



**PNEUMAX**

**GREEN LINE**  
**RACCORDERIA PNEUMATICA**  
***PNEUMATIC FITTINGS***  
TECHNOLOGY & INNOVATION



silenziatori e filtri

*silencer and filtering*

tubi e terminali

*tubes and terminals*

valvole e funzioni di linea

*line valves and functions*

accessori per impianti e vari

*plant accessories and more*

strumentazione e dispositivi elettrici

*instruments and electric devices*



## **ACCESSORI ARIA COMPRESSA COMPRESSED AIR ACCESSORIES**

SERVICE & SOLUTIONS

raccordi diritti in ottone nichelato

*push-in brass straight fittings nickel-plated*

raccordi in tecnopolimero con estremità in ottone nichelato

*push-in technopolymer fittings with nickel-plated brass ends*

raccordi intermedi e multipli

*intermediate and multiple automatic connectors*

regolatori di flusso

*flow regulators*



## **ECO PUSH-IN FITTINGS**

SERVICE & SOLUTIONS



## L'azienda

La Titan Engineering S.p.A. fondata nel 1993, è una società del Gruppo Pneumax, nata con l'obiettivo di diventare la sede produttiva e il magazzino centrale, per la raccorderia e gli accessori per l'aria compressa, di tutta la rete distributiva Pneumax, italiana e internazionale, attraverso un percorso sostenuto da iniziative strettamente legate alle strategie di sviluppo portate avanti dalla casa madre nel tempo. L'elemento che ha contribuito in modo determinante alla crescita dell'Azienda, nel corso di questi anni, è stato la capacità di sapersi modellare sulle esigenze e sulle indicazioni trasferite dalla Clientela, grazie alle quali sono stati fatti investimenti mirati in attività produttive interne, in accordi di collaborazione con i migliori partner italiani ed esteri, e si sono potenziati gli aspetti legati alla qualità e flessibilità del servizio offerto. L'obiettivo si è concretizzato con la realizzazione del "Catalogo Green Line", uno strumento per specialisti della raccorderia per aria compressa, fra i più completi proposti sul mercato.

## *Titan Engineering* S.p.A.

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Tel. 0549/961121  
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Cod. op. SM04813  
[www.titanengineering.sm](http://www.titanengineering.sm)

La vendita dei componenti illustrati e descritti nel presente catalogo viene effettuata in Italia e all'estero attraverso l'organizzazione indicata nella sez. "organizzazione commerciale". Dimensioni di ingombro e informazioni tecniche sono fornite a puro titolo informativo e possono essere modificate senza preavviso.

## *Pneumax* S.p.A.

24050 LURANO (BG) Italy  
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CAPITALE SOCIALE EUR 2.700.000 I.V.  
R.E.A. BERGAMO N. 160798  
R.E.A. MILANO N. 931262  
COD. FISC. E P. IVA 02893330163  
COD. MECC. MI 322178





## The company

*Titan Engineering S.p.A. founded in 1993, is a company of the Pneumax Group, started with the goal of becoming the production site and warehouse, of fittings and accessories for compressed air, for the entire Pneumax distribution network (Italian and international), through a path supported by initiatives closely linked to the development strategies pursued by the mother Company over the past years.*

*The element that has contributed to the growth of the Company, during these years, was to be capable of modeling itself on the needs and directions transferred from the customers, through which have been made targeted investments in production activities, in co-operation agreements with the best Italian and foreign partners, and have enhanced the aspects related to the quality and flexibility of the service.*

*The goal has been reflected in the creation of the "Green Line Catalog", a tool for specialists of fittings for compressed air, among the most comprehensive available on the market.*

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*Sales of the components illustrated and described in the present catalogue in Italy and abroad are handled through the organization indicated in the section "sales network".*

*The overall dimensions and technical information are provided solely for informative reasons and may be subject to change without notice.*

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## Certificate

SQS herewith certifies that the company named below has a management system which meets the requirements of the standards specified below.



**Titan Engineering S.p.A.**  
Via dei Cerri, 16/46  
47899 Serravalle  
San Marino

Scope of certification

Site of Via dei Cerri, 16  
47899 Serravalle/San Marino

Field of activity

Production and distribution of pneumatic components for the automation

Normative basis

ISO 9001:2015  
ISO 14001:2015

Quality Management System  
Environmental Management System

Scope(s) 29

Validity 02.11.2017 – 16.10.2020  
Issue 02.11.2017

Reg. no. 38586

*V. Edelmann*  
X. Edelmann, President SQS

*R. Glauser*  
R. Glauser, CEO SQS



Swiss Association for Quality and Management Systems SQS  
Bernstrasse 103, 3052 Zollikofen, Switzerland



Swiss Made



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**Titan Engineering S.p.A.**  
Via dei Cerri, 16  
47899 Serravalle  
San Marino

Scope of certification

Site of Via dei Cerri, 16  
47899 Serravalle/San Marino

Field of activity

Production and distribution of pneumatic components for the automation

Normative base

ISO 45001:2018

Occupational Health and Safety Management System

Scope(s) 18, 29

Validity 15.01.2019 – 14.01.2022  
Issue 15.01.2019

Reg. no. 52144

*V. Edelmann*  
X. Edelmann, President SQS

*F. Müller*  
F. Müller, CEO SQS



Swiss Association for Quality and Management Systems SQS  
Bernstrasse 103, 3052 Zollikofen, Switzerland



Swiss Made



THE INTERNATIONAL CERTIFICATION NETWORK

## CERTIFICATE

SQS has issued an IQNet recognized certificate that the organization:

**Titan Engineering S.p.A.**  
Via dei Cerri, 16  
47899 Serravalle  
San Marino

has implemented and maintains a

**Management System**

for the following scope(s):

18, 29

which fulfills the requirements of the following standard(s):

**ISO 45001:2018 Occupational Health and Safety Management System**

Issued on: 2019-01-15

Expires on: 2022-01-14

This attestation is directly linked to the IQNet Partner's original certificate and shall not be used as a stand-alone document

Registration Number: CH-52144



*Alex Stoichitov*  
Alex Stoichitov  
President of IQNet

*F. Müller*  
Felix Müller  
CEO SQS



IQNet Partners\*\*  
AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CSQ Italy  
CQC China CQM China CQS Czech Republic Csa Cert Croatia DQS Holding GmbH Germany PCAY Brazil  
FONDOFORMA Venezuela ICFRTEC Colombia Inspira Certification Oy Finland INTECO Costa Rica  
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INICE SICE Mexico PCBC Poland Quality Austria Austria RRI Russia SII Israel SIQ Slovenia SIRM QAS International Malaysia  
SIRM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia  
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\* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)



THE INTERNATIONAL CERTIFICATION NETWORK

## CERTIFICATE

SQS and IQNet Partner hereby states that the organization:

**Titan Engineering S.p.A.**  
Via dei Cerri, 16/46  
47899 Serravalle  
San Marino

for the following scope and type of activities

Site of Via dei Cerri, 16/46

47899 Serravalle/San Marino

**Production and distribution of pneumatic components for the automation**

has implemented and maintains a

**Management System**

which fulfills the requirements of the following standard(s)

**ISO 9001:2015 / Quality Management System  
ISO 14001:2015 / Environmental Management System**

for the validity date, please refer to the original certificate\* issued by SQS

Scope Note(s): 29

Issued on: 2017-11-02

Validity date: 2020-10-16

Registration Number: CH-38586



*Alex Stoichitov*  
Alex Stoichitov  
President of IQNet

*R. Glauser*  
Roland Glauser  
CEO SQS



IQNet Partners\*\*  
AENOR Spain AFNOR Certification France APCER Portugal CCC Cyprus CSQ Italy  
CQC China CQM China CQS Czech Republic Csa Cert Croatia DQS Holding GmbH Germany PCAY Brazil  
FONDOFORMA Venezuela ICFRTEC Colombia Inspira Certification Oy Finland INTECO Costa Rica  
IRAM Argentina JQA Japan KPO Korea MIRTEC Greece MSZT Hungary NENKO AS Norway NSAI Ireland  
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SIRM QAS International Malaysia SQS Switzerland SRAC Romania TEST St Petersburg Russia TSE Turkey YUQS Serbia  
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\*\* The list of IQNet partners is valid at the time of issue of this certificate. Updated information is available under [www.iqnet-certification.com](http://www.iqnet-certification.com)



## Mission

Qualità non solo come fine, ma come stile comportamentale, animato da una intensa attività di sensibilizzazione e coinvolgimento; sulla base di questa premessa, i principali elementi con cui si è deciso di edificare il nostro Sistema Qualità sono: l'**AZIENDA**, la **PERSONA**, il **LAVORO**.

Valori autentici che, in un contesto generale mutevole ed imprevedibile, diventano punti di riferimento imprescindibili.

Ogni componente è parte attiva in un sistema fatto di reciprocità: dove l'azienda promuove il rispetto dei valori etici e dei diritti e della dignità delle persone, dove ogni persona è parte attiva e fattiva per il bene dell'azienda e dove il lavoro ne rappresenta il legante, ritornando ad essere un modello dinamico di crescita per se stessi e per il tessuto socio-economico.

Il raggiungimento della Certificazione ISO 45001:2018, 14001:2015 è una ulteriore garanzia verso i nostri Clienti e soprattutto il riconoscimento in qualcosa in cui crediamo.

*Quality not only as an end, but as a behavioral style, animated by an intense awareness and involvement, on the basis of this premise, the main elements with which it was decided to build our Quality System are: the **COMPANY**, the **PERSON**, the **JOB**.*

*Authentic values which, in a general context changeable and unpredictable, they become points of reference indispensable.*

*Each component has an active part in a system made up of reciprocity: where the company promotes respect for ethical values and the rights and dignity of persons, where each person is an active and effective for the good of the company' and where the work represents the binder, returning to be a dynamic model of growth for themselves and for the socio-economic context.*

*Achieving ISO 45001:2018, 14001:2015 certification is an additional guarantee to our Customers, and above all the recognition in something we believe in.*



## Interpretazione della codifica dei raccordi automatici serie Rap e Tecnorap

### Coding interpretation of Rap and Tecnorap push-in fittings series

| Esempi reali di codifica dei raccordi automatici Rap e Tecnorap<br>Real coding examples of Rap and Tecnorap push-in fittings |      |    |    |                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------|------|----|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A                                                                                                                            | B    | C  | D  |                                                                                                                                                                                                                                                                               |
|                                                                                                                              | 22   | 04 | 18 | Raccordo RAP, con anello spintore verde, ad L girevole, per tubo diam.4 mm, con filettatura da 1/8<br><i>RAP fitting, with green thrust sleeve, elbow type, for tube size 4 mm, with 1/8 thread</i>                                                                           |
| B                                                                                                                            | 05   | 06 | 00 | Raccordo RAP, con anello spintore nero, a T intermedio, per tubi diam.6 mm<br><i>RAP fitting, with black thrust sleeve, T connector, for tube size 6 mm</i>                                                                                                                   |
|                                                                                                                              | 01OT | 08 | 14 | Raccordo RAP, con anello spintore metallico, diritto maschio, per tubo diam. 8 mm, con filettatura da 1/4<br><i>RAP fitting, with metal thrust sleeve, straight male, for tube size 8 mm, with 1/4 thread</i>                                                                 |
| T                                                                                                                            | 03   | 10 | 00 | Raccordo TECNORAP grigio, con anello spintore verde, diritto intermedio, per tubo diam.10 mm<br><i>TECNORAP grey fitting, with green thrust sleeve, straight connector, for tube size 10 mm</i>                                                                               |
| TS                                                                                                                           | 04   | 04 | L0 | Raccordo TECNORAP grigio, con anello spintore grigio, ad L intermedio, per tubo diam.4 mm, con codolo<br><i>TECNORAP grey fitting, with grey thrust sleeve, elbow connector, for tube size 4 mm, with plug</i>                                                                |
| TB                                                                                                                           | 22T  | 06 | 18 | Raccordo TECNORAP nero, con anello spintore nero, ad L girevole, con base in tecnopolimero, per tubo diam.6 mm, con filettatura da 1/8<br><i>TECNORAP black fitting, with black thrust sleeve, elbow type, with technopolymer swivel, for tube size 6 mm, with 1/8 thread</i> |
| TBV                                                                                                                          | 01   | 04 | 18 | Raccordo TECNORAP nero, con anello spintore verde, diritto maschio, per tubo diam.4 mm, con filettatura da 1/8<br><i>TECNORAP black fitting, with green thrust sleeve, straight male, for tube size 4 mm, with 1/8 thread</i>                                                 |

| Versione con corpo in tecnopolimero grigio TECNORAP<br>Version with grey technopolymer body |            |                                                                                          |
|---------------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------|
| A                                                                                           | T          | Anello spintore di colore verde<br><i>Thrust sleeve color green</i>                      |
|                                                                                             | TA         | Anello spintore di colore blu<br><i>Thrust sleeve color blue</i>                         |
|                                                                                             | TN         | Anello spintore di colore nero<br><i>Thrust sleeve color black</i>                       |
|                                                                                             | TS         | Anello spintore di colore grigio<br><i>Thrust sleeve color grey</i>                      |
| B1                                                                                          | T01...T34  | Tipo di articolo / <i>Type of item</i>                                                   |
| B2                                                                                          | B          | Versione due vie / <i>Branch version</i>                                                 |
|                                                                                             | C          | Filettatura conica / <i>Tapered thread</i>                                               |
|                                                                                             | F          | Filettatura femmina cilindrica / <i>Parallel female thread</i>                           |
|                                                                                             | FC         | Filettatura femmina conica / <i>Tapered female thread</i>                                |
|                                                                                             | G          | Filettatura maschio cilindrica / <i>Parallel male thread</i>                             |
|                                                                                             | L          | Versione ad "elle prolungata" / <i>Version with longer elbow</i>                         |
|                                                                                             | LC         | Versione ad "elle prolungata" (conica) / <i>Version with longer elbow (tapered)</i>      |
|                                                                                             | R          | Versione per regolatore di flusso / <i>Version for speed controller</i>                  |
|                                                                                             | T          | Versione con base girevole tecnopolimero / <i>Version with technopolymer swivel base</i> |
| C                                                                                           | D.4...D.12 | Diametro del tubo / <i>Tube diameter size</i>                                            |
| D1                                                                                          | 18...12    | Misura del filetto (1/8...1/2) / <i>Thread size (1/8...1/2)</i>                          |
| D2                                                                                          | 00         | Stessa misura di D1 / <i>Same as D1</i>                                                  |
|                                                                                             | D.4...D.14 | Diametro del tubo / <i>Tube diameter size</i>                                            |
|                                                                                             | L0         | Codolo centrale / <i>Version with plug</i>                                               |
|                                                                                             | V0         | Codolo laterale / <i>Version with lateral plug</i>                                       |

| RAP - Versione con corpo in ottone nichelato<br>RAP - Version with nickel-plated brass body |            |                                                                                                     |
|---------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------|
| A                                                                                           | blank      | Anello spintore di colore verde<br><i>Thrust sleeve color green</i>                                 |
|                                                                                             | A          | Anello spintore di colore blu<br><i>Thrust sleeve color blue</i>                                    |
|                                                                                             | B          | Anello spintore di colore nero<br><i>Thrust sleeve color black</i>                                  |
|                                                                                             | S          | Anello spintore di colore grigio<br><i>Thrust sleeve color grey</i>                                 |
| B1                                                                                          | 01...60    | Tipo di articolo / <i>Type of item</i>                                                              |
| B2                                                                                          | OT         | Versione con anello spintore in ottone nichelato<br><i>Version with nickel-plated thrust sleeve</i> |
|                                                                                             | C          | Filettatura conica / <i>Apered thread</i>                                                           |
|                                                                                             | F          | Filettatura femmina cilindrica/Corpo filettato<br><i>Parallel female thread/ threaded body</i>      |
|                                                                                             | E          | Maggiorazione / <i>Increaser</i>                                                                    |
|                                                                                             | L          | Versione ad "elle prolungata"<br><i>Version with longer elbow</i>                                   |
|                                                                                             | R          | Versione per regolatore di flusso<br><i>Version for speed controller</i>                            |
| C                                                                                           | D.4...D.14 | Diametro del tubo / <i>Tube diameter size</i>                                                       |
| D1                                                                                          | 18...12    | Misura del filetto (1/8...1/2) / <i>Thread size (1/8...1/2)</i>                                     |
| D2                                                                                          | 00         | Stessa misura di D1 / <i>Same as D1</i>                                                             |
|                                                                                             | D.4...D.14 | Diametro del tubo / <i>Tube diameter size</i>                                                       |
|                                                                                             | L0         | Versione con codolo / <i>Version with plug</i>                                                      |
|                                                                                             | V0         | Versione con codolo laterale / <i>Version with lateral plug</i>                                     |

| Versione con corpo in tecnopolimero nero TECNORAP<br>Version with black technopolymer body |             |                                                                                          |
|--------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------------|
| A                                                                                          | TB          | Anello spintore di colore nero<br><i>Thrust sleeve color black</i>                       |
|                                                                                            | TBA         | Anello spintore di colore blu<br><i>Thrust sleeve color blue</i>                         |
|                                                                                            | TBS         | Anello spintore di colore grigio<br><i>Thrust sleeve color grey</i>                      |
|                                                                                            | TBV         | Anello spintore di colore verde<br><i>Thrust sleeve color green</i>                      |
| B1                                                                                         | TB01...TB34 | Tipo di articolo / <i>Type of item</i>                                                   |
| B2                                                                                         | B           | Versione due vie / <i>Branch version</i>                                                 |
|                                                                                            | C           | Filettatura conica / <i>Tapered thread</i>                                               |
|                                                                                            | F           | Filettatura femmina cilindrica / <i>Parallel female thread</i>                           |
|                                                                                            | FC          | Filettatura femmina conica / <i>Tapered female thread</i>                                |
|                                                                                            | G           | Filettatura maschio cilindrica / <i>Parallel male thread</i>                             |
|                                                                                            | L           | Versione ad "elle prolungata" / <i>Version with longer elbow</i>                         |
|                                                                                            | LC          | Versione ad "elle prolungata" conica / <i>Version with longer elbow (tapered)</i>        |
|                                                                                            | R           | Versione per regolatore di flusso / <i>Version for speed controller</i>                  |
|                                                                                            | T           | Versione con base girevole tecnopolimero / <i>Version with technopolymer swivel base</i> |
| C                                                                                          | D.4...D.12  | Diametro del tubo / <i>Tube diameter size</i>                                            |
| D1                                                                                         | 18...12     | Misura del filetto (1/8...1/2) / <i>Thread size (1/8...1/2)</i>                          |
| D2                                                                                         | 00          | Stessa misura di D1 / <i>Same as D1</i>                                                  |
|                                                                                            | D.4...D.14  | Diametro del tubo / <i>Tube diameter size</i>                                            |
|                                                                                            | L0          | Codolo centrale / <i>Version with plug</i>                                               |
|                                                                                            | V0          | Codolo laterale / <i>Version with lateral plug</i>                                       |

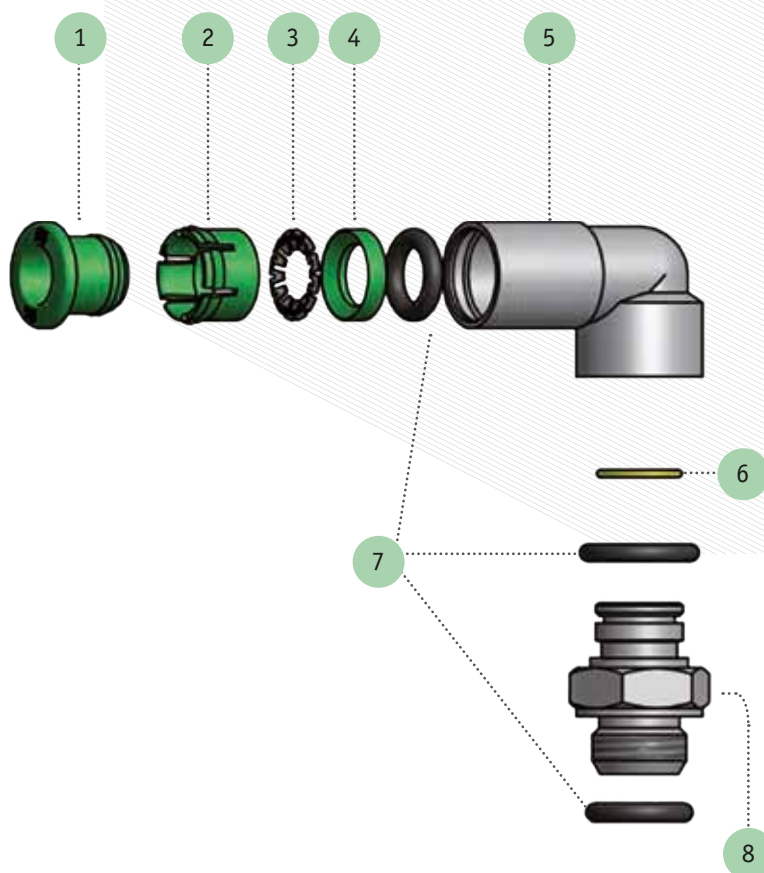
## Esempi di combinazioni e codifica - *Example of combination and coding*

| MAIN SERIES                                                                         | "B" SERIES                                                                          | "OT" SERIES                                                                       | "S" SERIES                                                                           | "A" SERIES                                                                            |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|    |    |  |    |    |
| 100800                                                                              | B100800                                                                             | 100T0800                                                                          | S100800                                                                              | A100800                                                                               |
| MAIN "T" SERIES                                                                     | "TN" SERIES                                                                         |                                                                                   | "TS" SERIES                                                                          | "TA" SERIES                                                                           |
|   |   |                                                                                   |   |   |
| T100800                                                                             | TN100800                                                                            |                                                                                   | TS100800                                                                             | TA100800                                                                              |
| "TBV" SERIES                                                                        | MAIN "TB" SERIES                                                                    |                                                                                   | "TBS" SERIES                                                                         | "TBA" SERIES                                                                          |
|  |  |                                                                                   |  |  |
| TBV100800                                                                           | TB100800                                                                            |                                                                                   | TBS100800                                                                            | TBA100800                                                                             |

NOTA: la presente tabella è la rappresentazione reale, basata sull'articolo "passaparete per tubi diametro 8mm", delle diverse combinazioni e codifiche descritte a pag. 7.

NOTE: the present table is the real representation, based on the item "bulkhead for 8mm diameter pipes", of the different combinations and coding described at page 7.





- 1 ANELLO SPINGITORE  
THRUST SLEEVE
- 2 DISTANZIALE DI FERMO  
LOCK RING
- 3 PINZA DI AGGRAFFAGGIO  
CRIMPING GRIPPER
- 4 ANELLO DI SOSTEGNO  
SUPPORTING RING
- 5 CORPO RACCORDO  
FITTING BODY
- 6 ANELLO ELASTICO  
ELASTIC RING
- 7 O-RING DI TENUTA  
O-RING SEAL
- 8 BASE GIREVOLE  
SWIVEL BASE



MAIN SERIES



B SERIES



OT SERIES


S SERIES  
ON DEMAND

A SERIES  
ON DEMAND

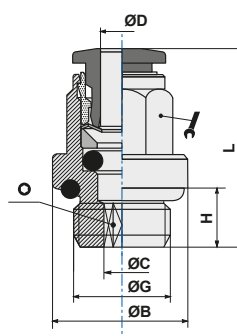


## ART. 01

Dritto filetto cilindrico maschio con O-ring  
*Straight male adaptor (parallel)*

| CODICE    | ØD | G   | ØC   | ØB   | H   | L    |  |  |  |
|-----------|----|-----|------|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 01CH04M5* | 4  | M5  | 2,2  | 11,3 | 3,5 | 20   | 10                                                                                | 2                                                                                 | 100                                                                               |
| 0104M5    | 4  | M5  | 2,6  | 9    | 4   | 20,5 | Ø9                                                                                | 2,5                                                                               | 100                                                                               |
| 0104M6    | 4  | M6  | 2,6  | 9    | 5   | 20,5 | Ø9                                                                                | 2,5                                                                               | 50                                                                                |
| 010418    | 4  | 1/8 | 2,6  | 13,5 | 5,5 | 20   | 9                                                                                 | 2,5                                                                               | 50                                                                                |
| 010414    | 4  | 1/4 | 2,6  | 17   | 6,5 | 21   | 9                                                                                 | 2,5                                                                               | 50                                                                                |
| 0106M5    | 6  | M5  | 2,6  | 11   | 4   | 22,8 | Ø11                                                                               | 2,5                                                                               | 50                                                                                |
| 0106M6    | 6  | M6  | 2,6  | 11   | 5   | 24,8 | Ø11                                                                               | 2,5                                                                               | 50                                                                                |
| 010618    | 6  | 1/8 | 4,2  | 13,5 | 5,5 | 25,3 | 11                                                                                | 4                                                                                 | 50                                                                                |
| 010614    | 6  | 1/4 | 4,2  | 17   | 6,5 | 24,3 | 11                                                                                | 4                                                                                 | 50                                                                                |
| 010818    | 8  | 1/8 | 5,2  | 12,8 | 5,5 | 27   | 13                                                                                | 5                                                                                 | 50                                                                                |
| 010814    | 8  | 1/4 | 6,2  | 17   | 6,5 | 25,5 | 13                                                                                | 6                                                                                 | 50                                                                                |
| 010838    | 8  | 3/8 | 6,2  | 20   | 7,5 | 25,5 | 13                                                                                | 6                                                                                 | 50                                                                                |
| 010812    | 8  | 1/2 | 6,2  | 24   | 10  | 25   | 14                                                                                | 6                                                                                 | 25                                                                                |
| 011018*   | 10 | 1/8 | 5,9  | 9    | 5,5 | 29   | 17                                                                                | 4                                                                                 | 25                                                                                |
| 011014    | 10 | 1/4 | 7,3  | 16   | 6,5 | 30,4 | 16                                                                                | 7                                                                                 | 50                                                                                |
| 011038    | 10 | 3/8 | 8,3  | 21   | 7,5 | 30,9 | 16                                                                                | 8                                                                                 | 50                                                                                |
| 011012    | 10 | 1/2 | 14,1 | 23   | 10  | 24,7 | 17                                                                                | 8                                                                                 | 25                                                                                |
| 011214    | 12 | 1/4 | 7,3  | 16   | 6,5 | 33,2 | 19                                                                                | 7                                                                                 | 25                                                                                |
| 011238    | 12 | 3/8 | 10,3 | 22   | 7,5 | 33,2 | 19                                                                                | 10                                                                                | 25                                                                                |
| 011212    | 12 | 1/2 | 10,3 | 24   | 9   | 33,2 | 19                                                                                | 10                                                                                | 25                                                                                |
| 011438    | 14 | 3/8 | 10,3 | 21   | 7,5 | 35   | 19                                                                                | 10                                                                                | 25                                                                                |
| 011412    | 14 | 1/2 | 12,3 | 25   | 9   | 35   | 19                                                                                | 12                                                                                | 25                                                                                |

\* = di importazione - imported

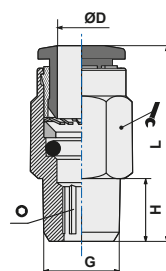


## ART. 01C

Dritto filetto conico maschio  
*Straight male adaptor (tapered)*

| CODICE  | ØD | G   |  | H    | L    |  |  |  |
|---------|----|-----|--|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 01C0418 | 4  | 1/8 |  | 7,5  | 18   | 10                                                                                  | 2,5                                                                                 | 50                                                                                  |
| 01C0414 | 4  | 1/4 |  | 9,5  | 16   | 14                                                                                  | 2,5                                                                                 | 50                                                                                  |
| 01C0438 | 4  | 3/8 |  | 7,5  | 17,4 | 17                                                                                  | 3                                                                                   | 25                                                                                  |
| 01C0618 | 6  | 1/8 |  | 7,5  | 19,5 | 12                                                                                  | 4                                                                                   | 50                                                                                  |
| 01C0614 | 6  | 1/4 |  | 9,5  | 22,3 | 14                                                                                  | 4                                                                                   | 50                                                                                  |
| 01C0638 | 6  | 3/8 |  | 10,5 | 20,3 | 17                                                                                  | 4                                                                                   | 25                                                                                  |
| 01C0612 | 6  | 1/2 |  | 10   | 23,2 | 24                                                                                  | 4                                                                                   | 25                                                                                  |
| 01C0818 | 8  | 1/8 |  | 7,5  | 25,5 | 14                                                                                  | 5                                                                                   | 50                                                                                  |
| 01C0814 | 8  | 1/4 |  | 9,5  | 24,5 | 14                                                                                  | 6                                                                                   | 50                                                                                  |
| 01C0838 | 8  | 3/8 |  | 10,5 | 21,5 | 17                                                                                  | 6                                                                                   | 50                                                                                  |
| 01C0812 | 8  | 1/2 |  | 12,5 | 25,5 | 21                                                                                  | 6                                                                                   | 25                                                                                  |
| 01C1018 | 10 | 1/8 |  | 7,5  | 29,5 | 17                                                                                  | 4                                                                                   | 25                                                                                  |
| 01C1014 | 10 | 1/4 |  | 9,5  | 30,8 | 17                                                                                  | 7                                                                                   | 50                                                                                  |
| 01C1038 | 10 | 3/8 |  | 10,5 | 28,3 | 17                                                                                  | 8                                                                                   | 50                                                                                  |
| 01C1012 | 10 | 1/2 |  | 13,5 | 26,6 | 21                                                                                  | 8                                                                                   | 25                                                                                  |
| 01C1218 | 12 | 1/8 |  | 7    | 31   | 21                                                                                  | 4                                                                                   | 25                                                                                  |
| 01C1214 | 12 | 1/4 |  | 9,5  | 33   | 19                                                                                  | 6                                                                                   | 25                                                                                  |
| 01C1238 | 12 | 3/8 |  | 10,5 | 30   | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| 01C1212 | 12 | 1/2 |  | 13,5 | 32,5 | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| 01C1438 | 14 | 3/8 |  | 9    | 37,5 | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| 01C1412 | 14 | 1/2 |  | 14   | 35   | 21                                                                                  | 10                                                                                  | 25                                                                                  |

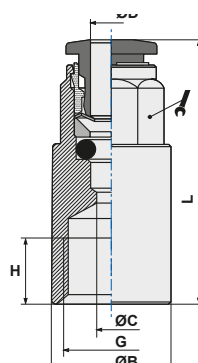
NOTA: articolo di importazione - NOTE: imported item



**ART. 02**

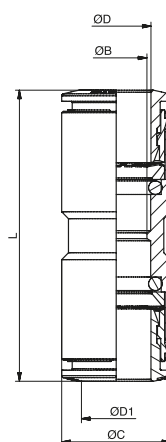
Diritto femmina  
*Straight female adaptor*

| CODICE | ØD | G   | ØC | ØB | H   | L    |    |  |    |
|--------|----|-----|----|----|-----|------|----|--|----|
| 020418 | 4  | 1/8 | 3  | 12 | 6,5 | 26,5 | 9  |  | 50 |
| 020414 | 4  | 1/4 | 3  | 17 | 10  | 29,5 | 9  |  | 50 |
| 020618 | 6  | 1/8 | 5  | 12 | 6,5 | 28,3 | 11 |  | 50 |
| 020614 | 6  | 1/4 | 5  | 17 | 10  | 31,3 | 11 |  | 50 |
| 020818 | 8  | 1/8 | 7  | 12 | 6,5 | 28,5 | 13 |  | 50 |
| 020814 | 8  | 1/4 | 7  | 17 | 10  | 32,5 | 13 |  | 50 |


**ART. 03**

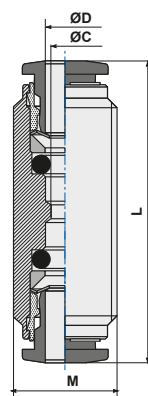
Diritto innestabile  
*Straight connector*

| CODICE | ØD | ØD1 | ØB |  | ØC | L    |  |  |    |
|--------|----|-----|----|--|----|------|--|--|----|
| 030400 | 4  | 4   | 3  |  | 9  | 32   |  |  | 50 |
| 030600 | 6  | 6   | 5  |  | 11 | 36,1 |  |  | 50 |
| 030800 | 8  | 8   | 7  |  | 13 | 38   |  |  | 50 |
| 031000 | 10 | 10  | 9  |  | 16 | 42,3 |  |  | 50 |
| 031200 | 12 | 12  | 11 |  | 19 | 45,8 |  |  | 25 |
| 031400 | 14 | 14  | 13 |  | 21 | 48,9 |  |  | 25 |


**ART. 03F**

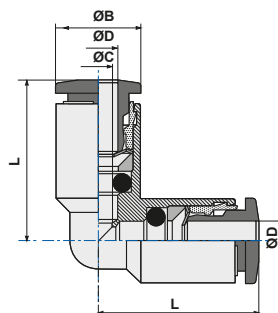
Diritto innestabile filettato  
*Threaded connector*

| CODICE  | ØD |  | ØC | M    |  | L    |  |  |    |
|---------|----|--|----|------|--|------|--|--|----|
| 03F0400 | 4  |  | 3  | 11x1 |  | 32   |  |  | 50 |
| 03F0600 | 6  |  | 5  | 14x1 |  | 36,1 |  |  | 50 |
| 03F0800 | 8  |  | 7  | 16x1 |  | 38   |  |  | 50 |
| 03F1000 | 10 |  | 9  | 18x1 |  | 42,3 |  |  | 50 |
| 03F1200 | 12 |  | 11 | 22x1 |  | 45,8 |  |  | 25 |
| 03F1400 | 14 |  | 13 | 24x1 |  | 47,5 |  |  | 25 |


**ART. 04**

Gomito innestabile  
*L connector*

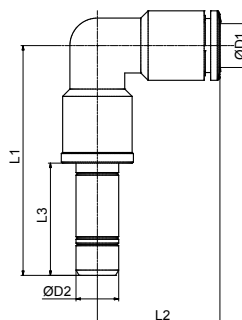
| CODICE | ØD |  | ØC | ØB |  | L    |  |  |    |
|--------|----|--|----|----|--|------|--|--|----|
| 040400 | 4  |  | 3  | 10 |  | 19   |  |  | 50 |
| 040600 | 6  |  | 5  | 11 |  | 20,6 |  |  | 50 |
| 040800 | 8  |  | 7  | 13 |  | 23   |  |  | 50 |
| 041000 | 10 |  | 8  | 16 |  | 26,4 |  |  | 50 |
| 041200 | 12 |  | 10 | 19 |  | 28,9 |  |  | 25 |
| 041400 | 14 |  | 12 | 21 |  | 31,5 |  |  | 25 |



## ART. 04L0

Gomito innestabile con codolo  
*Plug-in L connector*

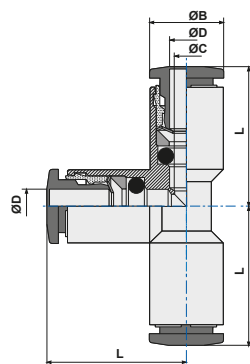
| CODICE | ØD1 | ØD2 | L1   | L2   | L3   |  |
|--------|-----|-----|------|------|------|-----------------------------------------------------------------------------------|
| 0404L0 | 4   | 4   | 34,5 | 18   | 16,7 | 50                                                                                |
| 0406L0 | 6   | 6   | 42,5 | 23   | 19,5 | 50                                                                                |
| 0408L0 | 8   | 8   | 46,5 | 25,5 | 21   | 50                                                                                |
| 0410L0 | 10  | 10  | 51   | 27   | 24   | 25                                                                                |
| 0412L0 | 12  | 12  | 54   | 29   | 25   | 25                                                                                |
|        |     |     |      |      |      |                                                                                   |
|        |     |     |      |      |      |                                                                                   |
|        |     |     |      |      |      |                                                                                   |



## ART. 05

T innestabile  
*T connector*

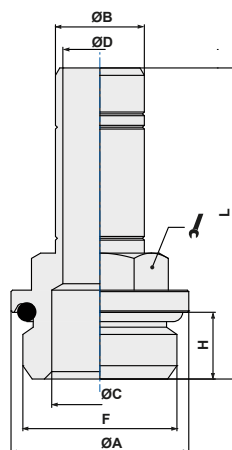
| CODICE | ØD | ØC | ØB | L    |  |
|--------|----|----|----|------|-----------------------------------------------------------------------------------|
| 050400 | 4  | 3  | 9  | 17,3 | 50                                                                                |
| 050600 | 6  | 5  | 11 | 20,6 | 50                                                                                |
| 050800 | 8  | 7  | 13 | 23   | 50                                                                                |
| 051000 | 10 | 8  | 16 | 26,4 | 25                                                                                |
| 051200 | 12 | 10 | 19 | 28,9 | 25                                                                                |
| 051400 | 14 | 12 | 21 | 31,5 | 10                                                                                |
|        |    |    |    |      |                                                                                   |
|        |    |    |    |      |                                                                                   |
|        |    |    |    |      |                                                                                   |



## ART. 06

Innesto filetto cilindrico con O-Ring  
*Adaptor parallel (short)*

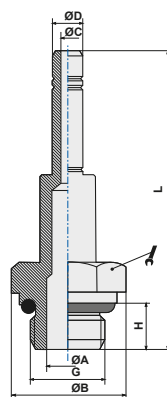
| CODICE | ØB | F   | ØA | ØC  | ØD  | H   | L    |  |  |
|--------|----|-----|----|-----|-----|-----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 0604M5 | 4  | M5  | 8  | 2   | 2   | 4   | 24,7 | 8                                                                                   | 50                                                                                  |
| 0604M6 | 4  | M6  | 9  | 2   | 2   | 5   | 25,7 | 8                                                                                   | 50                                                                                  |
| 060418 | 4  | 1/8 | 13 | 5,5 | 2   | 5,5 | 27,7 | 13                                                                                  | 50                                                                                  |
| 060414 | 4  | 1/4 | 16 | 7,5 | 2   | 6,5 | 29,2 | 13                                                                                  | 50                                                                                  |
| 0606M5 | 6  | M5  | 8  | 2,6 | 2,6 | 4   | 27,5 | 8                                                                                   | 50                                                                                  |
| 060618 | 6  | 1/8 | 13 | 5,5 | 4   | 5,5 | 30,5 | 13                                                                                  | 50                                                                                  |
| 060614 | 6  | 1/4 | 16 | 7,5 | 4   | 6,5 | 32,0 | 13                                                                                  | 50                                                                                  |
| 060818 | 8  | 1/8 | 13 | 6   | 6   | 5,5 | 32,0 | 13                                                                                  | 50                                                                                  |
| 060814 | 8  | 1/4 | 16 | 7,5 | 6   | 6,5 | 33,5 | 13                                                                                  | 50                                                                                  |
| 060838 | 8  | 3/8 | 20 | 9   | 6   | 7,5 | 35,5 | 13                                                                                  | 50                                                                                  |
| 061018 | 10 | 1/8 | 13 | 6   | 6   | 5,5 | 35,0 | 13                                                                                  | 50                                                                                  |
| 061014 | 10 | 1/4 | 16 | 8   | 8   | 6,5 | 36,5 | 13                                                                                  | 50                                                                                  |
| 061038 | 10 | 3/8 | 20 | 8   | 8   | 7,5 | 39,5 | 13                                                                                  | 50                                                                                  |
| 061214 | 12 | 1/4 | 16 | 8   | 8   | 6,5 | 37,5 | 13                                                                                  | 25                                                                                  |
| 061238 | 12 | 3/8 | 20 | 11  | 10  | 7,5 | 40,5 | 13                                                                                  | 25                                                                                  |
| 061212 | 12 | 1/2 | 24 | 13  | 10  | 9   | 42,0 | 16                                                                                  | 25                                                                                  |
| 061438 | 14 | 3/8 | 20 | 12  | 12  | 7,5 | 43,0 | 16                                                                                  | 25                                                                                  |
| 061412 | 14 | 1/2 | 24 | 13  | 12  | 9   | 44,5 | 16                                                                                  | 25                                                                                  |
|        |    |     |    |     |     |     |      |                                                                                     |                                                                                     |
|        |    |     |    |     |     |     |      |                                                                                     |                                                                                     |



**ART. 60**

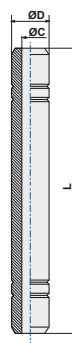
Innesto proungato filetto cilindrico con O-Ring  
*Adaptor parallel long*

| CODICE | ØD | G   | ØC | ØB | H   | L    | ØA  |    |    |
|--------|----|-----|----|----|-----|------|-----|----|----|
| 600418 | 4  | 1/8 | 2  | 13 | 5   | 39   | 6   | 13 | 50 |
| 600618 | 6  | 1/8 | 4  | 13 | 5   | 44,5 | 5,5 | 13 | 50 |
| 600614 | 6  | 1/4 | 4  | 16 | 6,5 | 48   | 7,5 | 13 | 50 |
| 600818 | 8  | 1/8 | 6  | 13 | 5   | 48   | 6   | 13 | 50 |
| 600814 | 8  | 1/4 | 6  | 16 | 6,5 | 49,5 | 7,5 | 13 | 50 |
| 600838 | 8  | 3/8 | 6  | 20 | 7,5 | 51,5 | 9   | 13 | 50 |
| 601038 | 10 | 3/8 | 8  | 13 | 7,5 | 57,5 | 9   | 13 | 25 |
|        |    |     |    |    |     |      |     |    |    |
|        |    |     |    |    |     |      |     |    |    |


**ART. 07**

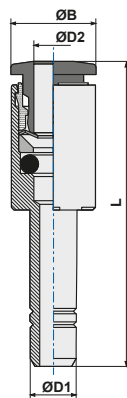
Prolungamento  
*Connector*

| CODICE | ØD |  | ØC |  | L    |     |
|--------|----|--|----|--|------|-----|
| 070400 | 4  |  | 2  |  | 33,4 | 100 |
| 070600 | 6  |  | 4  |  | 39   | 50  |
| 070800 | 8  |  | 6  |  | 42   | 50  |
| 071000 | 10 |  | 8  |  | 48   | 50  |
| 071200 | 12 |  | 10 |  | 50   | 50  |
|        |    |  |    |  |      |     |
|        |    |  |    |  |      |     |


**ART. 08**

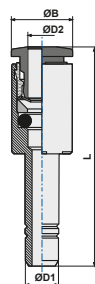
Riduzione con codolo  
*Plug-in reducer*

| CODICE | ØD1 | ØD2 |  | ØB | L    |    |
|--------|-----|-----|--|----|------|----|
| 080604 | 6   | 4   |  | 9  | 32,5 | 50 |
| 080804 | 8   | 4   |  | 9  | 34   | 50 |
| 080806 | 8   | 6   |  | 11 | 36   | 50 |
| 081006 | 10  | 6   |  | 11 | 39,3 | 50 |
| 081008 | 10  | 8   |  | 13 | 39   | 50 |
| 081208 | 12  | 8   |  | 13 | 39,5 | 25 |
| 081210 | 12  | 10  |  | 16 | 41,4 | 25 |
| 081406 | 14  | 6   |  | 15 | 43,8 | 25 |
|        |     |     |  |    |      |    |
|        |     |     |  |    |      |    |


**ART. 08E**

Maggiorazione con codolo  
*Plug-in increaser*

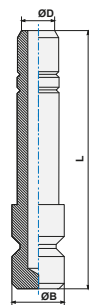
| CODICE  | ØD1 | ØD2 |  | ØB | L    |    |
|---------|-----|-----|--|----|------|----|
| 08E0406 | 4   | 6   |  | 11 | 35,5 | 50 |
| 08E0608 | 6   | 8   |  | 13 | 39   | 50 |
|         |     |     |  |    |      |    |
|         |     |     |  |    |      |    |



## ART. 09

Tappo  
*Plug*

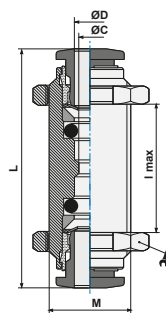
| CODICE | ØD | ØB |  |  | L    |    |
|--------|----|----|--|--|------|----|
| 090400 | 4  | 5  |  |  | 26   | 50 |
| 090600 | 6  | 7  |  |  | 29   | 50 |
| 090800 | 8  | 9  |  |  | 31,5 | 50 |
| 091000 | 10 | 11 |  |  | 35   | 50 |
| 091200 | 12 | 13 |  |  | 37   | 25 |



## ART. 10

Passaparete  
*Bulkhead connector*

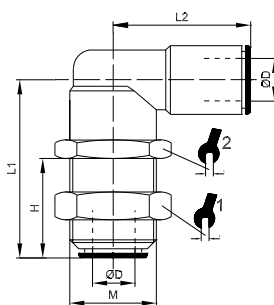
| CODICE | ØD | ØC | M    | Imax | L    |    |    |
|--------|----|----|------|------|------|----|----|
| 100400 | 4  | 3  | 11x1 | 8    | 32   | 14 | 50 |
| 100600 | 6  | 5  | 14x1 | 8    | 36,1 | 17 | 50 |
| 100800 | 8  | 7  | 16x1 | 10   | 38   | 18 | 50 |
| 101000 | 10 | 9  | 18x1 | 12   | 42,3 | 21 | 25 |
| 101200 | 12 | 11 | 22x1 | 17   | 45,8 | 26 | 25 |
| 101400 | 14 | 13 | 24x1 | 18   | 47,5 | 27 | 25 |



## ART. 10L

Passaparete ad L  
*L bulkhead*

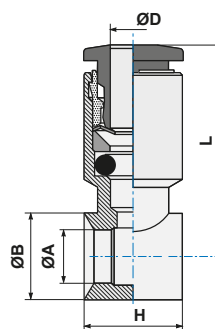
| CODICE  | ØD | M     | H    | L1   | L2 |    |    |    |
|---------|----|-------|------|------|----|----|----|----|
| 10L0400 | 4  | M11x1 | 12,5 | 25,5 | 20 | 13 | 13 | 50 |
| 10L0600 | 6  | M14x1 | 15   | 28   | 21 | 17 | 17 | 50 |
| 10L0800 | 8  | M16x1 | 17   | 30,5 | 24 | 18 | 18 | 50 |
| 10L1000 | 10 | M18x1 | 19   | 35   | 27 | 21 | 21 | 25 |



## ART. 13

Anello semplice  
*Single banjo body*

| CODICE  | ØD | G*  | ØA    | ØB | H  | L    |    |
|---------|----|-----|-------|----|----|------|----|
| 1304M5  | 4  | M5  | 5     | 8  | 9  | 19,5 | 50 |
| 130418  | 4  | 1/8 | 9,9   | 14 | 15 | 21,1 | 50 |
| 130618  | 6  | 1/8 | 9,9   | 14 | 15 | 24,3 | 50 |
| 130614  | 6  | 1/4 | 13,3  | 18 | 17 | 25,5 | 50 |
| 130818  | 8  | 1/8 | 9,9   | 14 | 15 | 24,8 | 50 |
| 130814  | 8  | 1/4 | 13,3  | 18 | 17 | 26,5 | 50 |
| 130838  | 8  | 3/8 | 16,75 | 21 | 20 | 28,0 | 50 |
| 131014  | 10 | 1/4 | 13,3  | 18 | 17 | 28,4 | 50 |
| 131038  | 10 | 3/8 | 16,75 | 21 | 20 | 29,9 | 25 |
| 131214  | 12 | 1/4 | 13,3  | 18 | 17 | 30,9 | 25 |
| 131238  | 12 | 3/8 | 16,75 | 21 | 20 | 31,4 | 25 |
| 131212  | 12 | 1/2 | 21    | 26 | 24 | 34,9 | 25 |
| 13R04M5 | 4  | M5  | 6     | 8  | 9  | 19,5 | 50 |
| 13R06M5 | 6  | M5  | 6     | 8  | 9  | 22,5 | 50 |

(\*) G = filetto vite/asta  
(\*) G = steam threadVedi capitolo Astine pag. 39  
See page 39 of Stems section

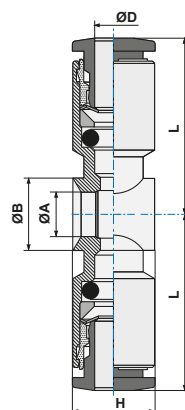
**ART. 14**

Anello doppio  
*Double banjo body*

| CODICE | ØD | G*  | ØA    | ØB | H  | L    |  |  |    |
|--------|----|-----|-------|----|----|------|--|--|----|
| 140618 | 6  | 1/8 | 9,9   | 14 | 15 | 24,3 |  |  | 50 |
| 140818 | 8  | 1/8 | 9,9   | 14 | 15 | 24,8 |  |  | 50 |
| 140814 | 8  | 1/4 | 13,3  | 18 | 17 | 26,5 |  |  | 50 |
| 140838 | 8  | 3/8 | 16,75 | 21 | 20 | 28   |  |  | 50 |
| 141014 | 10 | 1/4 | 13,3  | 18 | 17 | 28,4 |  |  | 50 |
| 141038 | 10 | 3/8 | 16,75 | 21 | 20 | 29,9 |  |  | 25 |
|        |    |     |       |    |    |      |  |  |    |
|        |    |     |       |    |    |      |  |  |    |
|        |    |     |       |    |    |      |  |  |    |
|        |    |     |       |    |    |      |  |  |    |

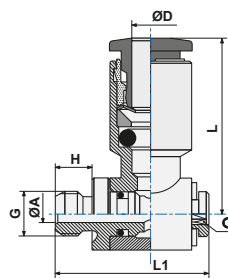
(\*) G = filetto vite/asta  
(\*) G = steam thread

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last


**ART. 15**

Anello semplice girevole con asta  
*Complete single banjo (rotating under pressure)*

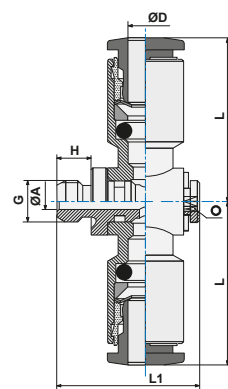
| CODICE | ØD | G   | ØA  | H   | L1   | L    |     |  |    |
|--------|----|-----|-----|-----|------|------|-----|--|----|
| 1504M5 | 4  | M5  | 2   | 4   | 16,8 | 19,5 | 2,5 |  | 50 |
| 1504M6 | 4  | M6  | 2   | 4   | 17,8 | 19,5 | 2,5 |  | 50 |
| 150418 | 4  | 1/8 | 5,5 | 5,5 | 25   | 21,1 | 3   |  | 50 |
| 1506M5 | 6  | M5  | 2   | 4   | 16,5 | 22   | 2,5 |  | 50 |
| 150618 | 6  | 1/8 | 5,5 | 5,5 | 24,5 | 24,3 | 3   |  | 50 |
| 150614 | 6  | 1/4 | 7,8 | 6,5 | 28   | 25,5 | 4   |  | 50 |
| 150818 | 8  | 1/8 | 5,5 | 5,5 | 24,5 | 24,8 | 3   |  | 50 |
| 150814 | 8  | 1/4 | 7,8 | 6,5 | 28   | 26,5 | 4   |  | 50 |
| 150838 | 8  | 3/8 | 10  | 7,5 | 32,5 | 28   | 5   |  | 25 |
| 151014 | 10 | 1/4 | 7,8 | 6,5 | 28   | 28,4 | 4   |  | 25 |
| 151038 | 10 | 3/8 | 10  | 7,5 | 32,5 | 29,9 | 5   |  | 25 |
| 151214 | 12 | 1/4 | 7,8 | 6,5 | 28   | 30,9 | 4   |  | 25 |
| 151238 | 12 | 3/8 | 10  | 7,5 | 32,5 | 31,4 | 5   |  | 25 |
| 151212 | 12 | 1/2 | 12  | 9   | 40,8 | 34,9 | 8   |  | 10 |
|        |    |     |     |     |      |      |     |  |    |
|        |    |     |     |     |      |      |     |  |    |


**ART. 16**

Anello doppio girevole con asta  
*Complete double banjo (rotating under pressure)*

| CODICE | ØD | G   | ØA  | H   | L1   | L    |   |  |    |
|--------|----|-----|-----|-----|------|------|---|--|----|
| 160618 | 6  | 1/8 | 5,5 | 5,5 | 24,5 | 24,3 | 3 |  | 50 |
| 160818 | 8  | 1/8 | 5,5 | 5,5 | 25   | 24,8 | 3 |  | 50 |
| 160814 | 8  | 1/4 | 7,8 | 6,5 | 28   | 26,5 | 4 |  | 25 |
| 160838 | 8  | 3/8 | 10  | 7,5 | 32,5 | 28   | 5 |  | 25 |
| 161014 | 10 | 1/4 | 7,8 | 6,5 | 28   | 28,4 | 4 |  | 25 |
| 161038 | 10 | 3/8 | 10  | 7,5 | 32,5 | 29,9 | 5 |  | 25 |
|        |    |     |     |     |      |      |   |  |    |
|        |    |     |     |     |      |      |   |  |    |
|        |    |     |     |     |      |      |   |  |    |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last

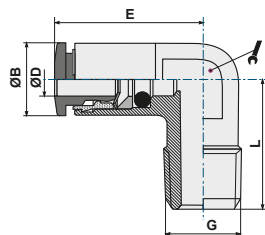




## ART. 19

Raccordo ad elle fisso conico maschio  
*L tapered male adapter*

| CODICE | ØD | G   | ØB | E    | L    |  |  |
|--------|----|-----|----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 190418 | 4  | 1/8 | 9  | 18,6 | 16,5 | 10                                                                                | 100                                                                               |
| 190618 | 6  | 1/8 | 11 | 23,8 | 16,5 | 10                                                                                | 100                                                                               |
| 190614 | 6  | 1/4 | 11 | 25,3 | 22,5 | 11                                                                                | 100                                                                               |
| 190818 | 8  | 1/8 | 13 | 25,5 | 18,5 | 11                                                                                | 100                                                                               |
| 190814 | 8  | 1/4 | 13 | 25,5 | 22,0 | 11                                                                                | 100                                                                               |
| 191014 | 10 | 1/4 | 16 | 28,0 | 24,0 | 13                                                                                | 50                                                                                |
|        |    |     |    |      |      |                                                                                   |                                                                                   |
|        |    |     |    |      |      |                                                                                   |                                                                                   |
|        |    |     |    |      |      |                                                                                   |                                                                                   |
|        |    |     |    |      |      |                                                                                   |                                                                                   |
|        |    |     |    |      |      |                                                                                   |                                                                                   |

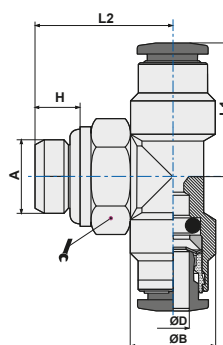


## ART. 20

Raccordo a T centrale girevole  
*Swivel male stud T parallel*

| CODICE | ØD | A   | H   | ØB    | L1   | L2   |  |  |
|--------|----|-----|-----|-------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2004M5 | 4  | M5  | 4   | 9     | 17,3 | 20,0 | 8                                                                                 | 50                                                                                |
| 200418 | 4  | 1/8 | 5,5 | 11,40 | 17,3 | 18,5 | 13                                                                                | 50                                                                                |
| 200414 | 4  | 1/4 | 6,5 | 9     | 19,0 | 22,5 | 16                                                                                | 50                                                                                |
| 2006M5 | 6  | M5  | 4   | 11,20 | 20,5 | 21   | 8                                                                                 | 50                                                                                |
| 200618 | 6  | 1/8 | 5,5 | 11    | 19,5 | 18,5 | 13                                                                                | 50                                                                                |
| 200614 | 6  | 1/4 | 6,5 | 11    | 22,1 | 22,5 | 16                                                                                | 50                                                                                |
| 200818 | 8  | 1/8 | 5,5 | 13    | 23,0 | 20,5 | 13                                                                                | 50                                                                                |
| 200814 | 8  | 1/4 | 6,5 | 13    | 23,0 | 22,5 | 16                                                                                | 50                                                                                |
| 200838 | 8  | 3/8 | 7,5 | 13    | 24,5 | 25,5 | 18                                                                                | 25                                                                                |
| 201014 | 10 | 1/4 | 6,5 | 16    | 26,4 | 24,5 | 16                                                                                | 25                                                                                |
| 201038 | 10 | 3/8 | 7,5 | 16    | 26,4 | 25,5 | 18                                                                                | 25                                                                                |

NOTA: articolo di importazione - NOTE: imported item

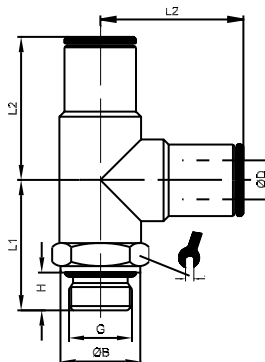


## ART. 21

Raccordo a T laterale girevole  
*Swivel male branch T parallel*

| CODICE  | ØD | G    | H   | ØB | L1   | L2   |  |  |
|---------|----|------|-----|----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 2104M5* | 4  | M5   | 4   | 8  | 16,5 | 19   | 9                                                                                   | 50                                                                                  |
| 210418  | 4  | G1/8 | 5,5 | 13 | 18,5 | 17,5 | 13                                                                                  | 50                                                                                  |
| 210414  | 4  | G1/4 | 6,5 | 16 | 22,5 | 19   | 13                                                                                  | 50                                                                                  |
| 210618  | 6  | G1/8 | 5,5 | 13 | 20   | 21   | 13                                                                                  | 50                                                                                  |
| 210614  | 6  | G1/4 | 6,5 | 16 | 24   | 21   | 13                                                                                  | 50                                                                                  |
| 210818  | 8  | G1/8 | 5,5 | 13 | 20   | 23   | 13                                                                                  | 50                                                                                  |
| 210814  | 8  | G1/4 | 6,5 | 16 | 24   | 23   | 13                                                                                  | 50                                                                                  |
| 210838  | 8  | G3/8 | 4,5 | 20 | 25,5 | 23   | 13                                                                                  | 25                                                                                  |
| 211014* | 10 | G1/4 | 6,5 | 16 | 24   | 27   | 16                                                                                  | 25                                                                                  |
|         |    |      |     |    |      |      |                                                                                     |                                                                                     |
|         |    |      |     |    |      |      |                                                                                     |                                                                                     |
|         |    |      |     |    |      |      |                                                                                     |                                                                                     |
|         |    |      |     |    |      |      |                                                                                     |                                                                                     |

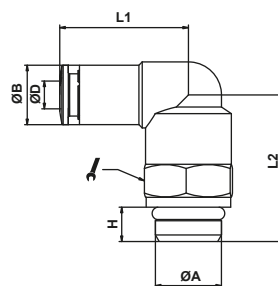
\* = Art. di importazione  
\* = Imported item



**ART. 22**

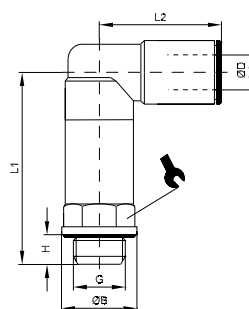
Gomito girevole filetto cilindrico maschio con O-Ring  
*Swivel L male adaptor parallel*

| CODICE  | ØD | A       | H   | ØB  | L1   | L2   |  |  |
|---------|----|---------|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2204M5  | 4  | M5      | 4   | 9,1 | 17,3 | 14,8 | 9                                                                                 | 100                                                                               |
| 2204M12 | 4  | M12x1,5 | 8   | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220418  | 4  | 1/8     | 5,5 | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220414  | 4  | 1/4     | 6,5 | 9,1 | 18,0 | 24,0 | 13                                                                                | 100                                                                               |
| 220438  | 4  | 3/8     | 7,5 | 9,1 | 18,0 | 25,5 | 13                                                                                | 100                                                                               |
| 2206M5  | 6  | M5      | 4   | 11  | 14,5 | 21,0 | 9                                                                                 | 100                                                                               |
| 2206M12 | 6  | M12x1,5 | 8   | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| 220618  | 6  | 1/8     | 5,5 | 11  | 23,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220614  | 6  | 1/4     | 6,5 | 11  | 23,0 | 24,0 | 13                                                                                | 100                                                                               |
| 220638  | 6  | 3/8     | 7,5 | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| 2208M12 | 8  | M12x1,5 | 8   | 13  | 25,5 | 25,5 | 13                                                                                | 100                                                                               |
| 220818  | 8  | 1/8     | 5,5 | 13  | 25,5 | 20,3 | 13                                                                                | 100                                                                               |
| 220814  | 8  | 1/4     | 6,5 | 13  | 25,5 | 24,3 | 13                                                                                | 100                                                                               |
| 220838  | 8  | 3/8     | 7,5 | 13  | 25,5 | 25,8 | 13                                                                                | 50                                                                                |
| 221014  | 10 | 1/4     | 6,5 | 16  | 27,0 | 26,0 | 16                                                                                | 50                                                                                |
| 221038  | 10 | 3/8     | 7,5 | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| 221012  | 10 | 1/2     | 9   | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| 221214  | 12 | 1/4     | 6,5 | 19  | 29,0 | 30,5 | 16                                                                                | 25                                                                                |
| 221238  | 12 | 3/8     | 7,5 | 19  | 29,0 | 28,5 | 20                                                                                | 25                                                                                |
| 221212  | 12 | 1/2     | 9   | 19  | 29,0 | 33,5 | 20                                                                                | 25                                                                                |
| 221438  | 14 | 3/8     | 7,5 | 21  | 32,0 | 28,5 | 20                                                                                | 25                                                                                |
| 221412  | 14 | 1/2     | 9   | 21  | 32,0 | 33,5 | 20                                                                                | 25                                                                                |


**ART. 22L**

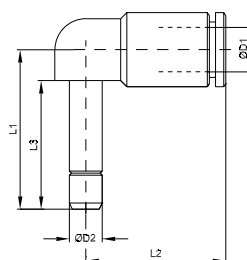
Gomito girevole cilindrico lungo  
*Swivel longer L male adaptor parallel*

| CODICE  | ØD | G    | ØB | H | L1   | L2   |  |  |
|---------|----|------|----|---|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 22L04M5 | 4  | M5   | 8  | 4 | 23,5 | 18   | 9                                                                                   | 25                                                                                  |
| 22L0418 | 4  | G1/8 | 13 | 6 | 33   | 20   | 13                                                                                  | 25                                                                                  |
| 22L0414 | 4  | G1/4 | 16 | 8 | 38   | 20   | 13                                                                                  | 25                                                                                  |
| 22L06M5 | 6  | M5   | 8  | 4 | 23,5 | 21   | 9                                                                                   | 25                                                                                  |
| 22L0618 | 6  | G1/8 | 13 | 6 | 33   | 21   | 13                                                                                  | 25                                                                                  |
| 22L0614 | 6  | G1/4 | 16 | 8 | 38   | 21   | 13                                                                                  | 25                                                                                  |
| 22L0818 | 8  | G1/8 | 13 | 6 | 33   | 24   | 13                                                                                  | 25                                                                                  |
| 22L0814 | 8  | G1/4 | 16 | 8 | 38   | 24   | 13                                                                                  | 25                                                                                  |
| 22L1014 | 10 | G1/4 | 16 | 8 | 37   | 26,5 | 16                                                                                  | 25                                                                                  |


**ART. 22L0**

Gomito innestabile con codolo  
*Plug-in L connector*

| CODICE | ØD1 | ØD2 | L1   | L2 | L3   |  |
|--------|-----|-----|------|----|------|-------------------------------------------------------------------------------------|
| 2204L0 | 4   | 4   | 19,5 | 18 | 15,5 | 50                                                                                  |
| 2206L0 | 6   | 6   | 26,5 | 20 | 18   | 50                                                                                  |
| 2208L0 | 8   | 8   | 31   | 24 | 19,5 | 50                                                                                  |
| 2210L0 | 10  | 10  | 41   | 25 | 24   | 25                                                                                  |
| 2212L0 | 12  | 12  | 29   | 28 | 25   | 25                                                                                  |
|        |     |     |      |    |      |                                                                                     |
|        |     |     |      |    |      |                                                                                     |

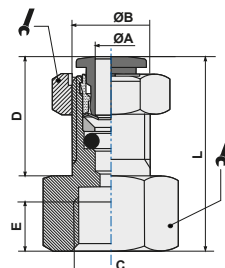


## ART. 25

Passaparete femmina  
Female bulkhead

| CODICE | ØA | C   | ØB    | D    | E    | L    |    |    |
|--------|----|-----|-------|------|------|------|----|----|
| 250418 | 4  | 1/8 | M12x1 | 15,5 | 8,5  | 24,0 | 14 | 25 |
| 250618 | 6  | 1/8 | M14x1 | 15,8 | 8,5  | 26,8 | 15 | 25 |
| 250614 | 6  | 1/4 | M14x1 | 15,8 | 11,0 | 29,5 | 17 | 25 |
| 250818 | 8  | 1/8 | M16x1 | 16,0 | 8,5  | 26,5 | 19 | 25 |
| 250814 | 8  | 1/4 | M16x1 | 16,0 | 11,0 | 32,0 | 19 | 25 |

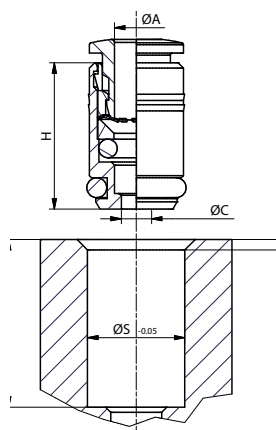
NOTA: articolo di importazione - NOTE: imported item



## ART. 27

Cartuccia  
Cartridge

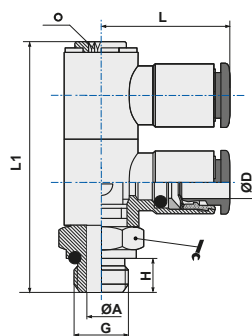
| CODICE | ØD | ØC  | H  | ØS   | L    |  |     |
|--------|----|-----|----|------|------|--|-----|
| 270400 | 4  | 2,9 | 14 | 9,1  | 13,5 |  | 100 |
| 270600 | 6  | 5   | 16 | 11,1 | 15,5 |  | 50  |
| 270800 | 8  | 7   | 17 | 13,6 | 16,5 |  | 50  |
|        |    |     |    |      |      |  |     |
|        |    |     |    |      |      |  |     |
|        |    |     |    |      |      |  |     |
|        |    |     |    |      |      |  |     |
|        |    |     |    |      |      |  |     |



## ART. 33

Doppio anello semplice girevole con asta  
Swivel bouble banjo stem

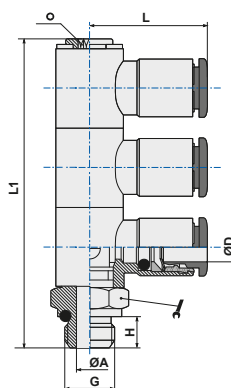
| CODICE | ØD | G   | ØA  | H   | L1   | L    |    |   |    |
|--------|----|-----|-----|-----|------|------|----|---|----|
| 330418 | 4  | 1/8 | 5,5 | 5,5 | 43,8 | 21,1 | 14 | 3 | 25 |
| 330618 | 6  | 1/8 | 5,5 | 5,5 | 43,8 | 24,3 | 14 | 3 | 25 |
| 330614 | 6  | 1/4 | 7,8 | 7,5 | 51,5 | 25,5 | 18 | 4 | 25 |
| 330818 | 8  | 1/8 | 5,5 | 5,5 | 43,8 | 24,8 | 14 | 3 | 25 |
| 330814 | 8  | 1/4 | 7,8 | 7,5 | 51,5 | 26,5 | 18 | 4 | 25 |
| 331014 | 10 | 1/4 | 7,8 | 7,5 | 51,5 | 28,4 | 18 | 4 | 25 |
|        |    |     |     |     |      |      |    |   |    |
|        |    |     |     |     |      |      |    |   |    |



## ART. 34

Triplo anello semplice girevole con asta  
Swivel triple banjo stem

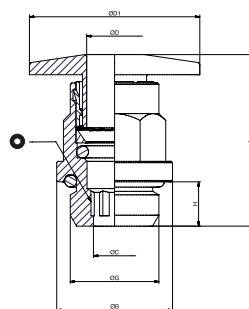
| CODICE | ØD | G   | ØA  | H   | L1   | L    |    |   |    |
|--------|----|-----|-----|-----|------|------|----|---|----|
| 340418 | 4  | 1/8 | 5,5 | 5,5 | 58,4 | 21,1 | 14 | 3 | 10 |
| 340618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 14 | 3 | 10 |
| 340614 | 6  | 1/4 | 7,8 | 7,5 | 67   | 25,5 | 18 | 4 | 10 |
| 340818 | 8  | 1/8 | 5,5 | 5,5 | 58,4 | 24,8 | 14 | 3 | 10 |
| 340814 | 8  | 1/4 | 7,8 | 7,5 | 67   | 26,5 | 18 | 4 | 10 |
| 341014 | 10 | 1/4 | 7,8 | 7,5 | 67   | 51,5 | 18 | 4 | 10 |
|        |    |     |     |     |      |      |    |   |    |
|        |    |     |     |     |      |      |    |   |    |



**ART. 01AM**

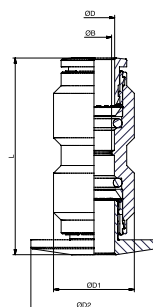
Diritto filetto cil. m. con O-Ring spintore maggiorato  
*Straight male adaptor (parallel) larger pusher*

| CODICE   | ØD | ØD1 | G   | ØC  | ØB | H   | L  |  |  |  |
|----------|----|-----|-----|-----|----|-----|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 010814AM | 8  | 25  | 1/4 | 6,2 | 17 | 6,5 | 26 | 13                                                                                | 6                                                                                 |                                                                                   |
|          |    |     |     |     |    |     |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |     |     |    |     |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |     |     |    |     |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |     |     |    |     |    |                                                                                   |                                                                                   |                                                                                   |


**ART. 03AM**

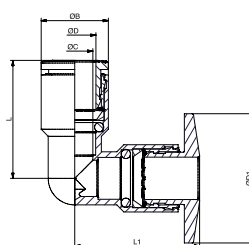
Diritto innestabile spintore maggiorato  
*Straight connector larger pusher*

| CODICE   | ØD | ØD1 | G | ØC | ØB | H | L  |  |  |  |
|----------|----|-----|---|----|----|---|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 030800AM | 8  | 15  |   |    | 7  |   | 39 |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |   |    |    |   |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |   |    |    |   |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |   |    |    |   |    |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |   |    |    |   |    |                                                                                   |                                                                                   |                                                                                   |


**ART. 04AM**

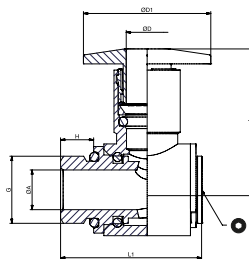
Gomito innestabile spintore maggiorato  
*L connector larger pusher*

| CODICE   | ØD | ØD1 | G | ØC | ØB | L1 | L  |  |  |  |
|----------|----|-----|---|----|----|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 040800AM | 8  | 25  |   | 7  | 13 | 24 | 23 |                                                                                     |                                                                                     |                                                                                     |
|          |    |     |   |    |    |    |    |                                                                                     |                                                                                     |                                                                                     |
|          |    |     |   |    |    |    |    |                                                                                     |                                                                                     |                                                                                     |
|          |    |     |   |    |    |    |    |                                                                                     |                                                                                     |                                                                                     |
|          |    |     |   |    |    |    |    |                                                                                     |                                                                                     |                                                                                     |


**ART. 15AM**

Anello semplice girevole con asta spintore maggiorato  
*Complete single banjo (rotating under pressure) larger pusher*

| CODICE    | ØD | ØD1 | G   | ØA  | H   | L  | L1   |  |  |  |
|-----------|----|-----|-----|-----|-----|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T150814AM | 8  | 25  | 1/4 | 7,8 | 6,5 | 29 | 26,5 |                                                                                     | 4                                                                                   |                                                                                     |
|           |    |     |     |     |     |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |     |     |     |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |     |     |     |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |     |     |     |    |      |                                                                                     |                                                                                     |                                                                                     |

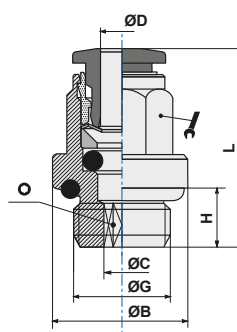


## ART. B01

Diritto filetto cilindrico maschio con O-Ring  
*Straight male adaptor (parallel)*

| CODICE   | ØD | G   | ØC   | ØB   | H   | L    |  |  |  |
|----------|----|-----|------|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B0104M5  | 4  | M5  | 2,6  | 9    | 4   | 20,5 | Ø9                                                                                | 2,5                                                                               | 100                                                                               |
| B0104M6  | 4  | M6  | 2,6  | 9    | 5   | 20,5 | Ø9                                                                                | 2,5                                                                               | 50                                                                                |
| B010418  | 4  | 1/8 | 2,6  | 13,5 | 5,5 | 20   | 9                                                                                 | 2,5                                                                               | 50                                                                                |
| B010414  | 4  | 1/4 | 2,6  | 17   | 6,5 | 21   | 9                                                                                 | 2,5                                                                               | 50                                                                                |
| B0106M5  | 6  | M5  | 2,6  | 11   | 4   | 22,8 | Ø11                                                                               | 2,5                                                                               | 50                                                                                |
| B0106M6  | 6  | M6  | 2,6  | 11   | 5   | 24,8 | Ø11                                                                               | 2,5                                                                               | 50                                                                                |
| B010618  | 6  | 1/8 | 4,2  | 13,5 | 5,5 | 25,3 | 11                                                                                | 4                                                                                 | 50                                                                                |
| B010614  | 6  | 1/4 | 4,2  | 17   | 6,5 | 24,3 | 11                                                                                | 4                                                                                 | 50                                                                                |
| B010818  | 8  | 1/8 | 5,2  | 12,8 | 5,5 | 27   | 13                                                                                | 5                                                                                 | 50                                                                                |
| B010814  | 8  | 1/4 | 6,2  | 17   | 6,5 | 25,5 | 13                                                                                | 6                                                                                 | 50                                                                                |
| B010838  | 8  | 3/8 | 6,2  | 20   | 7,5 | 25,5 | 13                                                                                | 6                                                                                 | 50                                                                                |
| B010812  | 8  | 1/2 | 6,2  | 24   | 10  | 25   | 14                                                                                | 6                                                                                 | 25                                                                                |
| B011018* | 10 | 1/8 | 5,9  | 9    | 5,5 | 29   | 17                                                                                | 4                                                                                 | 25                                                                                |
| B011014  | 10 | 1/4 | 7,3  | 16   | 6,5 | 30,4 | 16                                                                                | 7                                                                                 | 50                                                                                |
| B011038  | 10 | 3/8 | 8,3  | 21   | 7,5 | 30,9 | 16                                                                                | 8                                                                                 | 50                                                                                |
| B011012  | 10 | 1/2 | 14,1 | 23   | 10  | 24,7 | 17                                                                                | 8                                                                                 | 25                                                                                |
| B011214  | 12 | 1/4 | 7,3  | 16   | 6,5 | 33,2 | 19                                                                                | 7                                                                                 | 25                                                                                |
| B011238  | 12 | 3/8 | 10,3 | 22   | 7,5 | 33,2 | 19                                                                                | 10                                                                                | 25                                                                                |
| B011212  | 12 | 1/2 | 10,3 | 24   | 9   | 33,2 | 19                                                                                | 10                                                                                | 25                                                                                |
| B011438  | 14 | 3/8 | 10,3 | 21   | 7,5 | 35   | 19                                                                                | 10                                                                                | 25                                                                                |
| B011412  | 14 | 1/2 | 12,3 | 25   | 9   | 35   | 19                                                                                | 12                                                                                | 25                                                                                |

\* = di importazione - imported

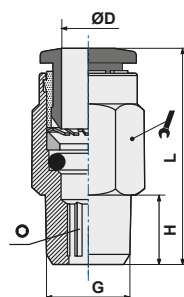


## ART. B01C

Diritto filetto conico maschio  
*Straight male adaptor (tapered)*

| CODICE   | ØD | G   |  | H    | L    |  |  |  |
|----------|----|-----|--|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B01C0418 | 4  | 1/8 |  | 7,5  | 18   | 10                                                                                  | 2,5                                                                                 | 50                                                                                  |
| B01C0414 | 4  | 1/4 |  | 9,5  | 16   | 14                                                                                  | 2,5                                                                                 | 50                                                                                  |
| B01C0438 | 4  | 3/8 |  | 7,5  | 17,4 | 17                                                                                  | 3                                                                                   | 25                                                                                  |
| B01C0618 | 6  | 1/8 |  | 7,5  | 19,5 | 12                                                                                  | 4                                                                                   | 50                                                                                  |
| B01C0614 | 6  | 1/4 |  | 9,5  | 22,3 | 14                                                                                  | 4                                                                                   | 50                                                                                  |
| B01C0638 | 6  | 3/8 |  | 10,5 | 20,3 | 17                                                                                  | 4                                                                                   | 25                                                                                  |
| B01C0612 | 6  | 1/2 |  | 10   | 23,2 | 24                                                                                  | 4                                                                                   | 25                                                                                  |
| B01C0818 | 8  | 1/8 |  | 7,5  | 25,5 | 14                                                                                  | 5                                                                                   | 50                                                                                  |
| B01C0814 | 8  | 1/4 |  | 9,5  | 24,5 | 14                                                                                  | 6                                                                                   | 50                                                                                  |
| B01C0838 | 8  | 3/8 |  | 10,5 | 21,5 | 17                                                                                  | 6                                                                                   | 50                                                                                  |
| B01C0812 | 8  | 1/2 |  | 12,5 | 25,5 | 21                                                                                  | 6                                                                                   | 25                                                                                  |
| B01C1018 | 10 | 1/8 |  | 7,5  | 29,5 | 17                                                                                  | 4                                                                                   | 25                                                                                  |
| B01C1014 | 10 | 1/4 |  | 9,5  | 30,8 | 17                                                                                  | 7                                                                                   | 50                                                                                  |
| B01C1038 | 10 | 3/8 |  | 10,5 | 28,3 | 17                                                                                  | 8                                                                                   | 50                                                                                  |
| B01C1012 | 10 | 1/2 |  | 13,5 | 26,6 | 21                                                                                  | 8                                                                                   | 25                                                                                  |
| B01C1218 | 12 | 1/8 |  | 7    | 31   | 21                                                                                  | 4                                                                                   | 25                                                                                  |
| B01C1214 | 12 | 1/4 |  | 9,5  | 33   | 19                                                                                  | 6                                                                                   | 25                                                                                  |
| B01C1238 | 12 | 3/8 |  | 10,5 | 30   | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| B01C1212 | 12 | 1/2 |  | 13,5 | 32,5 | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| B01C1438 | 14 | 3/8 |  | 9    | 37,5 | 21                                                                                  | 10                                                                                  | 25                                                                                  |
| B01C1412 | 14 | 1/2 |  | 14   | 35   | 21                                                                                  | 10                                                                                  | 25                                                                                  |

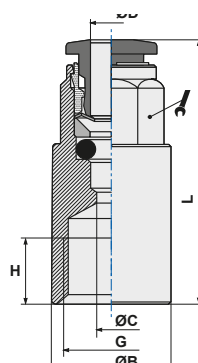
NOTA: articolo di importazione - NOTE: imported item



**ART. B02**

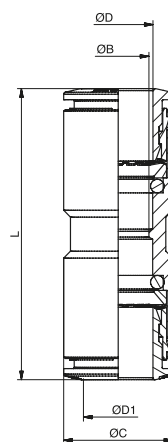
Diritto femmina  
*Straight female adaptor*

| CODICE  | ØD | G   | ØC | ØB | H   | L    |    |  |    |
|---------|----|-----|----|----|-----|------|----|--|----|
| B020418 | 4  | 1/8 | 3  | 12 | 6,5 | 26,5 | 9  |  | 50 |
| B020414 | 4  | 1/4 | 3  | 17 | 10  | 29,5 | 9  |  | 50 |
| B020618 | 6  | 1/8 | 5  | 12 | 6,5 | 28,3 | 11 |  | 50 |
| B020614 | 6  | 1/4 | 5  | 17 | 10  | 31,3 | 11 |  | 50 |
| B020818 | 8  | 1/8 | 7  | 12 | 6,5 | 28,5 | 13 |  | 50 |
| B020814 | 8  | 1/4 | 7  | 17 | 10  | 32,5 | 13 |  | 50 |


**ART. B03**

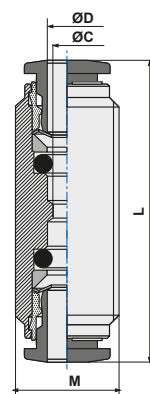
Diritto innestabile  
*Straight connector*

| CODICE  | ØD | ØD1 | ØB |  | ØC | L    |  |  |    |
|---------|----|-----|----|--|----|------|--|--|----|
| B030400 | 4  | 4   | 3  |  | 11 | 32   |  |  | 50 |
| B030600 | 6  | 6   | 5  |  | 13 | 36,1 |  |  | 50 |
| B030800 | 8  | 8   | 7  |  | 15 | 38   |  |  | 50 |
| B031000 | 10 | 10  | 9  |  | 18 | 42,3 |  |  | 50 |
| B031200 | 12 | 12  | 11 |  | 21 | 45,8 |  |  | 25 |
| B031400 | 14 | 14  | 13 |  | 23 | 48,9 |  |  | 25 |


**ART. B03F**

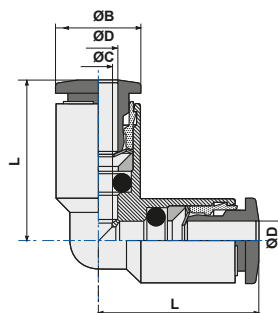
Diritto innestabile filettato  
*Threaded connector*

| CODICE   | ØD |  | ØC | M    |  | L    |  |  |    |
|----------|----|--|----|------|--|------|--|--|----|
| B03F0400 | 4  |  | 3  | 11x1 |  | 32   |  |  | 50 |
| B03F0600 | 6  |  | 5  | 14x1 |  | 36,1 |  |  | 50 |
| B03F0800 | 8  |  | 7  | 16x1 |  | 38   |  |  | 50 |
| B03F1000 | 10 |  | 9  | 18x1 |  | 42,3 |  |  | 50 |
| B03F1200 | 12 |  | 11 | 22x1 |  | 45,8 |  |  | 25 |
| B03F1400 | 14 |  | 13 | 24x1 |  | 47,5 |  |  | 25 |


**ART. B04**

Gomito innestabile  
*L connector*

| CODICE  | ØD |  | ØC | ØB |  | L    |  |  |    |
|---------|----|--|----|----|--|------|--|--|----|
| B040400 | 4  |  | 3  | 10 |  | 19   |  |  | 50 |
| B040600 | 6  |  | 5  | 11 |  | 20,6 |  |  | 50 |
| B040800 | 8  |  | 7  | 13 |  | 23   |  |  | 50 |
| B041000 | 10 |  | 8  | 16 |  | 26,4 |  |  | 50 |
| B041200 | 12 |  | 10 | 19 |  | 28,9 |  |  | 25 |
| B041400 | 14 |  | 12 | 21 |  | 31,5 |  |  | 25 |

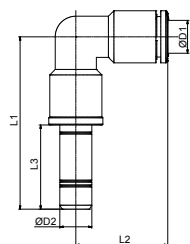




## ART. B04L0

Gomito innestabile con codolo  
*Plug-in L connector*

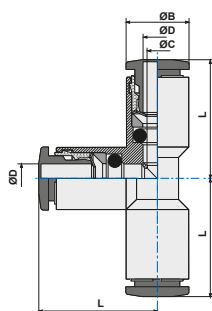
| CODICE  | ØD1 | ØD2 | L1   | L2   | L3   |    |
|---------|-----|-----|------|------|------|----|
| B0404L0 | 4   | 4   | 34,5 | 18   | 16,7 | 50 |
| B0406L0 | 6   | 6   | 42,5 | 23   | 19,5 | 50 |
| B0408L0 | 8   | 8   | 46,5 | 25,5 | 21   | 50 |
| B0410L0 | 10  | 10  | 51   | 27   | 24   | 25 |
| B0412L0 | 12  | 12  | 54   | 29   | 25   | 25 |



## ART. B05

T innestabile  
*T connector*

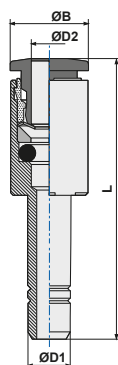
| CODICE  | ØD | ØC | ØB | L    |    |
|---------|----|----|----|------|----|
| B050400 | 4  | 3  | 9  | 17,3 | 50 |
| B050600 | 6  | 5  | 11 | 20,6 | 50 |
| B050800 | 8  | 7  | 13 | 23   | 50 |
| B051000 | 10 | 8  | 16 | 26,4 | 25 |
| B051200 | 12 | 10 | 19 | 28,9 | 25 |
| B051400 | 14 | 12 | 21 | 31,5 | 10 |



## ART. B08

Riduzione con codolo  
*Plug-in reducer*

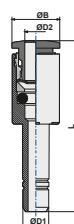
| CODICE  | ØD1 | ØD2 | ØB | L    |    |
|---------|-----|-----|----|------|----|
| B080604 | 6   | 4   | 9  | 32,5 | 50 |
| B080804 | 8   | 4   | 9  | 34   | 50 |
| B080806 | 8   | 6   | 11 | 36   | 50 |
| B081006 | 10  | 6   | 11 | 39,3 | 50 |
| B081008 | 10  | 8   | 13 | 39   | 50 |
| B081208 | 12  | 8   | 13 | 39,5 | 25 |
| B081210 | 12  | 10  | 16 | 41,4 | 25 |
| B081406 | 14  | 6   | 15 | 43,8 | 25 |



## ART. B08/E

Maggiorazione con codolo  
*Plug-in increaser*

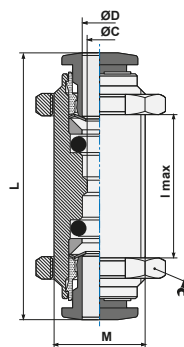
| CODICE   | ØD1 | ØD2 | ØB | L    |    |
|----------|-----|-----|----|------|----|
| B08E0406 | 4   | 6   | 11 | 35,5 | 50 |
| B08E0608 | 6   | 8   | 13 | 39   | 50 |



## ART. B10

Passaparete  
*Bulkhead connector*

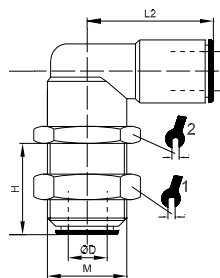
| CODICE  | ØD | ØC | M    | Imax | L    |    |    |
|---------|----|----|------|------|------|----|----|
| B100400 | 4  | 3  | 11x1 | 8    | 32   | 14 | 50 |
| B100600 | 6  | 5  | 14x1 | 8    | 36,1 | 17 | 50 |
| B100800 | 8  | 7  | 16x1 | 10   | 38   | 18 | 50 |
| B101000 | 10 | 9  | 18x1 | 12   | 42,3 | 21 | 25 |
| B101200 | 12 | 11 | 22x1 | 17   | 45,8 | 26 | 25 |
| B101400 | 14 | 13 | 24x1 | 18   | 47,5 | 27 | 25 |



**ART. B10L**

Passaparete ad L  
*L bulkhead*

| CODICE   | ØD | M     | H    | L1   | L2 |  |  |  |
|----------|----|-------|------|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B10L0400 | 4  | M11x1 | 12,5 | 25,5 | 20 | 13                                                                                | 13                                                                                | 50                                                                                |
| B10L0600 | 6  | M14x1 | 15   | 28   | 21 | 17                                                                                | 17                                                                                | 50                                                                                |
| B10L0800 | 8  | M16x1 | 17   | 30,5 | 24 | 18                                                                                | 18                                                                                | 50                                                                                |
| B10L1000 | 10 | M18x1 | 19   | 35   | 27 | 21                                                                                | 21                                                                                | 25                                                                                |

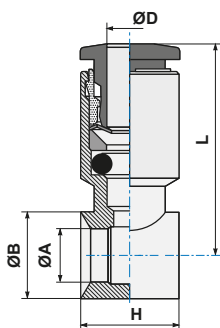

**ART. B13**

Anello semplice  
*Single banjo body*

| CODICE   | ØD | G*  | ØA    | ØB | H  | L    |  |
|----------|----|-----|-------|----|----|------|-----------------------------------------------------------------------------------|
| B1304M5  | 4  | M5  | 5     | 8  | 9  | 19,5 | 50                                                                                |
| B130418  | 4  | 1/8 | 9,9   | 14 | 15 | 21,1 | 50                                                                                |
| B130618  | 6  | 1/8 | 9,9   | 14 | 15 | 24,3 | 50                                                                                |
| B130614  | 6  | 1/4 | 13,3  | 18 | 17 | 25,5 | 50                                                                                |
| B130818  | 8  | 1/8 | 9,9   | 14 | 15 | 24,8 | 50                                                                                |
| B130814  | 8  | 1/4 | 13,3  | 18 | 17 | 26,5 | 50                                                                                |
| B130838  | 8  | 3/8 | 16,75 | 21 | 20 | 28,0 | 50                                                                                |
| B131014  | 10 | 1/4 | 13,3  | 18 | 17 | 28,4 | 50                                                                                |
| B131038  | 10 | 3/8 | 16,75 | 21 | 20 | 29,9 | 25                                                                                |
| B131214  | 12 | 1/4 | 13,3  | 18 | 17 | 30,9 | 25                                                                                |
| B131238  | 12 | 3/8 | 16,75 | 21 | 20 | 31,4 | 25                                                                                |
| B131212  | 12 | 1/2 | 21    | 26 | 24 | 34,9 | 25                                                                                |
| B13R04M5 | 4  | M5  | 6     | 8  | 9  | 19,5 | 50                                                                                |
| B13R06M5 | 6  | M5  | 6     | 8  | 9  | 22,5 | 50                                                                                |

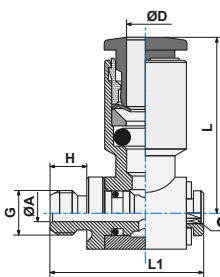
(\*) G = filetto vite/asta  
(\*) G = steam thread

Vedi capitolo Astine pag. 39  
See page 39 of Stems section


**ART. B15**

Anello semplice girevole con asta  
*Complete single banjo (rotating under pressure)*

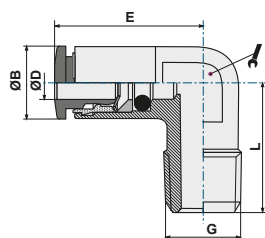
| CODICE  | ØD | G   | ØA  | H   | L1   | L    |  |  |
|---------|----|-----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B1504M5 | 4  | M5  | 2   | 4   | 16,8 | 19,5 | 2,5                                                                                 | 50                                                                                  |
| B1504M6 | 4  | M6  | 2   | 4   | 17,8 | 19,5 | 2,5                                                                                 | 50                                                                                  |
| B150418 | 4  | 1/8 | 5,5 | 5,5 | 25   | 21,1 | 3                                                                                   | 50                                                                                  |
| B1506M5 | 6  | M5  | 2   | 4   | 16,5 | 22   | 2,5                                                                                 | 50                                                                                  |
| B150618 | 6  | 1/8 | 5,5 | 5,5 | 24,5 | 24,3 | 3                                                                                   | 50                                                                                  |
| B150614 | 6  | 1/4 | 7,8 | 6,5 | 28   | 25,5 | 4                                                                                   | 50                                                                                  |
| B150818 | 8  | 1/8 | 5,5 | 5,5 | 24,5 | 24,8 | 3                                                                                   | 50                                                                                  |
| B150814 | 8  | 1/4 | 7,8 | 6,5 | 28   | 26,5 | 4                                                                                   | 50                                                                                  |
| B150838 | 8  | 3/8 | 10  | 7,5 | 32,5 | 28   | 5                                                                                   | 25                                                                                  |
| B151014 | 10 | 1/4 | 7,8 | 6,5 | 28   | 28,4 | 4                                                                                   | 25                                                                                  |
| B151038 | 10 | 3/8 | 10  | 7,5 | 32,5 | 29,9 | 5                                                                                   | 25                                                                                  |
| B151214 | 12 | 1/4 | 7,8 | 6,5 | 28   | 30,9 | 4                                                                                   | 25                                                                                  |
| B151238 | 12 | 3/8 | 10  | 7,5 | 32,5 | 31,4 | 5                                                                                   | 25                                                                                  |
| B151212 | 12 | 1/2 | 12  | 9   | 40,8 | 34,9 | 8                                                                                   | 10                                                                                  |



## ART. B19

Raccordo ad L fisso  
*L male adaptor*

| CODICE  | ØD | G   | ØB | E    | L    |  |  |
|---------|----|-----|----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B190418 | 4  | 1/8 | 9  | 18,6 | 16,5 | 10                                                                                | 100                                                                               |
| B190618 | 6  | 1/8 | 11 | 23,8 | 16,5 | 10                                                                                | 100                                                                               |
| B190614 | 6  | 1/4 | 11 | 25,3 | 22,5 | 11                                                                                | 100                                                                               |
| B190818 | 8  | 1/8 | 13 | 25,5 | 18,5 | 11                                                                                | 100                                                                               |
| B190814 | 8  | 1/4 | 13 | 25,5 | 22,0 | 11                                                                                | 100                                                                               |
| B191014 | 10 | 1/4 | 16 | 28,0 | 24,0 | 13                                                                                | 50                                                                                |

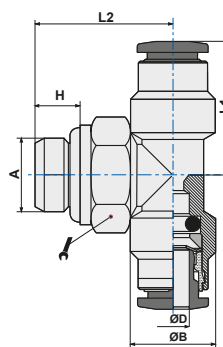


## ART. B20

Raccordo a T centrale girevole  
*Swivel male stud T parallel*

| CODICE  | ØD | A   | H   | ØB    | L1   | L2   |  |  |
|---------|----|-----|-----|-------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B2004M5 | 4  | M5  | 4   | 9     | 17,3 | 20,0 | 8                                                                                 | 50                                                                                |
| B200418 | 4  | 1/8 | 5,5 | 11,40 | 17,3 | 18,5 | 13                                                                                | 50                                                                                |
| B200414 | 4  | 1/4 | 6,5 | 9     | 19,0 | 22,5 | 16                                                                                | 50                                                                                |
| B2006M5 | 6  | M5  | 4   | 11,20 | 20,5 | 21   | 8                                                                                 | 50                                                                                |
| B200618 | 6  | 1/8 | 5,5 | 11    | 19,5 | 18,5 | 13                                                                                | 50                                                                                |
| B200614 | 6  | 1/4 | 6,5 | 11    | 22,1 | 22,5 | 16                                                                                | 50                                                                                |
| B200818 | 8  | 1/8 | 5,5 | 13    | 23,0 | 20,5 | 13                                                                                | 50                                                                                |
| B200814 | 8  | 1/4 | 6,5 | 13    | 23,0 | 22,5 | 16                                                                                | 50                                                                                |
| B200838 | 8  | 3/8 | 7,5 | 13    | 24,5 | 25,5 | 18                                                                                | 25                                                                                |
| B201014 | 10 | 1/4 | 6,5 | 16    | 26,4 | 24,5 | 16                                                                                | 25                                                                                |
| B201038 | 10 | 3/8 | 7,5 | 16    | 26,4 | 25,5 | 18                                                                                | 25                                                                                |

NOTA: articolo di importazione - NOTE: imported item

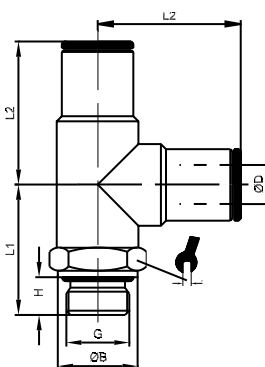


## ART. B21

Raccordo a T laterale girevole  
*Swivel male branch T parallel*

| CODICE   | ØD | G    | H | ØB | L1   | L2   |  |  |
|----------|----|------|---|----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B2104M5* | 4  | M5   | 4 | 8  | 16,5 | 19   | 9                                                                                   | 100                                                                                 |
| B210418  | 4  | G1/8 | 6 | 13 | 18,5 | 17,5 | 13                                                                                  | 100                                                                                 |
| B210414  | 4  | G1/4 | 8 | 16 | 22,5 | 19   | 13                                                                                  | 100                                                                                 |
| B210618  | 6  | G1/8 | 6 | 13 | 20   | 21   | 13                                                                                  | 100                                                                                 |
| B210614  | 6  | G1/4 | 8 | 16 | 24   | 21   | 13                                                                                  | 100                                                                                 |
| B210818  | 8  | G1/8 | 6 | 13 | 20   | 23   | 13                                                                                  | 100                                                                                 |
| B210814  | 8  | G1/4 | 8 | 16 | 24   | 23   | 13                                                                                  | 100                                                                                 |
| B210838  | 8  | G3/8 | 9 | 20 | 25,5 | 23   | 13                                                                                  | 50                                                                                  |
| B211014* | 10 | G1/4 | 8 | 16 | 24   | 27   | 16                                                                                  | 50                                                                                  |

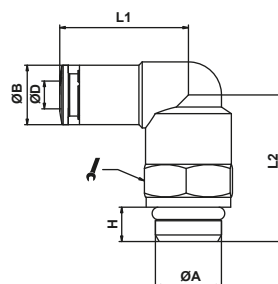
\* = Art. di importazione  
\* = Imported item



**ART. B22**

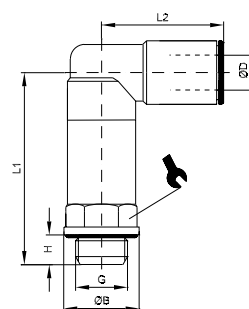
Gomito girevole filetto cilindrico maschio con O-Ring  
*Swivel L male adaptor parallel*

| CODICE   | ØD | A       | H  | ØB  | L1   | L2   |  |  |
|----------|----|---------|----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B2204M5  | 4  | M5      | 4  | 9,1 | 17,3 | 14,8 | 9                                                                                 | 100                                                                               |
| B2204M12 | 4  | M12x1,5 | 8  | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| B220418  | 4  | 1/8     | 6  | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| B220414  | 4  | 1/4     | 8  | 9,1 | 18,0 | 24,0 | 13                                                                                | 100                                                                               |
| B220438  | 4  | 3/8     | 9  | 9,1 | 18,0 | 25,5 | 13                                                                                | 100                                                                               |
| B2206M5  | 6  | M5      | 4  | 11  | 14,5 | 21,0 | 9                                                                                 | 100                                                                               |
| B2206M12 | 6  | M12x1,5 | 8  | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| B220618  | 6  | 1/8     | 6  | 11  | 23,0 | 20,0 | 13                                                                                | 100                                                                               |
| B220614  | 6  | 1/4     | 8  | 11  | 23,0 | 24,0 | 13                                                                                | 100                                                                               |
| B220638  | 6  | 3/8     | 9  | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| B2208M12 | 8  | M12x1,5 | 8  | 13  | 25,5 | 25,5 | 13                                                                                | 100                                                                               |
| B220818  | 8  | 1/8     | 6  | 13  | 25,5 | 20,3 | 13                                                                                | 100                                                                               |
| B220814  | 8  | 1/4     | 8  | 13  | 25,5 | 24,3 | 13                                                                                | 100                                                                               |
| B220838  | 8  | 3/8     | 9  | 13  | 25,5 | 25,8 | 13                                                                                | 50                                                                                |
| B221014  | 10 | 1/4     | 8  | 16  | 27,0 | 26,0 | 16                                                                                | 50                                                                                |
| B221038  | 10 | 3/8     | 9  | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| B221012  | 10 | 1/2     | 11 | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| B221214  | 12 | 1/4     | 8  | 19  | 29,0 | 30,5 | 16                                                                                | 25                                                                                |
| B221238  | 12 | 3/8     | 9  | 19  | 29,0 | 28,5 | 20                                                                                | 25                                                                                |
| B221212  | 12 | 1/2     | 11 | 19  | 29,0 | 33,5 | 20                                                                                | 25                                                                                |
| B221438  | 14 | 3/8     | 9  | 21  | 32,0 | 28,5 | 20                                                                                | 25                                                                                |
| B221412  | 14 | 1/2     | 11 | 21  | 32,0 | 33,5 | 20                                                                                | 25                                                                                |


**ART. B22L**

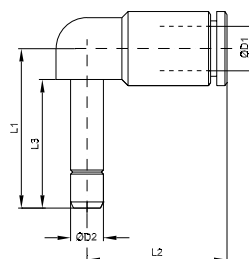
Gomito girevole cilindrico lungo  
*Swivel longer L male adaptor parallel*

| CODICE   | ØD | G    | ØB | H   | L1   | L2   |  |  |
|----------|----|------|----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B22L04M5 | 4  | M5   | 8  | 4   | 23,5 | 18   | 9                                                                                   | 25                                                                                  |
| B22L0418 | 4  | G1/8 | 13 | 6   | 33   | 20   | 13                                                                                  | 25                                                                                  |
| B22L0414 | 4  | G1/4 | 16 | 8   | 38   | 20   | 13                                                                                  | 25                                                                                  |
| B22L06M5 | 6  | M5   | 8  | 4   | 23,5 | 21   | 9                                                                                   | 25                                                                                  |
| B22L0618 | 6  | G1/8 | 13 | 6   | 33   | 21   | 13                                                                                  | 25                                                                                  |
| B22L0614 | 6  | G1/4 | 16 | 8   | 38   | 21   | 13                                                                                  | 25                                                                                  |
| B22L0818 | 8  | G1/8 | 13 | 6   | 33   | 24   | 13                                                                                  | 25                                                                                  |
| B22L0814 | 8  | G1/4 | 16 | 8   | 38   | 24   | 13                                                                                  | 25                                                                                  |
| B22L1014 | 10 | G1/4 | 16 | 6,5 | 37   | 26,5 | 16                                                                                  | 25                                                                                  |


**ART. B22L0**

Gomito innestabile con codolo  
*Plug-in L connector*

| CODICE  | ØD1 | ØD2 | L1   | L2 | L3   |  |
|---------|-----|-----|------|----|------|-------------------------------------------------------------------------------------|
| B2204L0 | 4   | 4   | 19,5 | 18 | 15,5 | 50                                                                                  |
| B2206L0 | 6   | 6   | 26,5 | 20 | 18   | 50                                                                                  |
| B2208L0 | 8   | 8   | 31   | 24 | 19,5 | 50                                                                                  |
| B2210L0 | 10  | 10  | 41   | 25 | 24   | 25                                                                                  |
| B2212L0 | 12  | 12  | 29   | 28 | 25   | 25                                                                                  |

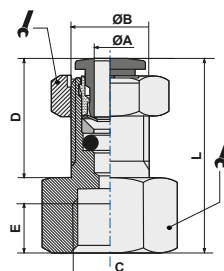


## ART. B25

Passaparete femmina  
*Female bulkhead*

| CODICE  | ØA | C   | ØB    | D    | E    | L    |  |  |
|---------|----|-----|-------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B250418 | 4  | 1/8 | M12x1 | 15,5 | 8,5  | 24,0 | 14                                                                                | 25                                                                                |
| B250618 | 6  | 1/8 | M14x1 | 15,8 | 8,5  | 26,8 | 15                                                                                | 25                                                                                |
| B250614 | 6  | 1/4 | M14x1 | 15,8 | 11,0 | 29,5 | 17                                                                                | 25                                                                                |
| B250818 | 8  | 1/8 | M16x1 | 16,0 | 8,5  | 26,5 | 19                                                                                | 25                                                                                |
| B250814 | 8  | 1/4 | M16x1 | 16,0 | 11,0 | 32,0 | 19                                                                                | 25                                                                                |

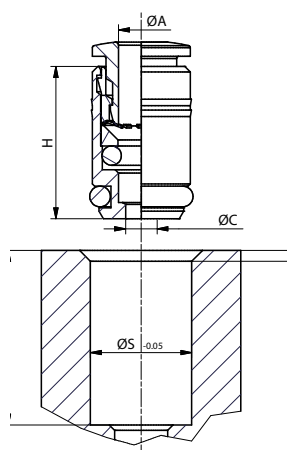
NOTA: articolo di importazione - NOTE: imported item



## ART. B27

Cartuccia  
*Cartridge*

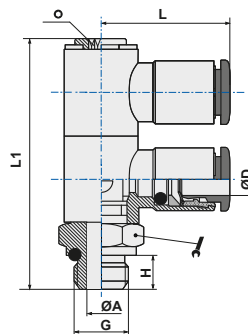
| CODICE  | ØD | ØC  | H  | ØS   | L    |  |
|---------|----|-----|----|------|------|-----------------------------------------------------------------------------------|
| B270400 | 4  | 2,9 | 14 | 9,1  | 13,5 | 100                                                                               |
| B270600 | 6  | 5   | 16 | 11,1 | 15,5 | 50                                                                                |
| B270800 | 8  | 7   | 17 | 13,6 | 16,5 | 50                                                                                |
|         |    |     |    |      |      |                                                                                   |
|         |    |     |    |      |      |                                                                                   |
|         |    |     |    |      |      |                                                                                   |
|         |    |     |    |      |      |                                                                                   |
|         |    |     |    |      |      |                                                                                   |



## ART. B33

Doppio anello semplice girevole con asta  
*Swivel bouble banjo stem*

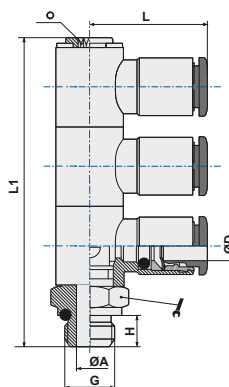
| CODICE  | ØD | G   | ØA  | H   | L1   | L    |  |  |  |
|---------|----|-----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B330418 | 4  | 1/8 | 5,5 | 5,5 | 43,8 | 21,1 | 14                                                                                  | 3                                                                                   | 25                                                                                  |
| B330618 | 6  | 1/8 | 5,5 | 5,5 | 43,8 | 24,3 | 14                                                                                  | 3                                                                                   | 25                                                                                  |
| B330614 | 6  | 1/4 | 7,8 | 7,5 | 51,5 | 25,5 | 18                                                                                  | 4                                                                                   | 25                                                                                  |
| B330818 | 8  | 1/8 | 5,5 | 5,5 | 43,8 | 24,8 | 14                                                                                  | 3                                                                                   | 25                                                                                  |
| B330814 | 8  | 1/4 | 7,8 | 7,5 | 51,5 | 26,5 | 18                                                                                  | 4                                                                                   | 25                                                                                  |
| B331014 | 10 | 1/4 | 7,8 | 7,5 | 51,5 | 28,4 | 18                                                                                  | 4                                                                                   | 25                                                                                  |
|         |    |     |     |     |      |      |                                                                                     |                                                                                     |                                                                                     |
|         |    |     |     |     |      |      |                                                                                     |                                                                                     |                                                                                     |



## ART. B34

Triplo anello semplice girevole con asta  
*Swivel triple banjo stem*

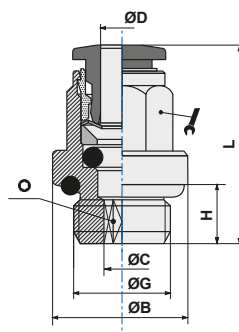
| CODICE  | ØD | G   | ØA  | H   | L1   | L    |  |  |  |
|---------|----|-----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B340418 | 4  | 1/8 | 5,5 | 5,5 | 58,4 | 21,1 | 14                                                                                  | 3                                                                                   | 10                                                                                  |
| B340618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 14                                                                                  | 3                                                                                   | 10                                                                                  |
| B340614 | 6  | 1/4 | 7,8 | 7,5 | 67   | 25,5 | 18                                                                                  | 4                                                                                   | 10                                                                                  |
| B340818 | 8  | 1/8 | 5,5 | 5,5 | 58,4 | 24,8 | 14                                                                                  | 3                                                                                   | 10                                                                                  |
| B340814 | 8  | 1/4 | 7,8 | 7,5 | 67   | 26,5 | 18                                                                                  | 4                                                                                   | 10                                                                                  |
| B341014 | 10 | 1/4 | 7,8 | 7,5 | 67   | 51,5 | 18                                                                                  | 4                                                                                   | 10                                                                                  |
|         |    |     |     |     |      |      |                                                                                     |                                                                                     |                                                                                     |
|         |    |     |     |     |      |      |                                                                                     |                                                                                     |                                                                                     |



**ART. 010T**

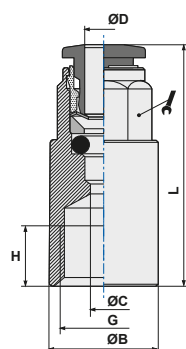
Diritto filetto cilindrico mschio con O-Ring  
*Straight male adaptor (parallel)*

| CODICE   | ØD | G   | ØC   | ØB   | H   | L    |     |     |     |
|----------|----|-----|------|------|-----|------|-----|-----|-----|
| 010T04M5 | 4  | M5  | 2,6  | 9    | 4   | 20,5 | Ø9  | 2,5 | 100 |
| 010T04M6 | 4  | M6  | 2,6  | 9    | 5   | 20,5 | Ø9  | 2,5 | 50  |
| 010T0418 | 4  | 1/8 | 2,6  | 13,5 | 5,5 | 20   | 9   | 2,5 | 50  |
| 010T0414 | 4  | 1/4 | 2,6  | 17   | 6,5 | 21   | 9   | 2,5 | 50  |
| 010T06M5 | 6  | M5  | 2,6  | 11   | 4   | 22,8 | Ø11 | 2,5 | 50  |
| 010T06M6 | 6  | M6  | 2,6  | 11   | 5   | 24,8 | Ø11 | 2,5 | 50  |
| 010T0618 | 6  | 1/8 | 4,2  | 13,5 | 5,5 | 25,3 | 11  | 4   | 50  |
| 010T0614 | 6  | 1/4 | 4,2  | 17   | 6,5 | 24,3 | 11  | 4   | 50  |
| 010T0818 | 8  | 1/8 | 5,2  | 12,8 | 5,5 | 27   | 13  | 5   | 50  |
| 010T0814 | 8  | 1/4 | 6,2  | 17   | 6,5 | 25,5 | 13  | 6   | 50  |
| 010T0838 | 8  | 3/8 | 6,2  | 20   | 7,5 | 25,5 | 13  | 6   | 50  |
| 010T0812 | 8  | 1/2 | 6,2  | 24   | 10  | 25   | 14  | 6   | 25  |
| 010T1014 | 10 | 1/4 | 7,3  | 16   | 6,5 | 30,4 | 16  | 7   | 50  |
| 010T1038 | 10 | 3/8 | 8,3  | 21   | 7,5 | 30,9 | 16  | 8   | 50  |
| 010T1012 | 10 | 1/2 | 14,1 | 23   | 10  | 24,7 | 17  | 8   | 25  |
| 010T1214 | 12 | 1/4 | 7,3  | 16   | 6,5 | 33,2 | 19  | 7   | 25  |
| 010T1238 | 12 | 3/8 | 10,3 | 22   | 7,5 | 33,2 | 19  | 10  | 25  |
| 010T1212 | 12 | 1/2 | 10,3 | 24   | 9   | 33,2 | 19  | 10  | 25  |
| 010T1438 | 14 | 3/8 | 10,3 | 21   | 7,5 | 35   | 19  | 10  | 25  |
| 010T1412 | 14 | 1/2 | 12,3 | 25   | 9   | 35   | 19  | 12  | 25  |


**ART. 020T**

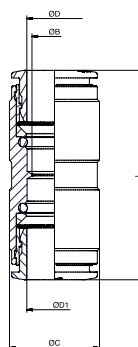
Diritto femmina  
*Straight female adaptor*

| CODICE   | ØD | G   | ØC | ØB | H   | L    |    |  |    |
|----------|----|-----|----|----|-----|------|----|--|----|
| 020T0418 | 4  | 1/8 | 3  | 12 | 6,5 | 26,5 | 9  |  | 50 |
| 020T0414 | 4  | 1/4 | 3  | 17 | 10  | 29,5 | 9  |  | 50 |
| 020T0618 | 6  | 1/8 | 5  | 12 | 6,5 | 28,3 | 11 |  | 50 |
| 020T0614 | 6  | 1/4 | 5  | 17 | 10  | 31,3 | 11 |  | 50 |
| 020T0818 | 8  | 1/8 | 7  | 12 | 6,5 | 28,5 | 13 |  | 50 |
| 020T0814 | 8  | 1/4 | 7  | 17 | 10  | 32,5 | 13 |  | 50 |


**ART. 030T**

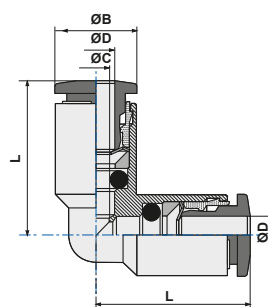
Diritto innestabile  
*Straight connector*

| CODICE   | ØD | ØD1 | ØB | ØC | L    |  |  |    |
|----------|----|-----|----|----|------|--|--|----|
| 030T0400 | 4  | 4   | 3  | 11 | 32   |  |  | 50 |
| 030T0600 | 6  | 6   | 5  | 13 | 36,1 |  |  | 50 |
| 030T0800 | 8  | 8   | 7  | 15 | 38   |  |  | 50 |
| 030T1000 | 10 | 10  | 9  | 18 | 42,3 |  |  | 50 |
| 030T1200 | 12 | 12  | 11 | 21 | 45,8 |  |  | 25 |
| 030T1400 | 14 | 14  | 13 | 23 | 48,9 |  |  | 25 |


**ART. 040T**

Gomito innestabile  
*L connector*

| CODICE   | ØD | ØC | ØB | L    |  |  |    |
|----------|----|----|----|------|--|--|----|
| 040T0400 | 4  | 3  | 10 | 19   |  |  | 50 |
| 040T0600 | 6  | 5  | 11 | 20,6 |  |  | 50 |
| 040T0800 | 8  | 7  | 13 | 23   |  |  | 50 |
| 040T1000 | 10 | 8  | 16 | 26,4 |  |  | 50 |
| 040T1200 | 12 | 10 | 19 | 28,9 |  |  | 25 |
| 040T1400 | 14 | 12 | 21 | 31,5 |  |  | 25 |

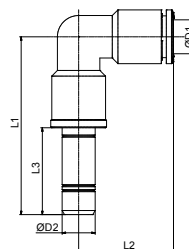




## ART. 040TLO

Gomito innestabile con codolo  
*Plug-in L connector*

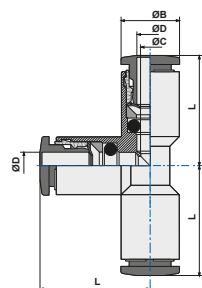
| CODICE   | ØD1 | ØD2 | L1   | L2   | L3   |  |
|----------|-----|-----|------|------|------|-----------------------------------------------------------------------------------|
| 040T04L0 | 4   | 4   | 34,5 | 18   | 16,7 | 50                                                                                |
| 040T06L0 | 6   | 6   | 42,5 | 23   | 19,5 | 50                                                                                |
| 040T08L0 | 8   | 8   | 46,5 | 25,5 | 21   | 50                                                                                |
| 040T10L0 | 10  | 10  | 51   | 27   | 24   | 25                                                                                |
| 040T12L0 | 12  | 12  | 54   | 29   | 25   | 25                                                                                |



## ART. 050T

T innestabile  
*T connector*

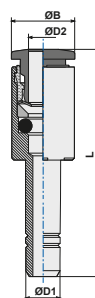
| CODICE   | ØD | ØC | ØB | L    |  |
|----------|----|----|----|------|-----------------------------------------------------------------------------------|
| 050T0400 | 4  | 3  | 9  | 17,3 | 50                                                                                |
| 050T0600 | 6  | 5  | 11 | 20,6 | 50                                                                                |
| 050T0800 | 8  | 7  | 13 | 23   | 50                                                                                |
| 050T1000 | 10 | 8  | 16 | 26,4 | 25                                                                                |
| 050T1200 | 12 | 10 | 19 | 28,9 | 25                                                                                |
| 050T1400 | 14 | 12 | 21 | 31,5 | 10                                                                                |



## ART. 080T

Riduzione con codolo  
*Plug-in reducer*

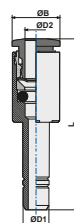
| CODICE   | ØD1 | ØD2 | ØB | L    |  |
|----------|-----|-----|----|------|-------------------------------------------------------------------------------------|
| 080T0604 | 6   | 4   | 9  | 32,5 | 50                                                                                  |
| 080T0804 | 8   | 4   | 9  | 34   | 50                                                                                  |
| 080T0806 | 8   | 6   | 11 | 36   | 50                                                                                  |
| 080T1006 | 10  | 6   | 11 | 39,3 | 50                                                                                  |
| 080T1008 | 10  | 8   | 13 | 39   | 50                                                                                  |
| 080T1208 | 12  | 8   | 13 | 39,5 | 25                                                                                  |
| 080T1210 | 12  | 10  | 16 | 41,4 | 25                                                                                  |
| 080T1406 | 14  | 6   | 15 | 43,8 | 25                                                                                  |



## ART. 080T/E

Maggiorazione con codolo  
*Plug-in increaser*

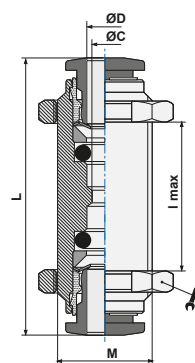
| CODICE    | ØD1 | ØD2 | ØB | L    |  |
|-----------|-----|-----|----|------|-------------------------------------------------------------------------------------|
| 080TE0406 | 4   | 6   | 11 | 35,5 | 50                                                                                  |
| 080TE0608 | 6   | 8   | 13 | 39   | 50                                                                                  |



## ART. 100T

Passaparete  
*Bulkhead connector*

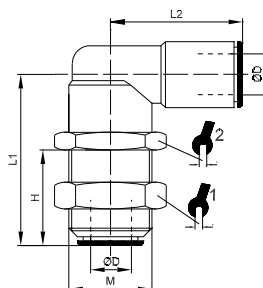
| CODICE   | ØD | ØC | M    | I max | L    |  |  |
|----------|----|----|------|-------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 100T0400 | 4  | 3  | 11x1 | 8     | 32   | 14                                                                                  | 50                                                                                  |
| 100T0600 | 6  | 5  | 14x1 | 8     | 36,1 | 17                                                                                  | 50                                                                                  |
| 100T0800 | 8  | 7  | 16x1 | 10    | 38   | 18                                                                                  | 50                                                                                  |
| 100T1000 | 10 | 9  | 18x1 | 12    | 42,3 | 21                                                                                  | 25                                                                                  |
| 100T1200 | 12 | 11 | 22x1 | 17    | 45,8 | 26                                                                                  | 25                                                                                  |
| 100T1400 | 14 | 13 | 24x1 | 18    | 47,5 | 27                                                                                  | 25                                                                                  |



**ART. 100TL**

Passaparete ad L  
*L bulkhead*

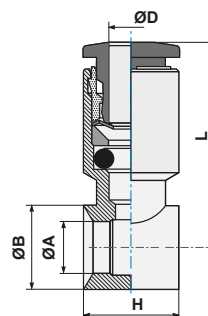
| CODICE    | ØD | M     | H    | L1   | L2 |  |  |  |
|-----------|----|-------|------|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 100TL0400 | 4  | M11x1 | 12,5 | 25,5 | 20 | 13                                                                                | 13                                                                                | 50                                                                                |
| 100TL0600 | 6  | M14x1 | 15   | 28   | 21 | 17                                                                                | 17                                                                                | 50                                                                                |
| 100TL0800 | 8  | M16x1 | 17   | 30,5 | 24 | 18                                                                                | 18                                                                                | 50                                                                                |
| 100TL1000 | 10 | M18x1 | 19   | 35   | 27 | 21                                                                                | 21                                                                                | 25                                                                                |


**ART. 130T**

Anello semplice  
*Single banjo body*

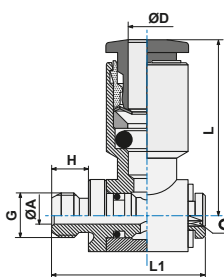
| CODICE    | ØD | G*  | ØA    | ØB | H  | L    |  |
|-----------|----|-----|-------|----|----|------|-----------------------------------------------------------------------------------|
| 130T04M5  | 4  | M5  | 5     | 8  | 9  | 19,5 | 50                                                                                |
| 130T0418  | 4  | 1/8 | 9,9   | 14 | 15 | 21,1 | 50                                                                                |
| 130T0618  | 6  | 1/8 | 9,9   | 14 | 15 | 24,3 | 50                                                                                |
| 130T0614  | 6  | 1/4 | 13,3  | 18 | 17 | 25,5 | 50                                                                                |
| 130T0818  | 8  | 1/8 | 9,9   | 14 | 15 | 24,8 | 50                                                                                |
| 130T0814  | 8  | 1/4 | 13,3  | 18 | 17 | 26,5 | 50                                                                                |
| 130T0838  | 8  | 3/8 | 16,75 | 21 | 20 | 28,0 | 50                                                                                |
| 130T1014  | 10 | 1/4 | 13,3  | 18 | 17 | 28,4 | 50                                                                                |
| 130T1038  | 10 | 3/8 | 16,75 | 21 | 20 | 29,9 | 25                                                                                |
| 130T1214  | 12 | 1/4 | 13,3  | 18 | 17 | 30,9 | 25                                                                                |
| 130T1238  | 12 | 3/8 | 16,75 | 21 | 20 | 31,4 | 25                                                                                |
| 130T1212  | 12 | 1/2 | 21    | 26 | 24 | 34,9 | 25                                                                                |
| 130TR04M5 | 4  | M5  | 6     | 8  | 9  | 19,5 | 50                                                                                |
| 130TR06M5 | 6  | M5  | 6     | 8  | 9  | 22,5 | 50                                                                                |

(\*) G = filetto vite/asta  
(\*) G = steam thread

Vedi capitolo Astine pag. 39  
See page 39 of Stems section

**ART. 150T**

Anello semplice girevole con asta  
*Complete single banjo (rotating under pressure)*

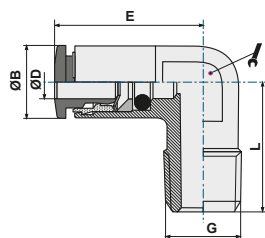
| CODICE   | ØD | G   | ØA  | H   | L1   | L    |  |  |
|----------|----|-----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 150T04M5 | 4  | M5  | 2   | 4   | 16,8 | 19,5 | 2,5                                                                                 | 50                                                                                  |
| 150T04M6 | 4  | M6  | 2   | 4   | 17,8 | 19,5 | 2,5                                                                                 | 50                                                                                  |
| 150T0418 | 4  | 1/8 | 5,5 | 5,5 | 25   | 21,1 | 3                                                                                   | 50                                                                                  |
| 150T06M5 | 6  | M5  | 2   | 4   | 16,5 | 22   | 2,5                                                                                 | 50                                                                                  |
| 150T0618 | 6  | 1/8 | 5,5 | 5,5 | 24,5 | 24,3 | 3                                                                                   | 50                                                                                  |
| 150T0614 | 6  | 1/4 | 7,8 | 6,5 | 28   | 25,5 | 4                                                                                   | 50                                                                                  |
| 150T0818 | 8  | 1/8 | 5,5 | 5,5 | 24,5 | 24,8 | 3                                                                                   | 50                                                                                  |
| 150T0814 | 8  | 1/4 | 7,8 | 6,5 | 28   | 26,5 | 4                                                                                   | 50                                                                                  |
| 150T0838 | 8  | 3/8 | 10  | 7,5 | 32,5 | 28   | 5                                                                                   | 25                                                                                  |
| 150T1014 | 10 | 1/4 | 7,8 | 6,5 | 28   | 28,4 | 4                                                                                   | 25                                                                                  |
| 150T1038 | 10 | 3/8 | 10  | 7,5 | 32,5 | 29,9 | 5                                                                                   | 25                                                                                  |
| 150T1214 | 12 | 1/4 | 7,8 | 6,5 | 28   | 30,9 | 4                                                                                   | 25                                                                                  |
| 150T1238 | 12 | 3/8 | 10  | 7,5 | 32,5 | 31,4 | 5                                                                                   | 25                                                                                  |
| 150T1212 | 12 | 1/2 | 12  | 9   | 40,8 | 34,9 | 8                                                                                   | 10                                                                                  |



## ART. 190T

Raccordo ad elle fisso  
*L male adaptor*

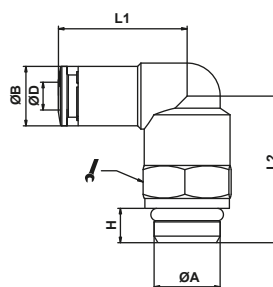
| CODICE   | ØD | G   | ØB | E    | L    |  |  |
|----------|----|-----|----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 190T0418 | 4  | 1/8 | 9  | 18,6 | 16,5 | 10                                                                                | 100                                                                               |
| 190T0618 | 6  | 1/8 | 11 | 23,8 | 16,5 | 10                                                                                | 100                                                                               |
| 190T0614 | 6  | 1/4 | 11 | 25,3 | 22,5 | 11                                                                                | 100                                                                               |
| 190T0818 | 8  | 1/8 | 13 | 25,5 | 18,5 | 11                                                                                | 100                                                                               |
| 190T0814 | 8  | 1/4 | 13 | 25,5 | 22,0 | 11                                                                                | 100                                                                               |
| 190T1014 | 10 | 1/4 | 16 | 28,0 | 24,0 | 13                                                                                | 50                                                                                |



## ART. 220T

Gomito girevole filetto cilindrico maschio con O-Ring  
*Swivel L male adaptor parallel*

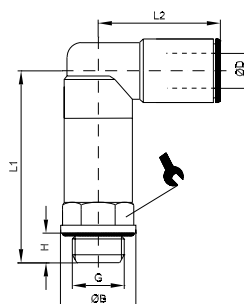
| CODICE    | ØD | A       | H  | ØB  | L1   | L2   |  |  |
|-----------|----|---------|----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 220T04M5  | 4  | M5      | 4  | 9,1 | 17,3 | 14,8 | 9                                                                                 | 100                                                                               |
| 220T04M12 | 4  | M12x1,5 | 8  | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220T0418  | 4  | 1/8     | 6  | 9,1 | 18,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220T0414  | 4  | 1/4     | 8  | 9,1 | 18,0 | 24,0 | 13                                                                                | 100                                                                               |
| 220T0438  | 4  | 3/8     | 9  | 9,1 | 18,0 | 25,5 | 13                                                                                | 100                                                                               |
| 220T06M5  | 6  | M5      | 4  | 11  | 14,5 | 21,0 | 9                                                                                 | 100                                                                               |
| 220T06M12 | 6  | M12x1,5 | 8  | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| 220T0618  | 6  | 1/8     | 6  | 11  | 23,0 | 20,0 | 13                                                                                | 100                                                                               |
| 220T0614  | 6  | 1/4     | 8  | 11  | 23,0 | 24,0 | 13                                                                                | 100                                                                               |
| 220T0638  | 6  | 3/8     | 9  | 11  | 23,0 | 25,5 | 13                                                                                | 100                                                                               |
| 220T08M12 | 8  | M12x1,5 | 8  | 13  | 25,5 | 25,5 | 13                                                                                | 100                                                                               |
| 220T0818  | 8  | 1/8     | 6  | 13  | 25,5 | 20,3 | 13                                                                                | 100                                                                               |
| 220T0814  | 8  | 1/4     | 8  | 13  | 25,5 | 24,3 | 13                                                                                | 100                                                                               |
| 220T0838  | 8  | 3/8     | 9  | 13  | 25,5 | 25,8 | 13                                                                                | 50                                                                                |
| 220T1014  | 10 | 1/4     | 8  | 16  | 27,0 | 26,0 | 16                                                                                | 50                                                                                |
| 220T1038  | 10 | 3/8     | 9  | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| 220T1012  | 10 | 1/2     | 11 | 16  | 27,0 | 27,5 | 16                                                                                | 50                                                                                |
| 220T1214  | 12 | 1/4     | 8  | 19  | 29,0 | 30,5 | 16                                                                                | 25                                                                                |
| 220T1238  | 12 | 3/8     | 9  | 19  | 29,0 | 28,5 | 20                                                                                | 25                                                                                |
| 220T1212  | 12 | 1/2     | 11 | 19  | 29,0 | 33,5 | 20                                                                                | 25                                                                                |
| 220T1438  | 14 | 3/8     | 9  | 21  | 32,0 | 28,5 | 20                                                                                | 25                                                                                |
| 220T1412  | 14 | 1/2     | 11 | 21  | 32,0 | 33,5 | 20                                                                                | 25                                                                                |



## ART. 22LOT

Gomito innestabile con codolo  
*Plug-in L connector*

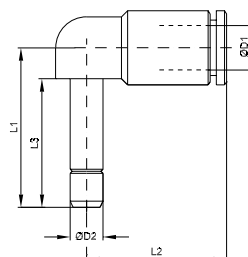
| CODICE    | ØD | G    | ØB | H | L1   | L2   |  |  |
|-----------|----|------|----|---|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 22LOT4M5  | 4  | M5   | 8  | 4 | 23,5 | 18   | 9                                                                                   | 25                                                                                  |
| 22LOT418  | 4  | G1/8 | 13 | 6 | 33   | 20   | 13                                                                                  | 25                                                                                  |
| 22LOT414  | 4  | G1/4 | 16 | 8 | 38   | 20   | 13                                                                                  | 25                                                                                  |
| 22LOT6M5  | 6  | M5   | 8  | 4 | 23,5 | 21   | 9                                                                                   | 25                                                                                  |
| 22LOT618  | 6  | G1/8 | 13 | 6 | 33   | 21   | 13                                                                                  | 25                                                                                  |
| 22LOT614  | 6  | G1/4 | 16 | 8 | 38   | 21   | 13                                                                                  | 25                                                                                  |
| 22LOT818  | 8  | G1/8 | 13 | 6 | 33   | 24   | 13                                                                                  | 25                                                                                  |
| 22LOT814  | 8  | G1/4 | 16 | 8 | 38   | 24   | 13                                                                                  | 25                                                                                  |
| 22LOT1014 | 10 | G1/4 | 16 | 8 | 37   | 26,5 | 16                                                                                  | 25                                                                                  |



**ART. 220TL0**

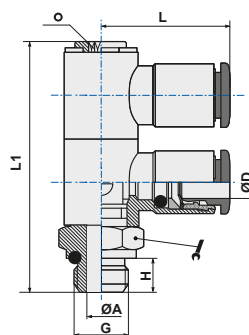
Gomito innestabile con codolo  
*Plug-in L connector*

| CODICE   | ØD1 | ØD2 | L1   | L2 | L3   |    |
|----------|-----|-----|------|----|------|----|
| 22OT04L0 | 4   | 4   | 19,5 | 18 | 15,5 | 50 |
| 22OT06L0 | 6   | 6   | 26,5 | 20 | 18   | 50 |
| 22OT08L0 | 8   | 8   | 31   | 24 | 19,5 | 50 |
| 22OT10L0 | 10  | 10  | 41   | 25 | 24   | 25 |
| 22OT12L0 | 12  | 12  | 29   | 28 | 25   | 25 |


**ART. 330T**

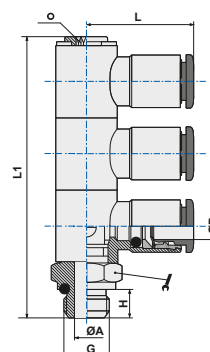
Doppio anello semplice girevole con asta  
*Swivel double banjo stem*

| CODICE   | ØD | G   | ØA  | H   | L1   | L    |    |   |    |
|----------|----|-----|-----|-----|------|------|----|---|----|
| 33OT0418 | 4  | 1/8 | 5,5 | 5,5 | 43,8 | 21,1 | 14 | 3 | 25 |
| 33OT0618 | 6  | 1/8 | 5,5 | 5,5 | 43,8 | 24,3 | 14 | 3 | 25 |
| 33OT0614 | 6  | 1/4 | 7,8 | 7,5 | 51,5 | 25,5 | 18 | 4 | 25 |
| 33OT0818 | 8  | 1/8 | 5,5 | 5,5 | 43,8 | 24,8 | 14 | 3 | 25 |
| 33OT0814 | 8  | 1/4 | 7,8 | 7,5 | 51,5 | 26,5 | 18 | 4 | 25 |
| 33OT1014 | 10 | 1/4 | 7,8 | 7,5 | 51,5 | 28,4 | 18 | 4 | 25 |


**ART. 340T**

Triplo anello semplice girevole con asta  
*Swivel triple banjo stem*

| CODICE   | ØD | G   | ØA  | H   | L1   | L    |    |   |    |
|----------|----|-----|-----|-----|------|------|----|---|----|
| 34OT0418 | 4  | 1/8 | 5,5 | 5,5 | 58,4 | 21,1 | 14 | 3 | 10 |
| 34OT0618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 14 | 3 | 10 |
| 34OT0614 | 6  | 1/4 | 7,8 | 7,5 | 67   | 25,5 | 18 | 4 | 10 |
| 34OT0818 | 8  | 1/8 | 5,5 | 5,5 | 58,4 | 24,8 | 14 | 3 | 10 |
| 34OT0814 | 8  | 1/4 | 7,8 | 7,5 | 67   | 26,5 | 18 | 4 | 10 |
| 34OT1014 | 10 | 1/4 | 7,8 | 7,5 | 67   | 51,5 | 18 | 4 | 10 |



**BREVE DESCRIZIONE**

I raccordi automatici della nostra serie RAP sono realizzati in Italia, a garanzia di elevati standard di qualità secondo le normative ISO di riferimento e rispondono alle seguenti specifiche tecniche e applicative.

**SHORT DESCRIPTION**

*The RAP series push-in fittings are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.*

**SCHEDA TECNICA TECHNICAL SHEET**

|                                                                       |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                       |                                                                                                  | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                                                     |
| APPLICAZIONI<br><i>APPLICATIONS</i>                                   |                                                                                                  | Pneumatica, idraulica a bassa pressione, secondo normativa DIN 3861-3870. Idonei al funzionamento con il vuoto.<br><i>Pneumatic circuits, low pressure hydraulic applications, according to DIN 3861-3870 norms. Suitable for vacuum applications.</i>                                                                                                                                                    |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                            |                                                                                                  | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br><i>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethylene), TCO (Copolyester)</i>                                                                                                                                                                                                                               |
| TOLLERANZE TUBI<br><i>TUBES TOLERANCES</i>                            |                                                                                                  | Diam. da 4 a 10 mm +/- 0,05 Diam. da 12 mm +/- 0,1<br><i>Diam. between 4 and 10 mm +/- 0,05 Diam. from 12 mm +/- 0,1</i>                                                                                                                                                                                                                                                                                  |
| GRADO DI PROTEZIONE<br><i>INGRESS PROTECTION</i>                      |                                                                                                  | "" IP 68 ""                                                                                                                                                                                                                                                                                                                                                                                               |
| TEMPERATURE<br>E PRESSIONI<br><br><i>TEMPERATURE<br/>AND PRESSURE</i> | VALORI LIMITE<br>CONSIGLIATI<br><br><i>RECOMMENDED<br/>LIMIT VALUES</i>                          | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato, e comunque si suggerisce di non superare i 15 bar e temperature comprese fra -20°C e +70°C.<br><i>Temperatures and pressures usually depend by the technical features of the employed tubes, anyway it is suggested a limit working pressure of 15 bar and a temperature range between -20°C and +70°C</i> |
|                                                                       | DATI TECNICI<br>DI PROVA<br><br><i>TECHNICAL<br/>TESTING DATA</i>                                | A pag. 34 sono riportati i dati di resistenza a trazione e i valori limite di utilizzo (Pressione e Temperature) relativi ai principali tubi commerciali.<br><i>At page 34 are indicated the load traction resistance values and the main working and breaking limit (Pressure and Temperature) of the main commercial tubing.</i>                                                                        |
|                                                                       | NOTA<br><i>NOTE</i>                                                                              | Per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br><i>For more complete informations pls read the technical catalogue of your tube supplier.</i>                                                                                                                                                                                                                      |
|                                                                       |                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                           |
| FILETTATURE<br><i>THREAD TYPE</i>                                     |                                                                                                  | BSP cilindrica UNI-ISO 228; BSP conica UNI-ISO 7; Metrica ISO/R 262.<br><i>BSP parallel UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                                                                                                                                                                                                                                          |
| MATERIALI<br><i>MATERIALS</i>                                         | corpo, spintore "OT", astine e basi girevoli<br><i>body, "OT" sleeve, stems and swivel bases</i> | Ottone UNI EN 12164 CW614N<br><i>Brass UNI EN 12164 CW614N</i>                                                                                                                                                                                                                                                                                                                                            |
|                                                                       | spintore, distanziale, sottomolla<br><i>sleeve, collar and back ring</i>                         | POM copolimero ISO1043-1<br><i>POM copolymer ISO1043-1</i>                                                                                                                                                                                                                                                                                                                                                |
|                                                                       | pinza<br><i>spring</i>                                                                           | Acciaio Inox AISI 301 austenitico<br><i>Stainless steel AISI 301 austenitic</i>                                                                                                                                                                                                                                                                                                                           |
|                                                                       | guarnizioni tenuta<br><i>seals</i>                                                               | NBR 70 DWGV-EN549 UL157<br><i>NBR 70 DWGV-EN549 UL157</i>                                                                                                                                                                                                                                                                                                                                                 |

## INFORMAZIONI TECNICHE AGGIUNTIVE

Ogni lotto della serie RAP viene sottoposto a controlli cosiddetti "rompilotto" durante tutto il ciclo produttivo, che comprendono, oltre all'osservazione estetica, la verifica di funzionalità e di eventuali perdite, un test in pressione a 8 bar per verificarne la conformità anche in condizioni di utilizzo nominali. Successivamente viene eseguito un test a campione di rottura (simulazione scoppio a 50 bar di pressione) con una macchina dedicata che sollecita il raccordo a trazione. Di seguito viene indicata la forza minima di strappo (in Newton) ammessa per ogni diametro:

| Diam. tubo <i>Tube diam.</i> | Forza di strappo <i>Breaking load</i> |
|------------------------------|---------------------------------------|
| Ø4                           | 63 N                                  |
| Ø6                           | 141 N                                 |
| Ø8                           | 251 N                                 |
| Ø10                          | 393 N                                 |
| Ø12                          | 566 N                                 |
| Ø14                          | 750 N                                 |

### Nota importante:

I valori indicati si riferiscono alla tenuta della pinza di aggraffaggio, "core part" sia del raccordo RAP in ottone, che del Tecno-RAP in tecnopolimero, per cui omogenei. I valori di rottura sperimentali misurati sono stati, in base al diametro, anche da 1,2 a 2,5 volte superiori.

### Informazioni complementari sulle temperature di utilizzo:

| Pressione di esercizio e pressione di scoppio (bar) alle diverse temperature<br>Working pressure and breaking pressure (bar) at different temperatures |                                  |                                 |                                  |                                 |                                  |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| Esempio<br>Example                                                                                                                                     | T-20°C                           | T-20°C                          | T+23°C                           | T+23°C                          | T+60°C                           | T+60°C                          |
| Tubo 6x4 colorato<br>Tube 6x4 colored                                                                                                                  | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar |
| TPU                                                                                                                                                    | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,2                              | 20,8                            |
| PA11                                                                                                                                                   | 37,4                             | 149,6                           | 20,0                             | 80,0                            | 10,4                             | 41,6                            |
| PA12                                                                                                                                                   | 48,6                             | 168,3                           | 26,0                             | 90,0                            | 10,4                             | 36,0                            |
| PE                                                                                                                                                     | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,0                              | 20,0                            |

Tutte le necessarie valutazioni sull'utilizzo dei raccordi in condizioni di esercizio differenti da quelle suggerite nella scheda tecnica iniziale debbono anche tenere conto, con riferimento alle temperature, dei dati nominali relativi al tubo utilizzato e del limite imposto dal componente più critico.

SERIE TECNORAP: -20°+50° • SERIE RAP : -20° +70°  
 SERIE OT: -20° + 80° • SERIE OV : -20° +150°  
 SERIE SS:-20° +120°

## ADDITIONAL TECHNICAL INFORMATION

Each RAP production batch is tested according to severe cyclics "lot breaker" controls along all the production period, which include shape observation, leakage verification, functionality, at the working pressure of 8 bar.

Then all samples taken from the lot are tested by a traction machine which simulate a breaking pressure of 50 bar.

Here below are indicated the traction loads (in Newton) for each size:

### Important note:

The values refer to the resistance of the crimping gripper, "core part" of both fittings, the brass RAP and the technopolymer Tecno-RAP, whereby homogeneous. The breaking experimental values measured, according to the diameter, were from 1.2 to 2.5 times higher.

### Additional information regarding the working temperatures:

Further to all the necessary assessments on the use of the fittings in operating conditions different from how suggested in the initial technical sheet must be considered, with reference to temperatures, the nominal data regarding the type of the used tube and the limit imposed by the most critical component.

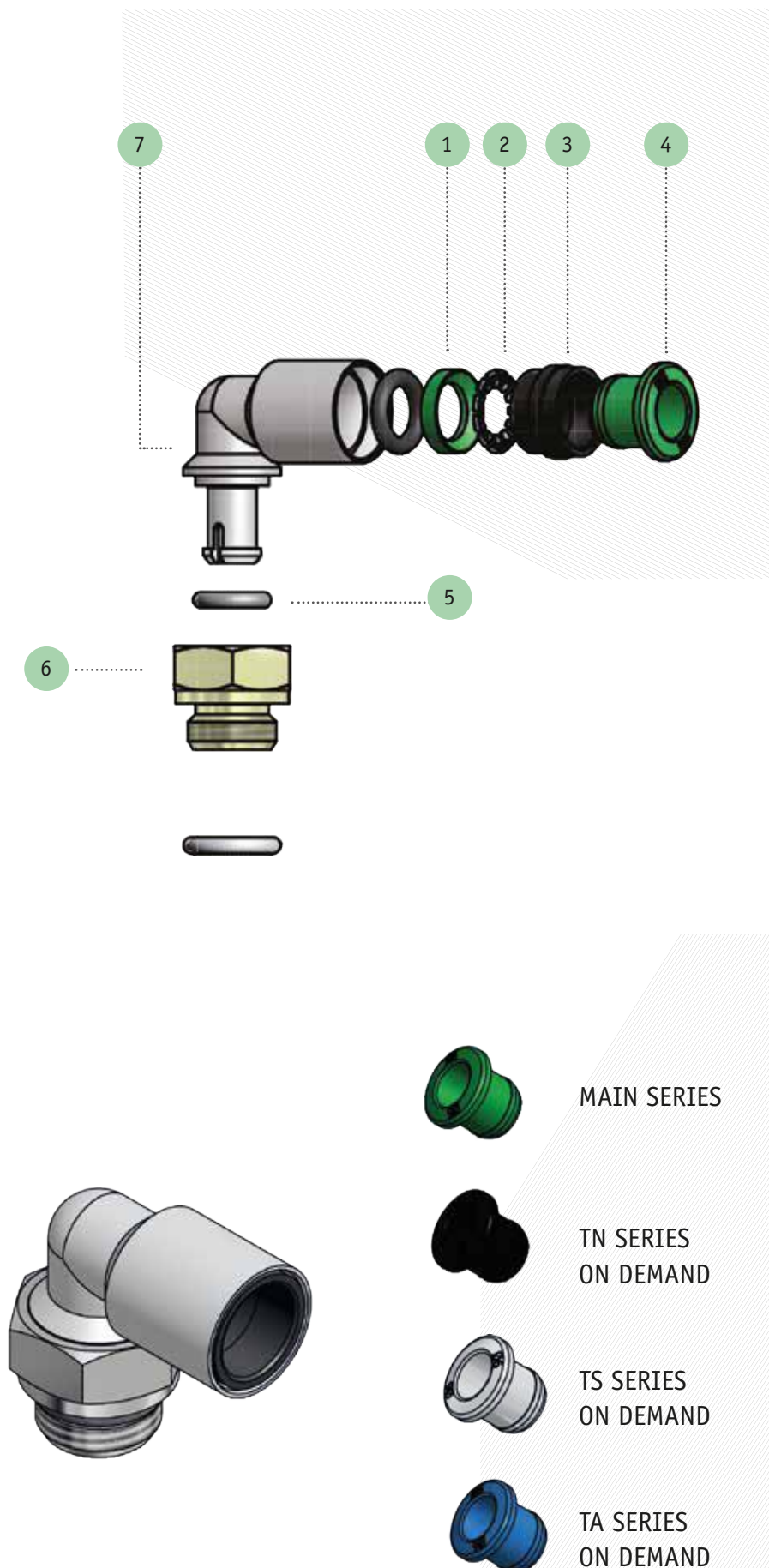
SERIES TECNORAP: -20°+50° • SERIES RAP : -20° +70°  
 SERIES OT: -20° + 80° • SERIES OV : -20° +150°  
 SERIES SS:-20° +120°



TECNO RAP



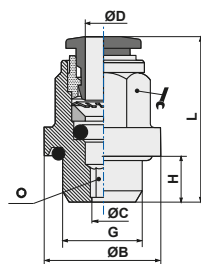
- 1 ANELLO DI SOSTEGNO  
LOCK RING
- 2 PINZA DI AGGRAFFAGGIO  
CRIMPING GRIPPER
- 3 DISTANZIALE DI FERMO  
LOCK RING
- 4 ANELLO SPINGITORE  
THRUST SLEEVE
- 5 O-RING DI TENUTA  
O-RING SEAL
- 6 BASE GIREVOLE  
SWIVEL BASE
- 7 CORPO DEL RACCORDO  
FITTING BODY



**ART. T01**

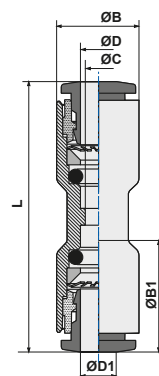
Diritto filetto cilindrico maschio con O-Ring  
*Straight male adaptor (parallel)*

| CODICE   | ØD | G       | ØC  | ØB   | H   | L    |  |  |  |
|----------|----|---------|-----|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T0104M10 | 4  | M10x1,5 | 2,5 | 14,0 | 7,5 | 21,3 | 10                                                                                | 2,5                                                                               | 50                                                                                |
| T010418  | 4  | 1/8     | 2,5 | 14,0 | 5,5 | 19,0 | 10                                                                                | 2,5                                                                               | 50                                                                                |
| T010414  | 4  | 1/4     | 2,5 | 17,5 | 6,5 | 20,8 | 10                                                                                | 2,5                                                                               | 50                                                                                |
| T0106M10 | 6  | M10x1,5 | 4,0 | 14,0 | 7,5 | 26,8 | 12                                                                                | 4,0                                                                               | 50                                                                                |
| T010618  | 6  | 1/8     | 4,0 | 14,0 | 5,5 | 24,5 | 12                                                                                | 4,0                                                                               | 50                                                                                |
| T010614  | 6  | 1/4     | 4,0 | 17,5 | 6,5 | 26,0 | 12                                                                                | 4,0                                                                               | 50                                                                                |
| T0108M10 | 8  | M10x1,5 | 6,0 | 14,0 | 7,5 | 28,1 | 14                                                                                | 5,0                                                                               | 50                                                                                |
| T010818  | 8  | 1/8     | 5,0 | 14,0 | 5,5 | 25,7 | 14                                                                                | 5,0                                                                               | 50                                                                                |
| T010814  | 8  | 1/4     | 6,0 | 17,5 | 6,5 | 27,2 | 14                                                                                | 6,0                                                                               | 50                                                                                |
| T011014  | 10 | 1/4     | 7,0 | 17,5 | 6,5 | 28,7 | 18                                                                                | 7,0                                                                               | 50                                                                                |


**ART. T03**

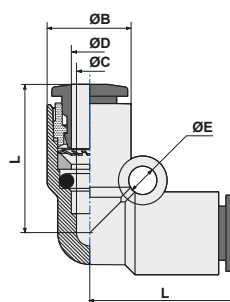
Diritto innestabile  
*Straight connector*

| CODICE  | ØD | ØD1 | ØC | ØB   | ØB1  | L    |  |
|---------|----|-----|----|------|------|------|-----------------------------------------------------------------------------------|
| T030400 | 4  | 4   | 3  | 9,5  | 9,5  | 32,0 | 50                                                                                |
| T030406 | 4  | 6   | 3  | 9,5  | 11,5 | 32,5 | 50                                                                                |
| T030600 | 6  | 6   | 5  | 11,5 | 11,5 | 35,6 | 50                                                                                |
| T030608 | 6  | 8   | 5  | 11,5 | 13,5 | 36,0 | 50                                                                                |
| T030800 | 8  | 8   | 7  | 13,5 | 13,5 | 38,0 | 50                                                                                |
| T030810 | 8  | 10  | 7  | 13,5 | 17,0 | 32,5 | 50                                                                                |
| T031000 | 10 | 10  | 9  | 17,0 | 17,0 | 42,3 | 50                                                                                |
| T031012 | 10 | 12  | 9  | 17,0 | 20,0 | 44,0 | 50                                                                                |
| T031200 | 12 | 12  | 10 | 20,0 | 20,0 | 46,2 | 25                                                                                |


**ART. T04**

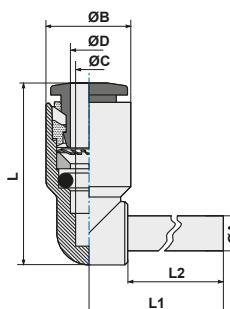
Gomito innestabile  
*L connector*

| CODICE  | ØD | ØC | ØB   | L    | ØE  |  |
|---------|----|----|------|------|-----|-------------------------------------------------------------------------------------|
| T040400 | 4  | 3  | 9,5  | 17,2 | 3,2 | 50                                                                                  |
| T040600 | 6  | 5  | 11,5 | 20,8 | 3,2 | 50                                                                                  |
| T040800 | 8  | 7  | 13,5 | 23,0 | 3,2 | 50                                                                                  |
| T041000 | 10 | 9  | 17,0 | 26,4 | 4,3 | 50                                                                                  |
| T041200 | 12 | 10 | 20,0 | 28,9 | 4,2 | 25                                                                                  |


**ART. T04L0**

Gomito innestabile con codolo  
*Plug-in L connector*

| CODICE  | ØD | ØC | ØB   | L    | L1    | ØA | L2   |  |
|---------|----|----|------|------|-------|----|------|-------------------------------------------------------------------------------------|
| T0404L0 | 4  | 3  | 9,5  | 17,2 | 20,75 | 4  | 16,7 | 50                                                                                  |
| T0406L0 | 6  | 5  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50                                                                                  |
| T0408L0 | 8  | 7  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50                                                                                  |
| T0410L0 | 10 | 9  | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 50                                                                                  |
| T0412L0 | 12 | 10 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 25                                                                                  |

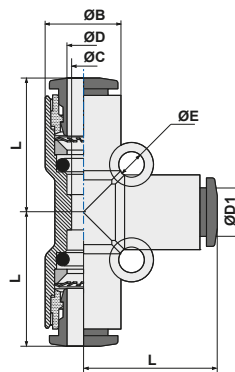


**ART. T05**

T Innestabile  
T connector

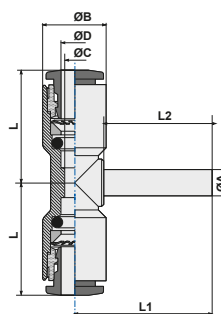
| CODICE   | ØD | ØD1 | ØC   | ØB   | L    |  |    |
|----------|----|-----|------|------|------|--|----|
| T050400  | 4  | 4   | 3,0  | 9,5  | 17,2 |  | 50 |
| T050604* | 6  | 4   | 5,3  | 13,0 | 19,2 |  | 50 |
| T050600  | 6  | 6   | 5,0  | 11,5 | 20,8 |  | 50 |
| T050806* | 8  | 6   | 7,1  | 14,4 | 22,7 |  | 25 |
| T050800  | 8  | 8   | 7,0  | 13,5 | 23,0 |  | 50 |
| T051008* | 10 | 8   | 9,3  | 18,4 | 27,9 |  | 25 |
| T051000  | 10 | 10  | 9,0  | 17,0 | 26,4 |  | 25 |
| T051210* | 12 | 10  | 10,0 | 21,0 | 29,9 |  | 10 |
| T051200  | 12 | 12  | 10,0 | 20,0 | 28,9 |  | 10 |
|          |    |     |      |      |      |  |    |
|          |    |     |      |      |      |  |    |
|          |    |     |      |      |      |  |    |
|          |    |     |      |      |      |  |    |
|          |    |     |      |      |      |  |    |

\* = di importazione - imported


**ART. T05LO**

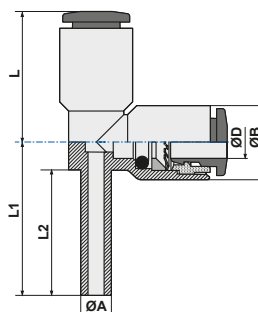
T Innestabile con codolo centrale  
Plug-in T connector (center)

| CODICE  | ØD | ØC | ØB   | L    | L1    | ØA | L2   |    |
|---------|----|----|------|------|-------|----|------|----|
| T0504LO | 4  | 3  | 9,5  | 17,2 | 20,75 | 4  | 16,7 | 50 |
| T0506LO | 6  | 5  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50 |
| T0508LO | 8  | 7  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50 |
| T0510LO | 10 | 9  | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 25 |
| T0512LO | 12 | 10 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 10 |
|         |    |    |      |      |       |    |      |    |
|         |    |    |      |      |       |    |      |    |
|         |    |    |      |      |       |    |      |    |
|         |    |    |      |      |       |    |      |    |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last

**ART. T05V0**

T Innestabile con codolo laterale  
Plug-in T connector (lateral)

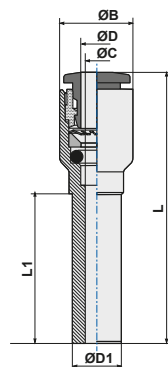
| CODICE  | ØD | ØB   | L    | L1    | ØA | L2   |    |
|---------|----|------|------|-------|----|------|----|
| T0506V0 | 6  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50 |
| T0508V0 | 8  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50 |
| T0510V0 | 10 | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 25 |
| T0512V0 | 12 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 10 |
|         |    |      |      |       |    |      |    |
|         |    |      |      |       |    |      |    |
|         |    |      |      |       |    |      |    |
|         |    |      |      |       |    |      |    |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last


**ART. T08**

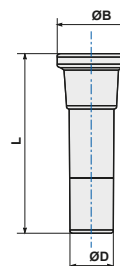
Riduzione  
*Reducer*

| CODICE  | ØD1 | ØD | ØC | ØB   | L     | L1    |  |
|---------|-----|----|----|------|-------|-------|-----------------------------------------------------------------------------------|
| T080604 | 6   | 4  | 3  | 9,5  | 35,5  | 19,5  | 50                                                                                |
| T080804 | 8   | 4  | 3  | 9,5  | 37,0  | 21,0  | 50                                                                                |
| T081004 | 10  | 4  | 3  | 9,5  | 40,0  | 24,0  | 25                                                                                |
| T081204 | 12  | 4  | 3  | 9,5  | 41,0  | 25,0  | 25                                                                                |
| T080806 | 8   | 6  | 5  | 11,5 | 39,05 | 23,0  | 50                                                                                |
| T081006 | 10  | 6  | 5  | 11,5 | 42,05 | 24,0  | 25                                                                                |
| T081206 | 12  | 6  | 5  | 11,5 | 43,05 | 25,0  | 25                                                                                |
| T081008 | 10  | 8  | 7  | 13,5 | 43,0  | 26,25 | 25                                                                                |
| T081208 | 12  | 8  | 7  | 13,5 | 44,0  | 25,0  | 25                                                                                |
| T081210 | 12  | 10 | 9  | 17,0 | 46,15 | 27,55 | 25                                                                                |


**ART. T09**

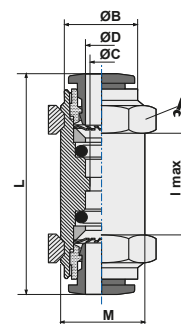
Tappo  
*Plug*

| CODICE  | ØD | ØB   | L    |  |
|---------|----|------|------|-----------------------------------------------------------------------------------|
| T090400 | 4  | 7,0  | 25,0 | 100                                                                               |
| T090600 | 6  | 9,5  | 27,5 | 100                                                                               |
| T090800 | 8  | 12,0 | 30,0 | 100                                                                               |
| T091000 | 10 | 14,0 | 32,5 | 100                                                                               |
| T091200 | 12 | 16,0 | 35,0 | 100                                                                               |


**ART. T10**

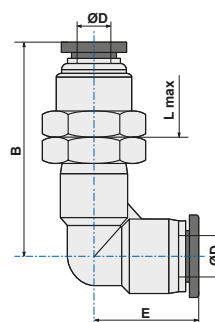
Passaparete  
*Bulkhead connector*

| CODICE  | ØD | ØB   | L    | M    | I <sub>max</sub> |  |  |
|---------|----|------|------|------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T100400 | 4  | 9,5  | 32,0 | 11x1 | 8                | 14                                                                                  | 50                                                                                  |
| T100600 | 6  | 11,5 | 36,1 | 14x1 | 8                | 17                                                                                  | 50                                                                                  |
| T100800 | 8  | 13,5 | 38,0 | 16x1 | 10               | 18                                                                                  | 50                                                                                  |
| T101000 | 10 | 17,5 | 42,3 | 20x1 | 12               | 24                                                                                  | 25                                                                                  |
| T101200 | 12 | 20,0 | 46,2 | 22x1 | 17               | 26                                                                                  | 25                                                                                  |


**ART. T10L**

Passaparete a "L"  
*L bulkhead*

| CODICE   | ØD | M    | B    | E    | H  | L max | CH |  |
|----------|----|------|------|------|----|-------|----|-------------------------------------------------------------------------------------|
| T10L0400 | 4  | 12x1 | 28,5 | 19,0 | 14 | 6     | 14 | 25                                                                                  |
| T10L0600 | 6  | 14x1 | 32,1 | 19,2 | 17 | 7     | 17 | 25                                                                                  |
| T10L0800 | 8  | 16x1 | 39,4 | 23,0 | 19 | 7,5   | 19 | 25                                                                                  |
| T10L1000 | 10 | 20x1 | 44,8 | 28,2 | 24 | 9,5   | 24 | 25                                                                                  |
| T10L1200 | 12 | 22x1 | 46,6 | 29,5 | 27 | 10    | 26 | 10                                                                                  |



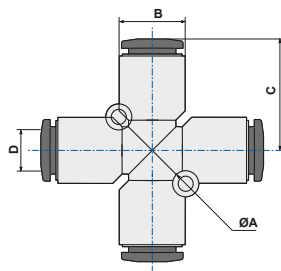
NOTA: articolo di importazione - NOTE: imported item

**ART. T11**

Croce intermedio  
*Cross connector*

| CODICE   | ØD |  | ØB   | ØA   | C |  |    |
|----------|----|--|------|------|---|--|----|
| T110400  | 4  |  | 9,5  | 17,2 | 3 |  | 25 |
| T110600  | 6  |  | 11,5 | 20,8 | 3 |  | 25 |
| T110800  | 8  |  | 13,5 | 23,0 | 3 |  | 25 |
| T111000* | 10 |  | 17,0 | 6,5  | 3 |  | 10 |
| T111200* | 12 |  | 20,0 | 28,8 | 3 |  | 10 |
|          |    |  |      |      |   |  |    |
|          |    |  |      |      |   |  |    |

\* = di importazione - imported


**ART. T13**

Anello semplice  
*Single banjo body*

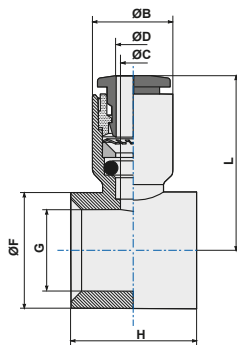
| CODICE   | ØD | G*  | ØC | ØB   | ØA    | H  | L    | ØF   |    |
|----------|----|-----|----|------|-------|----|------|------|----|
| T1304M5  | 4  | M5  | 3  | 9,5  | 5     | 10 | 19,5 | 8,0  | 50 |
| T130418  | 4  | 1/8 | 3  | 9,5  | 9,9   | 15 | 21,1 | 14,0 | 50 |
| T130618  | 6  | 1/8 | 5  | 11,5 | 9,9   | 15 | 24,3 | 14,0 | 50 |
| T130614  | 6  | 1/4 | 5  | 11,5 | 13,3  | 17 | 25,5 | 18,0 | 50 |
| T130818  | 8  | 1/8 | 7  | 13,5 | 9,9   | 15 | 24,8 | 14,0 | 50 |
| T130814  | 8  | 1/4 | 7  | 13,5 | 13,3  | 17 | 26,5 | 18,0 | 50 |
| T130838  | 8  | 3/8 | 7  | 13,5 | 16,75 | 20 | 28,0 | 21,3 | 50 |
| T131014  | 10 | 1/4 | 9  | 17,0 | 13,3  | 17 | 28,4 | 18,0 | 50 |
| T131038  | 10 | 3/8 | 9  | 17,0 | 16,75 | 20 | 29,9 | 21,3 | 25 |
| T131012  | 10 | 1/2 | 9  | 17,0 | 13,3  | 24 | 30,0 | 26,0 | 25 |
| T131238  | 12 | 3/8 | 10 | 20,0 | 16,75 | 20 | 31,4 | 21,3 | 25 |
| T131212  | 12 | 1/2 | 10 | 20,0 | 21    | 24 | 34,9 | 26,0 | 25 |
| T13R04M5 | 4  | M5  | 3  | 9,5  | 6     | 10 | 19,5 | 8    | 50 |
| T13R06M5 | 6  | M5  | 5  | 11,5 | 6     | 10 | 23   | 8    | 50 |

(\*) G = filetto vite/asta

(\*) G = steam thread

Vedi capitolo Astine pag. 39

See page 39 of Stems section


**ART. T13B**

Anello semplice due vie  
*Single branch body*

| CODICE   | ØD | G*  |  | H  | L    | L2 |    |
|----------|----|-----|--|----|------|----|----|
| T13B04M5 | 4  | M5  |  | 10 | 19,5 | 19 | 50 |
| T13B0618 | 6  | 1/8 |  | 15 | 24,3 | 23 | 50 |
| T13B0814 | 8  | 1/4 |  | 17 | 26,5 | 27 | 50 |
| T13B1038 | 10 | 3/8 |  | 20 | 29,9 | 34 | 25 |
| T13B1212 | 12 | 1/2 |  | 24 | 34,9 | 40 | 10 |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |
|          |    |     |  |    |      |    |    |

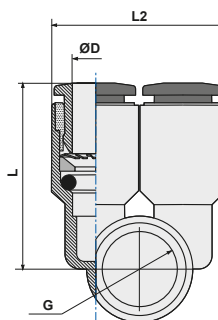
(\*) G = filetto vite/asta

(\*) G = steam thread

H = altezza sede asta - H = stem site lenght

Vedi capitolo Astine pag. 39

See page 39 of Stems section





**ART. T14**

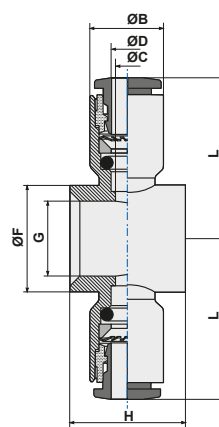
Anello doppio  
*Double banjo body*

| CODICE  | ØD | G*  | ØC | ØB   | H  | ØF   | L    |  |
|---------|----|-----|----|------|----|------|------|-----------------------------------------------------------------------------------|
| T1404M5 | 4  | M5  | 3  | 9,5  | 10 | 8,0  | 19,5 | 50                                                                                |
| T140418 | 4  | 1/8 | 3  | 9,5  | 15 | 14,0 | 21,1 | 50                                                                                |
| T140814 | 8  | 1/4 | 7  | 13,5 | 17 | 18,0 | 26,5 | 50                                                                                |
| T140838 | 8  | 3/8 | 7  | 13,5 | 20 | 21,3 | 28,0 | 25                                                                                |
| T141014 | 10 | 1/4 | 9  | 17,0 | 17 | 18,0 | 28,4 | 50                                                                                |
| T141038 | 10 | 3/8 | 9  | 17,0 | 20 | 21,3 | 29,9 | 25                                                                                |
| T141012 | 10 | 1/2 | 9  | 17,0 | 24 | 26,0 | 30,0 | 10                                                                                |
| T141238 | 12 | 3/8 | 10 | 20,0 | 20 | 21,3 | 31,4 | 25                                                                                |
| T141212 | 12 | 1/2 | 10 | 20,0 | 24 | 26,0 | 34,9 | 10                                                                                |

(\*) G = filetto vite/asta  
(\*) G = steam thread

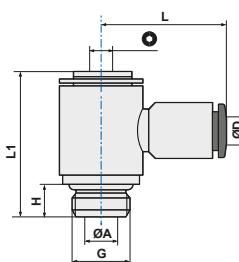
Vedi capitolo Astine pag. 39  
See page 39 of Stems section

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last


**ART. T15**

Anello semplice girevole con asta  
*Complete single banjo (rotating under pressure)*

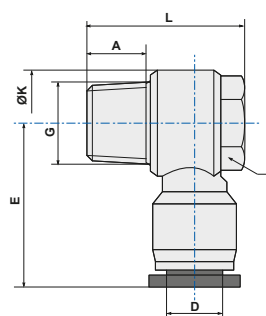
| CODICE  | ØD | G   | ØA   | H   | L1   | L    | Ø   |  |
|---------|----|-----|------|-----|------|------|-----|-----------------------------------------------------------------------------------|
| T1504M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50                                                                                |
| T1504M6 | 4  | M6  | 2,0  | 5,0 | 18,9 | 19,5 | 2,5 | 50                                                                                |
| T150418 | 4  | 1/8 | 5,5  | 5,5 | 24,5 | 21,1 | 3,0 | 50                                                                                |
| T150618 | 6  | 1/8 | 5,5  | 5,5 | 24,5 | 24,3 | 3,0 | 50                                                                                |
| T150614 | 6  | 1/4 | 7,8  | 6,5 | 28,0 | 25,5 | 4,0 | 50                                                                                |
| T150818 | 8  | 1/8 | 5,5  | 5,5 | 24,5 | 24,8 | 3,0 | 50                                                                                |
| T150814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 50                                                                                |
| T150838 | 8  | 3/8 | 10,0 | 7,5 | 32,5 | 28,0 | 5,0 | 25                                                                                |
| T151014 | 10 | 1/4 | 7,8  | 6,5 | 28,0 | 28,4 | 4,0 | 25                                                                                |
| T151038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25                                                                                |
| T151012 | 10 | 1/2 | 12,0 | 9,0 | 38,8 | 30,0 | 8,0 | 10                                                                                |
| T151238 | 12 | 3/8 | 10,0 | 7,5 | 32,5 | 31,4 | 5,0 | 10                                                                                |
| T151212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10                                                                                |


**ART. T15C**

Anello semplice girevole con asta conico  
*Complete single banjo tapered*

| CODICE   | ØD | G   | A    | L    | ØK   | E    |  |  |
|----------|----|-----|------|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T15C0418 | 4  | 1/8 | 7,5  | 23,0 | 14,4 | 23,5 | 12                                                                                  | 50                                                                                  |
| T15C0618 | 6  | 1/8 | 7,5  | 23,0 | 14,4 | 24,0 | 12                                                                                  | 50                                                                                  |
| T15C0614 | 6  | 1/4 | 9,5  | 26,5 | 18,3 | 25,4 | 14                                                                                  | 50                                                                                  |
| T15C0638 | 6  | 3/8 | 10,5 | 32,0 | 22,0 | 29,5 | 19                                                                                  | 25                                                                                  |
| T15C0818 | 8  | 1/8 | 7,5  | 23,0 | 14,4 | 28,9 | 14                                                                                  | 50                                                                                  |
| T15C0814 | 8  | 1/4 | 9,5  | 26,5 | 18,3 | 29,1 | 14                                                                                  | 50                                                                                  |
| T15C0838 | 8  | 3/8 | 10,5 | 32,0 | 22,0 | 30,0 | 19                                                                                  | 25                                                                                  |
| T15C1014 | 10 | 1/4 | 9,5  | 26,5 | 18,3 | 33,0 | 14                                                                                  | 25                                                                                  |
| T15C1038 | 10 | 3/8 | 10,5 | 32,0 | 22,0 | 33,5 | 19                                                                                  | 25                                                                                  |
| T15C1012 | 10 | 1/2 | 13,5 | 38,5 | 28,0 | 36,5 | 24                                                                                  | 10                                                                                  |
| T15C1238 | 12 | 3/8 | 10,5 | 32,0 | 22,0 | 35,8 | 19                                                                                  | 10                                                                                  |
| T15C1212 | 12 | 1/2 | 13,5 | 38,5 | 28,0 | 36,8 | 24                                                                                  | 10                                                                                  |

NOTA: articolo di importazione - NOTE: imported item

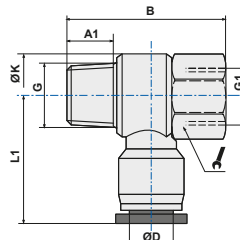


**ART. T15FC**

Anello semplice girevole con asta femmina conico  
*Female complete single banjo tapered*

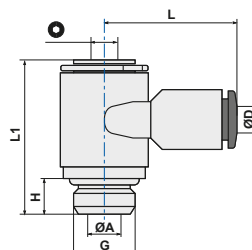
| CODICE    | ØD | G/G1 | L1   | A1   | B    | ØK   |    |    |
|-----------|----|------|------|------|------|------|----|----|
| T15FC0418 | 4  | 1/8  | 23,5 | 7,5  | 29,0 | 14,4 | 14 | 50 |
| T15FC0414 | 4  | 1/4  | 25,5 | 9,5  | 35,0 | 18,3 | 17 | 50 |
| T15FC0618 | 6  | 1/8  | 24,0 | 7,5  | 29,0 | 14,4 | 14 | 50 |
| T15FC0614 | 6  | 1/4  | 25,4 | 9,5  | 35,0 | 18,3 | 17 | 50 |
| T15FC0818 | 8  | 1/8  | 26,5 | 7,5  | 29,0 | 14,4 | 14 | 50 |
| T15FC0814 | 8  | 1/4  | 28,9 | 9,5  | 35,0 | 18,3 | 17 | 50 |
| T15FC0838 | 8  | 3/8  | 30,0 | 10,5 | 40,0 | 22,0 | 21 | 25 |
| T15FC1014 | 10 | 1/4  | 33,0 | 9,5  | 35,0 | 22,0 | 21 | 25 |
| T15FC1038 | 10 | 3/8  | 33,5 | 10,5 | 40,0 | 28,0 | 24 | 25 |
| T15FC1012 | 10 | 1/2  | 36,5 | 13,5 | 47,5 | 18,3 | 17 | 10 |
| T15FC1238 | 12 | 3/8  | 35,5 | 10,5 | 40,0 | 22,0 | 21 | 10 |
| T15FC1212 | 12 | 1/2  | 36,5 | 13,5 | 47,5 | 28,0 | 24 | 10 |

NOTA: articolo di importazione  
NOTE: imported item


**ART. T15B**

Anello due vie girevole con asta  
*Single branch universal male elbow*

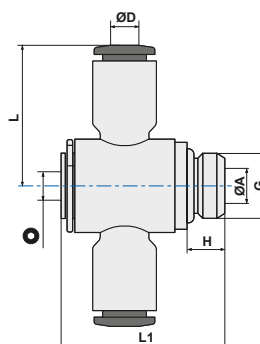
| CODICE   | ØD | G   | ØA   | H   | L1   | L    | Ø   |    |
|----------|----|-----|------|-----|------|------|-----|----|
| T15B04M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50 |
| T15B0618 | 6  | 1/8 | 5,5  | 5,5 | 24,5 | 24,3 | 3,0 | 50 |
| T15B0814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 50 |
| T15B1038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25 |
| T15B1212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10 |
|          |    |     |      |     |      |      |     |    |
|          |    |     |      |     |      |      |     |    |
|          |    |     |      |     |      |      |     |    |
|          |    |     |      |     |      |      |     |    |


**ART. T16**

Anello doppio girevole con asta  
*Complete double banjo (rotating under pressure)*

| CODICE  | ØD | G   | ØA   | H   | L1   | L    | Ø   |    |
|---------|----|-----|------|-----|------|------|-----|----|
| T1604M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50 |
| T160418 | 4  | 1/8 | 5,5  | 5,5 | 24,5 | 21,1 | 3,0 | 50 |
| T160814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 25 |
| T160838 | 8  | 3/8 | 10,0 | 7,5 | 32,5 | 28,0 | 5,0 | 25 |
| T161014 | 10 | 1/4 | 7,8  | 6,5 | 28,0 | 28,4 | 4,0 | 25 |
| T161038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25 |
| T161012 | 10 | 1/2 | 12,0 | 9,0 | 38,8 | 30,0 | 8,0 | 10 |
| T161238 | 12 | 3/8 | 10,0 | 7,5 | 32,5 | 31,4 | 5,0 | 25 |
| T161212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10 |
|         |    |     |      |     |      |      |     |    |
|         |    |     |      |     |      |      |     |    |
|         |    |     |      |     |      |      |     |    |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last

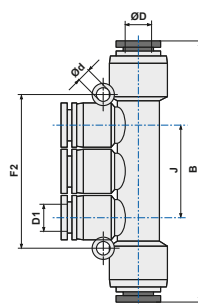


**ART. T18**

Giunzione tripla intermedia  
*Triple branch union*

| CODICE  | ØD | ØD1 | J  | B    | Ød  | F2 |    |
|---------|----|-----|----|------|-----|----|----|
| T180604 | 6  | 4   | 22 | 58,0 | 3,2 | 36 | 25 |
| T180804 | 8  | 4   | 26 | 63,4 | 3,2 | 42 | 25 |
| T180806 | 8  | 6   | 26 | 63,4 | 3,2 | 42 | 25 |
| T181006 | 10 | 6   | 29 | 83,8 | 4,2 | 48 | 10 |
| T181008 | 10 | 8   | 29 | 83,6 | 4,2 | 48 | 10 |

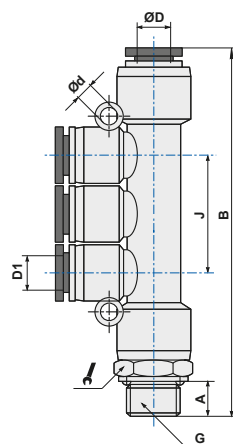
NOTA: articolo di importazione - NOTE: imported item


**ART. T18G**

Giunzione tripla filettata  
*Male triple branch*

| CODICE   | ØD | D1 | G   | A   | B     | J  |    | Ød  |    |
|----------|----|----|-----|-----|-------|----|----|-----|----|
| T18G0418 | 4  | 4  | 1/8 | 5,5 | 68,0  | 26 | 14 | 3,2 | 25 |
| T18G0414 | 4  | 4  | 1/4 | 7,5 | 70,0  | 26 | 17 | 3,2 | 25 |
| T18G0438 | 4  | 4  | 3/8 | 7,5 | 70,0  | 26 | 20 | 3,2 | 10 |
| T18G0618 | 6  | 6  | 1/8 | 5,5 | 68,0  | 26 | 14 | 3,2 | 25 |
| T18G0614 | 6  | 6  | 1/4 | 7,5 | 70,0  | 26 | 17 | 3,2 | 25 |
| T18G0638 | 6  | 6  | 3/8 | 7,5 | 70,5  | 26 | 20 | 3,2 | 10 |
| T18G0612 | 6  | 6  | 1/2 | 9   | 73,0  | 26 | 24 | 3,2 | 10 |
| T18G0818 | 8  | 8  | 1/8 | 5,5 | 87,0  | 29 | 14 | 3,2 | 10 |
| T18G0814 | 8  | 8  | 1/4 | 7,5 | 89,0  | 29 | 17 | 3,2 | 10 |
| T18G0838 | 8  | 8  | 3/8 | 7,5 | 89,5  | 29 | 20 | 3,2 | 10 |
| T18G0812 | 8  | 8  | 1/2 | 9   | 92,5  | 29 | 24 | 3,2 | 10 |
| T18G1018 | 10 | 10 | 1/8 | 5,5 | 95,5  | 37 | 14 | 4,2 | 10 |
| T18G1014 | 10 | 10 | 1/4 | 7,5 | 98,0  | 37 | 17 | 4,2 | 10 |
| T18G1038 | 10 | 10 | 3/8 | 7,5 | 98,5  | 37 | 20 | 4,2 | 10 |
| T18G1012 | 10 | 10 | 1/2 | 9   | 101,5 | 37 | 24 | 4,2 | 10 |

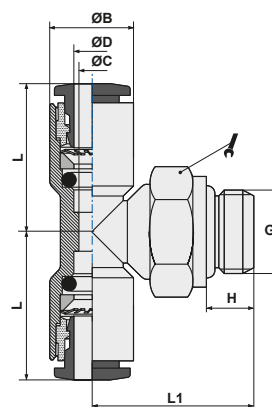
NOTA: articolo di importazione - NOTE: imported item


**ART. T20**

Raccordo a T centrale girevole  
*Swivel male stud T parallel*

| CODICE   | ØD | G   | ØB   | H    | L    | L1   |    |    |
|----------|----|-----|------|------|------|------|----|----|
| T2004M3  | 4  | M3  | 9,5  | 3,0  | 17,2 | 15,0 | 8  | 50 |
| T2004M5  | 4  | M5  | 9,5  | 4,0  | 17,2 | 17,0 | 8  | 50 |
| T200418  | 4  | 1/8 | 9,5  | 5,5  | 17,2 | 18,5 | 13 | 50 |
| T200414  | 4  | 1/4 | 9,5  | 7,5  | 17,2 | 20,4 | 16 | 50 |
| T200438* | 4  | 3/8 | 11,0 | 7,5  | 19,0 | 27,3 | 20 | 25 |
| T2006M5  | 6  | M5  | 9,5  | 4,0  | 20,8 | 17,0 | 8  | 50 |
| T200618  | 6  | 1/8 | 11,5 | 5,5  | 20,8 | 18,5 | 13 | 50 |
| T200614  | 6  | 1/4 | 11,5 | 7,5  | 20,8 | 20,4 | 16 | 50 |
| T200638* | 6  | 3/8 | 13,0 | 7,5  | 19,5 | 27,5 | 20 | 25 |
| T200612* | 6  | 1/2 | 13,0 | 9    | 19,5 | 30,0 | 24 | 10 |
| T200818  | 8  | 1/8 | 13,5 | 5,5  | 23,0 | 20,0 | 13 | 50 |
| T200814  | 8  | 1/4 | 13,5 | 6,5  | 23,0 | 20,4 | 16 | 50 |
| T200838  | 8  | 3/8 | 13,5 | 7,5  | 23,0 | 24,8 | 18 | 25 |
| T200812* | 8  | 1/2 | 15,0 | 9    | 22,5 | 32,5 | 24 | 10 |
| T201018* | 10 | 1/8 | 19,0 | 5,5  | 28,5 | 32,3 | 17 | 25 |
| T201014  | 10 | 1/4 | 17,0 | 7,5  | 26,4 | 23,2 | 16 | 25 |
| T201038* | 10 | 3/8 | 19,0 | 10,5 | 28,5 | 38,0 | 17 | 25 |
| T201012* | 10 | 1/2 | 17,0 | 9    | 26,4 | 31,1 | 21 | 10 |
| T201218* | 12 | 1/8 | 21,5 | 5,5  | 29,5 | 33,5 | 27 | 10 |
| T201214* | 12 | 1/4 | 21,5 | 7,5  | 29,5 | 38,5 | 21 | 10 |
| T201238* | 12 | 3/8 | 20,0 | 7,5  | 28,9 | 26,3 | 18 | 10 |
| T201212* | 12 | 20  | 20,0 | 9    | 28,9 | 29,3 | 21 | 10 |

\* = di importazione - imported

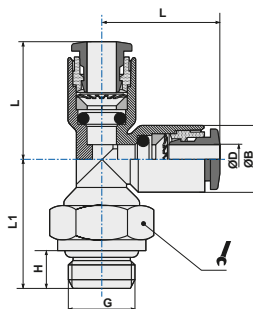


**ART. T21**

Raccordo a T laterale girevole  
*Swivel male branch T parallel*

| CODICE   | ØD | G   | ØB   | H   | L    | L1   |  |  |
|----------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T2104M3  | 4  | M3  | 9,5  | 3   | 12,2 | 15,0 | 8                                                                                 | 50                                                                                |
| T2104M5  | 4  | M5  | 9,5  | 4   | 12,2 | 17,0 | 8                                                                                 | 50                                                                                |
| T210418  | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 13                                                                                | 50                                                                                |
| T210414  | 4  | 1/4 | 9,5  | 7,5 | 17,2 | 20,4 | 16                                                                                | 50                                                                                |
| T210438* | 4  | 3/8 | 11,0 | 7,5 | 19   | 27,3 | 20                                                                                | 25                                                                                |
| T210618  | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 13                                                                                | 50                                                                                |
| T210614  | 6  | 1/4 | 11,5 | 7,5 | 20,8 | 20,4 | 16                                                                                | 50                                                                                |
| T210638* | 6  | 3/8 | 13,0 | 7,5 | 19,7 | 27,5 | 20                                                                                | 25                                                                                |
| T210612* | 6  | 1/2 | 13,0 | 9   | 19,7 | 30   | 24                                                                                | 10                                                                                |
| T210818  | 8  | 1/8 | 13,5 | 5,5 | 23   | 20   | 13                                                                                | 50                                                                                |
| T210814  | 8  | 1/4 | 13,5 | 7,5 | 23   | 20,4 | 16                                                                                | 50                                                                                |
| T210838  | 8  | 3/8 | 13,5 | 9   | 23   | 24,8 | 18                                                                                | 25                                                                                |
| T210812* | 8  | 1/2 | 14,4 | 9   | 22,5 | 32,5 | 24                                                                                | 10                                                                                |
| T211018* | 10 | 1/8 | 19,0 | 5,5 | 27,8 | 32,5 | 17                                                                                | 25                                                                                |
| T211014* | 10 | 1/4 | 17,0 | 6,5 | 26,4 | 23,2 | 16                                                                                | 25                                                                                |
| T211038* | 10 | 3/8 | 19,0 | 7,5 | 28,5 | 38,5 | 17                                                                                | 25                                                                                |
| T211012* | 10 | 1/2 | 17,0 | 9   | 26,4 | 31,1 | 21                                                                                | 10                                                                                |
| T211218* | 12 | 1/8 | 21,0 | 5,5 | 29,5 | 33,5 | 21                                                                                | 25                                                                                |
| T211214* | 12 | 1/4 | 21,0 | 7,5 | 29,5 | 36   | 21                                                                                | 10                                                                                |
| T211238* | 12 | 3/8 | 20,0 | 7,5 | 28,9 | 26,3 | 18                                                                                | 10                                                                                |
| T211212* | 12 | 1/2 | 20,0 | 9   | 28,9 | 31,1 | 21                                                                                | 10                                                                                |
|          |    |     |      |     |      |      |                                                                                   |                                                                                   |
|          |    |     |      |     |      |      |                                                                                   |                                                                                   |
|          |    |     |      |     |      |      |                                                                                   |                                                                                   |
|          |    |     |      |     |      |      |                                                                                   |                                                                                   |

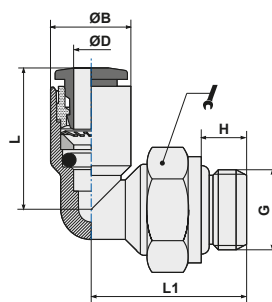
\* = di importazione - imported


**ART. T22**

Gomito girevole filetto cilindrico maschio con O-Ring  
*Swivel L male adaptor parallel*

| CODICE   | ØD | G   | ØB   | H   | L    | L1   |  |  |
|----------|----|-----|------|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T2204M3  | 4  | M3  | 9,5  | 3   | 17,2 | 17   | 8                                                                                   | 50                                                                                  |
| T2204M5  | 4  | M5  | 9,5  | 4   | 17,2 | 17   | 8                                                                                   | 100                                                                                 |
| T220418  | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 13                                                                                  | 100                                                                                 |
| T220414  | 4  | 1/4 | 9,5  | 6,5 | 17,2 | 20,4 | 16                                                                                  | 100                                                                                 |
| T2206M5  | 6  | M5  | 11,5 | 4   | 20,8 | 17   | 8                                                                                   | 100                                                                                 |
| T220618  | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 13                                                                                  | 100                                                                                 |
| T220614  | 6  | 1/4 | 11,5 | 6,5 | 20,8 | 20,4 | 16                                                                                  | 100                                                                                 |
| T220818  | 8  | 1/8 | 13,5 | 5,5 | 23   | 20   | 13                                                                                  | 100                                                                                 |
| T220814  | 8  | 1/4 | 13,5 | 6,5 | 23   | 20,4 | 16                                                                                  | 100                                                                                 |
| T220838  | 8  | 3/8 | 13,5 | 7,5 | 23   | 24,8 | 18                                                                                  | 50                                                                                  |
| T221018* | 10 | 1/8 | 19   | 5,5 | 27,8 | 26   | 14                                                                                  | 50                                                                                  |
| T221014  | 10 | 1/4 | 17   | 6,5 | 26,4 | 23,2 | 16                                                                                  | 50                                                                                  |
| T221038  | 10 | 3/8 | 17   | 7,5 | 26,4 | 24,8 | 18                                                                                  | 50                                                                                  |
| T221012  | 10 | 1/2 | 17   | 9   | 26,4 | 31,1 | 21                                                                                  | 25                                                                                  |
| T221214  | 12 | 1/4 | 20   | 6,5 | 28,9 | 24,2 | 16                                                                                  | 25                                                                                  |
| T221238  | 12 | 3/8 | 20   | 7,5 | 28,9 | 26,3 | 18                                                                                  | 25                                                                                  |
| T221212  | 12 | 1/2 | 20   | 9   | 28,9 | 31,1 | 21                                                                                  | 25                                                                                  |
|          |    |     |      |     |      |      |                                                                                     |                                                                                     |
|          |    |     |      |     |      |      |                                                                                     |                                                                                     |
|          |    |     |      |     |      |      |                                                                                     |                                                                                     |
|          |    |     |      |     |      |      |                                                                                     |                                                                                     |

\* = di importazione - imported

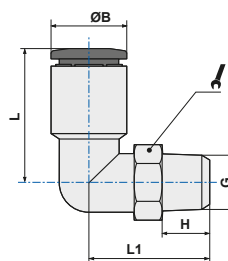


## ART. T22C

Gomito girevole filetto conico  
Swivel L male adaptor tapered

| CODICE   | ØD | G   | ØB   | H    | L    | L1   |  |  |
|----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T22C0418 | 4  | 1/8 | 11,5 | 7,5  | 17,2 | 20,5 | 13                                                                                | 100                                                                               |
| T22C0414 | 4  | 1/4 | 11,5 | 9,5  | 19,0 | 20,0 | 14                                                                                | 100                                                                               |
| T22C0438 | 4  | 3/8 | 11,5 | 10,5 | 19,0 | 21,0 | 17                                                                                | 25                                                                                |
| T22C0618 | 6  | 1/8 | 13,5 | 7,5  | 19,2 | 21,5 | 13                                                                                | 100                                                                               |
| T22C0614 | 6  | 1/4 | 13,5 | 9,5  | 19,2 | 21,0 | 14                                                                                | 100                                                                               |
| T22C0638 | 6  | 3/8 | 13,5 | 10,5 | 19,2 | 22,0 | 17                                                                                | 25                                                                                |
| T22C0612 | 6  | 1/2 | 13,5 | 13,5 | 19,2 | 25,5 | 21                                                                                | 10                                                                                |
| T22C0818 | 8  | 1/8 | 15,0 | 7,5  | 22,5 | 22,2 | 13                                                                                | 100                                                                               |
| T22C0814 | 8  | 1/4 | 15,0 | 9,5  | 22,5 | 21,7 | 14                                                                                | 100                                                                               |
| T22C0838 | 8  | 3/8 | 15,0 | 10,5 | 23,0 | 22,7 | 17                                                                                | 50                                                                                |
| T22C0812 | 8  | 1/2 | 15,0 | 13,5 | 22,5 | 26,2 | 21                                                                                | 10                                                                                |
| T22C1018 | 10 | 1/8 | 19,0 | 7,5  | 27,8 | 26,9 | 13                                                                                | 50                                                                                |
| T22C1014 | 10 | 1/4 | 19,0 | 9,5  | 27,8 | 28,4 | 14                                                                                | 50                                                                                |
| T22C1038 | 10 | 3/8 | 19,0 | 10,5 | 27,8 | 24,7 | 17                                                                                | 50                                                                                |
| T22C1012 | 10 | 1/2 | 19,0 | 13,5 | 27,8 | 28,2 | 21                                                                                | 25                                                                                |
| T22C1218 | 12 | 1/8 | 21,5 | 7,5  | 29,5 | 28,2 | 15                                                                                | 25                                                                                |
| T22C1214 | 12 | 1/4 | 21,5 | 9,5  | 29,5 | 29,7 | 15                                                                                | 25                                                                                |
| T22C1238 | 12 | 3/8 | 21,5 | 10,5 | 29,5 | 26,0 | 21                                                                                | 50                                                                                |
| T22C1212 | 12 | 1/2 | 21,5 | 13,5 | 29,5 | 29,5 | 21                                                                                | 25                                                                                |
|          |    |     |      |      |      |      |                                                                                   |                                                                                   |
|          |    |     |      |      |      |      |                                                                                   |                                                                                   |

NOTA: articolo di importazione - NOTE: imported item

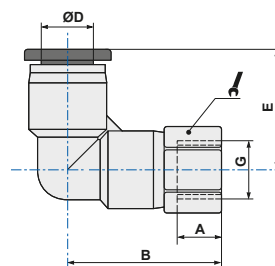


## ART. T22F

Gomito girevole femmina  
Female swivel L adaptor

| CODICE   | ØD | G   | A    | B    | E    |  |  |
|----------|----|-----|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T22F04M5 | 4  | M5  | 5,5  | 20,5 | 19,0 | 10                                                                                  | 50                                                                                  |
| T22F0418 | 4  | 1/8 | 8,5  | 24,0 | 19,0 | 14                                                                                  | 50                                                                                  |
| T22F0414 | 4  | 1/4 | 11,0 | 27,0 | 19,0 | 17                                                                                  | 50                                                                                  |
| T22F06M5 | 6  | M5  | 6,0  | 20,7 | 19,2 | 12                                                                                  | 50                                                                                  |
| T22F0618 | 6  | 1/8 | 8,5  | 24,2 | 19,2 | 14                                                                                  | 50                                                                                  |
| T22F0614 | 6  | 1/4 | 11,0 | 27,2 | 19,2 | 17                                                                                  | 50                                                                                  |
| T22F0638 | 6  | 3/8 | 12,0 | 28,7 | 19,2 | 21                                                                                  | 25                                                                                  |
| T22F0818 | 8  | 1/8 | 8,0  | 27,0 | 23,0 | 14                                                                                  | 50                                                                                  |
| T22F0814 | 8  | 1/4 | 11,0 | 30,5 | 23,0 | 17                                                                                  | 50                                                                                  |
| T22F0838 | 8  | 3/8 | 12,0 | 32,0 | 23,0 | 21                                                                                  | 25                                                                                  |
| T22F1014 | 10 | 1/4 | 11,0 | 34,3 | 28,2 | 17                                                                                  | 25                                                                                  |
| T22F1038 | 10 | 3/8 | 12,0 | 35,8 | 28,2 | 21                                                                                  | 25                                                                                  |
| T22F1012 | 10 | 1/2 | 14,0 | 38,8 | 28,2 | 24                                                                                  | 10                                                                                  |
| T22F1214 | 12 | 1/4 | 11,0 | 37,0 | 29,5 | 21                                                                                  | 25                                                                                  |
| T22F1238 | 12 | 3/8 | 12,0 | 38,0 | 29,5 | 21                                                                                  | 25                                                                                  |
| T22F1212 | 12 | 1/2 | 14,0 | 40,5 | 29,5 | 24                                                                                  | 10                                                                                  |
|          |    |     |      |      |      |                                                                                     |                                                                                     |
|          |    |     |      |      |      |                                                                                     |                                                                                     |

NOTA: articolo di importazione - NOTE: imported item

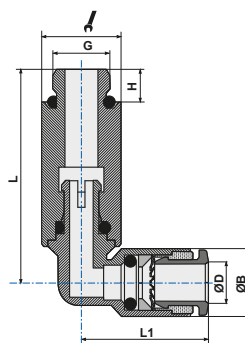


**ART. T22L**

Gomito girevole cilindrico lungo  
*Swivel longer L male adaptor parallel*

| CODICE    | ØD | G   | ØB   | H   | L    | L1   |  |  |
|-----------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T22L04M5* | 4  | M5  | 11,0 | 3,5 | 34,5 | 19,0 | 10                                                                                | 25                                                                                |
| T22L0418  | 4  | 1/8 | 9,5  | 6,0 | 35,7 | 17,2 | 13                                                                                | 25                                                                                |
| T22L06M5* | 6  | M5  | 13,0 | 3,5 | 36,4 | 19,2 | 12                                                                                | 25                                                                                |
| T22L0618  | 6  | 1/8 | 11,5 | 6,0 | 35,7 | 20,8 | 13                                                                                | 25                                                                                |
| T22L0818  | 8  | 1/8 | 13,5 | 6,0 | 38,0 | 23,0 | 13                                                                                | 25                                                                                |
| T22L0814* | 8  | 1/4 | 15,0 | 7,5 | 44,3 | 22,5 | 17                                                                                | 25                                                                                |

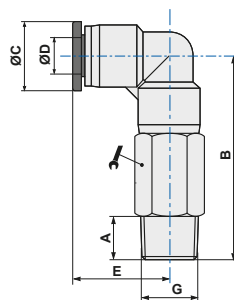
\* = di importazione - imported


**ART. T22LC**

Gomito girevole conico lungo  
*Swivel longer L male adaptor tapered*

| CODICE    | ØD | G   | A    | B    | ØC   | E    |  |  |
|-----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T22LC0418 | 4  | 1/8 | 7,5  | 37,0 | 11,0 | 19,0 | 10                                                                                | 25                                                                                |
| T22LC0414 | 4  | 1/4 | 9,5  | 40,0 | 11,0 | 19,0 | 14                                                                                | 25                                                                                |
| T22LC0618 | 6  | 1/8 | 7,5  | 39,7 | 13,0 | 19,2 | 12                                                                                | 25                                                                                |
| T22LC0614 | 6  | 1/4 | 9,5  | 42,2 | 13,0 | 19,2 | 14                                                                                | 25                                                                                |
| T22LC0638 | 6  | 3/8 | 10,5 | 43,7 | 13,0 | 19,2 | 17                                                                                | 25                                                                                |
| T22LC0818 | 8  | 1/8 | 7,5  | 44,8 | 14,4 | 23,0 | 14                                                                                | 25                                                                                |
| T22LC0814 | 8  | 1/4 | 9,5  | 46,8 | 14,4 | 23,0 | 17                                                                                | 25                                                                                |
| T22LC0838 | 8  | 3/8 | 10,5 | 48,5 | 14,4 | 23,0 | 17                                                                                | 25                                                                                |
| T22LC1018 | 10 | 1/8 | 7,5  | 54,3 | 18,5 | 28,2 | 17                                                                                | 25                                                                                |
| T22LC1014 | 10 | 1/4 | 9,5  | 56,3 | 18,5 | 28,2 | 17                                                                                | 25                                                                                |
| T22LC1038 | 10 | 3/8 | 10,5 | 57,3 | 18,5 | 28,2 | 17                                                                                | 25                                                                                |
| T22LC1012 | 10 | 1/2 | 13,5 | 60,8 | 18,5 | 28,2 | 21                                                                                | 10                                                                                |
| T22LC1214 | 12 | 1/4 | 9,5  | 61,5 | 21,0 | 29,5 | 21                                                                                | 10                                                                                |
| T22LC1238 | 12 | 3/8 | 10,5 | 62,5 | 21,0 | 29,5 | 21                                                                                | 10                                                                                |
| T22LC1212 | 12 | 1/2 | 13,5 | 65,5 | 21,0 | 29,5 | 21                                                                                | 10                                                                                |

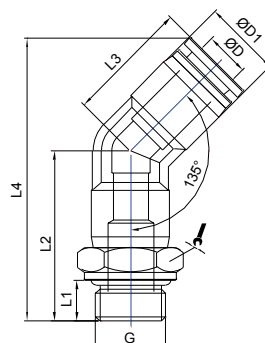
NOTA: articolo di importazione - NOTE: imported item


**ART. T45**

Gomito girevole cilindrico a 45°  
*Swivel 45° L male adaptor parallel*

| CODICE  | ØD | G    | L1  | L2   | L3   | L4   | ØD1  |  |  |
|---------|----|------|-----|------|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T4504M5 | 4  | M5   | 3,5 | 22,5 | 19   | 39,5 | 11,3 | 10                                                                                  | 1                                                                                   |
| T450418 | 4  | G1/8 | 5,5 | 25,5 | 19   | 42,5 | 11,3 | 14                                                                                  | 1                                                                                   |
| T450618 | 6  | G1/8 | 5,5 | 25,5 | 19,2 | 43,5 | 13,3 | 14                                                                                  | 1                                                                                   |
| T450614 | 6  | G1/4 | 7,5 | 28   | 19,2 | 46   | 13,3 | 17                                                                                  | 1                                                                                   |
| T450818 | 8  | G1/8 | 5,5 | 29   | 22,5 | 49,5 | 14,8 | 14                                                                                  | 1                                                                                   |
| T450814 | 8  | G1/4 | 7,5 | 31,5 | 22,5 | 52   | 14,8 | 17                                                                                  | 1                                                                                   |
| T451014 | 10 | G1/4 | 7,5 | 36   | 27,8 | 62,5 | 18,7 | 17                                                                                  | 1                                                                                   |
| T451038 | 10 | G3/8 | 7,5 | 36   | 27,8 | 62,5 | 18,7 | 20                                                                                  | 1                                                                                   |

NOTA: articolo di importazione - NOTE: imported item



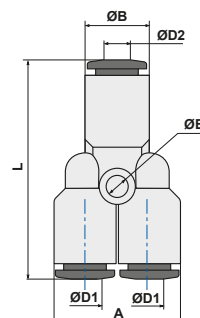


**ART. T23**

Y innestabile  
Y connector

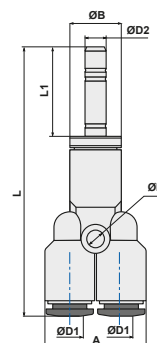
| CODICE   | ØD1 | ØD2 | ØE   | ØB   | A  | L    |  |    |
|----------|-----|-----|------|------|----|------|--|----|
| T230400  | 4   | 4   | 2,40 | 9,5  | 19 | 33,0 |  | 50 |
| T230406  | 4   | 6   | 2,40 | 11,5 | 19 | 35,8 |  | 50 |
| T230600  | 6   | 6   | 2,60 | 11,5 | 23 | 38,6 |  | 50 |
| T230608  | 6   | 8   | 3,20 | 13,5 | 23 | 39,8 |  | 50 |
| T230800  | 8   | 8   | 2,75 | 16,5 | 27 | 42,5 |  | 50 |
| T230810  | 8   | 10  | 3,20 | 17,0 | 27 | 44,4 |  | 25 |
| T231000  | 10  | 10  | 4,30 | 20,0 | 34 | 50,8 |  | 25 |
| T231012* | 10  | 12  | 4,30 | 20,0 | 34 | 50,8 |  | 10 |
| T231200  | 12  | 12  | 4,20 | 20,0 | 40 | 53,2 |  | 10 |

\* = di importazione - imported


**ART. T23L0**

Y innestabile  
Y connector

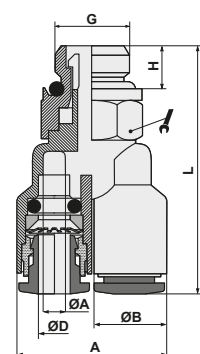
| CODICE  | ØD1 | ØD2 | ØB   | A  | ØE   | L    | L1   |    |
|---------|-----|-----|------|----|------|------|------|----|
| T2304L0 | 4   | 4   | 9,5  | 19 | 2,40 | 50,0 | 16,7 | 50 |
| T2306L0 | 6   | 6   | 11,5 | 23 | 2,60 | 58,1 | 19,5 | 50 |
| T2308L0 | 8   | 8   | 13,5 | 27 | 2,75 | 63,5 | 21,0 | 50 |
| T2310L0 | 10  | 10  | 17,0 | 34 | 4,30 | 74,8 | 24,0 | 25 |
| T2312L0 | 12  | 12  | 20,0 | 40 | 4,20 | 78,2 | 25,0 | 10 |


**ART. T23G**

Y innestabile filetto cilindrico con O-Ring  
Y connector with swivel parallel male adapter

| CODICE    | ØD | G   | ØA  | ØB   | H   | A    | L    |    |    |
|-----------|----|-----|-----|------|-----|------|------|----|----|
| T23G04M5* | 4  | M5  | 2,0 | 9,5  | 4,0 | 19,0 | 39,1 | 10 | 50 |
| T23G0418  | 4  | 1/8 | 3,0 | 9,5  | 5,5 | 19,0 | 20,5 | 13 | 50 |
| T23G0414  | 4  | 1/4 | 3,0 | 11,0 | 7,5 | 22,0 | 45,5 | 17 | 50 |
| T23G0438* | 4  | 3/8 | 3,0 | 11,0 | 7,5 | 22,0 | 46,0 | 20 | 25 |
| T23G0618  | 6  | 1/8 | 5,0 | 11,5 | 5,5 | 23,0 | 34,8 | 13 | 50 |
| T23G0614  | 6  | 1/4 | 5,0 | 11,5 | 6,5 | 23,0 | 36,4 | 16 | 50 |
| T23G0638* | 6  | 3/8 | 5,0 | 13,0 | 7,5 | 26,0 | 47,2 | 20 | 25 |
| T23G0818  | 8  | 1/8 | 7,0 | 13,5 | 5,5 | 27,0 | 37,5 | 13 | 50 |
| T23G0814  | 8  | 1/4 | 7,0 | 13,5 | 6,5 | 27,0 | 38,6 | 16 | 50 |
| T23G0838* | 8  | 3/8 | 6,2 | 14,4 | 7,5 | 29,4 | 50,5 | 20 | 25 |
| T23G1014* | 10 | 1/4 | 8,2 | 18,4 | 7,5 | 36,4 | 58,9 | 17 | 25 |
| T23G1038* | 10 | 3/8 | 8,2 | 18,4 | 7,5 | 36,4 | 58,9 | 20 | 25 |
| T23G1012* | 10 | 1/2 | 8,2 | 18,4 | 10  | 36,4 | 62,4 | 24 | 10 |
| T23G1214* | 12 | 1/4 | 9,5 | 21,0 | 7,5 | 42,0 | 62,3 | 21 | 10 |
| T23G1238* | 12 | 3/8 | 9,5 | 21,0 | 7,5 | 42,0 | 62,3 | 21 | 10 |
| T23G1212* | 12 | 1/2 | 9,5 | 21,0 | 10  | 42,0 | 65,3 | 24 | 10 |

\* = di importazione - imported

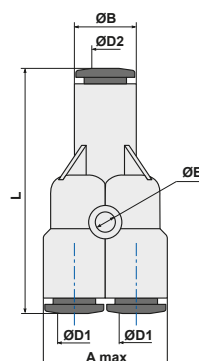


**ART. T24**

Y doppio innestabile  
Double Y connector

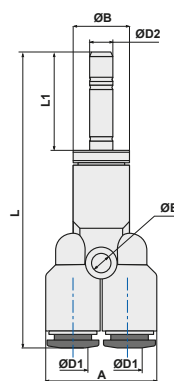
| CODICE   | ØD1 | ØD2 | ØE  | ØB   | A max | L    |  |    |
|----------|-----|-----|-----|------|-------|------|--|----|
| T240400  | 4   | 4   | 3,2 | 9,5  | 20,2  | 34,5 |  | 25 |
| T240406  | 4   | 6   | 3,2 | 13,0 | 20,8  | 35,5 |  | 25 |
| T240408* | 4   | 8   | 3,2 | 14,5 | 22,2  | 38,5 |  | 25 |
| T240600  | 6   | 6   | 3,2 | 11,5 | 23,9  | 39,6 |  | 25 |
| T240608* | 6   | 8   | 3,2 | 13,5 | 26,15 | 41,8 |  | 25 |
| T240800* | 8   | 8   | 3,5 | 15,0 | 28,0  | 42,0 |  | 25 |
| T240810  | 8   | 10  | 3,2 | 17,0 | 28,0  | 46,5 |  | 25 |

\* = di importazione - imported


**ART. T24L0**

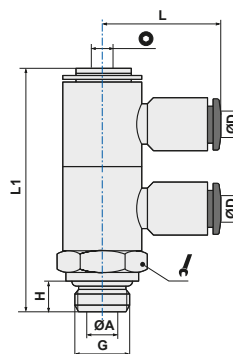
Y doppio innestabile  
Double Y connector

| CODICE  | ØD1 | ØD2 | ØE   | ØB   | A  | L    | L1   |    |
|---------|-----|-----|------|------|----|------|------|----|
| T2404L0 | 4   | 4   | 2,40 | 9,5  | 19 | 51,2 | 16,7 | 25 |
| T2406L0 | 6   | 6   | 2,60 | 11,5 | 23 | 59,1 | 19,5 | 25 |
| T2408L0 | 8   | 8   | 2,75 | 13,5 | 27 | 67,5 | 21,0 | 25 |
|         |     |     |      |      |    |      |      |    |
|         |     |     |      |      |    |      |      |    |
|         |     |     |      |      |    |      |      |    |
|         |     |     |      |      |    |      |      |    |


**ART. T33**

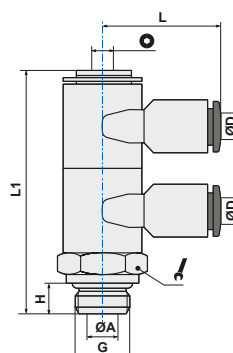
Doppio anello semplice girevole con asta  
Swivel double banjo stem

| CODICE  | ØD | G   | ØA  | H   | L1   | L    | Ø   |    |    |
|---------|----|-----|-----|-----|------|------|-----|----|----|
| T3304M5 | 4  | M5  | 2,0 | 4,0 | 28,0 | 19,5 | 2,5 | 14 | 25 |
| T330418 | 4  | 1/8 | 5,5 | 5,5 | 43,3 | 21,1 | 3   | 14 | 25 |
| T330618 | 6  | 1/8 | 5,5 | 5,5 | 43,3 | 24,3 | 3   | 14 | 25 |
| T330614 | 6  | 1/4 | 7,8 | 6,5 | 50,0 | 25,5 | 4   | 18 | 25 |
| T330818 | 8  | 1/8 | 5,5 | 5,5 | 43,3 | 24,8 | 3   | 14 | 25 |
| T330814 | 8  | 1/4 | 7,8 | 6,5 | 50,0 | 26,5 | 4   | 18 | 25 |
| T331014 | 10 | 1/4 | 7,8 | 6,5 | 50,0 | 28,4 | 4   | 18 | 25 |


**ART. T33B**

Doppio anello due vie girevole con asta  
Double branch universal male L

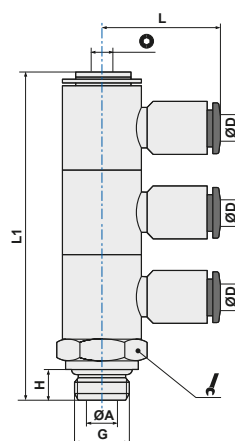
| CODICE   | ØD | G   | ØA  | H   | L1   | L    | Ø   |    |    |
|----------|----|-----|-----|-----|------|------|-----|----|----|
| T33B04M5 | 4  | M5  | 2,0 | 4,0 | 28,0 | 19,5 | 2,5 | 14 | 10 |
| T33B0618 | 6  | 1/8 | 5,5 | 5,5 | 43,3 | 24,3 | 3   | 14 | 10 |
| T33B0814 | 8  | 1/4 | 7,8 | 6,5 | 50,0 | 26,5 | 4   | 18 | 10 |
|          |    |     |     |     |      |      |     |    |    |
|          |    |     |     |     |      |      |     |    |    |
|          |    |     |     |     |      |      |     |    |    |



**ART. T34**

Triplo anello semplice girevole con asta  
*Swivel triple banjo stem*

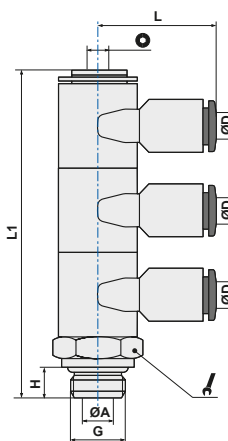
| CODICE  | ØD | G   | ØA  | H   | L1   | L    | Ø |    |    |
|---------|----|-----|-----|-----|------|------|---|----|----|
| T340418 | 4  | 1/8 | 5,5 | 5,5 | 58,4 | 21,1 | 3 | 14 | 10 |
| T340618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 3 | 14 | 10 |
| T340818 | 8  | 1/8 | 5,5 | 5,5 | 58,4 | 24,8 | 3 | 14 | 10 |
| T340614 | 6  | 1/4 | 7,8 | 6,5 | 67   | 25,5 | 4 | 18 | 10 |
| T340814 | 8  | 1/4 | 7,8 | 6,5 | 67   | 26,5 | 4 | 18 | 10 |
| T341014 | 10 | 1/4 | 7,8 | 6,5 | 67   | 28,4 | 4 | 18 | 10 |
|         |    |     |     |     |      |      |   |    |    |
|         |    |     |     |     |      |      |   |    |    |
|         |    |     |     |     |      |      |   |    |    |
|         |    |     |     |     |      |      |   |    |    |
|         |    |     |     |     |      |      |   |    |    |



**ART. T34B**

Triplo anello due vie girevole con asta  
*Triple branch universal male L*

| CODICE   | ØD | G   | ØA  | H   | L1   | L    | Ø |    |    |
|----------|----|-----|-----|-----|------|------|---|----|----|
| T34B0618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 3 | 14 | 10 |
| T34B0814 | 8  | 1/4 | 7,8 | 6,5 | 67   | 26,5 | 4 | 18 | 10 |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |



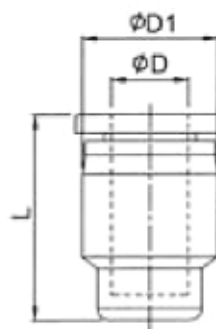
**ART. T90**

Tappo femmina  
*Tube Blanking Cap*

| CODICE  | ØD | ØD1  | L    |  |  |  |     |
|---------|----|------|------|--|--|--|-----|
| T900400 | 4  | 11,5 | 17,5 |  |  |  | 100 |
| T900600 | 6  | 13,5 | 17,7 |  |  |  | 100 |
| T900800 | 8  | 15   | 21,3 |  |  |  | 100 |
| T901000 | 10 | 19   | 25   |  |  |  | 50  |
| T901200 | 12 | 21,5 | 26   |  |  |  | 50  |
|         |    |      |      |  |  |  |     |
|         |    |      |      |  |  |  |     |
|         |    |      |      |  |  |  |     |
|         |    |      |      |  |  |  |     |
|         |    |      |      |  |  |  |     |

Adattabile a tutti i raccordi della serie Tecno-RAP  
*Suitable for all Tecno-RAP fitting series*

Di importazione  
*Import*



1 ANELLO DI SOSTEGNO  
LOCK RING

2 PINZA DI AGGRAFFAGGIO  
CRIMPING GRIPPER

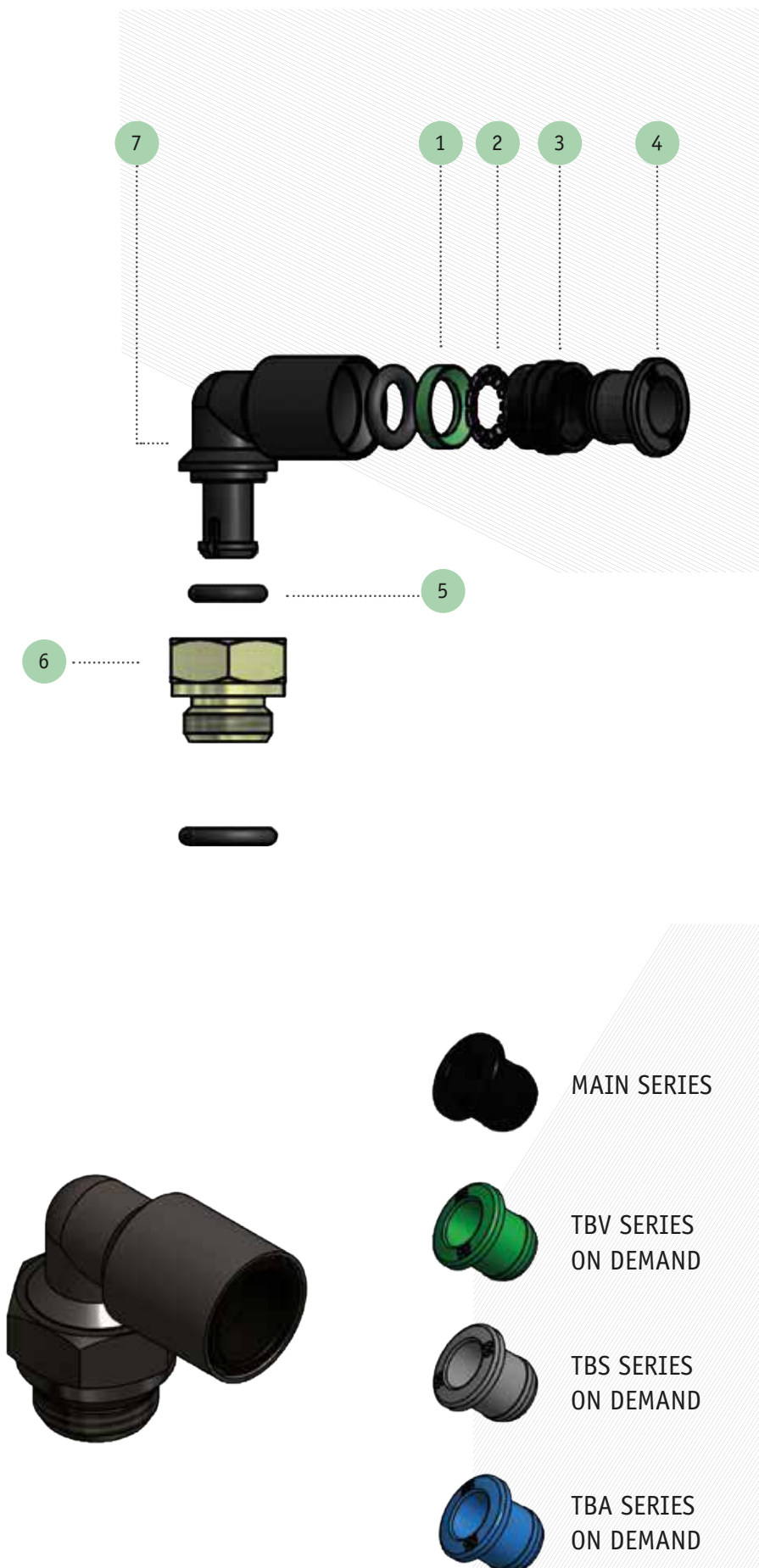
3 DISTANZIALE DI FERMO  
LOCK RING

4 ANELLO SPINGITORE  
THRUST SLEEVE

5 O-RING DI TENUTA  
O-RING SEAL

6 BASE GIREVOLE  
SWIVEL BASE

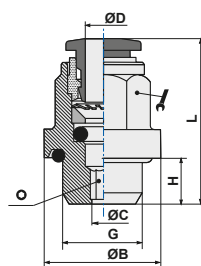
7 CORPO DEL RACCORDO  
FITTING BODY



**ART. TB01**

Diritto filetto cilindrico maschio con O-Ring  
*Straight male adaptor (parallel)*

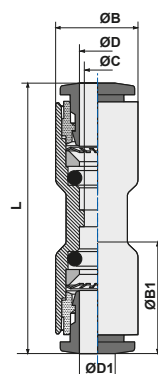
| CODICE   | ØD | G   | ØC  | ØB   | H   | L    |    |     |    |
|----------|----|-----|-----|------|-----|------|----|-----|----|
| TB010418 | 4  | 1/8 | 2,5 | 14,0 | 5,5 | 19,0 | 10 | 2,5 | 50 |
| TB010414 | 4  | 1/4 | 2,5 | 17,5 | 6,5 | 20,8 | 10 | 2,5 | 50 |
| TB010618 | 6  | 1/8 | 4,0 | 14,0 | 5,5 | 24,5 | 12 | 4,0 | 50 |
| TB010614 | 6  | 1/4 | 4,0 | 17,5 | 6,5 | 26,0 | 12 | 4,0 | 50 |
| TB010818 | 8  | 1/8 | 5,0 | 14,0 | 5,5 | 25,7 | 14 | 5,0 | 50 |
| TB010814 | 8  | 1/4 | 6,0 | 17,5 | 6,5 | 27,2 | 14 | 6,0 | 50 |
| TB011014 | 10 | 1/4 | 7,0 | 17,5 | 6,5 | 28,7 | 18 | 7,0 | 50 |



**ART. TB03**

Diritto innestabile  
*Straight connector*

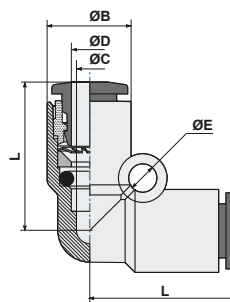
| CODICE   | ØD | ØD1 | ØC | ØB   | ØB1  | L    |    |
|----------|----|-----|----|------|------|------|----|
| TB030400 | 4  | 4   | 3  | 9,5  | 9,5  | 32,0 | 50 |
| TB030406 | 4  | 6   | 3  | 9,5  | 11,5 | 32,5 | 50 |
| TB030600 | 6  | 6   | 5  | 11,5 | 11,5 | 35,6 | 50 |
| TB030608 | 6  | 8   | 5  | 11,5 | 13,5 | 36,0 | 50 |
| TB030800 | 8  | 8   | 7  | 13,5 | 13,5 | 38,0 | 25 |
| TB030810 | 8  | 10  | 7  | 13,5 | 17,0 | 32,5 | 50 |
| TB031000 | 10 | 10  | 9  | 17,0 | 17,0 | 42,3 | 50 |
| TB031012 | 10 | 12  | 9  | 17,0 | 20,0 | 44,0 | 50 |
| TB031200 | 12 | 12  | 10 | 20,0 | 20,0 | 46,2 | 25 |



**ART. TB04**

Gomito innestabile  
*Elbow connector*

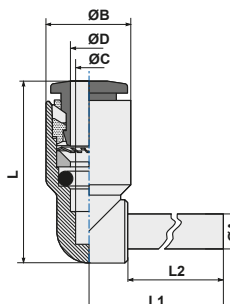
| CODICE   | ØD | ØC | ØB   | L    | ØE  |    |
|----------|----|----|------|------|-----|----|
| TB040400 | 4  | 3  | 9,5  | 17,2 | 3,2 | 50 |
| TB040600 | 6  | 5  | 11,5 | 20,8 | 3,2 | 50 |
| TB040800 | 8  | 7  | 13,5 | 23,0 | 3,2 | 50 |
| TB041000 | 10 | 9  | 17,0 | 26,4 | 4,3 | 50 |
| TB041200 | 12 | 10 | 20,0 | 28,9 | 4,2 | 25 |



**ART. TB04L0**

Gomito innestabile con codolo  
*Plug-in elbow connector*

| CODICE   | ØD | ØC | ØB   | L    | L1    | ØA | L2   |    |
|----------|----|----|------|------|-------|----|------|----|
| TB0404L0 | 4  | 3  | 9,5  | 17,2 | 20,75 | 4  | 16,7 | 50 |
| TB0406L0 | 6  | 5  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50 |
| TB0408L0 | 8  | 7  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50 |
| TB0410L0 | 10 | 9  | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 50 |
| TB0412L0 | 12 | 10 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 25 |

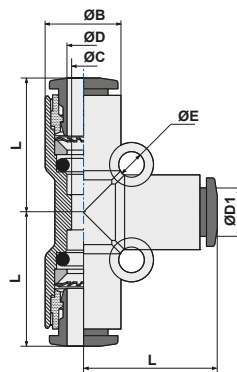


**ART. TB05**

T innestabile  
*T connector*

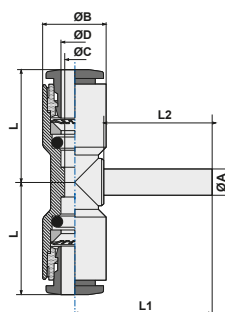
| CODICE    | ØD | ØD1 | ØC   | ØB   | L    |  |    |
|-----------|----|-----|------|------|------|--|----|
| TB050400  | 4  | 4   | 3,0  | 9,5  | 17,2 |  | 50 |
| TB050604* | 6  | 4   | 5,3  | 13,0 | 19,2 |  | 50 |
| TB050600  | 6  | 6   | 5,0  | 11,5 | 20,8 |  | 50 |
| TB050806* | 8  | 6   | 7,1  | 14,4 | 22,7 |  | 25 |
| TB050800  | 8  | 8   | 7,0  | 13,5 | 23,0 |  | 50 |
| TB051008* | 10 | 8   | 9,3  | 18,4 | 27,9 |  | 25 |
| TB051000  | 10 | 10  | 9,0  | 17,0 | 26,4 |  | 25 |
| TB051210* | 12 | 10  | 10,0 | 21,0 | 29,9 |  | 10 |
| TB051200  | 12 | 12  | 10,0 | 20,0 | 28,9 |  | 10 |

\* = di importazione - imported


**ART. TB05L0**

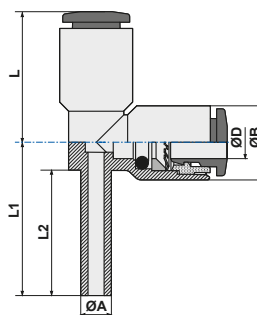
T Innestabile con codolo centrale  
*Plug-in T connector (center)*

| CODICE   | ØD | ØC | ØB   | L    | L1    | ØA | L2   |    |
|----------|----|----|------|------|-------|----|------|----|
| TB0504L0 | 4  | 3  | 9,5  | 17,2 | 20,75 | 4  | 16,7 | 50 |
| TB0506L0 | 6  | 5  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50 |
| TB0508L0 | 8  | 7  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50 |
| TB0510L0 | 10 | 9  | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 25 |
| TB0512L0 | 12 | 10 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 10 |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last

**ART. TB05V0**

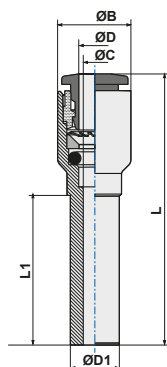
T Innestabile con codolo laterale  
*Plug-in T connector (lateral)*

| CODICE   | ØD | ØB   | L    | L1    | ØA | L2   |    |
|----------|----|------|------|-------|----|------|----|
| TB0506V0 | 6  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 50 |
| TB0508V0 | 8  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 50 |
| TB0510V0 | 10 | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 25 |
| TB0512V0 | 12 | 20,0 | 28,9 | 36,00 | 12 | 25,0 | 10 |

Art. disponibile fino ad esaurimento scorte  
Item available while stocks last

**ART. TB08**

Riduzione  
*Reducer*

| CODICE   | ØD1 | ØD | ØC | ØB   | L     | L1    |    |
|----------|-----|----|----|------|-------|-------|----|
| TB080604 | 6   | 4  | 3  | 9,5  | 35,5  | 19,5  | 50 |
| TB080804 | 8   | 4  | 3  | 9,5  | 37,0  | 21,0  | 50 |
| TB081004 | 10  | 4  | 3  | 9,5  | 40,0  | 24,0  | 25 |
| TB081204 | 12  | 4  | 3  | 9,5  | 41,0  | 25,0  | 25 |
| TB080806 | 8   | 6  | 5  | 11,5 | 39,05 | 23,0  | 50 |
| TB081006 | 10  | 6  | 5  | 11,5 | 42,05 | 24,0  | 25 |
| TB081206 | 12  | 6  | 5  | 11,5 | 43,05 | 25,0  | 25 |
| TB081008 | 10  | 8  | 7  | 13,5 | 43,0  | 26,25 | 25 |
| TB081208 | 12  | 8  | 7  | 13,5 | 44,0  | 25,0  | 25 |
| TB081210 | 12  | 10 | 9  | 17,0 | 46,15 | 27,55 | 25 |

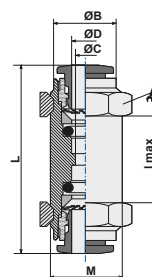




**ART. TB10**

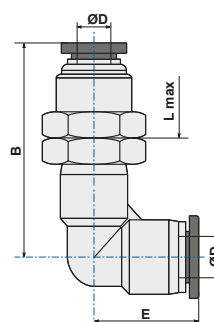
Passaparete  
*Bulkhead connector*

| CODICE   | ØD | ØB   | L    | M    | Imax |  |  |
|----------|----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TB100400 | 4  | 9,5  | 32,0 | 11x1 | 8    | 14                                                                                | 50                                                                                |
| TB100600 | 6  | 11,5 | 36,1 | 14x1 | 8    | 17                                                                                | 50                                                                                |
| TB100800 | 8  | 13,5 | 38,0 | 16x1 | 10   | 18                                                                                | 50                                                                                |
| TB101000 | 10 | 17,5 | 42,3 | 20x1 | 12   | 24                                                                                | 25                                                                                |
| TB101200 | 12 | 20,0 | 46,2 | 22x1 | 17   | 26                                                                                | 25                                                                                |


**ART. TB10L**

Passaparete a "L"  
*L bulkhead*

| CODICE    | ØD | M    | B    | E    | H  | L max |  |
|-----------|----|------|------|------|----|-------|-----------------------------------------------------------------------------------|
| TB10L0400 | 4  | 12x1 | 28,5 | 19,0 | 14 | 6     | 25                                                                                |
| TB10L0600 | 6  | 14x1 | 32,1 | 19,2 | 17 | 7     | 25                                                                                |
| TB10L0800 | 8  | 16x1 | 39,4 | 23,0 | 19 | 7,5   | 25                                                                                |
| TB10L1000 | 10 | 20x1 | 44,8 | 28,2 | 24 | 9,5   | 25                                                                                |
| TB10L1200 | 12 | 22x1 | 46,6 | 29,5 | 27 | 10    | 50                                                                                |



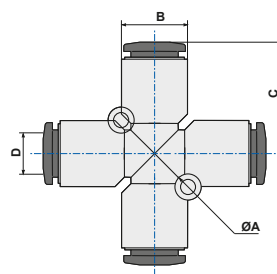
NOTA: articolo di importazione - NOTE: imported item

**ART. TB11**

Croce intermedio  
*Cross connector*

| CODICE    | ØD | ØB   | ØA   | C |  |
|-----------|----|------|------|---|-------------------------------------------------------------------------------------|
| TB110400  | 4  | 9,5  | 17,2 | 3 | 25                                                                                  |
| TB110600  | 6  | 11,5 | 20,8 | 3 | 25                                                                                  |
| TB110800  | 8  | 13,5 | 23,0 | 3 | 25                                                                                  |
| TB111000* | 10 | 17,0 | 6,5  | 3 | 10                                                                                  |
| TB111200* | 12 | 20,0 | 28,8 | 3 | 10                                                                                  |

\* = di importazione - imported

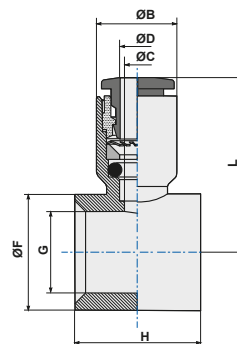

**ART. TB13**

Anello semplice  
*Single banjo body*

| CODICE    | ØD | G*  | ØC | ØB   | H  | L    | ØF   |  |
|-----------|----|-----|----|------|----|------|------|-------------------------------------------------------------------------------------|
| TB1304M5  | 4  | M5  | 3  | 9,5  | 10 | 19,5 | 8,0  | 50                                                                                  |
| TB130418  | 4  | 1/8 | 3  | 9,5  | 15 | 21,1 | 14,0 | 50                                                                                  |
| TB130618  | 6  | 1/8 | 5  | 11,5 | 15 | 24,3 | 14,0 | 50                                                                                  |
| TB130614  | 6  | 1/4 | 5  | 11,5 | 17 | 25,5 | 18,0 | 50                                                                                  |
| TB130818  | 8  | 1/8 | 7  | 13,5 | 15 | 24,8 | 14,0 | 50                                                                                  |
| TB130814  | 8  | 1/4 | 7  | 13,5 | 17 | 26,5 | 18,0 | 50                                                                                  |
| TB130838  | 8  | 3/8 | 7  | 13,5 | 20 | 28,0 | 21,3 | 50                                                                                  |
| TB131014  | 10 | 1/4 | 9  | 17,0 | 17 | 28,4 | 18,0 | 50                                                                                  |
| TB131038  | 10 | 3/8 | 9  | 17,0 | 20 | 29,9 | 21,3 | 25                                                                                  |
| TB131012  | 10 | 1/2 | 9  | 17,0 | 24 | 30,0 | 26,0 | 25                                                                                  |
| TB131238  | 12 | 3/8 | 10 | 20,0 | 20 | 31,4 | 21,3 | 25                                                                                  |
| TB131212  | 12 | 1/2 | 10 | 20,0 | 24 | 34,9 | 26,0 | 25                                                                                  |
| TB13R04M5 | 4  | M5  | 3  | 9,5  | 10 | 19,5 | 8    | 50                                                                                  |
| TB13R06M5 | 6  | M5  | 5  | 11,5 | 10 | 23   | 8    | 50                                                                                  |

(\*) G = filetto vite/asta  
(\*) G = steam thread

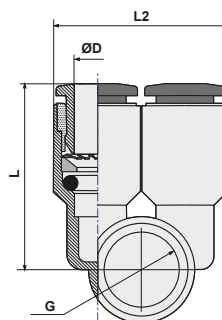
Vedi capitolo Astine pag. 39  
See page 39 of Stems section



**ART. TB13B**

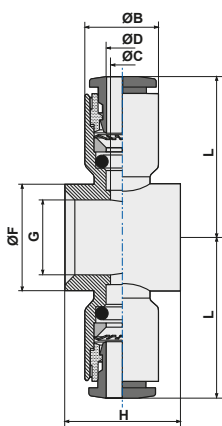
Anello semplice due vie  
*Single branch body*

| CODICE                                                                                            | ØD | G*  |  | H                                                            | L    | L2 |  |    |
|---------------------------------------------------------------------------------------------------|----|-----|--|--------------------------------------------------------------|------|----|--|----|
| TB13B04M5                                                                                         | 4  | M5  |  | 10                                                           | 19,5 | 19 |  | 50 |
| TB13B0618                                                                                         | 6  | 1/8 |  | 15                                                           | 24,3 | 23 |  | 50 |
| TB13B0814                                                                                         | 8  | 1/4 |  | 17                                                           | 26,5 | 27 |  | 50 |
| TB13B1038                                                                                         | 10 | 3/8 |  | 20                                                           | 29,9 | 34 |  | 25 |
| TB13B1212                                                                                         | 12 | 1/2 |  | 24                                                           | 34,9 | 40 |  | 10 |
|                                                                                                   |    |     |  |                                                              |      |    |  |    |
| (*) G = filetto vite/asta<br>(*) G = steam thread<br>H = altezza sede asta - H = stem site lenght |    |     |  | Vedi capitolo Astine pag. 39<br>See page 39 of Stems section |      |    |  |    |


**ART. TB14**

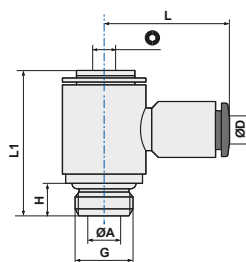
Anello doppio  
*Double banjo body*

| CODICE                                                                          | ØD | G*  | ØC | ØB                                                           | H  | ØF   | L    |  |
|---------------------------------------------------------------------------------|----|-----|----|--------------------------------------------------------------|----|------|------|-----------------------------------------------------------------------------------|
| TB1404M5                                                                        | 4  | M5  | 3  | 9,5                                                          | 10 | 8,0  | 19,5 | 50                                                                                |
| TB140418                                                                        | 4  | 1/8 | 3  | 9,5                                                          | 15 | 14,0 | 21,1 | 50                                                                                |
| TB140618                                                                        | 6  | 1/8 | 5  | 11,5                                                         | 15 | 14,0 | 24,3 | 50                                                                                |
| TB140614                                                                        | 6  | 1/4 | 5  | 11,5                                                         | 17 | 18,0 | 25,5 | 50                                                                                |
| TB140818                                                                        | 8  | 1/8 | 7  | 13,5                                                         | 15 | 14,0 | 24,8 | 50                                                                                |
| TB140814                                                                        | 8  | 1/4 | 7  | 13,5                                                         | 17 | 18,0 | 26,5 | 50                                                                                |
| TB140838                                                                        | 8  | 3/8 | 7  | 13,5                                                         | 20 | 21,3 | 28,0 | 25                                                                                |
| TB141014                                                                        | 10 | 1/4 | 9  | 17,0                                                         | 17 | 18,0 | 28,4 | 50                                                                                |
| TB141038                                                                        | 10 | 3/8 | 9  | 17,0                                                         | 20 | 21,3 | 29,9 | 25                                                                                |
| TB141012                                                                        | 10 | 1/2 | 9  | 17,0                                                         | 24 | 26,0 | 30,0 | 10                                                                                |
| TB141238                                                                        | 12 | 3/8 | 10 | 20,0                                                         | 20 | 21,3 | 31,4 | 25                                                                                |
| TB141212                                                                        | 12 | 1/2 | 10 | 20,0                                                         | 24 | 26,0 | 34,9 | 10                                                                                |
| (*) G = filetto vite/asta<br>(*) G = steam thread                               |    |     |    | Vedi capitolo Astine pag. 39<br>See page 39 of Stems section |    |      |      |                                                                                   |
| Art. disponibile fino ad esaurimento scorte<br>Item available while stocks last |    |     |    |                                                              |    |      |      |                                                                                   |


**ART. TB15**

Anello semplice girevole con asta  
*Complete single banjo (rotating under pressure)*

| CODICE   | ØD | G   | ØA   | H   | L1   | L    | Ø   |    |
|----------|----|-----|------|-----|------|------|-----|----|
| TB1504M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50 |
| TB1504M6 | 4  | M6  | 2,0  | 5,0 | 18,9 | 19,5 | 2,5 | 50 |
| TB150418 | 4  | 1/8 | 5,5  | 5,5 | 24,5 | 21,1 | 3,0 | 50 |
| TB150618 | 6  | 1/8 | 5,5  | 5,5 | 24,5 | 24,3 | 3,0 | 50 |
| TB150614 | 6  | 1/4 | 7,8  | 6,5 | 28,0 | 25,5 | 4,0 | 50 |
| TB150818 | 8  | 1/8 | 5,5  | 5,5 | 24,5 | 24,8 | 3,0 | 50 |
| TB150814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 50 |
| TB150838 | 8  | 3/8 | 10,0 | 7,5 | 32,5 | 28,0 | 5,0 | 25 |
| TB151014 | 10 | 1/4 | 7,8  | 6,5 | 28,0 | 28,4 | 4,0 | 25 |
| TB151038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25 |
| TB151012 | 10 | 1/2 | 12,0 | 9,0 | 38,8 | 30,0 | 8,0 | 10 |
| TB151238 | 12 | 3/8 | 10,0 | 7,5 | 32,5 | 31,4 | 5,0 | 10 |
| TB151212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10 |

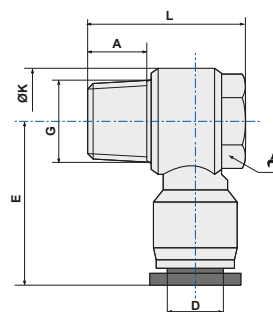


**ART. TB15C**

Anello semplice girevole con asta conico  
*Complete single banjo tapered*

| CODICE    | ØD | G   | A    | L    | ØK   | E    |  |  |
|-----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TB15C0418 | 4  | 1/8 | 7,5  | 23,0 | 14,4 | 23,5 | 12                                                                                | 50                                                                                |
| TB15C0618 | 6  | 1/8 | 7,5  | 23,0 | 14,4 | 24,0 | 12                                                                                | 50                                                                                |
| TB15C0614 | 6  | 1/4 | 9,5  | 26,5 | 18,3 | 25,4 | 14                                                                                | 50                                                                                |
| TB15C0638 | 6  | 3/8 | 10,5 | 32,0 | 22,0 | 29,5 | 19                                                                                | 25                                                                                |
| TB15C0818 | 8  | 1/8 | 7,5  | 23,0 | 14,4 | 28,9 | 14                                                                                | 50                                                                                |
| TB15C0814 | 8  | 1/4 | 9,5  | 26,5 | 18,3 | 29,1 | 14                                                                                | 50                                                                                |
| TB15C0838 | 8  | 3/8 | 10,5 | 32,0 | 22,0 | 30,0 | 19                                                                                | 25                                                                                |
| TB15C1014 | 10 | 1/4 | 9,5  | 26,5 | 18,3 | 33,0 | 14                                                                                | 25                                                                                |
| TB15C1038 | 10 | 3/8 | 10,5 | 32,0 | 22,0 | 33,5 | 19                                                                                | 25                                                                                |
| TB15C1012 | 10 | 1/2 | 13,5 | 38,5 | 28,0 | 36,5 | 24                                                                                | 10                                                                                |
| TB15C1238 | 12 | 3/8 | 10,5 | 32,0 | 22,0 | 35,8 | 19                                                                                | 10                                                                                |
| TB15C1212 | 12 | 1/2 | 13,5 | 38,5 | 28,0 | 36,8 | 24                                                                                | 10                                                                                |

NOTA: articolo di importazione - NOTE: imported item

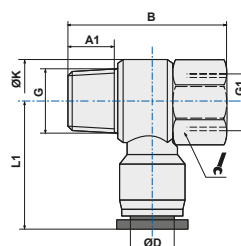


**ART. TB15FC**

Anello semplice girevole con asta femmina conico  
*Female complete single banjo tapered*

| CODICE     | ØD | G/G1 | L1   | A1   | B    | ØK   |  |  |
|------------|----|------|------|------|------|------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| TB15FC0418 | 4  | 1/8  | 23,5 | 7,5  | 29,0 | 14,4 | 14                                                                                 | 50                                                                                 |
| TB15FC0414 | 4  | 1/4  | 25,5 | 9,5  | 35,0 | 18,3 | 17                                                                                 | 50                                                                                 |
| TB15FC0618 | 6  | 1/8  | 24,0 | 7,5  | 29,0 | 14,4 | 14                                                                                 | 50                                                                                 |
| TB15FC0614 | 6  | 1/4  | 25,4 | 9,5  | 35,0 | 18,3 | 17                                                                                 | 50                                                                                 |
| TB15FC0818 | 8  | 1/8  | 26,5 | 7,5  | 29,0 | 14,4 | 14                                                                                 | 50                                                                                 |
| TB15FC0814 | 8  | 1/4  | 28,9 | 9,5  | 35,0 | 18,3 | 17                                                                                 | 50                                                                                 |
| TB15FC0838 | 8  | 3/8  | 30,0 | 10,5 | 40,0 | 22,0 | 21                                                                                 | 25                                                                                 |
| TB15FC1014 | 10 | 1/4  | 33,0 | 9,5  | 35,0 | 22,0 | 21                                                                                 | 25                                                                                 |
| TB15FC1038 | 10 | 3/8  | 33,5 | 10,5 | 40,0 | 28,0 | 24                                                                                 | 25                                                                                 |
| TB15FC1012 | 10 | 1/2  | 36,5 | 13,5 | 47,5 | 18,3 | 17                                                                                 | 10                                                                                 |
| TB15FC1238 | 12 | 3/8  | 35,5 | 10,5 | 40,0 | 22,0 | 21                                                                                 | 10                                                                                 |
| TB15FC1212 | 12 | 1/2  | 36,5 | 13,5 | 47,5 | 28,0 | 24                                                                                 | 10                                                                                 |

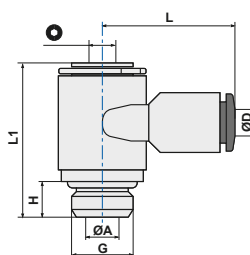
NOTA: articolo di importazione  
NOTE: imported item



**ART. TB15B**

Anello due vie girevole con asta  
*Single branch universal male L*

| CODICE    | ØD | G   | ØA   | H   | L1   | L    | Ø   |  |
|-----------|----|-----|------|-----|------|------|-----|-------------------------------------------------------------------------------------|
| TB15B04M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50                                                                                  |
| TB15B0618 | 6  | 1/8 | 5,5  | 5,5 | 24,5 | 24,3 | 3,0 | 50                                                                                  |
| TB15B0814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 50                                                                                  |
| TB15B1038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25                                                                                  |
| TB15B1212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10                                                                                  |
|           |    |     |      |     |      |      |     |                                                                                     |
|           |    |     |      |     |      |      |     |                                                                                     |
|           |    |     |      |     |      |      |     |                                                                                     |
|           |    |     |      |     |      |      |     |                                                                                     |

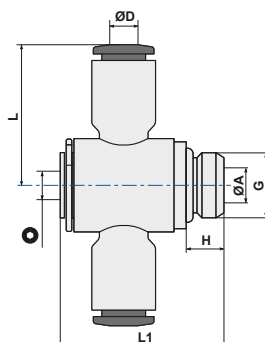


**ART. TB16**

Anello doppio girevole con asta  
*Complete double banjo (rotating under pressure)*

| CODICE   | ØD | G   | ØA   | H   | L1   | L    | Ø   |    |
|----------|----|-----|------|-----|------|------|-----|----|
| TB1604M5 | 4  | M5  | 2,0  | 4,0 | 17,8 | 19,5 | 2,5 | 50 |
| TB160418 | 4  | 1/8 | 5,5  | 5,5 | 24,5 | 21,1 | 3,0 | 50 |
| TB160618 | 6  | 1/8 | 5,5  | 5,5 | 24,5 | 24,3 | 3,0 | 50 |
| TB160614 | 6  | 1/4 | 7,8  | 6,5 | 28,0 | 25,5 | 4,0 | 50 |
| TB160818 | 8  | 1/8 | 5,5  | 5,5 | 24,5 | 24,8 | 3,0 | 50 |
| TB160814 | 8  | 1/4 | 7,8  | 6,5 | 28,0 | 26,5 | 4,0 | 25 |
| TB160838 | 8  | 3/8 | 10,0 | 7,5 | 32,5 | 28,0 | 5,0 | 25 |
| TB161014 | 10 | 1/4 | 7,8  | 6,5 | 28,0 | 28,4 | 4,0 | 25 |
| TB161038 | 10 | 3/8 | 10,0 | 7,5 | 32,5 | 29,9 | 5,0 | 25 |
| TB161012 | 10 | 1/2 | 12,0 | 9,0 | 38,8 | 30,0 | 8,0 | 10 |
| TB161238 | 12 | 3/8 | 10,0 | 7,5 | 32,5 | 31,4 | 5,0 | 25 |
| TB161212 | 12 | 1/2 | 12,0 | 9,0 | 38,8 | 34,9 | 8,0 | 10 |

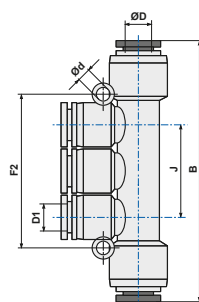
Art. disponibile fino ad esaurimento scorte  
Item available while stocks last


**ART. TB18**

Giunzione tripla intermedia  
*Triple branch union*

| CODICE   | ØD | ØD1 | J  | B    | Ød  | F2 |    |
|----------|----|-----|----|------|-----|----|----|
| TB180604 | 6  | 4   | 22 | 58,0 | 3,2 | 36 | 25 |
| TB180804 | 8  | 4   | 26 | 63,4 | 3,2 | 42 | 25 |
| TB180806 | 8  | 6   | 26 | 63,4 | 3,2 | 42 | 25 |
| TB181006 | 10 | 6   | 29 | 83,8 | 4,2 | 48 | 10 |
| TB181008 | 10 | 8   | 29 | 83,6 | 4,2 | 48 | 10 |

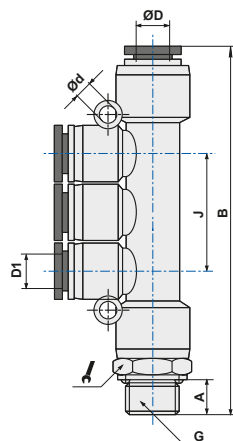
NOTA: articolo di importazione - NOTE: imported item


**ART. TB18G**

Giunzione tripla filettata  
*Male triple branch*

| CODICE    | ØD | D1 | G   | A   | B     | J  |    | Ød  |    |
|-----------|----|----|-----|-----|-------|----|----|-----|----|
| TB18G0418 | 4  | 4  | 1/8 | 5,5 | 68,0  | 26 | 14 | 3,2 | 25 |
| TB18G0414 | 4  | 4  | 1/4 | 7,5 | 70,0  | 26 | 17 | 3,2 | 25 |
| TB18G0438 | 4  | 4  | 3/8 | 7,5 | 70,0  | 26 | 20 | 3,2 | 10 |
| TB18G0618 | 6  | 6  | 1/8 | 5,5 | 68,0  | 26 | 14 | 3,2 | 25 |
| TB18G0614 | 6  | 6  | 1/4 | 7,5 | 70,0  | 26 | 17 | 3,2 | 25 |
| TB18G0638 | 6  | 6  | 3/8 | 7,5 | 70,5  | 26 | 20 | 3,2 | 10 |
| TB18G0612 | 6  | 6  | 1/2 | 10  | 73,0  | 26 | 24 | 3,2 | 10 |
| TB18G0818 | 8  | 8  | 1/8 | 5,5 | 87,0  | 29 | 14 | 3,2 | 10 |
| TB18G0814 | 8  | 8  | 1/4 | 7,5 | 89,0  | 29 | 17 | 3,2 | 10 |
| TB18G0838 | 8  | 8  | 3/8 | 7,5 | 89,5  | 29 | 20 | 3,2 | 10 |
| TB18G0812 | 8  | 8  | 1/2 | 10  | 92,5  | 29 | 24 | 3,2 | 10 |
| TB18G1018 | 10 | 10 | 1/8 | 5,5 | 95,5  | 37 | 14 | 4,2 | 10 |
| TB18G1014 | 10 | 10 | 1/4 | 7,5 | 98,0  | 37 | 17 | 4,2 | 10 |
| TB18G1038 | 10 | 10 | 3/8 | 7,5 | 98,5  | 37 | 20 | 4,2 | 10 |
| TB18G1012 | 10 | 10 | 1/2 | 10  | 101,5 | 37 | 24 | 4,2 | 10 |

NOTA: articolo di importazione - NOTE: imported item

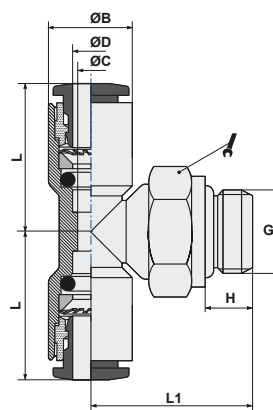


**ART. TB20**

Raccordo a T laterale girevole  
*Swivel male stud T parallel*

| CODICE    | ØD | G   | ØB   | H    | L    | L1   |  |  |
|-----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TB2004M3  | 4  | M3  | 9,5  | 3,0  | 17,2 | 15,0 | 8                                                                                 | 50                                                                                |
| TB2004M5  | 4  | M5  | 9,5  | 4,0  | 17,2 | 17,0 | 8                                                                                 | 50                                                                                |
| TB200418  | 4  | 1/8 | 9,5  | 5,5  | 17,2 | 18,5 | 13                                                                                | 50                                                                                |
| TB200414  | 4  | 1/4 | 9,5  | 7,5  | 17,2 | 20,4 | 16                                                                                | 50                                                                                |
| TB200438* | 4  | 3/8 | 11,0 | 7,5  | 19,0 | 27,3 | 20                                                                                | 25                                                                                |
| TB2006M5  | 6  | M5  | 9,5  | 4,0  | 20,8 | 17,0 | 8                                                                                 | 50                                                                                |
| TB200618  | 6  | 1/8 | 11,5 | 5,5  | 20,8 | 18,5 | 13                                                                                | 50                                                                                |
| TB200614  | 6  | 1/4 | 11,5 | 7,5  | 20,8 | 20,4 | 16                                                                                | 50                                                                                |
| TB200638* | 6  | 3/8 | 13,0 | 7,5  | 19,5 | 27,5 | 20                                                                                | 25                                                                                |
| TB200612* | 6  | 1/2 | 13,0 | 10   | 19,5 | 30,0 | 24                                                                                | 10                                                                                |
| TB200818  | 8  | 1/8 | 13,5 | 5,5  | 23,0 | 20,0 | 13                                                                                | 50                                                                                |
| TB200814  | 8  | 1/4 | 13,5 | 6,5  | 23,0 | 20,4 | 16                                                                                | 50                                                                                |
| TB200838  | 8  | 3/8 | 13,5 | 7,5  | 23,0 | 24,8 | 18                                                                                | 25                                                                                |
| TB200812* | 8  | 1/2 | 15,0 | 10   | 22,5 | 32,5 | 24                                                                                | 10                                                                                |
| TB201018* | 10 | 1/8 | 19,0 | 5,5  | 28,5 | 32,3 | 17                                                                                | 25                                                                                |
| TB201014  | 10 | 1/4 | 17,0 | 7,5  | 26,4 | 23,2 | 16                                                                                | 25                                                                                |
| TB201038* | 10 | 3/8 | 19,0 | 10,5 | 28,5 | 38,0 | 17                                                                                | 25                                                                                |
| TB201012* | 10 | 1/2 | 17,0 | 9    | 26,4 | 31,1 | 21                                                                                | 10                                                                                |
| TB201218* | 12 | 1/8 | 21,5 | 5,5  | 29,5 | 33,5 | 27                                                                                | 10                                                                                |
| TB201214* | 12 | 1/4 | 21,5 | 7,5  | 29,5 | 38,5 | 21                                                                                | 10                                                                                |
| TB201238* | 12 | 3/8 | 20,0 | 7,5  | 28,9 | 26,3 | 18                                                                                | 10                                                                                |
| TB201212* | 12 | 20  | 20,0 | 11   | 28,9 | 29,3 | 21                                                                                | 10                                                                                |

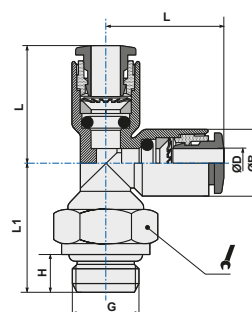
\* = di importazione - imported


**ART. TB21**

Raccordo a T laterale girevole  
*Swivel male branch T parallel*

| CODICE    | ØD | G   | ØB   | H   | L    | L1   |  |  |
|-----------|----|-----|------|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TB2104M3  | 4  | M3  | 9,5  | 3   | 12,2 | 15,0 | 8                                                                                   | 50                                                                                  |
| TB2104M5  | 4  | M5  | 9,5  | 4   | 12,2 | 17,0 | 8                                                                                   | 50                                                                                  |
| TB210418  | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 13                                                                                  | 50                                                                                  |
| TB210414  | 4  | 1/4 | 9,5  | 7,5 | 17,2 | 20,4 | 16                                                                                  | 50                                                                                  |
| TB210438* | 4  | 3/8 | 11,0 | 7,5 | 19   | 27,3 | 20                                                                                  | 25                                                                                  |
| TB2106M5  | 6  | M5  | 9,5  | 4   | 20,8 | 17   | 8                                                                                   | 50                                                                                  |
| TB210618  | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 13                                                                                  | 50                                                                                  |
| TB210614  | 6  | 1/4 | 11,5 | 7,5 | 20,8 | 20,4 | 16                                                                                  | 50                                                                                  |
| TB210638* | 6  | 3/8 | 13,0 | 7,5 | 19,7 | 27,5 | 20                                                                                  | 25                                                                                  |
| TB210612* | 6  | 1/2 | 13,0 | 10  | 19,7 | 30   | 24                                                                                  | 10                                                                                  |
| TB210818  | 8  | 1/8 | 13,5 | 5,5 | 23   | 20   | 13                                                                                  | 50                                                                                  |
| TB210814  | 8  | 1/4 | 13,5 | 7,5 | 23   | 20,4 | 16                                                                                  | 50                                                                                  |
| TB210838  | 8  | 3/8 | 13,5 | 9   | 23   | 24,8 | 18                                                                                  | 25                                                                                  |
| TB210812* | 8  | 1/2 | 14,4 | 9   | 22,5 | 32,5 | 24                                                                                  | 10                                                                                  |
| TB211018* | 10 | 1/8 | 19,0 | 5,5 | 27,8 | 32,5 | 17                                                                                  | 25                                                                                  |
| TB211014* | 10 | 1/4 | 17,0 | 6,5 | 26,4 | 23,2 | 16                                                                                  | 25                                                                                  |
| TB211038* | 10 | 3/8 | 19,0 | 7,5 | 28,5 | 38,5 | 17                                                                                  | 25                                                                                  |
| TB211012* | 10 | 1/2 | 17,0 | 10  | 26,4 | 31,1 | 21                                                                                  | 10                                                                                  |
| TB211218* | 12 | 1/8 | 21,0 | 5,5 | 29,5 | 33,5 | 21                                                                                  | 25                                                                                  |
| TB211214* | 12 | 1/4 | 21,0 | 7,5 | 29,5 | 36   | 21                                                                                  | 10                                                                                  |
| TB211238* | 12 | 3/8 | 20,0 | 7,5 | 28,9 | 26,3 | 18                                                                                  | 10                                                                                  |
| TB211212* | 12 | 1/2 | 20,0 | 9   | 28,9 | 31,1 | 21                                                                                  | 10                                                                                  |

\* = di importazione - imported

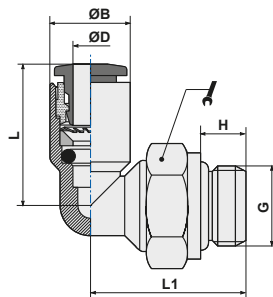


**ART. TB22**

Gomito girevole filetto cilindrico maschio con O-Ring  
*Swivel L male adaptor parallel*

| CODICE    | ØD | G   | ØB   | H   | L    | L1   |  |  |
|-----------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TB2204M3  | 4  | M3  | 9,5  | 4   | 17,2 | 17   | 8                                                                                 | 50                                                                                |
| TB2204M5  | 4  | M5  | 9,5  | 4   | 17,2 | 17   | 8                                                                                 | 100                                                                               |
| TB220418  | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 13                                                                                | 100                                                                               |
| TB220414  | 4  | 1/4 | 9,5  | 6,5 | 17,2 | 20,4 | 16                                                                                | 100                                                                               |
| TB2206M5  | 6  | M5  | 11,5 | 4   | 20,8 | 17   | 8                                                                                 | 100                                                                               |
| TB220618  | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 13                                                                                | 100                                                                               |
| TB220614  | 6  | 1/4 | 11,5 | 6,5 | 20,8 | 20,4 | 16                                                                                | 100                                                                               |
| TB220818  | 8  | 1/8 | 13,5 | 5,5 | 23   | 20   | 13                                                                                | 100                                                                               |
| TB220814  | 8  | 1/4 | 13,5 | 6,5 | 23   | 20,4 | 16                                                                                | 100                                                                               |
| TB220838  | 8  | 3/8 | 13,5 | 7,5 | 23   | 24,8 | 18                                                                                | 50                                                                                |
| TB221018* | 10 | 1/8 | 19   | 5,5 | 27,8 | 26   | 14                                                                                | 50                                                                                |
| TB221014  | 10 | 1/4 | 17   | 6,5 | 26,4 | 23,2 | 16                                                                                | 50                                                                                |
| TB221038  | 10 | 3/8 | 17   | 7,5 | 26,4 | 24,8 | 18                                                                                | 50                                                                                |
| TB221012  | 10 | 1/2 | 17   | 9   | 26,4 | 31,1 | 21                                                                                | 25                                                                                |
| TB221214  | 12 | 1/4 | 20   | 6,5 | 28,9 | 24,2 | 16                                                                                | 50                                                                                |
| TB221238  | 12 | 3/8 | 20   | 7,5 | 28,9 | 26,3 | 18                                                                                | 50                                                                                |
| TB221212  | 12 | 1/2 | 20   | 9   | 28,9 | 31,1 | 21                                                                                | 25                                                                                |

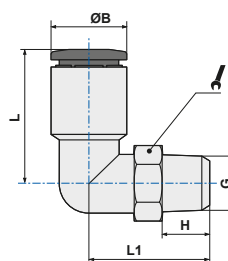
\* = di importazione - imported


**ART. TB22C**

Gomito girevole filetto conico  
*Swivel L male adaptor tapered*

| CODICE    | ØD | G   | ØB   | H    | L    | L1   |  |  |
|-----------|----|-----|------|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TB22C0418 | 4  | 1/8 | 11,5 | 7,5  | 17,2 | 20,5 | 10                                                                                  | 100                                                                                 |
| TB22C0414 | 4  | 1/4 | 11,5 | 9,5  | 19,0 | 20,0 | 14                                                                                  | 100                                                                                 |
| TB22C0438 | 4  | 3/8 | 11,5 | 10,5 | 19,0 | 21,0 | 17                                                                                  | 25                                                                                  |
| TB22C0618 | 6  | 1/8 | 13,5 | 7,5  | 19,2 | 21,5 | 10                                                                                  | 100                                                                                 |
| TB22C0614 | 6  | 1/4 | 13,5 | 9,5  | 19,2 | 21,0 | 14                                                                                  | 100                                                                                 |
| TB22C0638 | 6  | 3/8 | 13,5 | 10,5 | 19,2 | 22,0 | 17                                                                                  | 25                                                                                  |
| TB22C0612 | 6  | 1/2 | 13,5 | 13,5 | 19,2 | 25,5 | 21                                                                                  | 10                                                                                  |
| TB22C0818 | 8  | 1/8 | 15,0 | 7,5  | 22,5 | 22,2 | 12                                                                                  | 100                                                                                 |
| TB22C0814 | 8  | 1/4 | 15,0 | 9,5  | 22,5 | 21,7 | 14                                                                                  | 100                                                                                 |
| TB22C0838 | 8  | 3/8 | 15,0 | 10,5 | 23,0 | 22,7 | 17                                                                                  | 50                                                                                  |
| TB22C0812 | 8  | 1/2 | 15,0 | 13,5 | 22,5 | 26,2 | 21                                                                                  | 10                                                                                  |
| TB22C1018 | 10 | 1/8 | 19,0 | 7,5  | 27,8 | 26,9 | 14                                                                                  | 50                                                                                  |
| TB22C1014 | 10 | 1/4 | 19,0 | 9,5  | 27,8 | 28,4 | 14                                                                                  | 50                                                                                  |
| TB22C1038 | 10 | 3/8 | 19,0 | 10,5 | 27,8 | 24,7 | 17                                                                                  | 50                                                                                  |
| TB22C1012 | 10 | 1/2 | 19,0 | 13,5 | 27,8 | 28,2 | 21                                                                                  | 25                                                                                  |
| TB22C1218 | 12 | 1/8 | 21,5 | 7,5  | 29,5 | 28,2 | 15                                                                                  | 25                                                                                  |
| TB22C1214 | 12 | 1/4 | 21,5 | 9,5  | 29,5 | 29,7 | 15                                                                                  | 25                                                                                  |
| TB22C1238 | 12 | 3/8 | 21,5 | 10,5 | 29,5 | 26,0 | 21                                                                                  | 50                                                                                  |
| TB22C1212 | 12 | 1/2 | 21,5 | 13,5 | 29,5 | 29,5 | 21                                                                                  | 25                                                                                  |
|           |    |     |      |      |      |      |                                                                                     |                                                                                     |
|           |    |     |      |      |      |      |                                                                                     |                                                                                     |

NOTA: articolo di importazione - NOTE: imported item



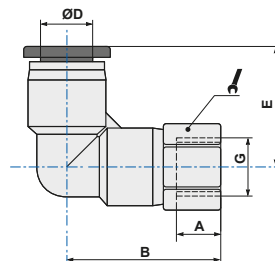


**ART. TB22F**

Gomito girevole femmina  
*Female swivel L adaptor*

| CODICE    | ØD | G   | A    | B    | E    |  |    |    |
|-----------|----|-----|------|------|------|--|----|----|
| TB22F04M5 | 4  | M5  | 5,5  | 20,5 | 19,0 |  | 10 | 50 |
| TB22F0418 | 4  | 1/8 | 8,5  | 24,0 | 19,0 |  | 14 | 50 |
| TB22F0414 | 4  | 1/4 | 11,0 | 27,0 | 19,0 |  | 17 | 50 |
| TB22F06M5 | 6  | M5  | 6,0  | 20,7 | 19,2 |  | 12 | 50 |
| TB22F0618 | 6  | 1/8 | 8,5  | 24,2 | 19,2 |  | 14 | 50 |
| TB22F0614 | 6  | 1/4 | 11,0 | 27,2 | 19,2 |  | 17 | 50 |
| TB22F0638 | 6  | 3/8 | 12,0 | 28,7 | 19,2 |  | 21 | 25 |
| TB22F0818 | 8  | 1/8 | 8,0  | 27,0 | 23,0 |  | 14 | 50 |
| TB22F0814 | 8  | 1/4 | 11,0 | 30,5 | 23,0 |  | 17 | 50 |
| TB22F0838 | 8  | 3/8 | 12,0 | 32,0 | 23,0 |  | 21 | 25 |
| TB22F1014 | 10 | 1/4 | 11,0 | 34,3 | 28,2 |  | 17 | 25 |
| TB22F1038 | 10 | 3/8 | 12,0 | 35,8 | 28,2 |  | 21 | 25 |
| TB22F1012 | 10 | 1/2 | 14,0 | 38,8 | 28,2 |  | 24 | 10 |
| TB22F1214 | 12 | 1/4 | 11,0 | 37,0 | 29,5 |  | 21 | 25 |
| TB22F1238 | 12 | 3/8 | 12,0 | 38,0 | 29,5 |  | 21 | 25 |
| TB22F1212 | 12 | 1/2 | 14,0 | 40,5 | 29,5 |  | 24 | 10 |

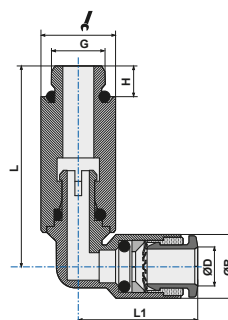
NOTA: articolo di importazione - NOTE: imported item


**ART. TB22L**

Gomito girevole cilindrico lungo  
*Swivel longer L male adaptor parallel*

| CODICE     | ØD | G   | ØB   | H   | L    | L1   |    |    |
|------------|----|-----|------|-----|------|------|----|----|
| TB22L04M5* | 4  | M5  | 11,0 | 3,5 | 34,5 | 19,0 | 10 | 25 |
| TB22L0418  | 4  | 1/8 | 9,5  | 6,0 | 35,7 | 17,2 | 13 | 25 |
| TB22L06M5* | 6  | M5  | 13,0 | 3,5 | 36,4 | 19,2 | 12 | 25 |
| TB22L0618  | 6  | 1/8 | 11,5 | 6,0 | 35,7 | 20,8 | 13 | 25 |
| TB22L0818  | 8  | 1/8 | 13,5 | 6,0 | 38,0 | 23,0 | 13 | 25 |
| TB22L0814* | 8  | 1/4 | 15,0 | 7,5 | 44,3 | 22,5 | 17 | 25 |

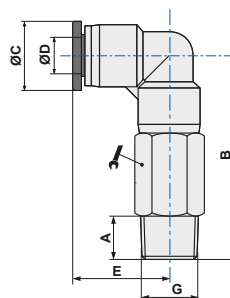
\* = di importazione - imported


**ART. TB22LC**

Gomito girevole conico lungo  
*Swivel longer L male adaptor tapered*

| CODICE     | ØD | G   | A    | B    | ØC   | E    |    |    |
|------------|----|-----|------|------|------|------|----|----|
| TB22LC0418 | 4  | 1/8 | 7,5  | 37,0 | 11,0 | 19,0 | 10 | 25 |
| TB22LC0414 | 4  | 1/4 | 9,5  | 40,0 | 11,0 | 19,0 | 14 | 25 |
| TB22LC0618 | 6  | 1/8 | 7,5  | 39,7 | 13,0 | 19,2 | 12 | 25 |
| TB22LC0614 | 6  | 1/4 | 9,5  | 42,2 | 13,0 | 19,2 | 14 | 25 |
| TB22LC0638 | 6  | 3/8 | 10,5 | 43,7 | 13,0 | 19,2 | 17 | 25 |
| TB22LC0818 | 8  | 1/8 | 7,5  | 44,8 | 14,4 | 23,0 | 14 | 25 |
| TB22LC0814 | 8  | 1/4 | 9,5  | 46,8 | 14,4 | 23,0 | 17 | 25 |
| TB22LC0838 | 8  | 3/8 | 10,5 | 48,5 | 14,4 | 23,0 | 17 | 25 |
| TB22LC1018 | 10 | 1/8 | 7,5  | 54,3 | 18,5 | 28,2 | 17 | 25 |
| TB22LC1014 | 10 | 1/4 | 9,5  | 56,3 | 18,5 | 28,2 | 17 | 25 |
| TB22LC1038 | 10 | 3/8 | 10,5 | 57,3 | 18,5 | 28,2 | 17 | 25 |
| TB22LC1012 | 10 | 1/2 | 13,5 | 60,8 | 18,5 | 28,2 | 21 | 10 |
| TB22LC1214 | 12 | 1/4 | 9,5  | 61,5 | 21,0 | 29,5 | 21 | 10 |
| TB22LC1238 | 12 | 3/8 | 10,5 | 62,5 | 21,0 | 29,5 | 21 | 10 |
| TB22LC1212 | 12 | 1/2 | 13,5 | 65,5 | 21,0 | 29,5 | 21 | 10 |

NOTA: articolo di importazione - NOTE: imported item

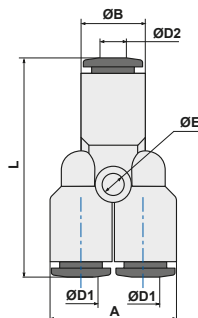


**ART. TB23**

Y innestabile  
Y connector

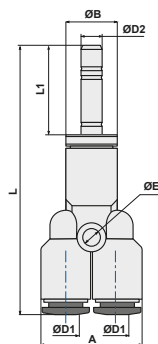
| CODICE    | ØD1 | ØD2 | ØE   | ØB   | A  | L    |  |    |
|-----------|-----|-----|------|------|----|------|--|----|
| TB230400  | 4   | 4   | 2,40 | 9,5  | 19 | 33,0 |  | 50 |
| TB230406  | 4   | 6   | 2,40 | 11,5 | 19 | 35,8 |  | 50 |
| TB230600  | 6   | 6   | 2,60 | 11,5 | 23 | 38,6 |  | 50 |
| TB230608  | 6   | 8   | 3,20 | 13,5 | 23 | 39,8 |  | 50 |
| TB230800  | 8   | 8   | 2,75 | 16,5 | 27 | 42,5 |  | 50 |
| TB230810  | 8   | 10  | 3,20 | 17,0 | 27 | 44,4 |  | 25 |
| TB231000  | 10  | 10  | 4,30 | 20,0 | 34 | 50,8 |  | 25 |
| TB231012* | 10  | 12  | 4,30 | 20,0 | 34 | 50,8 |  | 10 |
| TB231200  | 12  | 12  | 4,20 | 20,0 | 40 | 53,2 |  | 10 |

\* = di importazione - imported


**ART. TB23L0**

Y innestabile  
Y connector

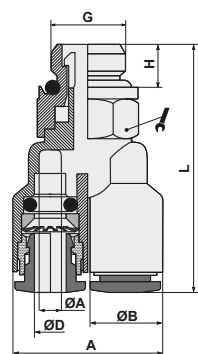
| CODICE   | ØD1 | ØD2 | ØB   | A  | ØE   | L    | L1   |    |
|----------|-----|-----|------|----|------|------|------|----|
| TB2304L0 | 4   | 4   | 9,5  | 19 | 2,40 | 50,0 | 16,7 | 50 |
| TB2306L0 | 6   | 6   | 11,5 | 23 | 2,60 | 58,1 | 19,5 | 50 |
| TB2308L0 | 8   | 8   | 13,5 | 27 | 2,75 | 63,5 | 21,0 | 50 |
| TB2310L0 | 10  | 10  | 17,0 | 34 | 4,30 | 74,8 | 24,0 | 25 |
| TB2312L0 | 12  | 12  | 20,0 | 40 | 4,20 | 78,2 | 25,0 | 10 |


**ART. TB23G**

Y innestabile filetto cilindrico con O-Ring  
Y connector with swivel parallel male adapter

| CODICE     | ØD | G   | ØA  | ØB   | H   | A    | L    |    |    |
|------------|----|-----|-----|------|-----|------|------|----|----|
| TB23G04M5* | 4  | M5  | 2,0 | 9,5  | 4,0 | 19,0 | 39,1 | 10 | 50 |
| TB23G0418  | 4  | 1/8 | 3,0 | 9,5  | 5,5 | 19,0 | 20,5 | 13 | 50 |
| TB23G0414  | 4  | 1/4 | 3,0 | 11,0 | 7,5 | 22,0 | 45,5 | 17 | 50 |
| TB23G0438* | 4  | 3/8 | 3,0 | 11,0 | 7,5 | 22,0 | 46,0 | 20 | 25 |
| TB23G0618  | 6  | 1/8 | 5,0 | 11,5 | 5,5 | 23,0 | 34,8 | 13 | 50 |
| TB23G0614  | 6  | 1/4 | 5,0 | 11,5 | 6,5 | 23,0 | 36,4 | 16 | 50 |
| TB23G0638* | 6  | 3/8 | 5,0 | 13,0 | 7,5 | 26,0 | 47,2 | 20 | 25 |
| TB23G0818  | 8  | 1/8 | 7,0 | 13,5 | 5,5 | 27,0 | 37,5 | 13 | 50 |
| TB23G0814  | 8  | 1/4 | 7,0 | 13,5 | 6,5 | 27,0 | 38,6 | 16 | 50 |
| TB23G0838* | 8  | 3/8 | 6,2 | 14,4 | 7,5 | 29,4 | 50,5 | 20 | 25 |
| TB23G1014* | 10 | 1/4 | 8,2 | 18,4 | 7,5 | 36,4 | 58,9 | 17 | 25 |
| TB23G1038* | 10 | 3/8 | 8,2 | 18,4 | 7,5 | 36,4 | 58,9 | 20 | 25 |
| TB23G1012* | 10 | 1/2 | 8,2 | 18,4 | 10  | 36,4 | 62,4 | 24 | 10 |
| TB23G1214* | 12 | 1/4 | 9,5 | 21,0 | 7,5 | 42,0 | 62,3 | 21 | 10 |
| TB23G1238* | 12 | 3/8 | 9,5 | 21,0 | 7,5 | 42,0 | 62,3 | 21 | 10 |
| TB23G1212* | 12 | 1/2 | 9,5 | 21,0 | 10  | 42,0 | 65,3 | 24 | 10 |

\* = di importazione - imported

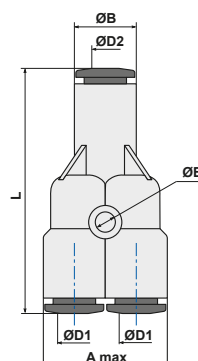


**ART. TB24**

Y doppio innestabile  
*Double Y connector*

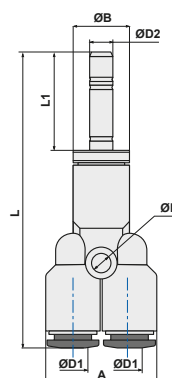
| CODICE    | ØD1 | ØD2 | ØE  | ØB   | A max | L    |  |    |
|-----------|-----|-----|-----|------|-------|------|--|----|
| TB240400  | 4   | 4   | 3,2 | 9,5  | 20,2  | 34,5 |  | 25 |
| TB240406  | 4   | 6   | 3,2 | 13,0 | 20,8  | 35,5 |  | 25 |
| TB240408* | 4   | 8   | 3,2 | 14,5 | 22,2  | 38,5 |  | 25 |
| TB240600  | 6   | 6   | 3,2 | 11,5 | 23,9  | 39,6 |  | 25 |
| TB240608* | 6   | 8   | 3,2 | 13,5 | 26,15 | 41,8 |  | 25 |
| TB240800* | 8   | 8   | 3,5 | 15,0 | 28,0  | 42,0 |  | 25 |
| TB240810  | 8   | 10  | 3,2 | 17,0 | 28,0  | 46,5 |  | 25 |

\* = di importazione - imported


**ART. TB24L0**

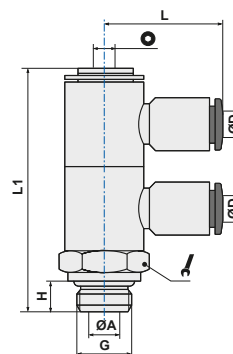
Y doppio innestabile  
*Double Y connector*

| CODICE   | ØD1 | ØD2 | ØE   | ØB   | A  | L    | L1   |    |
|----------|-----|-----|------|------|----|------|------|----|
| TB2404L0 | 4   | 4   | 2,40 | 9,5  | 19 | 51,2 | 16,7 | 25 |
| TB2406L0 | 6   | 6   | 2,60 | 11,5 | 23 | 59,1 | 19,5 | 25 |
| TB2408L0 | 8   | 8   | 2,75 | 13,5 | 27 | 67,5 | 21,0 | 25 |
|          |     |     |      |      |    |      |      |    |
|          |     |     |      |      |    |      |      |    |
|          |     |     |      |      |    |      |      |    |
|          |     |     |      |      |    |      |      |    |


**ART. TB33**

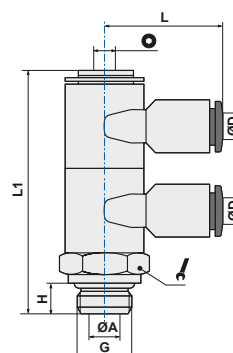
Doppio anello semplice girevole con asta  
*Swivel double banjo stem*

| CODICE   | ØD | G   | ØA  | H   | L1   | L    | Ø   |    |    |
|----------|----|-----|-----|-----|------|------|-----|----|----|
| TB3304M5 | 4  | M5  | 2,0 | 4,0 | 28,0 | 19,5 | 2,5 | 14 | 22 |
| TB330418 | 4  | 1/8 | 5,5 | 5,5 | 43,3 | 21,1 | 3   | 14 | 25 |
| TB330618 | 6  | 1/8 | 5,5 | 5,5 | 43,3 | 24,3 | 3   | 14 | 25 |
| TB330614 | 6  | 1/4 | 7,8 | 6,5 | 50,0 | 25,5 | 4   | 18 | 25 |
| TB330818 | 8  | 1/8 | 5,5 | 5,5 | 43,3 | 24,8 | 3   | 14 | 25 |
| TB330814 | 8  | 1/4 | 7,8 | 6,5 | 50,0 | 26,5 | 4   | 18 | 25 |
| TB331014 | 10 | 1/4 | 7,8 | 6,5 | 50,0 | 28,4 | 4   | 18 | 25 |


**ART. TB33B**

Doppio anello due vie girevole con asta  
*Double branch universal male L*

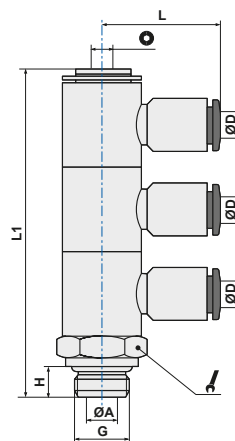
| CODICE    | ØD | G   | ØA  | H   | L1   | L    | Ø   |    |    |
|-----------|----|-----|-----|-----|------|------|-----|----|----|
| TB33B04M5 | 4  | M5  | 2,0 | 4,0 | 28,0 | 19,5 | 2,5 | 14 | 10 |
| TB33B0618 | 6  | 1/8 | 5,5 | 5,5 | 43,3 | 24,3 | 3   | 14 | 10 |
| TB33B0814 | 8  | 1/4 | 7,8 | 6,5 | 50,0 | 26,5 | 4   | 18 | 10 |
|           |    |     |     |     |      |      |     |    |    |
|           |    |     |     |     |      |      |     |    |    |



**ART. TB34**

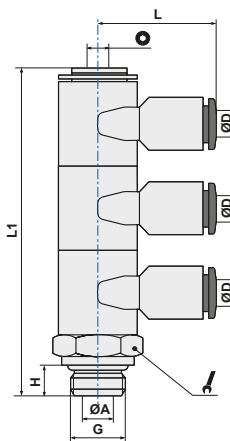
Triplo anello semplice girevole con asta  
*Swivel triple banjo stem*

| CODICE   | ØD | G   | ØA  | H   | L1   | L    | Ø | 1  | 2  |
|----------|----|-----|-----|-----|------|------|---|----|----|
| TB340418 | 4  | 1/8 | 5,5 | 5,5 | 58,4 | 21,1 | 3 | 14 | 10 |
| TB340618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 3 | 14 | 10 |
| TB340818 | 8  | 1/8 | 5,5 | 5,5 | 58,4 | 24,8 | 3 | 14 | 10 |
| TB340614 | 6  | 1/4 | 7,8 | 6,5 | 67   | 25,5 | 4 | 18 | 10 |
| TB340814 | 8  | 1/4 | 7,8 | 6,5 | 67   | 26,5 | 4 | 18 | 10 |
| TB341014 | 10 | 1/4 | 7,8 | 6,5 | 67   | 28,4 | 4 | 18 | 10 |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |
|          |    |     |     |     |      |      |   |    |    |


**ART. TB34B**

Triplo anello due vie girevole con asta  
*Triple branch universal male L*

| CODICE    | ØD | G   | ØA  | H   | L1   | L    | Ø | 1  | 2  |
|-----------|----|-----|-----|-----|------|------|---|----|----|
| TB34B0618 | 6  | 1/8 | 5,5 | 5,5 | 58,4 | 24,3 | 3 | 14 | 10 |
| TB34B0814 | 8  | 1/4 | 7,8 | 6,5 | 67   | 26,5 | 4 | 18 | 10 |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |
|           |    |     |     |     |      |      |   |    |    |

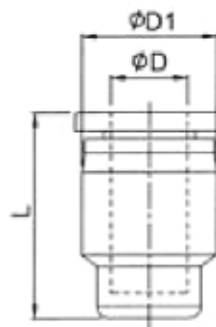

**ART. TB90**

Tappo femmina  
*Tube Blanking Cap*

| CODICE   | ØD | ØD1  | L    |  |  |  |     |
|----------|----|------|------|--|--|--|-----|
| TB900400 | 4  | 11,5 | 17,5 |  |  |  | 100 |
| TB900600 | 6  | 13,5 | 17,7 |  |  |  | 100 |
| TB900800 | 8  | 15   | 21,3 |  |  |  | 100 |
| TB901000 | 10 | 19   | 25   |  |  |  | 50  |
| TB901200 | 12 | 21,5 | 26   |  |  |  | 50  |
|          |    |      |      |  |  |  |     |
|          |    |      |      |  |  |  |     |
|          |    |      |      |  |  |  |     |
|          |    |      |      |  |  |  |     |
|          |    |      |      |  |  |  |     |

Adattabile a tutti i raccordi della serie Tecno-RAP  
*Suitable for all Tecno-RAP fitting series*

Di importazione  
*Import*



## BREVE DESCRIZIONE

I raccordi automatici della nostra serie TECNORAP sono realizzati in Italia, a garanzia di elevati standard di qualità secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

*The TECNORAP series push-in fittings are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.*

## SCHEDA TECNICA TECHNICAL SHEET

|                                                                       |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                       |                                                                                                        | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                                                     |
| APPLICAZIONI<br><i>APPLICATIONS</i>                                   |                                                                                                        | Pneumatica, idraulica a bassa pressione, secondo normativa DIN 3861-3870. Idonei al funzionamento con il vuoto.<br><i>Pneumatic circuits, low pressure hydraulic applications, according to DIN 3861-3870 norms. Suitable for vacuum applications.</i>                                                                                                                                                    |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                            |                                                                                                        | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br><i>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethylene), TCO (Copolyester)</i>                                                                                                                                                                                                                               |
| TOLLERANZE TUBI<br><i>TUBES TOLERANCES</i>                            |                                                                                                        | Diam. da 4 a 10 mm +/- 0,05 Diam. da 12 mm +/- 0,1<br><i>Diam. between 4 and 10 mm +/- 0,05 Diam. from 12 mm +/- 0,1</i>                                                                                                                                                                                                                                                                                  |
| GRADO DI PROTEZIONE<br><i>INGRESS PROTECTION</i>                      |                                                                                                        | "IP 68"                                                                                                                                                                                                                                                                                                                                                                                                   |
| TEMPERATURE<br>E PRESSIONI<br><br><i>TEMPERATURE<br/>AND PRESSURE</i> | VALORI LIMITE<br>CONSIGLIATI<br><br><i>RECOMMENDED<br/>LIMIT VALUES</i>                                | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato, e comunque si suggerisce di non superare i 12 bar e temperature comprese fra -20°C e +50°C.<br><i>Temperatures and pressures usually depend by the technical features of the employed tubes, anyway it is suggested a limit working pressure of 12 bar and a temperature range between -20°C and +50°C</i> |
|                                                                       | DATI TECNICI<br>DI PROVA<br><br><i>TECHNICAL<br/>TESTING DATA</i>                                      | A pag. 64 sono riportati i dati di resistenza a trazione e i valori limite di utilizzo (Pressione e Temperature) relativi ai principali tubi commerciali.<br><i>At page 64 are indicated the load traction resistance values and the main working and breaking limit (Pressure and Temperature) of the main commercial tubing.</i>                                                                        |
|                                                                       | NOTA<br><i>NOTE</i>                                                                                    | Per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br><i>For more complete informations pls read the technical catalogue of your tube supplier.</i>                                                                                                                                                                                                                      |
|                                                                       |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                           |
| FILETTATURE<br><i>THREAD TYPE</i>                                     |                                                                                                        | BSP cilindrica UNI-ISO 228; BSP conica UNI-ISO 7; Metrica ISO/R 262.<br><i>BSP parallell UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                                                                                                                                                                                                                                         |
| MATERIALI<br><i>MATERIALS</i>                                         | corpo, spintore, distanziale, sottomolla<br><i>body, sleeve, collar and back ring</i>                  | POM copolimero ISO1043-1<br><i>POM copolymer ISO1043-1</i>                                                                                                                                                                                                                                                                                                                                                |
|                                                                       | corpi raccordi T01 e basi girevoli serie T22T<br><i>fittings body T01 and swivel bases T22T series</i> | IXEF tecnopolimero caricato in vetro<br><i>IXEF technopolymer glass-fiber reinforced</i>                                                                                                                                                                                                                                                                                                                  |
|                                                                       | astine e basi girevoli<br><i>swivel stems and bases</i>                                                | Ottone UNI EN 12164 CW614N<br><i>Brass UNI EN 12164 CW614N</i>                                                                                                                                                                                                                                                                                                                                            |
|                                                                       | pinza<br><i>spring</i>                                                                                 | Acciaio Inox AISI 301 austenitico<br><i>Stainless steel AISI 301 austenitic</i>                                                                                                                                                                                                                                                                                                                           |
|                                                                       | guarnizioni tenuta<br><i>seals</i>                                                                     | NBR 70 DWGV-EN549 UL157<br><i>NBR 70 DWGV-EN549 UL157</i>                                                                                                                                                                                                                                                                                                                                                 |

## INFORMAZIONI TECNICHE AGGIUNTIVE

Ogni lotto della serie Tecno-RAP viene sottoposto a controlli cosiddetti "rompilotto" durante tutto il ciclo produttivo, che comprendono, oltre all'osservazione estetica, la verifica di funzionalità e di eventuali perdite, un test in pressione a 8 bar per verificarne la conformità anche in condizioni di utilizzo nominali. Successivamente viene eseguito un test a campione di rottura (simulazione scoppio a 50 bar di pressione) con una macchina dedicata che sollecita il raccordo a trazione. Di seguito viene indicata la forza minima di strappo (in Newton) ammessa per ogni diametro:

| Diam. tubo Tube diam. | Forza di strappo Breaking load |
|-----------------------|--------------------------------|
| Ø4                    | 63 N                           |
| Ø6                    | 141 N                          |
| Ø8                    | 251 N                          |
| Ø10                   | 393 N                          |
| Ø12                   | 566 N                          |

### Nota importante:

I valori indicati si riferiscono alla tenuta della pinza di aggraffaggio, "core part" sia del raccordo Tecno-RAP in tecnopolimero, che del RAP in ottone, per cui omogenei. I valori di rottura sperimentali misurati sono stati, in base al diametro, anche da 1,2 a 2,5 volte superiori.

### Informazioni complementari sulle temperature di utilizzo:

| Pressione di esercizio e pressione di scoppio (bar) alle diverse temperature<br>Working pressure and breaking pressure (bar) at different temperatures |                                  |                                 |                                  |                                 |                                  |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| Esempio<br>Example                                                                                                                                     | T-20°C                           | T-20°C                          | T+23°C                           | T+23°C                          | T+60°C                           | T+60°C                          |
| Tubo 6x4 colorato<br>Tube 6x4 colored                                                                                                                  | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar |
| TPU                                                                                                                                                    | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,2                              | 20,8                            |
| PA11                                                                                                                                                   | 37,4                             | 149,6                           | 20,0                             | 80,0                            | 10,4                             | 41,6                            |
| PA12                                                                                                                                                   | 48,6                             | 168,3                           | 26,0                             | 90,0                            | 10,4                             | 36,0                            |
| PE                                                                                                                                                     | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,0                              | 20,0                            |

Tutte le necessarie valutazioni sull'utilizzo dei raccordi in condizioni di esercizio differenti da quelle suggerite nella scheda tecnica iniziale debbono anche tenere conto, con riferimento alle temperature, dei dati nominali relativi al tubo utilizzato e del limite imposto dal componente più critico.

SERIE TECNORAP: -20°+50° • SERIE RAP : -20° +70°  
SERIE OT: -20° + 80° • SERIE OV : -20° +150°  
SERIE SS:-20° +120°

## ADDITIONAL TECHNICAL INFORMATION

Each Tecno-RAP production batch is tested according to severe cyclics "lot breaker" controls along all the production period, which include shape observation, leakage verification, functionality, at the working pressure of 8 bar.

Then all samples taken from the lot are tested by a traction machine which simulate a breaking pressure of 50 bar.

Here below are indicated the traction loads (in Newton) for each size:

### Important note:

The values refer to the resistance of the crimping gripper, "core part" of both fittings, the technopolymer Tecno-RAP and the brass RAP, whereby homogeneous. The breaking experimental values measured, according to the diameter, were from 1.2 to 2.5 times higher.

### Additional information regarding the working temperatures:

Further to all the necessary assessments on the use of the fittings in operating conditions different from how suggested in the initial technical sheet must be considered, with reference to temperatures, the nominal data regarding the type of the used tube and the limit imposed by the most critical component.

SERIES TECNORAP: -20°+50° • SERIES RAP : -20° +70°  
SERIES OT: -20° + 80° • SERIES OV : -20° +150°  
SERIES SS:-20° +120°





FOOD





## Una nuova missione

In un settore esigente come quello del “Food & Beverage” per soddisfare le richieste dei clienti è necessario realizzare prodotti che, oltre ad assicurare grande affidabilità, siano conformi alle normative internazionali di riferimento.

In quest’ottica nasce la nuova serie di raccordi FCM (Food Contact Material), idonea per il contatto con gli alimenti, e il passaggio di fluidi alimentari, secondo le Normative Europee (Regolamenti) CE 1935/2004, CE 2023/2006, CE 11/2011 e il contatto con acqua potabile secondo il Decreto Ministeriale DM 174/2004.

Requisiti necessari grazie ai quali si vuole offrire ad un mercato in forte evoluzione, una alternativa nuova, con la consapevolezza di aderire ad un cammino che muove i propri passi secondo precisi intendimenti dettati dal nuovo Regolamento Europeo UE 831/2018, conosciuto ormai da tutti gli addetti ai lavori come **MOCA (Fcm)**.

La serie FCM è realizzata da Titan Engineering Spa e si inserisce in un percorso già avviato basato sulla convinzione che sia sempre più necessario orientare le strategie aziendali verso lo sviluppo sostenibile, prestando maggiore attenzione alla salute delle persone e al rispetto dell’ambiente, temi fondamentali nei confronti dei quali l’azienda si presenta già accreditata delle certificazioni ISO14001 e ISO45001, integrate al sistema di gestione qualità ISO9001.

## A new mission

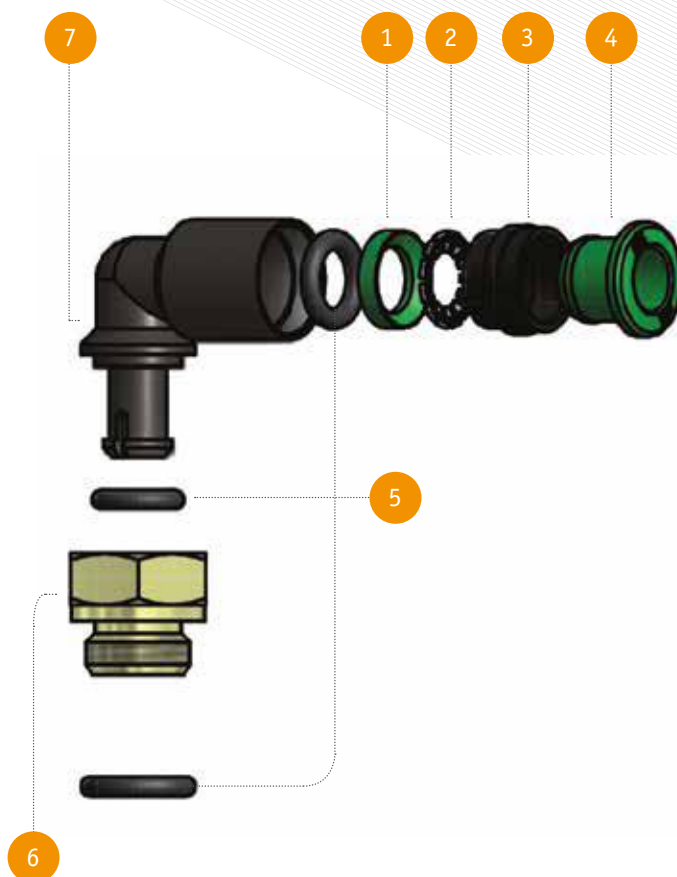
*In a demanding sector such as “Food & Beverage”, in order to satisfy customers’ requests, products must ensure high reliability and compliance with relevant international standards.*

*In this perspective born the new series of Fcm (Food Contact Material) fittings, suitable for food contact, and drinkable liquid passage, according to the European regulations 1935/2004, 2023/2006, 11/2011 and for contact with drinking according to the Ministerial Decree 174/2004.*

*According to those requirements this new series of fittings offers to an ever-changing market an efficient alternative to adhere to the new European Regulation 831/2018 - otherwise known as **FCM (Moca)**.*

*The FCM series, manufactured by Titan Engineering Spa, is part of a route based on the conviction that it is increasingly necessary to direct business strategies towards sustainable development, paying the greatest attention to people’s health and respect for the environment; these are fundamental beliefs for which the company already acquired the ISO14001 and ISO45001 certifications, which are integrated into the quality management system ISO9001.*

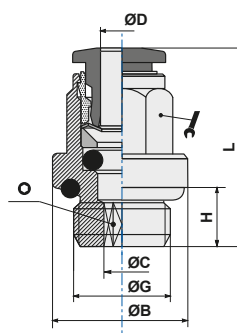
- 1 ANELLO DI SOSTEGNO  
SUPPORTING RING
- 2 PINZA DI AGGRAFFAGGIO  
CRIMPING GRIPPER
- 3 DISTANZIALE DI FERMO  
LOCK RING
- 4 ANELLO SPINGITORE  
THRUST SLEEVE
- 5 O-RING DI TENUTA  
O-RING SEAL
- 6 BASE GIREVOLE  
SWIVEL BASE
- 7 CORPO DEL RACCORDO  
FITTING BODY



**ART. F01**

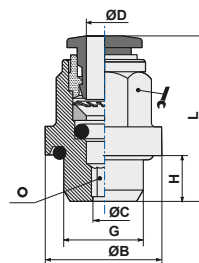
Diritto cilindrico maschio con O-Ring  
*Straight male adaptor (parallel)*

| CODICE  | ØD | G   | ØC  | ØB   | H   | L    |  |  |  |
|---------|----|-----|-----|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| F0104M5 | 4  | M5  | 2,6 | 9    | 4   | 20,5 | 9                                                                                 | 2,5                                                                               | 5                                                                                 |
| F010418 | 4  | 1/8 | 2,6 | 13,5 | 5,5 | 20   | 9                                                                                 | 2,5                                                                               | 5                                                                                 |
| F010414 | 4  | 1/4 | 2,6 | 17   | 6,5 | 21   | 9                                                                                 | 2,5                                                                               | 5                                                                                 |
| F0106M5 | 6  | M5  | 2,6 | 11   | 4   | 22,8 | 11                                                                                | 2,5                                                                               | 5                                                                                 |
| F010618 | 6  | 1/8 | 4,2 | 13,5 | 5,5 | 25,3 | 11                                                                                | 4                                                                                 | 5                                                                                 |
| F010614 | 6  | 1/4 | 4,2 | 17   | 6,5 | 24,3 | 11                                                                                | 4                                                                                 | 5                                                                                 |
| F010818 | 8  | 1/8 | 5,2 | 12,8 | 5,5 | 27   | 13                                                                                | 5                                                                                 | 5                                                                                 |
| F010814 | 8  | 1/4 | 6,2 | 17   | 6,5 | 25,5 | 13                                                                                | 6                                                                                 | 5                                                                                 |
| F011014 | 10 | 1/4 | 7,3 | 16   | 6,5 | 30,4 | 16                                                                                | 7                                                                                 | 5                                                                                 |


**ART. F01T**

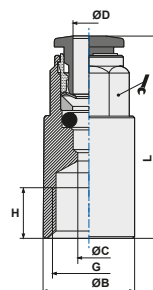
Diritto filetto cilindrico maschio con O-Ring  
*Straight male adaptor (parallel)*

| CODICE   | ØD | G   | ØC  | ØB   | H   | L    |  |  |  |
|----------|----|-----|-----|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| F01T0418 | 4  | 1/8 | 2,5 | 14,0 | 5,5 | 19,0 | 10                                                                                | 2,5                                                                               | 5                                                                                 |
| F01T0414 | 4  | 1/4 | 2,5 | 17,5 | 6,5 | 20,8 | 10                                                                                | 2,5                                                                               | 5                                                                                 |
| F01T0618 | 6  | 1/8 | 4,0 | 14,0 | 5,5 | 24,5 | 12                                                                                | 4,0                                                                               | 5                                                                                 |
| F01T0614 | 6  | 1/4 | 4,0 | 17,5 | 6,5 | 26,0 | 12                                                                                | 4,0                                                                               | 5                                                                                 |
| F01T0818 | 8  | 1/8 | 5,0 | 14,0 | 5,5 | 25,7 | 14                                                                                | 5,0                                                                               | 5                                                                                 |
| F01T0814 | 8  | 1/4 | 6,0 | 17,5 | 6,5 | 27,2 | 14                                                                                | 6,0                                                                               | 5                                                                                 |
| F01T1014 | 10 | 1/4 | 7,0 | 17,5 | 6,5 | 28,7 | 18                                                                                | 7,0                                                                               | 5                                                                                 |
|          |    |     |     |      |     |      |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |     |      |     |      |                                                                                   |                                                                                   |                                                                                   |
|          |    |     |     |      |     |      |                                                                                   |                                                                                   |                                                                                   |


**ART. F02**

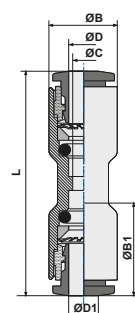
Diritto femmina  
*Straight female adaptor*

| CODICE  | ØD | G   | ØC | ØB | H   | L    |  |  |  |
|---------|----|-----|----|----|-----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| F020418 | 4  | 1/8 | 3  | 12 | 6,5 | 26,5 | 9                                                                                   |                                                                                     | 5                                                                                   |
| F020618 | 6  | 1/8 | 5  | 12 | 6,5 | 28,3 | 11                                                                                  |                                                                                     | 5                                                                                   |
| F020614 | 6  | 1/4 | 5  | 17 | 10  | 31,3 | 11                                                                                  |                                                                                     | 5                                                                                   |
| F020818 | 8  | 1/8 | 7  | 12 | 6,5 | 28,5 | 13                                                                                  |                                                                                     | 5                                                                                   |
| F020814 | 8  | 1/4 | 7  | 17 | 10  | 32,5 | 13                                                                                  |                                                                                     | 5                                                                                   |


**ART. F03**

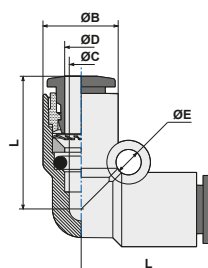
Diritto innestabile  
*Straight connector*

| CODICE  | ØD | ØD1 | ØC | ØB   | ØB1  | L    |  |
|---------|----|-----|----|------|------|------|-------------------------------------------------------------------------------------|
| F030400 | 4  | 4   | 3  | 9,5  | 9,5  | 32,0 | 5                                                                                   |
| F030406 | 4  | 6   | 3  | 9,5  | 11,5 | 32,5 | 5                                                                                   |
| F030600 | 6  | 6   | 5  | 11,5 | 11,5 | 35,6 | 5                                                                                   |
| F030608 | 6  | 8   | 5  | 11,5 | 13,5 | 36,0 | 5                                                                                   |
| F030800 | 8  | 8   | 7  | 13,5 | 13,5 | 38,0 | 5                                                                                   |
| F030810 | 8  | 10  | 7  | 13,5 | 17,0 | 32,5 | 5                                                                                   |
| F031000 | 10 | 10  | 9  | 17,0 | 17,0 | 42,3 | 5                                                                                   |


**ART. F04**

Gomito innestabile  
*L connector*

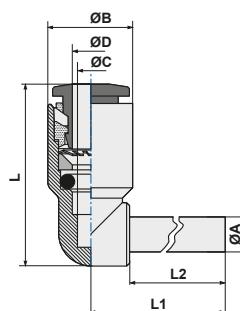
| CODICE  | ØD | ØC | ØB   | L    | ØE  |  |
|---------|----|----|------|------|-----|-------------------------------------------------------------------------------------|
| F040400 | 4  | 3  | 9,5  | 17,2 | 3,2 | 5                                                                                   |
| F040600 | 6  | 5  | 11,5 | 20,8 | 3,2 | 5                                                                                   |
| F040800 | 8  | 7  | 13,5 | 23,0 | 3,2 | 5                                                                                   |
| F041000 | 10 | 9  | 17,0 | 26,4 | 4,3 | 5                                                                                   |



**ART. F04LO**

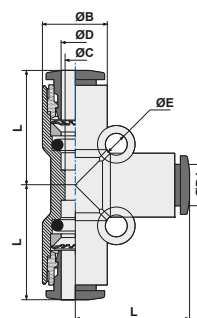
Gomito innestabile con codolo  
Plug-in L connector

| CODICE  | ØD | ØC | ØB   | L    | L1    | ØA | L2   |   |
|---------|----|----|------|------|-------|----|------|---|
| F0404LO | 4  | 3  | 9,5  | 17,2 | 20,75 | 4  | 16,7 | 5 |
| F0406LO | 6  | 5  | 11,5 | 20,8 | 24,25 | 6  | 19,5 | 5 |
| F0408LO | 8  | 7  | 13,5 | 23,0 | 27,25 | 8  | 21,0 | 5 |
| F0410LO | 10 | 9  | 17,0 | 26,4 | 31,80 | 10 | 24,0 | 5 |
|         |    |    |      |      |       |    |      |   |
|         |    |    |      |      |       |    |      |   |
|         |    |    |      |      |       |    |      |   |


**ART. F05**

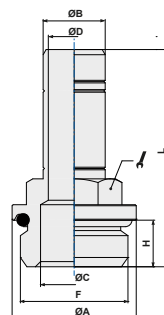
T innestabile  
T connector

| CODICE  | ØD | ØD1 | ØC  | ØB   | L    |  |   |
|---------|----|-----|-----|------|------|--|---|
| F050400 | 4  | 4   | 3,0 | 9,5  | 17,2 |  | 5 |
| F050600 | 6  | 6   | 5,0 | 11,5 | 20,8 |  | 5 |
| F050800 | 8  | 8   | 7,0 | 13,5 | 23,0 |  | 5 |
| F051000 | 10 | 10  | 9,0 | 17,0 | 26,4 |  | 5 |
|         |    |     |     |      |      |  |   |
|         |    |     |     |      |      |  |   |


**ART. F06**

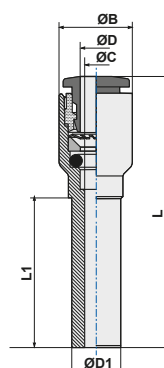
Innesto filetto cilindrico con O-Ring  
Adaptor parallel (short)

| CODICE  | ØB | F   | ØA | ØC  | ØD | H   | L    |    |   |
|---------|----|-----|----|-----|----|-----|------|----|---|
| F060418 | 4  | 1/8 | 13 | 5,5 | 2  | 5,5 | 27,7 | 13 | 5 |
| F060618 | 6  | 1/8 | 13 | 5,5 | 4  | 5,5 | 30,5 | 13 | 5 |
| F060614 | 6  | 1/4 | 16 | 7,5 | 4  | 6,5 | 32,0 | 13 | 5 |
| F060818 | 8  | 1/8 | 13 | 6   | 6  | 5,5 | 32,0 | 13 | 5 |
| F060814 | 8  | 1/4 | 16 | 7,5 | 6  | 6,5 | 33,5 | 13 | 5 |
| F061014 | 10 | 1/4 | 16 | 8   | 8  | 6,5 | 36,5 | 13 | 5 |
|         |    |     |    |     |    |     |      |    |   |
|         |    |     |    |     |    |     |      |    |   |


**ART. F08**

Riduzione  
Reducer

| CODICE  | ØD1 | ØD | ØC | ØB   | L     | L1    |   |
|---------|-----|----|----|------|-------|-------|---|
| F080604 | 6   | 4  | 3  | 9,5  | 35,5  | 19,5  | 5 |
| F080804 | 8   | 4  | 3  | 9,5  | 37,0  | 21,0  | 5 |
| F081004 | 10  | 4  | 3  | 9,5  | 40,0  | 24,0  | 5 |
| F081204 | 12  | 4  | 3  | 9,5  | 41,0  | 25,0  | 5 |
| F080806 | 8   | 6  | 5  | 11,5 | 39,05 | 23,0  | 5 |
| F081006 | 10  | 6  | 5  | 11,5 | 42,05 | 24,0  | 5 |
| F081206 | 12  | 6  | 5  | 11,5 | 43,05 | 25,0  | 5 |
| F081008 | 10  | 8  | 7  | 13,5 | 43,0  | 26,25 | 5 |
| F081208 | 12  | 8  | 7  | 13,5 | 44,0  | 25,0  | 5 |
| F081210 | 12  | 10 | 9  | 17,0 | 46,15 | 27,55 | 5 |
|         |     |    |    |      |       |       |   |
|         |     |    |    |      |       |       |   |

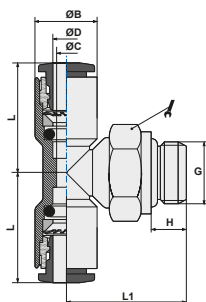




## ART. F20

Raccordo a T centrale girevole  
Swivel male stud T parallel

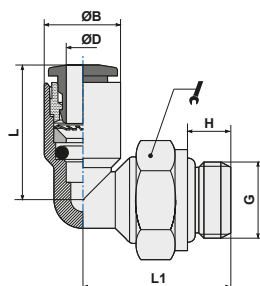
| CODICE  | ØD | G   | ØB   | H   | L    | L1   |    |   |
|---------|----|-----|------|-----|------|------|----|---|
| F200418 | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 13 | 5 |
| F200618 | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 13 | 5 |
| F200614 | 6  | 1/4 | 11,5 | 7,5 | 20,8 | 20,4 | 16 | 5 |
| F200818 | 8  | 1/8 | 13,5 | 5,5 | 23,0 | 20,0 | 13 | 5 |
| F200814 | 8  | 1/4 | 13,5 | 6,5 | 23,0 | 20,4 | 16 | 5 |
| F201014 | 10 | 1/4 | 17,0 | 7,5 | 26,4 | 23,2 | 16 | 5 |



## ART. F22

Gomito girevole maschio in tecnopolimero con O-Ring  
Swivel T technopolymer male adaptor

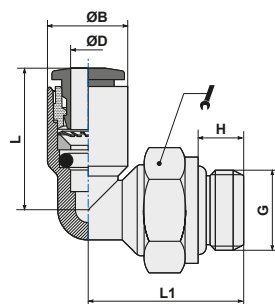
| CODICE  | ØD | G   | ØB   | H   | L    | L1   |    |    |
|---------|----|-----|------|-----|------|------|----|----|
| F2204M5 | 4  | M5  | 9,5  | 4   | 17,2 | 17   | 8  | 10 |
| F220418 | 4  | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 14 | 10 |
| F220414 | 4  | 1/4 | 9,5  | 6,5 | 17,2 | 20,4 | 16 | 10 |
| F2206M5 | 6  | M5  | 11,5 | 4   | 20,8 | 17   | 8  | 10 |
| F220618 | 6  | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 14 | 10 |
| F220614 | 6  | 1/4 | 11,5 | 6,5 | 20,8 | 20,4 | 16 | 10 |
| F220818 | 8  | 1/8 | 13,5 | 5,5 | 23,0 | 20,0 | 14 | 10 |
| F220814 | 8  | 1/4 | 13,5 | 6,5 | 23,0 | 20,4 | 16 | 5  |
| F221014 | 10 | 1/4 | 17,0 | 6,5 | 26,4 | 23,2 | 16 | 5  |



## ART. F22T

Gomito girevole maschio in tecnopolimero con O-Ring  
Swivel T technopolymer male adaptor

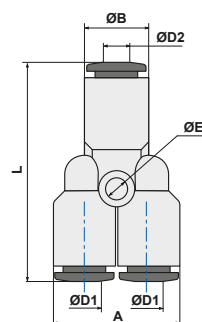
| CODICE   | ØD1 | G   | ØB   | H   | L    | L1   |    |    |
|----------|-----|-----|------|-----|------|------|----|----|
| F22T0418 | 4   | 1/8 | 9,5  | 5,5 | 17,2 | 18,5 | 14 | 10 |
| F22T0414 | 4   | 1/4 | 9,5  | 6,5 | 17,2 | 20,4 | 16 | 10 |
| F22T0618 | 6   | 1/8 | 11,5 | 5,5 | 20,8 | 18,5 | 14 | 10 |
| F22T0614 | 6   | 1/4 | 11,5 | 6,5 | 20,8 | 20,4 | 16 | 10 |
| F22T0818 | 8   | 1/8 | 13,5 | 5,5 | 23,0 | 20,0 | 14 | 10 |
| F22T0814 | 8   | 1/4 | 13,5 | 6,5 | 23,0 | 20,4 | 16 | 10 |
| F22T1014 | 10  | 1/4 | 17,0 | 6,5 | 26,4 | 23,2 | 16 | 10 |



## ART. F23

Y innestabile  
Y connector

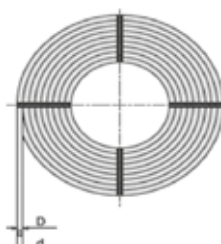
| CODICE  | ØD1 | ØD2 | ØE   | ØB   | A  | L    |  |   |
|---------|-----|-----|------|------|----|------|--|---|
| F230400 | 4   | 4   | 2,40 | 9,5  | 19 | 33,0 |  | 5 |
| F230406 | 4   | 6   | 2,40 | 11,5 | 19 | 35,8 |  | 5 |
| F230600 | 6   | 6   | 2,60 | 11,5 | 23 | 38,6 |  | 5 |
| F230608 | 6   | 8   | 3,20 | 13,5 | 23 | 39,8 |  | 5 |
| F230800 | 8   | 8   | 2,75 | 16,5 | 27 | 42,5 |  | 5 |
| F230810 | 8   | 10  | 3,20 | 17,0 | 27 | 44,4 |  | 5 |
| F231000 | 10  | 10  | 4,30 | 20,0 | 34 | 50,8 |  | 5 |



## ART. PELD

Tubo in Polietilene per alimenti (bassa densità)  
Polyethilene tube for food applications (low density)

| CODICE | Dxd   | P    | P1  | R   |     |
|--------|-------|------|-----|-----|-----|
|        | mm    | bar  | bar | mm  |     |
| PE0402 | 4x2   | 18,5 | 75  | 20  | 100 |
| PE0425 | 4x2,5 | 15   | 60  | 25  | 100 |
| PE0604 | 6x4   | 10   | 40  | 40  | 100 |
| PE0806 | 8x6   | 7,5  | 30  | 50  | 100 |
| PE1008 | 10x8  | 6    | 25  | 120 | 100 |





## PRESENTAZIONE

Titan Engineering Spa, motivata dall'obiettivo di innovare e progredire e a seguito dei propri studi e ricerche in ambito "food contact", si è impegnata nel progettare e realizzare, in un percorso di crescita sinergico con i principali partners, sia clienti che fornitori, una macchina di prova in grado di soddisfare le richieste di compatibilità e utilizzo dei propri prodotti in campo alimentare, con la possibilità di impiego dei più svariati liquidi.

## SCOPO DELLA MACCHINA E DELLE PROVE

Con questi presupposti è nata la macchina denominata: "APC060519TE", vero e proprio strumento di test sviluppato in collaborazione con società esperte e specializzate da tempo nel settore "food contact", grazie alla cui esperienza applicativa sono state assicurate tutte le peculiarità necessarie per garantire il rispetto dei requisiti normativi richiesti, basti pensare che la macchina, in ogni sua parte, è stata costruita utilizzando solo componenti adatti al contatto con gli alimenti e i liquidi potabili. Le prove che si possono eseguire hanno la finalità di validare l'idoneità dei raccordi della nuova serie FCM di Titan Engineering Spa dunque **non solo al contatto, ma anche al passaggio di un determinato fluido alimentare**. Inoltre, i parametri generali di prova (pressione, durata, tipo di fluido, ecc.) possono variare in base alla richiesta del cliente finale, ed in funzione del tipo di applicazione, con il fine di offrire un riscontro quanto più possibile fedele alle reali condizioni di utilizzo.

## INTRODUCTION

*Titan Engineering Spa, motivated by the target to innovate and progress and following its studies and research in the field of "food contact", has committed itself to designing and implementing, in a path of synergic growth with the main partners, both customers and suppliers, a test machine capable of satisfying the requests for compatibility and use of its products in the food sector, with the possibility of using the most varied liquids.*

## PURPOSE OF THE MACHINE AND TESTS

*With these assumptions the machine named: "APC060519TE" was born, a real test tool developed in collaboration with expert and specialized longtime companies in the "food contact" field, thanks to whose application experience all necessary peculiarities in compliance with the expected regulatory requirements have been ensured, just think that the machine, in all its parts, was built using only components suitable for contact with food and drinking liquids.*

*The tests that can be performed have the purpose of validating the suitability of the new FCM fittings series made by Titan Engineering Spa, **so not only on contact, but also on the passage of a specific food fluid**. Furthermore, the general test parameters (pressure, duration, type of fluid, etc.) may change according to the end customer's request and to the type of application, with the aim of offering a response as close as possible to the real use conditions.*



## RISULTATI DELLE PROVE E REPORT

I risultati ottenuti dalle prove eseguite, corredati di relativa documentazione fotografica, serviranno per accompagnare, ove richiesto e grazie ad apposita modulistica, la fornitura, costituendone certificazione di idoneità appropriata.

In questa ottica Titan Engineering Spa, in modo preventivo, stà inoltre portando avanti un programma di prove che riguardano i fluidi tra quelli più utilizzati in ambito alimentare, quali: acqua potabile, vino, birra e bevande gassate in genere, in modo da creare una base documentale da mettere a disposizione della Clientela, lasciando a quest'ultima la facoltà di richiedere prove mirate, anche personalizzate, solo quando le proprie esigenze applicative lo dovessero richiedere (a tal proposito è stato previsto un apposito modulo di accesso che dovrà contenere tutte le specifiche necessarie al fine di poter correttamente procedere alle prove di validazione).



## CARATTERISTICHE TECNICHE GENERALI

Dimensioni: 74 x 130 x 100.5 cm  
 Peso: 160 kg  
 Intervallo di pressione testabile: 0-16 Bar  
 Intervallo tubazioni testabili: Ø4-Ø14  
 Tipi di fluidi testabili: Acqua potabile e qualsiasi fluido ad uso alimentare a richiesta del cliente  
 Temperatura di prova: ambiente  
 Tipo pompa: Alimentare omologata NFS 169  
 Capacità pompa: 100 L/H  
 Descrizione tecnica impianto: Tubazioni, raccorderia, macchina, interamente in acciaio inox AISI 316L, omologati per utilizzo con acqua potabile e contatto alimentare

## TEST RESULTS AND REPORTS

*The results obtained from the carried out tests, supported by proper photographic documentation, will be used, where required and thanks to appropriate forms, to accompany the supply, constituting adequate certification of suitability.*

*With this in mind, Titan Engineering Spa, in a preventive way, is also carrying out a program of tests concerning the fluids among those most used in the food applications, such as: drinking water, wine, beer and carbonated drinks in general, in order to create a documentary base to be made available to customers, leaving them the chance to request targeted tests, even personalized ones, just when their application needs should require it (in this regard, a special access form, which must contain all specifications necessary in order to correctly proceed to the validation tests, has been prepared).*

## CERTIFICAZIONI DELLA MACCHINA

Macchina conforme alle norme CE N. 2014/35/UE  
 Prove conformi alle norme UNI EN ISO 13846:2001 e superiori

Documentazione a disposizione:

- Dichiarazione di conformità CE
- Manuale di uso e manutenzione
- Analisi non applicabilità PED
- Scheda analisi e rischi macchina

## MACHINE CERTIFICATIONS

*Machine compliant with CE standards 2014/35 / UE  
 Tests compliant with UNI EN ISO 13846: 2001 and above  
 Available documentation:*

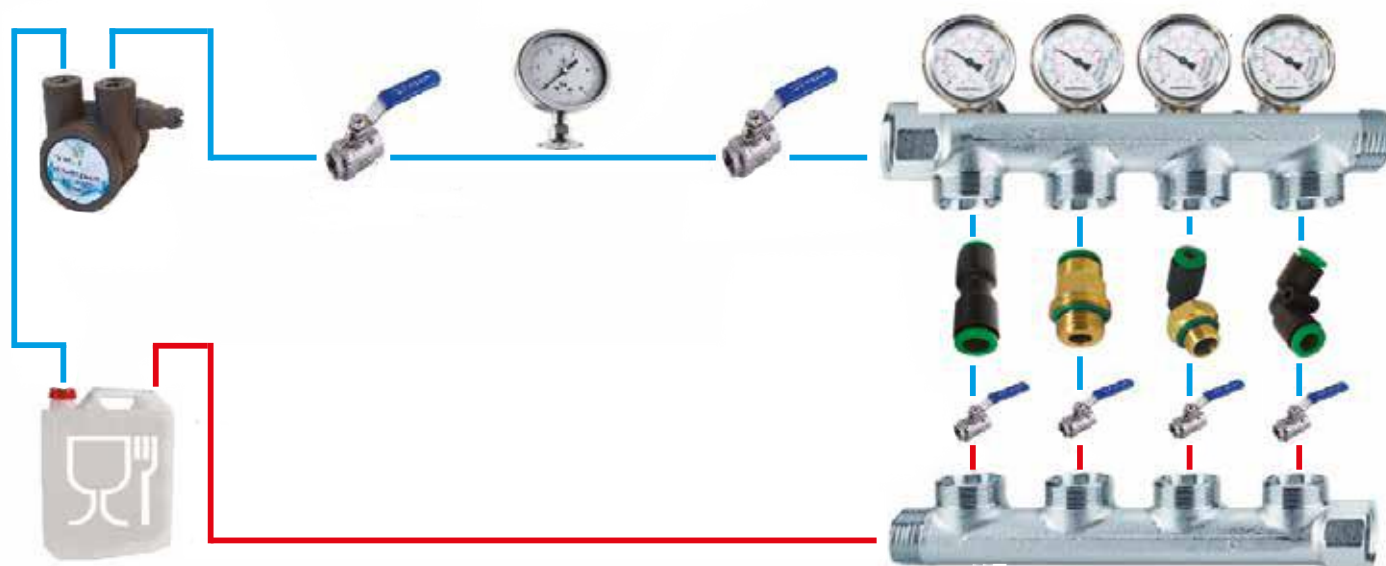
- *CE declaration of conformity*
- *Use and maintenance manual*
- *PED non-applicability analysis*
- *Analysis and machine risks sheet*

## GENERAL TECHNICAL CHARACTERISTICS

*Dimensions: 74 x 130 x 100.5 cm  
 Weight: 160 kg  
 Testable pressure range: 0-16 Bar  
 Testable piping sizes: from Ø4 to Ø14  
 Types of testable fluids: Drinking water and any fluid for food use at the customer's request  
 Test temperature: environment  
 Pump type: NFS 169 food approved  
 Pump capacity: 100 L / H  
 Plant technical description: Pipes, fittings, machine, entirely in AISI 316L stainless steel, approved for use with drinking water and food contact*

## Test funzionali eseguiti con macchina APC060519TE

### Functional tests performed with machine APC060519TE



|                                                                                     |                                       |                                   |                 |                 |                                          |
|-------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------|-----------------|-----------------|------------------------------------------|
| CONDIZIONI<br>DI PROVA<br>TEST CONDITION                                            | Pressione<br>Pressure                 | 8 bar costante / Constant 8 bar   |                 |                 |                                          |
|                                                                                     | Circuito<br>Circuit                   | Chiuso / Closed                   |                 |                 |                                          |
|                                                                                     | Temperatura<br>Temperature            | Ambiente / Environment 22°C-30°C  |                 |                 |                                          |
|                                                                                     | Durata<br>Duration                    | 2400 h in continuo / continuously |                 |                 |                                          |
|  |                                       | Tipo di fluido / type of fluid    |                 |                 |                                          |
|                                                                                     |                                       | Acqua potabile/<br>Drinking water | Vino / wine     | Birra / beer    | Bevanda gassata/<br>Sparkling soft drink |
| RISULTATI<br>DI PROVA<br>TEST RESULTS                                               | Perdita di liquido<br>Liquid leakage  | Nessuna/None                      | Nessuna/None    | Nessuna/None    | Nessuna/None                             |
|                                                                                     | Perdita di pressione<br>Pressure loss | Nessuna/None                      | Nessuna/None    | Nessuna/None    | Nessuna/None                             |
|                                                                                     | Esito<br>Outcome                      | Positivo/Passed                   | Positivo/Passed | Positivo/Passed | Positivo/Passed                          |

## TEST DI MIGRAZIONE

I test di migrazione globale e specifica descritti in tabella servono a determinare i quantitativi migrati e il successivo controllo di rientro nei limiti imposti dalle normative, vengono eseguiti per controllare i fenomeni di migrazione dei materiali a contatto con alimenti.

## MIGRATION TEST

The global and specific migration tests shown in the table are used to determine the quantities migrated and the subsequent control of re-entry within the limits imposed by the regulations, are carried out to check the migration phenomena of materials in contact with food.

| TIPO DI TEST ESEGUITO                                                                                                                                           | COMPONENTI                                   | ESITO PROVA |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-------------|
| Migrazione globale, migrazione specifica coloranti, migrazione specifica metalli. Simulanti: A,B,D2 + prova di migrazione mine aromatiche primarie simulante B. | Tappo spintore                               | Positivo    |
|                                                                                                                                                                 | Corpi raccordo (POM)                         | Positivo    |
|                                                                                                                                                                 | Corpi e basi girevoli raccordo (Ixef1022 FC) | Positivo    |
| Migrazione globale + Simulante acido citrico                                                                                                                    | Corpi e basi girevoli raccordo (CW510L-OT57) | Positivo    |
| Prova di migrazione specifica Cr, Ni, Mn simulante B                                                                                                            | Pinza stringitubo                            | Positivo    |
| Prova di migrazione globale gomma simulante A + prova di migrazione specifica simulante B                                                                       | Guarnizioni di tenuta                        | Positivo    |
| A: Etanolo 10%; B: Acido acetico 3%; C: Etanolo 20%; D1: Etanolo 50%; D2: Olio vegetale; E: Poli (ossido di 2,6-difenil-p-fenilene) (Tenax).                    |                                              |             |

| TYPE OF TEST PERFORMED                                                                                                                             | COMPONENTS                                 | TEST RESULT |
|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-------------|
| Global migration, specific migration of dyes, specific migration of metals. Simulants: A, B, D2 + primary aromatic mmine migration test simulant B | Thrus sleeve                               | Passed      |
|                                                                                                                                                    | Fitting body (POM)                         | Passed      |
|                                                                                                                                                    | Fitting body and swivel base (Ixef1022 FC) | Passed      |
| Global migration + Citric acid simulant                                                                                                            | Fitting body and swivel base (CW510L-OT57) | Passed      |
| Specific migration test Cr, Ni, Mn simulant B                                                                                                      | Crimping Gripper                           | Passed      |
| Global migration test simulant rubber A + specific migration test simulant B                                                                       | O-ring seal                                | Passed      |
| A: 10% ethanol; B: 3% acetic acid; C: 20% ethanol; D1: 50% ethanol; D2: Vegetable oil; E: Poly (2,6-diphenyl-p-phenylene oxide) (Tenax).           |                                            |             |

I limiti di migrazione specifica, sono rispettati nelle condizioni d'uso sopra menzionate.

The specific migration limits are respected in the conditions of use mentioned above.



## BREVE DESCRIZIONE

I raccordi automatici della serie “Food Contact Material” sono realizzati in Italia, a garanzia di elevati standard di qualità secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The “Food Contact Material” push-in fittings series are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

## SCHEDA TECNICA TECHNICAL SHEET

|                                                               |                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br>EMPLOYABLE FLUIDS                      |                                                                        | Aria compressa e principali fluidi alimentari<br>Compressed air and main food fluids                                                                                                                                                                                                                                                                                                                                                                                                      |
| APPLICAZIONI<br>APPLICATIONS                                  |                                                                        | Pneumatica applicata alle macchine destinate al settore alimentare (packaging, insacchettatrici, sottovuoto, enologia, ecc.) e macchine per passaggio fluidi alimentari a basse temperature (filling, imbottigliamento, spillatura, ecc.)<br>Compressed air applied to machines intended for the food and beverage field (boxing, bagging machines, vacuum packaging, oenology, etc.) and machines for the passage of low temperature drinkable fluids (filling, bottling, tapping, etc.) |
| TUBI CONSIGLIATI<br>SUGGESTED TUBES                           |                                                                        | TPU, PA11/PA12, TPE, TCO per aria compressa. PE, PVC, PELD per fluidi alimentari.<br>TPU, PA11 / PA12, TPE, TCO for compressed air. PE, PVC, PELD for food fluids.                                                                                                                                                                                                                                                                                                                        |
| TOLLERANZE TUBI<br>TUBES TOLERANCES                           |                                                                        | Diam. da 4 a 10 mm +/- 0,05<br>Diam. between 4 and 10 mm +/- 0,05                                                                                                                                                                                                                                                                                                                                                                                                                         |
| GRADO DI PROTEZIONE<br>INGRESS PROTECTION                     |                                                                        | "" IP 68 ""                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| TEMPERATURE<br>E PRESSIONI<br><br>TEMPERATURE<br>AND PRESSURE | VALORI LIMITE<br>CONSIGLIATI<br>RECOMMENDED<br>LIMIT VALUES            | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato, e comunque si suggerisce di non superare i 15 bar e temperature comprese fra -20°C e +70°C.<br>Temperatures and pressures usually depend by the technical features of the employed tubes, anyway it is suggested a limit working pressure of 15 bar and a temperature range between -20°C and +70°C                                                                                        |
|                                                               | DATI TECNICI<br>DI PROVA<br>TECHNICAL<br>TESTING DATA                  | A pag. 76 sono riportati i dati di resistenza a trazione e i valori limite di utilizzo (Pressione e Temperature) relativi ai principali tubi commerciali.<br>At page 76 are indicated the load traction resistance values and the main working and breaking limit (Pressure and Temperature) of the main commercial tubing.                                                                                                                                                               |
|                                                               | NOTA<br>NOTE                                                           | Per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br>For more complete informations pls read the technical catalogue of your tube supplier.                                                                                                                                                                                                                                                                                                             |
| FILETTATURE<br>THREAD TYPE                                    |                                                                        | BSP cilindrica UNI-ISO 228; Metrica ISO/R 262.<br>BSP parallel UNI-ISO 228; Metric ISO/R 262                                                                                                                                                                                                                                                                                                                                                                                              |
| MATERIALI<br>MATERIALS                                        | corpo e basi girevoli<br>body and swivel bases                         | Ottone UNI EN 12164 CW510L (NSF372)<br>Brass UNI EN 12164 CW510L (NSF372)                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                                                               | spintore, distanziale,<br>sottomolla / sleeve,<br>collar and back ring | POM copolimero ISO1043-1 (REG. UE 10/2011)<br>POM copolymer ISO1043-1 (REG. UE 10/2011)                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                               | pinza<br>spring                                                        | Acciaio Inox AISI 301 austenitico<br>Stainless steel AISI 301 austenitic                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                               | guarnizioni tenuta<br>seals                                            | NBR 70 DWGV-EN549 UL157<br>NBR 70 DWGV-EN549 UL157                                                                                                                                                                                                                                                                                                                                                                                                                                        |

## INFORMAZIONI TECNICHE AGGIUNTIVE

Ogni lotto della serie FCM viene sottoposto a controlli cosiddetti "rompilotto" durante tutto il ciclo produttivo, che comprendono, oltre all'osservazione estetica, la verifica di funzionalità e di eventuali perdite, un test in pressione a 8 bar per verificarne la conformità anche in condizioni di utilizzo nominali. Successivamente viene eseguito un test a campione di rottura (simulazione scoppio a 50 bar di pressione) con una macchina dedicata che sollecita il raccordo a trazione. Di seguito viene indicata la forza minima di strappo (in Newton) ammessa per ogni diametro:

| Diam. tubo <i>Tube diam.</i> | Forza di strappo <i>Breaking load</i> |
|------------------------------|---------------------------------------|
| Ø4                           | 63 N                                  |
| Ø6                           | 141 N                                 |
| Ø8                           | 251 N                                 |
| Ø10                          | 393 N                                 |

### Nota importante:

I valori indicati si riferiscono alla tenuta della pinza di aggraffaggio, "core part" sia del raccordo RAP in ottone, che del Tecno-RAP in tecnopolimero, per cui omogenei. I valori di rottura sperimentali misurati sono stati, in base al diametro, anche da 1,2 a 2,5 volte superiori.

### Informazioni complementari sulle temperature di utilizzo:

## ADDITIONAL TECHNICAL INFORMATION

Each FCM production batch is tested according to severe cyclics "lot breaker" controls along all the production period, which include shape observation, leakage verification, functionality, at the working pressure of 8 bar.

Then all samples taken from the lot are tested by a traction machine which simulate a breaking pressure of 50 bar.

Here below are indicated the traction loads (in Newton) for each size:

### Important note:

The values refer to the resistance of the crimping gripper, "core part" of both fittings, the brass RAP and the technopolymer Tecno-RAP, whereby homogeneous. The breaking experimental values measured, according to the diameter, were from 1.2 to 2.5 times higher.

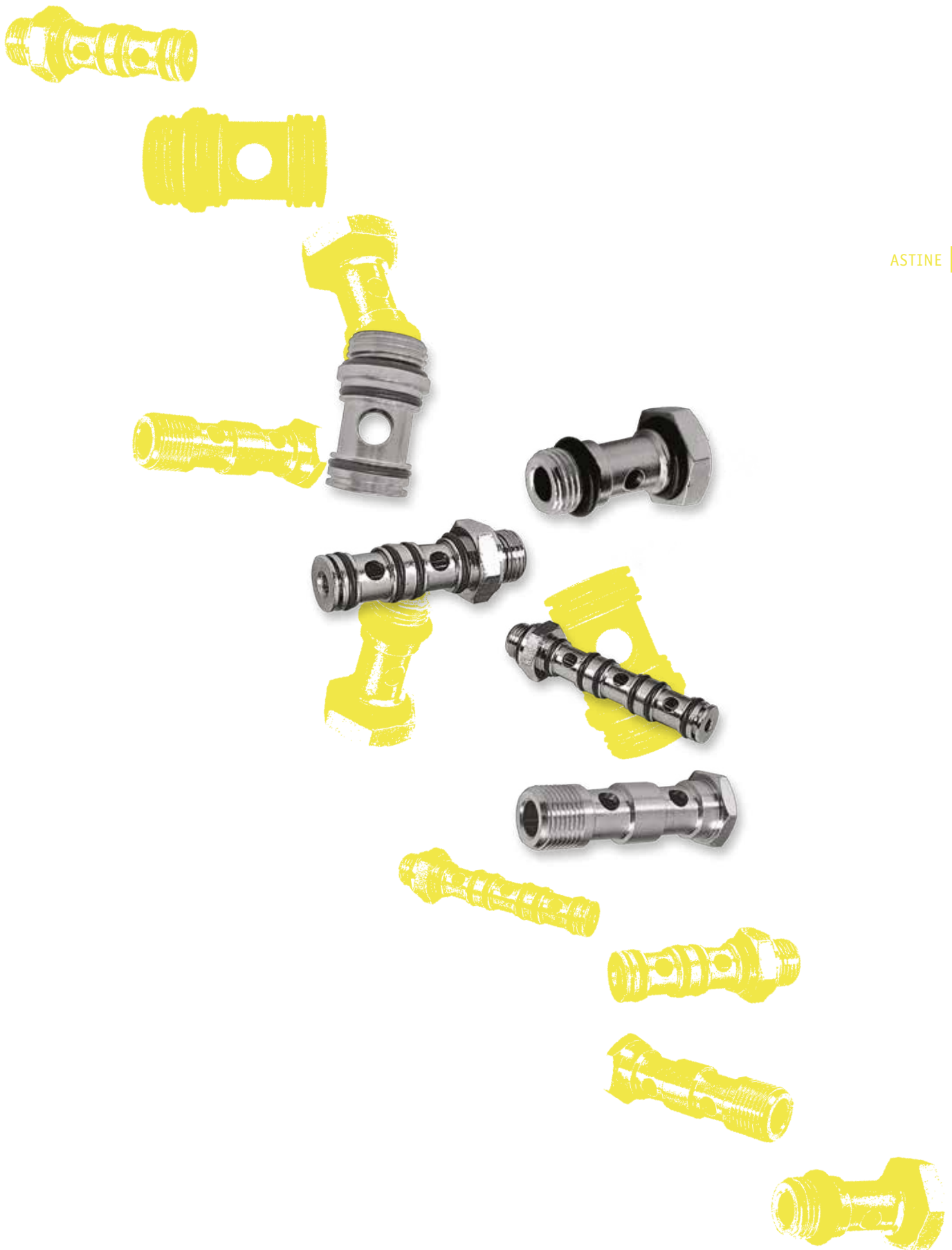
### Additional information regarding the working temperatures:

| Pressione di esercizio e pressione di scoppio (bar) alle diverse temperature<br><i>Working pressure and breaking pressure (bar) at different temperatures</i> |                                         |                                        |                                         |                                        |                                         |                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|-----------------------------------------|----------------------------------------|
| Esempio<br><i>Example</i>                                                                                                                                     | T-20°C                                  | T-20°C                                 | T+23°C                                  | T+23°C                                 | T+60°C                                  | T+60°C                                 |
| Tubo 6x4 colorato<br><i>Tube 6x4 colored</i>                                                                                                                  | P esercizio bar<br><i>working P bar</i> | P scoppio bar<br><i>breaking P bar</i> | P esercizio bar<br><i>working P bar</i> | P scoppio bar<br><i>breaking P bar</i> | P esercizio bar<br><i>working P bar</i> | P scoppio bar<br><i>breaking P bar</i> |
| TPU                                                                                                                                                           | 18,7                                    | 74,8                                   | 10,0                                    | 40,0                                   | 5,2                                     | 20,8                                   |
| PA11                                                                                                                                                          | 37,4                                    | 149,6                                  | 20,0                                    | 80,0                                   | 10,4                                    | 41,6                                   |
| PA12                                                                                                                                                          | 48,6                                    | 168,3                                  | 26,0                                    | 90,0                                   | 10,4                                    | 36,0                                   |
| PE                                                                                                                                                            | 18,7                                    | 74,8                                   | 10,0                                    | 40,0                                   | 5,0                                     | 20,0                                   |

Tutte le necessarie valutazioni sull'utilizzo dei raccordi in condizioni di esercizio differenti da quelle suggerite nella scheda tecnica iniziale debbono anche tenere conto, con riferimento alle temperature, dei dati nominali relativi al tubo utilizzato e del limite imposto dal componente più critico.

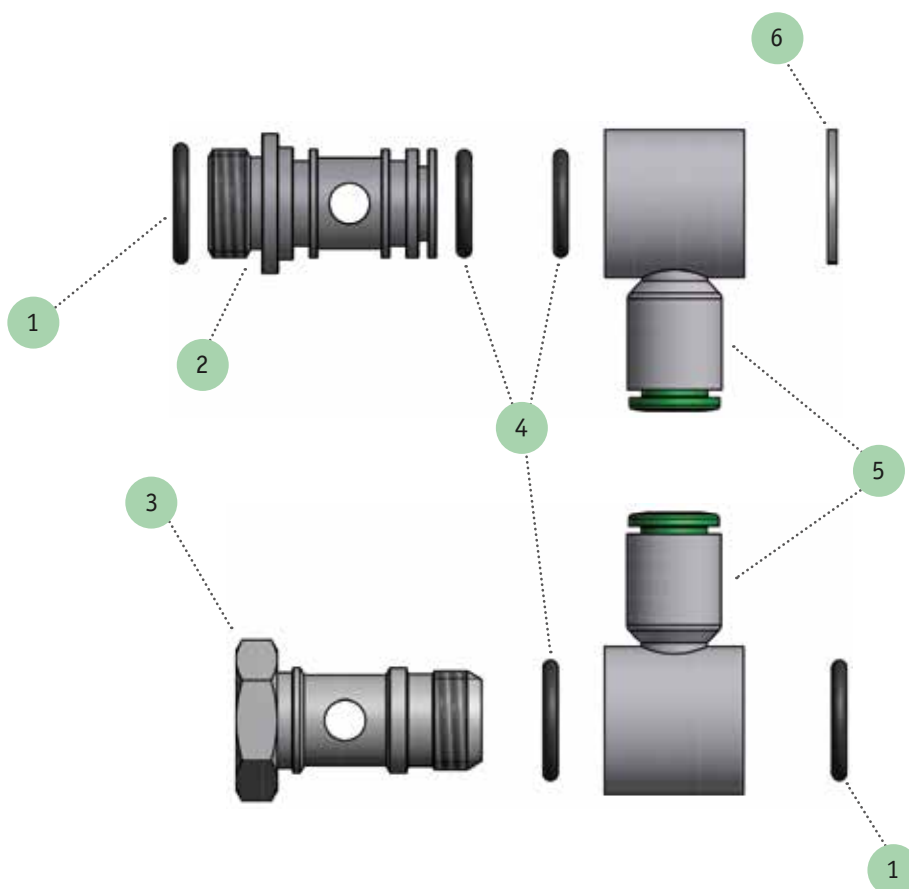
Further to all the necessary assessments on the use of the fittings in operating conditions different from how suggested in the initial technical sheet must be considered, with reference to temperatures, the nominal data regarding the type of the used tube and the limit imposed by the most critical component.





ASTINE

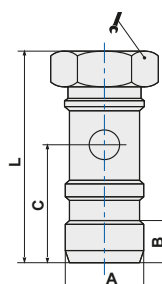
- 1 O-RING ESTERNO  
EXTERNAL O-RING
- 2 ASTINA GIREVOLE MODELLO 15A  
SWIVEL STEM 15A TYPE
- 3 ASTINA FISSA MODELLO 407  
FIX STEM 407 TYPE
- 4 O-RING INTERNO  
INTERNAL O-RING
- 5 ANELLO GIREVOLE MODELLO T13  
SWIVEL BANJO T13 TYPE
- 6 ANELLO ELASTICO  
ELASTIC RING



**ART. 407**

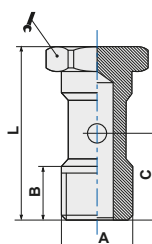
Vite cava semplice con O-Ring  
*Banjo stem single with O-Ring*

| CODICE | A    | B   | C     | L  |  |  |
|--------|------|-----|-------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 40718  | G1/8 | 4,5 | 13,75 | 25 | 14                                                                                | 100                                                                               |
| 40714  | G1/4 | 9,9 | 16,7  | 30 | 17                                                                                | 50                                                                                |
| 40738  | G3/8 | 6   | 18    | 34 | 22                                                                                | 25                                                                                |
|        |      |     |       |    |                                                                                   |                                                                                   |
|        |      |     |       |    |                                                                                   |                                                                                   |


**ART. 407V**

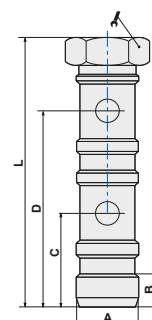
Vite cava semplice  
*Banjo stem single*

| CODICE | A    | B   | C    | L  |  |  |
|--------|------|-----|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 407M5  | M5   | 5,8 | 9,6  | 18 | 8                                                                                 | 100                                                                               |
| 40718V | G1/8 | 9   | 15   | 28 | 14                                                                                | 100                                                                               |
| 40714V | G1/4 | 11  | 18   | 33 | 17                                                                                | 50                                                                                |
| 40738V | G3/8 | 12  | 21,5 | 37 | 22                                                                                | 50                                                                                |
|        |      |     |      |    |                                                                                   |                                                                                   |
|        |      |     |      |    |                                                                                   |                                                                                   |


**ART. 408**

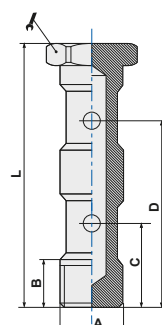
Vite cava doppia con O-Ring  
*Banjo stem double with O-Ring*

| CODICE | A    | B   | C    | D    | L    |  |  |
|--------|------|-----|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 40818  | G1/8 | 4,5 | 13   | 29   | 40   | 14                                                                                  | 50                                                                                  |
| 40814  | G1/4 | 6   | 16,5 | 33,5 | 47   | 17                                                                                  | 50                                                                                  |
| 40838  | G3/8 | 8,5 | 18   | 37,6 | 52,5 | 22                                                                                  | 25                                                                                  |
| 40812  | G1/2 | 7,4 | 21,5 | 45   | 63   | 27                                                                                  | 10                                                                                  |
|        |      |     |      |      |      |                                                                                     |                                                                                     |
|        |      |     |      |      |      |                                                                                     |                                                                                     |


**ART. 408V**

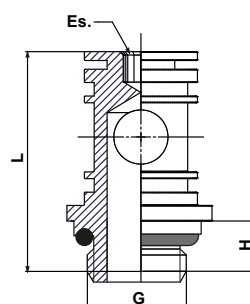
Vite cava doppia  
*Banjo stem double*

| CODICE | A    | B  | C    | D  | L    |  |  |
|--------|------|----|------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 40818V | G1/8 | 9  | 15   | 31 | 44,5 | 14                                                                                  | 50                                                                                  |
| 40814V | G1/4 | 11 | 17   | 36 | 51,5 | 17                                                                                  | 50                                                                                  |
| 40838V | G3/8 | 12 | 20,5 | 42 | 58,6 | 22                                                                                  | 25                                                                                  |
| 40812V | G1/2 | 14 | 24   | 50 | 68   | 24                                                                                  | 10                                                                                  |
|        |      |    |      |    |      |                                                                                     |                                                                                     |
|        |      |    |      |    |      |                                                                                     |                                                                                     |


**ART. 15A**

Asta singola per anello girevole  
*Single stem for swivel banjo*

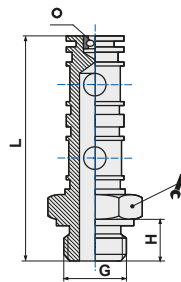
| CODICE | G   | L    | ES. | H    |  |
|--------|-----|------|-----|------|-------------------------------------------------------------------------------------|
| 15AM5  | M5  | 17   | 2,5 | 4,0  | 10                                                                                  |
| 15AM5L | M5  | 18   | 2,5 | 4,0  | 10                                                                                  |
| 15AM6L | M6  | 19   | 2,5 | 5,0  | 10                                                                                  |
| 15A18  | 1/8 | 24,5 | 3   | 5,5  | 10                                                                                  |
| 15A14  | 1/4 | 28   | 4   | 6,5  | 10                                                                                  |
| 15A38  | 3/8 | 32,5 | 5   | 7,5  | 10                                                                                  |
| 15A12  | 1/2 | 39   | 8   | 10,0 | 10                                                                                  |
|        |     |      |     |      |                                                                                     |
|        |     |      |     |      |                                                                                     |



## ART. 33A

Asta doppia per anello girevole  
Double stem for swivel banjo

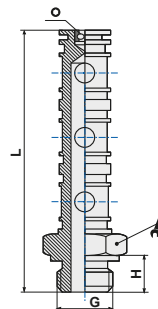
| CODICE | G   | H   | L    |  |  |      |     |    |
|--------|-----|-----|------|--|--|------|-----|----|
| 33AM5L | M5  | 4,0 | 28,0 |  |  | N.C. | 2,5 | 50 |
| 33A18  | 1/8 | 5,5 | 43,3 |  |  | 14   | 3   | 50 |
| 33A14  | 1/4 | 6,5 | 50,0 |  |  | 18   | 4   | 50 |
|        |     |     |      |  |  |      |     |    |



## ART. 34A

Asta tripla per anello girevole  
Triple stem for swivel banjo

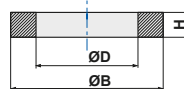
| CODICE | G   | H   | L    |  |  |    |   |    |
|--------|-----|-----|------|--|--|----|---|----|
| 34A18  | 1/8 | 5,5 | 58,4 |  |  | 14 | 3 | 50 |
| 34A14  | 1/4 | 6,5 | 67,1 |  |  | 18 | 4 | 25 |
|        |     |     |      |  |  |    |   |    |
|        |     |     |      |  |  |    |   |    |
|        |     |     |      |  |  |    |   |    |



## ART. 411

Rondella distanziatrice  
Spacer washer

| CODICE | A    | ØB   | ØD   | H   |     |
|--------|------|------|------|-----|-----|
| 411PM5 | M5   | 9    | 5,1  | 1,5 | 100 |
| 411P18 | G1/8 | 14   | 9,8  | 1,5 | 100 |
| 411P14 | G1/4 | 18   | 13,5 | 1,5 | 100 |
| 411P38 | G3/8 | 21   | 16,7 | 1,5 | 100 |
| 411P12 | G1/2 | 26   | 21,1 | 2   | 100 |
| 411M5  | M5   | 8,8  | 5,2  | 1   | 100 |
| 41118  | G1/8 | 13,8 | 9,8  | 1,5 | 100 |
| 41114  | G1/4 | 18   | 13,2 | 1,5 | 100 |
| 41138  | G3/8 | 21   | 16,8 | 1,5 | 100 |
| 41112  | G1/2 | 26   | 20,8 | 1,5 | 100 |
| 41134  | G3/4 | 32,8 | 26,8 | 1,5 | 100 |
|        |      |      |      |     |     |
|        |      |      |      |     |     |
|        |      |      |      |     |     |

P = versione in nylon  
P = nylon material  
A = taglia - A = size


**BREVE DESCRIZIONE**

Le astine, serie 407 e superiori e 15A e superiori, per l'impiego con i nostri raccordi tipo anelli girevoli, automatici e non, sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento.

**SHORT DESCRIPTION**

Stems, 407 series and higher, and 15A series, employed with our banjo fittings (push-in type, quick type, etc.) are produced in Italy according to the reference ISO norms as warranty of high quality level.

**SCHEMA TECNICA TECHNICAL SHEET**

|                                                       |                             |                                                                                                                                                                                            |
|-------------------------------------------------------|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br>EMPLOYABLE FLUIDS              |                             | Aria compressa, acqua fino 100 °C<br>(per altri fluidi contattare il nostro UT)<br>Compressed air, water up to 100 °C<br>(for different fluid pls contact our Technical Dept.)             |
| APPLICAZIONI<br>APPLICATIONS                          |                             | Pneumatica, idraulica a bassa pressione, secondo normativa DIN 3861-3870<br>Pneumatic circuits, low pressure hydraulic applications, according to DIN 3861-3870 norms                      |
| TEMPERATURE E PRESSIONI<br>TEMPERATURES AND PRESSURES |                             | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato<br>Temperatures and pressures usually depend by the technical features of the employed tubes |
| FILETTATURE<br>THREAD TYPE                            |                             | BSP cilindrica UNI-ISO 228 BSP conica UNI-ISO 7 Metrica ISO/R 262<br>BSP parallell UNI-ISO 228 BSP tapered UNI-ISO 7 Metric ISO/R 262                                                      |
| MATERIALI<br>MATERIALS                                | corpo<br>body               | Ottone UNI EN 12164 CW614N<br>Brass UNI EN 12164 CW614N                                                                                                                                    |
|                                                       | guarnizioni tenuta<br>seals | NBR 70 DWGV-EN549 UL157<br>NBR 70 DWGV-EN549 UL157                                                                                                                                         |
|                                                       | rondelle<br>washers         | Nylon/Alluminio<br>Nylon/Aluminium                                                                                                                                                         |



1

**ISTRUZIONI DI MONTAGGIO - FITTING INSTRUCTIONS**
**Prima dell'inserimento - Before the insertion**

- Il tipo di tubo utilizzato deve essere dichiarato dal costruttore idoneo all'utilizzo con raccordi automatici  
*The type of employed pipe must be declared as suitable by the manufacturer to be used with push-in fittings*
- Il taglio del tubo deve essere effettuato a 90° mediante apposita pinza taglia tubo (Vedi nostro catalogo bluline)  
*The cutting of the pipe must be at a right angle using a dedicated tube cutter (See our bluline catalogue)*
- Non effettuare il taglio del tubo con forbici, tenaglie o altri utensili che possano conferire all'estremità del tubo estremità non lineari  
*Do not cut the hose with scissors, pincers or other tools may cause non-linear surface to the end of the tube*



2

**INSERIMENTO CORRETTO DEL TUBO SUL RACCORDO**
**CORRECT INSERTION OF THE HOSE IN THE FITTING**


3

FOTO 1 - PICTURE 1

Tubo prima dell'inserimento - *Hose before insertion*

FOTO 2 - PICTURE 2

Tubo inserito - *Inserted hose*

FOTO 3 - PICTURE 3

Tubo tagliato a 90° con pinza in plastica - *Tubo tagliato a 90° con pinza*


4

FOTO 4 - PICTURE 4

Tubo tagliato in modo corretto con pinza in metallo - *Correct hose cut with metal tube cutter*


5

**Durante l'inserimento - During the insertion**

- Effettuare una leggera rotazione del tubo in modo da agevolarne l'ingresso, assicurarsi di arrivare con il tubo fino a quota di battuta interna.  
*Turn the hose slightly so to make it easier to get in, make sure the pipe reach the inside stop.*

**Sgancio del tubo - Hose extraction**

- Per effettuare lo sgancio del tubo, o disinnesto, premere il tappo spintore fino a battuta, mantenendo la pressione su quest'ultimo estrarre il tubo dal corpo (l'operazione può essere facilitata con l'utilizzo di apposita forchettina).  
*To extract the hose, or realising it, press the sleeve until it stops and keeping it pressed remove the tube from the fitting (the operation can be done easier using an appropriate fork).*
- Assicurarsi che il tubo inserito non sia soggetto a trazione e che il tappo spintore non venga a contatto con nessun tipo di oggetto in modo da non generare sganci o sfilamenti involontari.  
*Make sure that the inserted hose is not under traction and that the sleeve does not run the risk of accidental contacts which may cause unintentional extraction or releasing.*



6

FOTO 5 - PICTURE 5

Raccordo con tubo inserito e in trazione - *Fitting with inserted hose, in tension*

FOTO 6 - PICTURE 6

Raccordo con tubo inserito avente raggio di curvatura stretto - *Fitting with hose inserted, having a tight bending radius*





REGOLATORI DI FLUSSO

- 1 RAP**  
Anello girevole - Swivel banjo "13" "13 R/\*"
- 2 TECNO-RAP**  
Anello girevole - Swivel banjo "T13" "T13 R/\*"

- 3 Asta di regolazione con pomolo**  
**Adjusting stem with knob**  
28A (per valvola - for valve)  
29A (per cilindro - for cylinder)  
30A (bidirezionale - bidirectional)

- 4 Asta di regolazione con taglio a cacciavite**  
**Adjusting stem with screwdriver cut**  
28A (per valvola - for valve)  
29A (per cilindro - for cylinder)  
30A (bidirezionale - bidirectional)

(\*) Per asta M5  
For M5 stem



## CODIFICA DEI REGOLATORI DI FLUSSO

| A | B  | C  | D  | E |
|---|----|----|----|---|
|   | 28 | 04 | 18 |   |
| T | 29 | 06 | 18 | P |

ESEMPI DI ORDINAZIONE

## CODING OF FLOW REGULATORS

| A | B  | C  | D  | E |
|---|----|----|----|---|
|   | 28 | 04 | 18 |   |
| T | 29 | 06 | 18 | P |

ORDERING EXAMPLES

|            |   |                                     |
|------------|---|-------------------------------------|
| <b>A =</b> |   | VERSIONE CON CORPO IN OTTONE        |
|            | T | VERSIONE CON CORPO IN TECNOPOLIMERO |

|            |   |                       |
|------------|---|-----------------------|
| <b>A =</b> |   | BRASS BODY VERSION    |
|            | T | TECHNOPOLYMER VERSION |

|            |    |               |
|------------|----|---------------|
| <b>B =</b> | 28 | PER VALVOLA   |
|            | 29 | PER CILINDRO  |
|            | 30 | BIDIREZIONALE |

|            |    |               |
|------------|----|---------------|
| <b>B =</b> | 28 | FOR VALVE     |
|            | 29 | FOR CYLINDER  |
|            | 30 | BIDIRECTIONAL |

|            |    |                      |
|------------|----|----------------------|
| <b>C =</b> | 04 | PER TUBO DIAM. 4 MM  |
|            | 06 | PER TUBO DIAM. 6 MM  |
|            | 08 | PER TUBO DIAM. 8 MM  |
|            | 10 | PER TUBO DIAM. 10 MM |
|            | 12 | PER TUBO DIAM. 12 MM |

|            |    |                      |
|------------|----|----------------------|
| <b>C =</b> | 04 | FOR TUBE DIAM. 4 MM  |
|            | 06 | FOR TUBE DIAM. 6 MM  |
|            | 08 | FOR TUBE DIAM. 8 MM  |
|            | 10 | FOR TUBE DIAM. 10 MM |
|            | 12 | FOR TUBE DIAM. 12 MM |

|            |    |                 |
|------------|----|-----------------|
| <b>D =</b> | M5 | FILETTATURA M5  |
|            | 18 | FILETTATURA 1/8 |
|            | 14 | FILETTATURA 1/4 |
|            | 38 | FILETTATURA 3/8 |
|            | 12 | FILETTATURA 1/2 |

|            |    |            |
|------------|----|------------|
| <b>D =</b> | M5 | THREAD M5  |
|            | 18 | THREAD 1/8 |
|            | 14 | THREAD 1/4 |
|            | 38 | THREAD 3/8 |
|            | 12 | THREAD 1/2 |

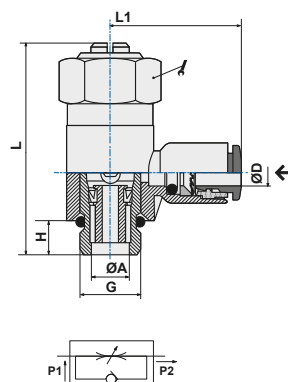
|            |   |                                     |
|------------|---|-------------------------------------|
| <b>E =</b> |   | ORIENTABILE CON TAGLIO A CACCIIVITE |
|            | P | GIREVOLE CON POMELLO DI REGOLAZIONE |

|            |   |                                      |
|------------|---|--------------------------------------|
| <b>E =</b> |   | ORIENTABLE TYPE WITH SCREWDRIVER CUT |
|            | P | SWIVEL TYPE WITH ADJUSTING KNOB      |

## ART. 28

Regolatore di flusso orientabile per valvola  
*Orientable flow regulator for valve*

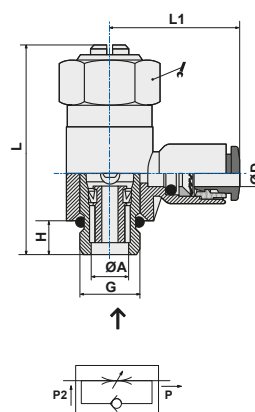
| CODICE | ØD | G   | ØA  | H   | L1   | L    |  |  |
|--------|----|-----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2804M5 | 4  | M5  | 1,9 | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| 280418 | 4  | 1/8 | 5,5 | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| 2806M5 | 6  | M5  | 1,9 | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| 280618 | 6  | 1/8 | 5,5 | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| 280614 | 6  | 1/4 | 6,0 | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| 280818 | 8  | 1/8 | 5,5 | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| 280814 | 8  | 1/4 | 6,0 | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| 280838 | 8  | 3/8 | 8,0 | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| 281014 | 10 | 1/4 | 6,0 | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| 281038 | 10 | 3/8 | 8,0 | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| 281238 | 12 | 3/8 | 8,0 | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |



## ART. 29

Regolatore di flusso orientabile per cilindro  
*Orientable flow regulator for cylinder*

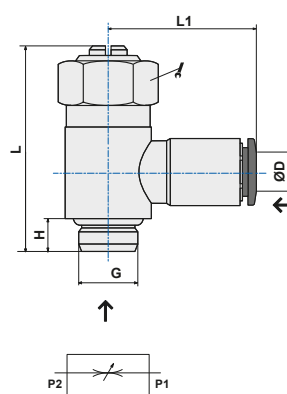
| CODICE | ØD | G   | ØA   | H   | L1   | L    |  |  |
|--------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2904M5 | 4  | M5  | 1,9  | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| 290418 | 4  | 1/8 | 5,0  | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| 2906M5 | 6  | M5  | 1,9  | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| 290618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| 290614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| 290818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| 290814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| 290838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| 291014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| 291038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| 291238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |
| 291212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26                                                                                | 10                                                                                |



## ART. 30

Regolatore di flusso orientabile bidirezionale  
*Orientable bidirectional flow regulator*

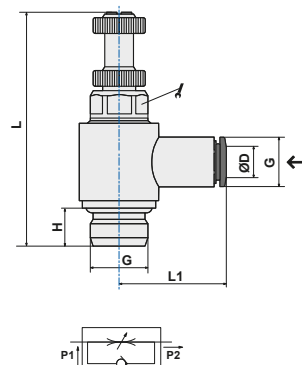
| CODICE | ØD | G   | H   | L1   | L  |  |  |
|--------|----|-----|-----|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 3004M5 | 4  | M5  | 4,0 | 19,5 | 24 | 8                                                                                   | 25                                                                                  |
| 300418 | 4  | 1/8 | 5,5 | 21,1 | 34 | 14                                                                                  | 25                                                                                  |
| 3006M5 | 6  | M5  | 4,0 | 21,0 | 24 | 8                                                                                   | 25                                                                                  |
| 300618 | 6  | 1/8 | 5,5 | 24,3 | 34 | 14                                                                                  | 25                                                                                  |
| 300614 | 6  | 1/4 | 6,5 | 25,5 | 42 | 17                                                                                  | 25                                                                                  |
| 300818 | 8  | 1/8 | 5,5 | 24,8 | 34 | 14                                                                                  | 25                                                                                  |
| 300814 | 8  | 1/4 | 6,5 | 26,5 | 42 | 17                                                                                  | 25                                                                                  |
| 300838 | 8  | 3/8 | 7,5 | 28,0 | 52 | 20                                                                                  | 10                                                                                  |
| 301014 | 10 | 1/4 | 6,5 | 28,4 | 42 | 17                                                                                  | 25                                                                                  |
| 301038 | 10 | 3/8 | 7,5 | 29,9 | 52 | 20                                                                                  | 10                                                                                  |
| 301238 | 12 | 3/8 | 7,5 | 31,4 | 52 | 20                                                                                  | 10                                                                                  |
| 301212 | 12 | 1/2 | 9   | 34,9 | 61 | 26                                                                                  | 10                                                                                  |



## ART. 28P

Regolatore di flusso girevole per valvola  
Swivel flow regulator for valve

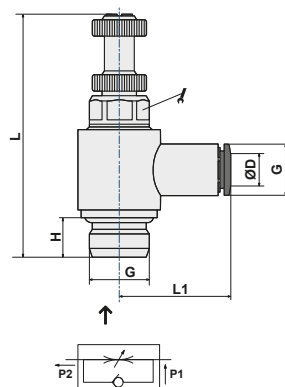
| CODICE  | ØD | G   | H   | L1   | L    |    |    |
|---------|----|-----|-----|------|------|----|----|
| 2804M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8  | 25 |
| 280418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9  | 25 |
| 2806M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8  | 25 |
| 280618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9  | 25 |
| 280818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9  | 25 |
| 280614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12 | 25 |
| 280814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12 | 25 |
| 281014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12 | 25 |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |



## ART. 29P

Regolatore di flusso girevole per cilindro  
Swivel flow regulator for cylinder

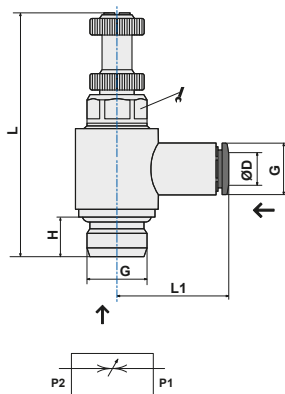
| CODICE  | ØD | G   | H   | L1   | L    |    |    |
|---------|----|-----|-----|------|------|----|----|
| 2904M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8  | 25 |
| 290418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9  | 25 |
| 2906M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8  | 25 |
| 290618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9  | 25 |
| 290818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9  | 25 |
| 290614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12 | 25 |
| 290814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12 | 25 |
| 291014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12 | 25 |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |



## ART. 30P

Regolatore di flusso girevole bidirezionale  
Swivel bidirectional flow regulator

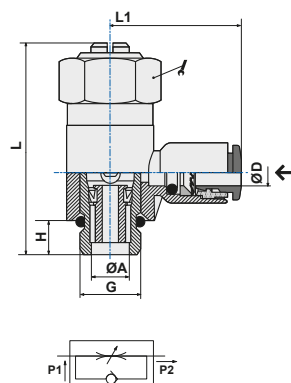
| CODICE  | ØD | G   | H   | L1   | L    |    |    |
|---------|----|-----|-----|------|------|----|----|
| 3004M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8  | 25 |
| 300418P | 4  | 1/8 | 5,5 | 43   | 21,1 | 9  | 25 |
| 3006M5P | 6  | M5  | 4   | 21   | 35,0 | 8  | 25 |
| 300618P | 6  | 1/8 | 5,5 | 43   | 24,3 | 9  | 25 |
| 300818P | 8  | 1/8 | 5,5 | 43   | 24,8 | 9  | 25 |
| 300614P | 6  | 1/4 | 6,5 | 50   | 25,5 | 12 | 25 |
| 300814P | 8  | 1/4 | 6,5 | 50   | 26,5 | 12 | 25 |
| 301014P | 10 | 1/4 | 6,5 | 50   | 28,4 | 12 | 25 |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |
|         |    |     |     |      |      |    |    |



## ART. B28

Regolatore di flusso unidirezionale per valvola  
*Unidirectional flow regulator for valve*

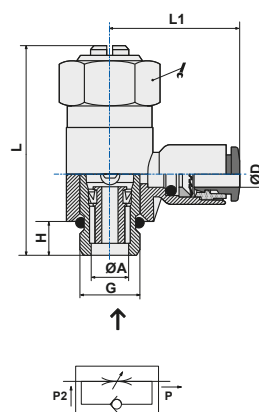
| CODICE  | ØD | G   | ØA  | H   | L1   | L    |  |  |
|---------|----|-----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B2804M5 | 4  | M5  | 1,9 | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| B280418 | 4  | 1/8 | 5,5 | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| B2806M5 | 6  | M5  | 1,9 | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| B280618 | 6  | 1/8 | 5,5 | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| B280614 | 6  | 1/4 | 6,0 | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| B280818 | 8  | 1/8 | 5,5 | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| B280814 | 8  | 1/4 | 6,0 | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| B280838 | 8  | 3/8 | 8,0 | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| B281014 | 10 | 1/4 | 6,0 | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| B281038 | 10 | 3/8 | 8,0 | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| B281238 | 12 | 3/8 | 8,0 | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |



## ART. B29

Regolatore di flusso unidirezionale per cilindro  
*Unidirectional flow regulator for cylinder*

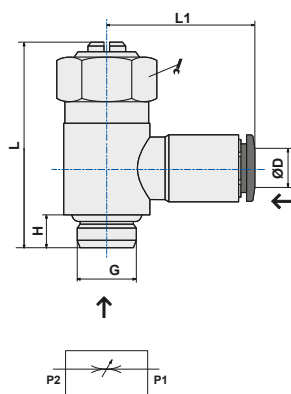
| CODICE  | ØD | G   | ØA   | H   | L1   | L    |  |  |
|---------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B2904M5 | 4  | M5  | 1,9  | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| B290418 | 4  | 1/8 | 5,0  | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| B2906M5 | 6  | M5  | 1,9  | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| B290618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| B290614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| B290818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| B290814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| B290838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| B291014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| B291038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| B291238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |
| B291212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26                                                                                | 10                                                                                |



## ART. B30

Regolatore di flusso bidirezionale  
*Bidirectional flow regulator*

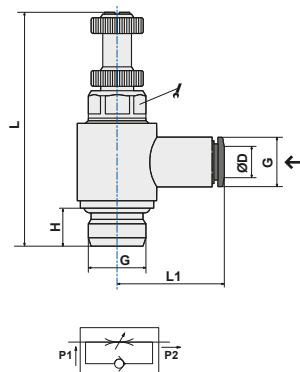
| CODICE  | ØD | G   | H   | L1   | L  |  |  |
|---------|----|-----|-----|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B3004M5 | 4  | M5  | 4,0 | 19,5 | 24 | 8                                                                                   | 25                                                                                  |
| B300418 | 4  | 1/8 | 5,5 | 21,1 | 34 | 14                                                                                  | 25                                                                                  |
| B3006M5 | 6  | M5  | 4,0 | 21,0 | 24 | 8                                                                                   | 25                                                                                  |
| B300618 | 6  | 1/8 | 5,5 | 24,3 | 34 | 14                                                                                  | 25                                                                                  |
| B300614 | 6  | 1/4 | 6,5 | 25,5 | 42 | 17                                                                                  | 25                                                                                  |
| B300818 | 8  | 1/8 | 5,5 | 24,8 | 34 | 14                                                                                  | 25                                                                                  |
| B300814 | 8  | 1/4 | 6,5 | 26,5 | 42 | 17                                                                                  | 25                                                                                  |
| B300838 | 8  | 3/8 | 7,5 | 28,0 | 52 | 20                                                                                  | 10                                                                                  |
| B301014 | 10 | 1/4 | 6,5 | 28,4 | 42 | 17                                                                                  | 25                                                                                  |
| B301038 | 10 | 3/8 | 7,5 | 29,9 | 52 | 20                                                                                  | 10                                                                                  |
| B301238 | 12 | 3/8 | 7,5 | 31,4 | 52 | 20                                                                                  | 10                                                                                  |
| B301212 | 12 | 1/2 | 9   | 34,9 | 61 | 26                                                                                  | 10                                                                                  |



**ART. B28P**

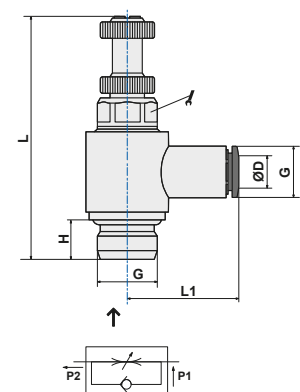
Regolatore di flusso per valvola girevole  
*Swivel flow regulator for valve*

| CODICE   | ØD | G   | H   | L    | L1   |  |  |
|----------|----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B2804M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                 | 25                                                                                |
| B280418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9                                                                                 | 25                                                                                |
| B2806M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8                                                                                 | 25                                                                                |
| B280618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9                                                                                 | 25                                                                                |
| B280818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9                                                                                 | 25                                                                                |
| B280614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12                                                                                | 25                                                                                |
| B280814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12                                                                                | 25                                                                                |
| B281014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12                                                                                | 25                                                                                |
|          |    |     |     |      |      |                                                                                   |                                                                                   |
|          |    |     |     |      |      |                                                                                   |                                                                                   |
|          |    |     |     |      |      |                                                                                   |                                                                                   |


**ART. B29P**

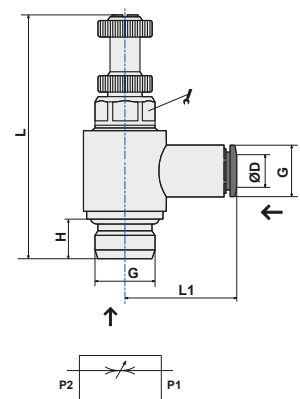
Regolatore di flusso per cilindro girevole  
*Swivel flow regulator for cylinder*

| CODICE   | ØD | G   | H   | L    | L1   |  |  |
|----------|----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| B204M5P  | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                 | 25                                                                                |
| B290418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9                                                                                 | 25                                                                                |
| B2906M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8                                                                                 | 25                                                                                |
| B290618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9                                                                                 | 25                                                                                |
| B290818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9                                                                                 | 25                                                                                |
| B290614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12                                                                                | 25                                                                                |
| B290814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12                                                                                | 25                                                                                |
| B291014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12                                                                                | 25                                                                                |
|          |    |     |     |      |      |                                                                                   |                                                                                   |
|          |    |     |     |      |      |                                                                                   |                                                                                   |
|          |    |     |     |      |      |                                                                                   |                                                                                   |


**ART. B30P**

Regolatore di flusso bidirezionale  
*Bidirectional flow regulator*

| CODICE   | ØD | G   | H   | L    | L1   |  |  |
|----------|----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| B3004M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                   | 25                                                                                  |
| B300418P | 4  | 1/8 | 5,5 | 43   | 21,1 | 9                                                                                   | 25                                                                                  |
| B3006M5P | 6  | M5  | 4   | 21   | 35,0 | 8                                                                                   | 25                                                                                  |
| B300618P | 6  | 1/8 | 5,5 | 43   | 24,3 | 9                                                                                   | 25                                                                                  |
| B300818P | 8  | 1/8 | 5,5 | 43   | 24,8 | 9                                                                                   | 25                                                                                  |
| B300614P | 6  | 1/4 | 6,5 | 50   | 25,5 | 12                                                                                  | 25                                                                                  |
| B300814P | 8  | 1/4 | 6,5 | 50   | 26,5 | 12                                                                                  | 25                                                                                  |
| B301014P | 10 | 1/4 | 6,5 | 50   | 28,4 | 12                                                                                  | 25                                                                                  |
|          |    |     |     |      |      |                                                                                     |                                                                                     |
|          |    |     |     |      |      |                                                                                     |                                                                                     |
|          |    |     |     |      |      |                                                                                     |                                                                                     |

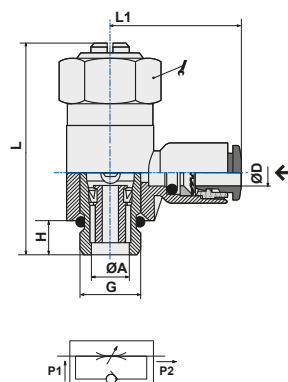




## ART. 280T

Regolatore di flusso orientabile per valvola  
*Orientable flow regulator for valve*

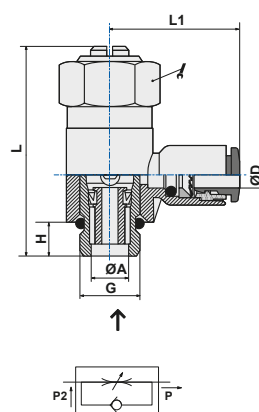
| CODICE   | ØD | G   | ØA  | H   | L1   | L    |  |  |
|----------|----|-----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 280T04M5 | 4  | M5  | 1,9 | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| 280T0418 | 4  | 1/8 | 5,5 | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| 280T06M5 | 6  | M5  | 1,9 | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| 280T0618 | 6  | 1/8 | 5,5 | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| 280T0614 | 6  | 1/4 | 6,0 | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| 280T0818 | 8  | 1/8 | 5,5 | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| 280T0814 | 8  | 1/4 | 6,0 | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| 280T0838 | 8  | 3/8 | 8,0 | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| 280T1014 | 10 | 1/4 | 6,0 | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| 280T1038 | 10 | 3/8 | 8,0 | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| 280T1238 | 12 | 3/8 | 8,0 | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |



## ART. 290T

Regolatore di flusso orientabile per cilindro  
*Orientable flow regulator for cylinder*

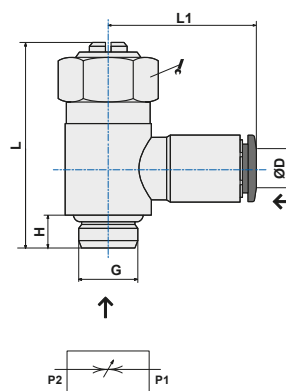
| CODICE   | ØD | G   | ØA   | H   | L1   | L    |  |  |
|----------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 290T04M5 | 4  | M5  | 1,9  | 4,0 | 19,5 | 24,0 | 8                                                                                 | 25                                                                                |
| 290T0418 | 4  | 1/8 | 5,0  | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| 290T06M5 | 6  | M5  | 1,9  | 4,0 | 21,0 | 24,0 | 8                                                                                 | 25                                                                                |
| 290T0618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| 290T0614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| 290T0818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| 290T0814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| 290T0838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| 290T1014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| 290T1038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| 290T1238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |
| 290T1212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26                                                                                | 10                                                                                |



## ART. 300T

Regolatore di flusso orientabile bidirezionale  
*Orientable bidirectional flow regulator*

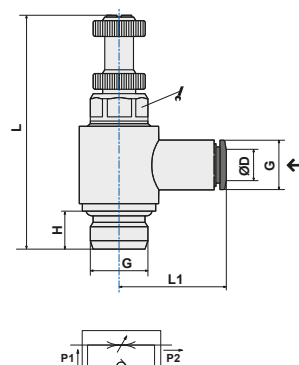
| CODICE   | ØD | G   | H   | L1   | L  |  |  |
|----------|----|-----|-----|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 300T04M5 | 4  | M5  | 4,0 | 19,5 | 24 | 8                                                                                   | 25                                                                                  |
| 300T0418 | 4  | 1/8 | 5,5 | 21,1 | 34 | 14                                                                                  | 25                                                                                  |
| 300T06M5 | 6  | M5  | 4,0 | 21,0 | 24 | 8                                                                                   | 25                                                                                  |
| 300T0618 | 6  | 1/8 | 5,5 | 24,3 | 34 | 14                                                                                  | 25                                                                                  |
| 300T0614 | 6  | 1/4 | 6,5 | 25,5 | 42 | 17                                                                                  | 25                                                                                  |
| 300T0818 | 8  | 1/8 | 5,5 | 24,8 | 34 | 14                                                                                  | 25                                                                                  |
| 300T0814 | 8  | 1/4 | 6,5 | 26,5 | 42 | 17                                                                                  | 25                                                                                  |
| 300T0838 | 8  | 3/8 | 7,5 | 28,0 | 52 | 20                                                                                  | 10                                                                                  |
| 300T1014 | 10 | 1/4 | 6,5 | 28,4 | 42 | 17                                                                                  | 25                                                                                  |
| 300T1038 | 10 | 3/8 | 7,5 | 29,9 | 52 | 20                                                                                  | 10                                                                                  |
| 300T1238 | 12 | 3/8 | 7,5 | 31,4 | 52 | 20                                                                                  | 10                                                                                  |
| 300T1212 | 12 | 1/2 | 9   | 34,9 | 61 | 26                                                                                  | 10                                                                                  |



**ART. 280P**

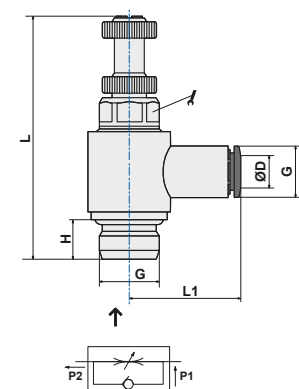
Regolatore di flusso girevole per valvola  
*Swivel flow regulator for valve*

| CODICE    | ØD | G   | H   | L    | L1   |  |  |
|-----------|----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 28OT04M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                 | 25                                                                                |
| 28OT0418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9                                                                                 | 25                                                                                |
| 28OT06M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8                                                                                 | 25                                                                                |
| 28OT0618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9                                                                                 | 25                                                                                |
| 28OT0818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9                                                                                 | 25                                                                                |
| 28OT0614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12                                                                                | 25                                                                                |
| 28OT0814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12                                                                                | 25                                                                                |
| 28OT1014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12                                                                                | 25                                                                                |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |


**ART. 290P**

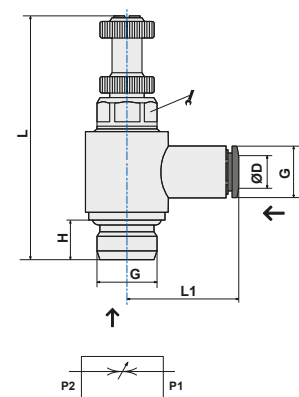
Regolatore di flusso girevole per cilindro  
*Swivel flow regulator for cylinder*

| CODICE    | ØD | G   | H   | L    | L1   |  |  |
|-----------|----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 29OT04M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                 | 25                                                                                |
| 29OT0418P | 4  | 1/8 | 5,5 | 43,0 | 21,1 | 9                                                                                 | 25                                                                                |
| 29OT06M5P | 6  | M5  | 4   | 21,0 | 35,0 | 8                                                                                 | 25                                                                                |
| 29OT0618P | 6  | 1/8 | 5,5 | 43,0 | 24,3 | 9                                                                                 | 25                                                                                |
| 29OT0818P | 8  | 1/8 | 5,5 | 43,0 | 24,8 | 9                                                                                 | 25                                                                                |
| 29OT0614P | 6  | 1/4 | 6,5 | 50,0 | 25,5 | 12                                                                                | 25                                                                                |
| 29OT0814P | 8  | 1/4 | 6,5 | 50,0 | 26,5 | 12                                                                                | 25                                                                                |
| 29OT1014P | 10 | 1/4 | 6,5 | 50,0 | 28,4 | 12                                                                                | 25                                                                                |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |
|           |    |     |     |      |      |                                                                                   |                                                                                   |


**ART. 300P**

Regolatore di flusso girevole bidirezionale  
*Swivel bidirectional flow regulator*

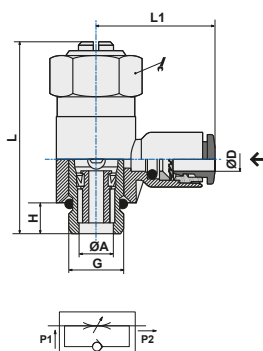
| CODICE    | ØD | G   | H   | L    | L1   |  |  |
|-----------|----|-----|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 30OT04M5P | 4  | M5  | 4   | 19,5 | 35,0 | 8                                                                                   | 25                                                                                  |
| 30OT0418P | 4  | 1/8 | 5,5 | 43   | 21,1 | 9                                                                                   | 25                                                                                  |
| 30OT06M5P | 6  | M5  | 4   | 21   | 35,0 | 8                                                                                   | 25                                                                                  |
| 30OT0618P | 6  | 1/8 | 5,5 | 43   | 24,3 | 9                                                                                   | 25                                                                                  |
| 30OT0818P | 8  | 1/8 | 5,5 | 43   | 24,8 | 9                                                                                   | 25                                                                                  |
| 30OT0614P | 6  | 1/4 | 6,5 | 50   | 25,5 | 12                                                                                  | 25                                                                                  |
| 30OT0814P | 8  | 1/4 | 6,5 | 50   | 26,5 | 12                                                                                  | 25                                                                                  |
| 30OT1014P | 10 | 1/4 | 6,5 | 50   | 28,4 | 12                                                                                  | 25                                                                                  |
|           |    |     |     |      |      |                                                                                     |                                                                                     |
|           |    |     |     |      |      |                                                                                     |                                                                                     |
|           |    |     |     |      |      |                                                                                     |                                                                                     |
|           |    |     |     |      |      |                                                                                     |                                                                                     |



## ART. T28

Regolatore di flusso orientabile per valvola  
*Orientable flow regulator for valve*

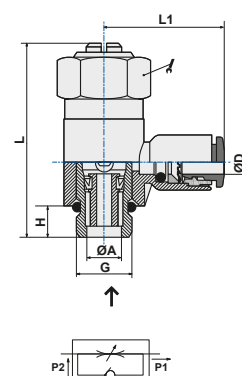
| CODICE  | ØD | G   | ØA  | H   | L1   | L    |  |  |
|---------|----|-----|-----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T2804M5 | 4  | M5  | 2,0 | 4   | 19,0 | 22,5 | 8                                                                                 | 25                                                                                |
| T280418 | 4  | 1/8 | 5,0 | 5,5 | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| T2806M5 | 6  | M5  | 2,0 | 4   | 22,0 | 22,5 | 8                                                                                 | 25                                                                                |
| T280618 | 6  | 1/8 | 5,0 | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| T280614 | 6  | 1/4 | 6,0 | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| T280818 | 8  | 1/8 | 5,0 | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| T280814 | 8  | 1/4 | 6,0 | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| T280838 | 8  | 3/8 | 6,5 | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| T281014 | 10 | 1/4 | 6,0 | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| T281038 | 10 | 3/8 | 6,5 | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| T281238 | 12 | 3/8 | 6,5 | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |



## ART. T29

Regolatore di flusso orientabile per cilindro  
*Orientable flow regulator for cylinder*

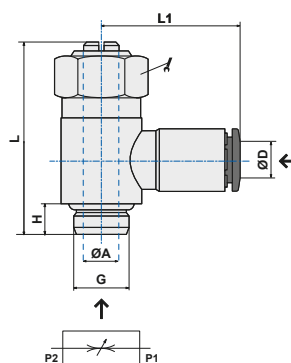
| CODICE  | ØD | G   | ØA   | H   | L1   | L    |  |  |
|---------|----|-----|------|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| T2904M5 | 4  | M5  | 2,0  | 4   | 19,0 | 22,5 | 8                                                                                 | 25                                                                                |
| T290418 | 4  | 1/8 | 5,0  | 4   | 21,1 | 34,0 | 14                                                                                | 25                                                                                |
| T2906M5 | 6  | M5  | 2,0  | 4   | 22,0 | 22,5 | 8                                                                                 | 25                                                                                |
| T290618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14                                                                                | 25                                                                                |
| T290614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17                                                                                | 25                                                                                |
| T290818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14                                                                                | 25                                                                                |
| T290814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17                                                                                | 25                                                                                |
| T290838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20                                                                                | 10                                                                                |
| T291014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17                                                                                | 25                                                                                |
| T291038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20                                                                                | 10                                                                                |
| T291012 | 10 | 1/2 | 10,0 | 9   | 30,0 | 61,0 | 26                                                                                | 10                                                                                |
| T291238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20                                                                                | 10                                                                                |
| T291212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26                                                                                | 10                                                                                |



## ART. T30

Regolatore di flusso orientabile bidirezionale  
*Orientable bidirectional flow regulator*

| CODICE  | ØD | G   | ØA   | H   | L1   | L    |  |  |
|---------|----|-----|------|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| T3004M5 | 4  | M5  | 2,0  | 4   | 19,0 | 22,5 | 8                                                                                   | 25                                                                                  |
| T300418 | 4  | 1/8 | 5,0  | 4   | 21,1 | 34,0 | 14                                                                                  | 25                                                                                  |
| T3006M5 | 6  | M5  | 2,0  | 4   | 22,0 | 22,5 | 8                                                                                   | 5                                                                                   |
| T300618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14                                                                                  | 25                                                                                  |
| T300614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17                                                                                  | 25                                                                                  |
| T300818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14                                                                                  | 25                                                                                  |
| T300814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17                                                                                  | 25                                                                                  |
| T300838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20                                                                                  | 10                                                                                  |
| T301014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17                                                                                  | 25                                                                                  |
| T301038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20                                                                                  | 10                                                                                  |
| T301238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20                                                                                  | 10                                                                                  |
| T301212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26                                                                                  | 10                                                                                  |

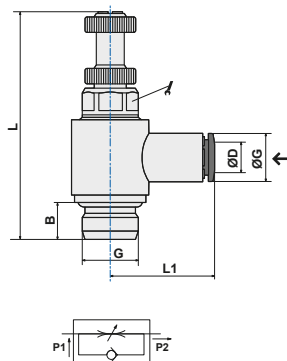


**ART. T28P**

Regolatore di flusso girevole per valvola  
*Swivel flow regulator for valve*

| CODICE    | ØD | G   | B    | L  | L1   |  |      |    |
|-----------|----|-----|------|----|------|--|------|----|
| T2804M5P  | 4  | M5  | 4    | 34 | 19,0 |  | 8,0  | 25 |
| T280418P  | 4  | 1/8 | 5,5  | 43 | 21,1 |  | 9,0  | 25 |
| T2806M5P  | 6  | M5  | 4    | 34 | 22,0 |  | 8,0  | 25 |
| T280618P  | 6  | 1/8 | 5,5  | 43 | 24,3 |  | 9,0  | 25 |
| T280614P  | 6  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| T280638P* | 6  | 3/8 | 9,5  | 53 | 29,5 |  | 13,0 | 10 |
| T280612P  | 6  | 1/2 | 12,0 | 61 | 30,2 |  | 13,0 | 10 |
| T280818P  | 8  | 1/8 | 5,5  | 43 | 24,8 |  | 9,0  | 25 |
| T280814P  | 8  | 1/4 | 6,5  | 50 | 26,5 |  | 12,0 | 25 |
| T280838P* | 8  | 3/8 | 9,5  | 53 | 30,0 |  | 14,4 | 10 |
| T280812P* | 8  | 1/2 | 1,2  | 61 | 35,8 |  | 14,4 | 10 |
| T281018P* | 10 | 1/8 | 6,5  | 42 | 30,7 |  | 18,4 | 10 |
| T281014P  | 10 | 1/4 | 6,5  | 50 | 28,4 |  | 12,0 | 25 |
| T281038P* | 10 | 3/8 | 9,5  | 53 | 33,5 |  | 18,4 | 10 |
| T281012P* | 10 | 1/2 | 12,0 | 61 | 36,5 |  | 18,4 | 10 |
| T281214P* | 12 | 1/4 | 8,5  | 48 | 33,7 |  | 21,0 | 10 |
| T281238P* | 12 | 3/8 | 9,5  | 53 | 35,5 |  | 19,0 | 10 |
| T281212P* | 12 | 1/2 | 12,0 | 61 | 36,5 |  | 21,0 | 10 |

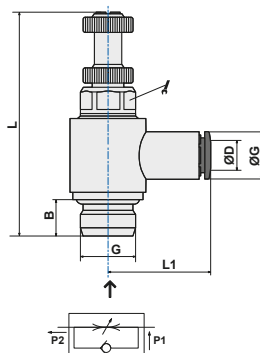
\* = di importazione - imported


**ART. T29P**

Regolatore di flusso girevole per cilindro  
*Swivel flow regulator for cylinder*

| CODICE    | ØD | G   | B    | L  | L1   |  |      |    |
|-----------|----|-----|------|----|------|--|------|----|
| T2904M5P  | 4  | M5  | 4    | 34 | 15,0 |  | 8,0  | 25 |
| T290418P  | 4  | 1/8 | 5,5  | 43 | 21,1 |  | 9,0  | 25 |
| T290414P* | 4  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| T2906M5P  | 6  | M5  | 4    | 34 | 22,0 |  | 8,0  | 25 |
| T290618P  | 6  | 1/8 | 5,5  | 43 | 24,3 |  | 9,0  | 25 |
| T290614P  | 6  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| T290638P* | 6  | 3/8 | 9,5  | 53 | 29,5 |  | 13,0 | 10 |
| T290612P* | 6  | 1/2 | 12,0 | 61 | 30,2 |  | 13,0 | 10 |
| T290818P  | 8  | 1/8 | 5,5  | 43 | 24,8 |  | 9,0  | 25 |
| T290814P  | 8  | 1/4 | 6,5  | 50 | 26,5 |  | 12,0 | 25 |
| T290838P* | 8  | 3/8 | 9,5  | 53 | 30,0 |  | 14,4 | 10 |
| T290812P* | 8  | 1/2 | 1,2  | 61 | 35,8 |  | 14,4 | 10 |
| T291018P* | 10 | 1/8 | 6,5  | 42 | 30,7 |  | 18,4 | 10 |
| T291014P  | 10 | 1/4 | 6,5  | 50 | 28,4 |  | 12,0 | 25 |
| T291038P* | 10 | 3/8 | 9,5  | 53 | 33,5 |  | 18,4 | 10 |
| T291012P* | 10 | 1/2 | 12,0 | 61 | 36,5 |  | 18,4 | 10 |
| T291214P* | 12 | 1/4 | 8,5  | 48 | 33,7 |  | 21,0 | 10 |
| T291238P* | 12 | 3/8 | 9,5  | 53 | 35,5 |  | 19,0 | 10 |
| T291212P* | 12 | 1/2 | 12,0 | 61 | 36,5 |  | 21,0 | 10 |

\* = di importazione - imported



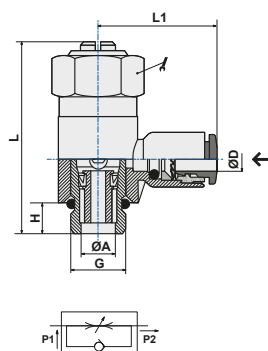
Regolatore di flusso girevole bidirezionale  
*Swivel bidirectional flow regulator*



## ART. TB28

Regolatore di flusso orientabile per valvola  
*Orientable flow regulator for valve*

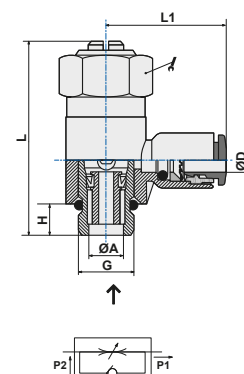
| CODICE   | ØD | G   | ØA  | H   | L1   | L    |    |    |
|----------|----|-----|-----|-----|------|------|----|----|
| TB2804M5 | 4  | M5  | 2,0 | 4   | 19,0 | 22,5 | 8  | 25 |
| TB280418 | 4  | 1/8 | 5,0 | 5,5 | 21,1 | 34,0 | 14 | 25 |
| TB2806M5 | 6  | M5  | 2,0 | 4   | 22,0 | 22,5 | 8  | 25 |
| TB280618 | 6  | 1/8 | 5,0 | 5,5 | 24,3 | 34,0 | 14 | 25 |
| TB280614 | 6  | 1/4 | 6,0 | 6,5 | 25,5 | 42,0 | 17 | 25 |
| TB280818 | 8  | 1/8 | 5,0 | 5,5 | 24,8 | 34,0 | 14 | 25 |
| TB280814 | 8  | 1/4 | 6,0 | 6,5 | 26,5 | 42,0 | 17 | 25 |
| TB280838 | 8  | 3/8 | 6,5 | 7,5 | 28,0 | 52,0 | 20 | 10 |
| TB281014 | 10 | 1/4 | 6,0 | 6,5 | 28,4 | 42,0 | 17 | 25 |
| TB281038 | 10 | 3/8 | 6,5 | 7,5 | 29,9 | 52,0 | 20 | 10 |
| TB281238 | 12 | 3/8 | 6,5 | 7,5 | 31,4 | 52,0 | 20 | 10 |



## ART. TB29

Regolatore di flusso orientabile per cilindro  
*Orientable flow regulator for cylinder*

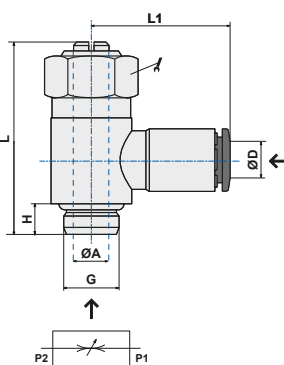
| CODICE   | ØD | G   | ØA   | H   | L1   | L    |    |    |
|----------|----|-----|------|-----|------|------|----|----|
| TB2904M5 | 4  | M5  | 2,0  | 4   | 19,0 | 22,5 | 8  | 25 |
| TB290418 | 4  | 1/8 | 5,0  | 4   | 21,1 | 34,0 | 14 | 25 |
| TB2906M5 | 6  | M5  | 2,0  | 4   | 22,0 | 22,5 | 8  | 25 |
| TB290618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14 | 25 |
| TB290614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17 | 25 |
| TB290818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14 | 25 |
| TB290814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17 | 25 |
| TB290838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20 | 10 |
| TB291014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17 | 25 |
| TB291038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20 | 10 |
| TB291012 | 10 | 1/2 | 10,0 | 9   | 30,0 | 61,0 | 26 | 10 |
| TB291238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20 | 10 |
| TB291212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26 | 10 |



## ART. TB30

Regolatore di flusso orientabile bidirezionale  
*Orientable bidirectional flow regulator*

| CODICE   | ØD | G   | ØA   | H   | L1   | L    |    |    |
|----------|----|-----|------|-----|------|------|----|----|
| TB3004M5 | 4  | M5  | 2,0  | 4   | 19,0 | 22,5 | 8  | 25 |
| TB300418 | 4  | 1/8 | 5,0  | 4   | 21,1 | 34,0 | 14 | 25 |
| TB3006M5 | 6  | M5  | 2,0  | 4   | 22,0 | 22,5 | 8  | 5  |
| TB300618 | 6  | 1/8 | 5,0  | 5,5 | 24,3 | 34,0 | 14 | 25 |
| TB300614 | 6  | 1/4 | 6,0  | 6,5 | 25,5 | 42,0 | 17 | 25 |
| TB300818 | 8  | 1/8 | 5,0  | 5,5 | 24,8 | 34,0 | 14 | 25 |
| TB300814 | 8  | 1/4 | 6,0  | 6,5 | 26,5 | 42,0 | 17 | 25 |
| TB300838 | 8  | 3/8 | 6,5  | 7,5 | 28,0 | 52,0 | 20 | 10 |
| TB301014 | 10 | 1/4 | 6,0  | 6,5 | 28,4 | 42,0 | 17 | 25 |
| TB301038 | 10 | 3/8 | 6,5  | 7,5 | 29,9 | 52,0 | 20 | 10 |
| TB301238 | 12 | 3/8 | 6,5  | 7,5 | 31,4 | 52,0 | 20 | 10 |
| TB301212 | 12 | 1/2 | 10,0 | 9   | 34,9 | 61,0 | 26 | 10 |



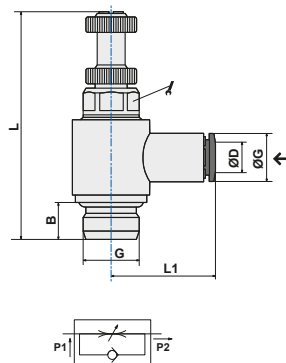


## ART. TB28P

Regolatore di flusso girevole per valvola  
Swivel flow regulator for valve

| CODICE     | ØD | G   | B    | L  | L1   |  |      |    |
|------------|----|-----|------|----|------|--|------|----|
| TB2804M5P  | 4  | M5  | 4    | 34 | 19,0 |  | 8,0  | 25 |
| TB280418P  | 4  | 1/8 | 5,5  | 43 | 21,1 |  | 9,0  | 25 |
| TB2806M5P  | 6  | M5  | 4    | 34 | 22,0 |  | 8,0  | 25 |
| TB280618P  | 6  | 1/8 | 5,5  | 43 | 24,3 |  | 9,0  | 25 |
| TB280614P  | 6  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| TB280638P* | 6  | 3/8 | 9,5  | 53 | 29,5 |  | 13,0 | 10 |
| TB280612P  | 6  | 1/2 | 12,0 | 61 | 30,2 |  | 13,0 | 10 |
| TB280818P  | 8  | 1/8 | 5,5  | 43 | 24,8 |  | 9,0  | 25 |
| TB280814P  | 8  | 1/4 | 6,5  | 50 | 26,5 |  | 12,0 | 25 |
| TB280838P* | 8  | 3/8 | 9,5  | 53 | 30,0 |  | 14,4 | 10 |
| TB280812P* | 8  | 1/2 | 1,2  | 61 | 35,8 |  | 14,4 | 10 |
| TB281018P* | 10 | 1/8 | 6,5  | 42 | 30,7 |  | 18,4 | 10 |
| TB281014P  | 10 | 1/4 | 6,5  | 50 | 28,4 |  | 12,0 | 25 |
| TB281038P* | 10 | 3/8 | 9,5  | 53 | 33,5 |  | 18,4 | 10 |
| TB281012P* | 10 | 1/2 | 12,0 | 61 | 36,5 |  | 18,4 | 10 |
| TB281214P* | 12 | 1/4 | 8,5  | 48 | 33,7 |  | 21,0 | 10 |
| TB281238P* | 12 | 3/8 | 9,5  | 53 | 35,5 |  | 19,0 | 10 |
| TB281212P* | 12 | 1/2 | 12,0 | 61 | 36,5 |  | 21,0 | 10 |

\* = di importazione - imported

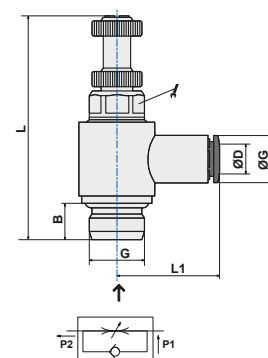


## ART. TB29P

Regolatore di flusso girevole per cilindro  
Swivel flow regulator for cylinder

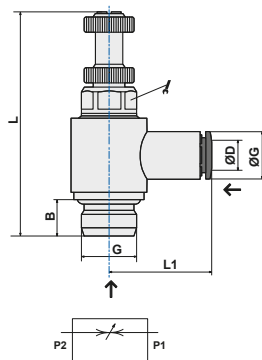
| CODICE     | ØD | G   | B    | L  | L1   |  |      |    |
|------------|----|-----|------|----|------|--|------|----|
| TB2904M5P  | 4  | M5  | 4    | 34 | 15,0 |  | 8,0  | 25 |
| TB290418P  | 4  | 1/8 | 5,5  | 43 | 21,1 |  | 9,0  | 25 |
| TB290414P* | 4  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| TB2906M5P  | 6  | M5  | 4    | 34 | 22,0 |  | 8,0  | 25 |
| TB290618P  | 6  | 1/8 | 5,5  | 43 | 24,3 |  | 9,0  | 25 |
| TB290614P  | 6  | 1/4 | 6,5  | 50 | 25,5 |  | 12,0 | 25 |
| TB290638P* | 6  | 3/8 | 9,5  | 53 | 29,5 |  | 13,0 | 10 |
| TB290612P* | 6  | 1/2 | 12,0 | 61 | 30,2 |  | 13,0 | 10 |
| TB290818P  | 8  | 1/8 | 5,5  | 43 | 24,8 |  | 9,0  | 25 |
| TB290814P  | 8  | 1/4 | 6,5  | 50 | 26,5 |  | 12,0 | 25 |
| TB290838P* | 8  | 3/8 | 9,5  | 53 | 30,0 |  | 14,4 | 10 |
| TB290812P* | 8  | 1/2 | 1,2  | 61 | 35,8 |  | 14,4 | 10 |
| TB291018P* | 10 | 1/8 | 6,5  | 42 | 30,7 |  | 18,4 | 10 |
| TB291014P  | 10 | 1/4 | 6,5  | 50 | 28,4 |  | 12,0 | 25 |
| TB291038P* | 10 | 3/8 | 9,5  | 53 | 33,5 |  | 18,4 | 10 |
| TB291012P* | 10 | 1/2 | 12,0 | 61 | 36,5 |  | 18,4 | 10 |
| T2B91214P* | 12 | 1/4 | 8,5  | 48 | 33,7 |  | 21,0 | 10 |
| TB291238P* | 12 | 3/8 | 9,5  | 53 | 35,5 |  | 19,0 | 10 |
| TB291212P* | 12 | 1/2 | 12,0 | 61 | 36,5 |  | 21,0 | 10 |

\* = di importazione - imported



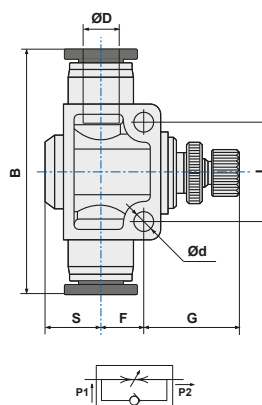
## ART. TB30P

Regolatore di flusso girevole bidirezionale  
*Swivel bidirectional flow regulator*

[illegible]

## ART. TB31

Regolatore di flusso in linea  
*Flat flow regulator*

[illegible]

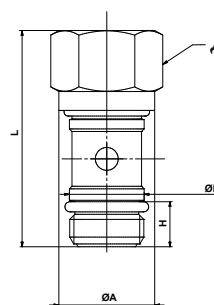
NOTA: articolo di importazione - NOTE: imported item

## ART. 28/29/30A

Asta regolatore orientabile  
Positioned flow regulator stem

| CODICE          | L    | ØB   | H   | G   | ØA   |  |  |
|-----------------|------|------|-----|-----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 28/29/30AM5 (*) | 24,0 | 6,0  | 4,0 | M5  | 5,0  | 8,0                                                                                 | 10                                                                                  |
| 28/29/30A18     | 31,5 | 9,8  | 7,0 | 1/8 | 13,5 | 14,0                                                                                | 10                                                                                  |
| 28/29/30A14     | 38,0 | 13,0 | 8,0 | 1/4 | 17,0 | 17,0                                                                                | 10                                                                                  |
| 28/29/30A38     | 46,5 | 16,5 | 9,0 | 3/8 | 21,0 | 21,0                                                                                | 10                                                                                  |
| 29A12 / 30A12   | 53,0 | 20,5 | 10  | 1/2 | 26   | 26                                                                                  | 5                                                                                   |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |
|                 |      |      |     |     |      |                                                                                     |                                                                                     |

(\*) Nota: 13R/T13R

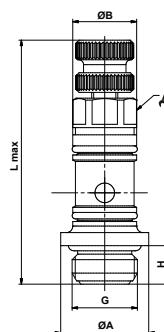


## ART. 28/29/30AP

Asta regolatore girevole  
Swivel flow regulator stem

| CODICE           | L max | ØB   | H   | G   | ØA   |  |  |
|------------------|-------|------|-----|-----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 28/29/30AM5P (*) | 35,0  | 6,0  | 4,2 | M5  | 5,0  | 8,0                                                                                 | 10                                                                                  |
| 28/29/30A18P     | 37,5  | 9,8  | 5,9 | 1/8 | 13,5 | 9,0                                                                                 | 10                                                                                  |
| 28/29/30A14P     | 44,0  | 13,0 | 7,0 | 1/4 | 17,0 | 12,0                                                                                | 10                                                                                  |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |
|                  |       |      |     |     |      |                                                                                     |                                                                                     |

(\*) Nota: 13R/T13R



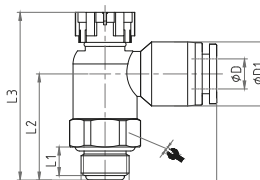
28 = per valvola (IN type)    29 = per cilindro (OUT type)    30 = bidirezionale (bi-directional)

## ART. T29GS

Regolatore di flusso per cilindro con ghiera di blocco  
Speed controller for cylinders with lock cap

| CODICE    | ØD | G    | L1  | L2   | L3   | L4   | ØD1  |  |
|-----------|----|------|-----|------|------|------|------|---------------------------------------------------------------------------------------|
| T29GS04M5 | 4  | M5   | 3,5 | 18,0 | 28,0 | 18,0 | 9,5  | 9                                                                                     |
| T29GS0418 | 4  | G1/8 | 5,5 | 21,5 | 33,5 | 24,0 | 13,0 | 13                                                                                    |
| T29GS06M5 | 6  | M5   | 3,5 | 17,6 | 28,0 | 19,0 | 11,5 | 9                                                                                     |
| T29GS0618 | 6  | G1/8 | 5,5 | 21,5 | 33,5 | 22,3 | 13,0 | 13                                                                                    |
| T29GS0614 | 6  | G1/4 | 7,5 | 24,5 | 38,7 | 24,0 | 13,0 | 17                                                                                    |
| T29GS0818 | 8  | G1/8 | 5,5 | 21,5 | 33,5 | 25,5 | 14,5 | 13                                                                                    |
| T29GS0814 | 8  | G1/4 | 7,5 | 24,5 | 38,7 | 27,0 | 14,5 | 17                                                                                    |
|           |    |      |     |      |      |      |      |                                                                                       |
|           |    |      |     |      |      |      |      |                                                                                       |

Di importazione  
Imported



NEW

## INFORMAZIONI TECNICHE AGGIUNTIVE

### Prove di portata

Prova effettuata presso il laboratorio Pneumax su alcuni campioni di regolatori di flusso alle seguenti condizioni:

|             |               |
|-------------|---------------|
| Fluido      | aria filtrata |
| Temperatura | 20°C          |
| Pressione   | 6 bar         |

## ADDITIONAL TECHNICAL INFORMATION

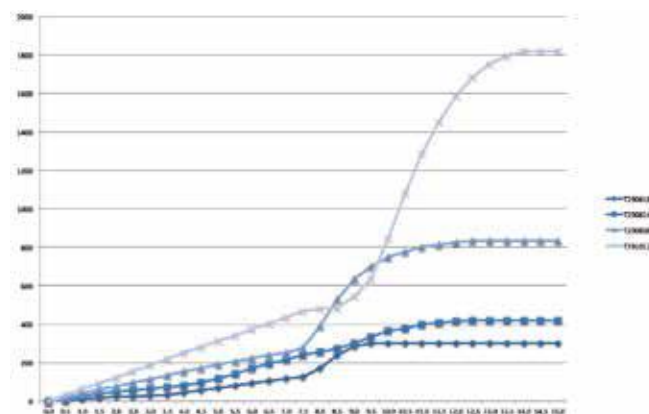
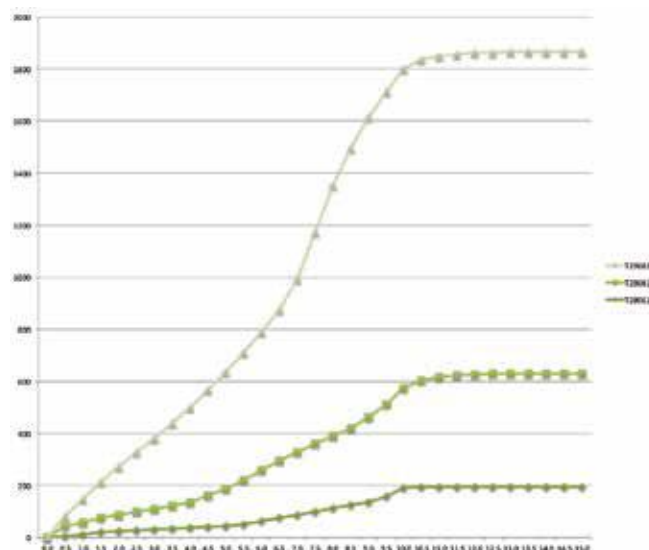
### Flow tests

Test carried out at the Pneumax laboratory on a flow regulators sample under the following conditions:

|             |              |
|-------------|--------------|
| Fluid       | filtered air |
| Temperature | 20°C         |
| Pressure    | 6 bar        |

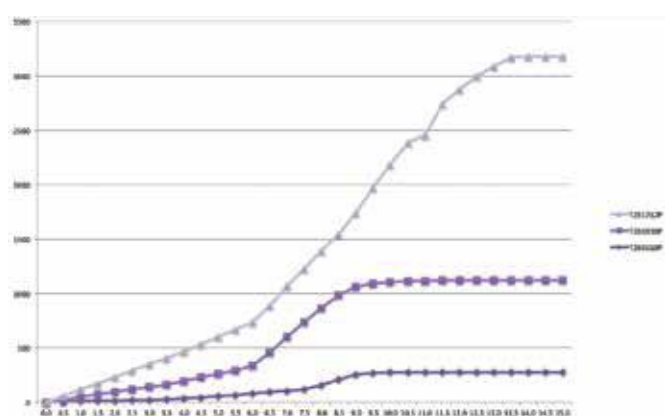
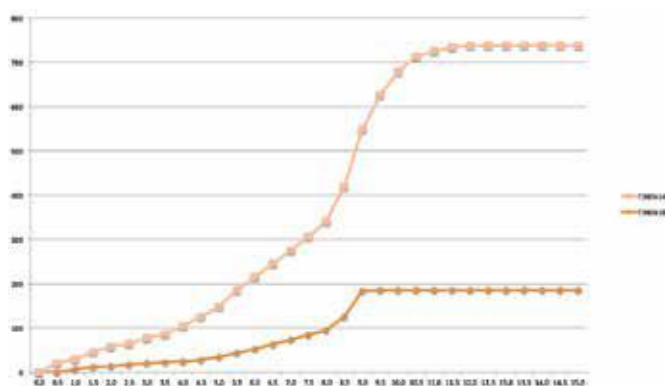
## Risultati della prova • Tests results

| N°giri spillo<br>Needle turns | Portata • Flow (ltr/min) |          |         |          |         |          |          |
|-------------------------------|--------------------------|----------|---------|----------|---------|----------|----------|
|                               | T290618                  | T290618P | T290614 | T290614P | T290838 | T290838P | T291012P |
| 0,0                           | 0                        | 0        | 0       | 0        | 0       | 0        | 0        |
| 0,5                           | 5                        | 5        | 38      | 2        | 40      | 21       | 30       |
| 1,0                           | 10                       | 10       | 48      | 23       | 92      | 40       | 63       |
| 1,5                           | 20                       | 16       | 55      | 41       | 139     | 59       | 94       |
| 2,0                           | 23                       | 22       | 65      | 50       | 185     | 78       | 123      |
| 2,5                           | 27                       | 25       | 72      | 58       | 230     | 96       | 156      |
| 3,0                           | 30                       | 28       | 80      | 64       | 272     | 115      | 186      |
| 3,5                           | 34                       | 33       | 88      | 73       | 318     | 135      | 220      |
| 4,0                           | 37                       | 43       | 100     | 81       | 361     | 153      | 251      |
| 4,5                           | 40                       | 55       | 121     | 97       | 405     | 171      | 282      |
| 5,0                           | 44                       | 68       | 145     | 118      | 447     | 190      | 312      |
| 5,5                           | 52                       | 80       | 170     | 142      | 489     | 207      | 343      |
| 6,0                           | 64                       | 93       | 196     | 169      | 530     | 224      | 375      |
| 6,5                           | 75                       | 105      | 220     | 193      | 580     | 240      | 404      |
| 7,0                           | 88                       | 118      | 241     | 217      | 664     | 251      | 437      |
| 7,5                           | 101                      | 127      | 260     | 238      | 811     | 276      | 466      |
| 8,0                           | 113                      | 172      | 277     | 255      | 963     | 392      | 480      |
| 8,5                           | 126                      | 240      | 294     | 273      | 1075    | 530      | 485      |
| 9,0                           | 136                      | 283      | 325     | 300      | 1154    | 635      | 543      |
| 9,5                           | 158                      | 300      | 355     | 334      | 1200    | 700      | 635      |
| 10,0                          | 191                      |          | 383     | 364      | 1228    | 750      | 845      |
| 10,5                          | 195                      |          | 408     | 379      | 1235    | 778      | 1083     |
| 11,0                          |                          |          | 421     | 400      |         | 802      | 1288     |
| 11,5                          |                          |          | 427     | 407      |         | 814      | 1454     |
| 12,0                          |                          |          | 432     | 414      |         | 824      | 1588     |
| 12,5                          |                          |          | 434     | 417      |         | 833      | 1685     |
| 13,0                          |                          |          | 436     | 418      |         | 835      | 1754     |
| 13,5                          |                          |          |         |          |         |          | 1795     |
| 14,0                          |                          |          |         |          |         |          | 1820     |
| 14,5                          |                          |          |         |          |         |          |          |
| 15,0                          |                          |          |         |          |         |          |          |



## Risultati della prova • Tests results

| N° giri spillo<br>Needle turns | Portata • Flow (ltr/min) |          |         |          |          |           |           |           |
|--------------------------------|--------------------------|----------|---------|----------|----------|-----------|-----------|-----------|
|                                | T280618                  | T280618P | T280614 | T280838P | T281212P | T290838-V | T290838-B | T290838-C |
| 0,0                            | 0                        | 0        | 0       | 0        | 0        | 0         | 0         | 0         |
| 0,5                            | 0                        | 0        | 20      | 22       | 35       | 42        | 39        | 88        |
| 1,0                            | 6                        | 10       | 24      | 40       | 70       | 82        | 79        | 185       |
| 1,5                            | 12                       | 13       | 34      | 59       | 100      | 124       | 122       | 280       |
| 2,0                            | 14                       | 16       | 43      | 78       | 138      | 159       | 163       | 375       |
| 2,5                            | 17                       | 20       | 48      | 100      | 171      | 200       | 205       | 480       |
| 3,0                            | 20                       | 22       | 57      | 120      | 207      | 236       | 244       | 582       |
| 3,5                            | 22                       | 25       | 65      | 141      | 240      | 272       | 282       | 680       |
| 4,0                            | 24                       | 32       | 80      | 160      | 274      | 307       | 320       | 780       |
| 4,5                            | 27                       | 44       | 98      | 184      | 306      | 342       | 357       | 880       |
| 5,0                            | 34                       | 55       | 115     | 207      | 338      | 377       | 392       | 1110      |
| 5,5                            | 44                       | 69       | 142     | 226      | 370      | 411       | 425       | 1428      |
| 6,0                            | 53                       | 81       | 162     | 255      | 402      | 445       | 460       | 1628      |
| 6,5                            | 64                       | 94       | 182     | 360      | 433      | 478       | 496       | 1720      |
| 7,0                            | 74                       | 106      | 202     | 498      | 464      | 529       | 546       | 1767      |
| 7,5                            | 84                       | 120      | 221     | 614      | 494      | 640       | 642       | 1798      |
| 8,0                            | 95                       | 155      | 247     | 712      | 525      | 800       | 793       | 1820      |
| 8,5                            | 125                      | 207      | 294     | 778      | 560      | 970       | 983       | 1825      |
| 9,0                            | 184                      | 250      | 365     | 808      | 678      | 1088      | 1129      |           |
| 9,5                            | 185                      | 269      | 442     | 823      | 877      | 1145      | 1222      |           |
| 10,0                           |                          | 275      | 495     | 830      | 1079     | 1185      |           |           |
| 10,5                           |                          |          | 528     | 835      | 1280     | 1187      |           |           |
| 11,0                           |                          |          | 541     | 838      | 1340     |           |           |           |
| 11,5                           |                          |          | 549     | 843      | 1623     |           |           |           |
| 12,0                           |                          |          | 552     |          | 1760     |           |           |           |
| 12,5                           |                          |          | 553     |          | 1880     |           |           |           |
| 13,0                           |                          |          |         |          | 1970     |           |           |           |
| 13,5                           |                          |          |         |          | 2055     |           |           |           |
| 14,0                           |                          |          |         |          | 2060     |           |           |           |
| 14,5                           |                          |          |         |          |          |           |           |           |
| 15,0                           |                          |          |         |          |          |           |           |           |



| Codice regolatore<br>Regulator code | Portata • Flow (ltr/min)                                  |                                                    |
|-------------------------------------|-----------------------------------------------------------|----------------------------------------------------|
|                                     | 6 bar $\Delta p=1$ Nominale<br>6 bar $\Delta p=1$ Nominal | 6 bar max Scarico libero<br>6 bar max Free exhaust |
| T280618                             | 120                                                       | 185                                                |
| T280618P                            | 170                                                       | 280                                                |
| T280614                             | 320                                                       | 550                                                |
| T280838P                            | 505                                                       | 840                                                |
| T281212P                            | 1230                                                      | 2060                                               |
| T290618                             | 120                                                       | 195                                                |
| T290618P                            | 175                                                       | 300                                                |
| T290614                             | 260                                                       | 435                                                |
| T290614P                            | 245                                                       | 420                                                |
| T290838                             | 790                                                       | 1235                                               |
| T290838P                            | 525                                                       | 835                                                |
| T291012P                            | 1120                                                      | 1820                                               |
| T300618                             | 200                                                       | 330                                                |
| T301014                             | 365                                                       | 655                                                |
| T290838-V                           | 705                                                       | 1185                                               |
| T290838-B                           | 775                                                       | 1070                                               |
| T291212-C                           | 1160                                                      | 1825                                               |

| Aste G1/8" anello tubo 4<br>Stems G1/8" banjo diam. 4 | 1    | 2    | 3    | 4    | 5    | m/a  | um |
|-------------------------------------------------------|------|------|------|------|------|------|----|
| Serraggio OK • Clamping OK                            | 2,5  | 2,5  | 2,5  | 2,5  |      | 2,5  | Nm |
| Anello schiacciato • Ring crushed                     | 3,5  | 3,5  | 3,0  | 3,3  |      | 3,5  | Nm |
| Anello deformato • Deformed ring                      | 5,0  | 5,5  | 4,5  | 5,0  |      | 5,0  | Nm |
| Rottura asta • Stem breakage                          | 16,4 | 16,4 | 15,3 | 14,5 |      | 16,0 | Nm |
| Aste G1/4" anello tubo 6<br>Stems G1/4" banjo diam. 6 | 1    | 2    | 3    | 4    | 5    | m/a  | um |
| Serraggio OK • Clamping OK                            | 2,5  | 3,0  | 2,5  | 2,5  | 3,0  | 3,0  | Nm |
| Anello schiacciato • Ring crushed                     | 4,0  | 5,0  | 5,5  | 6,0  | 6,0  | 5,5  | Nm |
| Anello deformato • Deformed ring                      | 7,0  | 7,5  | 8,0  | 8,5  | 9,0  | 8,0  | Nm |
| Rottura asta • Stem breakage                          | 33,0 | 32,1 | 30,1 | 32,4 | 33,4 | 32,0 | Nm |
| Aste G3/8" anello tubo 8<br>Stems G3/8" banjo diam. 8 | 1    | 2    | 3    | 4    | 5    | m/a  | um |
| Serraggio OK • Clamping OK                            | 4,0  | 5,0  |      |      |      | 4,5  | Nm |
| Anello schiacciato • Ring crushed                     | 8,0  | 8,5  |      |      |      | 8,0  | Nm |
| Anello deformato • Deformed ring                      | 15,0 | 16,0 |      |      |      | 16,0 | Nm |
| Rottura asta • Stem breakage                          | 41,9 | 44,3 |      |      |      | 43,0 | Nm |

## BREVE DESCRIZIONE

I Regolatori di flusso della nostra serie RAP e TRAP sono realizzati in Italia, a garanzia di elevati standard di qualità secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The RAP and TRAP Speed controllers series are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

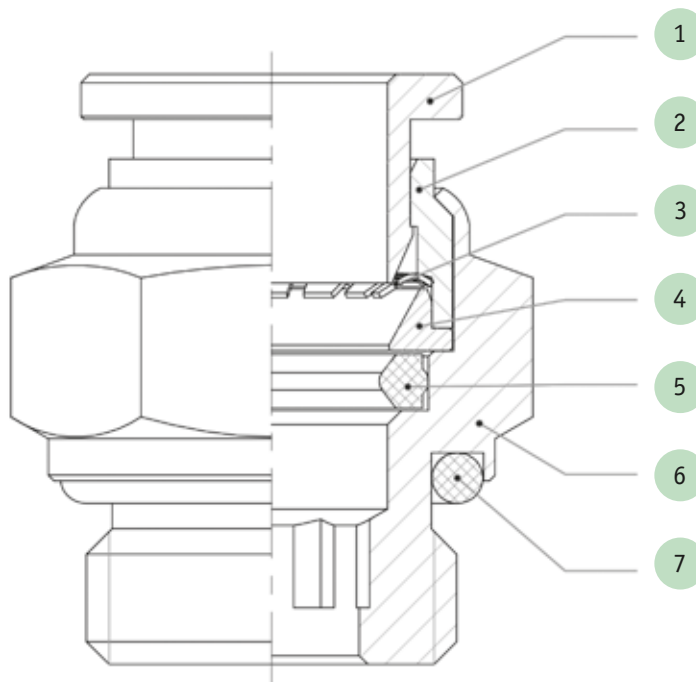
## SCHEDA TECNICA TECHNICAL SHEET

|                                                     |                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br>EMPLOYABLE FLUIDS            |                                                                                              | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br>Compressed air (for different fluid pls contact our Technical Dept.)                                                                                                                                                                                                                                                     |
| APPLICAZIONI<br>APPLICATIONS                        |                                                                                              | Pneumatica, idraulica a bassa pressione, secondo normativa DIN 3861-3870.<br>Pneumatic circuits, low pressure hydraulic applications, according to DIN 3861-3870 norms.                                                                                                                                                                                                                            |
| TUBI CONSIGLIATI<br>SUGGESTED TUBES                 |                                                                                              | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethylene), TCO (Copolyester)                                                                                                                                                                                                                               |
| TOLLERANZE TUBI<br>TUBES TOLERANCES                 |                                                                                              | Diam. da 4 a 10 mm +/- 0,05 Diam. da 12 mm +/- 0,1<br>Diam. between 4 and 10 mm +/- 0,05 Diam. from 12 mm +/- 0,1                                                                                                                                                                                                                                                                                  |
| TEMPERATURE E PRESSIONI<br>TEMPERATURE AND PRESSURE | VALORI LIMITE CONSIGLIATI<br>RECOMMENDED LIMIT VALUES                                        | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato, e comunque si suggerisce di non superare i 15 bar e temperature comprese fra -20°C e +70°C.<br>Temperatures and pressures usually depend by the technical features of the employed tubes, anyway it is suggested a limit working pressure of 15 bar and a temperature range between -20°C and +70°C |
|                                                     | DATI TECNICI DI PROVA<br>TECHNICAL TESTING DATA                                              | A pagg. 34 e 64 sono riportati i dati di resistenza a trazione e i valori limite di utilizzo (Pressione e Temperature) relativi ai principali tubi commerciali.<br>At pages 34 and 64 are indicated the load traction resistance values and the main working and breaking limit (Pressure and Temperature) of the main commercial tubing.                                                          |
|                                                     | NOTA<br>NOTE                                                                                 | Per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br>For more complete informations pls read the technical catalogue of your tube supplier.                                                                                                                                                                                                                      |
| FILETTATURE<br>THREAD TYPE                          |                                                                                              | BSP cilindrica UNI-ISO 228<br>BSP parallell UNI-ISO 228                                                                                                                                                                                                                                                                                                                                            |
| MATERIALI<br>MATERIALS                              | corpo RAP, colonnina di regolazione, Spintore "OT"<br>RAP body, regulation stem, "OT" sleeve | Ottone UNI EN 12164 CW614N<br>Brass UNI EN 12164 CW614N                                                                                                                                                                                                                                                                                                                                            |
|                                                     | corpo TRAP, spintore, distanziale, sottomolla<br>TRAP body, sleeve, collar and back ring     | POM copolimero ISO1043-1<br>POM copolymer ISO1043-1                                                                                                                                                                                                                                                                                                                                                |
|                                                     | pinza<br>spring                                                                              | Acciaio Inox AISI 301 austenitico<br>Stainless steel AISI 301 austenitic                                                                                                                                                                                                                                                                                                                           |
|                                                     | guarnizioni tenuta<br>seals                                                                  | NBR 70 DWGV-EN549 UL157<br>NBR 70 DWGV-EN549 UL157                                                                                                                                                                                                                                                                                                                                                 |





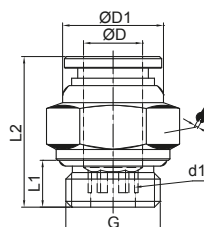
- 1 ANELLO SPINGITORE  
*THRUST SLEEVE*
- 2 DISTANZIALE DI FERMO  
*LOCK RING*
- 3 PINZA DI AGGRAFFAGGIO  
*CRIMPING GRIPPER*
- 4 ANELLO DI SOSTEGNO  
*SUPPORTING RING*
- 5 GUARNIZIONE DI TENUTA  
*SEAL PACKING*
- 6 CORPO DEL RACCORDO  
*FITTING BODY*
- 7 O-RING DI TENUTA  
*O-RING SEAL*



## ART. SSC-G

Diritto filetto a maschio  
Straight male parallel adaptor

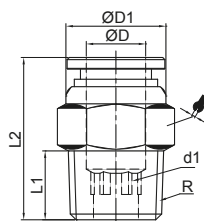
| CODICE    | ØD | G   | L1  | L2   | Ø  |    |    |
|-----------|----|-----|-----|------|----|----|----|
| SSC04-M5  | 4  | M5  | 4   | 19,3 | 2  | 10 | 10 |
| SSC04-G01 | 4  | 1/8 | 5,5 | 17,3 | 3  | 13 | 10 |
| SSC04-G02 | 4  | 1/4 | 6,5 | 21,2 | 3  | 17 | 10 |
| SSC06-M5  | 6  | M5  | 4   | 20,6 | 2  | 12 | 10 |
| SSC06-G01 | 6  | 1/8 | 5,5 | 18,8 | 4  | 13 | 10 |
| SSC06-G02 | 6  | 1/4 | 6,5 | 18,8 | 4  | 16 | 10 |
| SSC08-G01 | 8  | 1/8 | 5,5 | 23,2 | 5  | 14 | 10 |
| SSC08-G02 | 8  | 1/4 | 6,5 | 20,7 | 6  | 16 | 10 |
| SSC08-G03 | 8  | 3/8 | 7,5 | 22,5 | 6  | 21 | 10 |
| SSC10-G02 | 10 | 1/4 | 6,5 | 26,4 | 8  | 17 | 10 |
| SSC10-G03 | 10 | 3/8 | 7,5 | 22,9 | 8  | 20 | 5  |
| SSC10-G04 | 10 | 1/2 | 9,0 | 24   | 8  | 24 | 5  |
| SSC12-G02 | 12 | 1/4 | 6,5 | 31,3 | 8  | 21 | 5  |
| SSC12-G03 | 12 | 3/8 | 7,5 | 25,4 | 10 | 20 | 5  |
| SSC12-G04 | 12 | 1/2 | 9   | 25,4 | 10 | 24 | 5  |
| SSC14-G03 | 14 | 3/8 | 7,5 | 33   | 10 | 22 | 5  |
| SSC14-G04 | 14 | 1/2 | 9,0 | 32   | 10 | 24 | 5  |
|           |    |     |     |      |    |    |    |
|           |    |     |     |      |    |    |    |



## ART. SSC

Diritto filetto conico maschio  
Straight male tapered adaptor

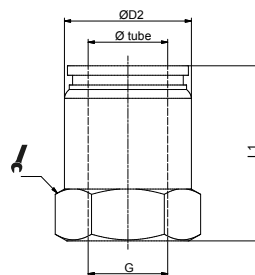
| CODICE   | ØD | R   | L1   | L2   | Ø  |    |    |
|----------|----|-----|------|------|----|----|----|
| SSC04-01 | 4  | 1/8 | 7,5  | 16,8 | 3  | 10 | 10 |
| SSC04-02 | 4  | 1/4 | 9,5  | 21   | 3  | 14 | 10 |
| SSC06-01 | 6  | 1/8 | 7,5  | 19,3 | 4  | 12 | 10 |
| SSC06-02 | 6  | 1/4 | 9,5  | 19,8 | 4  | 14 | 10 |
| SSC06-03 | 6  | 3/8 | 10,5 | 22   | 4  | 17 | 10 |
| SSC06-04 | 6  | 1/2 | 12,5 | 24   | 4  | 21 | 10 |
| SSC08-01 | 8  | 1/8 | 7,5  | 23,7 | 6  | 14 | 10 |
| SSC08-02 | 8  | 1/4 | 9,5  | 22,2 | 6  | 14 | 10 |
| SSC08-03 | 8  | 3/8 | 10,5 | 22,5 | 6  | 17 | 10 |
| SSC08-04 | 8  | 1/2 | 12,5 | 24   | 6  | 21 | 10 |
| SSC10-02 | 10 | 1/4 | 9,5  | 26,4 | 8  | 17 | 10 |
| SSC10-03 | 10 | 3/8 | 10,5 | 22,9 | 8  | 17 | 5  |
| SSC10-04 | 10 | 1/2 | 12,5 | 25   | 8  | 21 | 5  |
| SSC12-02 | 12 | 1/4 | 9,5  | 31,3 | 8  | 21 | 5  |
| SSC12-03 | 12 | 3/8 | 10,5 | 26,4 | 10 | 20 | 5  |
| SSC12-04 | 12 | 1/2 | 13,5 | 26,4 | 10 | 21 | 5  |
| SSC14-04 | 14 | 1/2 | 12,5 | 33   | 10 | 22 | 5  |
|          |    |     |      |      |    |    |    |
|          |    |     |      |      |    |    |    |



**ART. SSCF-G**

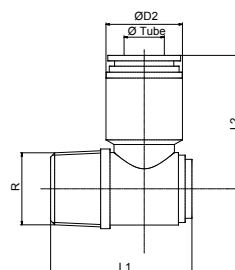
Diritto femmina (filetto cilindrico)  
*Straight female adaptor (parallel thread)*

| CODICE    | ØD | G   | L1   | L2   |  |  |
|-----------|----|-----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SSCF04-M5 | 4  | M5  | 20,2 | 10,5 | 12                                                                                | 10                                                                                |
| SSCF04-01 | 4  | 1/8 | 21,2 | 10,5 | 12                                                                                | 10                                                                                |
| SSCF04-02 | 4  | 1/4 | 21   | 10,5 | 17                                                                                | 10                                                                                |
| SSCF06-01 | 6  | 1/8 | 21,6 | 12,5 | 14                                                                                | 10                                                                                |
| SSCF06-02 | 6  | 1/4 | 21   | 12,5 | 17                                                                                | 10                                                                                |
| SSCF08-01 | 8  | 1/8 | 25   | 14,5 | 17                                                                                | 10                                                                                |
| SSCF08-02 | 8  | 1/4 | 24,5 | 14,5 | 17                                                                                | 10                                                                                |


**ART. SSH**

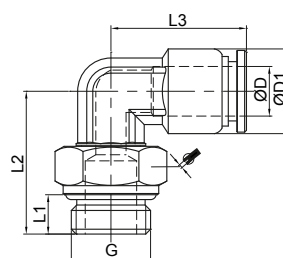
Anello semplice girevole con asta conico  
*Complete single banjo tapered*

| CODICE   | ØD | R   | L1   | L2   | D2   |  |
|----------|----|-----|------|------|------|-----------------------------------------------------------------------------------|
| SSH04-01 | 4  | 1/8 | 25,5 | 26   | 10,5 | 10                                                                                |
| SSH06-01 | 6  | 1/8 | 25,5 | 26   | 12,5 | 10                                                                                |
| SSH06-02 | 6  | 1/4 | 28   | 28   | 12,5 | 10                                                                                |
| SSH08-01 | 8  | 1/8 | 25,5 | 29   | 14,5 | 10                                                                                |
| SSH08-02 | 8  | 1/4 | 28   | 30   | 14,5 | 10                                                                                |
| SSH08-03 | 8  | 3/8 | 33,2 | 33   | 14,5 | 10                                                                                |
| SSH10-02 | 10 | 1/4 | 28   | 32   | 17,5 | 10                                                                                |
| SSH10-03 | 10 | 3/8 | 33,2 | 35   | 17,5 | 10                                                                                |
| SSH12-02 | 12 | 1/4 | 28   | 34   | 20,5 | 10                                                                                |
| SSH12-03 | 12 | 3/8 | 33,2 | 36,5 | 20,5 | 10                                                                                |
| SSH12-04 | 12 | 1/2 | 37,2 | 38   | 20,5 | 10                                                                                |


**ART. SSL-G**

Gomito girevole filetto cilindrico maschio  
*Swivel L male parallel adaptor*

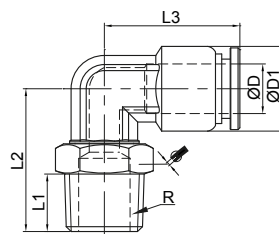
| CODICE    | ØD | G   | L1  | L2   | L3   | ØD1  |  |  |
|-----------|----|-----|-----|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SSL04-M5  | 4  | M5  | 4   | 17,5 | 18,3 | 10   | 10                                                                                  | 10                                                                                  |
| SSL04-G01 | 4  | 1/8 | 5,5 | 20   | 18,3 | 10   | 13                                                                                  | 10                                                                                  |
| SSL04-G02 | 4  | 1/4 | 6,5 | 27,5 | 23   | 10,5 | 14                                                                                  | 10                                                                                  |
| SSL06-M5  | 6  | M5  | 4   | 17,5 | 20,3 | 12   | 10                                                                                  | 10                                                                                  |
| SSL06-G01 | 6  | 1/8 | 5,5 | 22   | 20,3 | 12   | 13                                                                                  | 10                                                                                  |
| SSL06-G02 | 6  | 1/4 | 6,5 | 23   | 20,3 | 12   | 16                                                                                  | 10                                                                                  |
| SSL06-G03 | 6  | 3/8 | 7,5 | 28   | 24   | 12,5 | 17                                                                                  | 10                                                                                  |
| SSL08-G01 | 8  | 1/8 | 5,5 | 22,5 | 22,3 | 14   | 13                                                                                  | 10                                                                                  |
| SSL08-G02 | 8  | 1/4 | 6,5 | 23,5 | 22,3 | 14   | 16                                                                                  | 5                                                                                   |
| SSL08-G03 | 8  | 3/8 | 7,5 | 28   | 27   | 14,5 | 17                                                                                  | 5                                                                                   |
| SSL10-G01 | 10 | 1/8 | 5,5 | 32,3 | 30,5 | 17,5 | 17                                                                                  | 5                                                                                   |
| SSL10-G02 | 10 | 1/4 | 6,5 | 31   | 26,4 | 17   | 17                                                                                  | 5                                                                                   |
| SSL10-G03 | 10 | 3/8 | 7,5 | 28,5 | 26,4 | 17   | 20                                                                                  | 5                                                                                   |
| SSL10-G04 | 10 | 1/2 | 9   | 31   | 30,5 | 17,5 | 21                                                                                  | 5                                                                                   |
| SSL12-G02 | 12 | 1/4 | 6,5 | 30,5 | 34   | 20,5 | 14                                                                                  | 5                                                                                   |
| SSL12-G03 | 12 | 3/8 | 7,5 | 30   | 29,4 | 20   | 20                                                                                  | 5                                                                                   |
| SSL12-G04 | 12 | 1/2 | 9   | 30,5 | 29,4 | 20   | 24                                                                                  | 5                                                                                   |
| SSL14-G03 | 14 | 3/8 | 7,5 | 33   | 37   | 22   | 17                                                                                  | 5                                                                                   |
| SSL14-G04 | 12 | 1/2 | 9   | 35   | 37   | 22   | 21                                                                                  | 5                                                                                   |



## ART. SSL

Gomito girevole filetto conico maschio  
Swivel L tapered adaptor

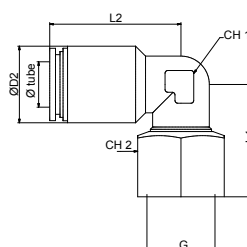
| CODICE   | ØD | R   | L1   | L2   | L3   | ØD1  |  |  |
|----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SSL04-01 | 4  | 1/8 | 7,5  | 20   | 18,3 | 10   | 12                                                                                | 10                                                                                |
| SSL04-02 | 4  | 1/4 | 9,5  | 27,5 | 23   | 10,5 | 14                                                                                | 10                                                                                |
| SSL06-01 | 6  | 1/8 | 7,5  | 23   | 20,3 | 12   | 12                                                                                | 10                                                                                |
| SSL06-02 | 6  | 1/4 | 9,5  | 23   | 20,3 | 12   | 14                                                                                | 10                                                                                |
| SSL06-03 | 6  | 3/8 | 10,5 | 28   | 24   | 12,5 | 17                                                                                | 10                                                                                |
| SSL08-01 | 8  | 1/8 | 7,5  | 23,5 | 22,3 | 14   | 12                                                                                | 10                                                                                |
| SSL08-02 | 8  | 1/4 | 9,5  | 23,5 | 22,3 | 14   | 14                                                                                | 5                                                                                 |
| SSL08-03 | 8  | 3/8 | 10,5 | 28   | 27   | 14,5 | 17                                                                                | 10                                                                                |
| SSL10-02 | 10 | 1/4 | 9,5  | 33   | 26,4 | 17   | 17                                                                                | 5                                                                                 |
| SSL10-03 | 10 | 3/8 | 10,5 | 30   | 26,4 | 17   | 17                                                                                | 5                                                                                 |
| SSL12-02 | 12 | 1/4 | 9,5  | 30,5 | 34   | 20,5 | 14                                                                                | 5                                                                                 |
| SSL12-03 | 12 | 3/8 | 10,5 | 31,5 | 29,4 | 20   | 17                                                                                | 5                                                                                 |
| SSL12-04 | 12 | 1/2 | 13,5 | 33,5 | 29,4 | 20   | 21                                                                                | 5                                                                                 |



## ART. SSLF

Gomito girevole femmina (filetto cilindrico)  
Female swivel L adaptor (parallel thread)

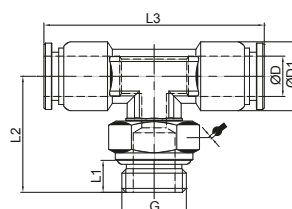
| CODICE    | ØD | G   | L1   | L2 | D2   |  |  |  |
|-----------|----|-----|------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SSLF04-01 | 4  | 1/8 | 25,5 | 23 | 10,5 | 9,2                                                                                 | 10                                                                                  | 10                                                                                  |
| SSLF06-01 | 6  | 1/8 | 27   | 24 | 12,5 | 9,2                                                                                 | 14                                                                                  | 10                                                                                  |
| SSLF06-02 | 6  | 1/4 | 28   | 24 | 12,5 | 9,2                                                                                 | 17                                                                                  | 10                                                                                  |
| SSLF08-01 | 8  | 1/8 | 27   | 27 | 14,5 | 11,2                                                                                | 14                                                                                  | 10                                                                                  |
| SSLF08-02 | 8  | 1/4 | 28   | 27 | 14,5 | 11,2                                                                                | 17                                                                                  | 10                                                                                  |
|           |    |     |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |    |     |      |    |      |                                                                                     |                                                                                     |                                                                                     |



## ART. SSB-G

T centrale girevole filetto cilindrico  
Swivel male stud T parallel

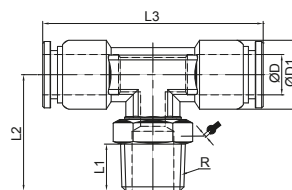
| CODICE    | ØD | G   | L1  | L2   | L3   | ØD1 |  |  |
|-----------|----|-----|-----|------|------|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SSB04-M5  | 4  | M5  | 4   | 17,5 | 36,6 | 10  | 10                                                                                  | 10                                                                                  |
| SSB04-G01 | 4  | 1/8 | 5,5 | 20   | 36,6 | 10  | 13                                                                                  | 10                                                                                  |
| SSB06-M5  | 6  | M5  | 4   | 17,5 | 40,6 | 12  | 10                                                                                  | 5                                                                                   |
| SSB06-G01 | 6  | 1/8 | 5,5 | 22   | 40,6 | 12  | 13                                                                                  | 5                                                                                   |
| SSB06-G02 | 6  | 1/4 | 6,5 | 23   | 40,6 | 12  | 16                                                                                  | 5                                                                                   |
| SSB08-G01 | 8  | 1/8 | 5,5 | 22,5 | 44,6 | 14  | 13                                                                                  | 5                                                                                   |
| SSB08-G02 | 8  | 1/4 | 6,5 | 23,5 | 44,6 | 14  | 16                                                                                  | 5                                                                                   |
| SSB10-G02 | 10 | 1/4 | 6,5 | 31   | 52,8 | 17  | 17                                                                                  | 5                                                                                   |
| SSB10-G03 | 10 | 3/8 | 7,5 | 28,5 | 52,8 | 17  | 20                                                                                  | 5                                                                                   |
| SSB12-G03 | 12 | 3/8 | 7,5 | 30   | 58,8 | 20  | 20                                                                                  | 5                                                                                   |
| SSB12-G04 | 12 | 1/2 | 9   | 30,5 | 58,8 | 20  | 24                                                                                  | 5                                                                                   |
|           |    |     |     |      |      |     |                                                                                     |                                                                                     |



**ART. SSB**

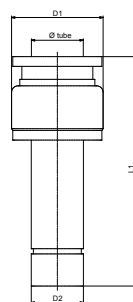
T centrale girevole filetto conico  
*Swivel male stud T tapered*

| CODICE   | ØD | R   | L1   | L2   | L3   | ØD1 |  |  |
|----------|----|-----|------|------|------|-----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SSB04-01 | 4  | 1/8 | 7,5  | 20   | 36,6 | 10  | 12                                                                                | 10                                                                                |
| SSB06-01 | 6  | 1/8 | 7,5  | 23   | 40,6 | 12  | 12                                                                                | 5                                                                                 |
| SSB06-02 | 6  | 1/4 | 9,5  | 23   | 40,6 | 12  | 14                                                                                | 5                                                                                 |
| SSB08-01 | 8  | 1/8 | 7,5  | 23,5 | 44,6 | 14  | 12                                                                                | 5                                                                                 |
| SSB08-02 | 8  | 1/4 | 9,5  | 23,5 | 44,6 | 14  | 14                                                                                | 5                                                                                 |
| SSB10-02 | 10 | 1/4 | 9,5  | 33   | 52,8 | 17  | 17                                                                                | 5                                                                                 |
| SSB10-03 | 10 | 3/8 | 10,5 | 30   | 52,8 | 17  | 17                                                                                | 5                                                                                 |
| SSB12-03 | 12 | 3/8 | 10,5 | 31,5 | 58,8 | 20  | 17                                                                                | 5                                                                                 |
| SSB12-04 | 12 | 1/2 | 13,5 | 33,5 | 58,8 | 20  | 21                                                                                | 5                                                                                 |
|          |    |     |      |      |      |     |                                                                                   |                                                                                   |
|          |    |     |      |      |      |     |                                                                                   |                                                                                   |


**ART. SSGJ**

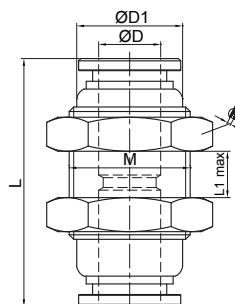
Riduzione con codolo  
*Plug-in reducer*

| CODICE    | ØD | D1   | D2 | L1 |  |  |
|-----------|----|------|----|----|--|-----------------------------------------------------------------------------------|
| SSGJ06-04 | 4  | 10,5 | 6  | 41 |  | 10                                                                                |
| SSGJ08-06 | 6  | 12,5 | 8  | 44 |  | 10                                                                                |
| SSGJ08-04 | 4  | 10,5 | 8  | 43 |  | 10                                                                                |
| SSGJ10-08 | 8  | 14,5 | 10 | 47 |  | 10                                                                                |
| SSGJ10-06 | 6  | 12,5 | 10 | 47 |  | 10                                                                                |
| SSGJ12-10 | 10 | 17,5 | 12 | 53 |  | 10                                                                                |
| SSGJ12-08 | 8  | 14,5 | 12 | 52 |  | 10                                                                                |
| SSGJ14-10 | 10 | 17,5 | 14 | 56 |  | 10                                                                                |
|           |    |      |    |    |  |                                                                                   |
|           |    |      |    |    |  |                                                                                   |


**ART. SSM**

Passaparete innestabile  
*Bulkhead connector*

| CODICE | ØD | ØD1 | L    | L1 max | M     |  |  |
|--------|----|-----|------|--------|-------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SSM04  | 4  | 10  | 27   | 8      | M12x1 | 14                                                                                  | 10                                                                                  |
| SSM06  | 6  | 12  | 29,5 | 8      | M14x1 | 17                                                                                  | 10                                                                                  |
| SSM08  | 8  | 14  | 32,5 | 8,5    | M16x1 | 19                                                                                  | 5                                                                                   |
| SSM10  | 10 | 17  | 36,8 | 9,5    | M20x1 | 24                                                                                  | 5                                                                                   |
| SSM12  | 12 | 20  | 39,8 | 11,5   | M22x1 | 26                                                                                  | 5                                                                                   |
| SSM14  | 14 | 24  | 42   | 17     | M24x1 | 27                                                                                  | 5                                                                                   |
|        |    |     |      |        |       |                                                                                     |                                                                                     |
|        |    |     |      |        |       |                                                                                     |                                                                                     |
|        |    |     |      |        |       |                                                                                     |                                                                                     |
|        |    |     |      |        |       |                                                                                     |                                                                                     |

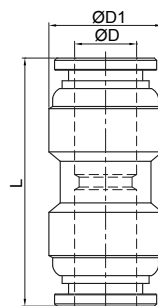




## ART. SSU

Diritto innestabile uguale  
Equal straight connector

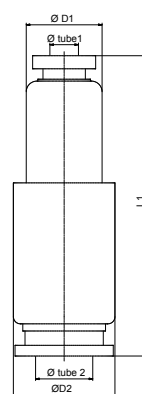
| CODICE | ØD | ØD1 | L    |  |    |
|--------|----|-----|------|--|----|
| SSU04  | 4  | 11  | 27   |  | 10 |
| SSU06  | 6  | 13  | 29,5 |  | 10 |
| SSU08  | 8  | 15  | 32,5 |  | 10 |
| SSU10  | 10 | 18  | 36,8 |  | 5  |
| SSU12  | 12 | 21  | 39,8 |  | 5  |
| SSU14  | 14 | 22  | 42   |  | 5  |
|        |    |     |      |  |    |
|        |    |     |      |  |    |



## ART. SSG

Diritto innestabile riduzione  
Reducer straight connector

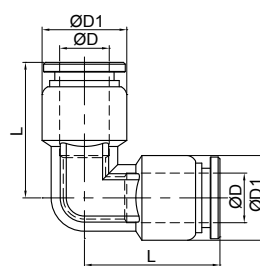
| CODICE   | ØD1 | ØD2 | D1   | D2   | L1   |    |
|----------|-----|-----|------|------|------|----|
| SSG04-06 | 4   | 6   | 10,5 | 12,5 | 30,6 | 10 |
| SSG06-08 | 6   | 8   | 12,5 | 14,5 | 32,8 | 10 |
| SSG08-10 | 8   | 10  | 14,5 | 17,5 | 35   | 10 |
| SSG10-12 | 10  | 12  | 17,5 | 20,5 | 38,2 | 10 |
|          |     |     |      |      |      |    |
|          |     |     |      |      |      |    |
|          |     |     |      |      |      |    |



## ART. SSV

Gomito innestabile  
L connector

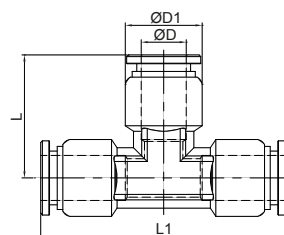
| CODICE | ØD | ØD1 | L    |  |    |
|--------|----|-----|------|--|----|
| SSV04  | 4  | 10  | 18,3 |  | 10 |
| SSV06  | 6  | 12  | 20,3 |  | 10 |
| SSV08  | 8  | 14  | 22,3 |  | 10 |
| SSV10  | 10 | 17  | 26,4 |  | 5  |
| SSV12  | 12 | 20  | 29,4 |  | 5  |
| SSV14  | 14 | 22  | 37   |  | 5  |
|        |    |     |      |  |    |
|        |    |     |      |  |    |



## ART. SSE

T innestabile  
T connector

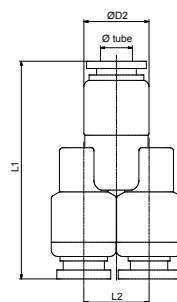
| CODICE | ØD | ØD1 | L    | L1   |    |
|--------|----|-----|------|------|----|
| SSE04  | 4  | 10  | 18,3 | 36,6 | 10 |
| SSE06  | 6  | 12  | 20,3 | 40,6 | 5  |
| SSE08  | 8  | 14  | 22,3 | 44,6 | 5  |
| SSE10  | 10 | 17  | 26,4 | 52,8 | 5  |
| SSE12  | 12 | 20  | 29,4 | 58,8 | 5  |
| SSE14  | 14 | 14  | 37   | 74   | 5  |
|        |    |     |      |      |    |
|        |    |     |      |      |    |



## ART. SSY

Y innestabile  
Y connector

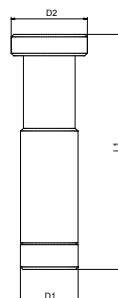
| CODICE | ØD | L1   | L2 | D2 |  |    |
|--------|----|------|----|----|--|----|
| SSY04  | 4  | 36   | 14 | 11 |  | 10 |
| SSY06  | 6  | 37,5 | 16 | 13 |  | 10 |
| SSY08  | 8  | 41,3 | 18 | 15 |  | 10 |
| SSY10  | 10 | 44,3 | 21 | 18 |  | 10 |
| SSY12  | 12 | 51   | 24 | 21 |  | 10 |
|        |    |      |    |    |  |    |
|        |    |      |    |    |  |    |
|        |    |      |    |    |  |    |



## ART. SSP

Tappo  
Plug

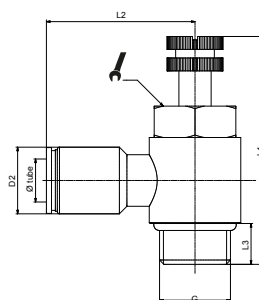
| CODICE | D1 | D2 | L1 |  |  |    |
|--------|----|----|----|--|--|----|
| SSP04  | 6  | 4  | 28 |  |  | 10 |
| SSP06  | 8  | 6  | 33 |  |  | 10 |
| SSP08  | 10 | 8  | 37 |  |  | 10 |
| SSP10  | 12 | 10 | 42 |  |  | 10 |
| SSP12  | 14 | 12 | 44 |  |  | 10 |
| SSP14  | 16 | 14 | 46 |  |  | 10 |
|        |    |    |    |  |  |    |
|        |    |    |    |  |  |    |
|        |    |    |    |  |  |    |



## ART. SSN-G

Regolatore di flusso per cilindro girevole  
Swivel flow regulator for cylinder

| CODICE    | ØD | G   | L1   | L2   | L3   | D2   |    |    |
|-----------|----|-----|------|------|------|------|----|----|
| SSN04-G01 | 4  | 1/8 | 34,5 | 28   | 7,5  | 10,5 | 12 | 10 |
| SSN04-G02 | 4  | 1/4 | 43   | 28   | 9,5  | 10,5 | 14 | 10 |
| SSN06-G01 | 6  | 1/8 | 34,5 | 28   | 7,5  | 12,5 | 12 | 10 |
| SSN06-G02 | 6  | 1/4 | 43   | 28   | 9,5  | 12,5 | 14 | 10 |
| SSN08-G01 | 8  | 1/8 | 34,5 | 30   | 7,5  | 14,5 | 12 | 10 |
| SSN08-G02 | 8  | 1/4 | 43   | 30   | 9,5  | 14,5 | 14 | 10 |
| SSN08-G03 | 8  | 3/8 | 47,3 | 33   | 10,5 | 14,5 | 19 | 10 |
| SSN08-G04 | 8  | 1/2 | 51   | 33   | 12,5 | 14,5 | 22 | 10 |
| SSN10-G02 | 10 | 1/4 | 43   | 32,5 | 9,5  | 17,5 | 14 | 10 |
| SSN10-G03 | 10 | 3/8 | 47,3 | 35   | 10,5 | 17,5 | 19 | 10 |
| SSN10-G04 | 10 | 1/2 | 51   | 35   | 12,5 | 17,5 | 22 | 10 |
| SSN12-G02 | 12 | 1/4 | 43   | 36   | 9,5  | 20,5 | 14 | 10 |
| SSN12-G03 | 12 | 3/8 | 47,3 | 38   | 10,5 | 20,5 | 19 | 10 |
| SSN12-G04 | 12 | 1/2 | 51   | 38   | 12,5 | 20,5 | 22 | 10 |



**BREVE DESCRIZIONE**

I raccordi automatici della nostra serie inox SS sono "oil free" e realizzati in conformità agli standard di qualità secondo le normative ISO di riferimento e rispondono alle seguenti specifiche tecniche e applicative.

**SHORT DESCRIPTION**

The stainless steel push-in fittings "SS" series are "oil free" and manufactured according to the ISO norms of reference, and suitable for the following technical and applicative specifications.

**SCHEMA TECNICA TECHNICAL SHEET**

|                                                                   |                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br>EMPLOYABLE FLUIDS                          |                                                                                              | Aria compressa, acqua, vapore (per altri fluidi sentire il nostro Ufficio Tecnico)<br><i>Compressed air, water, steam (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                                                                           |
| APPLICAZIONI<br>APPLICATIONS                                      |                                                                                              | Pneumatica applicata a settori industriali quali: medicale, chimico e alimentare. In generale ove siano richiesti requisiti di anti-corrosione, resistenza agli acidi e temperature elevate.<br><i>Pneumatic equipments which are applied widely in the range of Industry such as food service industry, chemical industry and medical industry. In general where required to ensure anti-corrosion and acid resistant, or usage at high temperature.</i> |
| TUBI CONSIGLIATI<br>SUGGESTED TUBES                               |                                                                                              | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br><i>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethylene), TCO (Copolyester)</i>                                                                                                                                                                                                                                                                               |
| TOLLERANZE TUBI<br>TUBES TOLERANCES                               |                                                                                              | Diam. da 4 a 10 mm +/- 0,05 Diam. da 12 mm +/- 0,1<br><i>Diam. between 4 and 10 mm +/- 0,05 Diam. from 12 mm +/- 0,1</i>                                                                                                                                                                                                                                                                                                                                  |
| VALORI<br>LIMITE<br>CONSIGLIATI<br>RECOMMENDED<br>LIMIT<br>VALUES | TEMPERATURE<br>TEMPERATURES                                                                  | Le temperature di esercizio sono comprese in un campo fra -20°C e +120°C.<br><i>The working temperatures range is between -20°C and +120°C</i>                                                                                                                                                                                                                                                                                                            |
|                                                                   | PRESSIONI<br>PRESSURES                                                                       | Le pressioni di esercizio sono comprese in un campo fra 0 e 1,2MPa (0-12bar).<br><i>The working pressure range is between 0 and 1,2MPa (0-12Bar).</i>                                                                                                                                                                                                                                                                                                     |
|                                                                   | NOTA<br>NOTE                                                                                 | Per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br><i>For more complete informations pls read the technical catalogue of your tube supplier.</i>                                                                                                                                                                                                                                                                      |
| FILETTATURE<br>THREAD TYPE                                        |                                                                                              | BSP cilindrica UNI-ISO 228; BSP conica UNI-ISO 7; Metrica ISO/R 262.<br><i>BSP parallell UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                                                                                                                                                                                                                                                                                         |
| MATERIALI<br>MATERIALS                                            | corpo, spintore,<br>distanziale, sottomolla<br><i>body, sleeve, collar<br/>and back ring</i> | Acciaio inox SUS316<br><i>Stainless Steel SUS316</i>                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                   | pinza<br><i>spring</i>                                                                       | Acciaio Inox SUS301<br><i>Stainless Steel SUS301</i>                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                   | guarnizioni tenuta<br><i>seals</i>                                                           | Viton/FKM/FPM<br><i>FPM/FKM/Viton</i>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NOTA IMPORTANTE<br>IMPORTANT NOTE                                 |                                                                                              | La materia prima è amagnetica, comunque dopo la lavorazione a freddo, una piccola quantità di austenite potrebbe essere trasformata in martensite, che potrebbe essere molto debolmente magnetica.<br><i>The raw material is non-magnetic, however after cold working, a small amount of austenite could be transformed into martensite, which could be very weakly magnetic.</i>                                                                         |

## Esito dei test di compatibilità alle specifiche FDA effettuati da **TUV NORD** per conto del produttore

|          | TEST REPORT N. | DATA       | DURATA (GIORNI) | COMPONENTE                  | MATERIALE                     | OBIETTIVO DEL TEST                                                                                                                                                      |
|----------|----------------|------------|-----------------|-----------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | TRHZ1208110    | 06/08/2012 | 6               | GUARNIZIONE DI TENUTA       | VITON FPM FLUORO-RUBBER (FKM) | CONFORMITA' ALLE SPECIFICHE FDA PER DETERMINARE IL GRADO DI ESTRAZIONE DI CLOROFORMIO SOLUBILE (ppm) NELLE GUARNIZIONI DI TENUTA PER CHIUSURA DI CONTENITORI ALIMENTARI |
| <b>B</b> | TRHZ1208111    | 06/08/2012 | 6               | RACCORDO AD L MOD. SSV      | ACCIAIO INOSSIDABILE SUS316L  | DETERMINAZIONE DEL CONTENUTO TOTALE DI CROMO                                                                                                                            |
| <b>C</b> | TRHZ1208112    | 06/08/2012 | 6               | RACCORDO DIRITTO MOD. SSC-G | ACCIAIO INOSSIDABILE SUS316L  | DETERMINAZIONE DEL CONTENUTO TOTALE DI CROMO                                                                                                                            |

|          | METODO DEL TEST (ref. FDA 21 CFR 177.1210)                 | RISULTATO                                                | CONCLUSIONI                                                                                                                                                |
|----------|------------------------------------------------------------|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | IMMERSIONE PER 2 ORE IN ACQUA DISTILLATA A 212°F           | VALORE RILEVATO 13,0<br>VALORE LIMITE 50,0               | IL RISULTATO DEL TEST SUI CAMPIONI PRESENTATI SONO CONFORMI ALLE SPECIFICHE FDA PER DETERMINARE LA QUANTITA' DI ESTRATTIVI DI CLOROFORMIO SOLUBILE AMMESSI |
|          | IMMERSIONE PER 2 ORE IN ALCOHOL 8% A 212°F                 | VALORE RILEVATO 7,0<br>VALORE LIMITE 50,0                |                                                                                                                                                            |
|          | IMMERSIONE PER 2 ORE IN EPTANO NORMALE (N-EPTANO) A 150 °F | VALORE RILEVATO 11,5<br>VALORE LIMITE 50,0               |                                                                                                                                                            |
| <b>B</b> | ANALISI VOLUMETRICA (TITOLAZIONE)                          | VALORE RILEVATO 16,38%<br>VALORE RICHIESTO $\geq 10,5\%$ | IL RISULTATO DEL TEST SUL CAMPIONE PRESENTATO DETERMINA CHE ESSO E' IDONEO AL CONTATTO CON GLI ALIMENTI                                                    |
| <b>C</b> | ANALISI VOLUMETRICA (TITOLAZIONE)                          | VALORE RILEVATO 17,18%<br>VALORE RICHIESTO $\geq 10,5\%$ | IL RISULTATO DEL TEST SUL CAMPIONE PRESENTATO DETERMINA CHE ESSO E' IDONEO AL CONTATTO CON GLI ALIMENTI                                                    |



## Test results to FDA specifications compatibility, made by **TUV NORD** on behalf of the manufacturer

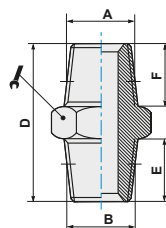
|          | TEST REPORT N. | DATE       | PERIOD (DAYS) | ITEM                        | MAIN MATERIAL                | TEST PURPOSE                                                                                                                                                                               |
|----------|----------------|------------|---------------|-----------------------------|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | TRHZ1208110    | 06/08/2012 | 6             | SEAL RING                   | FPM FLUORORUBBER VITON (FKM) | THE COMPLIANCE WITH THE FOOD AND DRUG ADMINISTRATION REGULATIONS FOR DETERMINING THE AMOUNT OF CHLOROFORM-SOLUBLE EXTRACTIVES (ppm) FROM CLOSURES WITH SEALING GASKETS FOR FOOD CONTAINERS |
| <b>B</b> | TRHZ1208111    | 06/08/2012 | 6             | ELBOW FITTING MOD. SSV      | STAINLESS STEEL SUS316L      | TO DETERMINE TOTAL CHROMIUM CONTENT IN THE SUBMITTED SAMPLE                                                                                                                                |
| <b>C</b> | TRHZ1208112    | 06/08/2012 | 6             | STRAIGHT FITTING MOD. SSC-G | STAINLESS STEEL SUS316L      | TO DETERMINE TOTAL CHROMIUM CONTENT IN THE SUBMITTED SAMPLE                                                                                                                                |

|          | TEST METHOD (ref. FDA 21 CFR 177.1210)              | TEST RESULT                                        | CONCLUSION                                                                                                                                                                             |
|----------|-----------------------------------------------------|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>A</b> | IMMERSION FOR 2 HOURS IN DISTILLED WATER AT 212 ° F | DETECTED VALUE 13,0<br>MAX PERMISSIBLE 50,0        | WHEN TESTED AS SPECIFIED, THE TEST RESULTS OF THE SUBMITTED SAMPLE COMPLY WITH THE FDA SPECIFICATIONS FOR DETERMINING THE AMOUNT OF CHLOROFORM-SOLUBLE EXTRACTIVES FOR CLOSURES (CLOS) |
|          | IMMERSION FOR 2 HOURS IN ALCOHOL 8% AT 212°F        | DETECTED VALUE 7,0<br>MAX PERMISSIBLE 50,0         |                                                                                                                                                                                        |
|          | IMMERSION FOR 2 HOURS IN n-HEPTANE AT 150°F         | DETECTED VALUE 11,5<br>MAX PERMISSIBLE 50,0        |                                                                                                                                                                                        |
| <b>B</b> | TITRATION METHOD                                    | DETECTED VALUE 16,38%<br>REQUIREMENT $\geq 10,5\%$ | WHEN TESTED AS SPECIFIED, THE TEST RESULTS OF THE SUBMITTED SAMPLE IS SUITABLE FOR CONTACT WITH FOOD                                                                                   |
| <b>C</b> | TITRATION METHOD                                    | DETECTED VALUE 17,18%<br>REQUIREMENT $\geq 10,5\%$ | WHEN TESTED AS SPECIFIED, THE TEST RESULTS OF THE SUBMITTED SAMPLE IS SUITABLE FOR CONTACT WITH FOOD                                                                                   |

## ART. RX102

Nipplo conico  
*Taper nipple*

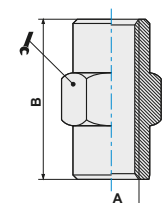
| CODICE    | A    | B    | D    | E    | F    |  |  |
|-----------|------|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX1021818 | G1/8 | G1/8 | 21   | 7,5  | 7,5  | 14                                                                                | 10                                                                                |
| RX1021814 | G1/8 | G1/4 | 23   | 7,5  | 9,5  | 14                                                                                | 10                                                                                |
| RX1021414 | G1/4 | G1/4 | 25   | 9,5  | 9,5  | 17                                                                                | 10                                                                                |
| RX1021438 | G1/4 | G3/8 | 25   | 9,5  | 10,5 | 17                                                                                | 10                                                                                |
| RX1021412 | G1/4 | G1/2 | 26,5 | 13   | 9,5  | 24                                                                                | 5                                                                                 |
| RX1023838 | G3/8 | G3/8 | 26,5 | 10,5 | 10,5 | 21                                                                                | 10                                                                                |
| RX1023812 | G3/8 | G1/2 | 29   | 10,5 | 13   | 24                                                                                | 5                                                                                 |
| RX1021212 | G1/2 | G1/2 | 31   | 13   | 13   | 21                                                                                | 5                                                                                 |



## ART. RX103

Manicotto filettato  
*Sleeve*

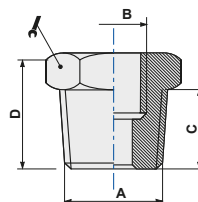
| CODICE  | A    | B  |  |  |  |  |  |
|---------|------|----|--|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX10318 | G1/8 | 17 |  |  |  | 14                                                                                | 10                                                                                |
| RX10314 | G1/4 | 23 |  |  |  | 17                                                                                | 10                                                                                |
| RX10338 | G3/8 | 25 |  |  |  | 21                                                                                | 5                                                                                 |
| RX10312 | G1/2 | 28 |  |  |  | 24                                                                                | 5                                                                                 |



## ART. RX104

Riduzione M/F conica  
*Taper reducer*

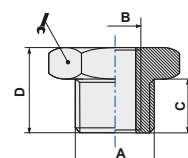
| CODICE    | A    | B    | C    | D  |  |  |  |
|-----------|------|------|------|----|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX1041418 | G1/4 | G1/8 | 10   | 16 |  | 17                                                                                  | 10                                                                                  |
| RX1043818 | G3/8 | G1/8 | 11,5 | 18 |  | 17                                                                                  | 10                                                                                  |
| RX1041218 | G1/2 | G1/8 | 12   | 18 |  | 21                                                                                  | 5                                                                                   |
| RX1043814 | G3/8 | G1/4 | 11,5 | 18 |  | 21                                                                                  | 10                                                                                  |
| RX1041214 | G1/2 | G1/4 | 12   | 18 |  | 24                                                                                  | 5                                                                                   |
| RX1041238 | G1/2 | G3/8 | 12   | 18 |  | 24                                                                                  | 5                                                                                   |
|           |      |      |      |    |  |                                                                                     |                                                                                     |
|           |      |      |      |    |  |                                                                                     |                                                                                     |



## ART. RX104Z

Riduzione M/F cilindrica con O.R.  
*Parallel reducer with O.R.*

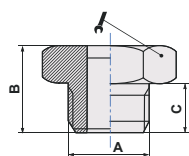
| CODICE     | A    | B    | C   | D    |  |  |  |
|------------|------|------|-----|------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX104Z18M5 | G1/8 | M5   | 5,5 | 12,5 |  | 14                                                                                  | 10                                                                                  |
| RX104Z1418 | G1/4 | G1/8 | 6,5 | 13,5 |  | 17                                                                                  | 10                                                                                  |
| RX104Z3814 | G3/8 | G1/4 | 7,5 | 14,5 |  | 21                                                                                  | 10                                                                                  |
|            |      |      |     |      |  |                                                                                     |                                                                                     |
|            |      |      |     |      |  |                                                                                     |                                                                                     |



**ART. RX107Z**

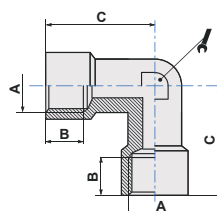
Tappo maschio cilindrico con O.R.  
*Parallel male plug with O.R.*

| CODICE   | A    | B    | C   |  |  |    |    |
|----------|------|------|-----|--|--|----|----|
| RX107Z18 | G1/8 | 12,5 | 5,5 |  |  | 14 | 10 |
| RX107Z14 | G1/4 | 13,5 | 6,5 |  |  | 17 | 10 |
| RX107Z38 | G3/8 | 14,5 | 7,5 |  |  | 21 | 5  |
| RX107Z12 | G1/2 | 16   | 9   |  |  | 24 | 5  |
|          |      |      |     |  |  |    |    |
|          |      |      |     |  |  |    |    |


**ART. RX109**

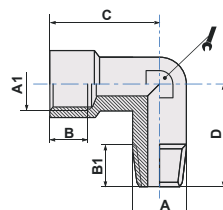
L F.F.  
*Female L*

| CODICE  | A    | B    | C    |  |  |      |    |
|---------|------|------|------|--|--|------|----|
| RX10918 | G1/8 | 9,5  | 22,5 |  |  | 11   | 10 |
| RX10914 | G1/4 | 11,5 | 25   |  |  | 13   | 5  |
| RX10938 | G3/8 | 12,5 | 28   |  |  | 15,6 | 5  |
| RX10912 | G1/2 | 15   | 31,5 |  |  | 20,6 | 10 |
|         |      |      |      |  |  |      |    |
|         |      |      |      |  |  |      |    |


**ART. RX110**

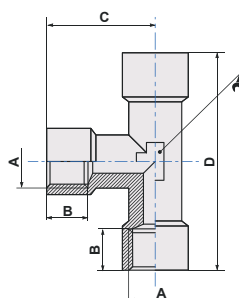
L M.F.  
*Male-Female L*

| CODICE  | A    | A1   | B    | B1   | C    | D    |      |   |
|---------|------|------|------|------|------|------|------|---|
| RX11018 | G1/8 | G1/8 | 9,5  | 7,5  | 22,5 | 18,5 | 11   | 5 |
| RX11014 | G1/4 | G1/4 | 11,5 | 10   | 25   | 22,5 | 13   | 5 |
| RX11038 | G3/8 | G3/8 | 12,5 | 11,5 | 28   | 25   | 15,6 | 5 |
| RX11012 | G1/2 | G1/2 | 15   | 12   | 31,5 | 29,5 | 20,6 | 5 |
|         |      |      |      |      |      |      |      |   |
|         |      |      |      |      |      |      |      |   |


**ART. RX111**

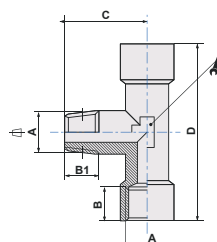
T F.F.F.  
*Female T*

| CODICE  | A    | B    | C   | D    |  |      |   |
|---------|------|------|-----|------|--|------|---|
| RX11118 | G1/8 | 7,5  | 7,5 | 18,5 |  | 11   | 5 |
| RX11114 | G1/4 | 10   | 25  | 50   |  | 13   | 5 |
| RX11138 | G3/8 | 11,5 | 27  | 58,5 |  | 15   | 5 |
| RX11112 | G1/2 | 12   | 31  | 67   |  | 20,6 | 5 |
|         |      |      |     |      |  |      |   |
|         |      |      |     |      |  |      |   |


**ART. RX112**

T F.M.F.  
*Centre male T*

| CODICE  | A    | B    | B1   | C    | D    |      |   |
|---------|------|------|------|------|------|------|---|
| RX11218 | G1/8 | 7,5  | 9,5  | 18,5 | 45   | 11   | 5 |
| RX11214 | G1/4 | 10   | 11,5 | 22,5 | 50   | 13   | 5 |
| RX11238 | G3/8 | 11,5 | 12,5 | 25   | 58,5 | 15,6 | 5 |
| RX11212 | G1/2 | 12   | 15   | 29,5 | 67   | 20,6 | 5 |
|         |      |      |      |      |      |      |   |
|         |      |      |      |      |      |      |   |

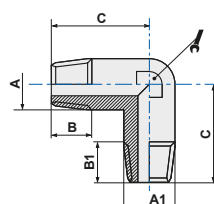




## ART. RX115

Elle M.M.  
Male L

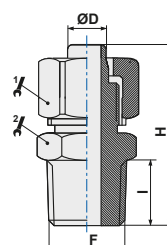
| CODICE  | A    | B    | C    | A1   | B1   |  |  |
|---------|------|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX11518 | G1/8 | 7,5  | 17   | 8,5  | 7,5  | 9                                                                                 | 10                                                                                |
| RX11514 | G1/4 | 10   | 21   | 10,5 | 10   | 11                                                                                | 5                                                                                 |
| RX11538 | G3/8 | 10,5 | 23,5 | 12,5 | 10,5 | 13                                                                                | 5                                                                                 |
| RX11512 | G1/2 | 13   | 26,7 | 15   | 13   | 15,6                                                                              | 5                                                                                 |
|         |      |      |      |      |      |                                                                                   |                                                                                   |
|         |      |      |      |      |      |                                                                                   |                                                                                   |
|         |      |      |      |      |      |                                                                                   |                                                                                   |
|         |      |      |      |      |      |                                                                                   |                                                                                   |



## ART. RX301

Raccordo diritto maschio conico  
Taper straight male adaptor

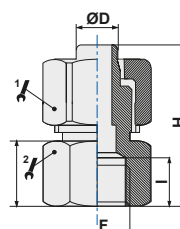
| CODICE    | ØD   | F    | I   | H    |  |  |  |
|-----------|------|------|-----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX30106M5 | 6/4  | M5   | 4   | 23,7 | 12                                                                                | 12                                                                                | 10                                                                                |
| RX3010618 | 6/4  | G1/8 | 7,5 | 25   | 12                                                                                | 12                                                                                | 10                                                                                |
| RX3010614 | 6/4  | G1/4 | 9,5 | 27   | 12                                                                                | 14                                                                                | 10                                                                                |
| RX3010818 | 8/6  | G1/8 | 7,5 | 26,2 | 14                                                                                | 14                                                                                | 10                                                                                |
| RX3010814 | 8/6  | G1/4 | 9,5 | 30,5 | 17                                                                                | 17                                                                                | 5                                                                                 |
| RX3011014 | 10/8 | G1/4 | 10  | 31,5 | 17                                                                                | 17                                                                                |                                                                                   |
|           |      |      |     |      |                                                                                   |                                                                                   |                                                                                   |
|           |      |      |     |      |                                                                                   |                                                                                   |                                                                                   |



## ART. RX302

Raccordo diritto femmina  
Straight female adaptor

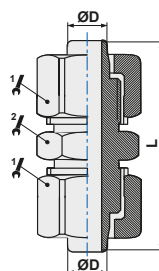
| CODICE    | ØD  | F    | I    | H  | H1   |  |  |  |
|-----------|-----|------|------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX3020618 | 6/4 | G1/8 | 9,5  | 23 | 10,5 | 12                                                                                  | 14                                                                                  | 10                                                                                  |
| RX3020614 | 6/4 | G1/4 | 11,5 | 25 | 12,5 | 12                                                                                  | 17                                                                                  | 10                                                                                  |
| RX3020818 | 8/6 | G1/8 | 9,5  | 24 | 11   | 14                                                                                  | 14                                                                                  | 10                                                                                  |
| RX3020814 | 8/6 | G1/4 | 11,5 | 26 | 12,5 | 14                                                                                  | 17                                                                                  | 10                                                                                  |
|           |     |      |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |     |      |      |    |      |                                                                                     |                                                                                     |                                                                                     |



## ART. RX303

Raccordo diritto intermedio  
Straight connector

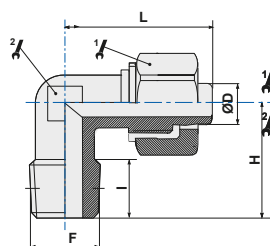
| CODICE    | ØD    | L  |  |  |  |  |  |
|-----------|-------|----|--|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX3030600 | 6/4   | 30 |  |  | 12                                                                                  | 12                                                                                  | 10                                                                                  |
| RX3030800 | 8/6   | 32 |  |  | 14                                                                                  | 14                                                                                  | 10                                                                                  |
| RX3031000 | 10/8  | 37 |  |  | 17                                                                                  | 17                                                                                  | 5                                                                                   |
| RX3031200 | 12/10 | 41 |  |  | 19                                                                                  | 19                                                                                  | 5                                                                                   |
|           |       |    |  |  |                                                                                     |                                                                                     |                                                                                     |
|           |       |    |  |  |                                                                                     |                                                                                     |                                                                                     |
|           |       |    |  |  |                                                                                     |                                                                                     |                                                                                     |



**ART. RX305**

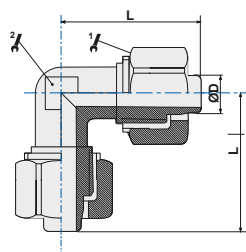
Raccordo ad L maschio conico  
*L taper male adaptor*

| CODICE    | ØD    | F    | I   | H    | L  |  |  |  |
|-----------|-------|------|-----|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX3050418 | 4/2,5 | G1/8 | 8,5 | 17   | 16 | 8                                                                                 | 9                                                                                 | 10                                                                                |
| RX3050618 | 6/4   | G1/8 | 11  | 21   | 21 | 12                                                                                | 9                                                                                 | 10                                                                                |
| RX3050614 | 6/4   | G1/4 | 11  | 21   | 21 | 12                                                                                | 11                                                                                | 10                                                                                |
| RX3050818 | 8/6   | G1/8 | 8,5 | 18   | 23 | 14                                                                                | 11                                                                                | 10                                                                                |
| RX3050814 | 8/6   | G1/4 | 11  | 22,3 | 23 | 14                                                                                | 11                                                                                | 10                                                                                |
| RX3051014 | 10/8  | G1/4 | 11  | 23,5 | 25 | 17                                                                                | 13                                                                                | 5                                                                                 |
| RX3051038 | 10/8  | G3/8 | 14  | 25   | 25 | 17                                                                                | 13                                                                                | 5                                                                                 |
|           |       |      |     |      |    |                                                                                   |                                                                                   |                                                                                   |
|           |       |      |     |      |    |                                                                                   |                                                                                   |                                                                                   |
|           |       |      |     |      |    |                                                                                   |                                                                                   |                                                                                   |


**ART. RX306**

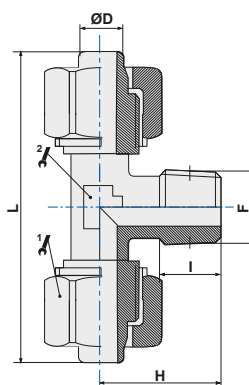
Raccordo ad L intermedio  
*L connector*

| CODICE    | ØD    | L    |  |  |  |  |  |  |
|-----------|-------|------|--|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX3060600 | 6/4   | 21   |  |  |  | 12                                                                                | 9                                                                                 | 10                                                                                |
| RX3060800 | 8/6   | 22,5 |  |  |  | 14                                                                                | 11                                                                                | 10                                                                                |
| RX3061000 | 10/8  | 25   |  |  |  | 17                                                                                | 13                                                                                | 5                                                                                 |
| RX3061200 | 12/10 | 27,5 |  |  |  | 19                                                                                | 15,5                                                                              | 5                                                                                 |
|           |       |      |  |  |  |                                                                                   |                                                                                   |                                                                                   |
|           |       |      |  |  |  |                                                                                   |                                                                                   |                                                                                   |
|           |       |      |  |  |  |                                                                                   |                                                                                   |                                                                                   |


**ART. RX307**

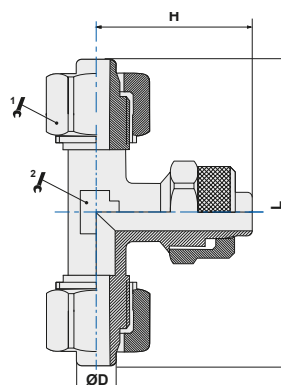
Raccordo T centrale  
*Central T adaptor*

| CODICE    | ØD   | F    | I    | H  | L    |  |  |  |
|-----------|------|------|------|----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX3070618 | 6/4  | G1/8 | 11,5 | 22 | 41,5 | 12                                                                                  | 9                                                                                   | 10                                                                                  |
| RX3070614 | 6/4  | G1/4 | 9    | 22 | 41,5 | 12                                                                                  | 9                                                                                   | 5                                                                                   |
| RX3070818 | 8/6  | G1/8 | 8,5  | 18 | 44,5 | 14                                                                                  | 11                                                                                  | 5                                                                                   |
| RX3070814 | 8/6  | G1/4 | 12   | 24 | 44   | 14                                                                                  | 11                                                                                  | 5                                                                                   |
| RX3071014 | 10/8 | G1/4 | 11,5 | 24 | 50,5 | 17                                                                                  | 13                                                                                  | 5                                                                                   |
|           |      |      |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |      |      |      |    |      |                                                                                     |                                                                                     |                                                                                     |
|           |      |      |      |    |      |                                                                                     |                                                                                     |                                                                                     |


**ART. RX309**

Raccordo T intermedio  
*connector*

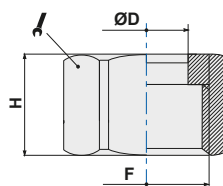
| CODICE    | ØD    | H    | L    |  |  |  |
|-----------|-------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| RX3090600 | 6/4   | 20,5 | 41   | 12                                                                                  | 9                                                                                   | 5                                                                                   |
| RX3090800 | 8/6   | 23,5 | 44,5 | 14                                                                                  | 11                                                                                  | 5                                                                                   |
| RX3091000 | 10/8  | 26,5 | 50,7 | 17                                                                                  | 13                                                                                  | 5                                                                                   |
| RX3091200 | 12/10 | 27,5 | 55,4 | 19                                                                                  | 13                                                                                  | 5                                                                                   |
|           |       |      |      |                                                                                     |                                                                                     |                                                                                     |
|           |       |      |      |                                                                                     |                                                                                     |                                                                                     |
|           |       |      |      |                                                                                     |                                                                                     |                                                                                     |



ART. RX310

 Dado di serraglio  
*Locking nut*

| CODICE    | ØD   | F     | H  |  |  |
|-----------|------|-------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| RX3100600 | 6/4  | M10x1 | 10 | 12                                                                                | 10                                                                                |
| RX3100800 | 8/6  | M12x1 | 10 | 14                                                                                | 10                                                                                |
| RX3101000 | 10/8 | M14x1 | 12 | 17                                                                                | 10                                                                                |
|           |      |       |    |                                                                                   |                                                                                   |
|           |      |       |    |                                                                                   |                                                                                   |



## BREVE DESCRIZIONE

I raccordi accessori della nostra serie inox RX sono “oil free” e realizzati in conformità agli standard di qualità secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

*The stainless steel accessory fittings “RX” series are “oil free” and manufactured according to the ISO norms of reference, and suitable for the following technical and applicative specifications.*

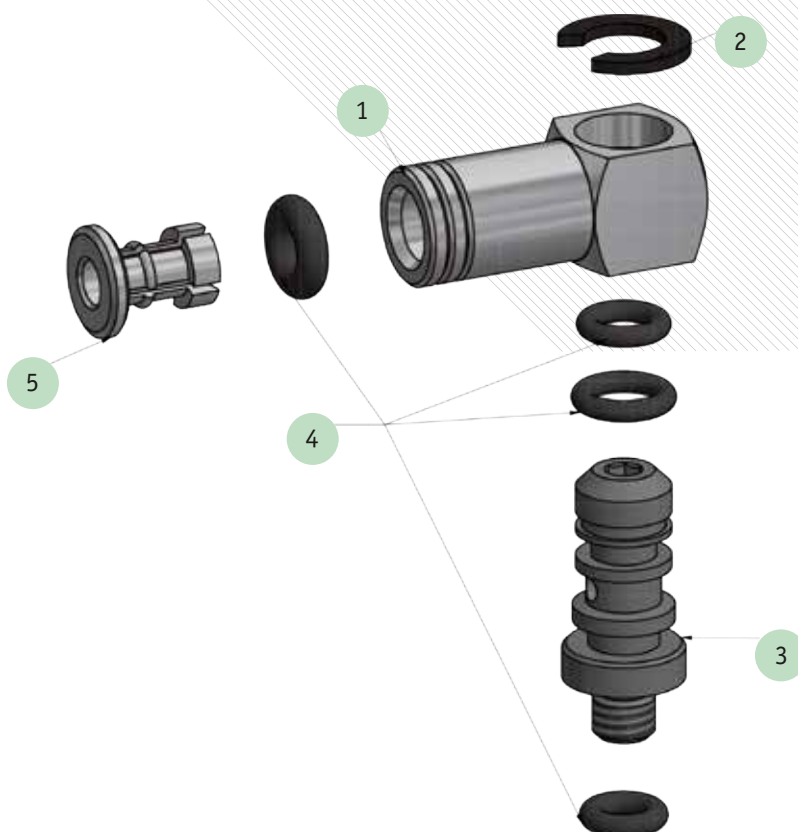
## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                                                           |                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                                           |                                                                     | Aria compressa, alcuni liquidi (per altri fluidi sentire il nostro Ufficio Tecnico)<br><i>Compressed air, some liquids (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                                                                          |
| APPLICAZIONI<br><i>APPLICATIONS</i>                                                       |                                                                     | Pneumatica applicata a settori industriali quali: medicale, chimico e alimentare. In generale ove siano richiesti requisiti di anti-corrosione, resistenza agli acidi e temperature elevate.<br><i>Pneumatic equipments which are applied widely in the range of Industry such as food service industry, chemical industry and medical industry. In general where required to ensure anti-corrosion and acid resistant, or usage at high temperature.</i> |
| TUBI CONSIGLIATI PER LA SERIE A CALZAMENTO<br><i>SUGGESTED TUBES FOR THE QUICK SERIES</i> |                                                                     | 4x2,5; 6x4; 8x6; 10x8; 12x10; 14x11; 16x13;                                                                                                                                                                                                                                                                                                                                                                                                               |
| VALORI LIMITE CONSIGLIATI<br><i>RECOMMENDED LIMIT VALUES</i>                              | TEMPERATURE<br><i>TEMPERATURES</i>                                  | Le temperature di esercizio sono comprese in un campo fra -20°C e +120°C.<br><i>The working temperatures range is between -20°C and +120°C</i>                                                                                                                                                                                                                                                                                                            |
|                                                                                           | PRESSIONE DI ESERCIZIO<br><i>WORKING PRESSURES</i>                  | La pressione di esercizio dipende dal tipo di tubo impegnato, valore massimo 25bar.<br><i>The working pressure depends on the type of employed pipe, maximum value 25bar</i>                                                                                                                                                                                                                                                                              |
| FILETTATURE<br><i>THREAD TYPE</i>                                                         |                                                                     | BSP cilindrica UNI-ISO 228; BSP conica UNI-ISO 7; Metrica ISO/R 262.<br><i>BSP parallel UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                                                                                                                                                                                                                                                                                          |
| MATERIALI<br><i>MATERIALS</i>                                                             | corpo e dado serie a calzamento<br><i>body and nut quick series</i> | Acciaio inox SUS316<br><i>Acciaio inox SUS316</i>                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                           | corpo serie di linea<br><i>body transition series</i>               | Acciaio inox SUS316<br><i>Acciaio inox SUS316</i>                                                                                                                                                                                                                                                                                                                                                                                                         |
|                                                                                           | guarnizioni tenuta<br><i>seals</i>                                  | Viton/FKM/FPM<br><i>FPM/FKM/Viton</i>                                                                                                                                                                                                                                                                                                                                                                                                                     |
| NOTA IMPORTANTE<br><i>IMPORTANT NOTE</i>                                                  |                                                                     | La materia prima è amagnetica, comunque dopo la lavorazione a freddo, una piccola quantità di austenite potrebbe essere trasformata in martensite, che potrebbe essere molto debolmente magnetica.<br><i>The raw material is non-magnetic, however after cold working, a small amount of austenite could be transformed into martensite, which could be very weakly magnetic.</i>                                                                         |



MINI

- 1 **CORPO DEL RACCORDO**  
*FITTING BODY*
- 2 **ANELLO ELASTICO**  
*ELASTIC RING*
- 3 **ASTINA GIREVOLE**  
*SWIVEL STEM*
- 4 **O-RING DI TENUTA**  
*O-RING SEAL*
- 5 **ANELLO SPINGITORE E AGGRAFFAGGIO**  
*THRUST AND CRIMPING SLEEVE*

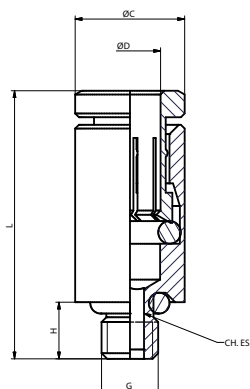




**ART. RDR**

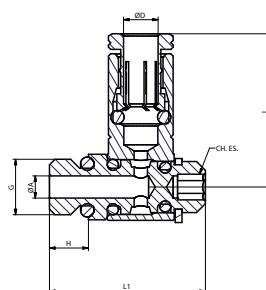
Diritto filetto cilindrico maschio con O-Ring  
Straight male adaptor (parallel)

| CODICE       | D    | G  | C   | H   | L    |  | ØC  | ØD  |
|--------------|------|----|-----|-----|------|--|-----|-----|
| RDR3.20      | 2,0  | M3 | 5,4 | 3   | 13,5 |  | 1,5 | 100 |
| RDR3.30      | 3,0  | M3 | 5,8 | 3   | 14,5 |  | 1,5 | 100 |
| RDR3.31      | 3,17 | M3 | 5,8 | 3   | 14,0 |  | 1,5 | 100 |
| RDR3.40      | 4,0  | M3 | 7,0 | 3   | 15,5 |  | 1,5 | 100 |
| RDR3.40-MH05 | 4,0  | M3 | 6,9 | 5   | 17,5 |  | 1,5 | 100 |
| RDR5.20      | 2,0  | M5 | 5,4 | 3,5 | 13,0 |  | 1,5 | 100 |
| RDR5.30      | 3,0  | M5 | 5,8 | 3,5 | 14,5 |  | 2,0 | 100 |
| RDR5.31      | 3,17 | M5 | 5,8 | 3,5 | 14,5 |  | 2,0 | 100 |
| RDR5.40      | 4,0  | M5 | 5,8 | 3,5 | 16,5 |  | 2,0 | 100 |
| RDR6.40-FH12 | 4,0  | M6 | 7   | 12  | 24,5 |  | 2,0 | 100 |
| RDR6.40-MH12 | 4,0  | M6 | 7   | 12  | 24,5 |  | 2,0 | 100 |


**ART. RGR**

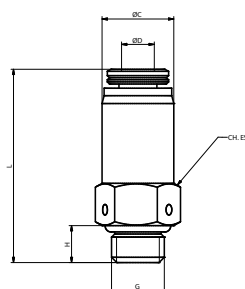
Asta con filetto cilindrico in anello semplice  
Complete single banjo with stem

| CODICE       | D    | G  | C   | H   | L    | L1   | ØC  | ØD  |
|--------------|------|----|-----|-----|------|------|-----|-----|
| RGR3.20      | 2    | M3 | 1,4 | 3,0 | 13,5 | 13,5 | 1,5 | 100 |
| RGR3.30      | 3    | M3 | 1,4 | 3,0 | 13,5 | 13,5 | 1,5 | 100 |
| RGR3.31      | 3,17 | M3 | 1,4 | 3,0 | 13,5 | 13,5 | 1,5 | 100 |
| RGR3.40      | 4,2  | M3 | 1,4 | 3,0 | 13,5 | 13,5 | 1,5 | 100 |
| RGR3.40-MH05 | 4,2  | M3 | 1,4 | 5,0 | 13,5 | 13,5 | 1,5 | 100 |
| RGR5.20      | 2    | M5 | 2,0 | 3,5 | 14   | 14   | 2,0 | 100 |
| RGR5.30      | 3    | M5 | 2,0 | 3,5 | 14   | 14   | 2,0 | 100 |
| RGR5.31      | 3,2  | M5 | 2,0 | 3,5 | 13,5 | 13,5 | 2,0 | 100 |
| RGR5.40      | 4,2  | M5 | 2,0 | 3,5 | 13,5 | 13,5 | 2,0 | 100 |
| RGR6.40-FH12 | 4,2  | M6 | 2,0 | 12  | 13,5 | 13,5 | 2,0 | 100 |
| RGR6.40-MH12 | 4,0  | M6 | 2,0 | 12  | 13,5 | 13,5 | 2,0 | 100 |


**ART. RDSR**

Diritto maschio cilindrico con scarico rapido  
Quick exhaust straight male parallel adapter

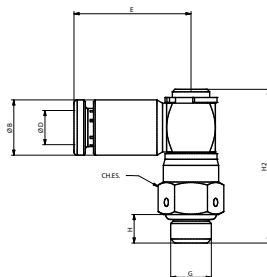
| CODICE  | L    | ØC  | ØD  | G  | H   |  | ØC | ØD  |
|---------|------|-----|-----|----|-----|--|----|-----|
| RDSR520 | 18,5 | 6,8 | 2,0 | M5 | 3,5 |  | 7  | 100 |
| RDSR530 | 18,5 | 6,8 | 3,0 | M5 | 3,5 |  | 7  | 100 |
| RDSR531 | 18,3 | 6,8 | 3,0 | M5 | 3,5 |  | 7  | 100 |
| RDSR540 | 19,5 | 7,8 | 4,2 | M5 | 3,5 |  | 8  | 100 |



**ART. RGSR**

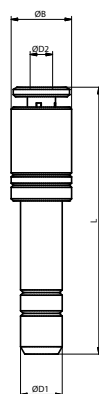
Gomito girevole cilindrico con scarico rapido  
*Quick exhaust swivel L parallel adapter*

| CODICE  | ØB  | ØD  | H   | H2 | E  | G  | Ø |     |
|---------|-----|-----|-----|----|----|----|---|-----|
| RGSR520 | 5,8 | 2,1 | 3,5 | 19 | 14 | M5 | 7 | 100 |
| RGSR530 | 5,8 | 3,0 | 3,5 | 19 | 14 | M5 | 7 | 100 |
| RGSR531 | 5,8 | 3,2 | 3,5 | 19 | 14 | M5 | 7 | 100 |
| RGSR540 | 5,8 | 4,2 | 3,5 | 19 | 14 | M5 | 7 | 100 |
|         |     |     |     |    |    |    |   |     |
|         |     |     |     |    |    |    |   |     |
|         |     |     |     |    |    |    |   |     |
|         |     |     |     |    |    |    |   |     |


**ART. RRR**

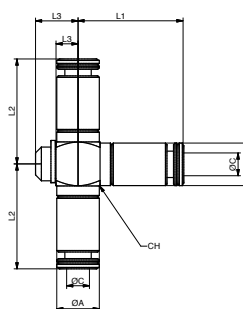
Riduzione con codolo  
*Plug-in reducer*

| CODICE    | ØD1 | ØD2 | ØB  | L    |     |
|-----------|-----|-----|-----|------|-----|
| RRR3020 * | 2,0 | 3,2 | 5,8 | 23,2 | 100 |
| RRR4020   | 4,0 | 2,0 | 5,8 | 25,5 | 100 |
| RRR4030   | 4,0 | 3,0 | 5,8 | 25,5 | 100 |
|           |     |     |     |      |     |
|           |     |     |     |      |     |
|           |     |     |     |      |     |
|           |     |     |     |      |     |


**ART. RTR**

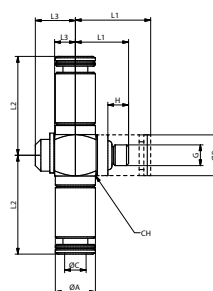
T combinato intermedio  
*T combined connector*

| CODICE | ØC   | L1   | L2 | G | H | ØB  | ØA  | L3 | Ø |     |
|--------|------|------|----|---|---|-----|-----|----|---|-----|
| RTR020 | 2,10 | 13,7 | 12 |   |   | 5,8 | 5,8 | 3  | 6 | 100 |
|        |      |      |    |   |   |     |     |    |   |     |
|        |      |      |    |   |   |     |     |    |   |     |
|        |      |      |    |   |   |     |     |    |   |     |
|        |      |      |    |   |   |     |     |    |   |     |


**ART. RTR**

T combinato filettato  
*T combined thread*

| CODICE | ØC  | L1  | L2 | G  | H | ØB  | ØA  | L3  | Ø |     |
|--------|-----|-----|----|----|---|-----|-----|-----|---|-----|
| RTR330 | 3,0 | 7,7 | 14 | M3 | 3 | 5,8 | 5,8 | 5,8 | 6 | 100 |
|        |     |     |    |    |   |     |     |     |   |     |
|        |     |     |    |    |   |     |     |     |   |     |
|        |     |     |    |    |   |     |     |     |   |     |
|        |     |     |    |    |   |     |     |     |   |     |



**BREVE DESCRIZIONE**

La serie dei raccordi MINI supercompatta, estremamente leggera ma robusta, si può innestare e disinnestare con una mano, ed è utilizzabile con tubi PA, TPU, Ny e PE. L'O-Ring è provvisto della propria sede per assicurare la tenuta su superfici pulite

**SHORT DESCRIPTION**

*The MINI supercompact fittings series, extremely lightweight yet sturdy, can be inserted and extracted with one hand and it is suitable for tube PA, TPU, Ny and PE. The O-Ring is provided with his own seat to ensure seal with polished surface.*

**SCHEMA TECNICA TECHNICAL SHEET**

|                                                                    |                                                         |                                                                                                                                                                              |
|--------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                    |                                                         | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                        |
| APPLICAZIONI<br><i>APPLICATIONS</i>                                |                                                         | Impianti pneumatici, idoneo anche per applicazioni con il vuoto.<br><i>BSP parallell UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                         |                                                         | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br><i>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethilene), TCO (Copolyester).</i> |
| FILETTATURE<br><i>THREAD TYPE</i>                                  |                                                         | Cilindrica con O-Ring.<br><i>Cylindrical with O-ring.</i>                                                                                                                    |
| VALORI LIMITE<br>CONSIGLIATI<br><i>RECOMMENDED<br/>LIMIT VALUE</i> | COPPIA DI SERRAGGIO<br>MASSIMA<br><i>MAXIMUM TORQUE</i> | Filettatura M3 = 0,4 Nm; Filettatura M6 e M6x0,75 = 1,3 Nm<br><i>Thread M3 = 0,4 Nm; Thread M6 and M6x0,75 = 1,3 Nm</i>                                                      |
|                                                                    | TEMPERATURE<br><i>TEMPERATURES</i>                      | Le temperature di esercizio sono comprese fra -20°C e +70°C<br><i>The working temperatures range is between -20°C and +70°C</i>                                              |
|                                                                    | PRESSIONI<br><i>PRESSURES</i>                           | La pressione di esercizio massima è 10 bar<br><i>The maximum working pressure is 10 Bar.</i>                                                                                 |
| MATERIALI<br><i>MATERIALS</i>                                      | CORPO<br><i>BODY</i>                                    | Ottone nichelato<br><i>Nichel-plated</i>                                                                                                                                     |
|                                                                    | PINZA<br><i>GRIP</i>                                    | Ottone<br><i>Brass</i>                                                                                                                                                       |
|                                                                    | GUARNIZIONI TENUTA<br><i>SEALS</i>                      | NBR esenti da silicone<br><i>Silicon free NBR</i>                                                                                                                            |
| NOTE<br><i>NOTES</i>                                               |                                                         | Prodotto gestito direttamente da Pneumax S.p.a.<br><i>Product managed directly from Pneumax S.p.A</i>                                                                        |



1

**ISTRUZIONI DI MONTAGGIO - FITTING INSTRUCTIONS**
**Prima dell'inserimento - Before the insertion**

- Il tipo di tubo utilizzato deve essere dichiarato dal costruttore idoneo all'utilizzo con raccordi automatici  
*The type of employed pipe must be declared as suitable by the manufacturer to be used with push-in fittings*
- Il taglio del tubo deve essere effettuato a 90° mediante apposita pinza taglia tubo (Vedi nostro catalogo bluline)  
*The cutting of the pipe must be at a right angle using a dedicated tube cutter (See our bluline catalogue)*
- Non effettuare il taglio del tubo con forbici, tenaglie o altri utensili che possano conferire all'estremità del tubo estremità non lineari  
*Do not cut the hose with scissors, pincers or other tools may cause non-linear surface to the end of the tube*



2

**INSERIMENTO CORRETTO DEL TUBO SUL RACCORDO**
**CORRECT INSERTION OF THE HOSE IN THE FITTING**


3

FOTO 1 - PICTURE 1

Tubo prima dell'inserimento - *Hose before insertion*

FOTO 2 - PICTURE 2

Tubo inserito - *Inserted hose*

FOTO 3 - PICTURE 3

Tubo tagliato a 90° con pinza in plastica - *Tubo tagliato a 90° con pinza*


4

FOTO 4 - PICTURE 4

Tubo tagliato in modo corretto con pinza in metallo - *Correct hose cut with metal tube cutter*


5

**Durante l'inserimento - During the insertion**

- Effettuare una leggera rotazione del tubo in modo da agevolarne l'ingresso, assicurarsi di arrivare con il tubo fino a quota di battuta interna.  
*Turn the hose slightly so to make it easier to get in, make sure the pipe reach the inside stop.*

**Sgancio del tubo - Hose extraction**

- Per effettuare lo sgancio del tubo, o disinnesto, premere il tappo spintore fino a battuta, mantenendo la pressione su quest'ultimo estrarre il tubo dal corpo (l'operazione può essere facilitata con l'utilizzo di apposita forchettina).  
*To extract the hose, or realising it, press the sleeve until it stops and keeping it pressed remove the tube from the fitting (the operation can be done easier using an appropriate fork).*
- Assicurarsi che il tubo inserito non sia soggetto a trazione e che il tappo spintore non venga a contatto con nessun tipo di oggetto in modo da non generare sganci o sfilamenti involontari.  
*Make sure that the inserted hose is not under traction and that the sleeve does not run the risk of accidental contacts which may cause unintentional extraction or releasing.*



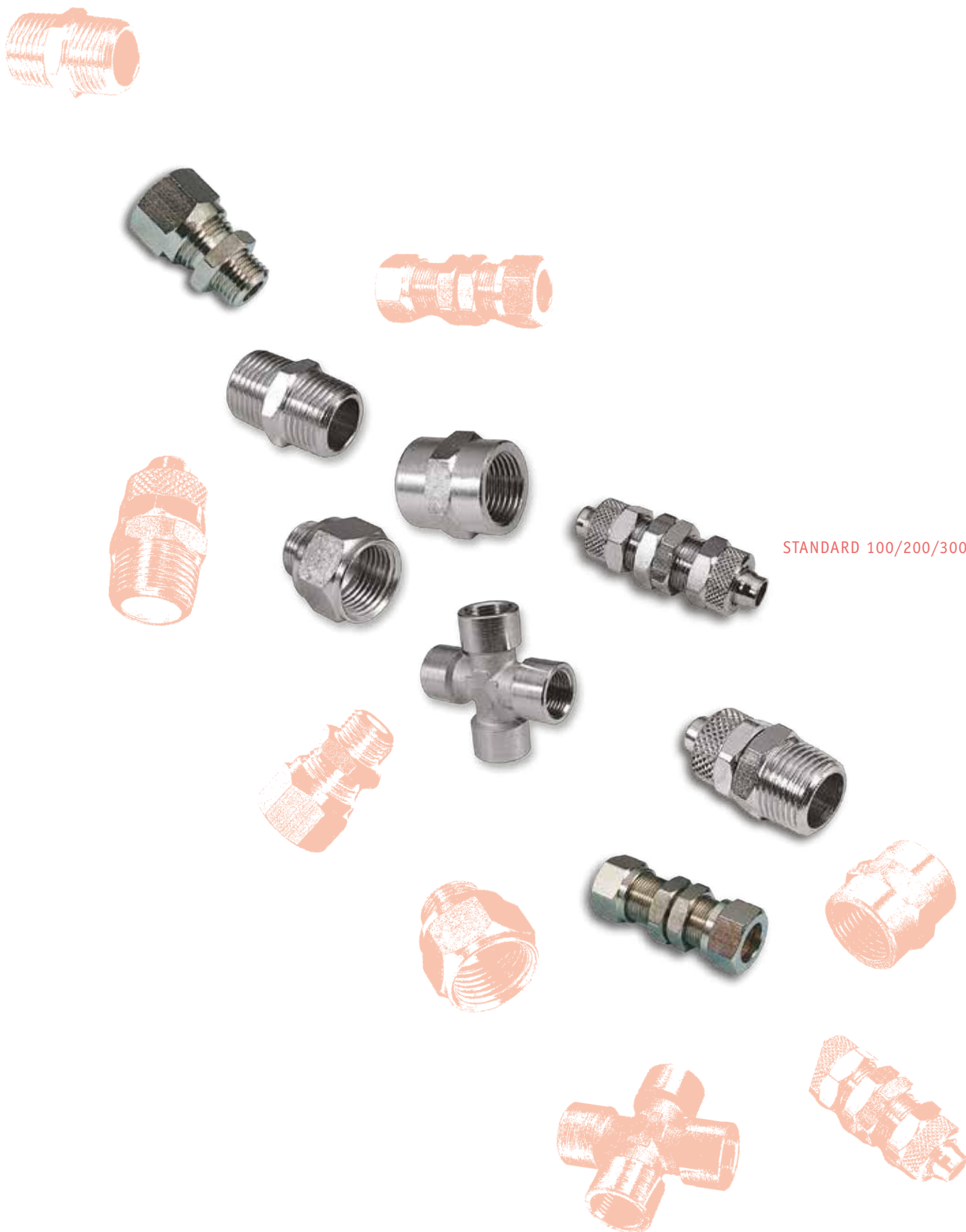
6

FOTO 5 - PICTURE 5

Raccordo con tubo inserito e in trazione - *Fitting with inserted hose, in tension.*

FOTO 6 - PICTURE 6

Raccordo con tubo inserito avente raggio di curvatura stretto - *Fitting with hose inserted, having a tight bending radius.*

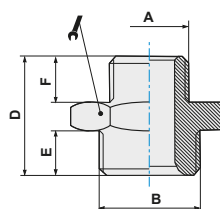


STANDARD 100/200/300

## ART. 101

Nipplo cilindrico  
Parallel nipple

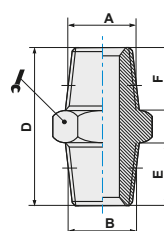
| CODICE  | A    | B    | D    | E  | F  |  |  |
|---------|------|------|------|----|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 101M5M5 | M5   | M5   | 11,5 | 4  | 4  | 8                                                                                 | 100                                                                               |
| 101M518 | M5   | G1/8 | 14,5 | 6  | 4  | 14                                                                                | 100                                                                               |
| 1011818 | G1/8 | G1/8 | 16,5 | 6  | 6  | 14                                                                                | 100                                                                               |
| 1011814 | G1/8 | G1/4 | 19,0 | 8  | 6  | 17                                                                                | 100                                                                               |
| 1011838 | G1/8 | G3/8 | 20,0 | 9  | 6  | 19                                                                                | 100                                                                               |
| 1011414 | G1/4 | G1/4 | 21,0 | 8  | 8  | 17                                                                                | 100                                                                               |
| 1011438 | G1/4 | G3/8 | 22,0 | 9  | 8  | 19                                                                                | 100                                                                               |
| 1011412 | G1/4 | G1/2 | 23,5 | 10 | 8  | 24                                                                                | 100                                                                               |
| 1013838 | G3/8 | G3/8 | 23,0 | 9  | 9  | 19                                                                                | 50                                                                                |
| 1013812 | G3/8 | G1/2 | 24,5 | 10 | 9  | 24                                                                                | 50                                                                                |
| 1011212 | G1/2 | G1/2 | 25,5 | 10 | 10 | 24                                                                                | 50                                                                                |
| 1011234 | G1/2 | G3/4 | 27,5 | 11 | 10 | 30                                                                                | 25                                                                                |
| 1013434 | G3/4 | G3/4 | 28,5 | 11 | 11 | 30                                                                                | 25                                                                                |



## ART. 102

Nipplo conico  
Taper nipple

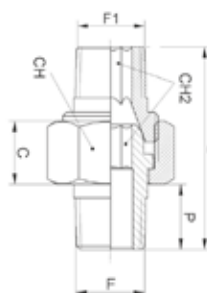
| CODICE  | A    | B    | D    | E    | F    |  |  |
|---------|------|------|------|------|------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 1021818 | G1/8 | G1/8 | 20,0 | 8,0  | 8,0  | 12                                                                                 | 100                                                                                |
| 1021814 | G1/8 | G1/4 | 24,0 | 11,0 | 8,0  | 14                                                                                 | 100                                                                                |
| 1021838 | G1/8 | G3/8 | 24,5 | 11,5 | 8,0  | 17                                                                                 | 100                                                                                |
| 1021812 | G1/8 | G1/2 | 27,5 | 14,0 | 8,0  | 22                                                                                 | 50                                                                                 |
| 1021414 | G1/4 | G1/4 | 27,0 | 11,0 | 11,0 | 14                                                                                 | 100                                                                                |
| 1021438 | G1/4 | G3/8 | 27,5 | 11,5 | 11,0 | 17                                                                                 | 100                                                                                |
| 1021412 | G1/4 | G1/2 | 30,5 | 14,0 | 11,0 | 22                                                                                 | 50                                                                                 |
| 1023838 | G3/8 | G3/8 | 28,0 | 11,5 | 11,5 | 17                                                                                 | 100                                                                                |
| 1023812 | G3/8 | G1/2 | 31,0 | 14,0 | 11,5 | 22                                                                                 | 50                                                                                 |
| 1021212 | G1/2 | G1/2 | 33,5 | 14,0 | 14,0 | 22                                                                                 | 50                                                                                 |
| 1021234 | G1/2 | G3/4 | 37,5 | 16,5 | 14,0 | 27                                                                                 | 25                                                                                 |
| 1023434 | G3/4 | G3/4 | 40,0 | 16,5 | 16,5 | 27                                                                                 | 25                                                                                 |
| 1023401 | G3/4 | G1'  | 42,5 | 19,0 | 16,5 | 34                                                                                 | 10                                                                                 |
| 1020101 | G1'  | G1'  | 45,0 | 19,0 | 19,0 | 34                                                                                 | 10                                                                                 |



## ART. 102P3

Nipplo conico 3 pezzi  
Nipple (taper) - 3 pieces

| CODICE    | F   | F1  | CH | CH2 | P    | L    | C    | Gr    |  |
|-----------|-----|-----|----|-----|------|------|------|-------|-------------------------------------------------------------------------------------|
| 10218P3   | 1/8 | 1/8 | 15 | 5   | 9,0  | 27,0 | 8,6  | 18,5  | 50                                                                                  |
| 10214P3   | 1/4 | 1/4 | 19 | 6   | 11,5 | 33,5 | 9,6  | 36,0  | 50                                                                                  |
| 10238P3   | 3/8 | 3/8 | 22 | 8   | 13,0 | 36,0 | 10,0 | 66,0  | 50                                                                                  |
| 10212P3   | 1/2 | 1/2 | 27 | 12  | 15,5 | 45,0 | 12,0 | 88,0  | 25                                                                                  |
| 10234P3   | 3/4 | 3/4 | 36 | 14  | 18,0 | 53,0 | 17,0 | 200,0 | 25                                                                                  |
| 10201P3   | 1"  | 1"  | 46 | 19  | 22,0 | 64,0 | 20,0 | 360,0 | 5                                                                                   |
| 1021814P3 | 1/8 | 1/4 | 15 | 5   | 9,0  | 30,0 | 8,5  | 24,0  | 50                                                                                  |
| 1021438P3 | 1/4 | 3/8 | 19 | 6   | 11,5 | 36,0 | 9,5  | 45,5  | 50                                                                                  |
| 1023812P3 | 3/8 | 1/2 | 22 | 8   | 13,0 | 39,0 | 10,0 | 76,0  | 25                                                                                  |

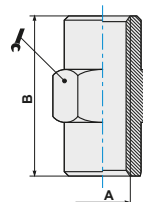




## ART. 103

Manicotto filettato  
Sleeve

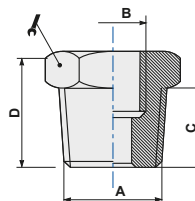
| CODICE | A    | B  |  |  |  |  |  |
|--------|------|----|--|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 103M5  | M5   | 11 |  |  |  | 8                                                                                 | 100                                                                               |
| 10318  | G1/8 | 15 |  |  |  | 14                                                                                | 100                                                                               |
| 10314  | G1/4 | 22 |  |  |  | 17                                                                                | 100                                                                               |
| 10338  | G3/8 | 23 |  |  |  | 22                                                                                | 50                                                                                |
| 10312  | G1/2 | 30 |  |  |  | 26                                                                                | 25                                                                                |
| 10334  | G3/4 | 32 |  |  |  | 32                                                                                | 10                                                                                |
|        |      |    |  |  |  |                                                                                   |                                                                                   |
|        |      |    |  |  |  |                                                                                   |                                                                                   |
|        |      |    |  |  |  |                                                                                   |                                                                                   |
|        |      |    |  |  |  |                                                                                   |                                                                                   |
|        |      |    |  |  |  |                                                                                   |                                                                                   |



## ART. 104

Riduzione M/F conica  
Taper reducer

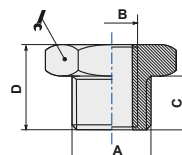
| CODICE  | A    | B    | C    | D    |  |  |  |
|---------|------|------|------|------|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1041418 | G1/4 | G1/8 | 11,0 | 16,0 |  | 14                                                                                | 100                                                                               |
| 1043818 | G3/8 | G1/8 | 11,5 | 16,5 |  | 17                                                                                | 100                                                                               |
| 1041218 | G1/2 | G1/8 | 14,0 | 19,5 |  | 22                                                                                | 50                                                                                |
| 1043814 | G3/8 | G1/4 | 11,5 | 16,5 |  | 17                                                                                | 100                                                                               |
| 1041214 | G1/2 | G1/4 | 14,0 | 19,5 |  | 22                                                                                | 50                                                                                |
| 1041238 | G1/2 | G3/8 | 14,0 | 19,5 |  | 22                                                                                | 50                                                                                |
| 1043412 | G3/4 | G1/2 | 16,5 | 23,0 |  | 27                                                                                | 25                                                                                |
| 1043438 | G3/4 | G3/8 | 16,5 | 23,0 |  | 27                                                                                | 10                                                                                |
| 1040112 | G1'  | G1/2 | 17,0 | 25,0 |  | 34                                                                                | 10                                                                                |
| 1040134 | G1'  | G3/4 | 17,0 | 25,0 |  | 34                                                                                | 10                                                                                |
|         |      |      |      |      |  |                                                                                   |                                                                                   |
|         |      |      |      |      |  |                                                                                   |                                                                                   |



## ART. 104Z

Riduzione M/F cilindrica  
Parallel reducer

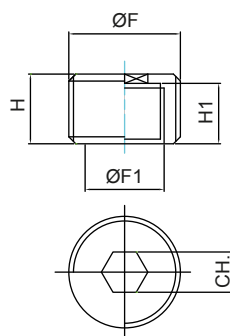
| CODICE   | A    | B    | C    | D    |  |  |  |
|----------|------|------|------|------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 104Z18M5 | G1/8 | M5   | 6,0  | 10,5 |  | 14                                                                                  | 100                                                                                 |
| 104Z1418 | G1/4 | G1/8 | 8,0  | 13,0 |  | 17                                                                                  | 100                                                                                 |
| 104Z3818 | G3/8 | G1/8 | 9,0  | 14,0 |  | 19                                                                                  | 100                                                                                 |
| 104Z3814 | G3/8 | G1/4 | 9,0  | 14,0 |  | 19                                                                                  | 100                                                                                 |
| 104Z1218 | G1/2 | G1/8 | 10,0 | 15,5 |  | 24                                                                                  | 50                                                                                  |
| 104Z1214 | G1/2 | G1/4 | 10,0 | 15,5 |  | 24                                                                                  | 50                                                                                  |
| 104Z1238 | G1/2 | G3/8 | 10,0 | 15,5 |  | 24                                                                                  | 50                                                                                  |
| 104Z3412 | G3/4 | G1/2 | 12,5 | 18,0 |  | 30                                                                                  | 25                                                                                  |
| 104Z3438 | G3/4 | G3/8 | 12,5 | 18,0 |  | 30                                                                                  | 10                                                                                  |
|          |      |      |      |      |  |                                                                                     |                                                                                     |
|          |      |      |      |      |  |                                                                                     |                                                                                     |
|          |      |      |      |      |  |                                                                                     |                                                                                     |



**ART. 104S**

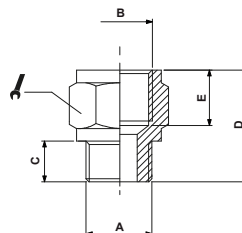
Riduzione cilindrica a scomparsa  
Disapperance parallel reducer

| CODICE   | F   | F1  | H  | H1   |  |  |
|----------|-----|-----|----|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 104S1418 | 1/4 | 1/8 | 8  | 7    | 6                                                                                 | 50                                                                                |
| 104S3814 | 3/8 | 1/4 | 9  | 7    | 8                                                                                 | 50                                                                                |
| 104S1238 | 1/2 | 3/8 | 10 | 9    | 10                                                                                | 25                                                                                |
| 104S3412 | 3/4 | 1/2 | 14 | 11   | 12                                                                                | 10                                                                                |
| 104S0134 | 1"  | 3/4 | 20 | 12,5 | 17                                                                                | 10                                                                                |
|          |     |     |    |      |                                                                                   |                                                                                   |
|          |     |     |    |      |                                                                                   |                                                                                   |
|          |     |     |    |      |                                                                                   |                                                                                   |
|          |     |     |    |      |                                                                                   |                                                                                   |


**ART. 105**

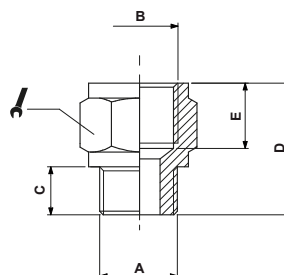
Prolunga M/F conica  
Taper M/F extension

| CODICE  | A    | B    | C    | D    | E    |  |  |
|---------|------|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1051818 | G1/8 | G1/8 | 8,0  | 18,0 | 8,0  | 14                                                                                | 100                                                                               |
| 1051814 | G1/8 | G1/4 | 8,0  | 21,5 | 11,0 | 17                                                                                | 100                                                                               |
| 1051838 | G1/8 | G3/8 | 8,0  | 22,5 | 11,5 | 22                                                                                | 50                                                                                |
| 1051414 | G1/4 | G1/4 | 11,0 | 24,5 | 11,0 | 17                                                                                | 100                                                                               |
| 1051438 | G1/4 | G3/8 | 11,0 | 24,5 | 11,5 | 22                                                                                | 50                                                                                |
| 1051412 | G1/4 | G1/2 | 11,0 | 29,0 | 14,0 | 24                                                                                | 50                                                                                |
| 1053838 | G3/8 | G3/8 | 11,5 | 26,0 | 11,5 | 22                                                                                | 50                                                                                |
| 1053812 | G3/8 | G1/2 | 11,5 | 29,5 | 14,0 | 24                                                                                | 25                                                                                |
| 1051212 | G1/2 | G1/2 | 14,0 | 32,0 | 14,0 | 26                                                                                | 25                                                                                |
| 1051234 | G1/2 | G3/4 | 14,0 | 35,0 | 16,5 | 32                                                                                | 10                                                                                |
| 1051201 | G1/2 | G1   | 14,0 | 37,0 | 18,0 | 38                                                                                | 10                                                                                |


**ART. 105Z**

Prolunga M/F cilindrica  
Parallel M/F extension

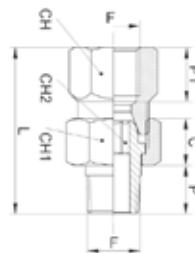
| CODICE   | A    | B    | C  | D    | E    |  |  |
|----------|------|------|----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 105ZM5M5 | M5   | M5   | 5  | 14,0 | 7,0  | 9                                                                                   | 100                                                                                 |
| 105ZM518 | M5   | G1/8 | 4  | 14,5 | 8,0  | 14                                                                                  | 100                                                                                 |
| 105ZM618 | M6   | G1/8 | 6  | 16,0 | 8,0  | 14                                                                                  | 100                                                                                 |
| 105Z1818 | G1/8 | G1/8 | 6  | 16,0 | 8,0  | 14                                                                                  | 100                                                                                 |
| 105Z1814 | G1/8 | G1/4 | 6  | 19,5 | 11,0 | 17                                                                                  | 100                                                                                 |
| 105Z1838 | G1/8 | G3/8 | 6  | 20,5 | 11,5 | 22                                                                                  | 50                                                                                  |
| 105Z1414 | G1/4 | G1/4 | 8  | 21,5 | 11,0 | 17                                                                                  | 100                                                                                 |
| 105Z1438 | G1/4 | G3/8 | 8  | 22,5 | 11,5 | 22                                                                                  | 50                                                                                  |
| 105Z1412 | G1/4 | G1/2 | 8  | 26,0 | 14,0 | 24                                                                                  | 50                                                                                  |
| 105Z3838 | G3/8 | G3/8 | 9  | 23,5 | 11,5 | 22                                                                                  | 50                                                                                  |
| 105Z3812 | G3/8 | G1/2 | 9  | 27,0 | 14,0 | 24                                                                                  | 25                                                                                  |
| 105Z1212 | G1/2 | G1/2 | 10 | 28,0 | 14,0 | 26                                                                                  | 25                                                                                  |
| 105Z1234 | G1/2 | G3/4 | 10 | 30,0 | 16,5 | 32                                                                                  | 10                                                                                  |



## ART. 105P3

Prolunga M/F - 3 pezzi  
Extension M/F - 3 pieces

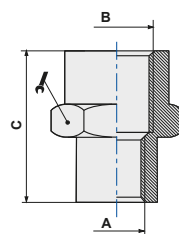
| CODICE  | F   | CH | CH1 | CH2 | P    | P1   | L    | C    | Gr    |    |
|---------|-----|----|-----|-----|------|------|------|------|-------|----|
| 10518P3 | 1/8 | 14 | 15  | 5   | 9,0  | 10,0 | 30,5 | 8,5  | 19,0  | 50 |
| 10514P3 | 1/4 | 17 | 19  | 6   | 12,0 | 12,0 | 37,0 | 9,5  | 39,0  | 50 |
| 10538P3 | 3/8 | 21 | 22  | 8   | 12,0 | 12,0 | 40,0 | 10,0 | 68,0  | 25 |
| 10512P3 | 1/2 | 25 | 27  | 12  | 15,0 | 15,0 | 48,0 | 12,0 | 118,0 | 10 |
|         |     |    |     |     |      |      |      |      |       |    |
|         |     |    |     |     |      |      |      |      |       |    |
|         |     |    |     |     |      |      |      |      |       |    |
|         |     |    |     |     |      |      |      |      |       |    |



## ART. 106

Manicotto riduzione  
Reducing sleeve

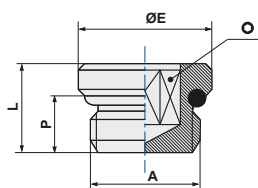
| CODICE  | A    | B    | C    |  |  |    |     |
|---------|------|------|------|--|--|----|-----|
| 106M518 | M5   | G1/8 | 13,5 |  |  | 14 | 100 |
| 1061814 | G1/8 | G1/4 | 19,0 |  |  | 17 | 100 |
| 1061838 | G1/8 | G3/8 | 20,0 |  |  | 22 | 25  |
| 1061812 | G1/8 | G1/2 | 24,0 |  |  | 26 | 50  |
| 1061438 | G1/4 | G3/8 | 23,0 |  |  | 22 | 50  |
| 1061412 | G1/4 | G1/2 | 25,0 |  |  | 26 | 50  |
| 1063812 | G3/8 | G1/2 | 27,5 |  |  | 26 | 25  |
| 1061234 | G1/2 | G3/4 | 30,0 |  |  | 32 | 10  |
|         |      |      |      |  |  |    |     |
|         |      |      |      |  |  |    |     |



## ART. 107

Tappo maschio cilindrico con O-Ring  
Parallel male plug + O-Ring

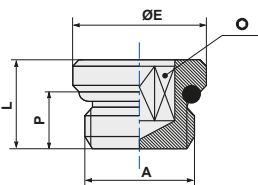
| CODICE | A    | P    | L    | ØE |  |      |     |
|--------|------|------|------|----|--|------|-----|
| 107M5  | M5   | 4,0  | 5,5  | 8  |  | 2,5  | 100 |
| 10718  | G1/8 | 5,5  | 7,5  | 14 |  | 4,0  | 100 |
| 10714  | G1/4 | 6,5  | 8,5  | 17 |  | 6,0  | 100 |
| 10738  | G3/8 | 7,5  | 10,5 | 20 |  | 8,0  | 100 |
| 10712  | G1/2 | 9,0  | 12,0 | 24 |  | 10,0 | 50  |
| 10734  | G3/4 | 15,0 | 20,0 | 32 |  | 12,0 | 10  |
|        |      |      |      |    |  |      |     |
|        |      |      |      |    |  |      |     |



## ART. 107P

Tappo maschio cilindrico con OR (Tecnopolimero)  
Parallel male plug + OR (Technopolymer)

| CODICE | A    | P   | L   | ØE | Nm   |   |     |
|--------|------|-----|-----|----|------|---|-----|
| 107P18 | G1/8 | 5,3 | 8,2 | 14 | 1,2* | 4 | 100 |
| 107P14 | G1/4 | 6,5 | 9,2 | 18 | 1,5* | 6 | 100 |
|        |      |     |     |    |      |   |     |
|        |      |     |     |    |      |   |     |

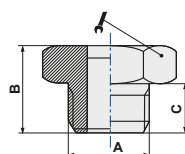


(\*) = coppie di serraggio tightening torque

## ART. 107Z

Tappo maschio cilindrico  
Parallel male plug

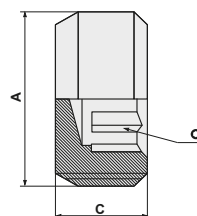
| CODICE | A    | B    | C  |  |  |    |     |
|--------|------|------|----|--|--|----|-----|
| 107Z18 | G1/8 | 10,5 | 6  |  |  | 14 | 100 |
| 107Z14 | G1/4 | 13,0 | 8  |  |  | 17 | 100 |
| 107Z38 | G3/8 | 14,0 | 9  |  |  | 19 | 50  |
| 107Z12 | G1/2 | 15,5 | 10 |  |  | 24 | 50  |
| 107Z34 | G3/4 | 16,5 | 11 |  |  | 30 | 25  |
| 107Z01 | G1"  | 19,0 | 13 |  |  | 38 | 10  |
|        |      |      |    |  |  |    |     |
|        |      |      |    |  |  |    |     |



## ART. E100

Tappo a scomparsa conico  
Disappearance tapered plug

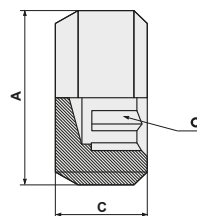
| CODICE   | A    |  | C  |  |  |    |     |
|----------|------|--|----|--|--|----|-----|
| E10018   | G1/8 |  | 8  |  |  | 5  | 100 |
| E10018L5 | G1/8 |  | 5  |  |  | 5  | 100 |
| E10014   | G1/4 |  | 10 |  |  | 6  | 100 |
| E10038   | G3/8 |  | 11 |  |  | 8  | 50  |
| E10012   | G1/2 |  | 13 |  |  | 10 | 50  |
|          |      |  |    |  |  |    |     |
|          |      |  |    |  |  |    |     |



## ART. E200

Tappo a scomparsa cilindrico  
Disappearance parallel plug

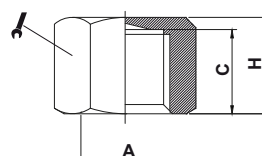
| CODICE | A    |  | C  |  |  |    |     |
|--------|------|--|----|--|--|----|-----|
| E20018 | G1/8 |  | 8  |  |  | 5  | 100 |
| E20014 | G1/4 |  | 10 |  |  | 6  | 100 |
| E20038 | G3/8 |  | 11 |  |  | 8  | 50  |
| E20012 | G1/2 |  | 13 |  |  | 10 | 50  |
|        |      |  |    |  |  |    |     |
|        |      |  |    |  |  |    |     |
|        |      |  |    |  |  |    |     |



## ART. 108

Tappo femmina  
Female plug

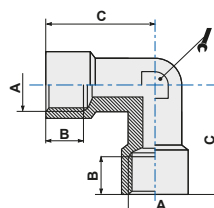
| CODICE | A    |  |  |  | C    | H    |    |     |
|--------|------|--|--|--|------|------|----|-----|
| 10818  | G1/8 |  |  |  | 8,0  | 10,0 | 14 | 100 |
| 10814  | G1/4 |  |  |  | 11,0 | 13,5 | 17 | 100 |
| 10838  | G3/8 |  |  |  | 11,5 | 14,0 | 20 | 50  |
| 10812  | G1/2 |  |  |  | 14,0 | 16,5 | 24 | 50  |
|        |      |  |  |  |      |      |    |     |
|        |      |  |  |  |      |      |    |     |
|        |      |  |  |  |      |      |    |     |
|        |      |  |  |  |      |      |    |     |



## ART. 109

Elle F.F.  
Female L

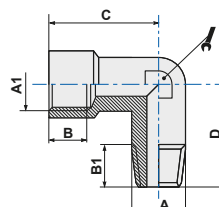
| CODICE | A    | B  | C    |  |  |  |  |
|--------|------|----|------|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 10918  | G1/8 | 7  | 20,0 |  |  | 10                                                                                | 100                                                                               |
| 10914  | G1/4 | 8  | 25,5 |  |  | 13                                                                                | 50                                                                                |
| 10938  | G3/8 | 10 | 29,0 |  |  | 17                                                                                | 25                                                                                |
| 10912  | G1/2 | 11 | 35,0 |  |  | 20                                                                                | 10                                                                                |
| 10934  | G3/4 | 16 | 36,0 |  |  | 25                                                                                | 5                                                                                 |
| 10901  | G1'  | 19 | 44,0 |  |  | 30                                                                                | 5                                                                                 |
|        |      |    |      |  |  |                                                                                   |                                                                                   |
|        |      |    |      |  |  |                                                                                   |                                                                                   |



## ART. 110

Elle M.F.  
Male-Female L

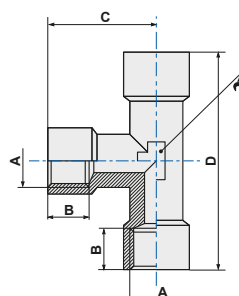
| CODICE    | A    | A1   | B  | B1   | C    | D    |  |  |
|-----------|------|------|----|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 110M5     | M5   | M5   | 4  |      | 11,0 | 11,5 | 9                                                                                 | 100                                                                               |
| 11018     | G1/8 | G1/8 | 7  | 8    | 20,0 | 19,0 | 10                                                                                | 50                                                                                |
| 11014     | G1/4 | G1/4 | 8  | 11   | 25,5 | 24,0 | 13                                                                                | 50                                                                                |
| 11038     | G3/8 | G3/8 | 10 | 11,5 | 29,0 | 26,5 | 17                                                                                | 25                                                                                |
| 11012     | G1/2 | G1/2 | 11 | 14   | 35,0 | 31,5 | 20                                                                                | 20                                                                                |
| 11034     | G3/4 | G3/4 | 16 | 16   | 35,0 | 34,5 | 25                                                                                | 10                                                                                |
| 11001     | G1'  | G1'  | 19 | 16   | 44,0 | 51,0 | 30                                                                                | 5                                                                                 |
| 11014F18M | G1/8 | G1/4 | 8  | 8    | 25,5 | 23,0 | 13                                                                                | 50                                                                                |
|           |      |      |    |      |      |      |                                                                                   |                                                                                   |
|           |      |      |    |      |      |      |                                                                                   |                                                                                   |



## ART. 111

T F.F.F.  
Female T

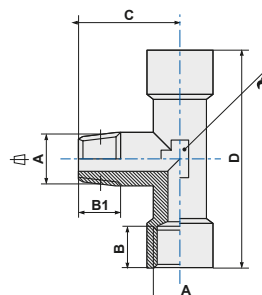
| CODICE | A    | B  | C    | D  |  |  |  |
|--------|------|----|------|----|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 11118  | G1/8 | 7  | 20,0 | 40 |  | 10                                                                                  | 50                                                                                  |
| 11114  | G1/4 | 8  | 25,5 | 51 |  | 13                                                                                  | 25                                                                                  |
| 11138  | G3/8 | 10 | 29,0 | 58 |  | 17                                                                                  | 10                                                                                  |
| 11112  | G1/2 | 11 | 35,0 | 70 |  | 20                                                                                  | 10                                                                                  |
| 11134  | G3/4 | 16 | 31,0 | 73 |  | 25                                                                                  | 5                                                                                   |
| 11101  | G1'  | 19 | 49,5 | 90 |  | 30                                                                                  | 5                                                                                   |
|        |      |    |      |    |  |                                                                                     |                                                                                     |
|        |      |    |      |    |  |                                                                                     |                                                                                     |



## ART. 112

T F.M.F.  
Centre male T

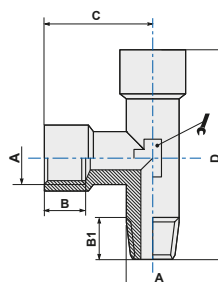
| CODICE | A    | B  | B1   | C    | D  |  |  |
|--------|------|----|------|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 11218  | G1/8 | 7  | 8,0  | 19,0 | 40 | 10                                                                                  | 50                                                                                  |
| 11214  | G1/4 | 8  | 11,0 | 24,0 | 51 | 13                                                                                  | 25                                                                                  |
| 11238  | G3/8 | 10 | 13,6 | 26,5 | 58 | 17                                                                                  | 25                                                                                  |
| 11212  | G1/2 | 11 | 15,5 | 31,5 | 72 | 20                                                                                  | 10                                                                                  |
| 11234  | G3/4 | 16 | 15,0 | 31,0 | 73 | 25                                                                                  | 5                                                                                   |
| 11201  | G1'  | 19 | 16,0 | 38,0 | 90 | 30                                                                                  | 5                                                                                   |
|        |      |    |      |      |    |                                                                                     |                                                                                     |
|        |      |    |      |      |    |                                                                                     |                                                                                     |



## ART. 113

T M.F.F.  
Off-set male T

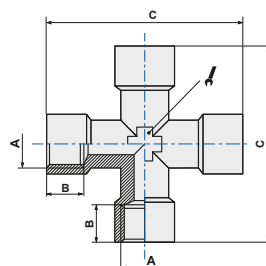
| CODICE | A    | B  | B1   | C    | D    |  |  |
|--------|------|----|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 11318  | G1/8 | 7  | 8,0  | 20,0 | 39,0 | 10                                                                                | 50                                                                                |
| 11314  | G1/4 | 8  | 11,0 | 25,5 | 49,5 | 13                                                                                | 25                                                                                |
| 11338  | G3/8 | 10 | 13,6 | 29,0 | 55,5 | 17                                                                                | 25                                                                                |
| 11312  | G1/2 | 11 | 15,5 | 35,0 | 65,0 | 20                                                                                | 10                                                                                |
| 11334  | G3/4 | 16 | 15,0 | 31,0 | 67,0 | 25                                                                                | 5                                                                                 |
| 11301  | G1"  | 19 | 16,0 | 44,0 | 84,0 | 30                                                                                | 5                                                                                 |
|        |      |    |      |      |      |                                                                                   |                                                                                   |
|        |      |    |      |      |      |                                                                                   |                                                                                   |
|        |      |    |      |      |      |                                                                                   |                                                                                   |
|        |      |    |      |      |      |                                                                                   |                                                                                   |
|        |      |    |      |      |      |                                                                                   |                                                                                   |
|        |      |    |      |      |      |                                                                                   |                                                                                   |



## ART. 114

Croce F.F.F.F.  
Female cross

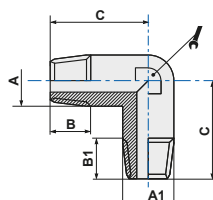
| CODICE | A    | B  | C  |  |  |  |  |
|--------|------|----|----|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 11418  | G1/8 | 7  | 40 |  |  | 10                                                                                | 25                                                                                |
| 11414  | G1/4 | 8  | 51 |  |  | 13                                                                                | 25                                                                                |
| 11438  | G3/8 | 10 | 58 |  |  | 17                                                                                | 10                                                                                |
| 11412  | G1/2 | 11 | 72 |  |  | 20                                                                                | 5                                                                                 |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |
|        |      |    |    |  |  |                                                                                   |                                                                                   |



## ART. 115

Elle M.M.  
Male L

| CODICE  | A    | B    | C    | A1   | B1   |  |  |
|---------|------|------|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 11518   | G1/8 | 8,0  | 19,0 | G1/8 | 8,0  | 10                                                                                  | 100                                                                                 |
| 11514   | G1/4 | 12,5 | 24,0 | G1/4 | 12,5 | 13                                                                                  | 50                                                                                  |
| 11538   | G3/8 | 13,6 | 26,5 | G3/8 | 26,5 | 17                                                                                  | 25                                                                                  |
| 11512   | G1/2 | 15,5 | 31,5 | G1/2 | 15,5 | 20                                                                                  | 25                                                                                  |
| 11534   | G3/4 | 15,0 | 35,5 | G3/4 | 15,0 | 25                                                                                  | 5                                                                                   |
| 11501   | G1"  | 16,0 | 51,0 | G1"  | 51,0 | 30                                                                                  | 5                                                                                   |
| 1151814 | G1/8 | 8,0  | 22,0 | G1/4 | 12,5 | 13                                                                                  | 100                                                                                 |
|         |      |      |      |      |      |                                                                                     |                                                                                     |
|         |      |      |      |      |      |                                                                                     |                                                                                     |
|         |      |      |      |      |      |                                                                                     |                                                                                     |
|         |      |      |      |      |      |                                                                                     |                                                                                     |
|         |      |      |      |      |      |                                                                                     |                                                                                     |

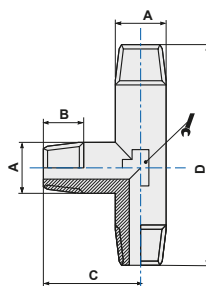




## ART. 116

T M.M.M.  
Male T

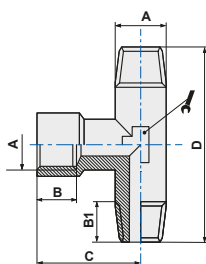
| CODICE | A    | B    | C    | D  |  |  |  |
|--------|------|------|------|----|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 11618  | G1/8 | 8,0  | 19,0 | 38 |  | 10                                                                                | 100                                                                               |
| 11614  | G1/4 | 12,5 | 24,0 | 48 |  | 13                                                                                | 50                                                                                |
| 11638  | G3/8 | 13,6 | 26,5 | 53 |  | 17                                                                                | 25                                                                                |
| 11612  | G1/2 | 15,5 | 31,5 | 63 |  | 20                                                                                | 10                                                                                |
| 11634  | G3/4 | 15,0 | 35,5 | 66 |  | 25                                                                                | 5                                                                                 |
| 11601  | G1"  | 16,0 | 40,5 | 78 |  | 30                                                                                | 5                                                                                 |
|        |      |      |      |    |  |                                                                                   |                                                                                   |
|        |      |      |      |    |  |                                                                                   |                                                                                   |
|        |      |      |      |    |  |                                                                                   |                                                                                   |
|        |      |      |      |    |  |                                                                                   |                                                                                   |
|        |      |      |      |    |  |                                                                                   |                                                                                   |
|        |      |      |      |    |  |                                                                                   |                                                                                   |



## ART. 117

T M.F.M.  
Centre female T

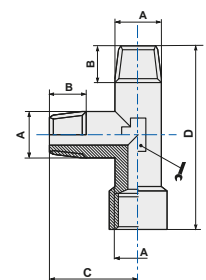
| CODICE | A    | B  | B1   | C    | D  |  |  |  |
|--------|------|----|------|------|----|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 11718  | G1/8 | 7  | 8,0  | 20,0 | 38 |  | 10                                                                                | 100                                                                               |
| 11714  | G1/4 | 8  | 12,5 | 25,5 | 48 |  | 13                                                                                | 50                                                                                |
| 11738  | G3/8 | 10 | 13,6 | 29,0 | 53 |  | 17                                                                                | 25                                                                                |
| 11712  | G1/2 | 11 | 15,5 | 36,0 | 63 |  | 17                                                                                | 10                                                                                |
| 11734  | G3/4 | 16 | 15,0 | 34,5 | 66 |  | 25                                                                                | 5                                                                                 |
| 11701  | G1"  | 19 | 16,0 | 46,5 | 78 |  | 30                                                                                | 5                                                                                 |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |
|        |      |    |      |      |    |  |                                                                                   |                                                                                   |



## ART. 118

T M.M.F.  
Off-set female T

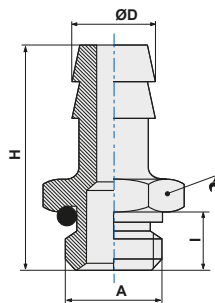
| CODICE | A    | B    | C    | D    |  |  |  |
|--------|------|------|------|------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 11818  | G1/8 | 8,0  | 19,0 | 39,0 |  | 10                                                                                  | 100                                                                                 |
| 11814  | G1/4 | 12,5 | 24,0 | 49,5 |  | 13                                                                                  | 50                                                                                  |
| 11838  | G3/8 | 13,6 | 26,5 | 55,5 |  | 17                                                                                  | 25                                                                                  |
| 11812  | G1/2 | 15,5 | 31,5 | 67,5 |  | 20                                                                                  | 10                                                                                  |
| 11834  | G3/4 | 15,0 | 34,5 | 69,0 |  | 25                                                                                  | 5                                                                                   |
| 11801  | G1"  | 16,0 | 38,0 | 84,0 |  | 30                                                                                  | 5                                                                                   |
|        |      |      |      |      |  |                                                                                     |                                                                                     |
|        |      |      |      |      |  |                                                                                     |                                                                                     |
|        |      |      |      |      |  |                                                                                     |                                                                                     |
|        |      |      |      |      |  |                                                                                     |                                                                                     |
|        |      |      |      |      |  |                                                                                     |                                                                                     |
|        |      |      |      |      |  |                                                                                     |                                                                                     |



**ART. 119**

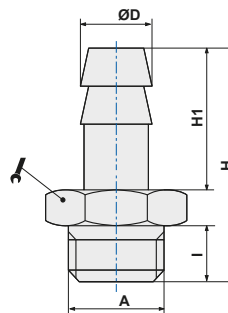
Portagomma maschio con O-Ring  
Male hose adapter + O-Ring

| CODICE  | ØD  | A    | I  | H    | Ød   |  |  |
|---------|-----|------|----|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 11945M5 | 4,5 | M5   | 4  | 31,5 | 2,2  | 11                                                                                | 100                                                                               |
| 1190718 | 7   | G1/8 | 6  | 31,5 | 4    | 13                                                                                | 100                                                                               |
| 1190714 | 7   | G1/4 | 8  | 34,0 | 4    | 16                                                                                | 100                                                                               |
| 1190818 | 8   | G1/8 | 6  | 31,5 | 5,30 | 13                                                                                | 100                                                                               |
| 1190918 | 9   | G1/8 | 6  | 31,5 | 5,5  | 13                                                                                | 100                                                                               |
| 1190914 | 9   | G1/4 | 8  | 34,0 | 5,5  | 16                                                                                | 100                                                                               |
| 1190938 | 9   | G3/8 | 9  | 35,0 | 5,5  | 17                                                                                | 50                                                                                |
| 1191014 | 10  | G1/4 | 8  | 34,0 | 6    | 16                                                                                | 50                                                                                |
| 1191038 | 10  | G3/8 | 9  | 35,0 | 6    | 17                                                                                | 50                                                                                |
| 1191214 | 12  | G1/4 | 8  | 34,0 | 8    | 16                                                                                | 50                                                                                |
| 1191238 | 12  | G3/8 | 9  | 36,0 | 8    | 17                                                                                | 50                                                                                |
| 1191212 | 12  | G1/2 | 11 | 37,0 | 8    | 22                                                                                | 50                                                                                |
| 1191738 | 17  | G3/8 | 9  | 36,0 | 11   | 17                                                                                | 50                                                                                |
| 1191712 | 17  | G1/2 | 11 | 37,0 | 12   | 22                                                                                | 50                                                                                |


**ART. 119Z**

Portagomma maschio cilindrico  
Male hose adapter

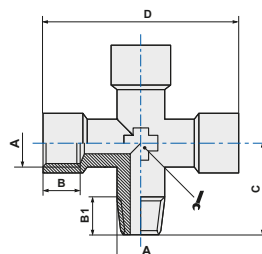
| CODICE   | ØD  | A    | I  | H    | H1   | Ød   |  |  |
|----------|-----|------|----|------|------|------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| 119Z04M5 | 4,5 | M5   | 4  | 22,5 | 15,0 | 2    | 8                                                                                  | 100                                                                                |
| 119Z0618 | 6   | G1/8 | 6  | 29,5 | 19,0 | 3    | 12                                                                                 | 100                                                                                |
| 119Z0614 | 6   | G1/4 | 8  | 32,0 | 19,0 | 3    | 14                                                                                 | 100                                                                                |
| 119Z0718 | 7   | G1/8 | 6  | 29,5 | 19,0 | 4    | 12                                                                                 | 100                                                                                |
| 119Z0714 | 7   | G1/4 | 8  | 32,0 | 19,0 | 4    | 14                                                                                 | 100                                                                                |
| 119Z0818 | 8   | G1/8 | 6  | 29,5 | 19,0 | 5    | 12                                                                                 | 100                                                                                |
| 119Z0814 | 8   | G1/4 | 8  | 32,0 | 19,0 | 5    | 14                                                                                 | 100                                                                                |
| 119Z0838 | 8   | G3/8 | 9  | 33,0 | 19,0 | 5    | 19                                                                                 | 100                                                                                |
| 119Z0918 | 9   | G1/8 | 6  | 29,5 | 19,0 | 6    | 12                                                                                 | 100                                                                                |
| 119Z0914 | 9   | G1/4 | 8  | 32,0 | 19,0 | 6    | 14                                                                                 | 100                                                                                |
| 119Z0938 | 9   | G3/8 | 9  | 33,0 | 19,0 | 6    | 19                                                                                 | 100                                                                                |
| 119Z0912 | 9   | G1/2 | 10 | 35,5 | 19,0 | 6    | 24                                                                                 | 25                                                                                 |
| 119Z1018 | 10  | G1/8 | 6  | 30,5 | 20,0 | 7    | 12                                                                                 | 100                                                                                |
| 119Z1014 | 10  | G1/4 | 8  | 33,0 | 20,0 | 7    | 14                                                                                 | 50                                                                                 |
| 119Z1038 | 10  | G3/8 | 9  | 34,0 | 20,0 | 7    | 19                                                                                 | 100                                                                                |
| 119Z1012 | 10  | G1/2 | 10 | 36,0 | 20,0 | 7    | 24                                                                                 | 50                                                                                 |
| 119Z1214 | 12  | G1/4 | 8  | 33,0 | 20,0 | 9    | 14                                                                                 | 50                                                                                 |
| 119Z1238 | 12  | G3/8 | 9  | 34,0 | 20,0 | 9    | 19                                                                                 | 50                                                                                 |
| 119Z1212 | 12  | G1/2 | 10 | 35,5 | 20,0 | 9    | 22                                                                                 | 50                                                                                 |
| 119Z1414 | 14  | G1/4 | 8  | 33,0 | 20,0 | 10   | 14                                                                                 | 25                                                                                 |
| 119Z1438 | 14  | G3/8 | 9  | 36,0 | 22,0 | 10,5 | 19                                                                                 | 50                                                                                 |
| 119Z1412 | 14  | G1/2 | 10 | 37,5 | 22,0 | 10,5 | 22                                                                                 | 50                                                                                 |
| 119Z1638 | 16  | G3/8 | 9  | 38,0 | 24,0 | 12   | 19                                                                                 | 50                                                                                 |
| 119Z1612 | 16  | G1/2 | 10 | 38,0 | 22,0 | 12,5 | 24                                                                                 | 25                                                                                 |
| 119Z1738 | 17  | G3/8 | 9  | 38,0 | 24,0 | 13   | 19                                                                                 | 50                                                                                 |
| 119Z1712 | 17  | G1/2 | 10 | 39,5 | 24,0 | 13   | 22                                                                                 | 50                                                                                 |
| 119Z2012 | 20  | G1/2 | 10 | 39,5 | 24,0 | 14   | 24                                                                                 | 25                                                                                 |
| 119Z2034 | 20  | G3/4 | 10 | 39,5 | 24,0 | 16   | 24                                                                                 | 25                                                                                 |



## ART. 120

Croce M.F.F.F.  
1 male 3 female cross

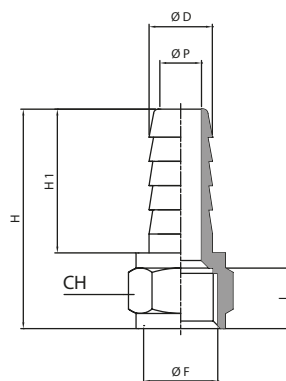
| CODICE | A    | B  | B1   | C    | D  |  |  |
|--------|------|----|------|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 12018  | G1/8 | 7  | 8,0  | 19,0 | 40 | 10                                                                                | 25                                                                                |
| 12014  | G1/4 | 8  | 12,5 | 24,0 | 51 | 13                                                                                | 25                                                                                |
| 12038  | G3/8 | 10 | 13,6 | 26,5 | 58 | 17                                                                                | 10                                                                                |
| 12012  | G1/2 | 11 | 15,5 | 31,5 | 72 | 20                                                                                | 5                                                                                 |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |
|        |      |    |      |      |    |                                                                                   |                                                                                   |



## ART. 122

Portagomma femmina  
Female hose adapter

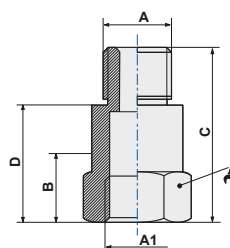
| CODICE  | ØD | F    | Ød  | I    | H    | H1 |  |  |
|---------|----|------|-----|------|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 1220618 | 6  | G1/8 | 3,5 | 8    | 28,5 | 19 | 12                                                                                | 100                                                                               |
| 1220718 | 7  | G1/8 | 4,5 | 8    | 28,5 | 19 | 12                                                                                | 100                                                                               |
| 1220714 | 7  | G1/4 | 4,5 | 11   | 31,5 | 19 | 15                                                                                | 100                                                                               |
| 1220818 | 8  | G1/8 | 5,5 | 8    | 28,5 | 19 | 12                                                                                | 100                                                                               |
| 1220814 | 8  | G1/4 | 5,5 | 11   | 31,5 | 19 | 15                                                                                | 100                                                                               |
| 1220914 | 9  | G1/4 | 6,5 | 11   | 31,5 | 19 | 15                                                                                | 100                                                                               |
| 1221014 | 10 | G1/4 | 7,5 | 11   | 32,5 | 20 | 15                                                                                | 50                                                                                |
| 1221038 | 10 | G3/8 | 7,5 | 11,5 | 33   | 20 | 19                                                                                | 25                                                                                |
| 1221238 | 12 | G3/8 | 9,5 | 11,5 | 33   | 20 | 19                                                                                | 25                                                                                |
| 1221212 | 12 | G1/2 | 9,5 | 14   | 36   | 20 | 24                                                                                | 10                                                                                |
| 1221438 | 14 | G3/8 | 11  | 11,5 | 35   | 22 | 19                                                                                | 10                                                                                |
| 1221412 | 14 | G1/2 | 11  | 14   | 38   | 22 | 24                                                                                | 10                                                                                |



## ART. 123

Prolunga  
Extension

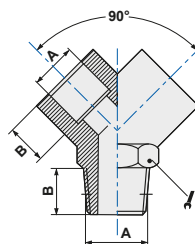
| CODICE   | A    | A1   | B | C  | D  |  |  |
|----------|------|------|---|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 12318L22 | G1/8 | G1/8 | 6 | 22 | 16 | 14                                                                                  | 100                                                                                 |
| 12318L32 | G1/8 | G1/8 | 6 | 32 | 26 | 14                                                                                  | 100                                                                                 |
| 12318L42 | G1/8 | G1/8 | 6 | 42 | 36 | 14                                                                                  | 100                                                                                 |
| 12318L51 | G1/8 | G1/8 | 6 | 51 | 45 | 14                                                                                  | 50                                                                                  |
| 12314L28 | G1/4 | G1/4 | 8 | 28 | 20 | 17                                                                                  | 50                                                                                  |
| 12314L35 | G1/4 | G1/4 | 8 | 35 | 27 | 17                                                                                  | 50                                                                                  |
| 12314L51 | G1/4 | G1/4 | 8 | 51 | 43 | 17                                                                                  | 25                                                                                  |
|          |      |      |   |    |    |                                                                                     |                                                                                     |
|          |      |      |   |    |    |                                                                                     |                                                                                     |
|          |      |      |   |    |    |                                                                                     |                                                                                     |
|          |      |      |   |    |    |                                                                                     |                                                                                     |



## ART. 125

Y maschio  
Male Y

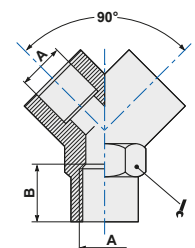
| CODICE | A    | B    |  |  |  |    |    |
|--------|------|------|--|--|--|----|----|
| 12518  | G1/8 | 8,0  |  |  |  | 13 | 50 |
| 12514  | G1/4 | 11,0 |  |  |  | 17 | 25 |
| 12538  | G3/8 | 11,5 |  |  |  | 20 | 25 |
| 12512  | G1/2 | 14,0 |  |  |  | 25 | 10 |
|        |      |      |  |  |  |    |    |
|        |      |      |  |  |  |    |    |



## ART. 126

Y femmina  
Female Y

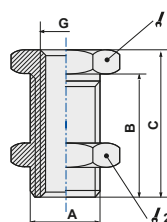
| CODICE | A    | B  |  |  |  |    |    |
|--------|------|----|--|--|--|----|----|
| 12618  | G1/8 | 8  |  |  |  | 13 | 50 |
| 12614  | G1/4 | 11 |  |  |  | 17 | 25 |
| 12638  | G3/8 | 11 |  |  |  | 20 | 25 |
| 12612  | G1/2 | 14 |  |  |  | 25 | 10 |
|        |      |    |  |  |  |    |    |
|        |      |    |  |  |  |    |    |



## ART. 127

Passaparete femmina (nichelato)  
Female bulkhead (nickel plated)

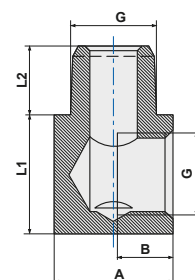
| CODICE | G    | A       | B    | C  |    |    |     |
|--------|------|---------|------|----|----|----|-----|
| 127M5  | M5   | M10x1,0 | 10,5 | 14 | 14 | 14 | 100 |
| 12718  | G1/8 | M16x1,5 | 14,0 | 18 | 22 | 19 | 50  |
| 12714  | G1/4 | M20x1,5 | 21,0 | 24 | 27 | 24 | 25  |
| 12738  | G3/8 | M26x1,5 | 21,0 | 26 | 32 | 30 | 25  |
| 12712  | G1/2 | M28x1,5 | 27,0 | 33 | 36 | 32 | 10  |
|        |      |         |      |    |    |    |     |
|        |      |         |      |    |    |    |     |



## ART. RLB100

Raccordo ad "L" M/F conico  
Male-female L tapered

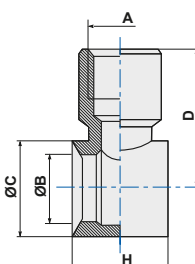
| CODICE   | G   | A  | B   | L1 | L2   |  |     |
|----------|-----|----|-----|----|------|--|-----|
| RLB100M5 | M5  | 9  | 4,5 | 9  | 4,5  |  | 100 |
| RLB10018 | 1/8 | 14 | 6,5 | 14 | 8    |  | 100 |
| RLB10014 | 1/4 | 18 | 9   | 18 | 10   |  | 100 |
| RLB10038 | 3/8 | 19 | 11  | 19 | 11,5 |  | 50  |
|          |     |    |     |    |      |  |     |
|          |     |    |     |    |      |  |     |



## ART. 412

Anello singolo femmina  
Female single banjo body

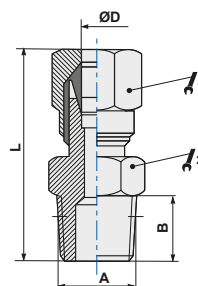
| CODICE | A    | ØB   | ØC | D      | H  |  |    |
|--------|------|------|----|--------|----|--|----|
| 41218  | G1/8 | 9,9  | 14 | 20     | 15 |  | 50 |
| 41214  | G1/4 | 13,3 | 18 | 24     | 17 |  | 50 |
| 41238  | G3/8 | 16,8 | 21 | 28,5   | 20 |  | 25 |
| 41212  | G1/2 | 21   | 26 | 34,524 |    |  |    |
|        |      |      |    |        |    |  |    |
|        |      |      |    |        |    |  |    |



## ART. 201

Raccordo diritto maschio conico  
Taper straight male adaptor

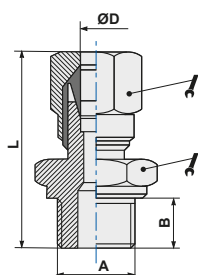
| CODICE  | ØD | A    | B    | L    |  |  |  |
|---------|----|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2010418 | 4  | G1/8 | 8    | 27   | 10                                                                                | 10                                                                                | 100                                                                               |
| 2010618 | 6  | G1/8 | 8    | 28   | 12                                                                                | 12                                                                                | 100                                                                               |
| 2010614 | 6  | G1/4 | 11   | 32,5 | 12                                                                                | 14                                                                                | 100                                                                               |
| 2010818 | 8  | G1/8 | 8    | 29,5 | 14                                                                                | 12                                                                                | 100                                                                               |
| 2010814 | 8  | G1/4 | 11   | 33   | 14                                                                                | 14                                                                                | 100                                                                               |
| 2010838 | 8  | G3/8 | 11,5 | 33   | 14                                                                                | 17                                                                                | 50                                                                                |
| 2011014 | 10 | G1/4 | 11   | 37,5 | 19                                                                                | 17                                                                                | 50                                                                                |
| 2011038 | 10 | G3/8 | 11,5 | 38   | 19                                                                                | 17                                                                                | 50                                                                                |
| 2011012 | 10 | G1/2 | 14   | 40,5 | 19                                                                                | 22                                                                                | 25                                                                                |
| 2011238 | 12 | G3/8 | 11,5 | 39   | 22                                                                                | 19                                                                                | 25                                                                                |
| 2011212 | 12 | G1/2 | 14   | 41   | 22                                                                                | 22                                                                                | 25                                                                                |
| 2011412 | 14 | G1/2 | 14   | 42,5 | 27                                                                                | 22                                                                                | 25                                                                                |
| 2011512 | 15 | G1/2 | 14   | 42,5 | 27                                                                                | 22                                                                                | 25                                                                                |
| 2011612 | 16 | G1/2 | 14   | 42   | 30                                                                                | 24                                                                                | 10                                                                                |
| 2011812 | 18 | G1/2 | 14   | 43   | 32                                                                                | 26                                                                                | 10                                                                                |



## ART. 201Z

Raccordo diritto maschio cilindrico  
Parallel straight male adaptor

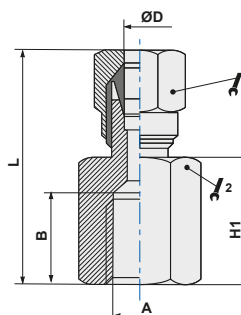
| CODICE   | ØD | A    | B | L    |  |  |  |
|----------|----|------|---|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 201Z0418 | 4  | G1/8 | 6 | 25   | 10                                                                                  | 14                                                                                  | 100                                                                                 |
| 201Z0618 | 6  | G1/8 | 6 | 26   | 12                                                                                  | 14                                                                                  | 100                                                                                 |
| 201Z0614 | 6  | G1/4 | 8 | 29,5 | 12                                                                                  | 17                                                                                  | 100                                                                                 |
| 201Z0814 | 8  | G1/8 | 6 | 27,5 | 14                                                                                  | 14                                                                                  | 100                                                                                 |
| 201Z0818 | 8  | G1/4 | 8 | 30   | 14                                                                                  | 17                                                                                  | 50                                                                                  |
| 201Z0838 | 8  | G3/8 | 9 | 30,5 | 14                                                                                  | 19                                                                                  | 50                                                                                  |
| 201Z1014 | 10 | G1/4 | 8 | 34,5 | 19                                                                                  | 17                                                                                  | 50                                                                                  |
|          |    |      |   |      |                                                                                     |                                                                                     |                                                                                     |
|          |    |      |   |      |                                                                                     |                                                                                     |                                                                                     |
|          |    |      |   |      |                                                                                     |                                                                                     |                                                                                     |
|          |    |      |   |      |                                                                                     |                                                                                     |                                                                                     |



## ART. 202

Raccordo diritto femmina  
Female straight adaptor

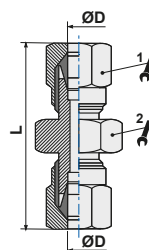
| CODICE  | ØD | A    | B    | L    |  |  |  |
|---------|----|------|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 2020418 | 4  | G1/8 | 8    | 24,5 | 10                                                                                  | 14                                                                                  | 100                                                                                 |
| 2020618 | 6  | G1/8 | 8    | 26   | 12                                                                                  | 14                                                                                  | 100                                                                                 |
| 2020614 | 6  | G1/4 | 11   | 30,5 | 12                                                                                  | 17                                                                                  | 100                                                                                 |
| 2020818 | 8  | G1/8 | 8    | 26,5 | 14                                                                                  | 14                                                                                  | 50                                                                                  |
| 2020814 | 8  | G1/4 | 11   | 31   | 14                                                                                  | 17                                                                                  | 50                                                                                  |
| 2020838 | 8  | G3/8 | 11,5 | 31   | 14                                                                                  | 20                                                                                  | 50                                                                                  |
| 2021014 | 10 | G1/4 | 11   | 35,5 | 19                                                                                  | 17                                                                                  | 50                                                                                  |
| 2021038 | 10 | G3/8 | 11,5 | 36,5 | 19                                                                                  | 20                                                                                  | 25                                                                                  |
|         |    |      |      |      |                                                                                     |                                                                                     |                                                                                     |
|         |    |      |      |      |                                                                                     |                                                                                     |                                                                                     |



## ART. 203

Raccordo diritto intermedio  
Straight connector

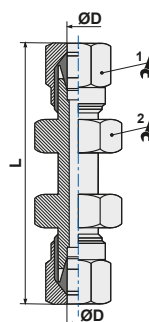
| CODICE  | ØD | L    |  |  |  |    |    |    |
|---------|----|------|--|--|--|----|----|----|
| 2030400 | 4  | 33,5 |  |  |  | 10 | 10 | 50 |
| 2030600 | 6  | 36,5 |  |  |  | 12 | 12 | 50 |
| 2030800 | 8  | 38,5 |  |  |  | 14 | 14 | 50 |
| 2031000 | 10 | 47,5 |  |  |  | 19 | 17 | 25 |
| 2031200 | 12 | 50,5 |  |  |  | 22 | 19 | 25 |
| 2031400 | 14 | 55,5 |  |  |  | 27 | 24 | 10 |
| 2031500 | 15 | 55,5 |  |  |  | 27 | 24 | 10 |
|         |    |      |  |  |  |    |    |    |
|         |    |      |  |  |  |    |    |    |
|         |    |      |  |  |  |    |    |    |



## ART. 204

Raccordo passaparete  
Bulkhead adaptor

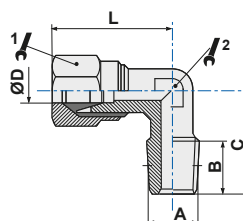
| CODICE  | ØD | L    |  |  |  |    |    |    |
|---------|----|------|--|--|--|----|----|----|
| 2040600 | 6  | 51,5 |  |  |  | 12 | 14 | 50 |
| 2040800 | 8  | 55,5 |  |  |  | 14 | 16 | 50 |
| 2041000 | 10 | 62,5 |  |  |  | 19 | 19 | 25 |
| 2041200 | 12 | 64,5 |  |  |  | 22 | 22 | 10 |
| 2041400 | 14 | 69,5 |  |  |  | 27 | 25 | 5  |
| 2041500 | 15 | 69,5 |  |  |  | 27 | 25 | 5  |
|         |    |      |  |  |  |    |    |    |
|         |    |      |  |  |  |    |    |    |
|         |    |      |  |  |  |    |    |    |



## ART. 205

Raccordo ad L  
L male adaptor

| CODICE  | ØD | A    | B    | C    | L    |  |    |    |
|---------|----|------|------|------|------|--|----|----|
| 2050418 | 4  | G1/8 | 8    | 16   | 21   |  | 10 | 9  |
| 2050618 | 6  | G1/8 | 8    | 16   | 22   |  | 12 | 9  |
| 2050614 | 6  | G1/4 | 11   | 20   | 24,5 |  | 12 | 11 |
| 2050818 | 8  | G1/8 | 8    | 17   | 24   |  | 14 | 11 |
| 2050814 | 8  | G1/4 | 11   | 20   | 24   |  | 14 | 11 |
| 2050838 | 8  | G3/8 | 11,5 | 24   | 27   |  | 14 | 13 |
| 2051014 | 10 | G1/4 | 11   | 23,5 | 32   |  | 19 | 13 |
| 2051038 | 10 | G3/8 | 11,5 | 24   | 32   |  | 19 | 13 |
| 2051012 | 10 | G1/2 | 14   | 28,5 | 34   |  | 19 | 15 |
| 2051238 | 12 | G3/8 | 11,5 | 25,5 | 34,5 |  | 22 | 15 |
| 2051212 | 12 | G1/2 | 14   | 28,5 | 34,5 |  | 22 | 15 |
| 2051412 | 14 | G1/2 | 14   | 30   | 38   |  | 27 | 17 |
| 2051512 | 15 | G1/2 | 14   | 30   | 38   |  | 27 | 17 |
| 2051612 | 16 | G1/2 | 14   | 31,5 | 39,5 |  | 30 | 19 |
| 2051812 | 18 | G1/2 | 14   | 34   | 44   |  | 32 | 22 |
|         |    |      |      |      |      |  |    |    |
|         |    |      |      |      |      |  |    |    |
|         |    |      |      |      |      |  |    |    |

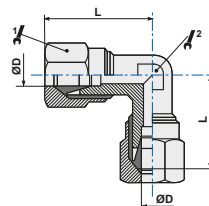




## ART. 206

Raccordo ad L intermedio  
*L connector*

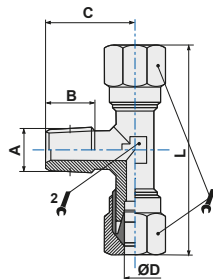
| CODICE  | ØD | L    |  |  |  |  |  |  |  |
|---------|----|------|--|--|--|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2060400 | 4  | 21   |  |  |  |  | 10                                                                                | 9                                                                                 | 100                                                                               |
| 2060600 | 6  | 23   |  |  |  |  | 12                                                                                | 9                                                                                 | 50                                                                                |
| 2060800 | 8  | 24   |  |  |  |  | 14                                                                                | 11                                                                                | 50                                                                                |
| 2061000 | 10 | 32   |  |  |  |  | 19                                                                                | 13                                                                                | 25                                                                                |
| 2061200 | 12 | 34,5 |  |  |  |  | 22                                                                                | 15                                                                                | 10                                                                                |
| 2061400 | 14 | 38   |  |  |  |  | 27                                                                                | 17                                                                                | 10                                                                                |
| 2061500 | 15 | 38   |  |  |  |  | 27                                                                                | 17                                                                                | 10                                                                                |
| 2061600 | 16 | 39,5 |  |  |  |  | 30                                                                                | 19                                                                                | 10                                                                                |



## ART. 207

Raccordo a T centrale  
*Centre male T adaptor*

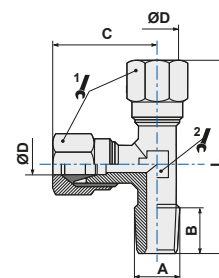
| CODICE  | ØD | A    | B    | C    | L  |  |  |  |  |
|---------|----|------|------|------|----|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 2070418 | 4  | G1/8 | 8    | 16   | 42 |  | 10                                                                                | 9                                                                                 | 100                                                                               |
| 2070618 | 6  | G1/8 | 8    | 16   | 46 |  | 12                                                                                | 9                                                                                 | 50                                                                                |
| 2070614 | 6  | G1/4 | 11   | 20   | 48 |  | 12                                                                                | 11                                                                                | 50                                                                                |
| 2070818 | 8  | G1/8 | 8    | 17   | 48 |  | 14                                                                                | 11                                                                                | 50                                                                                |
| 2070814 | 8  | G1/4 | 11   | 20   | 48 |  | 14                                                                                | 11                                                                                | 25                                                                                |
| 2070838 | 8  | G3/8 | 11,5 | 24   | 54 |  | 14                                                                                | 13                                                                                | 25                                                                                |
| 2071014 | 10 | G1/4 | 11   | 23,5 | 64 |  | 19                                                                                | 13                                                                                | 25                                                                                |
| 2071038 | 10 | G3/8 | 11,5 | 24   | 64 |  | 19                                                                                | 13                                                                                | 25                                                                                |
| 2071238 | 12 | G3/8 | 11,5 | 25,5 | 69 |  | 22                                                                                | 15                                                                                | 10                                                                                |
| 2071212 | 12 | G1/2 | 14   | 28,5 | 69 |  | 22                                                                                | 15                                                                                | 10                                                                                |



## ART. 208

Raccordo a T laterale  
*Off-set male T adaptor*

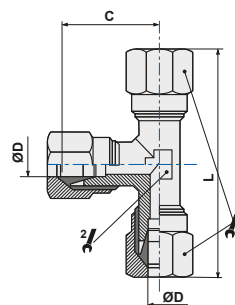
| CODICE  | ØD | A    | B    | C    | L    |  |  |  |  |
|---------|----|------|------|------|------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 2080418 | 4  | G1/8 | 8    | 37   | 21   |  | 10                                                                                  | 9                                                                                   | 100                                                                                 |
| 2080618 | 6  | G1/8 | 8    | 39   | 23   |  | 10                                                                                  | 9                                                                                   | 50                                                                                  |
| 2080614 | 6  | G1/4 | 11   | 44,5 | 24,5 |  | 12                                                                                  | 11                                                                                  | 50                                                                                  |
| 2080818 | 8  | G1/8 | 8    | 41   | 24   |  | 14                                                                                  | 11                                                                                  | 50                                                                                  |
| 2080814 | 8  | G1/4 | 11   | 44   | 24   |  | 14                                                                                  | 11                                                                                  | 25                                                                                  |
| 2080838 | 8  | G3/8 | 11,5 | 51   | 27   |  | 14                                                                                  | 13                                                                                  | 25                                                                                  |
| 2081014 | 10 | G1/4 | 11   | 55,5 | 32   |  | 19                                                                                  | 13                                                                                  | 25                                                                                  |
| 2081038 | 10 | G3/8 | 11,5 | 56   | 32   |  | 19                                                                                  | 13                                                                                  | 25                                                                                  |
| 2081238 | 12 | G3/8 | 11,5 | 60   | 34,5 |  | 22                                                                                  | 15                                                                                  | 10                                                                                  |
| 2081212 | 12 | G1/2 | 14   | 63   | 34,5 |  | 22                                                                                  | 15                                                                                  | 10                                                                                  |



## ART. 209

Raccordo a T intermedio  
*T connector*

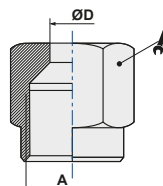
| CODICE  | ØD | C    | L  |  |  |  |  |  |  |
|---------|----|------|----|--|--|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 2090400 | 4  | 21   | 42 |  |  |  | 10                                                                                  | 9                                                                                   | 50                                                                                  |
| 2090600 | 6  | 23   | 46 |  |  |  | 12                                                                                  | 9                                                                                   | 50                                                                                  |
| 2090800 | 8  | 24   | 48 |  |  |  | 14                                                                                  | 11                                                                                  | 25                                                                                  |
| 2091000 | 10 | 32   | 64 |  |  |  | 19                                                                                  | 13                                                                                  | 25                                                                                  |
| 2091200 | 12 | 34,5 | 69 |  |  |  | 22                                                                                  | 15                                                                                  | 10                                                                                  |



## ART. 210

Dado  
Nut

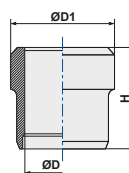
| CODICE  | ØD | A       | H    |  |  |    |     |
|---------|----|---------|------|--|--|----|-----|
| 2100400 | 4  | M8x1    | 11   |  |  | 10 | 100 |
| 2100600 | 6  | M10x1   | 11,5 |  |  | 12 | 100 |
| 2100800 | 8  | M12x1   | 12   |  |  | 14 | 100 |
| 2101000 | 10 | M16x1,5 | 15,5 |  |  | 19 | 100 |
| 2101200 | 12 | M18x1,5 | 15,5 |  |  | 22 | 100 |
| 2101400 | 14 | M22x1,5 | 17,5 |  |  | 27 | 10  |
| 2101500 | 15 | M22x1,5 | 17   |  |  | 27 | 10  |
| 2101600 | 16 | M24x1,5 | 17,5 |  |  | 30 | 10  |
| 2101800 | 18 | M26x1,5 | 18,5 |  |  | 32 | 10  |



## ART. 211

Ogiva  
Ogive

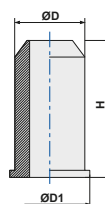
| CODICE  | ØD | ØD1 | H    |  |  |  |     |
|---------|----|-----|------|--|--|--|-----|
| 2110400 | 4  | 6   | 6    |  |  |  | 100 |
| 2110600 | 6  | 8   | 7    |  |  |  | 100 |
| 2110800 | 8  | 10  | 7    |  |  |  | 100 |
| 2111000 | 10 | 13  | 10   |  |  |  | 100 |
| 2111200 | 12 | 15  | 10   |  |  |  | 100 |
| 2111400 | 14 | 17  | 10   |  |  |  | 100 |
| 2111500 | 15 | 18  | 10   |  |  |  | 100 |
| 2111600 | 16 | 19  | 10   |  |  |  | 100 |
| 2111800 | 18 | 21  | 10,5 |  |  |  | 100 |



## ART. 212

Boccola di supporto  
Support bush

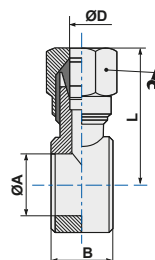
| CODICE  | ØD   | ØD1  | H  |  |  |  |     |
|---------|------|------|----|--|--|--|-----|
| 2120200 | 2    | 3,5  | 8  |  |  |  | 100 |
| 2120250 | 2,5  | 3,9  | 10 |  |  |  | 100 |
| 2120400 | 4    | 5,5  | 12 |  |  |  | 100 |
| 2120600 | 6    | 7,5  | 13 |  |  |  | 100 |
| 2120800 | 8    | 9,5  | 14 |  |  |  | 100 |
| 2121000 | 10   | 11,5 | 16 |  |  |  | 100 |
| 2121200 | 12   | 13,5 | 16 |  |  |  | 100 |
| 2121250 | 12,5 | 14,5 | 17 |  |  |  | 100 |
| 2121400 | 14   | 15,5 | 18 |  |  |  | 100 |



## ART. 216

Raccordo ad L orientabile  
Single banjo body

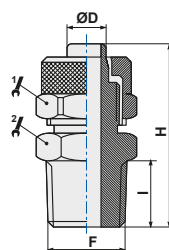
| CODICE  | ØD | G*  | ØA   | B    | L    |    |    |
|---------|----|-----|------|------|------|----|----|
| 2160418 | 4  | 1/8 | 9,8  | 14,5 | 24,5 | 10 | 50 |
| 2160618 | 6  | 1/8 | 9,8  | 14,5 | 26,5 | 12 | 50 |
| 2160614 | 6  | 1/4 | 13,2 | 14,5 | 28,5 | 12 | 50 |
| 2160818 | 8  | 1/8 | 9,8  | 14,5 | 25,5 | 14 | 50 |
| 2160814 | 8  | 1/4 | 13,2 | 14,5 | 28   | 14 | 50 |
| 2161014 | 10 | 1/4 | 13,3 | 14,5 | 32   | 17 | 25 |

(\*) G = filetto vite/asta  
(\*) G = steam thread


## ART. 301

Raccordo diritto maschio conico  
Taper straight male adaptor

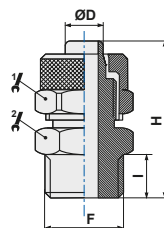
| CODICE  | ØD      | F    | I    | H    |  |  |  |
|---------|---------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 3010418 | 4/2,7   | G1/8 | 8    | 25,5 | 9                                                                                 | 12                                                                                | 100                                                                               |
| 3010518 | 5/3     | G1/8 | 8    | 25   | 8                                                                                 | 12                                                                                | 100                                                                               |
| 3010618 | 6/4     | G1/8 | 8    | 26,5 | 12                                                                                | 12                                                                                | 100                                                                               |
| 3010614 | 6/4     | G1/4 | 11   | 30   | 12                                                                                | 14                                                                                | 100                                                                               |
| 3010638 | 6/4     | G3/8 | 11,5 | 30,5 | 12                                                                                | 17                                                                                | 100                                                                               |
| 3010818 | 8/6     | G1/8 | 8    | 26,5 | 14                                                                                | 12                                                                                | 100                                                                               |
| 3010814 | 8/6     | G1/4 | 11   | 30   | 14                                                                                | 14                                                                                | 100                                                                               |
| 3010838 | 8/6     | G3/8 | 11,5 | 30,5 | 14                                                                                | 17                                                                                | 50                                                                                |
| 3010812 | 8/6     | G1/2 | 14   | 33,5 | 14                                                                                | 22                                                                                | 50                                                                                |
| 3011018 | 10/8    | G1/8 | 8    | 29   | 16                                                                                | 14                                                                                | 50                                                                                |
| 3011014 | 10/8    | G1/4 | 11   | 32   | 16                                                                                | 14                                                                                | 50                                                                                |
| 3011038 | 10/8    | G3/8 | 11,5 | 32,5 | 16                                                                                | 17                                                                                | 50                                                                                |
| 3011012 | 10/8    | G1/2 | 14   | 35,5 | 16                                                                                | 22                                                                                | 50                                                                                |
| 3011238 | 12/10   | G3/8 | 11,5 | 35,5 | 18                                                                                | 17                                                                                | 50                                                                                |
| 3011212 | 12/10   | G1/2 | 14   | 38,5 | 18                                                                                | 22                                                                                | 25                                                                                |
| 3011512 | 15/12,5 | G1/2 | 14   | 40   | 22                                                                                | 22                                                                                | 25                                                                                |
|         |         |      |      |      |                                                                                   |                                                                                   |                                                                                   |
|         |         |      |      |      |                                                                                   |                                                                                   |                                                                                   |
|         |         |      |      |      |                                                                                   |                                                                                   |                                                                                   |
|         |         |      |      |      |                                                                                   |                                                                                   |                                                                                   |



## ART. 301Z

Raccordo diritto maschio cilindrico  
Parallel straight male adaptor

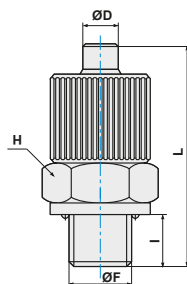
| CODICE   | ØD      | F    | I   | H    |  |  |  |
|----------|---------|------|-----|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 301Z0418 | 4/2,7   | G1/8 | 6   | 21,5 | 8                                                                                   | 13                                                                                  | 100                                                                                 |
| 301Z05M5 | 5/3     | M5   | 4   | 20   | 8                                                                                   | 8                                                                                   | 100                                                                                 |
| 301Z05M6 | 5/3     | M6   | 4   | 22,1 | 8                                                                                   | 8                                                                                   | 100                                                                                 |
| 301Z0518 | 5/3     | G1/8 | 6   | 24,1 | 8                                                                                   | 13                                                                                  | 100                                                                                 |
| 301Z06M5 | 6/4     | M5   | 3,8 | 21,8 | 8                                                                                   | 8                                                                                   | 100                                                                                 |
| 301Z0618 | 6/4     | G1/8 | 6   | 24,5 | 12                                                                                  | 14                                                                                  | 100                                                                                 |
| 301Z0614 | 6/4     | G1/4 | 8   | 27   | 12                                                                                  | 17                                                                                  | 100                                                                                 |
| 301Z0638 | 6/4     | G3/8 | 9   | 28   | 12                                                                                  | 19                                                                                  | 50                                                                                  |
| 301Z0818 | 8/6     | G1/8 | 6   | 24,5 | 14                                                                                  | 14                                                                                  | 100                                                                                 |
| 301Z0814 | 8/6     | G1/4 | 8   | 27   | 14                                                                                  | 17                                                                                  | 50                                                                                  |
| 301Z0838 | 8/6     | G3/8 | 9   | 28   | 14                                                                                  | 19                                                                                  | 50                                                                                  |
| 301Z1014 | 10/8    | G1/4 | 8   | 29   | 16                                                                                  | 17                                                                                  | 50                                                                                  |
| 301Z1038 | 10/8    | G3/8 | 9   | 30   | 16                                                                                  | 19                                                                                  | 25                                                                                  |
| 301Z1238 | 12/10   | G3/8 | 9   | 33   | 18                                                                                  | 19                                                                                  | 25                                                                                  |
| 301Z1212 | 12/10   | G1/2 | 10  | 35   | 18                                                                                  | 24                                                                                  | 25                                                                                  |
| 301Z1512 | 15/12,5 | G1/2 | 10  | 35   | 22                                                                                  | 24                                                                                  | 25                                                                                  |
|          |         |      |     |      |                                                                                     |                                                                                     |                                                                                     |
|          |         |      |     |      |                                                                                     |                                                                                     |                                                                                     |
|          |         |      |     |      |                                                                                     |                                                                                     |                                                                                     |
|          |         |      |     |      |                                                                                     |                                                                                     |                                                                                     |



## ART. TC

Raccordo diritto maschio cilindrico (compatto)  
Parallel straight male adaptor (compact)

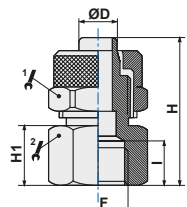
| CODICE | ØD | ØF     | I   | L    | H  |  |  |     |
|--------|----|--------|-----|------|----|--|--|-----|
| TC04M5 | 4  | M5x0,8 | 4   | 17,0 | 8  |  |  | 100 |
| TC0418 | 4  | G1/8   | 5,5 | 20,0 | 14 |  |  | 100 |
| TC06M5 | 6  | M5x0,8 | 4   | 20,8 | 10 |  |  | 100 |
| TC06M6 | 6  | M6x1   | 4   | 20,8 | 10 |  |  | 100 |
| TC0618 | 6  | G1/8   | 5,5 | 23,0 | 14 |  |  | 100 |
|        |    |        |     |      |    |  |  |     |
|        |    |        |     |      |    |  |  |     |
|        |    |        |     |      |    |  |  |     |

Di importazione  
Imported


## ART. 302

Raccordo diritto femmina  
Straight female adaptor

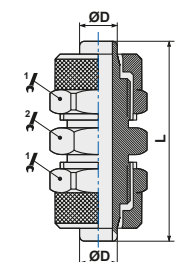
| CODICE  | ØD    | F    | I    | H    | H1   | 1  | 2  |     |
|---------|-------|------|------|------|------|----|----|-----|
| 3020618 | 6/4   | G1/8 | 8    | 25   | 10   | 12 | 14 | 100 |
| 3020614 | 6/4   | G1/4 | 11   | 29   | 14   | 12 | 17 | 100 |
| 3020638 | 6/4   | G3/8 | 11,5 | 29,5 | 14,5 | 12 | 22 | 50  |
| 3020818 | 8/6   | G1/8 | 8    | 25   | 10   | 14 | 14 | 100 |
| 3020814 | 8/6   | G1/4 | 11   | 29   | 14   | 14 | 17 | 100 |
| 3020838 | 8/6   | G3/8 | 11,5 | 29,5 | 14,5 | 14 | 22 | 50  |
| 3021014 | 10/8  | G1/4 | 11   | 30,5 | 14   | 16 | 17 | 50  |
| 3021038 | 10/8  | G3/8 | 11,5 | 31   | 14,5 | 16 | 22 | 50  |
| 3021238 | 12/10 | G3/8 | 11,5 | 32,5 | 14,5 | 18 | 22 | 50  |



## ART. 303

Raccordo diritto intermedio  
Straight connector

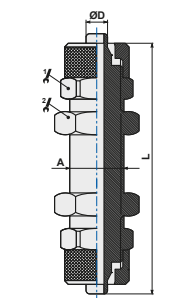
| CODICE  | ØD      | L    |  |  | 1  | 2  |     |
|---------|---------|------|--|--|----|----|-----|
| 3030500 | 5/3     | 28,5 |  |  | 8  | 8  | 100 |
| 3030600 | 6/4     | 32   |  |  | 12 | 12 | 100 |
| 3030800 | 8/6     | 32   |  |  | 14 | 12 | 100 |
| 3031000 | 10/8    | 37   |  |  | 16 | 14 | 50  |
| 3031200 | 12/10   | 43   |  |  | 18 | 17 | 50  |
| 3031500 | 15/12,5 | 46,5 |  |  | 22 | 22 | 25  |



## ART. 304

Raccordo intermedio passaparete  
Bulkhead connector

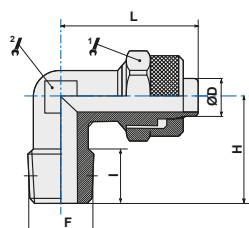
| CODICE  | ØD      | A     | L  |  | 1  | 2  |     |
|---------|---------|-------|----|--|----|----|-----|
| 3040600 | 6/4     | M10x1 | 45 |  | 12 | 14 | 100 |
| 3040800 | 8/6     | M12x1 | 48 |  | 14 | 17 | 50  |
| 3041000 | 10/8    | M14x1 | 54 |  | 16 | 17 | 50  |
| 3041200 | 12/10   | M16x1 | 57 |  | 18 | 19 | 25  |
| 3041500 | 15/12,5 | M20x1 | 59 |  | 22 | 24 | 10  |
|         |         |       |    |  |    |    |     |
|         |         |       |    |  |    |    |     |



## ART. 305

Raccordo ad L maschio conico  
L taper male adaptor

| CODICE  | ØD      | F    | I    | H    | L    |  |  |  |
|---------|---------|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 30504M5 | 4/2     | M5   | 8    | 13   | 20,0 | 9                                                                                 | 9                                                                                 | 100                                                                               |
| 3050418 | 4/2     | G1/8 | 8    | 17   | 20,0 | 9                                                                                 | 9                                                                                 | 100                                                                               |
| 3050518 | 5/3     | G1/8 | 8    | 17   | 21,5 | 8                                                                                 | 8                                                                                 | 100                                                                               |
| 3050618 | 6/4     | G1/8 | 8,5  | 17   | 20,5 | 12                                                                                | 10                                                                                | 100                                                                               |
| 3050614 | 6/4     | G1/4 | 12,5 | 21   | 20,5 | 12                                                                                | 8                                                                                 | 100                                                                               |
| 3050638 | 6/4     | G3/8 | 15,5 | 23   | 20,5 | 12                                                                                | 8                                                                                 | 50                                                                                |
| 3050818 | 8/6     | G1/8 | 8    | 17   | 20,5 | 14                                                                                | 10                                                                                | 100                                                                               |
| 3050814 | 8/6     | G1/4 | 12,5 | 21,5 | 20,5 | 14                                                                                | 10                                                                                | 100                                                                               |
| 3050838 | 8/6     | G3/8 | 15,3 | 23,8 | 20,5 | 14                                                                                | 10                                                                                | 50                                                                                |
| 3051018 | 10/8    | G1/8 | 8    | 17   | 24,5 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3051014 | 10/8    | G1/4 | 12,5 | 22   | 24,5 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3051038 | 10/8    | G3/8 | 14,8 | 24,3 | 24,5 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3051012 | 10/8    | G1/2 | 14   | 28   | 28   | 16                                                                                | 17                                                                                | 25                                                                                |
| 3051238 | 12/10   | G3/8 | 14   | 26   | 29   | 18                                                                                | 14                                                                                | 50                                                                                |
| 3051212 | 12/10   | G1/2 | 16   | 28   | 29   | 18                                                                                | 14                                                                                | 25                                                                                |
| 3051512 | 15/12,5 | G1/2 | 15   | 28   | 24   | 22                                                                                | 16                                                                                | 25                                                                                |

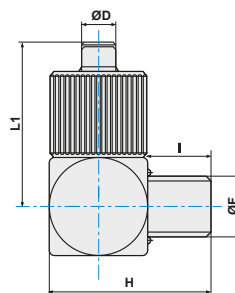


## ART. TL

Raccordo ad L maschio cilindrico  
Elbow parallel male adaptor

| CODICE | ØD | ØF     | I   | H    | L1   |  |  |
|--------|----|--------|-----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TL04M5 | 4  | M5x0,8 | 4,0 | 13,0 | 13,5 |                                                                                     | 50                                                                                  |
| TL0418 | 4  | G1/8   | 5,0 | 19,5 | 16,5 |                                                                                     | 50                                                                                  |
| TL06M5 | 6  | M5x0,8 | 4,9 | 13,9 | 16,3 |                                                                                     | 50                                                                                  |
| TL06M6 | 6  | M6x1   | 4,0 | 14,2 | 17,5 |                                                                                     | 50                                                                                  |
| TL0618 | 6  | G1/8   | 5,0 | 19,5 | 19,3 |                                                                                     | 50                                                                                  |

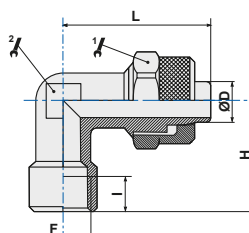
Di importazione  
Imported



## ART. 305F

Raccordo ad L femmina  
Female L adaptor

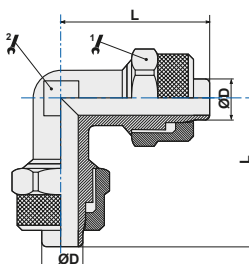
| CODICE   | ØD    | F    | I  | H    | L    |  |  |  |
|----------|-------|------|----|------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 305F0618 | 6/4   | G1/8 | 7  | 20,5 | 20,5 | 12                                                                                  | 10                                                                                  | 100                                                                                 |
| 305F0614 | 6/4   | G1/4 | 8  | 22,5 | 20,5 | 12                                                                                  | 12                                                                                  | 50                                                                                  |
| 305F0818 | 8/6   | G1/8 | 7  | 20,5 | 20,5 | 14                                                                                  | 10                                                                                  | 100                                                                                 |
| 305F0814 | 8/6   | G1/4 | 8  | 23,5 | 20,5 | 14                                                                                  | 11                                                                                  | 50                                                                                  |
| 305F1014 | 10/8  | G1/4 | 8  | 24   | 24,5 | 16                                                                                  | 13                                                                                  | 50                                                                                  |
| 305F1038 | 10/8  | G3/8 | 10 | 27   | 24,5 | 16                                                                                  | 17                                                                                  | 25                                                                                  |
| 305F1238 | 12/10 | G3/8 | 10 | 29   | 29   | 18                                                                                  | 14                                                                                  | 25                                                                                  |



## ART. 306

Raccordo ad L intermedio  
L connector

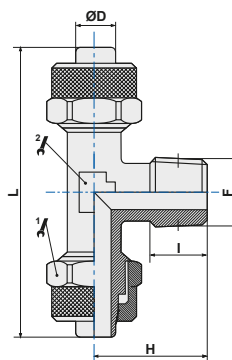
| CODICE  | ØD      | L    |  |  |  |
|---------|---------|------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 3060600 | 6/4     | 20,5 | 12                                                                                  | 8                                                                                   | 100                                                                                 |
| 3060800 | 8/6     | 20,5 | 14                                                                                  | 10                                                                                  | 100                                                                                 |
| 3061000 | 10/8    | 24,5 | 16                                                                                  | 11                                                                                  | 50                                                                                  |
| 3061200 | 12/10   | 29   | 18                                                                                  | 14                                                                                  | 25                                                                                  |
| 3061500 | 15/12,5 | 34   | 22                                                                                  | 16                                                                                  | 25                                                                                  |



## ART. 307

Raccordo T centrale  
Central T adaptor

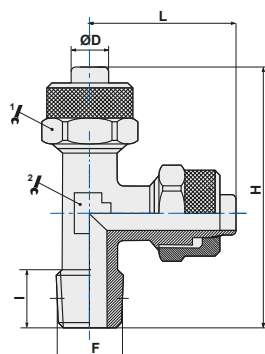
| CODICE  | ØD      | F    | I    | H    | L  |  |  |  |
|---------|---------|------|------|------|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 3070618 | 6/4     | G1/8 | 8,5  | 17   | 41 | 12                                                                                | 8                                                                                 | 100                                                                               |
| 3070614 | 6/4     | G1/4 | 13   | 21,5 | 41 | 12                                                                                | 8                                                                                 | 50                                                                                |
| 3070818 | 8/6     | G1/8 | 8    | 16,5 | 41 | 14                                                                                | 10                                                                                | 50                                                                                |
| 3070814 | 8/6     | G1/4 | 12,5 | 21   | 41 | 14                                                                                | 10                                                                                | 50                                                                                |
| 3070838 | 8/6     | G3/8 | 15,3 | 23,8 | 41 | 14                                                                                | 10                                                                                | 25                                                                                |
| 3071018 | 10/8    | G1/8 | 8    | 18,5 | 49 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3071014 | 10/8    | G1/4 | 11,8 | 22,3 | 49 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3071038 | 10/8    | G3/8 | 14,7 | 25,2 | 49 | 16                                                                                | 12                                                                                | 25                                                                                |
| 3071238 | 12/10   | G3/8 | 14,1 | 26   | 58 | 18                                                                                | 14                                                                                | 25                                                                                |
| 3071212 | 12/10   | G1/2 | 15   | 27   | 58 | 18                                                                                | 14                                                                                | 25                                                                                |
| 3071512 | 15/12,5 | G1/2 | 14,4 | 27,4 | 68 | 22                                                                                | 16                                                                                | 10                                                                                |



## ART. 308

Raccordo T laterale  
Off-set T adaptor

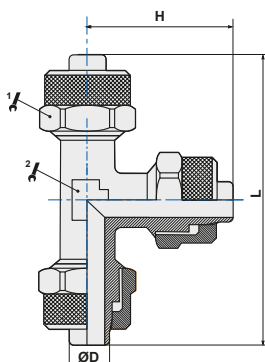
| CODICE  | ØD      | F    | I    | L    | H    |  |  |  |
|---------|---------|------|------|------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 3080618 | 6/4     | G1/8 | 8,5  | 20,5 | 37,5 | 12                                                                                | 8                                                                                 | 100                                                                               |
| 3080614 | 6/4     | G1/4 | 13   | 20,5 | 42   | 12                                                                                | 8                                                                                 | 50                                                                                |
| 3080818 | 8/6     | G1/8 | 8    | 20,5 | 37   | 14                                                                                | 10                                                                                | 50                                                                                |
| 3080814 | 8/6     | G1/4 | 12,5 | 20,5 | 41,5 | 14                                                                                | 10                                                                                | 50                                                                                |
| 3080838 | 8/6     | G3/8 | 15,3 | 20,5 | 44,3 | 14                                                                                | 10                                                                                | 25                                                                                |
| 3081018 | 10/8    | G1/8 | 8    | 25,5 | 44   | 16                                                                                | 12                                                                                | 50                                                                                |
| 3081014 | 10/8    | G1/4 | 11,8 | 24,5 | 46,8 | 16                                                                                | 12                                                                                | 50                                                                                |
| 3081038 | 10/8    | G3/8 | 14,7 | 24,5 | 49,7 | 16                                                                                | 12                                                                                | 25                                                                                |
| 3081238 | 12/10   | G3/8 | 14,1 | 29   | 55,1 | 18                                                                                | 14                                                                                | 25                                                                                |
| 3081212 | 12/10   | G1/2 | 15   | 29   | 56   | 18                                                                                | 14                                                                                | 25                                                                                |
| 3081512 | 15/12,5 | G1/2 | 14,4 | 34   | 61,4 | 22                                                                                | 16                                                                                | 10                                                                                |



## ART. 309

Raccordo T intermedio  
T connector

| CODICE  | ØD      | H    | L  |  |  |  |
|---------|---------|------|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 3090600 | 6/4     | 20,5 | 41 | 12                                                                                  | 8                                                                                   | 50                                                                                  |
| 3090800 | 8/6     | 20,5 | 41 | 14                                                                                  | 10                                                                                  | 50                                                                                  |
| 3091000 | 10/8    | 24,5 | 49 | 16                                                                                  | 12                                                                                  | 25                                                                                  |
| 3091200 | 12/10   | 29   | 58 | 18                                                                                  | 14                                                                                  | 25                                                                                  |
| 3091500 | 15/12,5 | 34   | 68 | 22                                                                                  | 17                                                                                  | 10                                                                                  |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |
|         |         |      |    |                                                                                     |                                                                                     |                                                                                     |

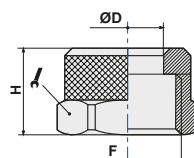




## ART. 310

Dado di serraggio  
Locking nut

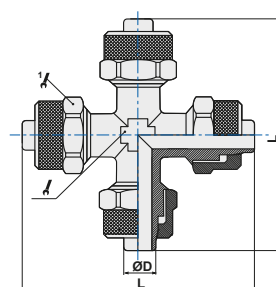
| CODICE  | ØD      | F       | H    |  |  |
|---------|---------|---------|------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 3100400 | 4/2,7   | M7x0,75 | 8,1  | 9                                                                                 | 100                                                                               |
| 3100500 | 5/3     | M7x0,75 | 8,5  | 8                                                                                 | 100                                                                               |
| 3100608 | 6/4     | M8x0,75 | 9    | 9                                                                                 | 100                                                                               |
| 3100610 | 6/4     | M10x1   | 10,5 | 12                                                                                | 100                                                                               |
| 3100800 | 8/6     | M12x1   | 10,5 | 14                                                                                | 100                                                                               |
| 3101000 | 10/8    | M14x1   | 11,5 | 16                                                                                | 100                                                                               |
| 3101200 | 12/10   | M16x1   | 13   | 18                                                                                | 100                                                                               |
| 3101500 | 15/12,5 | M20x1   | 15,5 | 22                                                                                | 50                                                                                |



## ART. 311

Raccordo a croce intermedio  
Cross adaptor

| CODICE  | ØD   | L  |  |  |  |  |
|---------|------|----|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 3110600 | 6/4  | 41 |  | 8                                                                                 | 12                                                                                | 50                                                                                |
| 3110800 | 8/6  | 41 |  | 10                                                                                | 14                                                                                | 25                                                                                |
| 3111000 | 10/8 | 49 |  | 12                                                                                | 16                                                                                | 25                                                                                |
|         |      |    |  |                                                                                   |                                                                                   |                                                                                   |
|         |      |    |  |                                                                                   |                                                                                   |                                                                                   |

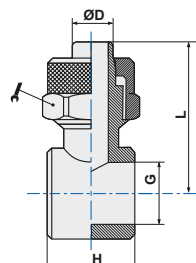


## ART. 405

Anello singolo  
Single banjo body

| CODICE  | ØD    | G*   | H  | L    |  |  |  |
|---------|-------|------|----|------|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 40504M5 | 4/2   | M5   | 9  | 16,5 |  | 8                                                                                   | 100                                                                                 |
| 4050418 | 4/2,7 | G1/8 | 9  | 16,5 |  | 8                                                                                   | 100                                                                                 |
| 40506M5 | 6/4   | M5   | 9  | 18   |  | 9                                                                                   | 100                                                                                 |
| 4050618 | 6/4   | G1/8 | 15 | 23,5 |  | 12                                                                                  | 100                                                                                 |
| 4050614 | 6/4   | G1/4 | 17 | 25,5 |  | 12                                                                                  | 100                                                                                 |
| 4050818 | 8/6   | G1/8 | 15 | 22,5 |  | 14                                                                                  | 100                                                                                 |
| 4050814 | 8/6   | G1/4 | 17 | 24,5 |  | 14                                                                                  | 50                                                                                  |
| 4051014 | 10/8  | G1/4 | 17 | 25,5 |  | 14                                                                                  | 50                                                                                  |
|         |       |      |    |      |  |                                                                                     |                                                                                     |
|         |       |      |    |      |  |                                                                                     |                                                                                     |

(\*) G = Filetto vite/asta  
(\*) G = Steam thread

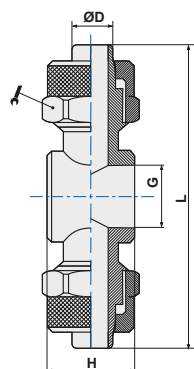


## ART. 406

Anello doppio  
Double banjo body

| CODICE  | ØD   | G*   | H    | L  |  |  |  |
|---------|------|------|------|----|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 4060618 | 6/4  | G1/8 | 15   | 47 |  | 12                                                                                  | 100                                                                                 |
| 4060614 | 6/4  | G1/4 | 14,5 | 51 |  | 12                                                                                  | 50                                                                                  |
| 4060818 | 8/6  | G1/8 | 14,5 | 45 |  | 14                                                                                  | 50                                                                                  |
| 4060814 | 8/6  | G1/4 | 14,5 | 49 |  | 14                                                                                  | 50                                                                                  |
| 4061014 | 10/8 | G1/4 | 14,5 | 51 |  | 16                                                                                  | 50                                                                                  |

(\*) G = Filetto vite/asta  
(\*) G = Steam thread



## BREVE DESCRIZIONE

I raccordi di linea della nostra serie **100**, sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The standard **100** series fittings are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                              |                                    |                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>              |                                    | Aria compressa, acqua fino 100 °C (per altri fluidi contattare il nostro UT)<br><i>Compressed air, water up to 100 °C</i><br><i>(for different fluid pls contact our Technical Dept.)</i>                                                                                     |
| APPLICAZIONI<br><i>APPLICATIONS</i>                          |                                    | Circuiti pneumatici, oleodinamici e idraulici.<br><i>Pneumatic, oleodynamic and hydraulic circuits.</i>                                                                                                                                                                       |
| TEMPERATURE E PRESSIONI<br><i>TEMPERATURES AND PRESSURES</i> |                                    | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato. La pressione massima consigliata è 60 bar.<br><i>Temperatures and pressures usually depend by the technical features of the employed tubes. Max pressure suggested 60 bar.</i> |
| FILETTATURE<br><i>THREAD TYPE</i>                            |                                    | BSP cilindrica UNI-ISO 228; BSP conica UNI-ISO 7; Metrica ISO/R 262.<br><i>BSP parallell UNI-ISO 228; BSP tapered UNI-ISO 7; Metric ISO/R 262</i>                                                                                                                             |
| MATERIALI<br><i>MATERIALS</i>                                | corpi<br><i>bodies</i>             | Ottone UNI EN 12164 CW614N (barra); UNI EN 12165 CW617N (stampato)<br><i>Brass UNI EN 12164 CW614N (bar); UNI EN 12165 CW617N (molded)</i>                                                                                                                                    |
|                                                              | guarnizioni tenuta<br><i>seals</i> | NBR 70 DWGV-EN549 UL157<br><i>NBR 70 DWGV-EN549 UL157</i>                                                                                                                                                                                                                     |
|                                                              | rondelle<br><i>washers</i>         | Nylon/Alluminio<br><i>Aluminium/Nylon</i>                                                                                                                                                                                                                                     |

## BREVE DESCRIZIONE

I raccordi ad ogiva della nostra serie **200**, sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO/DIN di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The compressed **200** series fittings are produced in Italy according to the reference ISO/DIN norms as warranty of high quality level and answer to the followings technical specifications and applications.

## SCHEDA TECNICA TECHNICAL SHEET

|                                          |                                |                                                                                                                                                                                       |
|------------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br>EMPLOYABLE FLUIDS |                                | Aria compressa, acqua fino 100 °C (per altri fluidi contattare il nostro UT)<br>Compressed air, water up to 100 °C<br>(for different fluid pls contact our Technical Dept.)           |
| APPLICAZIONI<br>APPLICATIONS             |                                | Circuiti pneumatici, oleodinamici e idraulici.<br>Pneumatic, oleodynamic and hydraulic circuits.                                                                                      |
| TUBI DI COLLEGAMENTO<br>CONNECTING TUBES | plastici<br>plastic            | TPU, PE, PA, PET, PVC intrecciato, PTFE, FEP<br>(solo con l'uso dell'anima di rinforzo interna)<br>TPU, PE, PA, PET, braided PVC, PTFE, FEP<br>(with internal reinforcement included) |
|                                          | metallici<br>metal             | Rame, ottone, acciaio, alluminio, ecc.<br>Copper, brass, steel, aluminium, etc.                                                                                                       |
| FILETTATURE<br>THREAD TYPE               |                                | BSP cilindrica UNI-ISO 228; BSPT conica UNI-ISO 7-DIN2999.<br>BSP parallell UNI-ISO 228; BSP tapered UNI-ISO 7-DIN2999.                                                               |
| MATERIALI<br>MATERIALS                   | corpi<br>bodies                | Ottone UNI EN 12164 CW614N (barra); UNI EN 12165 CW617N (stampato)<br>Brass UNI EN 12164 CW614N (bar); UNI EN 12165 CW617N (molded)                                                   |
|                                          | guarnizioni<br>tenuta<br>seals | NBR 70 DWGV-EN549 UL157<br>NBR 70 DWGV-EN549 UL157                                                                                                                                    |
|                                          | rondelle<br>washers            | Nylon/Alluminio<br>Aluminium/Nylon                                                                                                                                                    |

## BREVE DESCRIZIONE

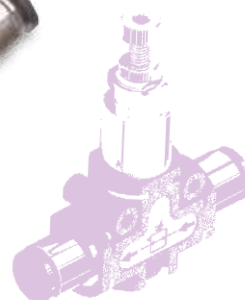
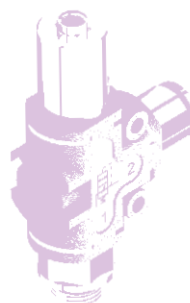
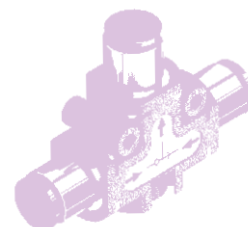
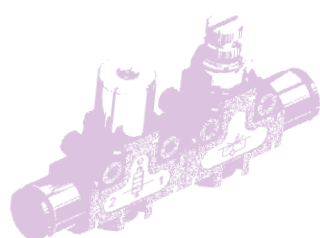
I raccordi a calzamento della nostra serie **300**, sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The quick **300** series fittings are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                 |                                    |                                                                                                                                                                                        |
|-------------------------------------------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i> |                                    | Aria compressa, acqua fino 100 °C<br>(per altri fluidi contattare il nostro UT)<br><i>Compressed air, water up to 100 °C<br/>(for different fluid pls contact our Technical Dept.)</i> |
| APPLICAZIONI<br><i>APPLICATIONS</i>             |                                    | Circuiti pneumatici, oleodinamici e idraulici.<br><i>Pneumatic, oleodynamic and hydraulic circuits.</i>                                                                                |
| TUBI DI COLLEGAMENTO<br><i>CONNECTING TUBES</i> | plastici<br><i>plastic</i>         | TPU, PE, PA, PET, PVC intrecciato, PTFE, FEP<br><i>TPU, PE, PA, PET, braided PVC, PTFE, FEP</i>                                                                                        |
|                                                 | metallici<br><i>metal</i>          |                                                                                                                                                                                        |
| FILETTATURE<br><i>THREAD TYPE</i>               |                                    | BSP cilindrica UNI-ISO 228; BSPT conica UNI-ISO 7-DIN2999;<br>Metrica ISO R/262<br><i>BSP parallel UNI-ISO 228; BSP tapered UNI-ISO 7-DIN2999;<br/>Metric ISO R/262</i>                |
| MATERIALI<br><i>MATERIALS</i>                   | corpi<br><i>bodies</i>             | Ottone UNI EN 12164 CW614N (barra); UNI EN 12165 CW617N (stampato)<br><i>Brass UNI EN 12164 CW614N (bar); UNI EN 12165 CW617N (molded)</i>                                             |
|                                                 | guarnizioni tenuta<br><i>seals</i> | NBR 70 DWGV-EN549 UL157<br><i>NBR 70 DWGV-EN549 UL157</i>                                                                                                                              |
|                                                 | rondelle<br><i>washers</i>         | Nylon/Alluminio<br><i>Aluminium/Nylon</i>                                                                                                                                              |

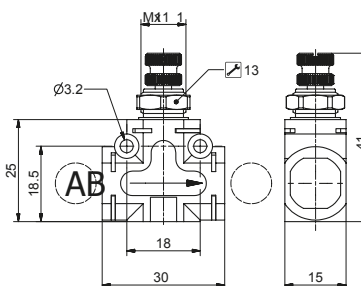


TECNO FUN

## ART. 551.11T.A.B.XX

Regolatore di flusso  
Flow regulator

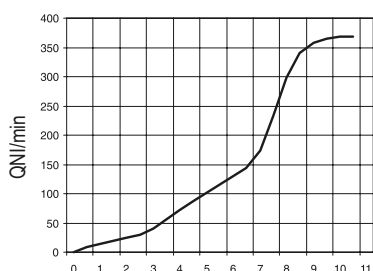
| TIPOLOGIA                                        | VERSION                                          |
|--------------------------------------------------|--------------------------------------------------|
| <b>T</b> 1 = Unidirezionale<br>2 = Bidirezionale | <b>T</b> 1 = Unidirectional<br>2 = Bidirectional |
| <b>A</b> Connessione A - Vedi LISTA              | <b>A</b> Connection A - see LIST                 |
| <b>B</b> Connessione B - Vedi LISTA              | <b>B</b> Connection B - see LIST                 |
| LISTA Connessioni                                | Connections LIST                                 |
| 00 = Non prevista                                | 00 = None                                        |
| D4 = Diritto Ø4                                  | D4 = Straight Ø4                                 |
| D6 = Diritto Ø6                                  | D6 = Straight Ø6                                 |
| D8 = Diritto Ø8                                  | D8 = Straight Ø8                                 |
| L1 = Anello girevole metallo G1/8"               | L1 = Female banjo G1/8"/8"                       |
| G4 = Anello PL girevole Ø4                       | G4 = Rotating banjo Ø4                           |
| G6 = Anello PL girevole Ø6                       | G6 = Rotating banjo Ø6                           |
| G8 = Anello PL girevole Ø8                       | G8 = Rotating banjo Ø8                           |
| M1 = G1/8 maschio                                | M1 = G1/8 male                                   |
| M2 = G1/4 maschio                                | M2 = G1/4 male                                   |
| F1 = G1/8 femmina                                | F1 = G1/8 female                                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
Esempio: 551.111.D6.D6.XX  
Regolatore di flusso unidirezionale. Connessioni di alimentazione "A" e "B" Tubo Ø6

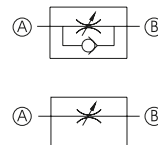
NOTE: For the dimension including cartridges see page CONNECTIONS  
Example: 551.111.D6.D6.XX  
Flow control valve, unidirectional, CONNECTIONS "A" and "B" Tube Ø6

Curva di portata a 6 bar  
Flow-rates curves 6 bar



Giri di regolazione della vite Adjusting screw revolutions

Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- Una valvola regolatrice di flusso viene utilizzata per regolare la portata d'aria, in particolare ad es. la velocità dei cilindri. Abbiamo due tipologie di valvole regolatrici, Unidirezionale e Bidirezionale. La valvola tipo unidirezionale di flusso regola in una sola direzione, mentre nella direzione opposta il flusso è libero. La valvola tipo bidirezionale permette la regolazione nei due sensi di flusso.
- Ghiera di fissaggio a pannello.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                                                                                 |                                            |
|-------------------------------------------------------------------------------------------------|--------------------------------------------|
| Fluido                                                                                          | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione                                                                    | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)                                                           | 10                                         |
| Temperatura di esercizio in °C                                                                  | -5 ÷ + 50                                  |
| Peso (gr)                                                                                       | 26                                         |
| Diametro nominale di passaggio (mm)                                                             | Ø3                                         |
| Portata in scarico libero nel senso opposto alla regolazione (Versione Unidirezionale) (Nl/min) | 800                                        |

## Construction characteristics

- The flow control valve is normally used to regulate the air flow and, as a consequence, for example, the speed of a cylinder. Two types of flow control valves are available: unidirectional and bidirectional. In the unidirectional valve the flow is regulated only in one direction while is free to move in the opposite direction; in the bidirectional valve the flow is regulated in both directions.
- Mounting options:
- panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

## Technical characteristics

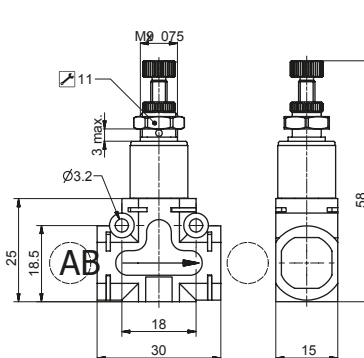
|                                                                                            |                                    |
|--------------------------------------------------------------------------------------------|------------------------------------|
| Fluid                                                                                      | Filtered and lubricated air or not |
| Connections                                                                                | See CONNECTIONS LIST               |
| Max working pressure                                                                       | 10 bar                             |
| Working temperature                                                                        | -5°C ÷ +50°C                       |
| Weight without connections                                                                 | 26 gr.                             |
| Ø Orifice size                                                                             | Ø3 mm.                             |
| Free exhaust flow rate in the opposite side of the regulation (for unidirectional version) | 800 Nl/min.                        |



## ART. 551.12T.A.B.XX

 Riduttore di pressione in linea  
*In line pressure regulator*

| TIPOLOGIA                                                   | VERSION                                                     |
|-------------------------------------------------------------|-------------------------------------------------------------|
| <b>T</b><br>2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar | <b>T</b><br>2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar |
| <b>A</b> Connessione A - Vedi LISTA                         | <b>A</b> Connection A - see LIST                            |
| <b>B</b> Connessione B - Vedi LISTA                         | <b>B</b> Connection B - see LIST                            |
| LISTA Connessioni                                           | Connections LIST                                            |
| 00 = Non prevista                                           | 00 = None                                                   |
| D4 = Diritto Ø4                                             | D4 = Straight Ø4                                            |
| D6 = Diritto Ø6                                             | D6 = Straight Ø6                                            |
| D8 = Diritto Ø8                                             | D8 = Straight Ø8                                            |
| L1 = Anello girevole metallo G1/8"                          | L1 = Female banjo G1/8"                                     |
| G4 = Anello PL girevole Ø4                                  | G4 = Rotating banjo Ø4                                      |
| G6 = Anello PL girevole Ø6                                  | G6 = Rotating banjo Ø6                                      |
| G8 = Anello PL girevole Ø8                                  | G8 = Rotating banjo Ø8                                      |
| M1 = G1/8 maschio                                           | M1 = G1/8 male                                              |
| M2 = G1/4 maschio                                           | M2 = G1/4 male                                              |
| F1 = G1/8 femmina                                           | F1 = G1/8 female                                            |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.128.D8.D8.XX

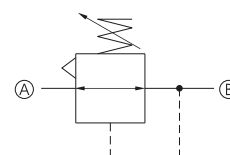
Riduttore di pressione in linea, gamma 0 - 8 bar. Connessioni di alimentazione "A" e "B"  
 Tubo Ø8

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.128.D8.D8.XX

In line pressure regulator, pressure range 0 - 8 bar. CONNECTIONS "A" and "B"  
 Tube Ø8

Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- Il riduttore di pressione (o regolatore) è un dispositivo che consente di ridurre, regolare e stabilizzare la pressione dell'aria a disposizione in rete, adattandola alle esigenze degli apparecchi da alimentare. Riduttore di pressione con scarico della sovrappressione (funzione relieving).
- Ghiera di fissaggio a pannello.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| Fluido                                     | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione               | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)      | 10                                         |
| Temperatura di esercizio in °C             | -5 ÷ + 50                                  |
| Peso (gr)                                  | 31                                         |
| Portata a 6 bar con Δp=1 (NI/min)          | 180                                        |
| Gamma di regolazione della pressione (bar) | 0 ÷ 2 / 0 ÷ 4 / 0 ÷ 8                      |

## Construction characteristics

- The pressure regulator is a device which is used to reduce, regulate and stabilize the air pressure in a conduit in order to adapt it to the needs of the equipments to be supplied. The pressure regulator incorporates the relieving function.
- Mounting options:
- panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

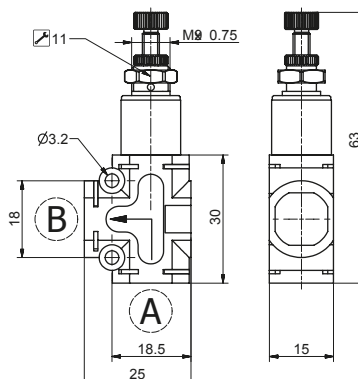
## Technical characteristics

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max inlet pressure           | 10 bar                             |
| Working temperature          | -5°C ÷ +50°C                       |
| Weight without connections   | 31 gr.                             |
| Flow rate at 6 bar with Δp=1 | 180 NI/min                         |
| Regulated pressure range     | 0 ÷ 2 / 0 ÷ 4 / 0 ÷ 8              |

## ART. 551.22T.A.B.XX

Riduttore di pressione a 90°  
90° pressure regulator

| TIPOLOGIA                                                   | VERSION                                                     |
|-------------------------------------------------------------|-------------------------------------------------------------|
| <b>T</b><br>2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar | <b>T</b><br>2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar |
| <b>A</b> Connessione A - Vedi LISTA                         | <b>A</b> Connection A - see LIST                            |
| <b>B</b> Connessione B - Vedi LISTA                         | <b>B</b> Connection B - see LIST                            |
| LISTA Connessioni                                           | Connections LIST                                            |
| 00 = Non prevista                                           | 00 = None                                                   |
| D4 = Diritto Ø4                                             | D4 = Straight Ø4                                            |
| D6 = Diritto Ø6                                             | D6 = Straight Ø6                                            |
| D8 = Diritto Ø8                                             | D8 = Straight Ø8                                            |
| L1 = Anello girevole metallo G1/8"                          | L1 = Female banjo G1/8"                                     |
| G4 = Anello PL girevole Ø4                                  | G4 = Rotating banjo Ø4                                      |
| G6 = Anello PL girevole Ø6                                  | G6 = Rotating banjo Ø6                                      |
| G8 = Anello PL girevole Ø8                                  | G8 = Rotating banjo Ø8                                      |
| M1 = G1/8 maschio                                           | M1 = G1/8 male                                              |
| M2 = G1/4 maschio                                           | M2 = G1/4 male                                              |
| F1 = G1/8 femmina                                           | F1 = G1/8 female                                            |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.224.M1.D6.XX

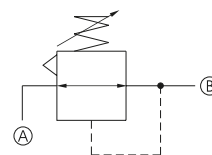
Riduttore di pressione a 90°, gamma pressione 0 - 4 bar. Connessioni di alimentazione "A" Maschio G1/8 e "B" Tubo Ø6

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.224.M1.D6.XX

90° pressure regulator, pressure range 0 - 4 bar. CONNECTIONS "A" Male G1/8 and "B" Tube Ø6

Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- Il riduttore di pressione (o regolatore) è un dispositivo che consente di ridurre, regolare e stabilizzare la pressione dell'aria a disposizione in rete, adattandola alle esigenze degli apparecchi da alimentare. Riduttore di pressione con scarico della sovrappressione (funzione relieving).
- Ghiera di fissaggio a pannello.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| Fluid                                      | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione               | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)      | 10                                         |
| Temperatura di esercizio in °C             | -5 ÷ + 50                                  |
| Peso (gr)                                  | 31                                         |
| Portata a 6 bar con Δp=1 (NI/min)          | 180                                        |
| Gamma di regolazione della pressione (bar) | 0 ÷ 2 / 0 ÷ 4 / 0 ÷ 8                      |

## Construction characteristics

- The pressure regulator is a device which is used to reduce, regulate and stabilize the air pressure in a conduit in order to adapt it to the needs of the equipments to be supplied. The pressure regulator incorporates the relieving function.
- Mounting options:
- panel mounting using the lock nut supplied as standard
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

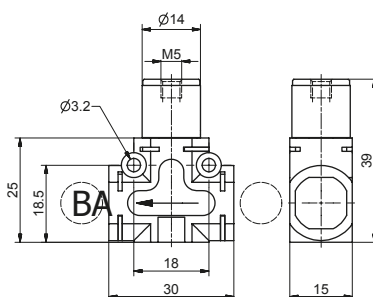
## Technical characteristics

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max inlet pressure           | 10 bar                             |
| Working temperature          | -5°C ÷ +50°C                       |
| Weight without connections   | 31 gr.                             |
| Flow rate at 6 bar with Δp=1 | 180 NI/min                         |
| Regulated pressure range     | 0 ÷ 2 / 0 ÷ 4 / 0 ÷ 8              |

## ART. 551.13T.A.B.XX

Valvole di blocco  
Blocking valve

| TIPOLOGIA                                        | VERSION                                          |
|--------------------------------------------------|--------------------------------------------------|
| <b>T</b> 1 = Unidirezionale<br>2 = Bidirezionale | <b>T</b> 1 = Unidirectional<br>2 = Bidirectional |
| <b>A</b> Connessione A - Vedi LISTA              | <b>A</b> Connection A - see LIST                 |
| <b>B</b> Connessione B - Vedi LISTA              | <b>B</b> Connection B - see LIST                 |
| LISTA Connessioni                                | Connections LIST                                 |
| 00 = Non prevista                                | 00 = None                                        |
| D4 = Dritto Ø4                                   | D4 = Straight Ø4                                 |
| D6 = Dritto Ø6                                   | D6 = Straight Ø6                                 |
| D8 = Dritto Ø8                                   | D8 = Straight Ø8                                 |
| L1 = Anello girevole metallo G1/8"               | L1 = Female banjo G1/8"/8"                       |
| G4 = Anello PL girevole Ø4                       | G4 = Rotating banjo Ø4                           |
| G6 = Anello PL girevole Ø6                       | G6 = Rotating banjo Ø6                           |
| G8 = Anello PL girevole Ø8                       | G8 = Rotating banjo Ø8                           |
| M1 = G1/8 maschio                                | M1 = G1/8 male                                   |
| M2 = G1/4 maschio                                | M2 = G1/4 male                                   |
| F1 = G1/8 femmina                                | F1 = G1/8 female                                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.131.D4.D4.XX

Valvola di blocco in linea unidirezionale. Connessioni di alimentazione "A" e "B" Tubo Ø4

Questi componenti non devono essere intesi né utilizzati come elementi di sicurezza

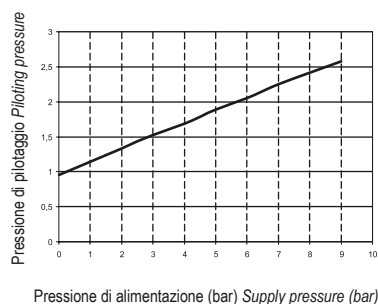
NOTE : For the dimension including cartridges see page CONNECTIONS

Example: 551.131.D4.D4.XX

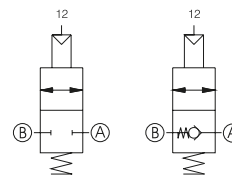
In line blocking valve, unidirectional, CONNECTIONS "A" and "B" Tube Ø4

These components must not be understood and used as security elements

Curva di pilotaggio  
Piloting curves



Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- La funzione della valvola di blocco è quella di mantenere in pressione il circuito a valle nel caso in cui venga a mancare la sorgente di pressione. Viene solitamente impiegata direttamente sulle bocche di alimentazione dei cilindri per poterli mantenere in posizione nel caso in cui si interrompa accidentalmente il segnale di pilotaggio impedendo così un'improvvisa depressurizzazione delle camere in pressione. E' prevista sia la versione unidirezionale che la versione bidirezionale.
- La versione unidirezionale consente il passaggio d'aria in un senso, mentre per il passaggio nel senso opposto è necessario inviare un segnale di pilotaggio alla bocca 12.
- La versione bidirezionale, invece, consente il passaggio d'aria nei due sensi solo in presenza del segnale di pilotaggio.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| Fluid                                     | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione              | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)     | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C            | -5 ÷ + 50                                  |
| Peso (gr)                                 | 26                                         |
| Portata a 6 bar con $\Delta p=1$ (Nl/min) | 285                                        |
| Portata a 6 bar scarico libero (nl/min.)  | 450                                        |

## Construction characteristics

- The blocking valve function is to maintain the circuit downstream pressure in the event of loss of supply pressure. It is normally fitted directly onto the cylinder connections ports in order to ensure that, in case of accidental loss of the supply pressure, the units positions is maintained. This is achieved as the blocking valve preserves the pressure inside the pressurised chamber. Blocking valves can be unidirectional or bidirectional. In the unidirectional version the air flow is free in one direction while in order to allow the flow in the opposite direction is necessary to send a pneumatic signal to the unit connection 12. The bidirectional version requires a pneumatic signal on connection 12 to allow the flow in any of the two directions.
- Mounting options:
  - on DIN rail using the relevant adaptor kit (see accessories)
  - with 90° bracket (see accessories)
  - directly on the support plate thanks to two through holes on the body

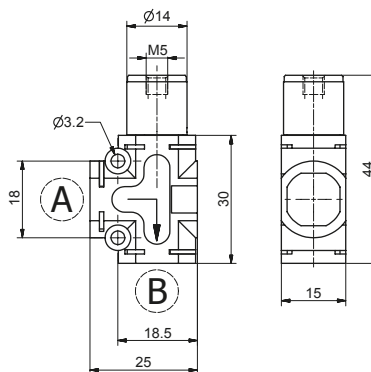
## Technical characteristics

|                                                                                  |                                    |
|----------------------------------------------------------------------------------|------------------------------------|
| Fluid                                                                            | Filtered and lubricated air or not |
| Connections                                                                      | See CONNECTIONS LIST               |
| Max working pressure                                                             | 10 bar                             |
| Working temperature                                                              | -5°C ÷ +50°C                       |
| Weight without connections                                                       | 26 gr.                             |
| Flow rate at 6 bar with $\Delta p=1$<br>Unidirectional and bidirectional version | 285 Nl/min                         |
| Flow rate at 6 bar with free exhaust<br>Unidirectional and bidirectional version | 450 Nl/min                         |

## ART. 551.23T.A.B.XX

Valvole di blocco a 90°  
90° blocking valve

| TIPOLOGIA                                        | VERSION                                          |
|--------------------------------------------------|--------------------------------------------------|
| <b>T</b> 1 = Unidirezionale<br>2 = Bidirezionale | <b>T</b> 1 = Unidirectional<br>2 = Bidirectional |
| <b>A</b> Connessione A - Vedi LISTA              | <b>A</b> Connection A - see LIST                 |
| <b>B</b> Connessione B - Vedi LISTA              | <b>B</b> Connection B - see LIST                 |
| LISTA Connessioni                                | Connections LIST                                 |
| 00 = Non prevista                                | 00 = None                                        |
| D4 = Diritto Ø4                                  | D4 = Straight Ø4                                 |
| D6 = Diritto Ø6                                  | D6 = Straight Ø6                                 |
| D8 = Diritto Ø8                                  | D8 = Straight Ø8                                 |
| L1 = Anello girevole metallo G1/8"               | L1 = Female banjo G1/8"/8"                       |
| G4 = Anello PL girevole Ø4                       | G4 = Rotating banjo Ø4                           |
| G6 = Anello PL girevole Ø6                       | G6 = Rotating banjo Ø6                           |
| G8 = Anello PL girevole Ø8                       | G8 = Rotating banjo Ø8                           |
| M1 = G1/8 maschio                                | M1 = G1/8 male                                   |
| M2 = G1/4 maschio                                | M2 = G1/4 male                                   |
| F1 = G1/8 femmina                                | F1 = G1/8 female                                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.231.M1.D6.XX

Valvola di blocco a 90°. Connessioni di alimentazione "A" Maschio G1/8 e "B" Tubo Ø6

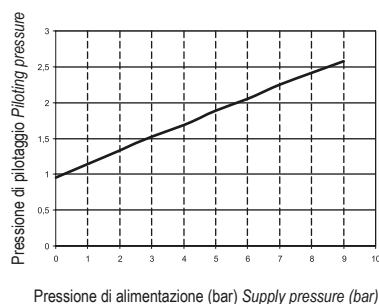
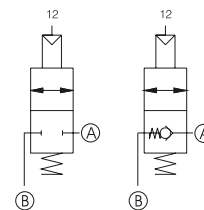
Questi componenti non devono essere intesi né utilizzati come elementi di sicurezza

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.231.M1.D6.XX

90° blocking valve, unidirectional, CONNECTIONS "A" Male G1/8 and "B" Tube Ø6

These components must not be understood and used as security elements

Curva di pilotaggio  
Piloting curves

Simboli pneumatici  
Pneumatic Symbol


## Caratteristiche costruttive

- La funzione della valvola di blocco è quella di mantenere in pressione il circuito a valle nel caso in cui venga a mancare la sorgente di pressione. Viene solitamente impiegata direttamente sulle bocche di alimentazione dei cilindri per poterli mantenere in posizione nel caso in cui si interrompa accidentalmente il segnale di pilotaggio impedendo così un' improvvisa depressurizzazione delle camere in pressione.
- E' prevista sia la versione unidirezionale che la versione bidirezionale.
- La versione unidirezionale consente il passaggio d' aria in un senso, mentre per il passaggio nel senso opposto è necessario inviare un segnale di pilotaggio alla bocca 12.
- La versione bidirezionale, invece, consente il passaggio d'aria nei due sensi solo in presenza del segnale di pilotaggio.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| Fluido                                    | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione              | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)     | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C            | -5 ÷ + 50                                  |
| Peso (gr)                                 | 26                                         |
| Portata a 6 bar con $\Delta p=1$ (Nl/min) | 285                                        |
| Portata a 6 bar scarico libero (Nl/min.)  | 450                                        |

## Construction characteristics

- The blocking valve function is to maintain the circuit downstream pressure in the event of loss of supply pressure. It is normally fitted directly onto the cylinder connections ports in order to ensure that, in case of accidental loss of the supply pressure, the units positions is maintained. This is achieved as the blocking valve preserves the pressure inside the pressurised chamber. Blocking valves can be unidirectional or bidirectional. In the unidirectional version the air flow is free in one direction while in order to allow the flow in the opposite direction is necessary to send a pneumatic signal to the unit connection 12. The bidirectional version requires a pneumatic signal on connection 12 to allow the flow in any of the two directions.
- Mounting options:
  - on DIN rail using the relevant adaptor kit (see accessories)
  - with 90° bracket (see accessories)
  - directly on the support plate thanks to two through holes on the body

## Technical characteristics

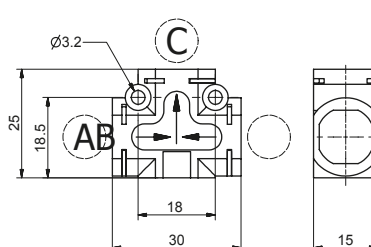
|                                                                                  |                                    |
|----------------------------------------------------------------------------------|------------------------------------|
| Fluid                                                                            | Filtered and lubricated air or not |
| Connections                                                                      | See CONNECTIONS LIST               |
| Max working pressure                                                             | 10 bar                             |
| Working temperature                                                              | -5°C ÷ +50°C                       |
| Weight without connections                                                       | 26 gr.                             |
| Flow rate at 6 bar with $\Delta p=1$<br>Unidirectional and bidirectional version | 285 Nl/min                         |
| Flow rate at 6 bar with free exhaust<br>Unidirectional and bidirectional version | 450 Nl/min                         |

## ART. 551.141A.B.C

Valvola selettoria di circuito OR  
*Circuit selector valve - OR*

| TIPOLOGIA                           |
|-------------------------------------|
| <b>A</b> Connessione A - Vedi LISTA |
| <b>B</b> Connessione B - Vedi LISTA |
| <b>C</b> Connessione C - Vedi LISTA |
| LISTA Connessioni                   |
| 00 = Non prevista                   |
| D4 = Diritto Ø4                     |
| D6 = Diritto Ø6                     |
| D8 = Diritto Ø8                     |
| L1 = Anello girevole metallo G1/8"  |
| G4 = Anello PL girevole Ø4          |
| G6 = Anello PL girevole Ø6          |
| G8 = Anello PL girevole Ø8          |
| M1 = G1/8 maschio                   |
| M2 = G1/4 maschio                   |
| F1 = G1/8 femmina                   |

| VERSION                          |
|----------------------------------|
| <b>A</b> Connection A - see LIST |
| <b>B</b> Connection B - see LIST |
| <b>C</b> Connection C - see LIST |
| Connections LIST                 |
| 00 = None                        |
| D4 = Straight Ø4                 |
| D6 = Straight Ø6                 |
| D8 = Straight Ø8                 |
| L1 = Female banjo G1/8"          |
| G4 = Rotating banjo Ø4           |
| G6 = Rotating banjo Ø6           |
| G8 = Rotating banjo Ø8           |
| M1 = G1/8 male                   |
| M2 = G1/4 male                   |
| F1 = G1/8 female                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.141.D8.D8.D8

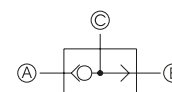
Valvola selettoria di circuito OR. Connessioni di alimentazione "A", "B" e "C" Tubo Ø8

NOTE : For the dimension including cartridges see page CONNECTIONS

Example: 551.141.D8.D8.D8

Circuit selector valve OR, CONNECTIONS "A", "B" and "C" Tube Ø8

Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- Sono valvole a 3 vie con due ingressi e un'uscita, in presenza di due segnali pneumatici con valori diversi queste valvole scelgono in uscita il valore più alto, per questo sono anche dette selettori di alta pressione. Sono impiegate per permettere l'azionamento di un componente da due diverse posizioni.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

## Caratteristiche tecniche

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluido                                | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 10                                         |
| Temperatura di esercizio in °C        | -5 ÷ + 50                                  |
| Peso (gr)                             | 10                                         |
| Portata a 6 bar con Δp=1 (NI/min)     | 600                                        |

## Construction characteristics

- These valves have two inlets and one output connection and are normally called high pressure selector valves as, when receiving two separate pressure supply, only allow the passage of the highest pressure. The most common application is to operate a component from two separate positions.
- Mounting options:
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

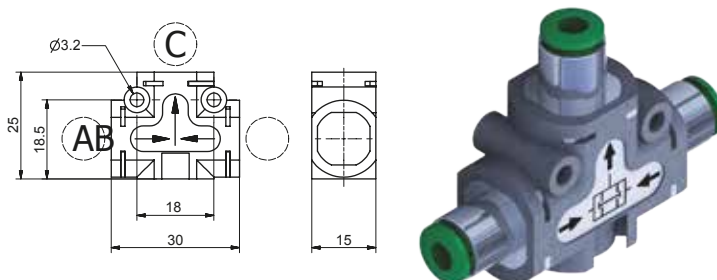
## Technical characteristics

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max inlet pressure           | 10 bar                             |
| Working temperature          | -5°C ÷ +50°C                       |
| Weight without connections   | 10 gr.                             |
| Flow rate at 6 bar with Δp=1 | 600 NI/min                         |

**ART. 551.151A.B.C**

Valvola selettoria di circuito AND  
*Circuit selector valve - AND*

| TIPOLOGIA                           | VERSION                          |
|-------------------------------------|----------------------------------|
| <b>A</b> Connessione A - Vedi LISTA | <b>A</b> Connection A - see LIST |
| <b>B</b> Connessione B - Vedi LISTA | <b>B</b> Connection B - see LIST |
| <b>C</b> Connessione C - Vedi LISTA | <b>C</b> Connection C - see LIST |
| LISTA Connessioni                   | Connections LIST                 |
| 00 = Non prevista                   | 00 = None                        |
| D4 = Diritto Ø4                     | D4 = Straight Ø4                 |
| D6 = Diritto Ø6                     | D6 = Straight Ø6                 |
| D8 = Diritto Ø8                     | D8 = Straight Ø8                 |
| L1 = Anello girevole metallo G1/8"  | L1 = Female banjo G1/8"          |
| G4 = Anello PL girevole Ø4          | G4 = Rotating banjo Ø4           |
| G6 = Anello PL girevole Ø6          | G6 = Rotating banjo Ø6           |
| G8 = Anello PL girevole Ø8          | G8 = Rotating banjo Ø8           |
| M1 = G1/8 maschio                   | M1 = G1/8 male                   |
| M2 = G1/4 maschio                   | M2 = G1/4 male                   |
| F1 = G1/8 femmina                   | F1 = G1/8 female                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

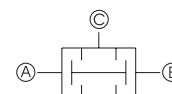
Esempio: 551.151.D6.D6.D6

Valvola selettoria di circuito AND. Connessioni di alimentazione "A", "B" e "C" Tubo Ø6

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.151.D6.D6.D6

Circuit selector valve AND, CONNECTIONS "A", "B" and "C" Tube Ø6

Simboli pneumatici  
Pneumatic Symbol

**Caratteristiche costruttive**

- Sono valvole a 3 vie con due ingressi e un'uscita, in presenza di due segnali pneumatici con valori diversi queste valvole scelgono in uscita il valore più basso, per questo sono anche dette selettori di bassa pressione. Sono impiegate per permettere l'azionamento di un componente da due diverse posizioni.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

**Caratteristiche tecniche**

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluid                                 | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 10                                         |
| Temperatura di esercizio in °C        | -5 ÷ + 50                                  |
| Peso (gr)                             | 10                                         |
| Portata a 6 bar con Δp=1 (NI/min)     | 550                                        |

**Construction characteristics**

- These valves have two inlets and one output connection and are normally called low pressure selector valves as, when receiving two separate pressure supply, only allow the passage of the lowest pressure. The most common application is to operate a component from two separate positions.
- Mounting options:
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

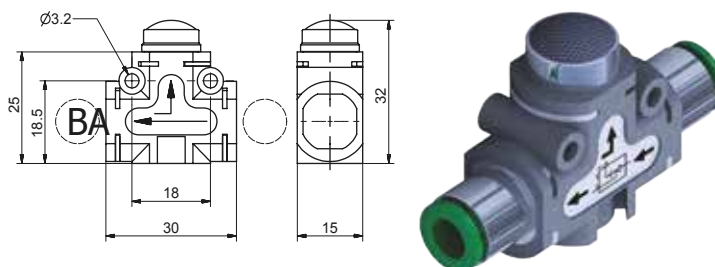
**Technical characteristics**

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max inlet pressure           | 10 bar                             |
| Working temperature          | -5°C ÷ +50°C                       |
| Weight without connections   | 10 gr.                             |
| Flow rate at 6 bar with Δp=1 | 550 NI/min                         |



**ART. 551.161A.B.XX**
**Valvola di scarico rapido**  
*Quick exhaust valve*

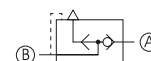
| TIPOLOGIA                           | VERSION                          |
|-------------------------------------|----------------------------------|
| <b>A</b> Connessione A - Vedi LISTA | <b>A</b> Connection A - see LIST |
| <b>B</b> Connessione B - Vedi LISTA | <b>B</b> Connection B - see LIST |
| LISTA Connessioni                   | Connections LIST                 |
| 00 = Non prevista                   | 00 = None                        |
| D4 = Diritto Ø4                     | D4 = Straight Ø4                 |
| D6 = Diritto Ø6                     | D6 = Straight Ø6                 |
| D8 = Diritto Ø8                     | D8 = Straight Ø8                 |
| L1 = Anello girevole metallo G1/8"  | L1 = Female banjo G1/8"          |
| G4 = Anello PL girevole Ø4          | G4 = Rotating banjo Ø4           |
| G6 = Anello PL girevole Ø6          | G6 = Rotating banjo Ø6           |
| G8 = Anello PL girevole Ø8          | G8 = Rotating banjo Ø8           |
| M1 = G1/8 maschio                   | M1 = G1/8 male                   |
| M2 = G1/4 maschio                   | M2 = G1/4 male                   |
| F1 = G1/8 femmina                   | F1 = G1/8 female                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
 Esempio: 551.161.D8.D8.XX  
 Valvola di scarico rapido. Connessioni di alimentazione "A" e "B" Tubo Ø8

NOTE: For the dimension including cartridges see page CONNECTIONS  
 Example: 551.161.D8.D8.XX  
 Quick exhaust valve, CONNECTIONS "A" and "B" Tube Ø8

Simboli pneumatici  
*Pneumatic symbol*

**Caratteristiche costruttive**

- Sono valvole a 3 vie 2 posizioni. Questo tipo di accessorio montato direttamente sull'attuatore o interposto nel circuito pneumatico tra attuatore e valvola, consente di ottenere ad es. la massima velocità di un cilindro scaricando direttamente l'aria in atmosfera senza il bisogno di attraversare la circuitazione.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

**Caratteristiche tecniche**

|                                                |                                            |
|------------------------------------------------|--------------------------------------------|
| Fluidi                                         | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione                   | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)          | 10                                         |
| Temperatura di esercizio in °C                 | -5 ÷ + 50                                  |
| Peso (gr)                                      | 15                                         |
| Portata a 6 bar con $\Delta p=1$ (NI/min)      | 250                                        |
| Portata max a 6 bar in scarico libero (NI/min) | 500                                        |

**Construction characteristics**

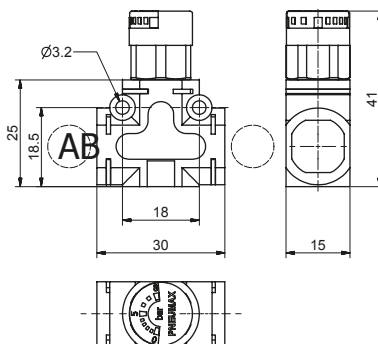
- These are 3 ways, two positions valves which can be directly mounted onto the actuator or between the actuator and the control valve. Their function is to discharge the air directly into the atmosphere without going through the pneumatic circuit enabling the actuator to reach the maximum speed.
- Mounting options:
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

**Technical characteristics**

|                                                    |                                    |
|----------------------------------------------------|------------------------------------|
| Fluid                                              | Filtered and lubricated air or not |
| Connections                                        | See CONNECTIONS LIST               |
| Max inlet pressure                                 | 10 bar                             |
| Working temperature                                | -5°C ÷ +50°C                       |
| Weight without connections                         | 15 gr.                             |
| Flow rate at 6 bar with $\Delta p=1$ (from 1 to 2) | 250 NI/min                         |
| Flow rate at 6 bar with free exhaust (from 2 to 3) | 500 NI/min                         |

**ART. 551.178A.B.XX**
**Indicatore di pressione**  
*Pressure indicator*

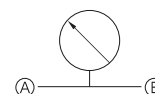
| TIPOLOGIA                           | VERSION                          |
|-------------------------------------|----------------------------------|
| <b>A</b> Connessione A - Vedi LISTA | <b>A</b> Connection A - see LIST |
| <b>B</b> Connessione B - Vedi LISTA | <b>B</b> Connection B - see LIST |
| LISTA Connessioni                   | Connections LIST                 |
| 00 = Non prevista                   | 00 = None                        |
| D4 = Diritto Ø4                     | D4 = Straight Ø4                 |
| D6 = Diritto Ø6                     | D6 = Straight Ø6                 |
| D8 = Diritto Ø8                     | D8 = Straight Ø8                 |
| L1 = Anello girevole metallo G1/8"  | L1 = Female banjo G1/8"          |
| G4 = Anello PL girevole Ø4          | G4 = Rotating banjo Ø4           |
| G6 = Anello PL girevole Ø6          | G6 = Rotating banjo Ø6           |
| G8 = Anello PL girevole Ø8          | G8 = Rotating banjo Ø8           |
| M1 = G1/8 maschio                   | M1 = G1/8 male                   |
| M2 = G1/4 maschio                   | M2 = G1/4 male                   |
| F1 = G1/8 femmina                   | F1 = G1/8 female                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
 Esempio: 551.178.D6.D4.XX  
 Indicatore di pressione, Connessione "A" Tubo Ø6, "B" Tubo Ø4

NOTE: For the dimension including cartridges see page CONNECTIONS  
 Example: 551.178.D6.D4.XX  
 Pressure indicator, CONNECTIONS "A" Tube Ø6, "B" Tube Ø4

Simboli pneumatici  
*Pneumatic Symbol*


**Caratteristiche costruttive**

- L'indicatore di pressione è un dispositivo in grado di misurare la pressione all'interno di un circuito pneumatico. L'inserimento di questo componente permette sempre il monitoraggio della pressione con grande facilità, grazie ad un visualizzatore con fondo scala da 0 a 8 bar.
- Viene impiegato singolarmente, oppure può essere accoppiato con un altro dispositivo.
- Possibile ancoraggio su barra DIN mediante adattatori (vedi accessori).
- Possibile ancoraggio con squadretta a 90° (vedi accessori).
- Possibile fissaggio a parete mediante fori presenti sul corpo.

**Caratteristiche tecniche**

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluido                                | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 8                                          |
| Temperatura di esercizio in °C        | -5 ÷ + 50                                  |
| Peso (gr)                             | 20,5                                       |
| Scala di visualizzazione (bar)        | 0 - 8                                      |

**Construction characteristics**

- The pressure visual indicator is a device which measures the pressure inside a pneumatic circuit. The 0 to 8 bar visual indicator makes very easy to monitor the pressure state inside the circuit. It can be use on its own or can be coupled with another device.
- Mounting options:
- on DIN rail using the relevant adaptor kit (see accessories)
- with 90° bracket (see accessories)
- directly on the support plate thanks to two through holes on the body

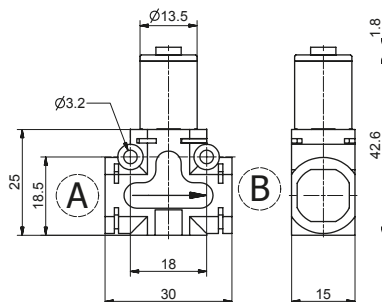
**Technical characteristics**

|                            |                                    |
|----------------------------|------------------------------------|
| Fluid                      | Filtered and lubricated air or not |
| Connections                | See CONNECTIONS LIST               |
| Max. working pressure      | 8 bar                              |
| Working temperature        | -5°C ÷ +50°C                       |
| Weight without connections | 20,5 gr.                           |
| Visualization scale        | 0 - 8 bar                          |

## ART. 551.181A.B.XX

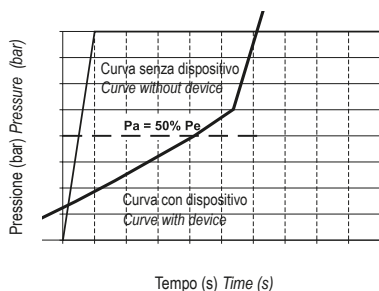
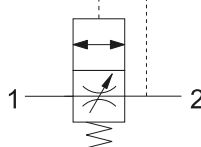
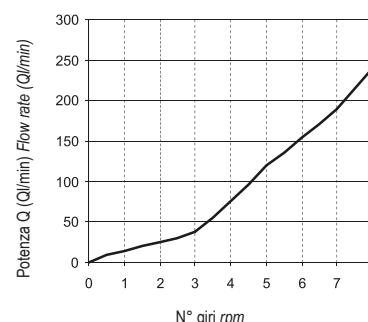
**Avviatore progressivo in linea**  
*In line progressive star-up valve*

| TIPOLOGIA                           | VERSION                          |
|-------------------------------------|----------------------------------|
| <b>A</b> Connessione A - Vedi LISTA | <b>A</b> Connection A - see LIST |
| <b>B</b> Connessione B - Vedi LISTA | <b>B</b> Connection B - see LIST |
| LISTA Connessioni                   | Connections LIST                 |
| 00 = Non prevista                   | 00 = None                        |
| D4 = Diritto Ø4                     | D4 = Straight Ø4                 |
| D6 = Diritto Ø6                     | D6 = Straight Ø6                 |
| D8 = Diritto Ø8                     | D8 = Straight Ø8                 |
| L1 = Anello girevole metallo G1/8"  | L1 = Female banjo G1/8"          |
| G4 = Anello PL girevole Ø4          | G4 = Rotating banjo Ø4           |
| G6 = Anello PL girevole Ø6          | G6 = Rotating banjo Ø6           |
| G8 = Anello PL girevole Ø8          | G8 = Rotating banjo Ø8           |
| M1 = G1/8 maschio                   | M1 = G1/8 male                   |
| M2 = G1/4 maschio                   | M2 = G1/4 male                   |
| F1 = G1/8 femmina                   | F1 = G1/8 female                 |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
 Esempio: 551.181.D6.D4.XX  
 Avviatore progressivo in linea, Connessione "A" Tubo Ø6, "B" Tubo Ø4

NOTE: For the dimension including cartridges see page CONNECTIONS  
 Example: 551.181.D6.D4.XX  
 Progressive start-up, CONNECTIONS "A" Tube Ø6, "B" Tube Ø4

 Curva di funzionamento  
*Piloting curves*

 Simboli pneumatici  
*Pneumatic Symbol*

 Curva di regolazione  
*Adjustment curves*


## Caratteristiche costruttive

- L'avviatore progressivo è un dispositivo che permette di pressurizzare gradualmente il circuito a valle fino al raggiungimento del 50% del valore di pressione di alimentazione.
- Successivamente nel dispositivo avviene una commutazione che porta ad avere il passaggio d'aria massimo consentito.
- Il tempo di riempimento graduale può essere variato grazie al regolatore di flusso incorporato.
- Solitamente questo componente viene impiegato per fare in modo che, all'avvio dell'impianto pneumatico, i cilindri presenti sul circuito, vengano riportati nella loro posizione d'origine con velocità lenta evitando urti violenti indesiderati.

## Caratteristiche tecniche

|                                                                        |                                         |
|------------------------------------------------------------------------|-----------------------------------------|
| Fluido                                                                 | Aria filtrata e lubrificata o non       |
| Connessioni di alimentazione                                           | Vedi LISTA Connessioni di alimentazione |
| Pressione di funzionamento (bar)                                       | 2 ÷ 10                                  |
| Pressione d'apertura (Pa)                                              | 50% della pressione di esercizio (Pe)   |
| Portata a 6 bar scarico libero (NI/min.) da 1 a 2 con circuito aperto  | 650                                     |
| Portata a 6 bar con $\Delta p=1$ (NI/min) da 1 a 2 con circuito aperto | 350                                     |
| Portata a 6 bar con $\Delta p=1$ (NI/min) da 2 a 1 con spillo aperto   | 600                                     |
| Temperatura di esercizio in °C                                         | -5 ÷ +50                                |
| Peso (gr)                                                              | 31                                      |

## Construction characteristics

- The soft start valve is a device designed to gradually pressurise the downstream circuit until 50% of the upstream pressure value is reached.
- Once the 50% of the upstream pressure value is reached in the downstream circuit the valve fully opens allowing full air passage.
- The filling time can be adjusted thanks to the built in flow regulator.
- This device is used in order to ensure that during the pneumatic circuit start up the cylinders will return to their home position slowly avoiding collisions or sudden movements.

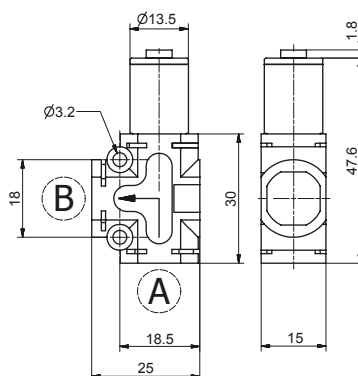
## Technical characteristics

|                                      |                                               |
|--------------------------------------|-----------------------------------------------|
| Fluid                                | Filtered and lubricated air or not            |
| Connections                          | See CONNECTIONS LIST                          |
| Max. working pressure                | 2 ÷ 10 bar                                    |
| Opening pressure (Pa)                | 50% of the inlet pressure (Pi)                |
| Flow rate at 6 bar with free exhaust | 650 NI/min (from 1 to 2 with opening circuit) |
| Flow rate at 6 bar with $\Delta p=1$ | 350 NI/min (from 1 to 2 with opening circuit) |
| Flow rate at 6 bar with $\Delta p=1$ | 600 NI/min (from 2 to 1 with opening pin)     |
| Working temperature                  | -5°C ÷ +50°C                                  |
| Weight without connections           | 31 gr.                                        |

## ART. 551.281A.B.XX

Avviatore progressivo a 90°  
90° progressive start-up valve

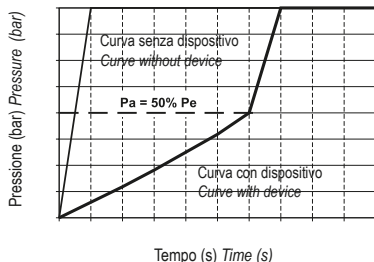
| TIPOLOGIA                           | VERSION                          |
|-------------------------------------|----------------------------------|
| <b>A</b> Connessione A - Vedi LISTA | <b>A</b> Connection A - see LIST |
| <b>B</b> Connessione B - Vedi LISTA | <b>B</b> Connection B - see LIST |
| LISTA Connessioni                   | Connections LIST                 |
| 00 = Non prevista                   | 00 = None                        |
| D4 = Diritto Ø4                     | D4 = Straight Ø4                 |
| D6 = Diritto Ø6                     | D6 = Straight Ø6                 |
| D8 = Diritto Ø8                     | D8 = Straight Ø8                 |
| L1 = Anello girevole metallo G1/8"  | L1 = Female banjo G1/8"          |
| G4 = Anello PL girevole Ø4          | G4 = Rotating banjo Ø4           |
| G6 = Anello PL girevole Ø6          | G6 = Rotating banjo Ø6           |
| G8 = Anello PL girevole Ø8          | G8 = Rotating banjo Ø8           |
| M1 = G1/8 maschio                   | M1 = G1/8 male                   |
| M2 = G1/4 maschio                   | M2 = G1/4 male                   |
| F1 = G1/8 femmina                   | F1 = G1/8 female                 |



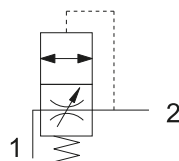
NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
Esempio: 551.281.M1.D4.XX  
Avviatore progressivo a 90°, Connessione "A" Maschio G1/8", "B" Tubo Ø4

NOTE: For the dimension including cartridges see page CONNECTIONS  
Example: 551.281.D6.D4.XX  
Progressive start-up, CONNECTIONS "A" Tube Ø6, "B" Tube Ø4

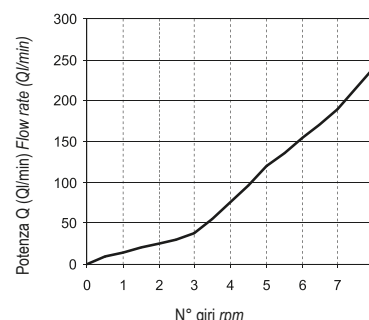
Curva di funzionamento  
Piloting curves



Simboli pneumatici  
Pneumatic Symbol



Curva di regolazione  
Adjustment curves



## Caratteristiche costruttive

- L'avviatore progressivo è un dispositivo che permette di pressurizzare gradualmente il circuito a valle fino al raggiungimento del 50% del valore di pressione di alimentazione.
- Successivamente nel dispositivo avviene una commutazione che porta ad avere il passaggio d'aria massimo consentito.
- Il tempo di riempimento graduale può essere variato grazie al regolatore di flusso incorporato.
- Solitamente questo componente viene impiegato per fare in modo che, all'avvio dell'impianto pneumatico, i cilindri presenti sul circuito, vengano riportati nella loro posizione d'origine con velocità lenta evitando urti violenti indesiderati.

## Caratteristiche tecniche

|                                                                        |                                         |
|------------------------------------------------------------------------|-----------------------------------------|
| Fluido                                                                 | Aria filtrata e lubrificata o non       |
| Connessioni di alimentazione                                           | Vedi LISTA Connessioni di alimentazione |
| Pressione di funzionamento (bar)                                       | 2 ÷ 10                                  |
| Pressione d'apertura (Pa)                                              | 50% della pressione di esercizio (Pe)   |
| Portata a 6 bar scarico libero (NI/min.) da 1 a 2 con circuito aperto  | 650                                     |
| Portata a 6 bar con $\Delta p=1$ (NI/min) da 1 a 2 con circuito aperto | 350                                     |
| Portata a 6 bar con $\Delta p=1$ (NI/min) da 2 a 1 con spillo aperto   | 600                                     |
| Temperatura di esercizio in °C                                         | -5 ÷ +50                                |
| Peso (gr)                                                              | 31                                      |

## Construction characteristics

- The soft start valve is a device designed to gradually pressurise the downstream circuit until 50% of the upstream pressure value is reached.
- Once the 50% of the upstream pressure value is reached in the downstream circuit the valve fully opens allowing full air passage.
- The filling time can be adjusted thanks to the built in flow regulator.
- This device is used in order to ensure that during the pneumatic circuit start up the cylinders will return to their home position slowly avoiding collisions or sudden movements.

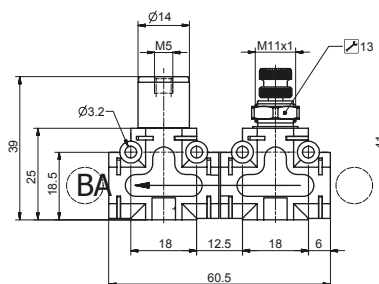
## Technical characteristics

|                                      |                                               |
|--------------------------------------|-----------------------------------------------|
| Fluid                                | Filtered and lubricated air or not            |
| Connections                          | See CONNECTIONS LIST                          |
| Max. working pressure                | 2 ÷ 10 bar                                    |
| Opening pressure (Pa)                | 50% of the inlet pressure (Pi)                |
| Flow rate at 6 bar with free exhaust | 650 NI/min (from 1 to 2 with opening circuit) |
| Flow rate at 6 bar with $\Delta p=1$ | 350 NI/min (from 1 to 2 with opening circuit) |
| Flow rate at 6 bar with $\Delta p=1$ | 600 NI/min (from 2 to 1 with opening pin)     |
| Working temperature                  | -5°C ÷ +50°C                                  |
| Weight without connections           | 31 gr.                                        |

## ART. 551.1FT.A.B.XX

Valvole di blocco in linea + MRF  
In line blocking valve + MRF

| TIPOLOGIA                                                 | VERSION                                                               |
|-----------------------------------------------------------|-----------------------------------------------------------------------|
| <b>T</b>                                                  | <b>T</b>                                                              |
| 1 = Valvola di Blocco Unidirezionale + RFU Unidirezionale | 1 = Unidirectional blocking valve + Unidirectional flow control valve |
| 2 = Valvola di Blocco Bidirezionale + RFU Bidirezionale   | 2 = Bidirectional blocking valve + Bidirectional flow control valve   |
| 3 = Valvola di Blocco Unidirezionale + RFU Bidirezionale  | 3 = Unidirectional blocking valve + Bidirectional flow control valve  |
| 4 = Valvola di Blocco Bidirezionale + RFU Unidirezionale  | 4 = Bidirectional blocking valve + Unidirectional flow control valve  |
| <b>A</b> Connessione A - Vedi LISTA                       | <b>A</b> Connection A - see LIST                                      |
| <b>B</b> Connessione B - Vedi LISTA                       | <b>B</b> Connection B - see LIST                                      |
| LISTA Connessioni                                         | Connections LIST                                                      |
| 00 = Non prevista                                         | 00 = None                                                             |
| D4 = Diritto Ø4                                           | D4 = Straight Ø4                                                      |
| D6 = Diritto Ø6                                           | D6 = Straight Ø6                                                      |
| D8 = Diritto Ø8                                           | D8 = Straight Ø8                                                      |
| L1 = Anello girevole metallo G1/8"                        | L1 = Female banjo G1/8"/8"                                            |
| G4 = Anello PL girevole Ø4                                | G4 = Rotating banjo Ø4                                                |
| G6 = Anello PL girevole Ø6                                | G6 = Rotating banjo Ø6                                                |
| G8 = Anello PL girevole Ø8                                | G8 = Rotating banjo Ø8                                                |
| M1 = G1/8 maschio                                         | M1 = G1/8 male                                                        |
| M2 = G1/4 maschio                                         | M2 = G1/4 male                                                        |
| F1 = G1/8 femmina                                         | F1 = G1/8 female                                                      |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 551.1F1.00.00.XX

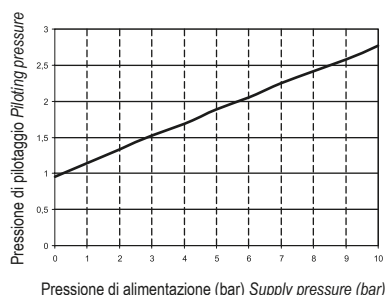
Valvola di blocco in linea + Regolatore di flusso. Connessioni di alimentazione "A" e "B" non previste.

NOTE: For the dimension including cartridges see page CONNECTIONS

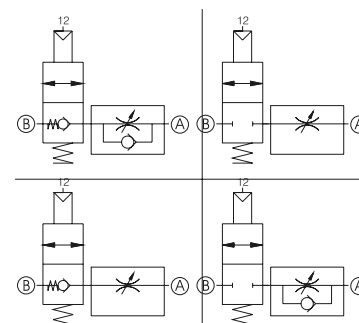
Example: 551.1F1.00.00.XX

In line unidirectional blocking valve + unidirectional flow control valve, without CONNECTIONS "A" and "B"

Curva di pilotaggio  
Piloting curves



Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di mantenere la pressione nel circuito a valle nel caso in cui venga a mancare la sorgente di pressione, abbinata alla possibilità di regolare la portata d'aria nel circuito. L'applicazione tipica per questo prodotto è direttamente installato in prossimità o direttamente sulla bocca di un cilindro avendo quindi la possibilità di mantenere la camera in pressione nel caso venga a mancare il segnale di pilotaggio con in più la possibilità di regolare la portata in scarico della camera stessa nel momento in cui si pilota la valvola di blocco.
- Le possibili combinazioni sono:
- Valvola di blocco unidirezionale + regolatore di flusso unidirezionale
- Valvola di blocco bidirezionale + regolatore di flusso bidirezionale
- Valvola di blocco bidirezionale + regolatore di flusso unidirezionale
- Valvola di blocco unidirezionale + regolatore di flusso bidirezionale

## Caratteristiche tecniche

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| Fluido                                    | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione              | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)     | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C            | -5 ÷ +50                                   |
| Diametro nominale di passaggio (mm)       | Ø3                                         |
| Portata a 6 bar con $\Delta p=1$ (NL/min) | 285                                        |
| Peso (gr.)                                | 62                                         |

## Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time grants the possibility to regulate the circuit flow rate. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to regulate the exhaust flow rate when the blocking valve is actuated.
- The possible combinations are the following:
- unidirectional blocking valve + unidirectional flow control valve
- bidirectional blocking valve + bidirectional flow control valve
- bidirectional blocking valve + unidirectional flow control valve
- unidirectional blocking valve + bidirectional flow control valve

## Technical characteristics

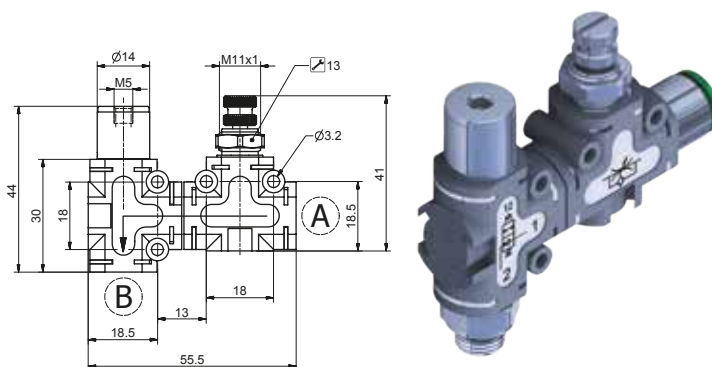
|                                      |                                    |
|--------------------------------------|------------------------------------|
| Fluid                                | Filtered and lubricated air or not |
| Connections                          | See CONNECTIONS LIST               |
| Max working pressure                 | 0,5 ÷ 10 bar                       |
| Working temperature                  | -5°C ÷ +50°C                       |
| Ø Orifice size                       | Ø3 mm                              |
| Flow rate at 6 bar with $\Delta p=1$ | 285 NL/min                         |
| Weight without connections           | 62 gr.                             |



## ART. 551.2FT.A.B.XX

Valvole di blocco a 90° + MRF  
90° blocking valve + MRF

| TIPOLOGIA                                                     | VERSION                                                                   |
|---------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>T</b>                                                      | <b>T</b>                                                                  |
| 1 = Valvola di Blocco 90° Unidirezionale + RFU Unidirezionale | 1 = 90° Unidirectional blocking valve + Unidirectional flow control valve |
| 2 = Valvola di Blocco 90° Bidirezionale + RFU Bidirezionale   | 2 = 90° Bidirectional blocking valve + Bidirectional flow control valve   |
| 3 = Valvola di Blocco 90° Unidirezionale + RFU Bidirezionale  | 3 = 90° Unidirectional blocking valve + Bidirectional flow control valve  |
| 4 = Valvola di Blocco 90° Bidirezionale + RFU Unidirezionale  | 4 = 90° Bidirectional blocking valve + Unidirectional flow control valve  |
| <b>A</b> Connessione A - Vedi LISTA                           | <b>A</b> Connection A - see LIST                                          |
| <b>B</b> Connessione B - Vedi LISTA                           | <b>B</b> Connection B - see LIST                                          |
| LISTA Connessioni                                             | Connections LIST                                                          |
| 00 = Non prevista                                             | 00 = None                                                                 |
| D4 = Diritto Ø4                                               | D4 = Straight Ø4                                                          |
| D6 = Diritto Ø6                                               | D6 = Straight Ø6                                                          |
| D8 = Diritto Ø8                                               | D8 = Straight Ø8                                                          |
| L1 = Anello girevole metallo G1/8"                            | L1 = Female banjo G1/8"                                                   |
| G4 = Anello PL girevole Ø4                                    | G4 = Rotating banjo Ø4                                                    |
| G6 = Anello PL girevole Ø6                                    | G6 = Rotating banjo Ø6                                                    |
| G8 = Anello PL girevole Ø8                                    | G8 = Rotating banjo Ø8                                                    |
| M1 = G1/8 maschio                                             | M1 = G1/8 male                                                            |
| M2 = G1/4 maschio                                             | M2 = G1/4 male                                                            |
| F1 = G1/8 femmina                                             | F1 = G1/8 female                                                          |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

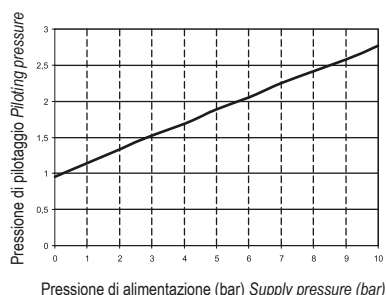
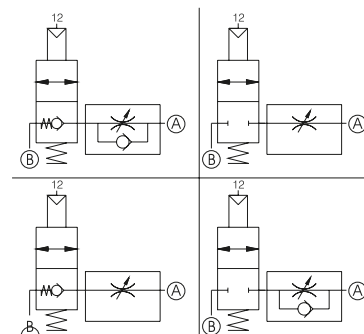
Esempio: 5512F1.00.00.XX

Valvola di blocco a 90° + Regolatore di flusso. Connessioni di alimentazione "A" e "B" non previste.

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.2F1.00.00.XX

90° unidirectional blocking valve + unidirectional flow control valve, without CONNECTIONS "A" and "B"

Curva di pilotaggio  
Piloting curves

Simboli pneumatici  
Pneumatic Symbol


## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di mantenere la pressione nel circuito a valle nel caso in cui venga a mancare la sorgente di pressione, abbinata alla possibilità di regolare la portata d'aria nel circuito. L'applicazione tipica per questo prodotto è direttamente installato in prossimità o direttamente sulla bocca di un cilindro avendo quindi la possibilità di mantenere la camera in pressione nel caso venga a mancare il segnale di pilotaggio con in più la possibilità di regolare la portata in scarico della camera stessa nel momento in cui si pilota la valvola di blocco.
- Le possibili combinazioni sono:
- Valvola di blocco unidirezionale + regolatore di flusso unidirezionale
- Valvola di blocco bidirezionale + regolatore di flusso bidirezionale
- Valvola di blocco bidirezionale + regolatore di flusso unidirezionale
- Valvola di blocco unidirezionale + regolatore di flusso bidirezionale

## Caratteristiche tecniche

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluido                                | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C        | -5 ÷ + 50                                  |
| Diametro nominale di passaggio (mm)   | Ø3                                         |
| Portata a 6 bar con Δp=1 (Nl/min)     | 285                                        |
| Peso (gr.)                            | 62                                         |

## Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time grants the possibility to regulate the circuit flow rate. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to regulate the exhaust flow rate when the blocking valve is actuated.
- The possible combinations are the following:
- unidirectional blocking valve + unidirectional flow control valve
- bidirectional blocking valve + bidirectional flow control valve
- bidirectional blocking valve + unidirectional flow control valve
- unidirectional blocking valve + bidirectional flow control valve

## Technical characteristics

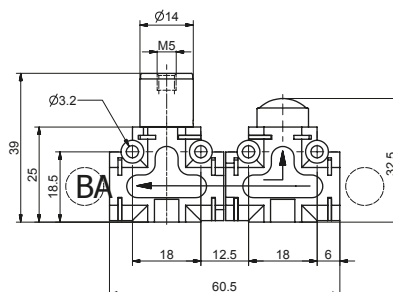
|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max working pressure         | 0,5 ÷ 10 bar                       |
| Working temperature          | -5°C ÷ +50°C                       |
| Ø Orifice size               | Ø3 mm                              |
| Flow rate at 6 bar with Δp=1 | 285 Nl/min                         |
| Weight without connections   | 62 gr.                             |



## ART. 551.1GT.A.B.XX

Valvole di blocco in linea + VSR  
In line blocking valve + QEV

| TIPOLOGIA                                                                                                              | VERSION                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>T</b> 1 = Valvola di Blocco Unidirezionale + scarico rapido<br>2 = Valvola di Blocco Bidirezionale + scarico rapido | <b>T</b> 1 = Unidirectional blocking valve + quick exhaust valve<br>2 = Bidirectional blocking valve + quick exhaust valve |
| <b>A</b> Connessione A - Vedi LISTA                                                                                    | <b>A</b> Connection A - see LIST                                                                                           |
| <b>B</b> Connessione B - Vedi LISTA                                                                                    | <b>B</b> Connection B - see LIST                                                                                           |
| LISTA Connessioni                                                                                                      | Connections LIST                                                                                                           |
| 00 = Non prevista                                                                                                      | 00 = None                                                                                                                  |
| D4 = Diritto Ø4                                                                                                        | D4 = Straight Ø4                                                                                                           |
| D6 = Diritto Ø6                                                                                                        | D6 = Straight Ø6                                                                                                           |
| D8 = Diritto Ø8                                                                                                        | D8 = Straight Ø8                                                                                                           |
| L1 = Anello girevole metallo G1/8"                                                                                     | L1 = Female banjo G1/8"                                                                                                    |
| G4 = Anello PL girevole Ø4                                                                                             | G4 = Rotating banjo Ø4                                                                                                     |
| G6 = Anello PL girevole Ø6                                                                                             | G6 = Rotating banjo Ø6                                                                                                     |
| G8 = Anello PL girevole Ø8                                                                                             | G8 = Rotating banjo Ø8                                                                                                     |
| M1 = G1/8 maschio                                                                                                      | M1 = G1/8 male                                                                                                             |
| M2 = G1/4 maschio                                                                                                      | M2 = G1/4 male                                                                                                             |
| F1 = G1/8 femmina                                                                                                      | F1 = G1/8 female                                                                                                           |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

Esempio: 5511G1.00.00.XX

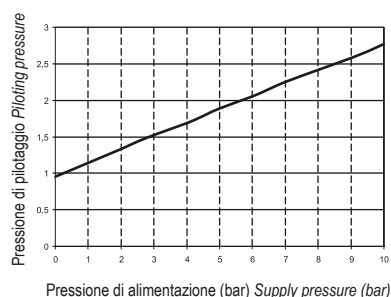
Valvola di blocco in linea + Scarico rapido. Connessioni di alimentazione "A" e "B" non previste.

NOTE: For the dimension including cartridges see page CONNECTIONS

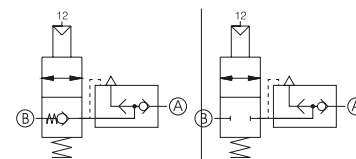
Example: 551.1G1.00.00.XX

In line unidirectional blocking valve + quick exhaust valve, without CONNECTIONS "A" and "B"

Curva di pilotaggio  
Piloting curves



Simboli pneumatici  
Pneumatic Symbol



## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di mantenere la pressione nel circuito a valle nel caso in cui venga a mancare la sorgente di pressione, abbinata alla possibilità di scaricare direttamente l'aria in atmosfera senza necessariamente far ripercorrere il flusso in senso inverso. L'applicazione tipica per questo prodotto è direttamente installato in prossimità o direttamente sulla bocca di un cilindro avendo quindi la possibilità di mantenere la camera in pressione nel caso venga a mancare il segnale di pilotaggio con in più la possibilità di scaricare rapidamente la pressione presente nella camera stessa nel momento in cui si pilota la valvola di blocco.
- Le tipologie di combinazioni sono:
- Valvola di blocco unidirezionale + valvola di scarico rapido
- Valvola di blocco bidirezionale + valvola di scarico rapido

## Caratteristiche tecniche

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluido                                | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C        | -5 ÷ +50                                   |
| Portata a 6 bar con Δp=1 (Nl/min)     | 285                                        |
| Peso (gr.)                            | 51                                         |

## Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time allows for the air to be directly discharged into the atmosphere without going through the pneumatic circuit. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to quickly discharge the same chamber when the blocking valve is actuated.
- The possible combination are the following:
- unidirectional blocking valve + quick exhaust valve
- bidirectional blocking valve + quick exhaust valve

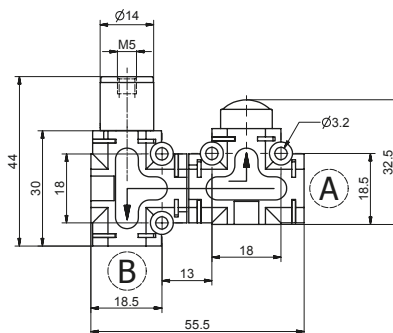
## Technical characteristics

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max working pressure         | 0,5 ÷ 10 bar                       |
| Working temperature          | -5°C ÷ +50°C                       |
| Flow rate at 6 bar with Δp=1 | 285 Nl/min                         |
| Weight without connections   | 51 gr.                             |

## ART. 551.2GT.A.B.XX

Valvole di blocco a 90° + VSR  
90° blocking valve + QEVac

| TIPOLOGIA                                                                                                                      | VERSION                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>T</b> 1 = Valvola di Blocco 90° Unidirezionale + scarico rapido<br>2 = Valvola di Blocco 90° Bidirezionale + scarico rapido | <b>T</b> 1 = 90° Unidirectional blocking valve + quick exhaust valve<br>2 = 90° Bidirectional blocking valve + quick exhaust valve |
| <b>A</b> Connessione A - Vedi LISTA                                                                                            | <b>A</b> Connection A - see LIST                                                                                                   |
| <b>B</b> Connessione B - Vedi LISTA                                                                                            | <b>B</b> Connection B - see LIST                                                                                                   |
| LISTA Connessioni                                                                                                              | Connections LIST                                                                                                                   |
| 00 = Non prevista                                                                                                              | 00 = None                                                                                                                          |
| D4 = Diritto Ø4                                                                                                                | D4 = Straight Ø4                                                                                                                   |
| D6 = Diritto Ø6                                                                                                                | D6 = Straight Ø6                                                                                                                   |
| D8 = Diritto Ø8                                                                                                                | D8 = Straight Ø8                                                                                                                   |
| L1 = Anello girevole metallo G1/8"                                                                                             | L1 = Female banjo G1/8"                                                                                                            |
| G4 = Anello PL girevole Ø4                                                                                                     | G4 = Rotating banjo Ø4                                                                                                             |
| G6 = Anello PL girevole Ø6                                                                                                     | G6 = Rotating banjo Ø6                                                                                                             |
| G8 = Anello PL girevole Ø8                                                                                                     | G8 = Rotating banjo Ø8                                                                                                             |
| M1 = G1/8 maschio                                                                                                              | M1 = G1/8 male                                                                                                                     |
| M2 = G1/4 maschio                                                                                                              | M2 = G1/4 male                                                                                                                     |
| F1 = G1/8 femmina                                                                                                              | F1 = G1/8 female                                                                                                                   |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

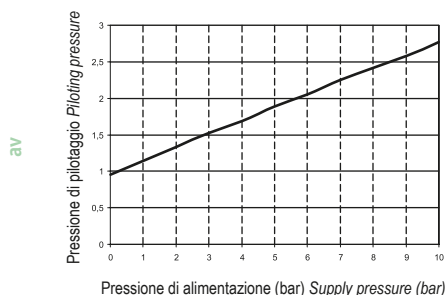
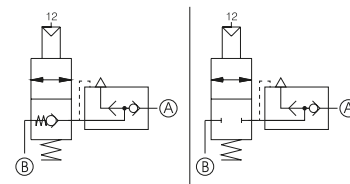
Esempio: 5512G1.00.00.XX

Valvola di blocco a 90° + Scarico rapido. Connessioni di alimentazione "A" e "B" non previste.

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.2G1.00.00.XX

90° unidirectional blocking valve + quick exhaust valve, without CONNECTIONS "A" and "B"


Simboli pneumatici  
Pneumatic Symbol


## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di mantenere la pressione nel circuito a valle nel caso in cui venga a mancare la sorgente di pressione, abbinata alla possibilità di scaricare direttamente l'aria in atmosfera senza necessariamente far ripercorrere il flusso in senso inverso. L'applicazione tipica per questo prodotto è direttamente installato in prossimità o direttamente sulla bocca di un cilindro avendo quindi la possibilità di mantenere la camera in pressione nel caso venga a mancare il segnale di pilotaggio con in più la possibilità di scaricare rapidamente la pressione presente nella camera stessa nel momento in cui si pilota la valvola di blocco.
- Le tipologie di combinazioni sono:
- Valvola di blocco unidirezionale 90° + valvola di scarico rapido
- Valvola di blocco bidirezionale 90° + valvola di scarico rapido

## Caratteristiche tecniche

|                                       |                                            |
|---------------------------------------|--------------------------------------------|
| Fluido                                | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione          | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar) | 0,5 ÷ 10                                   |
| Temperatura di esercizio in °C        | -5 ÷ +50                                   |
| Portata a 6 bar con Δp=1 (Nl/min)     | 285                                        |
| Peso (gr.)                            | 51                                         |

## Construction characteristics

- The combination of this two functions ensures that the downstream pressure is maintained in case of accidental loss of supply pressure and at the same time allows for the air to be directly discharged into the atmosphere without going through the pneumatic circuit. A typical application of this combination is close to or directly assembled onto the actuator connection ports. This allows to keep pressurised the cylinder chamber in case of accidental loss of supply pressure and to quickly discharge the same chamber when the blocking valve is actuated.
- The possible combination are the following:
- 90° unidirectional blocking valve + quick exhaust valve
- 90° bidirectional blocking valve + quick exhaust valve

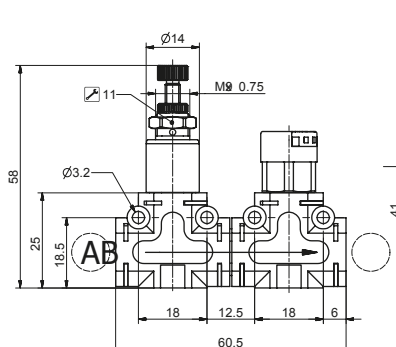
## Technical characteristics

|                              |                                    |
|------------------------------|------------------------------------|
| Fluid                        | Filtered and lubricated air or not |
| Connections                  | See CONNECTIONS LIST               |
| Max working pressure         | 0,5 ÷ 10 bar                       |
| Working temperature          | -5°C ÷ +50°C                       |
| Flow rate at 6 bar with Δp=1 | 285 Nl/min                         |
| Weight without connections   | 51 gr.                             |

## ART. 551.1HT.A.B.XX

 Rid. di pressione con indicatore  
*Pressure regulator + indicator*

| TIPOLOGIA                                                | VERSION                                                  |
|----------------------------------------------------------|----------------------------------------------------------|
| <b>T</b> 2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar | <b>T</b> 2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar |
| <b>A</b> Connessione A - Vedi LISTA                      | <b>A</b> Connection A - see LIST                         |
| <b>B</b> Connessione B - Vedi LISTA                      | <b>B</b> Connection B - see LIST                         |
| LISTA Connessioni                                        | Connections LIST                                         |
| 00 = Non prevista                                        | 00 = None                                                |
| D4 = Diritto Ø4                                          | D4 = Straight Ø4                                         |
| D6 = Diritto Ø6                                          | D6 = Straight Ø6                                         |
| D8 = Diritto Ø8                                          | D8 = Straight Ø8                                         |
| L1 = Anello girevole metallo G1/8"                       | L1 = Female banjo G1/8"/8"                               |
| G4 = Anello PL girevole Ø4                               | G4 = Rotating banjo Ø4                                   |
| G6 = Anello PL girevole Ø6                               | G6 = Rotating banjo Ø6                                   |
| G8 = Anello PL girevole Ø8                               | G8 = Rotating banjo Ø8                                   |
| M1 = G1/8 maschio                                        | M1 = G1/8 male                                           |
| M2 = G1/4 maschio                                        | M2 = G1/4 male                                           |
| F1 = G1/8 femmina                                        | F1 = G1/8 female                                         |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione

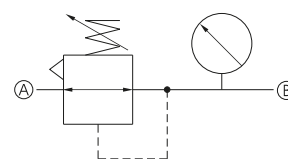
Esempio: 551.1H2.M1.D4.XX

Riduttore di pressione in linea, Gamma di regolazione pressione 0 - 2 bar con indicatore di pressione. Connessioni di alimentazione "A" Maschio G 1/8 e "B" Tubo Ø4

NOTE: For the dimension including cartridges see page CONNECTIONS

Example: 551.1H2.M1.D4.XX

In line pressure regulator, adjusting range 0 - 2 bar + pressure indicator, CONNECTIONS "A" Male G 1/8 and "B" Tube Ø4

 Simboli pneumatici  
*Pneumatic Symbol*


## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di poter regolare la pressione a valle in un circuito visualizzando direttamente il valore di pressione impostato.
- Le possibili combinazioni sono:
- Riduttore di pressione 0 ÷ 2 bar + Indicatore di pressione
- Riduttore di pressione 0 ÷ 4 bar + Indicatore di pressione
- Riduttore di pressione 0 ÷ 8 bar + Indicatore di pressione
- Nota: l'indicatore di pressione è disponibile solo con fondo scala da 0 a 8 bar

## Caratteristiche tecniche

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| Fluido                                     | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione               | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)      | 8                                          |
| Temperatura di esercizio in °C             | -5 ÷ + 50                                  |
| Scala di visualizzazione (bar)             | 0 ÷ 8                                      |
| Gamma di regolazione della pressione (bar) | 0 ÷ 2 - 0 ÷ 4 - 0 ÷ 8                      |
| Peso (gr.)                                 | 62                                         |

## Construction characteristics

- The combination of this two functions ensures the possibility to regulate the downstream pressure while directly visualising the adjusted pressure value.
- The possible combinations are the following:
- 0 to 2 bar pressure regulator + pressure visual indicator
- 0 to 4 bar pressure regulator + pressure visual indicator
- 0 to 8 bar pressure regulator + pressure visual indicator
- the visual indicator pressure range is always 0 to 8 bar

## Technical characteristics

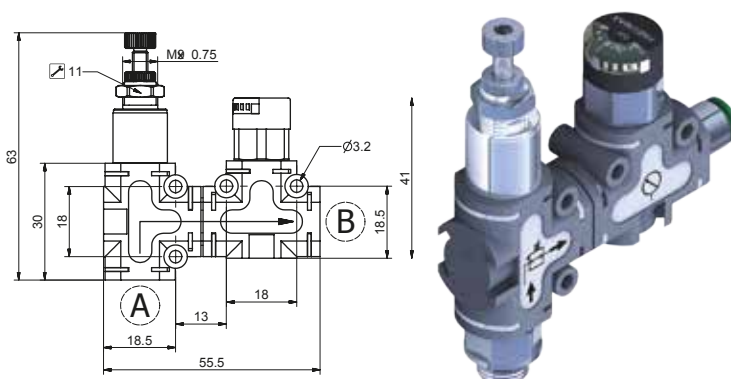
|                            |                                    |
|----------------------------|------------------------------------|
| Fluid                      | Filtered and lubricated air or not |
| Connections                | See CONNECTIONS LIST               |
| Max working pressure       | 8 bar                              |
| Working temperature        | -5°C ÷ +50°C                       |
| Visualization scale        | 0 ÷ 8 bar                          |
| Regulated pressure range   | 0 ÷ 2 - 0 ÷ 4 - 0 ÷ 8              |
| Weight without connections | 62 gr.                             |

## ART. 551.2HT.A.B.XX

Rid. di pressione 90° con indicatore  
90° pressure regulator + indicator

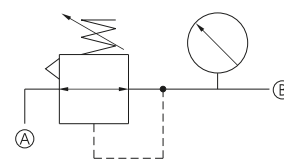
| TIPOLOGIA |                                                 |
|-----------|-------------------------------------------------|
| <b>T</b>  | 2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar |
| <b>A</b>  | Connessione A - Vedi LISTA                      |
| <b>B</b>  | Connessione B - Vedi LISTA                      |
|           | LISTA Connessioni                               |
|           | 00 = Non prevista                               |
|           | D4 = Diritto Ø4                                 |
|           | D6 = Diritto Ø6                                 |
|           | D8 = Diritto Ø8                                 |
|           | L1 = Anello girevole metallo G1/8"              |
|           | G4 = Anello PL girevole Ø4                      |
|           | G6 = Anello PL girevole Ø6                      |
|           | G8 = Anello PL girevole Ø8                      |
|           | M1 = G1/8 maschio                               |
|           | M2 = G1/4 maschio                               |
|           | F1 = G1/8 femmina                               |

| VERSION  |                                                 |
|----------|-------------------------------------------------|
| <b>T</b> | 2 = 0 - 2 bar<br>4 = 0 - 4 bar<br>8 = 0 - 8 bar |
| <b>A</b> | Connection A - see LIST                         |
| <b>B</b> | Connection B - see LIST                         |
|          | Connections LIST                                |
|          | 00 = None                                       |
|          | D4 = Straight Ø4                                |
|          | D6 = Straight Ø6                                |
|          | D8 = Straight Ø8                                |
|          | L1 = Female banjo G1/8"                         |
|          | G4 = Rotating banjo Ø4                          |
|          | G6 = Rotating banjo Ø6                          |
|          | G8 = Rotating banjo Ø8                          |
|          | M1 = G1/8 male                                  |
|          | M2 = G1/4 male                                  |
|          | F1 = G1/8 female                                |



NOTA: Per Ingombro con cartucce vedi pagina Connessioni di alimentazione  
Esempio: 551.2H2.M1.D4.XX  
Riduttore di pressione a 90°, Gamma di regolazione pressione 0 - 2 bar con indicatore di pressione. Connessioni di alimentazione "A" Maschio G 1/8 e "B" Tubo Ø4

NOTE: For the dimension including cartridges see page CONNECTIONS  
Example: 551.2H2.M1.D4.XX  
90° pressure regulator, adjusting range 0 - 2 bar + pressure indicator, CONNECTIONS "A" Male G 1/8 and "B" Tube Ø4

Simboli pneumatici  
Pneumatic Symbol


## Caratteristiche costruttive

- L'utilizzo di queste 2 funzioni combinate consente di poter regolare la pressione a valle in un circuito visualizzando direttamente il valore di pressione impostato.
- Le possibili combinazioni sono:
- Riduttore di pressione 0 ÷ 2 bar + Indicatore di pressione
- Riduttore di pressione 0 ÷ 4 bar + Indicatore di pressione
- Riduttore di pressione 0 ÷ 8 bar + Indicatore di pressione
- Nota: l'indicatore di pressione è disponibile solo con fondo scala da 0 a 8 bar

## Caratteristiche tecniche

|                                            |                                            |
|--------------------------------------------|--------------------------------------------|
| Fluido                                     | Aria filtrata e lubrificata o non          |
| Connessioni di alimentazione               | Vedi LISTA<br>Connessioni di alimentazione |
| Pressione di funzionamento max. (bar)      | 8                                          |
| Temperatura di esercizio in °C             | -5 ÷ + 50                                  |
| Scala di visualizzazione (bar)             | 0 ÷ 8                                      |
| Gamma di regolazione della pressione (bar) | 0 ÷ 2 - 0 ÷ 4 - 0 ÷ 8                      |
| Peso (gr.)                                 | 62                                         |

## Construction characteristics

- The combination of this two functions ensures the possibility to regulate the downstream pressure while directly visualising the adjusted pressure value.
- The possible combinations are the following:
- 0 to 2 bar pressure regulator + pressure visual indicator
- 0 to 4 bar pressure regulator + pressure visual indicator
- 0 to 8 bar pressure regulator + pressure visual indicator
- the visual indicator pressure range is always 0 to 8 bar

## Technical characteristics

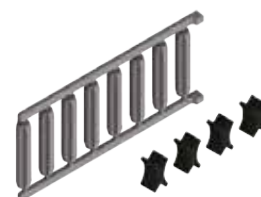
|                            |                                    |
|----------------------------|------------------------------------|
| Fluid                      | Filtered and lubricated air or not |
| Connections                | See CONNECTIONS LIST               |
| Max working pressure       | 8 bar                              |
| Working temperature        | -5°C ÷ +50°C                       |
| Visualization scale        | 0 ÷ 8 bar                          |
| Regulated pressure range   | 0 ÷ 2 - 0 ÷ 4 - 0 ÷ 8              |
| Weight without connections | 62 gr.                             |

## ART. 55160

**Kit perni più Crocette**  
*Coupling kit (pins and forks)*

Il kit composto da una serie di perni abbinata ad una serie di crocette di accoppiamento permette una facile, veloce e sicura unione di più componenti nelle più svariate configurazioni. L'inserimento dei perni negli appositi fori frontali, permette di contrastare eventuali forze applicate in modo perpendicolare ed in modo trasversale al componente (es. l'inserimento di un tubo nell'apposita cartuccia) così che il gruppo si mantenga assialmente stabile e ben allineato. L'inserimento delle crocette di accoppiamento nell'apposita fessura sagomata permette di mantenere il gruppo compatto garantendo l'unione dei componenti. Il kit permette di accoppiare un numero massimo di 5 elementi.

*The kit, which includes a series of pins and forks, enables to join together in a fast and safe way the function fittings. The pins, once inserted in the front holes, ensure resistance against forces applied perpendicularly and sideways (for example the insertion of the tube in the cartridges). The forks, once located in the profiled housing ensures that the parts are held together tightly. The kit allows for 5 function fittings to be mounted together.*



## ART. 55150

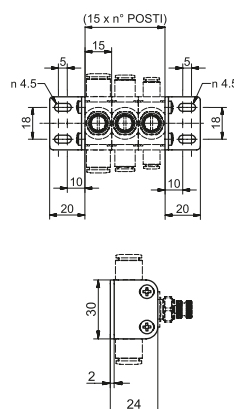
**Squadretta di fissaggio**  
*Fixing brackets*

|      |        |
|------|--------|
| Peso | 18 gr. |
|------|--------|

|        |        |
|--------|--------|
| Weight | 18 gr. |
|--------|--------|

Il kit comprende 2 elementi più viti di fissaggio

*The kit comprises two fixing brackets and the*



## ART. 55116

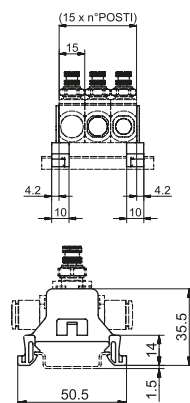
**Adattatore guida DIN**  
*DIN rail adapter*

|      |       |
|------|-------|
| Peso | 4 gr. |
|------|-------|

|        |       |
|--------|-------|
| Weight | 4 gr. |
|--------|-------|

Il kit comprende 2 elementi

*The kit comprises two adapters*

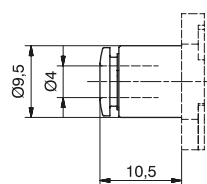


## ART. 551KD

**Cartuccia diritta**  
*Straight cartridge*

|      |         |
|------|---------|
| Peso | 7,5 gr. |
|------|---------|

|        |         |
|--------|---------|
| Weight | 7,5 gr. |
|--------|---------|

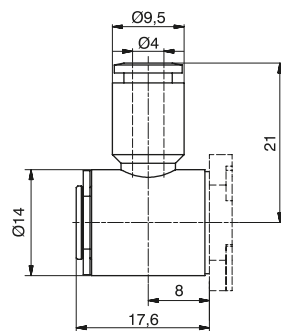


**ART. 551KG**

Cartuccia gomito girevole  
*Banjo PL cartridge*

Peso 13,6 gr.

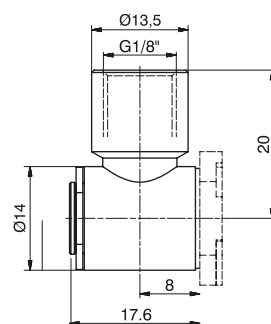
Weight 13,6 gr.


**ART. 551KL**

Cartuccia gomito girevole G1/8"  
*G1/8" banjo female cartridge*

Peso 30 gr.

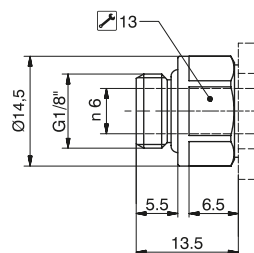
Weight 30 gr.


**ART. 551KM1**

Cartuccia G1/8" Maschio  
*G1/8" male straight cartridge*

Peso 14 gr.

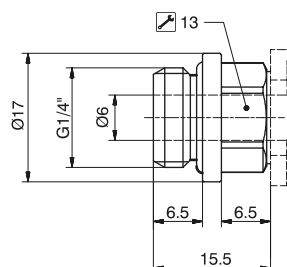
Weight 14 gr.


**ART. 551KM2**

Cartuccia G1/4" Maschio  
*G1/4" male straight cartridge*

Peso 20 gr.

Weight 20 gr.





ART. 551KF1

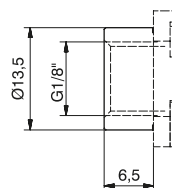
Cartuccia G1/8" Femmina  
*G1/8" female straight cartridge*

Peso

9 gr.

Weight

9 gr.



ART. 551KUU

Giunzione per funzioni multiple  
*Connection for multiple function*

Peso

14 gr.

Weight

14 gr.



## BREVE DESCRIZIONE

Nuova linea di componenti miniaturizzati che raccolgono varie funzioni logiche, utilizzabili in qualsiasi punto dei rami secondari dei circuiti pneumatici, indicati per essere applicati direttamente sui componenti pneumatici principali (distributori e cilindri).

Il sistema di composizione modulare permette di combinare fra di loro diverse funzioni logiche senza necessariamente mettere un tubo di collegamento tra gli elementi; lo stesso consente inoltre di poter scegliere il tipo di attacco su ciascuna delle bocche. Sono disponibili infatti svariate alternative: raccordi a innesto rapido diritti, raccordi a innesto rapido girevoli, nippli con filetto maschio G1/8" e G1/4" e nippli con filetto femmina G1/8". Gli elementi possono essere anche accoppiati in parallelo per essere poi agganciati su guida DIN EN 50022 (mediante apposito kit).

## SHORT DESCRIPTION

*New compact line of different logic functions that can be used in any place of the secondary pneumatic circuit, developed to be installed directly onto the main pneumatic components (distributors or cylinders).*

*Thanks to the modular design it is possible to easily join together multiple logic functions without the need of using pipes to connect them; it is also possible to choose the type and style of each connection.*

*The connections available are the following: straight cartridge; Banjo PL cartridge; male cartridge threaded 1/8" or 1/4" and female cartridge threaded 1/8".*

*Function fittings can also be assembled side by side in order to be assembled on the DIN EN 50022 rail (using the relevant kit).*

## SCHEDA TECNICA TECHNICAL SHEET

|                                                            |                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>            |                                                                                                        | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                          |
| APPLICAZIONI<br><i>APPLICATIONS</i>                        |                                                                                                        | Impianti pneumatici secondo normativa DIN 3861-3870.<br><i>Pneumatic circuits according to DIN 3861-3870 norms.</i>                                                                                                                                                                                                                                                            |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                 |                                                                                                        | TPU (Poliuretano), PA11/PA12 (Poliammide), TPE (Polietilene), TCO (Copoliestere)<br><i>TPU (Polyurethane), PA11/PA12 (Polyamide), TPE (Polyethylene), TCO (Copolyester)</i>                                                                                                                                                                                                    |
| TOLLERANZE TUBI<br><i>TUBES TOLERANCES</i>                 |                                                                                                        | Diam. da 4 a 10 mm +/- 0,05 Diam. da 12 mm +/- 0,1<br><i>Diam. between 4 and 10 mm +/- 0,05 Diam. from 12 mm +/- 0,1</i>                                                                                                                                                                                                                                                       |
| TEMPERATURE E PRESSIONI<br><i>TEMPERATURE AND PRESSURE</i> |                                                                                                        | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo impiegato; per dati più puntuali consultare il catalogo tecnico del proprio fornitore di tubi.<br><i>Temperatures and pressures usually depend by the technical features of the employed tubes, for more complete informations pls read the technical catalogue of your tube supplier.</i> |
| FILETTATURE<br><i>THREAD TYPE</i>                          |                                                                                                        | BSP cilindrica UNI-ISO 228<br><i>BSP parallell UNI-ISO 228</i>                                                                                                                                                                                                                                                                                                                 |
| MATERIALI<br><i>MATERIALS</i>                              | corpo centrale<br><i>main body</i>                                                                     | IXEF, tecnopolimero caricato in vetro<br><i>IXEF, technopolymer glass-fiber reinforced</i>                                                                                                                                                                                                                                                                                     |
|                                                            | corpo raccordo, spintore, distanziale, sottomolla<br><i>fitting body, sleeve, collar and back ring</i> | POM copolimero ISO1043-1<br><i>POM copolymer ISO1043-1</i>                                                                                                                                                                                                                                                                                                                     |
|                                                            | vite di regolazione e raccordo<br><i>adjustment screw and fitting</i>                                  | Ottone UNI EN 12164 CW614N<br><i>Brass UNI EN 12164 CW614N</i>                                                                                                                                                                                                                                                                                                                 |
|                                                            | corpo cartuccia<br><i>cartridge body</i>                                                               | Alluminio<br><i>Alluminium</i>                                                                                                                                                                                                                                                                                                                                                 |
|                                                            | pinza<br><i>spring</i>                                                                                 | Acciaio Inox AISI 301 austenitico<br><i>Stainless steel AISI 301 austenitic</i>                                                                                                                                                                                                                                                                                                |
|                                                            | guarnizioni tenuta<br><i>seals</i>                                                                     | NBR 70 DWGV-EN549 UL157<br><i>NBR 70 DWGV-EN549 UL157</i>                                                                                                                                                                                                                                                                                                                      |

## INFORMAZIONI TECNICHE AGGIUNTIVE

|                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conessioni di ingresso / utilizzo direttamente integrate nel corpo                                                                                                                                                                                                                                                                                                                                                                                      |
| Versioni con attacchi in linea e 90°                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Possibile abbinamento in parallelo                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Diverse possibilità di connessione:<br>- Tubo Ø4 Ø6 Ø8 (anche nella versione girevole)<br>- Filetto maschio G1/8" G1/4"<br>- Filetto femmina G1/8" nella versione in linea oppure a 90°                                                                                                                                                                                                                                                                 |
| Diverse possibilità di ancoraggio:<br>- Fissaggio a parete mediante fori passanti<br>- Su piastra mediante squadrette<br>- A pannello (per le funzioni logiche che lo prevedono)<br>- Su barra din EN 50022 (mediante kit di fissaggio)                                                                                                                                                                                                                 |
| Funzioni previste:<br>- Regolatore di flusso (RFU)<br>- Riduttore di pressione (RP)<br>- Valvola di blocco (VB)<br>- Valvola di scarico rapido (VSR)<br>- Valvola Selettore OR (VS-OR)<br>- Valvola Selettore AND (VS-AND)<br>- Indicatore di pressione (IP)<br>- Riduttore di pressione<br>+ Indicatore di pressione (RP+IP)<br>- Valvola di blocco<br>+ Regolatore di flusso (VB+RFU)<br>- Valvola di blocco<br>+ Valvola di scarico rapido (VB+VSR). |

## ADDITIONAL TECHNICAL INFORMATIONS

|                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Input/output connection directly integrated into the body</i>                                                                                                                                                                                                                                                                                                    |
| <i>In line or 90° connection</i>                                                                                                                                                                                                                                                                                                                                    |
| <i>Possibility to build a manifold -parallel mounting-</i>                                                                                                                                                                                                                                                                                                          |
| <i>Different connection options:</i><br>- Tube Ø4 Ø6 Ø8 (elbow version as well)<br>- G1/8" G1/4" male straight cartridge<br>- G1/8" female cartridge, in line or 90°                                                                                                                                                                                                |
| <i>Different mounting options:</i><br>- Wall fixing through the holes in the body<br>- By means of the fixing bracket<br>- Panel mounting (for those function that include such possibility)<br>- On DIN rail EN 50022 (using the DIN rail adapter kit)                                                                                                             |
| <i>Available functions:</i><br>- Flow control valve (FCV)<br>- Pressure regulator (PR)<br>- Block valve (BV)<br>- Quick exhaust valve (QEV)<br>- OR gate (CSV-OR)<br>- AND gate (CSV-AND)<br>- pressure gauge (PI)<br>- pressure regulator + pressure gauge (PR+PI)<br>- block valve + Flow control valve (BV+FCV)<br>- block valve + quick exhaust valve (BV+QEV). |

## Raccordi di arresto • Stop fittings

Caratteristiche  
Features

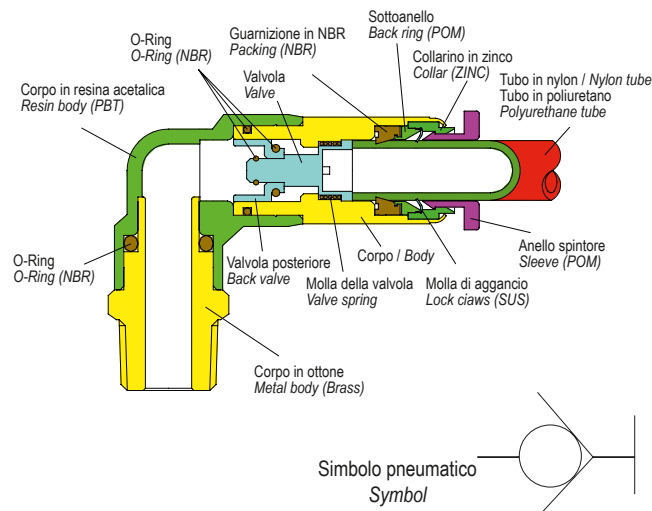
- Il passaggio dell'aria si interrompe quando il tubo viene estratto e si riavvia nuovamente solo una volta che il tubo è reinserito
- Air flows is stopped from the tube if it is released, the air flows again only after the tube is connected

Specifiche tecniche  
Specifications

|                                                   |                                                           |
|---------------------------------------------------|-----------------------------------------------------------|
| Fluido / Fluid                                    | Aria / Air                                                |
| Pressione di esercizio<br>Operation pressure      | 0,1-1,0Mpa (150psi)                                       |
| Pressione negativa<br>Negative pressure           | -100Kpa (-29,5 in Hg)                                     |
| Temperatura di esercizio<br>Operating temperature | 0-60 °C (32-140 °F)                                       |
| Tubo utilizzabile<br>Applicable tube              | Poliuretano, Poliammide e Nylon<br>Polyurethane and Nylon |

Applicazioni  
Applications

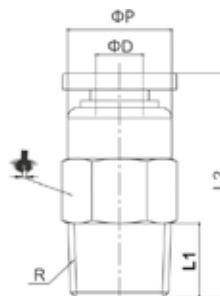
- Utilizzato in casi di frequenti disinnesti/cambio di tubo
- Used in the place where tube frequently changes

Sezione costruttiva  
Structure chart


## ART. ISPC

Raccordo diritto maschio conico "di arresto"  
Straight male tapered "stop fitting"

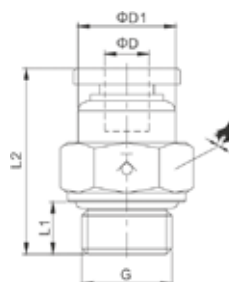
| CODICE    | A  | B   | C    | L    |    |    |
|-----------|----|-----|------|------|----|----|
| ISPC04-01 | 4  | 1/8 | 7,5  | 27,5 | 10 | 10 |
| ISPC06-01 | 6  | 1/8 | 7,5  | 27   | 12 | 12 |
| ISPC06-02 | 6  | 1/4 | 9,5  | 27   | 12 | 14 |
| ISPC08-01 | 8  | 1/8 | 7,5  | 29   | 14 | 14 |
| ISPC08-02 | 8  | 1/4 | 9,5  | 29   | 14 | 14 |
| ISPC08-03 | 8  | 3/8 | 10,5 | 29   | 14 | 17 |
| ISPC10-02 | 10 | 1/4 | 9,5  | 37   | 17 | 17 |
| ISPC10-03 | 10 | 3/8 | 10,5 | 37   | 17 | 17 |
| ISPC10-04 | 10 | 1/2 | 13,5 | 37   | 17 | 21 |
| ISPC12-02 | 12 | 1/4 | 9,5  | 38   | 20 | 21 |
| ISPC12-03 | 12 | 3/8 | 10,5 | 38   | 20 | 21 |
| ISPC12-04 | 12 | 1/2 | 13,5 | 38   | 20 | 21 |



## ART. ISPC-G

Raccordo diritto maschio cilindrico "di arresto"  
Straight male parallel "stop fitting"

| CODICE     | ØD | G   | ØD1 | L1  | L2   |    |
|------------|----|-----|-----|-----|------|----|
| ISPC04-G01 | 4  | 1/8 | 10  | 5,5 | 27,5 | 14 |
| ISPC06-G01 | 6  | 1/8 | 12  | 5,5 | 27   | 14 |
| ISPC06-G02 | 6  | 1/4 | 12  | 7,5 | 27   | 17 |
| ISPC08-G01 | 8  | 1/8 | 14  | 5,5 | 29   | 14 |
| ISPC08-G02 | 8  | 1/4 | 14  | 7,5 | 29   | 17 |
| ISPC08-G03 | 8  | 3/8 | 14  | 7,5 | 29   | 20 |
| ISPC10-G02 | 10 | 1/4 | 17  | 7,5 | 37   | 17 |
| ISPC10-G03 | 10 | 3/8 | 17  | 7,5 | 37   | 20 |
| ISPC10-G04 | 10 | 1/2 | 17  | 10  | 37   | 24 |
| ISPC12-G02 | 12 | 1/4 | 20  | 7,5 | 38   | 21 |
| ISPC12-G03 | 12 | 3/8 | 20  | 7,5 | 38   | 21 |
| ISPC12-G04 | 12 | 1/2 | 20  | 10  | 38   | 24 |

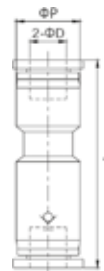


Raccordi di arresto • *Stop fittings*

## ART. ISPU

Raccordo diritto intermedio "di arresto"  
*Stop fitting straight connector*

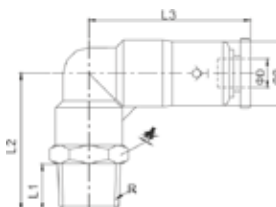
| CODICE | ØD | R    | L    |
|--------|----|------|------|
| ISPU04 | 4  | 13   | 47   |
| ISPU06 | 6  | 13   | 45   |
| ISPU08 | 8  | 15   | 49,5 |
| ISPU10 | 10 | 19   | 63   |
| ISPU12 | 12 | 21,5 | 66,5 |



## ART. ISPL

Raccordo ad L maschio conico "di arresto"  
*L male tapered "stop fitting"*

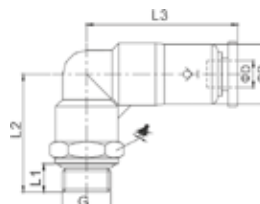
| CODICE    | ØD | R   | L1   | L2   | L3   | Øp   |  |
|-----------|----|-----|------|------|------|------|-----------------------------------------------------------------------------------|
| ISPL04-M5 | 4  | M5  | 3,5  | 21,3 | 31   | 13   | 10                                                                                |
| ISPL04-M6 | 4  | M6  | 4    | 21,8 | 31   | 13   | 10                                                                                |
| ISPL04-01 | 4  | 1/8 | 7,5  | 23,8 | 31   | 13   | 10                                                                                |
| ISPL06-M5 | 6  | M5  | 3,5  | 21,7 | 29,4 | 13   | 12                                                                                |
| ISPL06-M6 | 6  | M6  | 4    | 22,2 | 29,4 | 13   | 12                                                                                |
| ISPL06-01 | 6  | 1/8 | 7,5  | 24,2 | 29,4 | 13   | 12                                                                                |
| ISPL06-02 | 6  | 1/4 | 9,5  | 26,7 | 29,4 | 13   | 14                                                                                |
| ISPL08-01 | 8  | 1/8 | 7,5  | 27,5 | 33   | 14,5 | 14                                                                                |
| ISPL08-02 | 8  | 1/4 | 9,5  | 29,5 | 33   | 14,5 | 14                                                                                |
| ISPL08-03 | 8  | 3/8 | 10,5 | 31   | 33   | 14,5 | 17                                                                                |
| ISPL10-02 | 10 | 1/4 | 9,5  | 34,3 | 42,5 | 18   | 17                                                                                |
| ISPL10-03 | 10 | 3/8 | 10,5 | 35,3 | 42,5 | 18   | 17                                                                                |
| ISPL10-04 | 10 | 1/2 | 13,5 | 38,8 | 42,5 | 18   | 21                                                                                |
| ISPL12-02 | 12 | 1/4 | 9,5  | 36   | 46,5 | 21   | 21                                                                                |
| ISPL12-03 | 12 | 3/8 | 10,5 | 37   | 46,5 | 21   | 21                                                                                |
| ISPL12-04 | 12 | 1/2 | 13,5 | 40   | 46,5 | 21   | 21                                                                                |



## ART. ISPL-G

Raccordo ad L maschio cilindrico "di arresto"  
*L male parallel "stop fitting"*

| CODICE     | ØD | G   | L1  | L2   | L3   | Øp   |  |
|------------|----|-----|-----|------|------|------|-------------------------------------------------------------------------------------|
| ISPL04-G01 | 4  | 1/8 | 5,5 | 24,3 | 31   | 13   | 14                                                                                  |
| ISPL06-G01 | 6  | 1/8 | 5,5 | 24,2 | 29,4 | 13   | 14                                                                                  |
| ISPL06-G02 | 6  | 1/4 | 7,5 | 26,7 | 39,4 | 13   | 17                                                                                  |
| ISPL08-G01 | 8  | 1/8 | 5,5 | 27   | 33   | 14,5 | 14                                                                                  |
| ISPL08-G02 | 8  | 1/4 | 7,5 | 29,5 | 33   | 14,5 | 17                                                                                  |
| ISPL08-G03 | 8  | 3/8 | 7,5 | 30   | 33   | 14,5 | 20                                                                                  |
| ISPL10-G02 | 10 | 1/4 | 7,5 | 34,3 | 42,5 | 18   | 17                                                                                  |
| ISPL10-G03 | 10 | 3/8 | 7,5 | 34,3 | 42,5 | 18   | 20                                                                                  |
| ISPL10-G04 | 10 | 1/2 | 10  | 37,8 | 42,5 | 18   | 24                                                                                  |
| ISPL12-G02 | 12 | 1/4 | 7,5 | 36   | 46,5 | 21   | 21                                                                                  |
| ISPL12-G03 | 12 | 3/8 | 7,5 | 36   | 46,5 | 21   | 21                                                                                  |
| ISPL12-G04 | 12 | 1/2 | 10  | 39   | 46,5 | 21   | 24                                                                                  |



Valvole di ritegno • *Check valves*

Caratteristiche  
*Features*

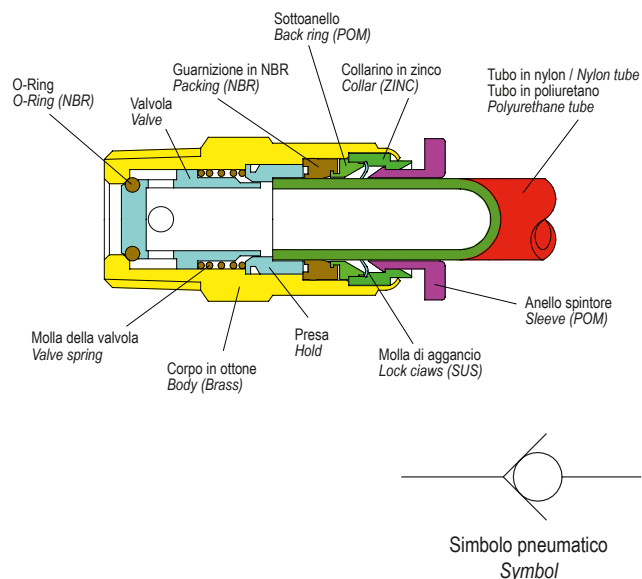
- Specifiche: permette il passaggio dell'aria in una direzione ma lo impedisce nella direzione opposta
- *Specifications: allow the airflow in one direction but stops in the reverse direction*

Specifiche tecniche  
*Specifications*

|                                                           |                                                                                  |
|-----------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Fluido / Fluid</b>                                     | Aria (non ammessi altri gas o liquidi)<br><i>Air (no other gases or liquids)</i> |
| <b>Pressione di esercizio<br/>Operation pressure</b>      | 0,05-1,0Mpa (150psi)                                                             |
| <b>Pressione negativa<br/>Negative pressure</b>           | -100Kpa (-29,5 in Hg)                                                            |
| <b>Temperatura di esercizio<br/>Operating temperature</b> | 0-60 °C (32-140 °F)                                                              |
| <b>Tubo utilizzabile<br/>Applicable tube</b>              | Poliuretano, Poliammide<br><i>Polyurethane and Nylon</i>                         |

Metodo di verifica  
*Control method*

| <b>Tipo<br/>Type</b>                 | Modello IN (B)<br><i>Meter IN (B)</i>        | Modello OUT<br><i>Meter OUT</i>              |
|--------------------------------------|----------------------------------------------|----------------------------------------------|
| <b>Direzione flusso<br/>Air Flow</b> | Dal filetto al tubo<br><i>Thread to tube</i> | Dal tubo al filetto<br><i>Tube to thread</i> |
| <b>PCVC</b>                          |                                              |                                              |
| <b>PCVF</b>                          |                                              |                                              |

Sezione costruttiva  
*Structure chart*

Avvertenze  
*Notes*

Stringere il filetto secondo le regole. Non funzionerà se troppo stretto.  
*Tight the thread according to the rule. It won't work if too tight.*

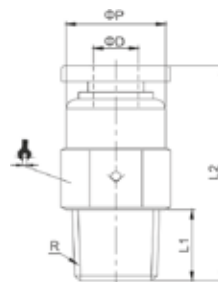
Applicazioni  
*Applications*

- Le valvole di ritegno permettono il passaggio dell'aria in una direzione
- *Check valves permit airflow in one direction*

## ART. IPCVC

Raccordo diritto maschio conico "unidirezionale"  
*Straight male tapered "unidirectional" fitting*

| <b>CODICE</b> | <b>ØD</b> | <b>R</b> | <b>L1</b> | <b>L2</b> | <b>Øp</b> |    |
|---------------|-----------|----------|-----------|-----------|-----------|----|
| IPCVC04-M5    | 4         | M5       | 3,5       | 29        | 10        | 10 |
| IPCVC04-M6    | 4         | M6       | 4         | 30        | 10        | 10 |
| IPCVC04-01    | 4         | 1/8      | 7,5       | 25        | 10        | 10 |
| IPCVC06-01    | 6         | 1/8      | 7,5       | 26        | 12        | 12 |
| IPCVC06-02    | 6         | 1/4      | 9,5       | 33        | 12        | 14 |
| IPCVC08-01    | 8         | 1/8      | 7,5       | 28,5      | 14        | 14 |
| IPCVC08-02    | 8         | 1/4      | 9,5       | 34,8      | 14        | 14 |
| IPCVC08-03    | 8         | 3/8      | 10,5      | 34,8      | 14        | 17 |
| IPCVC10-02    | 10        | 1/4      | 9,5       | 39,5      | 17        | 17 |
| IPCVC10-03    | 10        | 3/8      | 10,5      | 41        | 17        | 17 |
| IPCVC10-04    | 10        | 1/2      | 13,5      | 43        | 17        | 21 |
| IPCVC12-02    | 12        | 1/4      | 9,5       | 41        | 20        | 21 |
| IPCVC12-03    | 12        | 3/8      | 10,5      | 42,5      | 20        | 21 |
| IPCVC12-04    | 12        | 1/2      | 13,5      | 44,5      | 20        | 21 |



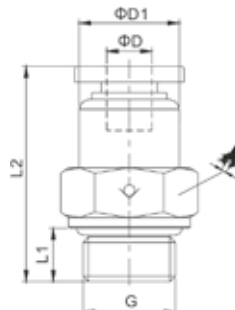


Valvole di ritegno • *Check valves*

## ART. IPCVC-G

Raccordo diritto maschio cilindrico "unidirezionale"  
Straight male parallel "unidirectional" fitting

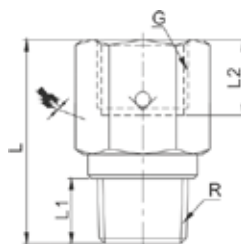
| CODICE      | ØD | G   | ØD1 | L1  | L2   |    |
|-------------|----|-----|-----|-----|------|----|
| IPCVC04-G01 | 4  | 1/8 | 10  | 5,5 | 24   | 14 |
| IPCVC06-G01 | 6  | 1/8 | 12  | 5,5 | 26   | 14 |
| IPCVC06-G02 | 6  | 1/4 | 12  | 7,5 | 33   | 17 |
| IPCVC08-G01 | 8  | 1/8 | 14  | 5,5 | 28,5 | 14 |
| IPCVC08-G02 | 8  | 1/4 | 14  | 7,5 | 34,8 | 17 |
| IPCVC08-G03 | 8  | 3/8 | 14  | 7,5 | 34,8 | 20 |
| IPCVC10-G02 | 10 | 1/4 | 17  | 7,5 | 39,5 | 17 |
| IPCVC10-G03 | 10 | 3/8 | 17  | 7,5 | 41   | 20 |
| IPCVC10-G04 | 10 | 1/2 | 17  | 10  | 43   | 24 |
| IPCVC12-G02 | 12 | 1/4 | 20  | 7,5 | 41   | 21 |
| IPCVC12-G03 | 12 | 3/8 | 20  | 7,5 | 42,5 | 21 |
| IPCVC12-G04 | 12 | 1/2 | 20  | 10  | 42,5 | 24 |



## ART. IPCVF

Raccordo maschio/femmina conico "unidirezionale"  
Tapered male/female "unidirectional" fitting

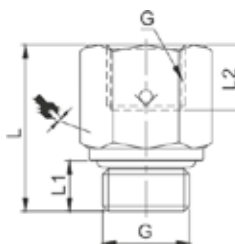
| CODICE      | R   | G   | L1   | L2  | L    |    |
|-------------|-----|-----|------|-----|------|----|
| IPCVF-01-01 | 1/8 | 1/8 | 7,5  | 8,5 | 23   | 14 |
| IPCVF-02-02 | 1/4 | 1/4 | 9,5  | 11  | 29,8 | 17 |
| IPCVF-03-03 | 3/8 | 3/8 | 10,5 | 12  | 32,9 | 21 |
| IPCVF-04-04 | 1/2 | 1/2 | 13,5 | 14  | 37   | 24 |
|             |     |     |      |     |      |    |
|             |     |     |      |     |      |    |



## ART. IPCVF-G

Raccordo maschio/femmina cilindrico "unidirezionale"  
Parallel male/female "unidirectional" fitting

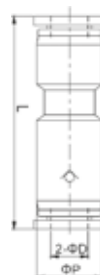
| CODICE       | G   | L1  | L2  | L    |    |
|--------------|-----|-----|-----|------|----|
| IPCVF-01-G01 | 1/8 | 5,5 | 8,5 | 23   | 14 |
| IPCVF-02-G02 | 1/4 | 7,5 | 11  | 29,8 | 17 |
| IPCVF-03-G03 | 3/8 | 7,5 | 12  | 32,9 | 21 |
| IPCVF-04-G04 | 1/2 | 10  | 14  | 37   | 24 |
|              |     |     |     |      |    |
|              |     |     |     |      |    |



## ART. IPCVU

Raccordo diritto intermedio "unidirezionale"  
Unidirectional straight connector

| CODICE  | ØD | Øp   | L    |
|---------|----|------|------|
| IPCVU04 | 4  | 13   | 47   |
| IPCVU06 | 6  | 13,5 | 21,5 |
| IPCVU08 | 8  | 15   | 53   |
| IPCVU10 | 10 | 19   | 62   |
| IPCVU12 | 12 | 21,5 | 64   |
|         |    |      |      |
|         |    |      |      |

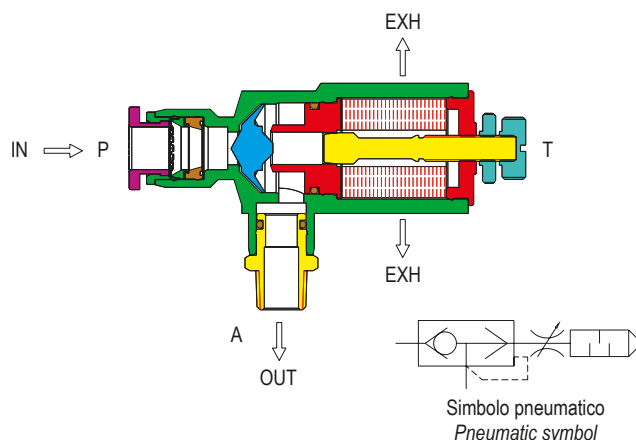


## Valvole di scarico rapido con regolatore di flusso e silenziatore Quick exhaust valves with speed control and silencer

### Caratteristiche Features

- Utilizzate con cilindri ad alta velocità
- La valvola di scarico integra un raccordo rapido per l'innesto facilitato del tubo
- La valvola ha anche la funzione di valvola selettiva
- Lo scarico ha la funzione di eliminazione dello strozzamento e del rumore
- Esso può controllare il cilindro ad alta velocità e al tempo stesso ridurre il rumore dello scarico
- *Used to the high-speed cylinders*
- *The exhaust valve with a quick fittings to fix the tube easily*
- *The valve have the function of the shuttle valve*
- *The exhaust side have the function with throttling and noise elimination.*
- *It can control the high-speed cylinder, at the same time also can reduce the exhaust noise*

### Sezione costruttiva Structure chart



### Principio operativo Operation principle

Come sopra illustrato nel disegno sezionato, la valvola ha tre porte P, A e T. L'aria entra dall'ingresso P, ed esce da A verso l'attuatore, o T dal silenziatore. Quando l'aria compressa entra dall'ingresso P spinge la valvola-N verso destra, in questo modo si ha il passaggio da P verso A e l'aria sarà disponibile per l'attuatore. Quando non c'è ingresso di aria compressa da P, l'aria di ritorno dall'attuatore spinge la valvola-N verso sinistra, e chiude la porta P, l'aria può passare da A verso T e scaricarsi rapidamente. La valvola di scarico rapido è sempre usata come valvola selettiva sul cilindro, l'aria può essere scaricata rapidamente senza passare attraverso questa funzione che, in questo modo, consente un moto alternato del cilindro più veloce riducendo i tempi di lavoro. Il lato di scarico T ha la funzione di eliminare lo strozzamento e il rumore. Può dunque controllare il cilindro ad alta velocità e allo stesso tempo è anche in grado di ridurre il rumore di scarico.

As above drawing shown, it with three valve ports P, A, T. The air input from P, A with the actuator, T through the air. When the compressed air input from P, which will push the N-holder to the right way, the air can be through between P and A, air will be offered to the actuator; When no compressed air input from P, the air from the actuator will push the N-holder to the left way, and stop P, the air can be through between A and T, also exhaust the air from T quickly. The quick exhaust valve always used to the shuttle valve and cylinder, the air can be exhaust quickly and not through the shuttle valve, which fast the reciprocating motion on the cylinder and short the work period. The exhaust side T have the function with throttling and noise elimination. It can control the high-speed cylinder, at the same time also can reduce the exhaust noise.

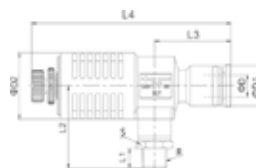
### Specifiche tecniche Specifications

|                                                           |                                                           |
|-----------------------------------------------------------|-----------------------------------------------------------|
| <b>Fluido / Fluid</b>                                     | Aria / Air                                                |
| <b>Pressione di esercizio<br/>Operation pressure</b>      | 0,1-1,0Mpa                                                |
| <b>Temperatura di esercizio<br/>Operating temperature</b> | 0-60 °C                                                   |
| <b>Tubo utilizzabile<br/>Applicable tube</b>              | Poliuretano, Poliammide e Nylon<br>Polyurethane and Nylon |
|                                                           |                                                           |
|                                                           |                                                           |
|                                                           |                                                           |

### ART. ISE

VSR + RFV filetto conico  
VSR + RFV taper thread

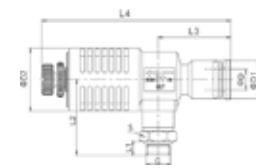
| CODICE   | ØD | R   | L1   | L2   | L3 | L4<br>Max | ØD1 | ØD2 | S  |
|----------|----|-----|------|------|----|-----------|-----|-----|----|
| ISE08-01 | 8  | 1/8 | 7,5  | 31   | 29 | 83        | 15  | 25  | 12 |
| ISE08-02 | 8  | 1/4 | 9,5  | 34   | 29 | 83        | 15  | 25  | 14 |
| ISE08-03 | 8  | 3/8 | 10,5 | 35,5 | 29 | 83        | 15  | 25  | 17 |
| ISE10-01 | 10 | 1/8 | 7,5  | 31   | 32 | 86        | 19  | 25  | 12 |
| ISE10-02 | 10 | 1/4 | 9,5  | 34   | 32 | 86        | 19  | 25  | 14 |
| ISE10-03 | 10 | 3/8 | 10,5 | 35,5 | 32 | 86        | 19  | 25  | 17 |



### ART. ISE-G

VSR + RFV filetto cilindrico  
VSR + RFV parallel thread

| CODICE    | ØD | G   | L1  | L2   | L3 | L4<br>Max | ØD1 | ØD2 | S  |
|-----------|----|-----|-----|------|----|-----------|-----|-----|----|
| ISE08-G01 | 8  | 1/8 | 5,5 | 30   | 29 | 83        | 15  | 25  | 13 |
| ISE08-G02 | 8  | 1/4 | 6,5 | 31,5 | 29 | 83        | 15  | 25  | 16 |
| ISE08-G03 | 8  | 3/8 | 7,5 | 33   | 29 | 83        | 15  | 25  | 20 |
| ISE10-G01 | 10 | 1/8 | 5,5 | 30   | 32 | 86        | 19  | 25  | 13 |
| ISE10-G02 | 10 | 1/4 | 6,5 | 31,5 | 32 | 86        | 19  | 25  | 16 |
| ISE10-G03 | 10 | 3/8 | 7,5 | 33   | 32 | 86        | 19  | 25  | 20 |





## ART. TPU

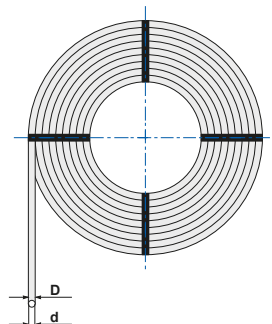
Tubo Poliuretano  
Polyurethane tube

| CODICE  | Dxd<br>mm. | P<br>bar | P1<br>bar | R<br>mm. |  |  |
|---------|------------|----------|-----------|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| TPU0315 | 3 x 1,5    | 13,5     | 54        | 7,5      | 200                                                                                 | 25                                                                                  |
| TPU0402 | 4 x 2      | 15       | 60        | 11       | 100                                                                                 | 25                                                                                  |
| TPU0425 | 4 x 2,5    | 10(10)   | 40(40)    | 15       | 100                                                                                 | 25                                                                                  |
| TPU0604 | 6 x 4      | 10       | 40(36)    | 18       | 100                                                                                 | 25                                                                                  |
| TPU0805 | 8 x 5      | 13       | 52        | 25       | 100                                                                                 | 25                                                                                  |
| TPU0855 | 8 x 5,5    | 9 (8)    | 37 (34)   | 30       | 100                                                                                 | 25                                                                                  |
| TPU0806 | 8 x 6      | 7        | 28        | 35       | 100                                                                                 | 25                                                                                  |
| TPU1065 | 10 x 6,5   | 10(7)    | 40(28)    | 30       | 100                                                                                 | 25                                                                                  |
| TPU1075 | 10 x 7,5   | 6,5(6)   | 27(25)    | 40       | 100                                                                                 | 25                                                                                  |
| TPU1008 | 10 x 8     | 5,5      | 22        | 45       | 100                                                                                 | 25                                                                                  |
|         |            |          |           |          |                                                                                     |                                                                                     |
|         |            |          |           |          |                                                                                     |                                                                                     |
|         |            |          |           |          |                                                                                     |                                                                                     |

Nota: i dati fra parentesi si riferiscono alle misure disponibili anche nelle colorazioni traslucide (durezza 95 shoreA).

Notice: data between parenthesis refer to cristal colour types (hardness 95 shoreA).

[ ] = Nero/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red, [GR] = Grigio/Grey, [T] = Trasparente/Cristal, [Y] = Giallo/Yellow



D = diametro esterno – external diameter

d = diametro interno – internal diameter

P = pressione di esercizio – working pressure

P1 = pressione di scoppio – breaking pressure

R = raggio di curvatura – bending radius

 = rotolo confezione – roll packing

 = scatola cartone – cartoon box

Scala di correzione in funzione della Temperatura  
Adjusting scale on atmospheric temperature basis

Tabella di correzione dei valori della pressione di utilizzo  
in funzione della variazione di temperatura  
Correction value scale for working pressure  
in consideration of the temperature variation

| Temperatura<br>Temperature  | -20°C  | 0°C   | +23°C | +30°C  | +40°C  | +50°C  | +60°C  | +70°C  |
|-----------------------------|--------|-------|-------|--------|--------|--------|--------|--------|
| Coefficiente<br>Coefficient | x 1,87 | x 1,4 | x 1   | x 0,84 | x 0,70 | x 0,60 | x 0,52 | x 0,47 |

Nella scelta dell'applicazione l'utilizzatore deve tenere conto delle variabili d'uso (pressione, temperatura, condizioni ambientali) e di tutto quello che può interferire nell'applicazione. Queste informazioni sono pertanto solo indicative. La validazione delle applicazioni è sempre a carico dell'utilizzatore. Medifly si riserva il diritto di modificare o aggiornare i dati tecnici qui riportati in qualsiasi momento senza obbligo di notifica. Questo documento non ha valenza contrattuale.

*In the application choice the user must keep in mind the different use variables (pressure, temperature, environment conditions) and all the things that can interfere with the application. These information must be considered only as a general indication. The validation of the application is always at the user charge. Medifly keeps the right to modify or adjourn the technical data in any moment without notify duty. This document has no contract value.*

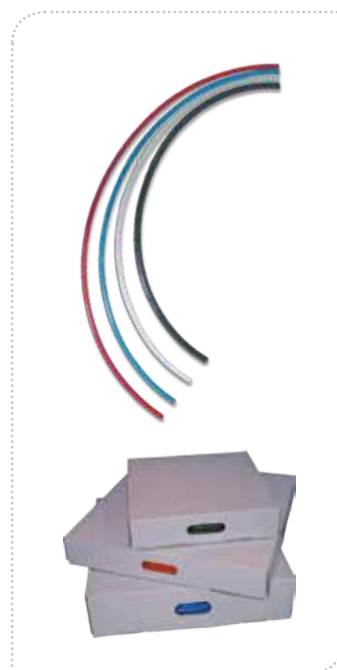
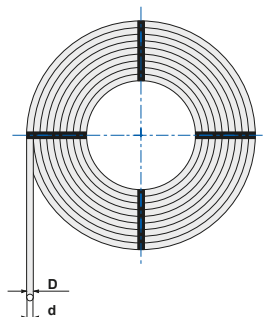
## ART. PA12

Tubo Poliammide  
Polyamide tube

| CODICE       | Dxd<br>mm. | P<br>bar | P1<br>bar | R<br>mm. |  |  |
|--------------|------------|----------|-----------|----------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| PA120402 (*) | 4 x 2      | 37       | 130       | 20       | 100                                                                                 | 25                                                                                  |
| PA120425     | 4 x 2,5    | 32       | 112       | 20       | 100                                                                                 | 25                                                                                  |
| PA120427     | 4 x 2,7    | 23       | 80        | 25       | 100                                                                                 | 25                                                                                  |
| PA120604     | 6 x 4      | 26       | 90        | 30       | 100                                                                                 | 25                                                                                  |
| PA120806     | 8 x 6      | 20       | 70        | 40       | 100                                                                                 | 25                                                                                  |
| PA121007 (*) | 10 x 7     | 25       | 88        | 70       | 100                                                                                 | 25                                                                                  |
| PA121008     | 10 x 8     | 15       | 52        | 60       | 100                                                                                 | 25                                                                                  |
| PA121210     | 12 x 10    | 12       | 42        | 85       | 100                                                                                 | 25                                                                                  |
| PA121412     | 14 x 12    | 11       | 33        | 90       | 100                                                                                 | 25                                                                                  |
|              |            |          |           |          |                                                                                     |                                                                                     |
|              |            |          |           |          |                                                                                     |                                                                                     |
|              |            |          |           |          |                                                                                     |                                                                                     |

Nota: le misure contrassegnate con asterisco sono disponibili solo su richiesta.  
Notice: (\*) = sizes available on demand only.

[N] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue.



D = diametro esterno – external diameter  
d = diametro interno – internal diameter  
P = pressione di esercizio – working pressure  
P1 = pressione di scoppio – breaking pressure  
R = raggio di curvatura – bending radius  
 = rotolo confezione – roll packing  
 = scatola cartone – cartoon box

Scala di correzione in funzione della Temperatura  
Adjusting scale on atmospheric temperature basis

Tabella di correzione dei valori della pressione di utilizzo  
in funzione della variazione di temperatura  
Correction value scale for working pressure  
in consideration of the temperature variation

| Temperatura<br>Temperature  | -20°C  | 0°C   | +23°C | +30°C  | +40°C  | +50°C  | +60°C  |
|-----------------------------|--------|-------|-------|--------|--------|--------|--------|
| Coefficiente<br>Coefficient | x 1,87 | x 1,4 | x 1   | x 0,90 | x 0,80 | x 0,70 | x 0,60 |

Nella scelta dell'applicazione l'utilizzatore deve tenere conto delle variabili d'uso (pressione, temperatura, condizioni ambientali) e di tutto quello che può interferire nell'applicazione. Queste informazioni sono pertanto solo indicative. La validazione delle applicazioni è sempre a carico dell'utilizzatore. Medifly si riserva il diritto di modificare o aggiornare i dati tecnici qui riportati in qualsiasi momento senza obbligo di notifica. Questo documento non ha valenza contrattuale.

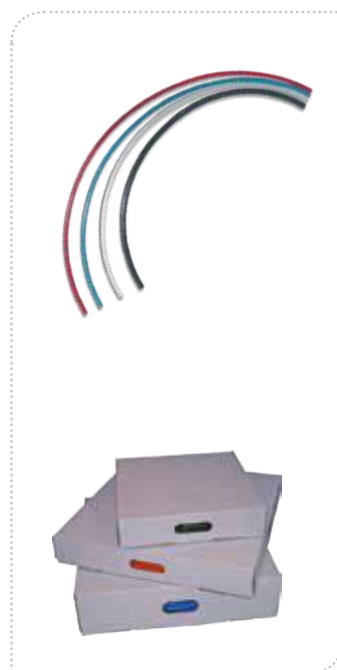
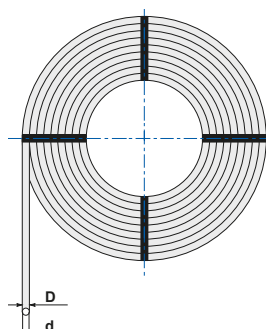
*In the application choice the user must keep in mind the different use variables (pressure, temperature, environment conditions) and all the things that can interfere with the application. These information must be considered only as a general indication. The validation of the application is always at the user charge. Medifly keeps the right to modify or adjourn the technical data in any moment without notify duty. This document has no contract value.*

## ART. TPA

Tubo Poliuretano/Copoliestere ALLOY SOFT  
Polyurethane tube/Copolyester ALLOY SOFT

| CODICE      | Dxd mm. | P bar | P1 bar | R mm. |  |  |
|-------------|---------|-------|--------|-------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| TPA0425     | 4 x 2,5 | 18    | 72     | 12    | 100                                                                               | 100                                                                               |
| TPA0604     | 6 x 4   | 14    | 56     | 15    | 100                                                                               | 100                                                                               |
| TPA0806 (*) | 8 x 6   | 10    | 40     | 25    | 100                                                                               | 100                                                                               |
| TPA1008 (*) | 10 x 8  | 8     | 34     | 35    | 100                                                                               | 100                                                                               |
| TPA1209     | 12 x 9  | 8     | 34     | 45    | 100                                                                               | 100                                                                               |
| TPA1411     | 14 x 11 | 6     | 24     | 120   | 100                                                                               | 100                                                                               |
| TPA1412     | 14 x 12 | 3     | 12     | 160   | 100                                                                               | 100                                                                               |
| TPA1612     | 16 x 12 | 5,5   | 22     | 150   | 100                                                                               | 100                                                                               |
|             |         |       |        |       |                                                                                   |                                                                                   |
|             |         |       |        |       |                                                                                   |                                                                                   |
|             |         |       |        |       |                                                                                   |                                                                                   |

(\*) disponibile anche nella versione PLUS con diametro interno minorato di 0,3 mm .  
disponibile solo azzurro ad eccezione della misura 12x9 fornibile nei seguenti colori:  
[N] = Neutro/Neutral, [B] = Nero/Black, [BU] = Azzurro/Light Blue, [G] = Verde/Green, [R] = Rosso/Red, [GR] = Grigio/Grey, [TB] = Blu traslucido/Cristal blue, [Y] = Giallo/Yellow



D = diametro esterno – external diameter

d = diametro interno – internal diameter

P = pressione di esercizio – working pressure

P1 = pressione di scoppio – breaking pressure

R = raggio di curvatura – bending radius

 = rotolo confezione – roll packing

 = scatola cartone – cartoon box

Scala di correzione in funzione della Temperatura  
Adjusting scale on atmospheric temperature basis

Tabella di correzione dei valori della pressione di utilizzo  
in funzione della variazione di temperatura  
Correction value scale for working pressure  
in consideration of the temperature variation

| Temperatura<br>Temperature  | - 20°C | 0°C | +23°C | +30°C | +40°C | +60°C | +70°C | +70°C  |
|-----------------------------|--------|-----|-------|-------|-------|-------|-------|--------|
| Coefficiente<br>Coefficient | 1,87   | 1,4 | 1     | 0.90  | 0.80  | 0.70  | 0.50  | x 0,47 |



## TUBO POLIURETANO

Materiale dalle eccezionali caratteristiche meccaniche, questo tubo nasce per risolvere le problematiche legate ad applicazioni particolarmente gravose.

|                                                                                                                                                                                                                                                                          |                                                        |                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------|
| <b>PROPRIETÀ TECNICHE:</b>                                                                                                                                                                                                                                               | Durezza Shore A                                        | 98                                                                                |
|                                                                                                                                                                                                                                                                          | Temperatura di applicazione                            | - 20°C +70°C                                                                      |
|                                                                                                                                                                                                                                                                          | Allungamento a rottura                                 | 540% (DIN 53504)                                                                  |
|                                                                                                                                                                                                                                                                          | Densità (gr./cm <sup>3</sup> )                         | 1.18 (DIN 53479)                                                                  |
|                                                                                                                                                                                                                                                                          | Perdita di abrasione (mm <sup>3</sup> )                | 55 (DIN 53516)                                                                    |
|                                                                                                                                                                                                                                                                          | Resistenza allo strappo (KN/m)                         | 120 (DIN 53515)                                                                   |
| <b>CARATTERISTICHE TECNICHE:</b>                                                                                                                                                                                                                                         |                                                        |                                                                                   |
| Eccellente resistenza all'abrasione.<br>Altissima flessibilità alle basse temperature.<br>Buona resistenza agli agenti atmosferici.<br>Buon invecchiamento nel tempo.<br>Estremamente resistente alla fatica.<br>Poco sensibile all'effetto "click" e "stress cracking". |                                                        |                                                                                   |
| <b>ALTRE CARATTERISTICHE:</b>                                                                                                                                                                                                                                            | <b>Tolleranze:</b>                                     | Diametro esterno +/- 0,1 mm Spessore +/-0,1 mm                                    |
|                                                                                                                                                                                                                                                                          | <b>Colore:</b>                                         | Azzurro, rosso, nero, verde, giallo, neutro, grigio, blu trasparente, cristallino |
|                                                                                                                                                                                                                                                                          | <b>Confezione:</b>                                     | Bobine da mt. 100                                                                 |
| <b>PRINCIPALI APPLICAZIONI:</b>                                                                                                                                                                                                                                          | Robotica, Agricoltura, Pneumatica, Autofficine, ecc... |                                                                                   |

**INFORMAZIONI GENERALI:** I poliuretani, pur essendo molto resistenti alla fatica o alle tensioflessioni, hanno la tendenza ad accumulare calore laddove vengono impiegati con pressioni pulsanti continue. Se tali condizioni si verificano in concomitanza con un'elevata temperatura ambiente, possono verificarsi rigonfiamenti o addirittura rotture del tubo, caratteristica che si evidenzia specialmente nelle misure 8x6, 10x8, 14x12. Il poliuretano è in generale resistente all'ozono, idrocarburi, olii grassi, carburanti e soluzioni chimiche moderate. Non è resistente, o debolmente, ad acidi concentrati, ketoni, idrocarburi clorurati.

Sul tubo viene marcato il diametro int. x est., il tipo di materiale e il numero di lotto per la rintracciabilità. Ogni lotto di materiale viene accompagnato da certificato di conformità.

## TUBO POLIAMMIDE

Il poliammide è tra i materiali più diffusi nelle applicazioni tecniche per le sue caratteristiche di flessibilità, prestazioni meccaniche come specificato di seguito.

|                                                                                                                                                                                                                                                                                          |                                     |                                                |                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------------------------|-----------------------|
| <b>CARATTERISTICHE:</b>                                                                                                                                                                                                                                                                  |                                     |                                                |                       |
| Elevate proprietà meccaniche alla trazione ed alla flessione continua ed alterna, notevole flessibilità, buona stabilità al calore, notevole resistenza all'invecchiamento, basso assorbimento d'acqua, notevole resistenza agli idrocarburi e olii e buona inerzia agli agenti chimici. |                                     |                                                |                       |
|                                                                                                                                                                                                                                                                                          | <b>PROPRIETÀ FISICHE/MECCANICHE</b> | <b>METODO DI PROVA</b>                         | <b>VALORE</b>         |
|                                                                                                                                                                                                                                                                                          | Densità                             | ASTM D-792                                     | 1,03g/cm <sup>3</sup> |
|                                                                                                                                                                                                                                                                                          | Durezza                             | ASTM D-2240                                    | 65ShD                 |
|                                                                                                                                                                                                                                                                                          | Allungamento alla rottura           | ASTM-D638                                      | >300%                 |
|                                                                                                                                                                                                                                                                                          | Modulo elastico                     | ASTM D-790                                     | 410MPa                |
|                                                                                                                                                                                                                                                                                          | Temperatura di applicazione         | -                                              | -40°C/+70°C           |
|                                                                                                                                                                                                                                                                                          | <b>Tolleranze:</b>                  | Diametro esterno +/- 0,1 mm Spessore +/-0,1 mm |                       |
|                                                                                                                                                                                                                                                                                          | <b>Colore:</b>                      | Azzurro, nero, rosso e neutro.                 |                       |
|                                                                                                                                                                                                                                                                                          | <b>Confezione:</b>                  | Bobine da mt. 100                              |                       |

**APPLICAZIONI:** Questo tipo di materiale risulta essere particolarmente indicato per la realizzazione di tubi per pneumatica, robotica, utensileria, macchine industriali, ecc..., ovvero quando vi sia l'esigenza di una notevole flessibilità in special modo a freddo.

**NORMATIVE:** ISO 1874 - DIN 73378 - DIN 74324

## TUBO POLIURETANO+COPOLIESTERE

Il "coex", copoliestere rivestito di poliuretano, è un materiale che ha fatto il suo ingresso nelle applicazioni pneumatiche negli ultimi anni, in particolare per venire incontro ad esigenze applicative e di reperibilità. Oggi costituisce una valida alternativa sia tecnica che economica ai tubi storicamente utilizzati.

**CARATTERISTICHE:** Altissima flessibilità anche alle basse temperature, ottimo ritorno elastico, poco sensibile all'effetto "click" e "stress cracking", eccellente resistenza all'abrasione, buona resistenza agli agenti atmosferici, buon invecchiamento nel tempo, estremamente resistente alla fatica, buona resistenza chimica, ottima resistenza all'olio di taglio e lubrificazione a basse/medie temperature.

|  |                                     |                                                                                                                  |                        |
|--|-------------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------|
|  | <b>PROPRIETÀ FISICHE/MECCANICHE</b> | <b>METODO DI PROVA</b>                                                                                           | <b>VALORE</b>          |
|  | Durezza                             | DIN 53505 - ISO868                                                                                               | 95 ShA                 |
|  | Assorbimento acqua                  | a 23°C 50% r.h.                                                                                                  | <1%                    |
|  | Densità                             | DIN 53479 - ISO1183                                                                                              | 1,20 g/cm <sup>2</sup> |
|  | Allungamento alla rottura           | DIN 53504 - ISO37                                                                                                | 500%                   |
|  | Modulo elastico a flessione         | ASTN D790                                                                                                        | 110 Mpa                |
|  | Perdita di abrasione                | DIN 53516 - ISO4649                                                                                              | 25 mm <sup>3</sup>     |
|  | Resistenza alla rottura             | DIN 53504 - ISO37                                                                                                | 55 Mpa                 |
|  | Temperatura di applicazione         | -                                                                                                                | 40°C - +65°C           |
|  | <b>Tolleranze:</b>                  | Diametro esterno +/- 0,1 mm (+/- 0,15 dal diam. 10mm).<br>Diametro interno +/- 0,2 mm (+/- 0,3 dal diam. 7,5mm). |                        |
|  | <b>Colore:</b>                      | Vedi tabella tecnica pag. xx                                                                                     |                        |
|  | <b>Confezione:</b>                  | Bobine da mt. 100                                                                                                |                        |

**APPLICAZIONI:** Tubi prodotti con questo materiale hanno tutte le credenziali per inserirsi nelle applicazioni pneumatiche, agricoltura, in generale quando sia richiesta resistenza a grassi, oli emulsionati, lubrificazione. L'uso con pressioni pulsanti può dare origine ad accumulo di calore.

## POLYURETHANE TUBE

Materiale dalle eccezionali caratteristiche meccaniche, questo tubo nasce per risolvere le problematiche legate ad applicazioni particolarmente gravose.

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                  |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|
| <b>TECHNICAL PROPERTY:</b> | Hardness Shore A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 98               |
|                            | Temperature working range                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | - 20°C +70°C     |
|                            | Breaking Elongation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 540% (DIN 53504) |
|                            | Density (gr./cm <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1,18 (DIN 53479) |
|                            | Abrasion loss (mm <sup>3</sup> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 55 (DIN 53516)   |
|                            | Tensile strenght (N/mm <sup>2</sup> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 120 (DIN 53515)  |
| <b>TECHNICAL FEATURES:</b> | Excelent resistance at the abrasion<br>Good resistance at the atmospheric effects<br>Good process of becoming old<br>High flexibility at the lowest temperatures<br>Extremely endeavor resistance<br>Very low "click" and "stress cracking" effects                                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |
| <b>OTHER FEATURES:</b>     | <b>Tolerances:</b> O.D. +/-0,1 mm Thickness +/-0,1 mm<br><b>Colours available:</b> Light blue, Red, Black, Green, Yellow, Neutral, Cristal blue, Cristal<br><b>Packing:</b> 100 mt. Rolls in plastic film                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                  |
| <b>MAIN APPLICATIONS:</b>  | Pneumatic, Robotic, agriculture, garage, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                  |
| <b>GENERAL NOTICES:</b>    | Polyurethane tube material has excelent mechanical features and it is particularly addressed to mostly solve the heavy applications. Anyway polyurethanes, although they are much resistant at the endeavor and at the flexion stress, trend to keep heat when working with continuous variable pressure and in case of high atmosphere temperature it could bring to the swelling or breaking of the tubing itself, specially on sizes 8x6, 10x8, 14x12.<br>Polyurethane is normally also resistant to ozone, hydrocarbon, oils and greases, fuel and moderate chemical solutions. It is not, or very low, resistant to concentrated acids, ketons, esters and chloride hydrocarbons. |                  |

## POLYAMIDE TUBE

The polyamide is the most diffused material among the technical applications for its characteristics of flexibility and mechanical performances.

|                         |                                                                                                                                                                                                                                                                   |                     |                       |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------|
| <b>CHARACTERISTICS:</b> | High mechanical properties to traction and to continuous & alternate flexion, notable flexibility, good stability to heat, notable resistance to ageing, low water absorption, notable resistance to hydrocarbons and oils and good inertness to chemical agents. |                     |                       |
|                         | <b>MECHANICAL/PHYSICAL PROPERTIES</b>                                                                                                                                                                                                                             | <b>TRIAL METHOD</b> | <b>VALUE</b>          |
|                         | Density                                                                                                                                                                                                                                                           | ASTM D-792          | 1,03g/cm <sup>3</sup> |
|                         | Hardness                                                                                                                                                                                                                                                          | ASTM D-2240         | 65ShD                 |
|                         | Elongation at break                                                                                                                                                                                                                                               | ASTM-D638           | >300%                 |
|                         | Elastic modulus                                                                                                                                                                                                                                                   | ASTM D-790          | 410MPa                |
|                         | Working pressure                                                                                                                                                                                                                                                  | -                   | -40°C/+70°C           |
|                         | <b>Tolerances:</b> O.D. +/- 0,1 mm Thickness +/-0,1 mm<br><b>Colours available:</b> Light blue, black, red and neutral.<br><b>Packing:</b> 100 mt. Rolls in plastic film                                                                                          |                     |                       |
| <b>APPLICATION:</b>     | This kind of material is particularly indicated for the realization of tubing for pneumatic, robotic, steel, industrial machineries, ecc..., when there is the necessity of notable flexibility.                                                                  |                     |                       |
| <b>REFERENCE NORMS:</b> | ISO 1874 - DIN 73378 - DIN 74324                                                                                                                                                                                                                                  |                     |                       |

## COPOLYESTER+POLYURETHANE TUBE

The "coex", copolyester coated with polyurethane, is a material that has made mits entry into the pneumatic applications in the recent years, in particular to meet the needs of applications and availability. Today is a good alternative for both, technical and economic reasons, to the tubes storicly used.

|                  |                                                                                                                                                                                                                                                                                                                                                              |                       |                        |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|
| <b>FEATURES:</b> | Very high flexibility also at low temperatures, excellent elastic return, low sensibility to "click" and "stress cracking" effect, excellent resistance to abrasion, good resistance to atmospheric agents, good aging, extremely resistant to fatigue, good chemical resistance, excellent resistance to cut and lubrication oil at low/medium temperature. |                       |                        |
|                  | <b>MECHANICAL/PHYSICAL PROPERTIES</b>                                                                                                                                                                                                                                                                                                                        | <b>TESTING METHOD</b> | <b>VALORE</b>          |
|                  | Hardness                                                                                                                                                                                                                                                                                                                                                     | DIN 53505 - ISO868    | 95 ShA                 |
|                  | Water absorpion                                                                                                                                                                                                                                                                                                                                              | a 23°C 50% r.h.       | <1%                    |
|                  | Density                                                                                                                                                                                                                                                                                                                                                      | DIN 53479 - ISO1183   | 1,20 g/cm <sup>2</sup> |
|                  | Elongation at break                                                                                                                                                                                                                                                                                                                                          | DIN 53504 - ISO37     | 500%                   |
|                  | Flexural elastic modulus                                                                                                                                                                                                                                                                                                                                     | ASTN D790             | 110 Mpa                |
|                  | Abrasion loss                                                                                                                                                                                                                                                                                                                                                | DIN 53516 - ISO4649   | 25 mm <sup>3</sup>     |
|                  | Break resistance                                                                                                                                                                                                                                                                                                                                             | DIN 53504 - ISO37     | 55 Mpa                 |
|                  | Workin temperature                                                                                                                                                                                                                                                                                                                                           | -                     | 40°C - +65°C           |
|                  | <b>Tolerances:</b> External diameter +/- 0,1 mm (+/- 0,15 from diam. 10mm).<br>Internal diameter +/- 0,2 mm (+/- 0,3 from diam. 7,5mm).<br><b>Colours available:</b> See technical page xx<br><b>Packing:</b> 100 mt. Rolls in plastic film                                                                                                                  |                       |                        |

**APPLICATION:** Tubes made with this row material have all the credentials to fit in pneumatics, agriculture, in general when is required resistance with grease, emulsiifed oils, lubrication. The use with continuous pulsating pressures can create heat accumulation.

## BREVE DESCRIZIONE

I tubi per aria compressa in poliuretano, poliammide a copoliestere sono realizzate in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

The polyurethane, polyamide and copolyester tubes are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

## SCHEDA TECNICA TECHNICAL SHEET

|                                                            |                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>            | Fluidi liquidi e gassosi, aria compressa (per specifiche contattare il nostro UT)<br><i>Liquids and gases, compressed air (for information contact our UT)</i>                                                                                                   |
| APPLICAZIONI<br><i>APPLICATIONS</i>                        | Pneumatica, idraulica a bassa pressione, secondo normativa DIN 3861-3870<br><i>Pneumatic circuits, low pressure hydraulic applications, according to DIN 3861-3870 norms</i>                                                                                     |
| RACCORDI DI COLLEGAMENTO<br><i>CONNECTING FITTINGS</i>     | Le serie di raccordi Rap, Tecno-Rap e a seguire, illustrati nel catalogo "Grenline" sono tutti compatibili<br><i>Fittings Rap, Tecno-Rap series and further, illustrated on our "Greenline" catalogue are all suitable</i>                                       |
| TEMPERATURE E PRESSIONI<br><i>TEMPERATURE AND PRESSURE</i> | Le temperature e le pressioni dipendono generalmente dalle caratteristiche del tubo e sono specificate nelle pagine successive<br><i>Temperatures and pressures usually depend by the features of the employed tubes and are detailed on the following pages</i> |
| MATERIALI<br><i>MATERIALS</i>                              | Poliuretano TPU<br>Poliammide PA12<br>Poliuretano / Copoliestere TPA<br><i>Polyurethane TPU</i><br><i>Polyamide PA12</i><br><i>Polyurethane / Copolyester TPA</i>                                                                                                |

ART. PSVA

Pinza tagliatubo in metallo  
*Metal tube cutter*

| CODICE  | A   | B  | C  |  |
|---------|-----|----|----|-----------------------------------------------------------------------------------|
| PSVA853 | 130 | 40 | 63 | 1                                                                                 |
| PSVA854 | 185 | 55 | 88 | 1                                                                                 |
|         |     |    |    |                                                                                   |
|         |     |    |    |                                                                                   |
|         |     |    |    |                                                                                   |



ART. TPT

Pinza tagliatubo in tecnopolimero  
*Technopolymer tube cutter*

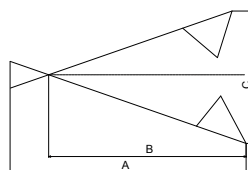
| CODICE    | A   | B  | C  |  |
|-----------|-----|----|----|-----------------------------------------------------------------------------------|
| TPT0318AV | 140 | 90 | 50 | 1                                                                                 |
|           |     |    |    |                                                                                   |
|           |     |    |    |                                                                                   |
|           |     |    |    |                                                                                   |
|           |     |    |    |                                                                                   |



ART. TC

Pinza tagliatubo in plastica  
*Plastic tube cutter*

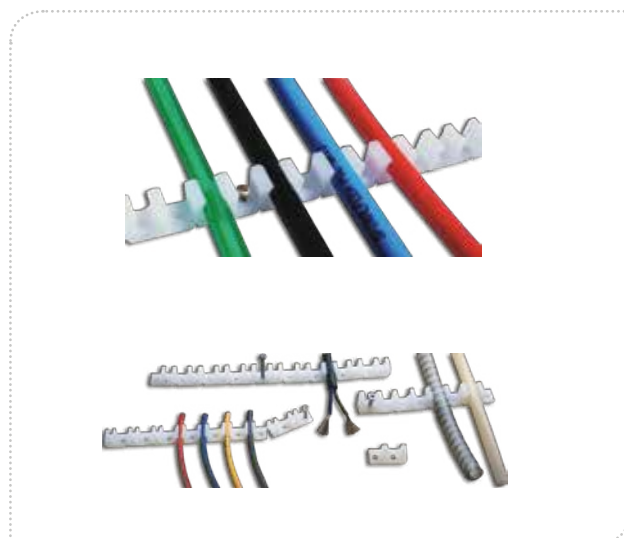
| CODICE  | Colore / Color | A    | B  | V  |  |
|---------|----------------|------|----|----|-------------------------------------------------------------------------------------|
| TC (BU) | Azzurro / Blue | 80.5 | 35 | 61 | 1                                                                                   |
|         |                |      |    |    |                                                                                     |
|         |                |      |    |    |                                                                                     |
|         |                |      |    |    |                                                                                     |



ART. MORS

Morsettiere  
*Terminals*

| CODICE  | Ø mm. | lunghezza<br>length<br>mm. | lunghezza<br>width<br>mm. | altezza<br>height<br>mm. |  |
|---------|-------|----------------------------|---------------------------|--------------------------|-------------------------------------------------------------------------------------|
| 706.004 | 4     | 185                        | 14                        | 9                        | 10                                                                                  |
| 706.006 | 6     | 215                        | 14                        | 13                       | 10                                                                                  |
| 706.008 | 8     | 235                        | 14                        | 15                       | 10                                                                                  |
| 706.010 | 10    | 275                        | 14                        | 17                       | 10                                                                                  |
| 706.012 | 12    | 305                        | 14                        | 19                       | 10                                                                                  |
| 706.015 | 15    | 276                        | 14                        | 21                       | 8                                                                                   |
|         |       |                            |                           |                          |                                                                                     |
|         |       |                            |                           |                          |                                                                                     |
|         |       |                            |                           |                          |                                                                                     |
|         |       |                            |                           |                          |                                                                                     |



## BREVE DESCRIZIONE

Le pinze tagliatubo, realizzate in Italia nella versione metallica, e di importazione, nella versione in nylon, sono state concepite per essere utilizzate con tutti i tubi per l'aria e tutte le misure illustrate nel presente catalogo, per garantire tagli di precisione. Una perfetta tenuta pneumatica del raccordo necessita di un taglio pulito e senza bave del tubo; per questo è nata la sua nuova Pinza Tagliatubo "TPT", dotata di lama in acciaio di qualità "made in Germany" per migliaia di tagli garantiti, un unico utensile con cui tagliare perfettamente e con il minimo sforzo tubi in materiale plastico fino a 20 mm di diametro.

## SHORT DESCRIPTION

*The tube cutters, made in Italy in the metal version, and imported, in the plastic version, are designed to be used with all air hoses and measures shown in this catalog, they ensure precision cuts. A perfect pneumatic seal of the fitting requires a clean cut without burrs of the pipe; this is why the new "TPT" pipe cutter has been realized, equipped with a "made in Germany" quality steel blade for thousands of guaranteed cuts, a single tool for cutting perfectly and with minimal effort plastic pipes up to 20 mm in diameter.*

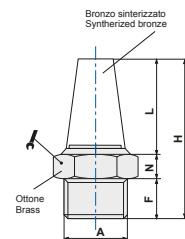
## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>PRECAUZIONI D'USO<br/><i>PRECAUTIONS</i></p> | <p>Tagliare il tubo perpendicolarmente all'asse, con una operazione decisa, avendo l'attenzione di evitare anomale inclinazioni del taglio che potrebbero compromettere il corretto inserimento del tubo nel raccordo e conseguentemente dare luogo ad eventuali perdite. Eliminare possibili bave interne ed esterne.</p> <p><i>Cut the tube at right angles to the axis, with a resolute operation, having the attention to avoid abnormal inclinations of the cut that may compromise the proper insertion of the tube into the fitting and consequently result in air leakage. Eliminate possible internal and external burrs.</i></p> |
| <p>MATERIALI<br/><i>MATERIALS</i></p>           | <p>Corpo in materiale metallico pressofuso e cromato<br/>Corpo in materiale plastico (PA66-50%FV - POM) Lama (intercambiabile) in acciaio temprato ad alta resistenza.</p> <p><i>Body in chrome metal die-cast<br/>Body in plastic material (PA66-50%FV - POM)<br/>Blade (interchangeable) hardened high strenght steel.</i></p>                                                                                                                                                                                                                                                                                                           |

### ART. SBE

Silenziatore a forma conica su base esagonale  
*Conical-shaped silencer on hexagonal base*

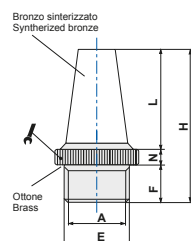
| CODICE   | A            | N  | F  | L  | H  |  |  |
|----------|--------------|----|----|----|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SBE18    | 1/8" BSP     | 8  | 6  | 15 | 29 | 13                                                                                | 50                                                                                |
| SBE14    | 1/4" BSP     | 8  | 7  | 17 | 32 | 16                                                                                | 50                                                                                |
| SBE38    | 3/8" BSP     | 7  | 8  | 25 | 40 | 19                                                                                | 25                                                                                |
| SBE12    | 1/2" BSP     | 9  | 9  | 27 | 45 | 24                                                                                | 25                                                                                |
| SBE34    | 3/4" BSP     | 10 | 9  | 37 | 56 | 30                                                                                | 5                                                                                 |
| SBE01    | 1" BSP       | 10 | 11 | 45 | 66 | 36                                                                                | 5                                                                                 |
| SBE5MA   | M5"          | 4  | 4  | 9  | 17 | 8                                                                                 | 100                                                                               |
| SBE18FEM | 1/8" FEM BSP | 8  | 7  | 15 | 30 | 13                                                                                | 50                                                                                |



### ART. SBT

Silenziatore a forma conica su base circolare  
*Conical-shaped silencer on a circular base*

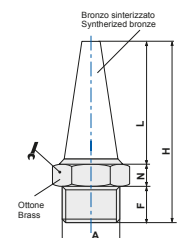
| CODICE | A        | E  | F  | L  | H    | N   |  |
|--------|----------|----|----|----|------|-----|-----------------------------------------------------------------------------------|
| SBT18  | 1/8" BSP | 12 | 6  | 15 | 25   | 4   | 100                                                                               |
| SBT14  | 1/4" BSP | 16 | 7  | 20 | 30   | 3   | 50                                                                                |
| SBT38  | 3/8" BSP | 19 | 8  | 27 | 38   | 3   | 25                                                                                |
| SBT12  | 1/2" BSP | 23 | 10 | 28 | 42   | 4   | 25                                                                                |
| SBT34  | 3/4" BSP | 29 | 10 | 38 | 52   | 4   | 5                                                                                 |
| SBT01  | 1" BSP   | 36 | 12 | 46 | 65,5 | 7,5 | 5                                                                                 |



### ART. SAC

Silenziatore a forma conica sottile su base esagonale  
*Thin conical silencer on hexagonal base*

| CODICE   | A            | N  | F  | L  | H  |  |  |
|----------|--------------|----|----|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SAC18    | 1/8" BSP     | 8  | 6  | 30 | 44 | 13                                                                                  | 100                                                                                 |
| SAC14    | 1/4" BSP     | 8  | 7  | 35 | 50 | 16                                                                                  | 50                                                                                  |
| SAC38    | 3/8" BSP     | 7  | 8  | 39 | 54 | 19                                                                                  | 25                                                                                  |
| SAC12    | 1/2" BSP     | 9  | 9  | 49 | 67 | 24                                                                                  | 25                                                                                  |
| SAC34    | 3/4" BSP     | 10 | 9  | 46 | 65 | 30                                                                                  | 5                                                                                   |
| SAC01    | 1" BSP       | 10 | 11 | 56 | 77 | 36                                                                                  | 5                                                                                   |
| SAC5MA   | M5"          | 4  | 4  | 18 | 26 | 8                                                                                   | 100                                                                                 |
| SAC18FEM | 1/8" FEM BSP | 8  | 7  | 30 | 45 | 13                                                                                  | 50                                                                                  |

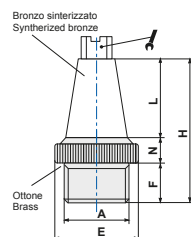


### ART. SBTE-SBTT

Silenziatore con taglio cacciavite su base circolare  
*Silencer with screwdriver cut on a circular base*

| CODICE | A        | E  | F  | L  | H    | N   |  |  |
|--------|----------|----|----|----|------|-----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SBTT18 | 1/8" BSP | 12 | 6  | 15 | 25   | 4   | 6                                                                                   | 100                                                                                 |
| SBTT14 | 1/4" BSP | 16 | 7  | 20 | 30   | 3   | 7                                                                                   | 50                                                                                  |
| SBTT38 | 3/8" BSP | 19 | 8  | 27 | 38   | 3   | 10                                                                                  | 25                                                                                  |
| SBTT12 | 1/2" BSP | 23 | 10 | 28 | 42   | 4   | 13                                                                                  | 25                                                                                  |
| SBTT34 | 3/4" BSP | 29 | 10 | 38 | 52   | 4   | 17                                                                                  | 10                                                                                  |
| SBTT01 | 1" BSP   | 36 | 12 | 46 | 65,5 | 7,5 | 22                                                                                  | 10                                                                                  |
| SBTE18 | 1/8" BSP | 12 | 6  | 15 | 25   | 4   | 6                                                                                   | 100                                                                                 |
| SBTE14 | 1/4" BSP | 16 | 7  | 20 | 30   | 3   | 7                                                                                   | 50                                                                                  |
| SBTE38 | 3/8" BSP | 19 | 8  | 27 | 38   | 3   | 10                                                                                  | 25                                                                                  |
| SBTE12 | 1/2" BSP | 23 | 10 | 28 | 42   | 4   | 13                                                                                  | 25                                                                                  |
| SBTE34 | 3/4" BSP | 29 | 10 | 38 | 52   | 4   | 17                                                                                  | 5                                                                                   |
| SBTE01 | 1" BSP   | 36 | 12 | 46 | 65,5 | 7,5 | 22                                                                                  | 5                                                                                   |

SBTE = Senza taglio  
SBTE = Without screwdriver

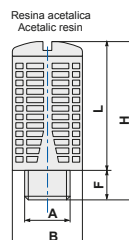




**ART. SPL**

Silenziatore dinamico autopulente  
*Dynamic self-cleaning silencer*

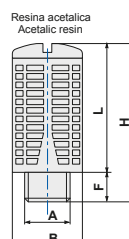
| CODICE | A        | B    | F  | L  | H   |  |     |
|--------|----------|------|----|----|-----|--|-----|
| SPL18  | 1/8" BSP | 15   | 8  | 27 | 35  |  | 100 |
| SPL14  | 1/4" BSP | 19,5 | 9  | 36 | 45  |  | 50  |
| SPL38  | 3/8" BSP | 24,5 | 11 | 47 | 58  |  | 50  |
| SPL12  | 1/2" BSP | 24,5 | 11 | 47 | 58  |  | 50  |
| SPL34  | 3/4" BSP | 48   | 18 | 96 | 114 |  | 10  |
| SPL01  | 1" BSP   | 48   | 18 | 96 | 114 |  | 10  |



**ART. SPLB**

Silenziatore dinamico autopulente  
*Dynamic self-cleaning silencer*

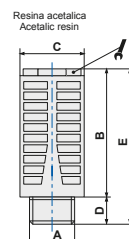
| CODICE | A        | B    | F  | L  | H   |  |     |
|--------|----------|------|----|----|-----|--|-----|
| SPLB18 | 1/8" BSP | 15   | 8  | 27 | 35  |  | 100 |
| SPLB14 | 1/4" BSP | 19,5 | 9  | 36 | 45  |  | 50  |
| SPLB38 | 3/8" BSP | 24,5 | 11 | 47 | 58  |  | 50  |
| SPLB12 | 1/2" BSP | 24,5 | 11 | 47 | 58  |  | 50  |
| SPLB34 | 3/4" BSP | 48   | 18 | 96 | 114 |  | 10  |
| SPLB01 | 1" BSP   | 48   | 18 | 96 | 114 |  | 10  |



**ART. SPLF**

Silenziatore statico in feltro  
*Static felt silencer*

| CODICE | A        | B    | C    | D   | E   |     |     |
|--------|----------|------|------|-----|-----|-----|-----|
| SPLF18 | 1/8" BSP | 28   | 16   | 6   | 34  | 10  | 100 |
| SPLF14 | 1/4" BSP | 36,5 | 19,5 | 6,5 | 43  | 13  | 50  |
| SPLF38 | 3/8" BSP | 46   | 24   | 10  | 56  | 17  | 50  |
| SPLF12 | 1/2" BSP | 46   | 24   | 10  | 56  | 17  | 50  |
| SPLF34 | 3/4" BSP | 95   | 48   | 16  | 111 | (*) | 10  |
| SPLF01 | 1" BSP   | 95   | 48   | 16  | 111 | (*) | 10  |

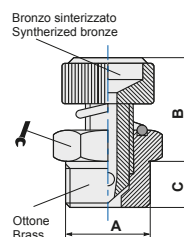


(\*) Taglio cacciavite Screwdriver cut

**ART. SVE**

Silenziatore con valvola regolatrice  
*Silencer with regulating valve*

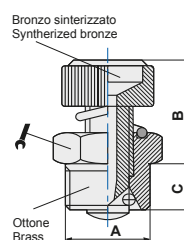
| CODICE | A        | min B max | C  |  |    |
|--------|----------|-----------|----|--|----|
| SVE18  | 1/8" BSP | 20 - 22   | 6  |  | 50 |
| SVE14  | 1/4" BSP | 22 - 24   | 8  |  | 50 |
| SVE38  | 3/8" BSP | 25 - 28   | 10 |  | 25 |
| SVE12  | 1/2" BSP | 26 - 29   | 11 |  | 25 |
| SVE34  | 3/4" BSP | 32 - 37   | 12 |  | 5  |
| SVE01  | 1" BSP   | 32 - 37   | 12 |  | 5  |



**ART. RBP**

Silenziatore con valvola regolatrice  
*Silencer with regulating valve*

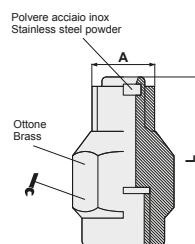
| CODICE | A        | min B max | C    |  |    |
|--------|----------|-----------|------|--|----|
| RBP18  | 1/8" BSP | 14 - 19   | 6    |  | 50 |
| RBP14  | 1/4" BSP | 17 - 22   | 8    |  | 50 |
| RBP38  | 3/8" BSP | 18 - 24   | 9    |  | 25 |
| RBP12  | 1/2" BSP | 18 - 24   | 10,5 |  | 10 |
|        |          |           |      |  |    |
|        |          |           |      |  |    |



### ART. SM

Smorzatore di pressione  
*Pressure damper*

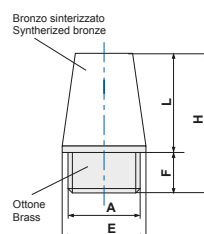
| CODICE | A        | L  |  |    |    |
|--------|----------|----|--|----|----|
| SM1018 | 1/8" BSP | 30 |  | 14 | 50 |
| SM2014 | 1/4" BSP | 36 |  | 19 | 25 |
| SM3038 | 3/8" BSP | 45 |  | 27 | 25 |
| SM4012 | 1/2" BSP | 50 |  | 20 | 25 |
|        |          |    |  |    |    |
|        |          |    |  |    |    |
|        |          |    |  |    |    |
|        |          |    |  |    |    |



### ART. SC

Silenziatore a forma conica su base circolare  
*Conical-shaped silencer on a circular base*

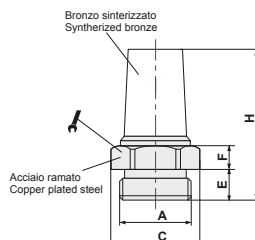
| CODICE | A        | E  | F   | L   | H  |  |     |
|--------|----------|----|-----|-----|----|--|-----|
| SC18   | 1/8" BSP | 12 | 6   | 15  | 21 |  | 100 |
| SC14   | 1/4" BSP | 15 | 6   | 19  | 25 |  | 50  |
| SC38   | 3/8" BSP | 19 | 8   | 28  | 36 |  | 25  |
| SC12   | 1/2" BSP | 23 | 10  | 33  | 43 |  | 25  |
| SC34   | 3/4" BSP | 29 | 13  | 40  | 53 |  | 5   |
| SC01   | 1" BSP   | 36 | 15  | 48  | 63 |  | 5   |
| SC5MA  | M5"      | 6  | 4,5 | 8,5 | 13 |  | 100 |
|        |          |    |     |     |    |  |     |



### ART. SEB

Silenziatore a forma conica su base esagonale  
*Conical-shaped silencer on hexagonal base*

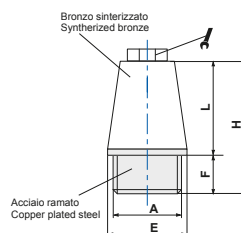
| CODICE | A        | C    | E   | F   | H    |    |     |
|--------|----------|------|-----|-----|------|----|-----|
| SEB18  | 1/8" BSP | 12,6 | 4,5 | 3,8 | 20,5 | 12 | 100 |
| SEB14  | 1/4" BSP | 16   | 6   | 4,5 | 26,5 | 15 | 50  |
| SEB38  | 3/8" BSP | 20   | 7   | 5,4 | 33,9 | 19 | 25  |
| SEB12  | 1/2" BSP | 24,5 | 8   | 7   | 40,5 | 23 | 25  |
| SEB34  | 3/4" BSP | 32   | 9   | 7,5 | 51,5 | 30 | 5   |
| SEB01  | 1" BSP   | 38,5 | 11  | 9   | 66   | 36 | 5   |
| SEB5MA | M5"      | 8    | 5,5 | 3,5 | 17   | 7  | 100 |
|        |          |      |     |     |      |    |     |



### ART. SET

Silenziatore con testa esagonale  
*Hex head silencer*

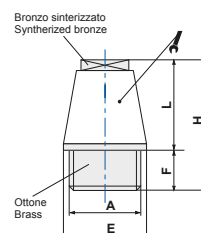
| CODICE | A        | E    | F   | L  | H    |    |     |
|--------|----------|------|-----|----|------|----|-----|
| SET18  | 1/8" BSP | 11,5 | 4,5 | 13 | 17,5 | 8  | 100 |
| SET14  | 1/4" BSP | 15   | 6   | 18 | 24   | 10 | 50  |
| SET38  | 3/8" BSP | 19   | 7   | 24 | 31   | 13 | 25  |
| SET12  | 1/2" BSP | 23   | 8   | 29 | 37   | 14 | 25  |
| SET34  | 3/4" BSP | 30   | 9   | 41 | 50   | 19 | 5   |
| SET01  | 1" BSP   | 37   | 11  | 51 | 62   | 24 | 5   |
| SET5MA | M5"      | 8,5  | 5   | 15 | 20   | 27 | 100 |
|        |          |      |     |    |      |    |     |



**ART. SCQ**

Silenziatore con testa quadra  
*Square head silencer*

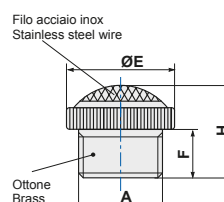
| CODICE | A        | E  | F  | L  | H  |  |  |
|--------|----------|----|----|----|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SCQ18  | 1/8" BSP | 12 | 6  | 15 | 21 | 7                                                                                 | 100                                                                               |
| SCQ14  | 1/4" BSP | 15 | 6  | 19 | 25 | 9                                                                                 | 50                                                                                |
| SCQ38  | 3/8" BSP | 19 | 8  | 28 | 38 | 10                                                                                | 25                                                                                |
| SCQ12  | 1/2" BSP | 23 | 10 | 33 | 43 | 14                                                                                | 25                                                                                |
| SCQ34  | 3/4" BSP | 29 | 13 | 40 | 53 | 17                                                                                | 5                                                                                 |
| SCQ01  | 1" BSP   | 36 | 15 | 48 | 63 | 23                                                                                | 5                                                                                 |
|        |          |    |    |    |    |                                                                                   |                                                                                   |
|        |          |    |    |    |    |                                                                                   |                                                                                   |



**ART. SFT**

Silenziatore a cupola su base circolare  
*Dome silencer on a circular base*

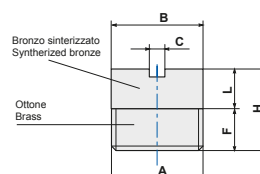
| CODICE | A        |  | F  | H  | ØE |  |  |
|--------|----------|--|----|----|----|--|-----------------------------------------------------------------------------------|
| SFT18  | 1/8" BSP |  | 6  | 13 | 12 |  | 100                                                                               |
| SFT14  | 1/4" BSP |  | 7  | 14 | 16 |  | 50                                                                                |
| SFT38  | 3/8" BSP |  | 8  | 18 | 19 |  | 25                                                                                |
| SFT12  | 1/2" BSP |  | 10 | 19 | 23 |  | 25                                                                                |
| SFT34  | 3/4" BSP |  | 10 | 22 | 29 |  | 5                                                                                 |
| SFT01  | 1" BSP   |  | 12 | 23 | 36 |  | 5                                                                                 |
| SFT5MA | M5"      |  | 5  | 12 | 11 |  | 100                                                                               |
|        |          |  |    |    |    |  |                                                                                   |
|        |          |  |    |    |    |  |                                                                                   |



**ART. STT**

Silenziatore a tappo con taglio cacciavite  
*Cap silencer with screwdriver cut*

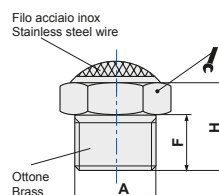
| CODICE | A        | B  | F  | L  | H  | C   |  |
|--------|----------|----|----|----|----|-----|-------------------------------------------------------------------------------------|
| STT18  | 1/8" BSP | 10 | 6  | 6  | 12 | 1,5 | 100                                                                                 |
| STT14  | 1/4" BSP | 13 | 6  | 6  | 12 | 1,5 | 50                                                                                  |
| STT38  | 3/8" BSP | 17 | 7  | 8  | 15 | 1,5 | 25                                                                                  |
| STT12  | 1/2" BSP | 21 | 10 | 8  | 18 | 1,5 | 25                                                                                  |
| STT34  | 3/4" BSP | 26 | 13 | 9  | 22 | 1,5 | 5                                                                                   |
| STT01  | 1" BSP   | 33 | 14 | 11 | 25 | 1,5 | 5                                                                                   |
|        |          |    |    |    |    |     |                                                                                     |
|        |          |    |    |    |    |     |                                                                                     |



**ART. SFE**

Silenziatore a cupola su base esagonale  
*Dome silencer on hexagonal base*

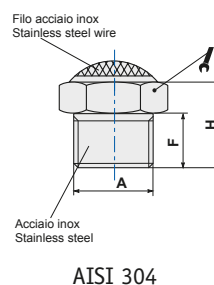
| CODICE   | A            |  | F  | H  |  |  |
|----------|--------------|--|----|----|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SFE18    | 1/8" BSP     |  | 6  | 15 | 13                                                                                  | 100                                                                                 |
| SFE14    | 1/4" BSP     |  | 7  | 18 | 16                                                                                  | 50                                                                                  |
| SFE38    | 3/8" BSP     |  | 8  | 20 | 19                                                                                  | 50                                                                                  |
| SFE12    | 1/2" BSP     |  | 10 | 22 | 24                                                                                  | 25                                                                                  |
| SFE34    | 3/4" BSP     |  | 10 | 26 | 30                                                                                  | 25                                                                                  |
| SFE01    | 1" BSP       |  | 12 | 28 | 36                                                                                  | 10                                                                                  |
| SFE5MA   | M5"          |  | 4  | 8  | 8                                                                                   | 100                                                                                 |
| SFE18FEM | 1/8" FEM BSP |  | 7  | 18 | 14                                                                                  | 50                                                                                  |



### ART. SFEX

Silenziatore inox a cupola su base esagonale  
*Stainless steel dome silencer on hexagonal base*

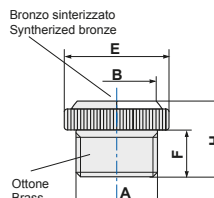
| CODICE | A        |  | F  | H  |  |  |
|--------|----------|--|----|----|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| SFEX18 | 1/8" BSP |  | 6  | 15 | 13                                                                                | 50                                                                                |
| SFEX14 | 1/4" BSP |  | 7  | 18 | 16                                                                                | 50                                                                                |
| SFEX38 | 3/8" BSP |  | 8  | 20 | 19                                                                                | 50                                                                                |
| SFEX12 | 1/2" BSP |  | 10 | 22 | 24                                                                                | 25                                                                                |
| SFEX34 | 3/4" BSP |  | 10 | 26 | 30                                                                                | 5                                                                                 |
| SFEX01 | 1" BSP   |  | 12 | 28 | 36                                                                                | 5                                                                                 |
|        |          |  |    |    |                                                                                   |                                                                                   |
|        |          |  |    |    |                                                                                   |                                                                                   |



### ART. SBP

Silenziatore piatto su base circolare  
*Flat silencer on circular base*

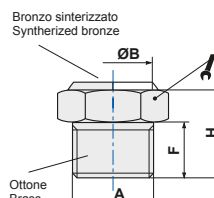
| CODICE | A        |  | B  | E  | F  | H    |  |
|--------|----------|--|----|----|----|------|-----------------------------------------------------------------------------------|
| SBP18  | 1/8" BSP |  | 11 | 12 | 6  | 12   | 100                                                                               |
| SBP14  | 1/4" BSP |  | 14 | 16 | 7  | 13   | 50                                                                                |
| SBP38  | 3/8" BSP |  | 17 | 19 | 8  | 17   | 25                                                                                |
| SBP12  | 1/2" BSP |  | 22 | 23 | 10 | 18   | 25                                                                                |
| SBP34  | 3/4" BSP |  | 28 | 29 | 10 | 20   | 5                                                                                 |
| SBP01  | 1" BSP   |  | 35 | 36 | 12 | 21   | 5                                                                                 |
| SBP5MA | M5"      |  | 11 | 12 | 5  | 11,5 | 100                                                                               |
|        |          |  |    |    |    |      |                                                                                   |
|        |          |  |    |    |    |      |                                                                                   |



### ART. SEP

Silenziatore piatto su base esagonale  
*Flat silencer on hexagonal base*

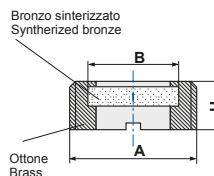
| CODICE   | A            | B  | F  | H  |  |  |  |
|----------|--------------|----|----|----|--|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SEP18    | 1/8" BSP     | 11 | 6  | 14 |  | 13                                                                                  | 100                                                                                 |
| SEP14    | 1/4" BSP     | 14 | 7  | 17 |  | 16                                                                                  | 50                                                                                  |
| SEP38    | 3/8" BSP     | 17 | 8  | 18 |  | 19                                                                                  | 25                                                                                  |
| SEP12    | 1/2" BSP     | 22 | 10 | 20 |  | 24                                                                                  | 25                                                                                  |
| SEP34    | 3/4" BSP     | 28 | 10 | 23 |  | 30                                                                                  | 5                                                                                   |
| SEP01    | 1" BSP       | 35 | 12 | 25 |  | 36                                                                                  | 5                                                                                   |
| SEP5MA   | M5"          | 7  | 5  | 12 |  | 8                                                                                   | 100                                                                                 |
| SEP18FEM | 1/8" FEM BSP | 11 | 7  | 17 |  | 14                                                                                  | 50                                                                                  |
|          |              |    |    |    |  |                                                                                     |                                                                                     |
|          |              |    |    |    |  |                                                                                     |                                                                                     |



### ART. SP

Silenziatore piatto a scomparsa  
*Retractable flat silencer*

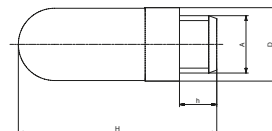
| CODICE | A        |  | B  | H  |  |  |
|--------|----------|--|----|----|--|-------------------------------------------------------------------------------------|
| SP18   | 1/8" BSP |  | 6  | 5  |  | 100                                                                                 |
| SP14   | 1/4" BSP |  | 8  | 6  |  | 50                                                                                  |
| SP38   | 3/8" BSP |  | 10 | 7  |  | 25                                                                                  |
| SP12   | 1/2" BSP |  | 15 | 8  |  | 25                                                                                  |
| SP34   | 3/4" BSP |  | 20 | 9  |  | 5                                                                                   |
| SP01   | 1" BSP   |  | 26 | 10 |  | 5                                                                                   |
|        |          |  |    |    |  |                                                                                     |
|        |          |  |    |    |  |                                                                                     |



**ART. SPL-P**

Silenziatore in polietilene con base filettata  
*Polyethylene silencer with threaded base*

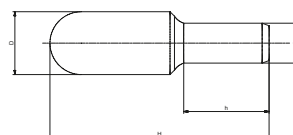
| CODICE  | A   | D    | H     | h    |  |
|---------|-----|------|-------|------|-----------------------------------------------------------------------------------|
| SPLP-M5 | M5  | 6,5  | 21,5  | 4,0  | 50                                                                                |
| SPLP-18 | 1/8 | 12,5 | 34,0  | 5,5  | 50                                                                                |
| SPLP-14 | 1/4 | 15,5 | 42,5  | 8,0  | 50                                                                                |
| SPLP-38 | 3/8 | 18,5 | 67,5  | 11,5 | 50                                                                                |
| SPLP-12 | 1/2 | 23,5 | 77,5  | 11,0 | 50                                                                                |
| SPLP-34 | 3/4 | 38,5 | 131,5 | 16,0 | 50                                                                                |
| SPLP-1  | 1"  | 49,0 | 161,0 | 21,0 | 50                                                                                |
|         |     |      |       |      |                                                                                   |
|         |     |      |       |      |                                                                                   |
|         |     |      |       |      |                                                                                   |



**ART. SPL-R**

Silenziatore in polietilene con base a codolo  
*Polyethylene silencer with plug base*

| CODICE  | A    | D    | H    | h    |  |
|---------|------|------|------|------|-----------------------------------------------------------------------------------|
| SPLR-04 | 4,0  | 7,0  | 32,0 | 16,0 | 50                                                                                |
| SPLR-06 | 6,0  | 12,5 | 45,0 | 20,5 | 50                                                                                |
| SPLR-08 | 8,0  | 13,5 | 43,5 | 21,5 | 50                                                                                |
| SPLR-10 | 10,0 | 15,5 | 57,5 | 26,5 | 50                                                                                |
| SPLR-12 | 12,0 | 18,5 | 82,0 | 29,0 | 50                                                                                |
|         |      |      |      |      |                                                                                   |
|         |      |      |      |      |                                                                                   |
|         |      |      |      |      |                                                                                   |
|         |      |      |      |      |                                                                                   |



## INFORMAZIONI TECNICHE AGGIUNTIVE

Tutti silenziatori per aria compressa illustrati nel catalogo sono stati classificati in base a riscontri oggettivi avuti a seguito di prove di flusso e prove di rumore a cui sono stati sottoposti dal costruttore. Le prove di portata sono state eseguite variando la pressione a monte tramite il regolatore di pressione. Le prove di rumore sono state eseguite in ambiente di lavoro a due livelli di pressione: 6 bar e a 4 bar.

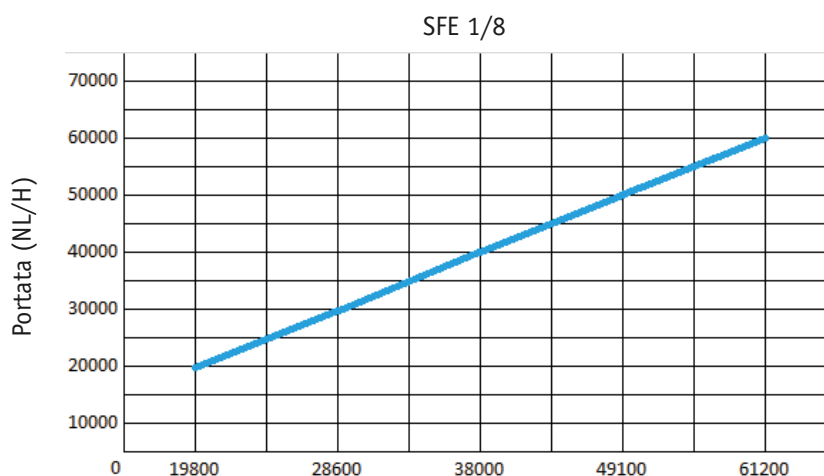
A titolo esemplificativo riportiamo di seguito il diagramma di portata relativo al modello SFE18 e una tabella riepilogativa dei livelli di rumore rilevati alla pressione di 6 bar sui modelli a maggiore movimentazione (considerare che a 4 bar tali valori si abbassano mediamente di un 3-6% circa in funzione del modello e della misura).

## ADDITIONAL TECHNICAL INFORMATION

*All silencers for air compressed illustrated ON the catalog have been classified according to objective evidence got as a result of flow tests and noise tests to which they were subjected by the manufacturer. The flow tests were carried out by varying the pressure upstream via the pressure regulator. The noise tests have been performed in the work environment at two pressure levels: 6 bar and 4 bar.*

*As an example is shown below the flow chart for the model SFE18 and a summary table of the levels of noise measured at a pressure of 6 bar on the main models (consider that at 4 bar such values fall on average values of about 3-6% depending on the model and size).*

| Modello | Livelli di rumore a 6 BAR (dB) Noise level at 6 BAR |     |     |     |     |    |
|---------|-----------------------------------------------------|-----|-----|-----|-----|----|
|         | 1/8                                                 | 1/4 | 3/8 | 1/2 | 3/4 | 1" |
| SBE     | 75                                                  | 81  | 82  | 85  |     |    |
| SEB     | 79                                                  | 78  | 82  | 85  | 94  | 95 |
| SEP     | 73                                                  | 74  | 85  | 89  | 89  | 90 |
| SFE     | 74                                                  | 72  | 88  | 90  | 90  | 92 |
| SP      | 72                                                  | 73  | 84  | 88  | 88  | 89 |
| SVE     | 72                                                  | 73  | 84  | 88  | 88  | 89 |
|         |                                                     |     |     |     |     |    |
| SPL     | 87                                                  | 84  | 90  | 90  | 91  | 90 |
| SPLF    | 87                                                  | 90  | 92  | 92  |     |    |





## BREVE DESCRIZIONE

I silenziatori metallici in filo d'acciaio inox, bronzo, ottone, polvere di bronzo e acciaio inox sono prodotti in Italia in conformità alla normativa ISO 9002 e costituiscono la soluzione ad ogni tipo di esigenza, dalla depurazione di fluidi (liquidi e gassosi) all'assorbimento dei rumori e degli urti di liquidi e gas.

## SHORT DESCRIPTION

*The silencers metal wire stainless steel, bronze, brass, bronze powder and stainless steel are produced in Italy in accordance with ISO 9002 and are the solution to every need, from the purification of fluids (liquids and gases) to shock and noise absorption of liquids and gases.*

## SCHEDA TECNICA TECHNICAL SHEET

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                        |
|------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>            | Fluidi liquidi e gassosi, aria compressa (per specifiche contattare il nostro UT)<br><i>Liquids and gases, compressed air (for information contact our UT)</i>                                                                                                                                                                                                                                 |                                                                                                                                                        |
| APPLICAZIONI<br><i>APPLICATIONS</i>                        | Apparecchiature pneumatiche, sistemi di filtraggio, riduzione, abbattimento e protezione connessi all'uso di fluidi.<br><i>Pneumatic equipment, filtration systems, reduction, abatement and protection related to the use of fluids.</i>                                                                                                                                                      |                                                                                                                                                        |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                 | Normalmente non applicati direttamente a tubi, comunque presenti negli impianti e definiti in funzione delle applicazioni.<br><i>Normally not applied directly to pipes, however defined according to the applications.</i>                                                                                                                                                                    |                                                                                                                                                        |
| TEMPERATURE E PRESSIONI<br><i>TEMPERATURE AND PRESSURE</i> | Nelle applicazioni pneumatiche si uniformano ai requisiti degli altri componenti, quali la raccorderia, l'elemento saliente, il livello di rumore massimo, viene determinato a 4 e a 6 bar.<br><i>In pneumatic applications they follow the requirements of other similar components, such as fittings, the salient element, the maximum noise level, is anyway determined at 4 and 6 bar.</i> |                                                                                                                                                        |
| FILETTATURE<br><i>THREAD TYPE</i>                          | BSP gas cilindrica non nichelata (nichelato di serie solo nel modello SC).<br><i>BSP pipe thread no nickel (standard nickel-plated on SC model only).</i>                                                                                                                                                                                                                                      |                                                                                                                                                        |
| MATERIALI<br><i>MATERIALS</i>                              | corpi<br><i>bodies</i>                                                                                                                                                                                                                                                                                                                                                                         | Ottone, acciaio inox, acciaio ramato, resina acetilica e nylon (corpi).<br><i>Brass, stainless steel, copper-plated steel, acetal resin and nylon.</i> |
|                                                            | filo<br><i>seals</i>                                                                                                                                                                                                                                                                                                                                                                           | acciaio inox.<br><i>stainless steel.</i>                                                                                                               |
|                                                            | filtri<br><i>filters</i>                                                                                                                                                                                                                                                                                                                                                                       | bronzo sinterizzato.<br><i>sintered bronze.</i>                                                                                                        |

ART. 83892600

Ugello rotondo a più canali ABS  
Circular multi-channel nozzle ABS

**Pezzo di precisione stampato in plastica antiurto POM.**

In questo modello sono incorporati tutti i pregi dell'ugello piatto, in più ne amplia il campo d'impiego ed è pure idoneo per un impiego fisso.

Note: la forza soffiante è stata misurata a 50 mm dall'uscita e i valori sulla rumorosità sono dentro i parametri DIN 45645.

Nel montaggio di questo ugello a più canali, deve essere sfruttata tutta la lunghezza del pezzo filettato.

**Dimensioni:**

55 x 23 x 10

(lunghezza x diametro est. x lunghezza filettatura)

**Raccordo del tubo:**

R1/4" (filettatura esterna all'imbocco)

**Caratteristiche:**

antiurto sino a -40°C

indeformabile sino a +90°C

resistente a combustibili, oli minerali, lubrificanti e ogni tipo di solvente.

Cod. 838.926

**Circular multi-channel nozzle POM.**

Material: impact-resistant plastic

This model combines the undisputed advantages of the flat jet nozzle with a broader range of application and is ideal for stationary tasks.

Note: the blowing force was measured 50 mm in front of the nozzle. The sound levels were measured in compliance with DIN 45635.

When installing the multi-channel nozzles, the full thread length should be used.

**Dimensions:**

55 x 23 x 10

(L x ext. diam. x thread length)

**Pipe connection:**

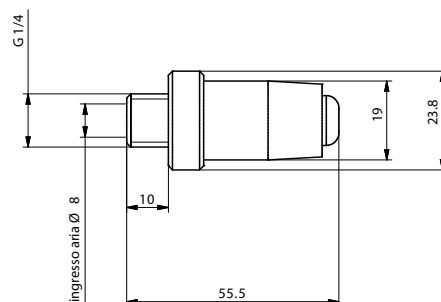
R 1/4" (external thread on air inlet)

**Characteristics:**

Impact-resistant down to -40°C

Dimensional stability up to +90°C

Resistant to fuels, mineral oils, lubricants and commonly used solvents.



ART. 923702

Ugello rotondo a più canali AL  
Circular multi-channel nozzle AL

**Pezzo di precisione stampato in alluminio.**

Raccomandato in particolari condizioni d'impiego es. fonderia.

Campo d'impiego principale: pistole ad aria.

Note: la forza soffiante è stata misurata a 50 mm dall'uscita e i valori sulla rumorosità sono dentro i parametri DIN 45645.

**Dimensioni:**

31,5 x 18,5 x 8 (lunghezza x diametro est. x lunghezza filettatura)

**Raccordo per tubo:**

R1/4" (filettatura esterna all'imbocco)

Codice: 923.702

**Material: aluminium.**

Recommended for particularly harsh operating conditions, such as high temperatures (foundries, etc.) Principle application: blow guns.

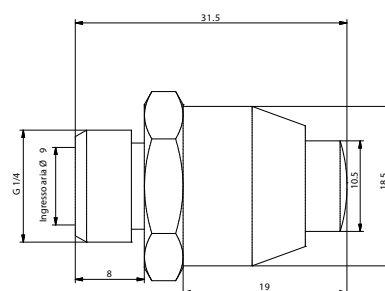
Note: the blowing force was measured 50 mm in front of the nozzle. The sound levels were measured in compliance with DIN 45635.

**Dimensions:**

31.5 x 18.5 x 8 (L x ext. diam. x thread length)

**Pipe connection:**

R 1/4" (external thread on air inlet)



ART. 06952300T

Ugello piatto a più canali  
Multi-channel flat jet nozzle

**Titan Jet**

**Dimensioni:**

90 x 47 x 14.5

(lunghezza x larghezza x altezza)

**Tubo di raccordo:**

R1/4" (filettatura esterna sul tubo di entrata)

**Caratteristiche:**

Antiurto sino a -40° C

Indeformabile sino a +90°C

Resistente a combustibili, oli minerali o solventi di ogni tipo.

**Fornibile come:**

Ugello piatto a più canali.

**La forza soffiante mirata.**

La disposizione parallela dei getti d'aria, permette di avere un ampio raggio di soffiatura nei pezzi trasportati.

Anche pezzi di piccole dimensioni lavorati su torni automatici, possono venire investiti da un getto d'aria ben preciso.

La nuova forma ne permette la totale intercambiabilità con i modelli presenti sul mercato e garantisce un aumento della linea di soffiature.

**Dimensions:**

90 x 47 x 14,5 (LxWxH)

**Pipe connection:**

R 1/4 " (external thread on air inlet)

**Characteristics:**

Impact-resistant down to -40°C

Dimensional stability up to +90°C

Resistant to fuels, mineral oils, lubricants and commonly used solvents

**Form of delivery:**

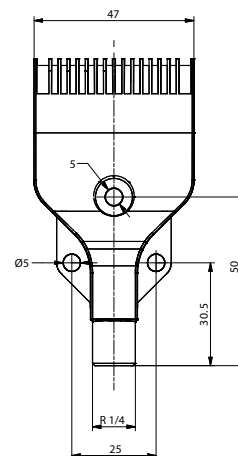
Multi-channel flat jet nozzle

**Concentrated blowing power.**

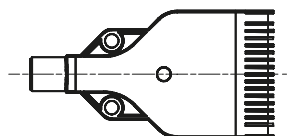
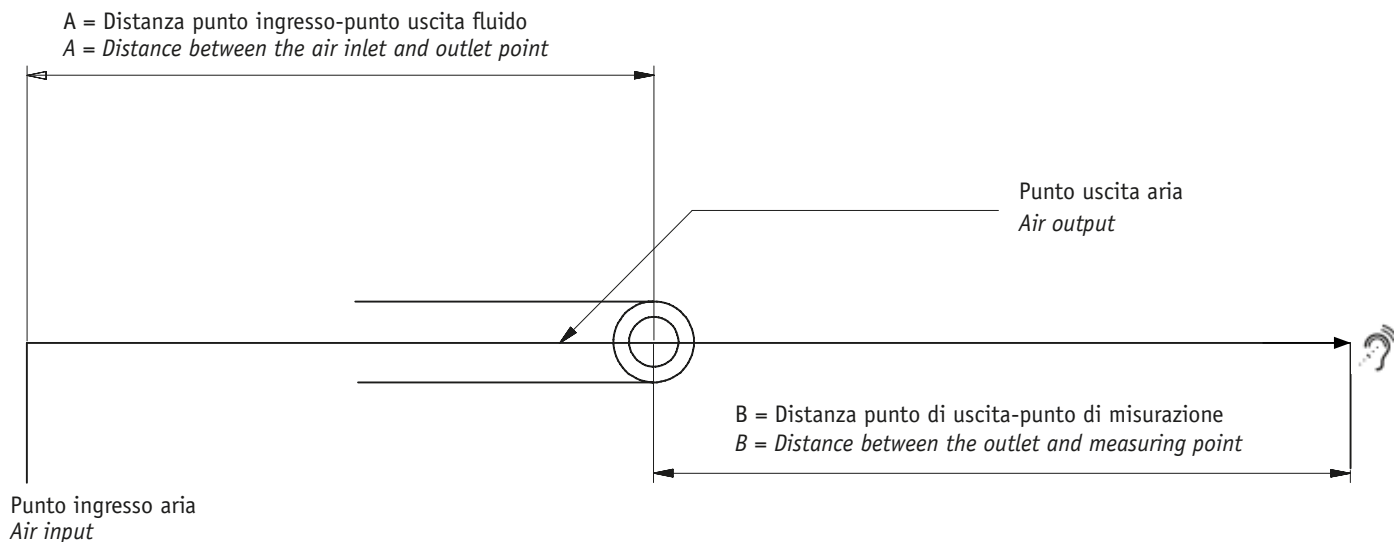
The parallel arrangement of the component air streams gives an optimum blow-out width for work piece conveyance.

Even the smallest finished parts, e.g. on lathes, can be accurately and efficiently blown out.

The new design enables the interchangeability with the main models available on the market and grant a larger blow-out line.

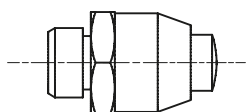


## Test livello sonoro • *Noise level test*



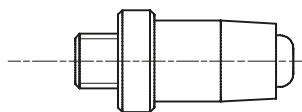
| Ugello Piatto a più canali<br><i>Multi channels flat nozzle</i> |                                            |
|-----------------------------------------------------------------|--------------------------------------------|
| Pressione ingresso (Bar)<br><i>Input pressure (Bar)</i>         | Picco Massimo (dB)<br><i>Max peak (dB)</i> |
| 2                                                               | 61                                         |
| 4                                                               | 66                                         |
| 6                                                               | 71                                         |
| 8                                                               | 75                                         |

A = 270 mm  
B = 400 mm



| Ugello tondo in alluminio<br><i>Aluminium round nozzle</i> |                                            |
|------------------------------------------------------------|--------------------------------------------|
| Pressione ingresso (Bar)<br><i>Input pressure (Bar)</i>    | Picco Massimo (dB)<br><i>Max peak (dB)</i> |
| 2                                                          | 65                                         |
| 4                                                          | 69                                         |
| 6                                                          | 75                                         |
| 8                                                          | 79                                         |

A = 200 mm  
B = 400 mm



| Ugello tondo in plastica<br><i>Plastic round nozzle</i> |                                            |
|---------------------------------------------------------|--------------------------------------------|
| Pressione ingresso (Bar)<br><i>Input pressure (Bar)</i> | Picco Massimo (dB)<br><i>Max peak (dB)</i> |
| 2                                                       | 65                                         |
| 4                                                       | 69                                         |
| 6                                                       | 75                                         |
| 8                                                       | 79                                         |

A = 240 mm  
B = 400 mm

**BREVE DESCRIZIONE**

Gli ugelli soffianti a pettine (Titan-Jet) e rotondi (in alluminio e tecnopolimero) sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

**SHORT DESCRIPTION**

*The multi-channels flow nozzles, flat (Titan-Jet) and circular (in aluminium and plastic), are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.*

**SCHEDA TECNICA TECHNICAL SHEET**

|                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>            | Fluidi liquidi e gassosi, aria compressa (per specifiche contattare il nostro UT)<br><i>Liquids and gases, compressed air (for information contact our UT)</i>                                                                                                                                                                                                                                                                                                             |
| APPLICAZIONI<br><i>APPLICATIONS</i>                        | Sistemi di pulizia e raffreddamento fluido, abbattimento rumore, impieghi come cortine d'aria. Linee di irrigazione<br><i>Fluid methods for cleaning and cooling fluid, noise abatement, uses as air curtains, irrigation systems</i>                                                                                                                                                                                                                                      |
| TUBI DI COLLEGAMENTO<br><i>CONNECTING TUBES</i>            | Normalmente non applicati direttamente a tubi, comunque presenti negli impianti e definiti in funzione delle applicazioni<br><i>Normally not applied directly to pipes, however defined according to the applications</i>                                                                                                                                                                                                                                                  |
| TEMPERATURE E PRESSIONI<br><i>TEMPERATURE AND PRESSURE</i> | Nelle applicazioni pneumatiche si uniformano ai requisiti degli altri componenti, stesso materiale, quali la raccorderia. Nelle versioni in POM l'indefornabilità è garantita fino a +90°C mentre la resistenza agli urti fino a -40°C<br><i>In pneumatic applications they follow the requirements of other same materials components, such as fittings. In the POM versions indeformability is guaranteed up to + 90 °C, while the impact resistance down to -40 °C.</i> |
| FILETTATURE<br><i>THREAD TYPE</i>                          | BSPP 1/4 gas cilindrica<br><i>BSPP 1/4 gas parallel</i>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| MATERIALI<br><i>MATERIALS</i>                              | ABS-GP40 norme ASTM/IEC/UL (modello piatto)<br>POM antiurto (modello rotondo)<br>Alluminio (modello rotondo AL)<br><i>ABS-GP40 norms ASTM/IEC/UL (flat model)</i><br><i>POM shockproof (round model)</i><br><i>Aluminium (round model AL)</i>                                                                                                                                                                                                                              |

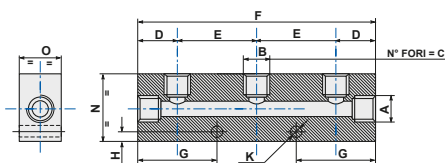


FIGURA 1

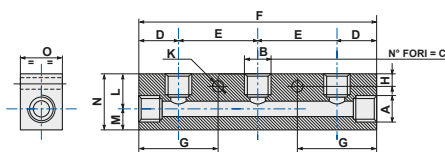


FIGURA 2

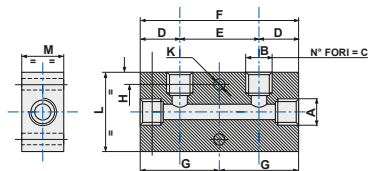


FIGURA 3



# ART. RIPUL

Ripartitori con uscite lineari  
In-line output manifolds

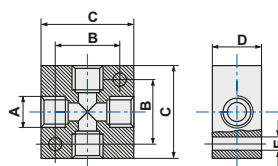
| CODICE    | FIG. | A    | B    | C | D  | E  | F   | G  | H   | K    | L  | M  | N  | O  | FILETTATURA / THREAD |   |
|-----------|------|------|------|---|----|----|-----|----|-----|------|----|----|----|----|----------------------|---|
| RIPUL1512 | 3    | 1/4" | 1/8" | 2 | 15 | 30 | 60  | 30 | 4,5 | 5,25 |    |    | 30 | 20 | 4 VIE 2-1/4" 2-1/8"  | 5 |
| RIPUL1513 | 1    | 1/4" | 1/8" | 3 | 15 | 30 | 90  | 30 | 4,5 | 5,25 |    |    | 30 | 20 | 5 VIE 2-1/4" 3-1/8"  | 5 |
| RIPUL1514 | 1    | 1/4" | 1/8" | 4 | 15 | 30 | 120 | 30 | 4,5 | 5,25 |    |    | 30 | 20 | 6 VIE 2-1/4" 4-1/8"  | 5 |
| RIPUL1515 | 1    | 1/4" | 1/8" | 5 | 15 | 30 | 150 | 30 | 4,5 | 5,25 |    |    | 30 | 20 | 7 VIE 2-1/4" 5-1/8"  | 5 |
| RIPUL1516 | 1    | 1/4" | 1/8" | 6 | 15 | 30 | 180 | 30 | 4,5 | 5,25 |    |    | 30 | 20 | 8 VIE 2-1/4" 6-1/8"  | 5 |
| RIPUL1522 | 3    | 3/8" | 1/4" | 4 | 18 | 36 | 72  | 36 | 6   | 6,5  |    |    | 40 | 20 | 4 VIE 2-3/8" 2-1/4"  | 5 |
| RIPUL1523 | 2    | 3/8" | 1/4" | 3 | 18 | 36 | 108 | 36 | 6   | 6,5  | 19 | 11 | 30 | 20 | 5 VIE 2-3/8" 3-1/4"  | 5 |
| RIPUL1524 | 2    | 3/8" | 1/4" | 4 | 18 | 36 | 144 | 36 | 6   | 4,5  | 19 | 11 | 30 | 20 | 6 VIE 2-3/8" 4-1/4"  | 5 |
| RIPUL1525 | 2    | 3/8" | 1/4" | 5 | 18 | 36 | 180 | 36 | 6   | 6,5  | 19 | 11 | 30 | 20 | 7 VIE 2-3/8" 5-1/4"  | 5 |
| RIPUL1526 | 2    | 3/8" | 1/4" | 6 | 18 | 36 | 216 | 36 | 6   | 6,5  | 19 | 11 | 30 | 20 | 8 VIE 2-3/8" 6-1/4"  | 5 |
| RIPUL1542 | 3    | 1/2" | 1/4" | 2 | 22 | 36 | 80  | 40 | 6   | 6,5  |    |    | 40 | 28 | 4 VIE 2-1/2" 2-1/4"  | 5 |
| RIPUL1543 | 1    | 1/2" | 1/4" | 3 | 22 | 36 | 116 | 40 | 6   | 6,5  |    |    | 40 | 28 | 5 VIE 2-1/2" 3-1/4"  | 5 |
| RIPUL1544 | 1    | 1/2" | 1/4" | 4 | 22 | 36 | 152 | 40 | 6   | 6,5  |    |    | 40 | 28 | 6 VIE 2-1/2" 4-1/4"  | 5 |
| RIPUL1545 | 1    | 1/2" | 1/4" | 5 | 22 | 36 | 188 | 40 | 6   | 6,5  |    |    | 40 | 28 | 7 VIE 2-1/2" 5-1/4"  | 5 |
| RIPUL1546 | 1    | 1/2" | 1/4" | 6 | 22 | 36 | 224 | 40 | 6   | 6,5  |    |    | 40 | 28 | 8 VIE 2-1/2" 6-1/4"  | 5 |
| RIPUL1552 | 3    | 1/2" | 3/8" | 2 | 22 | 36 | 80  | 40 | 6   | 6,5  |    |    | 40 | 28 | 4 VIE 2-1/2" 2-3/8"  | 5 |
| RIPUL1553 | 1    | 1/2" | 3/8" | 3 | 22 | 36 | 116 | 40 | 6   | 6,5  |    |    | 40 | 28 | 5 VIE 2-1/2" 3-3/8"  | 5 |
| RIPUL1554 | 1    | 1/2" | 3/8" | 4 | 22 | 36 | 152 | 40 | 6   | 6,5  |    |    | 40 | 28 | 6 VIE 2-1/2" 4-3/8"  | 5 |
| RIPUL1555 | 1    | 1/2" | 3/8" | 5 | 22 | 36 | 188 | 40 | 6   | 6,5  |    |    | 40 | 28 | 7 VIE 2-1/2" 5-3/8"  | 5 |
| RIPUL1556 | 1    | 1/2" | 3/8" | 6 | 22 | 36 | 224 | 40 | 6   | 6,5  |    |    | 40 | 28 | 8 VIE 2-1/2" 6-3/8"  | 5 |
|           |      |      |      |   |    |    |     |    |     |      |    |    |    |    |                      |   |
|           |      |      |      |   |    |    |     |    |     |      |    |    |    |    |                      |   |



**ART. RIP4V**

Ripartitore a 4 vie  
Aluminium cross manifold

| CODICE    | A    | B  | C  | D  | E   |    |
|-----------|------|----|----|----|-----|----|
| RIP4V1815 | 1/8" | 17 | 25 | 15 | 4,5 | 25 |
| RIP4V1816 | 1/8" | 23 | 30 | 16 | 4,5 | 25 |
| RIP4V1418 | 1/4" | 23 | 30 | 18 | 4,5 | 25 |
| RIP4V1420 | 1/4" | 26 | 40 | 20 | 5,5 | 25 |
| RIP4V3820 | 3/8" | 30 | 40 | 20 | 5,5 | 10 |
| RIP4V3825 | 3/8" | 33 | 50 | 25 | 5,5 | 10 |
| RIP4V1230 | 1/2" | 33 | 50 | 30 | 5,5 | 10 |


**ART. RIPUC**

Ripartitori con uscite contrapposte  
Opposite output manifolds

| CODICE     | FIG. | A    | B    | C  | D  | E  | F   | G  | H   | K    | L  | M  | FILETTATURA<br>THREAD |   |
|------------|------|------|------|----|----|----|-----|----|-----|------|----|----|-----------------------|---|
| RIPUC15122 | 1    | 1/4" | 1/8" | 4  | 15 | 30 | 60  | 30 | 4,5 | 5,25 | 30 | 20 | 6 VIE 2-1/4" 4-1/8"   | 5 |
| RIPUC15133 | 2    | 1/4" | 1/8" | 6  | 15 | 30 | 90  | 30 | 4,5 | 5,25 | 30 | 20 | 8 VIE 2 1/4" 6-1/8"   | 5 |
| RIPUC15144 | 2    | 1/4" | 1/8" | 8  | 15 | 30 | 120 | 30 | 4,5 | 5,25 | 30 | 20 | 10 VIE 2-1/4" 8-1/8"  | 5 |
| RIPUC15155 | 2    | 1/4" | 1/8" | 10 | 15 | 30 | 150 | 30 | 4,5 | 5,25 | 30 | 20 | 12 VIE 2-1/4" 10-1/8" | 5 |
| RIPUC15222 | 1    | 3/8" | 1/4" | 4  | 18 | 36 | 72  | 36 | 6   | 6,5  | 40 | 20 | 6 VIE 2-3/8" 4-1/4"   | 5 |
| RIPUC15233 | 2    | 3/8" | 1/4" | 6  | 18 | 36 | 108 | 36 | 6   | 6,5  | 40 | 20 | 8 VIE 2-3/8" 6-1/4"   | 5 |
| RIPUC15244 | 2    | 3/8" | 1/4" | 8  | 18 | 36 | 144 | 36 | 6   | 6,5  | 40 | 20 | 10 VIE 2-3/8" 8-1/4"  | 5 |
| RIPUC15255 | 2    | 3/8" | 1/4" | 10 | 18 | 36 | 180 | 36 | 6   | 6,5  | 40 | 20 | 12 VIE 2-3/8" 10-1/4" | 5 |
| RIPUC15422 | 1    | 1/2" | 1/4" | 4  | 22 | 36 | 80  | 40 | 6   | 6,5  | 40 | 28 | 6 VIE 2-1/2" 4-1/4"   | 5 |
| RIPUC15433 | 2    | 1/2" | 1/4" | 6  | 22 | 36 | 116 | 40 | 6   | 6,5  | 40 | 28 | 8 VIE 2-1/2" 6-1/4"   | 5 |
| RIPUC15444 | 2    | 1/2" | 1/4" | 8  | 22 | 36 | 152 | 40 | 6   | 6,5  | 40 | 28 | 10 VIE 2-1/2" 8-1/4"  | 5 |
| RIPUC15455 | 2    | 1/2" | 1/4" | 10 | 22 | 36 | 188 | 40 | 6   | 6,5  | 40 | 28 | 12 VIE 2-1/2" 10-1/4" | 5 |
| RIPUC15522 | 1    | 1/2" | 3/8" | 4  | 22 | 36 | 80  | 40 | 6   | 6,5  | 40 | 28 | 6 VIE 2-1/2" 4-3/8"   | 5 |
| RIPUC15533 | 2    | 1/2" | 3/8" | 6  | 22 | 36 | 116 | 40 | 6   | 6,5  | 40 | 28 | 8 VIE 2-1/2" 6-3/8"   | 5 |
| RIPUC15544 | 2    | 1/2" | 3/8" | 8  | 22 | 36 | 152 | 40 | 6   | 6,5  | 40 | 28 | 10 VIE 2-1/2" 8-3/8"  | 5 |
| RIPUC15555 | 2    | 1/2" | 3/8" | 10 | 22 | 36 | 188 | 40 | 6   | 6,5  | 40 | 28 | 12 VIE 2-1/2" 10-3/8" | 5 |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |
|            |      |      |      |    |    |    |     |    |     |      |    |    |                       |   |

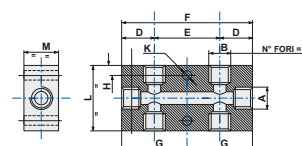


FIGURA 1

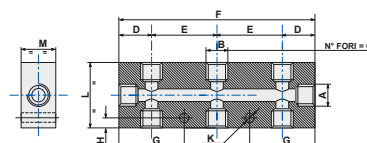


FIGURA 2



## BREVE DESCRIZIONE

I ripartitori in alluminio si inseriscono nella circuiteria pneumatica come elemento compatto e modulare per la distribuzione dell'aria compressa.

## SHORT DESCRIPTION

*The aluminum manifolds are inserted in the pneumatic circuitry as a compact and modular element for the distribution of compressed air.*

## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                          |                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>          |                                                                                                                                                                                                                                                                                                                                       | Aria compressa (per altri fluidi contattare il nostro Ufficio Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                        |
| APPLICAZIONI<br><i>APPLICATIONS</i>                      |                                                                                                                                                                                                                                                                                                                                       | Le temperature sono comprese nell'intervallo dell'ambiente di lavoro (da -20°C a +130°C), la pressione massima di esercizio é <12 bar.<br><i>The temperatures are within the range of the working environment (from -20 ° C to + 130 ° C), the maximum operating pressure is &lt;12 bar.</i> |
| CARATTERISTICHE TECNICHE<br><i>TECHNICAL FEATURES</i>    | TEMPERATURE E PRESSIONI<br><i>TEMPERATURE AND PRESSURE</i>                                                                                                                                                                                                                                                                            | Le temperature sono comprese nell'intervallo dell'ambiente di lavoro (da -20°C a +100°C), la pressione massima di esercizio é <12 bar.<br><i>The temperatures are within the range of the working environment (from -20° C to + 100° C), the maximum operating pressure is &lt;12 bar.</i>   |
|                                                          | FILETTATURE<br><i>THREAD TYPE</i>                                                                                                                                                                                                                                                                                                     | BSP cilindrica ISO 228<br><i>BSP parallel UNI-ISO 228</i>                                                                                                                                                                                                                                    |
|                                                          | MATERIALE<br><i>MATERIAL</i>                                                                                                                                                                                                                                                                                                          | Lega EN-AW-6005-T6 estrusa secondo normativa UNI EN 755-2:2016<br><i>EN-AW-6005-T6 alloy extruded according to UNI EN 755-2: 2016</i>                                                                                                                                                        |
| CARATTERISTICHE MECCANICHE<br><i>MECHANICAL FEATURES</i> | Rm (Carico di rottura minimo)<br><i>Rm (Minimum breaking load)</i>                                                                                                                                                                                                                                                                    | 255 Mpa                                                                                                                                                                                                                                                                                      |
|                                                          | Rp 0,2 (Tensione di snervamento)<br><i>Rp 0,2 (yield strenght)</i>                                                                                                                                                                                                                                                                    | 215 Mpa                                                                                                                                                                                                                                                                                      |
|                                                          | Allungamento % minimo<br><i>Minimum elongation %</i>                                                                                                                                                                                                                                                                                  | 8mm                                                                                                                                                                                                                                                                                          |
|                                                          | Durezza tipica<br><i>Typical hardness</i>                                                                                                                                                                                                                                                                                             | 85 HBW (brinell)                                                                                                                                                                                                                                                                             |
|                                                          | 1 Mpa                                                                                                                                                                                                                                                                                                                                 | =10,1972 Kg/cm2                                                                                                                                                                                                                                                                              |
| NOTA<br><i>NOTE</i>                                      | Questi valori, indicati nella norma 755-2, si intendono per profilo soggetto a trazione meccanica, non ad un carico applicato diversamente (laterale, in punta).<br><i>These values, indicated in the 755-2 standard, refer to a profile subject to mechanical traction, not to a differently applied load (lateral, at the tip).</i> |                                                                                                                                                                                                                                                                                              |

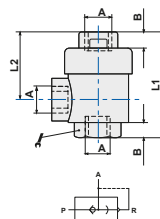


**ART. 503**

Valvola scarico rapido in ottone  
*Brass quick exhaust valve*

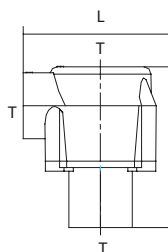
| CODICE | A    | B  | L1   | L2   |  |  |  |
|--------|------|----|------|------|--|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| 50318  | G1/8 | 8  | 42   | 28   |  | 14                                                                                | 25                                                                                |
| 50314  | G1/4 | 11 | 53,3 | 34,5 |  | 19                                                                                | 10                                                                                |
| 50338  | G3/8 | 12 | 58   | 36   |  | 21                                                                                | 10                                                                                |
| 50312  | G1/2 | 14 | 71   | 44   |  | 26                                                                                | 10                                                                                |
| 50334  | G3/4 | 18 | 86   | 52   |  | 32                                                                                | 2                                                                                 |
| 50301  | G1"  | 19 | 94   | 56   |  | 38                                                                                | 1                                                                                 |
| 50314P | G1/4 | 11 | 53,3 | 34,5 |  | 19                                                                                | 10                                                                                |

P: Tecnopolimero


**ART. JXQ**

Valvola di scarico rapido "Heavy Duty"  
*"Heavy Duty" quick exhaust valve*

| CODICE     | T   | H   | L  |  |  |  |  |
|------------|-----|-----|----|--|--|--|-----------------------------------------------------------------------------------|
| JXQ2000-06 | 3/4 | 112 | 92 |  |  |  | 1                                                                                 |
| JXQ2500-10 | 1"  | 112 | 92 |  |  |  | 1                                                                                 |
|            |     |     |    |  |  |  |                                                                                   |
|            |     |     |    |  |  |  |                                                                                   |
|            |     |     |    |  |  |  |                                                                                   |
|            |     |     |    |  |  |  |                                                                                   |

Di importazione  
*Imported*

**ART. UR**

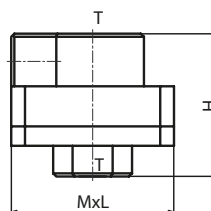
Pastiglia per valvola di scarico  
*Tablet for exhaust valve*

| CODICE | -         | A    | B   | Materiale |
|--------|-----------|------|-----|-----------|
| UR05   | M5        | 13,5 | 4,5 | NBR       |
| UR08   | 1/8       | 20,5 | 5   | PU        |
| UR17   | 1/4 - 3/8 | 25,5 | 5,8 | PU        |
| UR35   | 1/2       | 35,5 | 8,2 | PU        |
| UR44   | 3/4 - 1"  | 40,5 | 9   | PU        |
|        |           |      |     |           |
|        |           |      |     |           |
|        |           |      |     |           |


**ART. JAQ**

Valvola di scarico rapido "Cube"  
*"Cube" quick exhaust valve*

| CODICE     | T   | Mx | L  | H  |  |  |
|------------|-----|----|----|----|--|-------------------------------------------------------------------------------------|
| JAQ2000-01 | 1/8 | 45 | 45 | 40 |  | 1                                                                                   |
| JAQ2000-02 | 1/4 | 45 | 45 | 40 |  | 1                                                                                   |
| JAQ3000-02 | 1/4 | 56 | 56 | 50 |  | 1                                                                                   |
| JAQ3000-03 | 3/8 | 56 | 56 | 50 |  | 1                                                                                   |
| JAQ5000-04 | 1/2 | 85 | 85 | 75 |  | 1                                                                                   |
| JAQ5000-06 | 3/4 | 85 | 85 | 75 |  | 1                                                                                   |

Di importazione  
*Imported*


## CARATTERISTICHE TECNICHE VALVOLE SCARICO RAPIDO SERIE 503/503P

Condizioni generali di prova e prova di durata:

Fluid: Aria filtrata

Temperatura: 20 ° C

Pressione: 6 bar

Capacità serbatoio: 5 litri

### Risultati della prova

Le valvole in tecnopolimero hanno la stessa portata della versione in ottone, anche il tempo di pressurizzazione e di svuotamento del serbatoio è il medesimo.

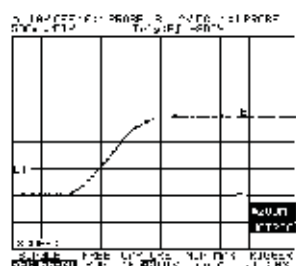
Il tempo di apertura e di scarico delle valvole non cambia variando la temperatura di esercizio, da -20 °C a +50°C.

La forza di strappo dei filetti per il tecnopolimero è inversamente proporzionale all'aumento della temperatura.

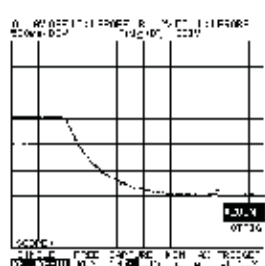
Sottoponendo le valvole ad un ciclo continuo di 50000 carichi/scarichi, alla pressione costante di 7 bar, il comportamento non ha evidenziato irregolarità.

### TEST SCARICO RAPIDO - VOLUME 5 LITRI

Versione in ottone - Brass version



tempo carica 1,5 secondi - load time 1,5 seconds



tempo carica 2 secondi - load time 2 seconds

## ADDITIONAL TECHNICAL FEATURES QUICK EXHAUST VALVES 503/503P SERIES

General test conditions and life test:

Fluid: Filtered air

Temperature: 20 ° C

Pressure: 6 bar

Tank capacity: 5 liters

### Test Results

The technopolymer valves have the same flow rate as the brass version, the time of pressurization and emptying of the tank is the same.

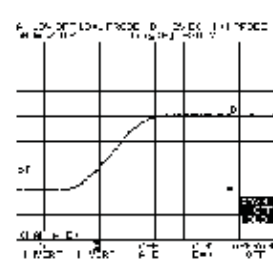
The opening and the exhaust time of the valves do not change by varying the operating temperature, from -20 ° C to +50 ° C.

The breakout of the threads, for the technopolymer version, is inversely proportional to the temperature rise.

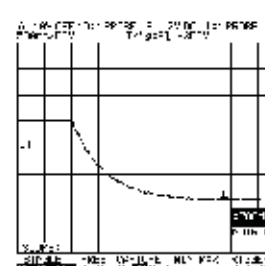
Subjecting the valves to 50,000 charge/discharge continuous cycles, at a constant pressure of 7 bar, the functioning was showing none irregularities.

### QUICK EXHAUST TEST - VOLUME 5 LITERS

Versione in tecnopolimero - Technopolymer version



tempo carica 1,5 secondi - load time 1,5 seconds



tempo carica 2 secondi - load time 2 seconds

| Valvola<br>Valve                         |           | Portata (l/min)<br>Flow rate (l/min) |      |
|------------------------------------------|-----------|--------------------------------------|------|
|                                          |           | PA                                   | AR   |
| 50314<br>ottone<br>brass                 | 6 bar p=1 | 1070                                 | 1590 |
|                                          | 6 bar max | 2050                                 | 2360 |
| 503P14<br>tecnopolimero<br>technopolymer | 6 bar p=1 | 1130                                 | 1590 |
|                                          | max       | 2170                                 | 2350 |

| RESISTENZA FILETTI (tecnopolimero)<br>THREADS RESISTANCE (technopolymer) |                                               |                                                |
|--------------------------------------------------------------------------|-----------------------------------------------|------------------------------------------------|
| Temperatura (°C)<br>Temperature (°C)                                     | Forza di rottura (Kgf)<br>Breaking load (Kgf) | Coppia di strappo (Nm)<br>Breakout torque (Nm) |
| +20°C                                                                    | 525                                           | 5,0                                            |
| +50°C                                                                    | 465                                           | 4,2                                            |
| -20°C                                                                    | 640                                           | 5,5                                            |

## BREVE DESCRIZIONE

Le valvole di scarico rapido serie 503, sono realizzate in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

*The quick exhaust valves and the manually valves, 503 series, are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.*

## SCHEDA TECNICA *TECHNICAL SHEET*

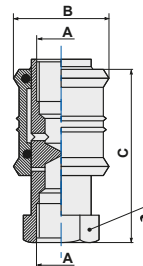
|                                                                   |                                                                                                                                                                                                                                                                                                             |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                   | Aria compressa (per altri fluidi contattare il nostro Uff. Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                          |
| APPLICAZIONI<br><i>APPLICATIONS</i>                               | Circuiti pneumatici<br><i>Pneumatic systems (503 Series)</i>                                                                                                                                                                                                                                                |
| TEMPERATURE<br>E PRESSIONI<br><i>TEMPERATURE<br/>AND PRESSURE</i> | Temperatura di esercizio da -20° a +50° °C<br>Pressione di esercizio da 0,30 a 10 bar<br><i>Working temperature from -20° to +50° °C<br/>Working pressure from 0,30 to 10 bar</i>                                                                                                                           |
| FILETTATURE<br><i>THREAD TYPE</i>                                 | BSPP gas cilindrica ISO 228<br><i>BSP cilindrica UNI-ISO 228</i>                                                                                                                                                                                                                                            |
| MATERIALI<br><i>MATERIALS</i>                                     | Ottone UNI EN 12165 CW617N (corpo, tappo)<br>POM copolimero ISO1043-1 (corpo, tappo versione "503P")<br>Elastomero poliuretanico (elemento di tenuta)<br><i>Brass UNI EN 12165 CW617N (body, plug)<br/>POM copolymer ISO1043-1 (body, plug "503P" version)<br/>Polyurethane elastomer (sealing element)</i> |



**ART. 504**

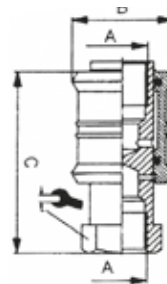
Valvola a corsoio manuale in alluminio  
*Hand slide valve*

| CODICE | A    | B  | C  |  |  |  |  |
|--------|------|----|----|-----------------------------------------------------------------------------------|--|--|-----------------------------------------------------------------------------------|
| 50418  | G1/8 | 25 | 40 | 14                                                                                |  |  | 10                                                                                |
| 50414  | G1/4 | 30 | 46 | 17                                                                                |  |  | 10                                                                                |
| 50438  | G3/8 | 35 | 52 | 21                                                                                |  |  | 10                                                                                |
| 50412  | G1/2 | 40 | 62 | 26                                                                                |  |  | 10                                                                                |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |
|        |      |    |    |                                                                                   |  |  |                                                                                   |


**ART. 505**

Valvola a corsoio manuale in ottone  
*Hand slide valve*

| CODICE | A    | B  | C    |  |  |  |  |
|--------|------|----|------|------------------------------------------------------------------------------------|--|--|------------------------------------------------------------------------------------|
| 505M5  | M5   | 14 | 30,5 | 10                                                                                 |  |  | 10                                                                                 |
| 50518  | G1/8 | 25 | 48   | 14                                                                                 |  |  | 10                                                                                 |
| 50514  | G1/4 | 30 | 58   | 19                                                                                 |  |  | 10                                                                                 |
| 50538  | G3/8 | 35 | 70   | 22                                                                                 |  |  | 10                                                                                 |
| 50512  | G1/2 | 40 | 75   | 27                                                                                 |  |  | 10                                                                                 |
| 50534  | G3/4 | 50 | 83   | 32                                                                                 |  |  | 10                                                                                 |
|        |      |    |      |                                                                                    |  |  |                                                                                    |
|        |      |    |      |                                                                                    |  |  |                                                                                    |
|        |      |    |      |                                                                                    |  |  |                                                                                    |
|        |      |    |      |                                                                                    |  |  |                                                                                    |
|        |      |    |      |                                                                                    |  |  |                                                                                    |
|        |      |    |      |                                                                                    |  |  |                                                                                    |



## BREVE DESCRIZIONE

Le valvole manuali serie 504-505, sono realizzate in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

## SHORT DESCRIPTION

*The manually valves, 504-505 series, are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.*

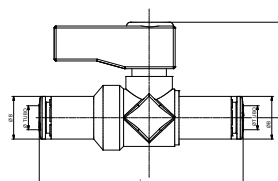
## SCHEDA TECNICA *TECHNICAL SHEET*

|                                                                   |                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TUBI DI COLLEGAMENTO<br><i>CONNECTING TUBES</i>                   | Normalmente non applicate direttamente a tubi, comunque presenti negli impianti e definiti in funzione delle applicazioni<br><i>Normally not applied directly to pipes, however defined according to the applications</i>                                                                                                     |
| TEMPERATURE<br>E PRESSIONI<br><i>TEMPERATURE<br/>AND PRESSURE</i> | Temperatura di esercizio da -20° a +70° °C<br>Pressione di esercizio max consigliata 10 bar<br><i>Working temperature from -20° to +70° °C<br/>Max suggested working pressure 10 bar</i>                                                                                                                                      |
| FILETTATURE<br><i>THREAD TYPE</i>                                 | BSPP gas cilindrica ISO 228<br><i>BSP cilindrica UNI-ISO 228</i>                                                                                                                                                                                                                                                              |
| MATERIALI<br><i>MATERIALS</i>                                     | Ottone UNI EN 12165 CW617N (corpo Serie 505)<br>Alluminio anodizzato (corpo Serie 504, corsoio Serie 504-505)<br>NBR 70 DWGV-EN549 UL157 (guarnizione tenuta)<br><i>Brass UNI EN 12165 CW617N (body 505 Series)<br/>Anodized aluminum (body 504 Series, slider 504-505 Series)<br/>NBR 70 DWGV-EN549 UL157 (seals gasket)</i> |

**ART. VSTT**

Valvola a sfera tubo/tubo  
Tube/tube ball valve

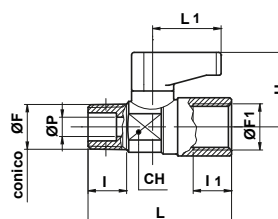
| CODICE   | A  | L  | Ø TUBO | ØB |   |
|----------|----|----|--------|----|---|
| VSTT0404 | 23 | 46 | 4      | 9  | 1 |
| VSTT0606 | 23 | 50 | 6      | 11 | 1 |
| VSTT0808 | 23 | 52 | 8      | 13 | 1 |
|          |    |    |        |    |   |
|          |    |    |        |    |   |
|          |    |    |        |    |   |
|          |    |    |        |    |   |



**ART. 4010**

Valvola a sfera maschio conico/femmina  
Tapered male/female ball valve

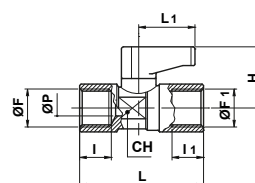
| CODICE   | F   | F1  | P   | I    | I1 | L    | L1 | H    |    |   |
|----------|-----|-----|-----|------|----|------|----|------|----|---|
| 40100900 | 1/8 | 1/8 | 5,5 | 8    | 8  | 35,5 | 19 | 21,5 | 14 | 1 |
| 40101800 | 1/4 | 1/8 | 5,5 | 11   | 8  | 38   | 19 | 21,5 | 14 | 1 |
| 40101900 | 1/4 | 1/4 | 5,5 | 11   | 11 | 40,5 | 19 | 21,5 | 14 | 1 |
| 40102800 | 3/8 | 1/4 | 5,5 | 11,5 | 11 | 41,5 | 19 | 21,5 | 14 | 1 |
| 40102900 | 3/8 | 3/8 | 7   | 13   | 16 | 48   | 19 | 22,5 | 18 | 1 |
| 40103900 | 1/2 | 1/2 | 10  | 17   | 23 | 58   | 25 | 25   | 22 | 1 |
|          |     |     |     |      |    |      |    |      |    |   |
|          |     |     |     |      |    |      |    |      |    |   |
|          |     |     |     |      |    |      |    |      |    |   |



**ART. 4000**

Valvola a sfera femmina/femmina  
Female/female ball valve

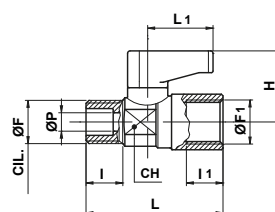
| CODICE   | F   | F1  | P   | I    | I1 | L    | L1 | H    |    |   |
|----------|-----|-----|-----|------|----|------|----|------|----|---|
| 40000900 | 1/8 | 1/8 | 5,5 | 8    | 8  | 36,5 | 19 | 21,5 | 14 | 1 |
| 40001900 | 1/4 | 1/4 | 5,5 | 11   | 11 | 41   | 19 | 21,5 | 14 | 1 |
| 40002900 | 3/8 | 3/8 | 7   | 11,5 | 16 | 48   | 19 | 22,5 | 18 | 1 |
| 40003900 | 1/2 | 1/2 | 10  | 16   | 23 | 59   | 25 | 32   | 32 | 1 |
|          |     |     |     |      |    |      |    |      |    |   |
|          |     |     |     |      |    |      |    |      |    |   |
|          |     |     |     |      |    |      |    |      |    |   |
|          |     |     |     |      |    |      |    |      |    |   |



**ART. 4020**

Valvole a sfera maschio cilindrico/femmina  
Parallel male/female ball valve

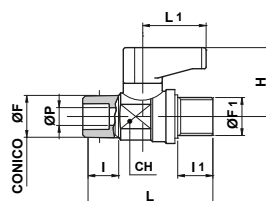
| CODICE   | F   | F1  | P   | I   | I1 | L    | L1 | H    |    |   |
|----------|-----|-----|-----|-----|----|------|----|------|----|---|
| 40200900 | 1/8 | 1/8 | 5,5 | 7   | 8  | 34,5 | 19 | 21,5 | 14 | 1 |
| 40201800 | 1/4 | 1/8 | 5,5 | 8   | 8  | 35,5 | 19 | 21,5 | 14 | 1 |
| 40201900 | 1/4 | 1/4 | 5,5 | 8   | 11 | 37,5 | 19 | 21,5 | 14 | 1 |
| 40202800 | 3/8 | 1/4 | 5,5 | 5,5 | 9  | 41   | 19 | 21,5 | 14 | 1 |
| 40202900 | 3/8 | 3/8 | 7   | 10  | 16 | 43   | 19 | 22,5 | 18 | 1 |
| 40203900 | 1/2 | 1/2 | 10  | 15  | 23 | 58   | 25 | 32   | 22 | 1 |
|          |     |     |     |     |    |      |    |      |    |   |
|          |     |     |     |     |    |      |    |      |    |   |
|          |     |     |     |     |    |      |    |      |    |   |



## ART. 4030

Valvola a sfera maschio conico/maschio cilindrico  
*Tapered/parallel male ball valve*

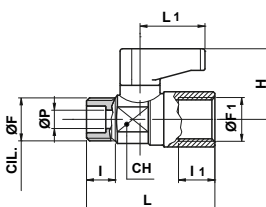
| CODICE   | F   | F1  | P   | I    | I1  | L    | L1 | H    |    |   |
|----------|-----|-----|-----|------|-----|------|----|------|----|---|
| 40300900 | 1/8 | 1/8 | 5,5 | 8    | 7   | 33   | 19 | 21,5 | 14 | 1 |
| 40301000 | 1/8 | 1/4 | 5,5 | 8    | 7,5 | 33,5 | 19 | 21,5 | 14 | 1 |
| 40301800 | 1/4 | 1/8 | 5,5 | 11   | 7   | 35,5 | 19 | 21,5 | 14 | 1 |
| 40301900 | 1/4 | 1/4 | 5,5 | 11   | 7,5 | 7,5  | 19 | 21,5 | 14 | 1 |
| 40302800 | 3/8 | 1/4 | 5,5 | 11,5 | 7,5 | 37   | 19 | 21,5 | 14 | 1 |
| 40302900 | 3/8 | 3/8 | 7   | 13   | 10  | 10   | 19 | 22,5 | 18 | 1 |
| 40303900 | 1/2 | 1/2 | 10  | 10   | 10  | 48   | 25 | 32   | 22 | 1 |



## ART. 4050

Valvola a sfera maschio conico attacco bicono  
*Tapered male ball valve bicone connection*

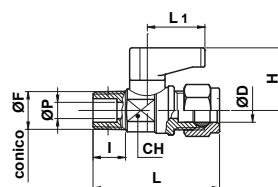
| CODICE   | F   | D | P   | I    | L    | L1 | H    |    |   |
|----------|-----|---|-----|------|------|----|------|----|---|
| 40501570 | 1/8 | 6 | 5,5 | 8    | 40,5 | 19 | 21,5 | 14 | 1 |
| 40501580 | 1/4 | 6 | 5,5 | 11   | 43,5 | 19 | 21,5 | 14 | 1 |
| 40501660 | 1/8 | 8 | 5,5 | 8    | 41,5 | 19 | 21,5 | 14 | 1 |
| 40501660 | 1/4 | 8 | 5,5 | 11   | 11   | 19 | 21,5 | 14 | 1 |
| 40501680 | 3/8 | 8 | 5,5 | 11,5 | 45   | 19 | 21,5 | 14 | 1 |



## ART. 4070

Valvola a sfera maschio cilindrico/femmina (serie corta)  
*Parallel male/female ball valve (short series)*

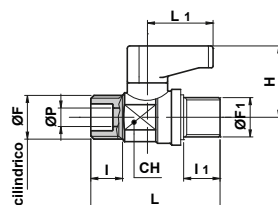
| CODICE   | F   | F1  | P   | I  | I1 | L    | L1 | H    |    |   |
|----------|-----|-----|-----|----|----|------|----|------|----|---|
| 40700900 | 1/8 | 1/8 | 5,5 | 7  | 7  | 33,5 | 19 | 21,5 | 14 | 1 |
| 40701800 | 1/4 | 1/8 | 5,5 | 8  | 7  | 34,5 | 19 | 21,5 | 14 | 1 |
| 40701900 | 1/4 | 1/4 | 5,5 | 8  | 8  | 35   | 19 | 21,5 | 14 | 1 |
| 40702900 | 3/8 | 3/8 | 7   | 8  | 16 | 16   | 19 | 22,5 | 18 | 1 |
| 40703900 | 1/2 | 1/2 | 10  | 10 | 23 | 53   | 25 | 32   | 22 | 1 |



## ART. 4080

Valvola a sfera maschio cilindrico/maschio cilindrico  
*Parallel/parallel ball valve*

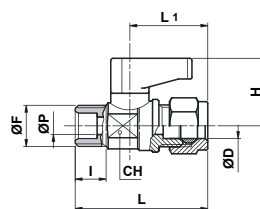
| CODICE   | F   | F1  | P   | I  | I1 | L    | L1 | H    |    |   |
|----------|-----|-----|-----|----|----|------|----|------|----|---|
| 40800900 | 1/8 | 1/8 | 5,5 | 7  | 7  | 32   | 19 | 21,5 | 14 | 1 |
| 40801600 | 1/8 | 1/4 | 5,5 | 7  | 8  | 32,5 | 19 | 21,5 | 14 | 1 |
| 40801900 | 1/4 | 1/4 | 5,5 | 8  | 8  | 33,5 | 19 | 21,5 | 14 | 1 |
| 40802800 | 3/8 | 1/4 | 5,5 | 9  | 8  | 34,5 | 19 | 21,5 | 14 | 1 |
| 40802900 | 3/8 | 3/8 | 7   | 10 | 10 | 40   | 19 | 22,5 | 18 | 1 |
| 40803900 | 1/2 | 1/2 | 10  | 17 | 10 | 48   | 25 | 32   | 22 | 1 |



**ART. 4100**

Valvola a sfera maschio cilindrico attacco bicono  
*Parallel male ball valve bicone connection*

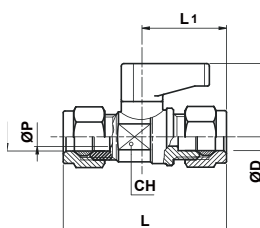
| CODICE   | F   | D | P   | I | L    | L1 | H    |    |   |
|----------|-----|---|-----|---|------|----|------|----|---|
| 41001570 | 1/8 | 6 | 5,5 | 7 | 39,5 | 19 | 21,5 | 14 | 1 |
| 41001580 | 1/4 | 6 | 5,5 | 8 | 40,5 | 19 | 21,5 | 14 | 1 |
| 41001660 | 1/8 | 8 | 5,5 | 7 | 40,5 | 19 | 21,5 | 14 | 1 |
| 41001670 | 1/4 | 8 | 5,5 | 8 | 41,5 | 19 | 21,5 | 14 | 1 |
| 41001680 | 3/8 | 8 | 5,5 | 9 | 42,5 | 19 | 21,5 | 14 | 1 |



**ART. 4110**

Valvola a sfera bicono - bicono  
*Bicone - bicone ball valve*

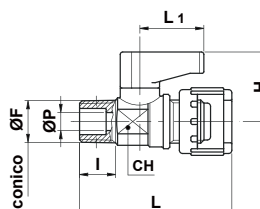
| CODICE   | D1 | D | P   | L  | L1 | H    |    |   |
|----------|----|---|-----|----|----|------|----|---|
| 41105900 | 6  | 6 | 5,5 | 47 | 19 | 21,5 | 14 | 1 |
| 41106000 | 6  | 8 | 5,5 | 48 | 19 | 21,5 | 14 | 1 |
| 41106100 | 8  | 8 | 5,5 | 49 | 19 | 21,5 | 14 | 1 |



**ART. 4120**

Valvola a sfera maschio conico attacco a baionetta con ghiera  
*Tapered male ball valve bayonet connection with nut*

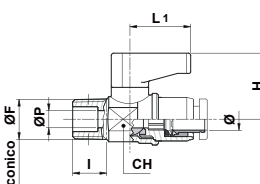
| CODICE   | F   | P   | I  | L    | L1 | H    |    |   |
|----------|-----|-----|----|------|----|------|----|---|
| 41201000 | 1/8 | 5,5 | 8  | 38,5 | 19 | 21,5 | 14 | 1 |
| 41201900 | 1/4 | 5,5 | 11 | 41   | 19 | 21,5 | 14 | 1 |



**ART. 4160**

Valvola a sfera maschio con attacco tubo automatico  
*Male ball valve with automatic tube connection*

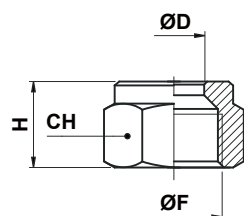
| CODICE   | D | F   | P   | I    | L    | L1 | H    |    |   |
|----------|---|-----|-----|------|------|----|------|----|---|
| 41601490 | 4 | 1/8 | 5,5 | 8,5  | 41   | 19 | 21,5 | 14 | 1 |
| 41601500 | 4 | 1/4 | 5,5 | 11,5 | 44   | 19 | 21,5 | 14 | 1 |
| 41601570 | 6 | 1/8 | 5,5 | 8,5  | 41   | 19 | 21,5 | 14 | 1 |
| 41601580 | 6 | 1/4 | 5,5 | 11,5 | 44   | 19 | 21,5 | 14 | 1 |
| 41601590 | 6 | 3/8 | 5,5 | 12   | 45   | 19 | 21,5 | 14 | 1 |
| 41601670 | 8 | 1/4 | 5,5 | 11,5 | 48   | 19 | 21,5 | 14 | 1 |
| 41601680 | 8 | 3/8 | 5,5 | 12   | 48,5 | 19 | 21,5 | 14 | 1 |



**ART. 4190**

Dado per valvola a sfera con bicono  
*Ball valve nut with bicone*

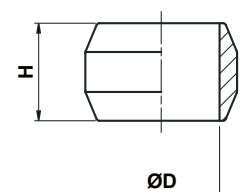
| CODICE   | F   | D | H    |    |   |
|----------|-----|---|------|----|---|
| 41901570 | 1/8 | 6 | 11,5 | 12 | 1 |
| 41201900 | 1/4 | 8 | 12   | 15 | 1 |



**ART. 4200**

Bicono in ottone per valvola a sfera  
*Brass bicone for ball valve*

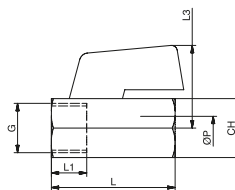
| CODICE   | D | H   |  |   |
|----------|---|-----|--|---|
| 42007500 | 6 | 6,6 |  | 1 |
| 42008300 | 8 | 6,6 |  | 1 |



## ART. 600

Rubinetto sfera F.F. con leva  
F.F. ball tap with lever

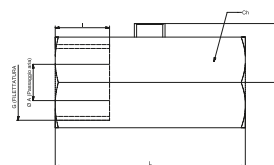
| CODICE  | G   | G1  | L1   | L  | P    | L3   | CH |  |
|---------|-----|-----|------|----|------|------|----|--|
| 6001818 | 1/8 | 1/8 | 9    | 39 | 8    | 27,2 | 20 |  |
| 6001414 | 1/4 | 1/4 | 9    | 39 | 8    | 27,2 | 20 |  |
| 6003838 | 3/8 | 3/8 | 9,9  | 42 | 8    | 27,1 | 20 |  |
| 6001212 | 1/2 | 1/2 | 11,7 | 47 | 10   | 29,4 | 24 |  |
| 6003434 | 3/4 | 3/4 | 12   | 54 | 13,5 | 32   | 30 |  |
|         |     |     |      |    |      |      |    |  |
|         |     |     |      |    |      |      |    |  |



## ART. 601

Rubinetto sfera F.F. taglio cacciavite  
F.F. screwdriver cut ball tap

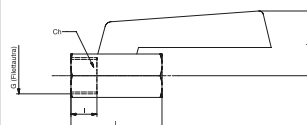
| CODICE  | G   | G1  | I    | L  | P    | h    | CH |  |
|---------|-----|-----|------|----|------|------|----|--|
| 6011818 | 1/8 | 1/8 | 9    | 39 | 8    | 13   | 20 |  |
| 6011414 | 1/4 | 1/4 | 9    | 39 | 8    | 13   | 20 |  |
| 6013838 | 3/8 | 3/8 | 9,9  | 42 | 8    | 13   | 20 |  |
| 6011212 | 1/2 | 1/2 | 11,7 | 47 | 10   | 15,4 | 24 |  |
| 6013434 | 3/4 | 3/4 | 12   | 54 | 13,5 | 18   | 30 |  |
|         |     |     |      |    |      |      |    |  |
|         |     |     |      |    |      |      |    |  |



## ART. 602

Rubinetto sfera F.F. con leva lunga  
Long lever F.F. ball tap

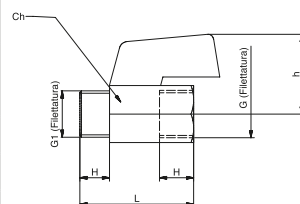
| CODICE  | G   | G1  | I    | L  | P    | h    | CH |  |
|---------|-----|-----|------|----|------|------|----|--|
| 6021818 | 1/8 | 1/8 | 9    | 39 | 8    | 31,3 | 20 |  |
| 6021414 | 1/4 | 1/4 | 9    | 39 | 8    | 31,3 | 20 |  |
| 6023838 | 3/8 | 3/8 | 9,9  | 42 | 8    | 31,3 | 20 |  |
| 6021212 | 1/2 | 1/2 | 11,7 | 47 | 10   | 33,8 | 24 |  |
| 6023434 | 3/4 | 3/4 | 12   | 54 | 13,5 | 36,4 | 30 |  |
|         |     |     |      |    |      |      |    |  |
|         |     |     |      |    |      |      |    |  |



## ART. 605

Rubinetto sfera M.F. con leva  
M.F. ball tap with lever

| CODICE  | G   | G1  | H    | H1   | L  | h    | CH |  |
|---------|-----|-----|------|------|----|------|----|--|
| 6051818 | 1/8 | 1/8 | 9    | 10   | 39 | 27,2 | 20 |  |
| 6051414 | 1/4 | 1/4 | 9,2  | 11   | 39 | 27,2 | 20 |  |
| 6053838 | 3/8 | 3/8 | 10,2 | 9,8  | 40 | 27,2 | 20 |  |
| 6051212 | 1/2 | 1/2 | 12,2 | 11,6 | 45 | 29,5 | 24 |  |
| 6053434 | 3/4 | 3/4 | 14   | 12,2 | 51 | 32   | 30 |  |
|         |     |     |      |      |    |      |    |  |
|         |     |     |      |      |    |      |    |  |

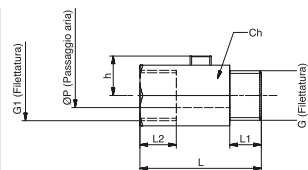




**ART. 606**

Rubinetto sfera M.F. taglio cacciavite  
M.F. screwdriver cut ball tap

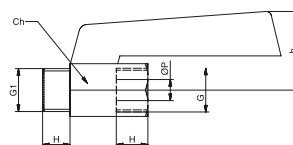
| CODICE  | G   | G1  | L1   | L2   | L  | P    | h    | CH |  |
|---------|-----|-----|------|------|----|------|------|----|--|
| 6061818 | 1/8 | 1/8 | 9    | 10   | 39 | 8    | 13   | 20 |  |
| 6061414 | 1/4 | 1/4 | 9,2  | 11   | 39 | 8    | 13   | 20 |  |
| 6063838 | 3/8 | 3/8 | 10,2 | 9,8  | 40 | 8    | 13   | 20 |  |
| 6061212 | 1/2 | 1/2 | 12,2 | 11,6 | 45 | 10   | 15,4 | 24 |  |
| 6063434 | 3/4 | 3/4 | 14   | 12,2 | 51 | 13,5 | 17,9 | 30 |  |



**ART. 607**

Rubinetto sfera M.F. con leva lunga  
Long lever M.F. ball tap

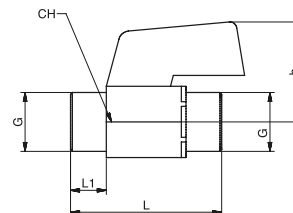
| CODICE  | G   | G1  | H    | H1   | L  | h    | CH |  |
|---------|-----|-----|------|------|----|------|----|--|
| 6071818 | 1/8 | 1/8 | 10   | 9    | 39 | 31,4 | 20 |  |
| 6071414 | 1/4 | 1/4 | 11   | 9,2  | 39 | 31,4 | 20 |  |
| 6073838 | 3/8 | 3/8 | 10   | 10,2 | 40 | 31,3 | 20 |  |
| 6071212 | 1/2 | 1/2 | 11,6 | 12,2 | 45 | 33,8 | 24 |  |
| 6073434 | 3/4 | 3/4 | 14   | 14   | 51 | 36   | 30 |  |



**ART. 610**

Rubinetto sfera M.M. con leva  
M.M. ball tap with lever

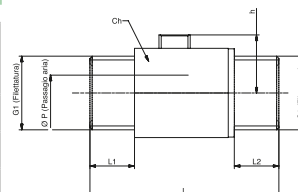
| CODICE  | G   | G1  | L1   | L    | P  | h    | CH |  |
|---------|-----|-----|------|------|----|------|----|--|
| 6101414 | 1/4 | 1/4 | 9    | 40,4 | 8  | 27,2 | 20 |  |
| 6103838 | 3/8 | 3/8 | 10   | 42,4 | 8  | 27,4 | 20 |  |
| 6101212 | 1/2 | 1/2 | 11,6 | 49,7 | 10 | 29,4 | 24 |  |



**ART. 611**

Rubinetto sfera M.M. taglio cacciavite  
M.M. screwdriver cut ball tap

| CODICE  | G   | G1  | L1   | L2   | L    | P  | h    | CH |  |
|---------|-----|-----|------|------|------|----|------|----|--|
| 6111414 | 1/4 | 1/4 | 9    | 9    | 40,4 | 8  | 12,9 | 20 |  |
| 6113838 | 3/8 | 3/8 | 10   | 10   | 42,4 | 8  | 12,9 | 20 |  |
| 6111212 | 1/2 | 1/2 | 11,6 | 11,6 | 49,7 | 10 | 15,4 | 24 |  |

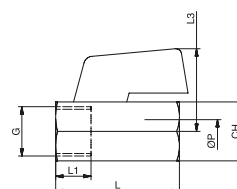


**ART. 650**

Rubinetto sfera F.F. con leva  
F.F. ball tap with lever

**MICRO**

| CODICE  | G   | G1  | L1  | L    | P   | L3   | CH |  |
|---------|-----|-----|-----|------|-----|------|----|--|
| 6501414 | 1/4 | 1/4 | 9   | 35   | 5,5 | 26,1 | 18 |  |
| 6503838 | 3/8 | 3/8 | 7   | 38,5 | 8   | 27   | 20 |  |
| 6501212 | 1/2 | 1/2 | 8,5 | 42   | 10  | 28,9 | 24 |  |

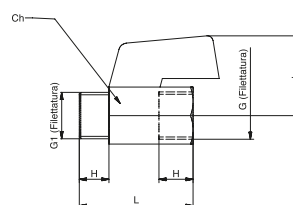


**ART. 655**

Rubinetto sfera M.F. con leva  
M.F. ball tap with lever

**MICRO**

| CODICE  | G   | G1  | H  | H1  | L    | P   | h    | CH |  |
|---------|-----|-----|----|-----|------|-----|------|----|--|
| 6551414 | 1/4 | 1/4 | 9  | 7   | 35   | 5,5 | 26,1 | 18 |  |
| 6553838 | 3/8 | 3/8 | 10 | 7   | 38,5 | 8   | 27   | 20 |  |
| 6551212 | 1/2 | 1/2 | 9  | 9,3 | 32   | 10  | 28,9 | 24 |  |



## INFORMAZIONI TECNICHE AGGIUNTIVE “VSTT”

Ogni lotto dei rubinetti serie VSTT viene sottoposto a controlli cosiddetti “rompilotto” durante tutto il ciclo produttivo, che comprendono, oltre all’osservazione estetica, la verifica di funzionalità e di eventuali perdite, un test in pressione a 8 bar per verificarne la conformità anche in condizioni di utilizzo nominali. Successivamente viene eseguito un test a campione di rottura (simulazione scoppio a 50 bar di pressione) con una macchina dedicata che sollecita gli attacchi rapidi del rubinetto. Di seguito viene indicata la forza minima di strappo (in Newton) ammessa per ogni diametro:

| Diam. tubo Tube diam. | Forza di strappo Breaking load |
|-----------------------|--------------------------------|
| Ø4                    | 63 N                           |
| Ø6                    | 141 N                          |
| Ø8                    | 251 N                          |

### Nota importante:

I valori indicati si riferiscono alla tenuta della pinza di aggraffaggio, “core part” come per il raccordo RAP in ottone e il Tecno-RAP in tecnopolimero, per cui omogenei. I valori di rottura sperimentali misurati sono stati, in base al diametro, anche da 1,2 a 2,5 volte superiori.

### Informazioni complementari sulle temperature di utilizzo:

| Pressione di esercizio e pressione di scoppio (bar) alle diverse temperature<br>Working pressure and breaking pressure (bar) at different temperatures |                                  |                                 |                                  |                                 |                                  |                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|----------------------------------|---------------------------------|
| Esempio<br>Example                                                                                                                                     | T-20°C                           | T-20°C                          | T+23°C                           | T+23°C                          | T+60°C                           | T+60°C                          |
| Tubo 6x4 colorato<br>Tube 6x4 colored                                                                                                                  | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar | P esercizio bar<br>working P bar | P scoppio bar<br>breaking P bar |
| TPU                                                                                                                                                    | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,2                              | 20,8                            |
| PA11                                                                                                                                                   | 37,4                             | 149,6                           | 20,0                             | 80,0                            | 10,4                             | 41,6                            |
| PA12                                                                                                                                                   | 48,6                             | 168,3                           | 26,0                             | 90,0                            | 10,4                             | 36,0                            |
| PE                                                                                                                                                     | 18,7                             | 74,8                            | 10,0                             | 40,0                            | 5,0                              | 20,0                            |

Tutte le necessarie valutazioni sull’utilizzo dei rubinetti VSTT in condizioni di esercizio differenti da quelle suggerite nella scheda tecnica iniziale debbono anche tenere conto, con riferimento alle temperature, dei dati nominali relativi al tubo utilizzato e del limite imposto dal componente più critico. Le resine acetaliche, ad esempio, con cui sono realizzati alcuni particolari, e gli stessi o-ring, suggeriscono campi di utilizzo ben precisi. Specificatamente agli o-ring in NBR il fornitore dichiara una forbice compresa fra -25°C e +100°C.

## “VSTT” ADDITIONAL TECHNICAL INFORMATION

Each VSTT taps series batch is tested according to severe cyclics “lot breaker” controls along all the production period, which include shape observation, leakage verification, functionality, at the working pressure of 8 bar.

Then all samples taken from the lot are tested by a traction machine which simulate a breaking pressure of 50 bar.

Here below are indicated the traction loads (in Newton) for each size:

### Important note:

The values refer to the resistance of the crimping gripper, “core part” as per the two fittings series, the brass RAP and the technopolymer Tecno-RAP, whereby homogeneous. The breaking experimental values measured, according to the diameter, were from 1.2 to 2.5 times higher.

### Additional information regarding the working temperatures:

Further to all the necessary assessments on the use of the VSTT taps in operating conditions different from how suggested in the initial technical sheet must be considered, with reference to temperatures, the nominal data regarding the type of the used tube and the limit imposed by the most critical component. Acetal resins with which some components are made, and the O-ring itself, suggest precise range of usage. Specifically to the NBR O-rings the supplier declares a fork between -25°C and +100°C.

**BREVE DESCRIZIONE**

I rubinetti a sfera con leva di regolazione, sono realizzati in Italia, a garanzia di elevati standard di qualità, secondo le normative ISO di riferimento, e rispondono alle seguenti specifiche tecniche e applicative.

**SHORT DESCRIPTION**

The mini ball valves with handle are produced in Italy according to the reference ISO norms as warranty of high quality level and answer to the followings technical specifications and applications.

**SCHEDA TECNICA TECHNICAL SHEET**

|                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FLUIDI UTILIZZABILI<br><i>EMPLOYABLE FLUIDS</i>                   | Aria compressa (per altri fluidi contattare il nostro Uff. Tecnico)<br><i>Compressed air (for different fluid pls contact our Technical Dept.)</i>                                                                                                                                                                                                                                                                                                                                                                   |
| APPLICAZIONI<br><i>APPLICATIONS</i>                               | Circuiti pneumatici, oleodinamici e idraulici<br><i>Pneumatic, oleodynamic and hydraulic circuits</i>                                                                                                                                                                                                                                                                                                                                                                                                                |
| TUBI CONSIGLIATI<br><i>SUGGESTED TUBES</i>                        | Plastici: TPU, PA, PE, ecc. Metallici: rame, alluminio, acciaio<br><i>Plastic: TPU, PA, PE, etc. Metal: copper, aluminium, steel</i>                                                                                                                                                                                                                                                                                                                                                                                 |
| TEMPERATURE<br>E PRESSIONI<br><i>TEMPERATURE<br/>AND PRESSURE</i> | Le temperature di utilizzo sono comprese fra -20°C e +80°C, la pressione massima consigliata è 20 bar.<br><i>Working temperature range -20°C to +80°C, max working pressure 20 bar</i>                                                                                                                                                                                                                                                                                                                               |
| FILETTATURE<br><i>THREAD TYPE</i>                                 | BSPP gas cilindrica ISO 228 - BSPT gas conica ISO 7 - DIN 2999<br><i>BSPP parallel UNI-ISO 228 - BSPT tapered UNI-ISO 7 - DIN 2999</i>                                                                                                                                                                                                                                                                                                                                                                               |
| MATERIALI<br><i>MATERIALS</i>                                     | Sfera, ogiva, dado, ghiera e alberino: ottone UNI EN 12164 CW614N (nichelato)<br>Corpo: ottone UNI EN 12165 CW617N (nichelato)<br>Leva: materiale plastico PA66<br>Vite: acciaio<br>Guarnizione sede sfera: PTFE<br>O-Ring: NBR 70<br><i>Ball, olive, nut, ring nut and shaft: brass UNI EN 12164 CW614N (nickel plated)</i><br><i>Body: brass UNI EN 12165 CW617N (nickel plated)</i><br><i>Handle: PA66 plastic material</i><br><i>Screw: steel</i><br><i>Washer ball seat: PTFE</i><br><i>O-Ring seal: NBR 70</i> |

## Direttiva 2011/65/UE (RoHS 2)

TITAN ENGINEERING SPA produce e commercializza raccordi e accessori per la pneumatica che potrebbero essere utilizzati come componenti/accessori in apparecchiature elettriche ed elettroniche, ove, in base alla Direttiva 2011/65/UE (RoHS 2) di cui all'Allegato II, è prescritto un contenuto di sostanze "con restrizione d'uso" inferiori ai valori di seguito riportati:

Piombo (0,1%) • Mercurio (0,1%) • Cadmio (0,01%) • Cromo esavalente (0,1%) • Bifenili polibromurati (PBB) (0,1%) • Eteri di bifenile polibromurato (PBDE) (0,1%) • Ftalato di BIS (2-etilesile) (DEHP) (0,1%) • Benzilbutifalato (BBP) (0,1%) • Dibutilftalato (DBP) (0,1%) • Disobutilftalato (DIBP) (0,1%)

In base alle dichiarazioni rilasciate dai nostri Fornitori, informiamo che i seguenti prodotti da noi fabbricati e commercializzati, illustrati nel presente catalogo:

- RACCORDI AUTOMATICI IN OTTONE
- RACCORDI AUTOMATICI IN TECNOPOLIMERO
- REGOLATORI DI FLUSSO IN OTTONE E TECNOPOLIMERO
- ASTINE IN OTTONE
- RACCORDI AUTOMATICI MINIATURIZZATI E INOX
- RACCORDI STANDARD DI LINEA IN OTTONE
- RACCORDI AD OGIVA IN OTTONE
- RACCORDI A CALZAMENTO IN OTTONE

fanno parte, in esenzione ai valori sopra dichiarati, dei prodotti in alluminio, acciaio e leghe di rame ed ottone, dell'Allegato III della direttiva stessa, che ne definisce espressamente tipologie e relativi limiti.

## Regolamento CE 1907/2006 (REACH)

In base alle dichiarazioni rilasciate dai nostri Fornitori, TITAN ENGINEERING SPA dichiara di aver ottenuto:

- \* relativa dichiarazione da cui risulti che i Fornitori stessi sono al corrente dei propri obblighi e che operano conformemente al regolamento REACH
  - \* relativa dichiarazione di prodotti/sostanze non ricadenti nelle disposizioni previste dal regolamento REACH
  - \* Impegno ad informare tempestivamente TITAN ENGINEERING SPA nel caso di variazioni/aggiornamenti riguardanti le sostanze di cui al regolamento REACH
- Informiamo altresì che TITAN ENGINEERING SPA effettua attività di assemblaggio e commercializzazione, non alterando in alcun modo le sostanze contenute nei prodotti acquistati dai propri Fornitori sia come finiti, che come semilavorati.

## Directive 2011/65 / EU (RoHS 2)

TITAN ENGINEERING SPA manufactures and sells fittings and accessories for the air pneumatic circuits that could be used as components/accessories in electrical and electronic equipment, where, according to Directive 2011/65 / EU (RoHS 2) in Annex II, is prescribed a content of substances "with restricted use" within the following values:

Lead (0,1%) • Mercury (0,1%) • Cadmium (0,01%) • Hexavalent chromium (0,1%) • Polybrominated biphenyls (PBB) (0,1%) • Polybrominated diphenyl ethers (PBDE) (0,1%) •

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According to statements made by our suppliers, we declare that the following products, manufactured and marketed by us, and illustrated in this catalog:

- PUSH-IN BRASS FITTINGS
- PUSH-IN TECHNOPOLYMER FITTINGS
- BRASS AND POLYMER SPEED CONTROLLERS
- BRASS STEMS
- COMPACT AND STAINLESS STEEL PUSH-IN FITTINGS
- STANDARD LINE BRASS FITTINGS
- COMPRESSED BRASS FITTINGS
- QUICK BRASS FITTINGS

are belong to, in exemption to the values stated above, to the products in aluminum, steel and copper alloys and brass, Annex III hereto, which explicitly defines the types and relative limits.

## Regulation EC 1907/2006 (REACH)

According to statements made by our suppliers, TITAN ENGINEERING SPA declares that it has obtained:

- \* Its statement to the effect that the suppliers themselves are aware of their obligations and operating in accordance with REACH
  - \* Relevant declaration of products / substances not covered by points available under REACH
  - \* Commitment from suppliers themselves to inform TITAN ENGINEERING SPA in case of changes/updates regarding the substances under REACH regulation
- We also inform that TITAN ENGINEERING SPA performs assembly and marketing activities, without altering in any way the substances contained in the products, finite, or as semi-finished, purchased from its suppliers.

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