



PNEUMAX



SERIES 3000 SOLENOID VALVES

TECHNOLOGY AND FLEXIBILITY



PNEUMAX



Pneumax

Smart Technologies and Human Competence

Founded in 1976, **Pneumax S.p.A.** is today one of the leading, international manufacturers of components and systems for automation. It is at the fore front of a group comprised of 25 companies, with over 730 employees worldwide. Ongoing investment in research and development has allowed **Pneumax** to continually expand its range of standard products and customised solutions, adding to the well-established pneumatic technology, a range of electric drive actuators and fluid control components. The desire to provide the service and specific application skills has led to the creation of 3 business units, dedicated to Industrial Automation, Process Automation and Automotive sector.



The ability to provide various technologies and solutions for each of our clients applications is the main objective of the Company, making Pneumax the ideal strategic partner.

What defines us is the “**Pneumax Business Attitude**”, born out of the capacity to combine industry sectors, technology and our application skills via the clients collaboration with our business and product specialists.

The most effective solutions are studied around the TCO (Total cost of ownership) related to the entire life cycle of the product.

This represents the main Pneumax distinguishing factor.



Pneumatic technology



Electric actuation



Fluid control



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Solenoid valves series 3000

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STAND ALONE solenoid valves version - Version 3100 (10mm) and 3400 (15,5mm)

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MANIFOLD solenoid valves version - Version 3100 (10mm) and 3400 (15,5mm)

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Solenoid valves series 3000



AIR DISTRIBUTION

- Version 3100 (10mm) and 3400 (15,5mm)
- Nominal flow rate up to 200 NI/min (Version 3100) and up to 600 NI/min (Version 3400)
- Stand alone or manifold mounted versions
- Valve replacement without disconnecting the tubes
- Available with a wide range of serial system protocols
- Wide range of accessories
- Available sub-base mounted or with M5 threaded ports (Version 3100) and G1/8" (Version 3400)
- Suitable for use with pressure or vacuum
- Certified c us

Pneumax valves and solenoid valves are designed to guarantee versatility and maximum reliability in the control of integrated pneumatic circuits. The Pneumax 3000 series of solenoid valves is a very flexible solution that can be easily configured to optimize the efficiency of the whole system through a constant interface and communication with the machine. The Pneumax 3000 series is available in stand alone and manifold mounted versions, including a wide range of functions, capable of working with positive pressures up to 10 Bar or vacuum.

The valves have aluminum bodies with integrated electrical connections, manual override and a LED that indicates when the valve is actuated. 3000 series is another addition to the extensive range of solenoid valve systems designed for applications in very demanding industrial sectors such as assembly and robotics, packaging or automotive.

Construction characteristics	
Body	Aluminium
Operators	Technopolymer
Spool	Aluminium
Seals	NBR
Piston seals	NBR
Springs	AISI 302 stainless steel
Pistons	Alluminium / Technopolymer
Operational characteristics	
Voltage	24 VDC \pm 10%
Pilot power consumption	1.3W nominal in energy saving mode 0,25W
Valve working pressure [1]	from vacuum to 10 bar max.
Pilot working pressure [12-14]	from 2,5 to 7 bar max.
Operating temperature	from -5°C to +50°C
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous

▶ **STAND ALONE solenoid valve version**



General

The range of series 3000 solenoid valves Version 3100 (10mm) and 3400 (15,5mm), are available in STAND ALONE self feeding or external feeding versions and realised with M8 point to point connections with an integrated snap-on fitting.

Main characteristics

10 and 15,5 mm size.
Multi-position sub-bases in different lengths.

Functions

- S.V. 5/2 Monostable Solenoid-Spring
- S.V. 5/2 Monostable Solenoid-Differential (only self feeding)
- S.V. 5/2 Bistable Solenoid-Solenoid
- S.V. 5/3 C.C. Solenoid-Solenoid
- S.V. 2x3/2 N.C.-N.C. (= 5/3 O.C.) Solenoid-Solenoid
- S.V. 2x3/2 N.O.-N.O. (= 5/3 C.P.) Solenoid-Solenoid
- S.V. 2x3/2 N.C.-N.O. Solenoid-Solenoid
- S.V. 2x3/2 N.O.-N.C. Solenoid-Solenoid

Solenoid valve ordering code

3 1 15 . 52.00 . 39 . 82

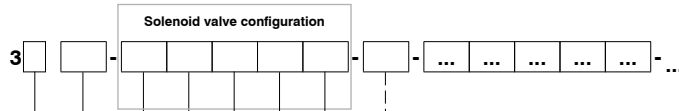
Size	3	1	15	52.00	39	82
1: Version 3100 (10mm)						
4: Version 3400 (15,5mm)						
Function						
52.00: S.V. 5/2						
53.31: S.V. 5/3						
62.44: 2x3/2 N.C.-N.C.						
62.55: 2x3/2 N.O.-N.O.						
62.45: 2x3/2 N.C.-N.O.						
62.54: 2x3/2 N.O.-N.C.						
Valves type						
36: Solenoid - Differential self feeding						
39: Solenoid - Spring self feeding						
35: Solenoid - Solenoid self feeding						
29: Solenoid - Spring external feeding						
25: Solenoid - Solenoid external feeding						
Connection						
82: M8 SPEED-UP connector						

Example in the table : 3115.52.00.39.82 : Solenoid valve size 10mm 5/2 solenoid-spring self feeding



Configurator

AIR DISTRIBUTION



Size
1: Version 3100 (10mm)
4: Version 3400 (15,5mm)

Number of collector positions
02: 2 positions collector
03: 3 positions collector
04: 4 positions collector
05: 5 positions collector
06: 6 positions collector
07: 7 positions collector
08: 8 positions collector
09: 9 positions collector
10: 10 positions collector

Valve type
A: S.V. 5/2 Solenoid-Spring
B: S.V. 5/2 Solenoid-Differential (only self feeding)
C: S.V. 5/2 Solenoid-Solenoid
E: S.V. 5/3 C.C. Solenoid-Solenoid
F: S.V. 2x3/2 N.C.-N.C. (=5/3 O.C.) Solenoid-Solenoid
G: S.V. 2x3/2 N.O.-N.O. (=5/3 P.C.) Solenoid-Solenoid
H: S.V. 2x3/2 N.C.-N.O. Solenoid-Solenoid
I: S.V. 2x3/2 N.O.-N.C. Solenoid-Solenoid

Power supply
2: External feeding
3: Self feeding

Connector type
M: M8 SPEED-UP connector

Voltage
1: 24 VDC

Connections
5: M5 - only for version 3100 (10 mm)
8: G1/8" - only for version 3400 (15,5 mm)

Accessories (optional)
T: Free valve space plug

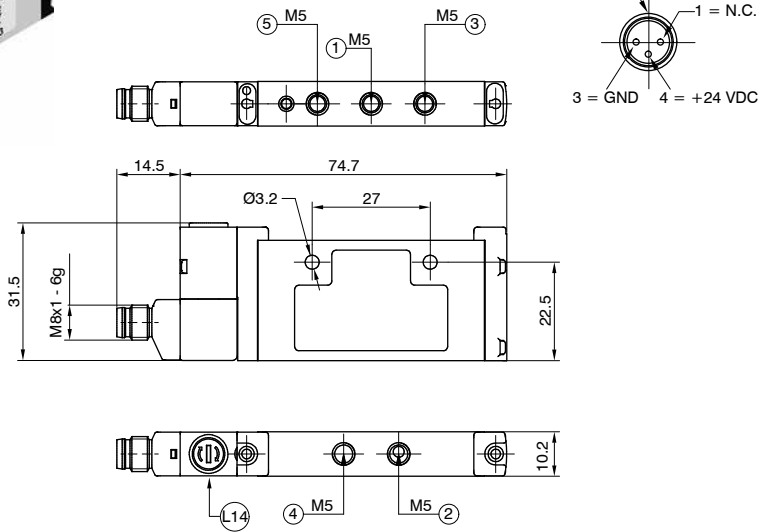
Accessories (optional)	no valve position occupied on the manifold
0X0: Diaphragm plug on pipe 1	
00Y: Diaphragm plug on pipe 3	
Z00: Diaphragm plug on pipe 5	
0XY: Diaphragm plugs on pipes 1 and 3	
ZX0: Diaphragm plugs on pipes 5 and 1	
Z0Y: Diaphragm plugs on pipes 5 and 3	
ZXY: Diaphragm plugs on pipes 5, 1 and 3	

Example in the table : 3104-C2M15-T-0X0-A3M15-F3M15

- Four position manifold Version 3100 (10mm) composed of:
- Solenoid valve 5/2 solenoid-solenoid external feeding, 24 VDC
 - Free valve space plug
 - Diaphragm plug on pipe 1
 - Solenoid valve 5/2 solenoid-spring self feeding, 24 VDC
 - Solenoid valve 2x3/2 N.C.-N.C. (=5/3 O.C.) solenoid-solenoid, 24 VDC

Solenoid-Spring / Solenoid-Differential - Version 3100 (10mm)

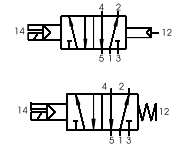
Coding: 3115.52.00.❸❹



FUNCTION	
❸	36 = Solenoid-Differential
❹	39 = Solenoid-Spring
CONNECTIONS	
❹	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "A" (39)
SHORT FUNCTION CODE "B" (36)

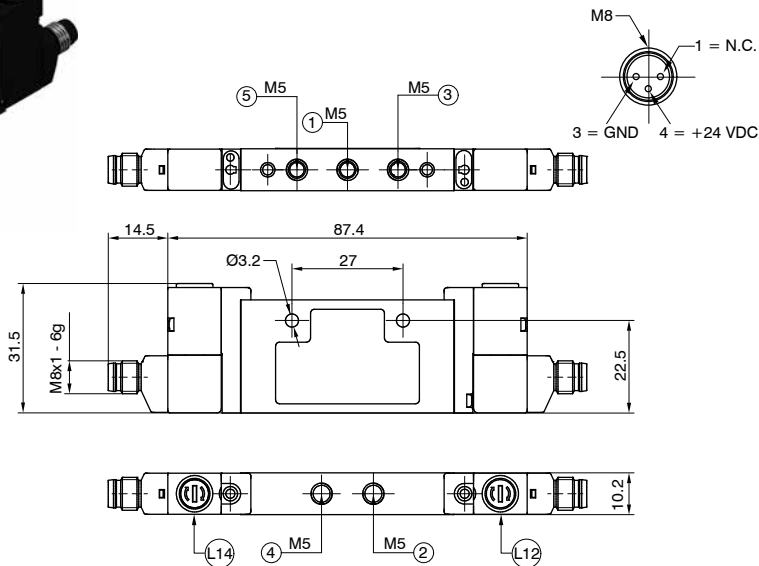
L14 = Manual over ride - side 14



Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.52.00.39.❹ Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	20	2.5 ... 7	-5 ... +50	49
3115.52.00.36.❸ Solenoid-Differential				15			

Solenoid-Solenoid - Version 3100 (10mm)

Coding: 3115.52.00.35.❹



CONNECTION	
❹	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "C"

L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.52.00.35.❹ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	20	2.5 ... 7	-5 ... +50	59

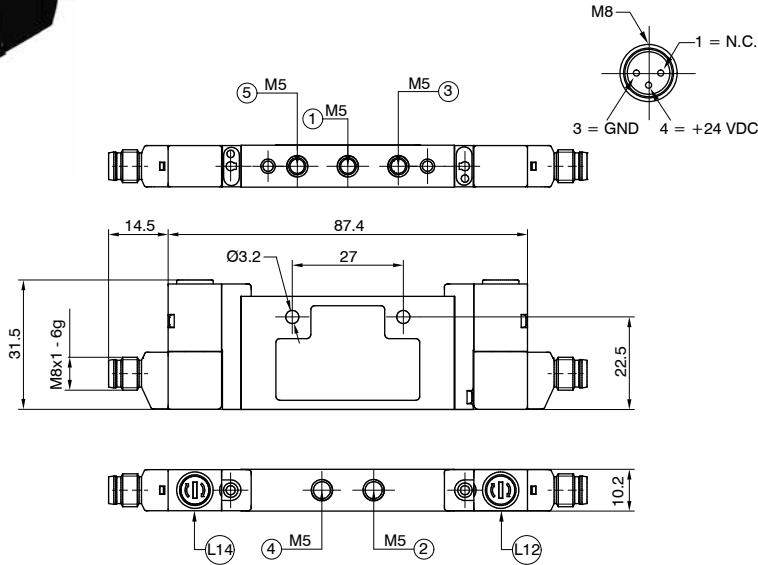


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3100 (10mm) - Self feeding

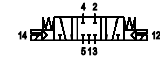
AIR DISTRIBUTION

Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3115.53.31.35. **C**



L12 = Manual over ride - side 12
 L14 = Manual over ride - side 14



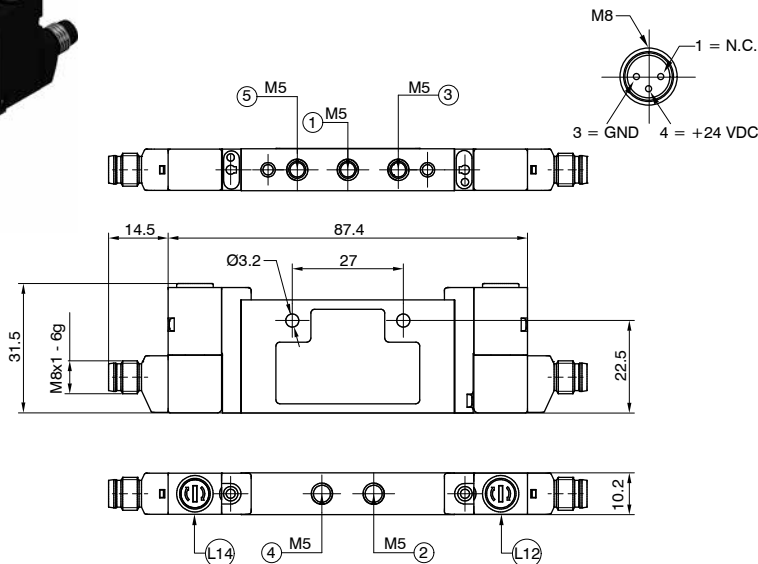
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "E"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.53.31.35. C Solenoid-Solenoid (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	150	10	20	2,5 ... 7	-5 ... +50	59

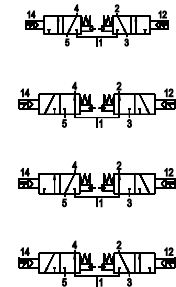
Solenoid-Solenoid 2x3/2 - Version 3100 (10mm)

Coding: 3115.62. **F**.35. **C**



L12 = Manual over ride - side 12
 L14 = Manual over ride - side 14

FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
F	45 = N.C.-N.O.
F	55 = N.O.-N.O. (5/3 Pressured centres)
F	54 = N.O.-N.C.
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



SHORT FUNCTION CODE:
 N.C.-N.C. (5/3 Open centres) = "F"
 N.O.-N.O. (5/3 Pressured centres) = "G"
 N.C.-N.O. = "H"
 N.O.-N.C. = "I"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.62.44.35. C N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	150	10	15	2,5 ... 7	-5 ... +50	59,4
3115.62.55.35. C N.O.-N.O. (5/3 Pressured centres)							
3115.62.45.35. C N.C.-N.O.							
3115.62.54.35. C N.O.-N.C.							

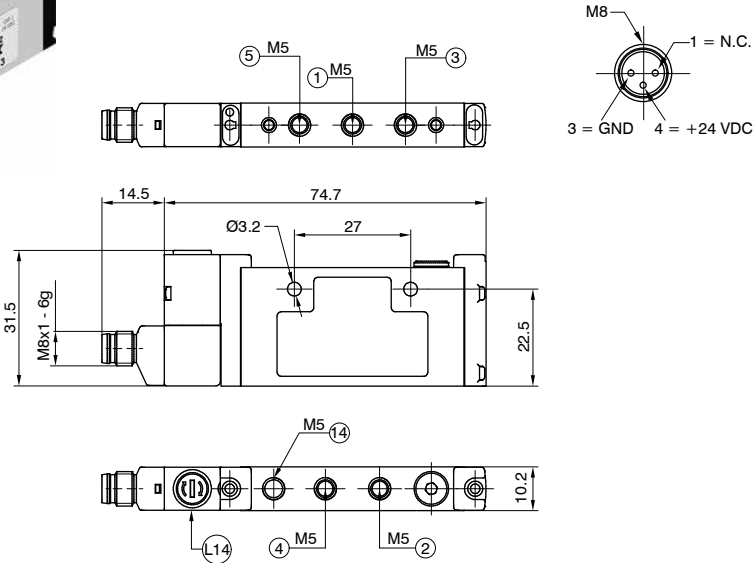
Solenoid-Spring - Version 3100 (10mm)

Coding: 3115.52.00.29. **C**

CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



RU US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



SHORT FUNCTION CODE "A" (29)

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.52.00.29. C Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	49

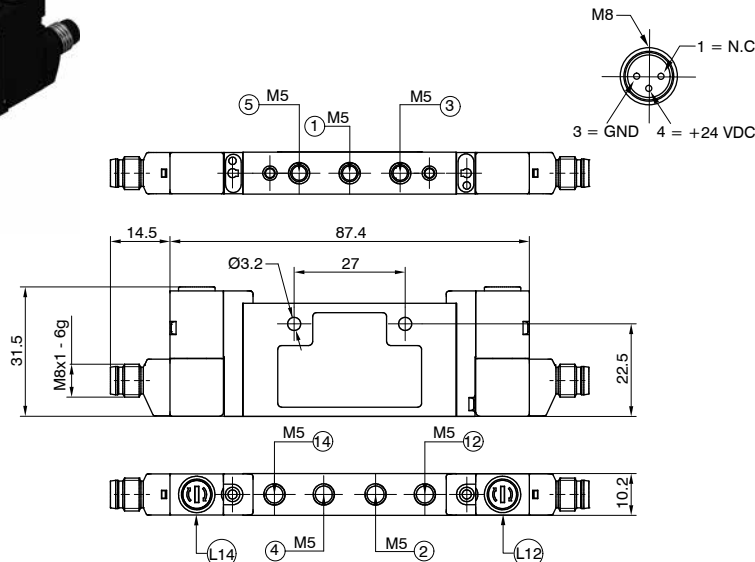
Solenoid-Solenoid - Version 3100 (10mm)

Coding: 3115.52.00.25. **C**

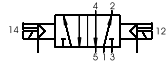
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



RU US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



SHORT FUNCTION CODE "C"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.52.00.25. C Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	10	From vacuum to 10	2,5 ... 7	-5 ... +50	59

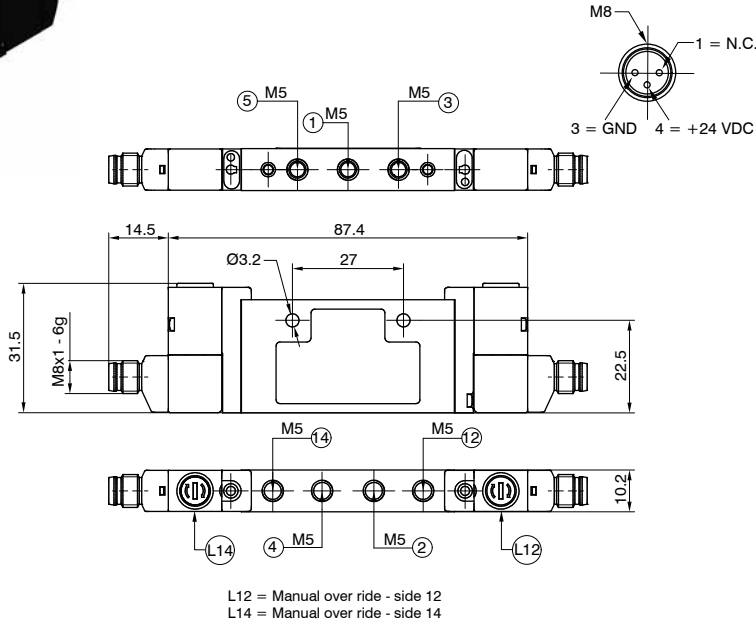


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3100 (10mm) - External feeding

AIR DISTRIBUTION

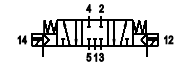
Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3115.53.31.25. **C**



CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC

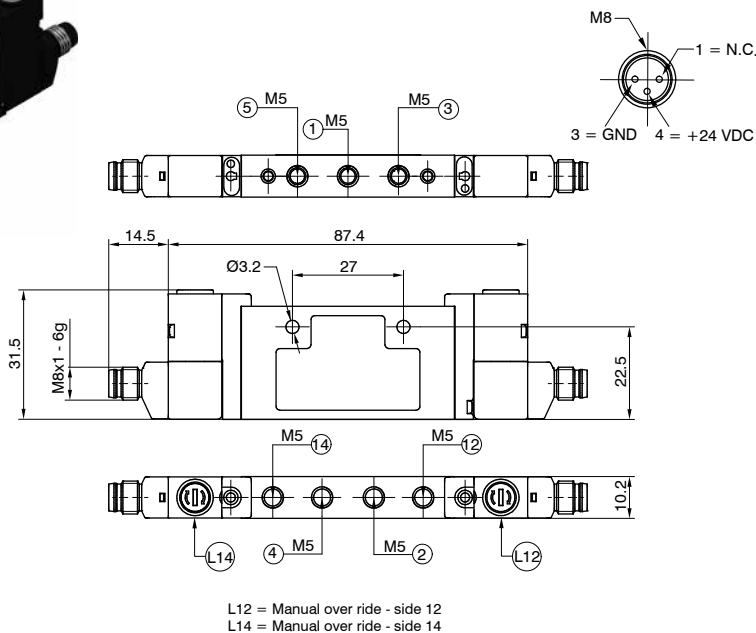
SHORT FUNCTION CODE "E"



Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.53.31.25. C Solenoid-Solenoid 5/3 (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	150	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	59

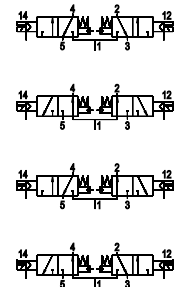
Solenoid-Solenoid 2x3/2 - Version 3100 (10mm)

Coding: 3115.62. **F**.25. **C**



FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
F	45 = N.C.-N.O.
F	55 = N.O.-N.O. (5/3 Pressured centres)
F	54 = N.O.-N.C.
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"



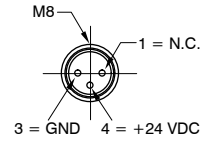
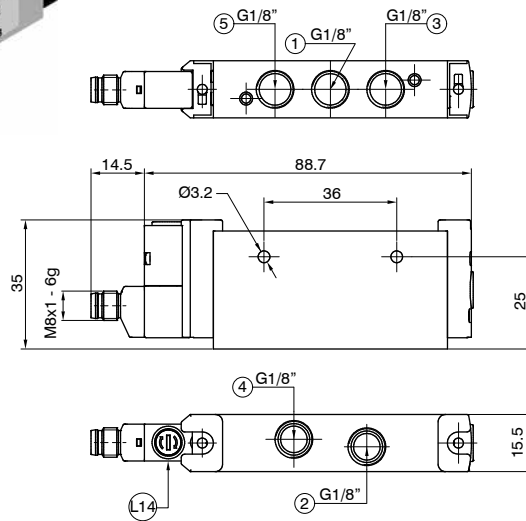
Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3115.62.44.25. C N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	150	10	15	From vacuum to 10	$\geq 3 + (02 \times \text{Inlet } p.)$	-5 ... +50	59,4
3115.62.55.25. C N.O.-N.O. (5/3 Pressured centres)								
3115.62.45.25. C N.C.-N.O.								
3115.62.54.25. C N.O.-N.C.								

Solenoid-Spring / Solenoid-Differential - Version 3400 (15,5mm)

Coding: 3415.52.00.ⒻⒼ



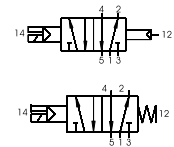
CAUS



FUNCTION	
Ⓕ	36 = Solenoid-Differential
Ⓖ	39 = Solenoid-Spring
CONNECTION	
Ⓒ	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "A" (39)
SHORT FUNCTION CODE "B" (36)

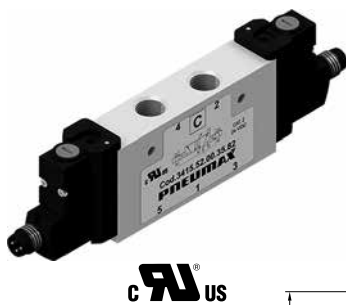
L14 = Manual over ride - side 14



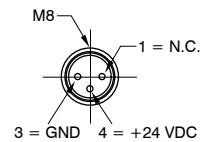
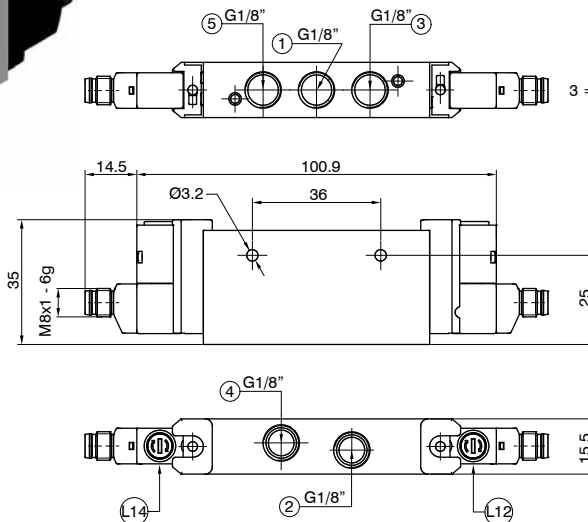
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.52.00.39.Ⓒ Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	20	2,5 ... 7	-5 ... +50	90
3415.52.00.36.Ⓖ Solenoid-Differential				15			

Solenoid-Solenoid - Version 3400 (15,5mm)

Coding: 3415.52.00.35.Ⓒ



CAUS



CONNECTION	
Ⓒ	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "C"

L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.52.00.35.Ⓒ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	10	2,5 ... 7	-5 ... +50	100

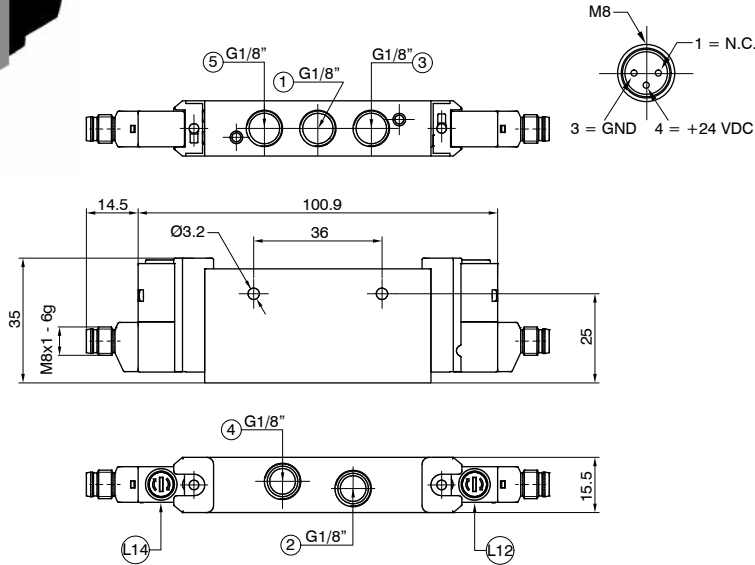


Solenoid valves manifold Series 3000 - STAND ALONE - Version 3400 (15,5mm) - Self feeding

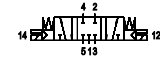
AIR DISTRIBUTION

Solenoid-Solenoid 5/3 (Closed centres) - Version 3400 (15,5mm)

Coding: 3415.53.31.35. **C**



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



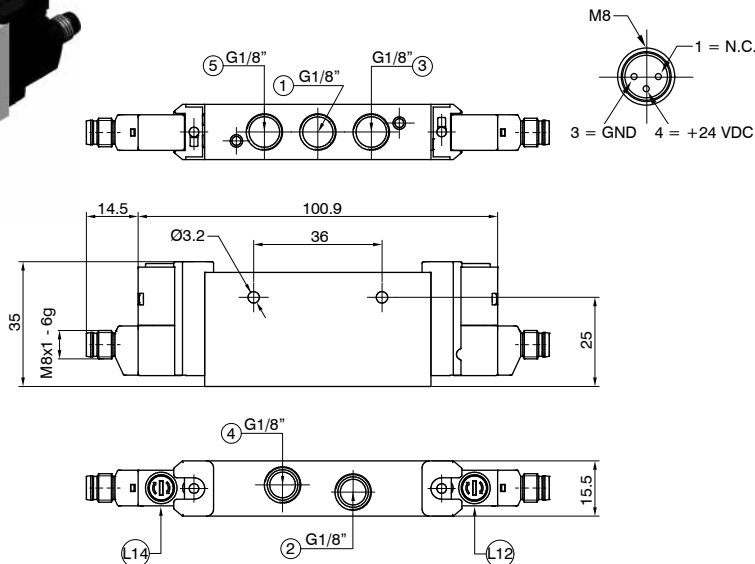
SHORT FUNCTION CODE "E"

CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.53.31.35. C Solenoid-Solenoid (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	20	2,5 ... 7	-5 ... +50	100

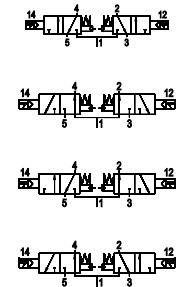
Solenoid-Solenoid 2x3/2 - Version 3400 (15,5mm)

Coding: 3415.62. **F**.35. **C**



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

FUNCTION	
44	= N.C.-N.C. (5/3 Open centres)
F	45 = N.C.-N.O.
55	= N.O.-N.O. (5/3 Pressured centres)
54	= N.O.-N.C.
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.62.44.35. C N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	15	2,5 ... 7	-5 ... +50	100
3415.62.55.35. C N.O.-N.O. (5/3 Pressured centres)							
3415.62.45.35. C N.C.-N.O.							
3415.62.54.35. C N.O.-N.C.							

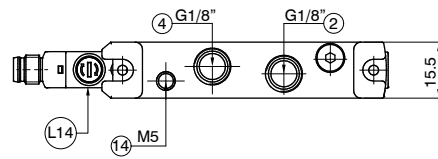
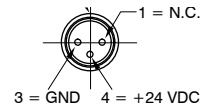
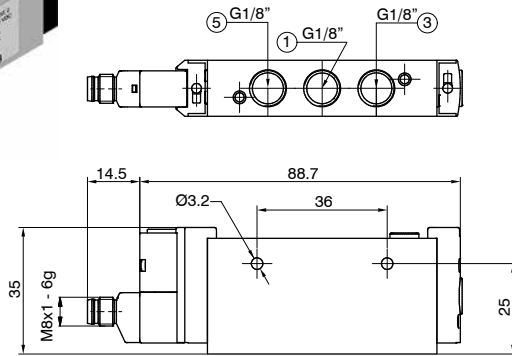
Solenoid-Spring - Version 3400 (15,5mm)

Coding: 3415.52.00.29. **C**

CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



CAUS



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



SHORT FUNCTION CODE "A" (29)

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.52.00.29 C Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	90

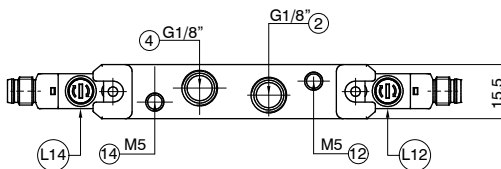
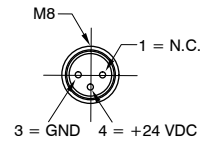
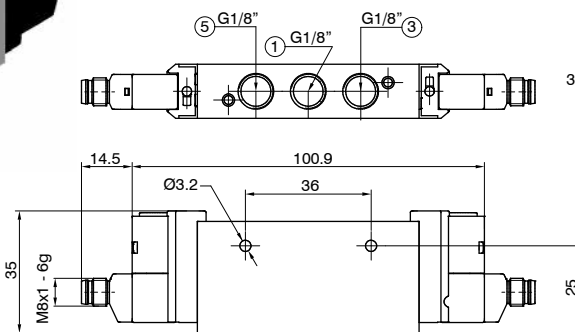
Solenoid-Solenoid - Version 3400 (15,5mm)

Coding: 3415.52.00.25. **C**

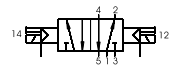
CONNECTION	
C	82 = M8 SPEED-UP connector 24VDC



CAUS



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



SHORT FUNCTION CODE "C"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.52.00.25 C Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	10	From vacuum to 10	2,5 ... 7	-5 ... +50	100

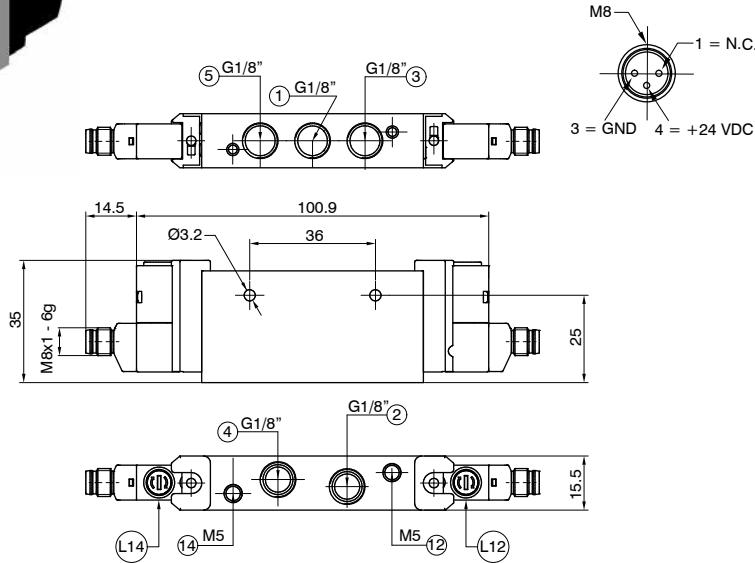


Solenoid valves manifold Series 3000 - STAND ALONE - Version 3400 (15,5mm) - External feeding

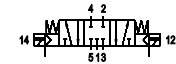
AIR DISTRIBUTION

Solenoid-Solenoid 5/3 (Closed centres) - Version 3400 (15,5mm)

Coding: 3415.53.31.25. **C**



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

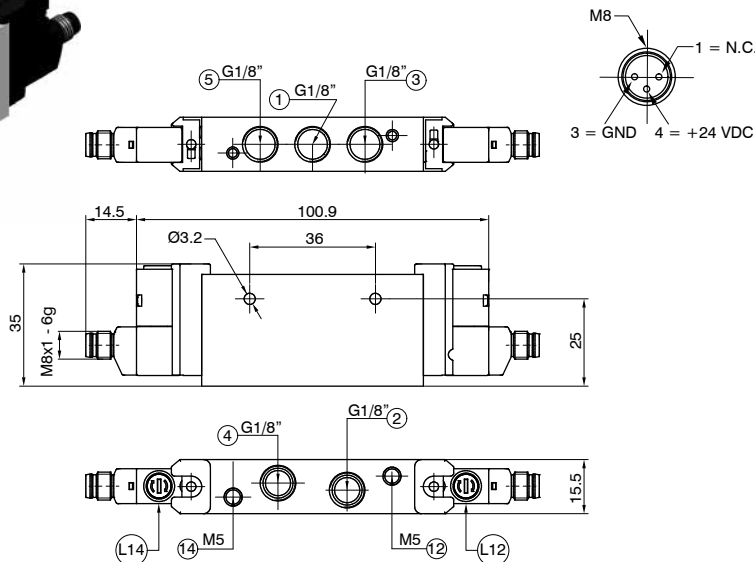


SHORT FUNCTION CODE "E"

Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.53.31.25. C Solenoid-Solenoid 5/3 (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	100

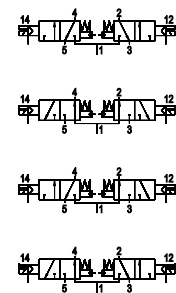
Solenoid-Solenoid 2x3/2 - Version 3400 (15,5mm)

Coding: 3415.62. **F**.25. **C**



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

FUNCTION
44 = N.C.-N.C. (5/3 Open centres)
F 45 = N.C.-N.O.
55 = N.O.-N.O. (5/3 Pressured centres)
54 = N.O.-N.C.
CONNECTION
C 82 = M8 SPEED-UP connector 24VDC

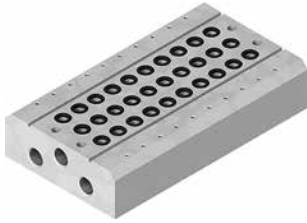


SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

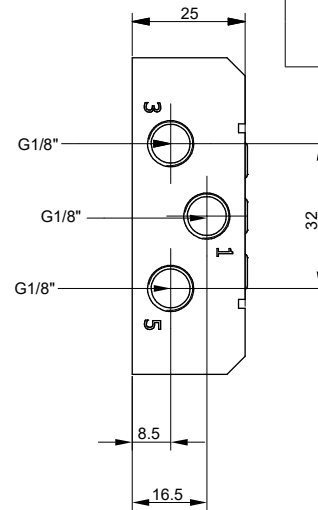
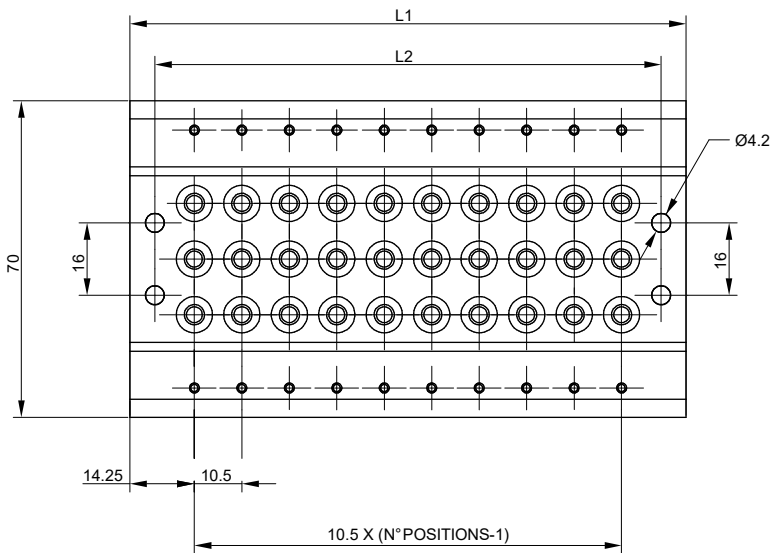
Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.62.44.25. C N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	15	From vacuum to 10	$\geq 3 + (0.2 \times \text{Inlet } p.)$	-5 ... +50	100
3415.62.55.25. C N.O.-N.O. (5/3 Pressured centres)								
3415.62.45.25. C N.C.-N.O.								
3415.62.54.25. C N.O.-N.C.								

Manifold - Version 3100 (10mm)

Coding: 3115.P



POSITIONS	L1	L2
02=2 positions (weight 150 g)	39	29
03=3 positions (weight 200 g)	49,5	39,5
04=4 positions (weight 250 g)	60	50
05=5 positions (weight 300 g)	70,5	60,5
P 06=6 positions (weight 350 g)	81	71
07=7 positions (weight 400 g)	91,5	81,5
08=8 positions (weight 450 g)	102	92
09=9 positions (weight 500 g)	112,5	102,5
10=10 positions (weight 550 g)	123	113



AIR DISTRIBUTION

Assembling kit - Version 3100 (10mm)

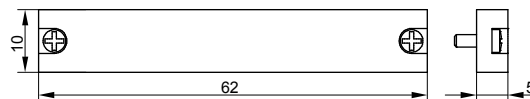
Coding: 3115.KV



Weight 2 g

Closing plate - Version 3100 (10mm)

Coding: 3115.00



Weight 10 g

Diaphragm plug - Version 3100 (10mm)

Coding: 3130.17



Weight 1,5 g

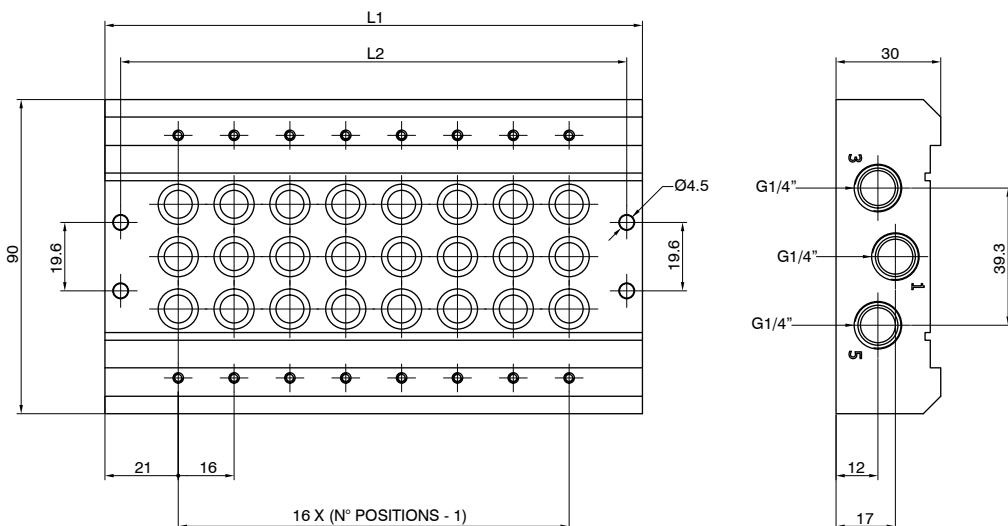


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3400 (15,5mm) - Accessories

Manifold - Version 3400 (15,5mm)



AIR DISTRIBUTION



Coding: 3415.Ⓟ

POSITIONS	L1	L2
02=2 positions (weight 350 g)	58	49
03=3 positions (weight 440 g)	74	65
04=4 positions (weight 530 g)	90	81
05=5 positions (weight 620 g)	106	97
Ⓟ 06=6 positions (weight 710 g)	122	113
07=7 positions (weight 800 g)	138	129
08=8 positions (weight 890 g)	154	145
09=9 positions (weight 980 g)	170	161
10=10 positions (weight 1070 g)	186	177

Assembling kit - Version 3400 (15,5mm)

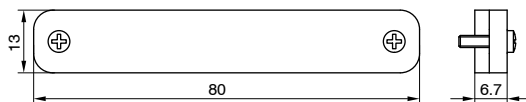
Coding: 3415.KV



Weight 3 g

Closing plate - Version 3400 (15,5mm)

Coding: 3415.00



Weight 25 g

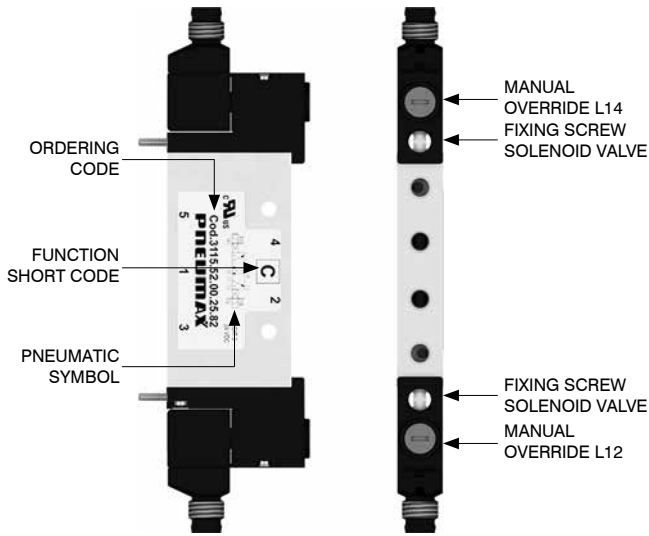
Diaphragm plug - Version 3400 (15,5mm)

Coding: 3430.17

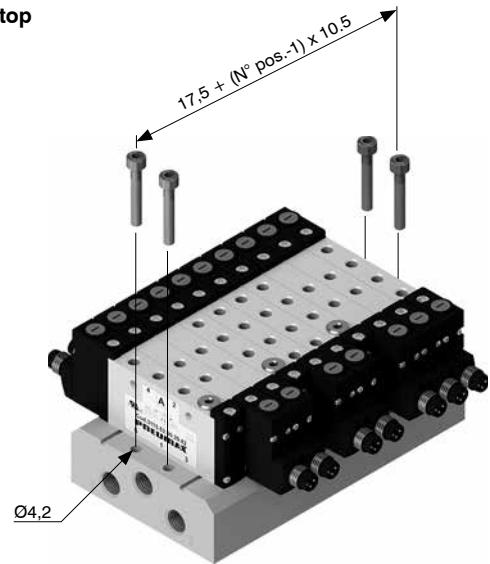


Weight 3 g

Solenoid valve description

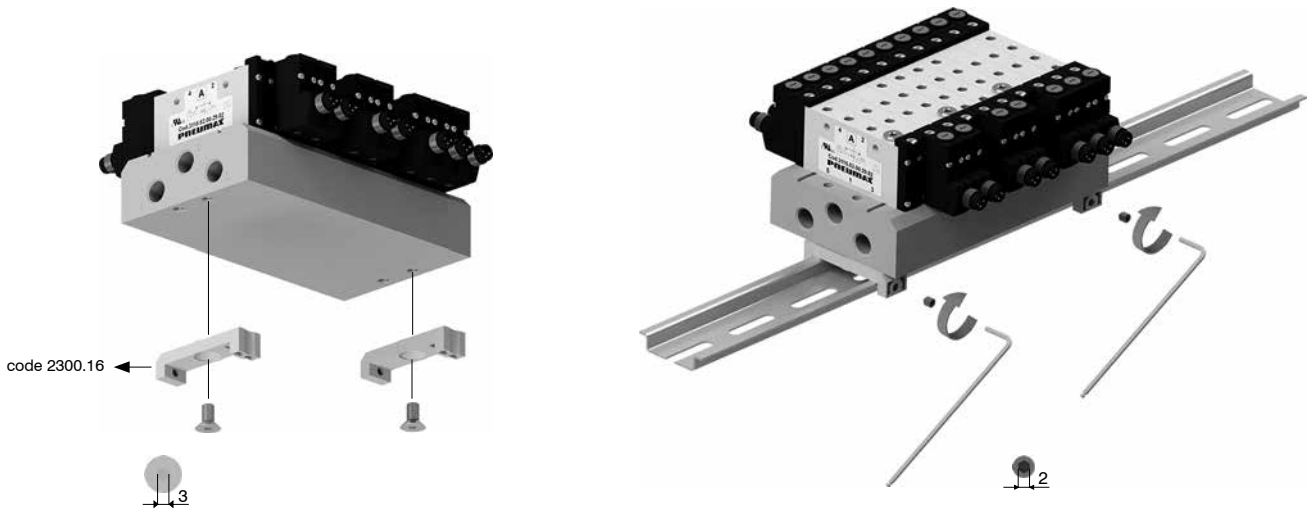


From the top

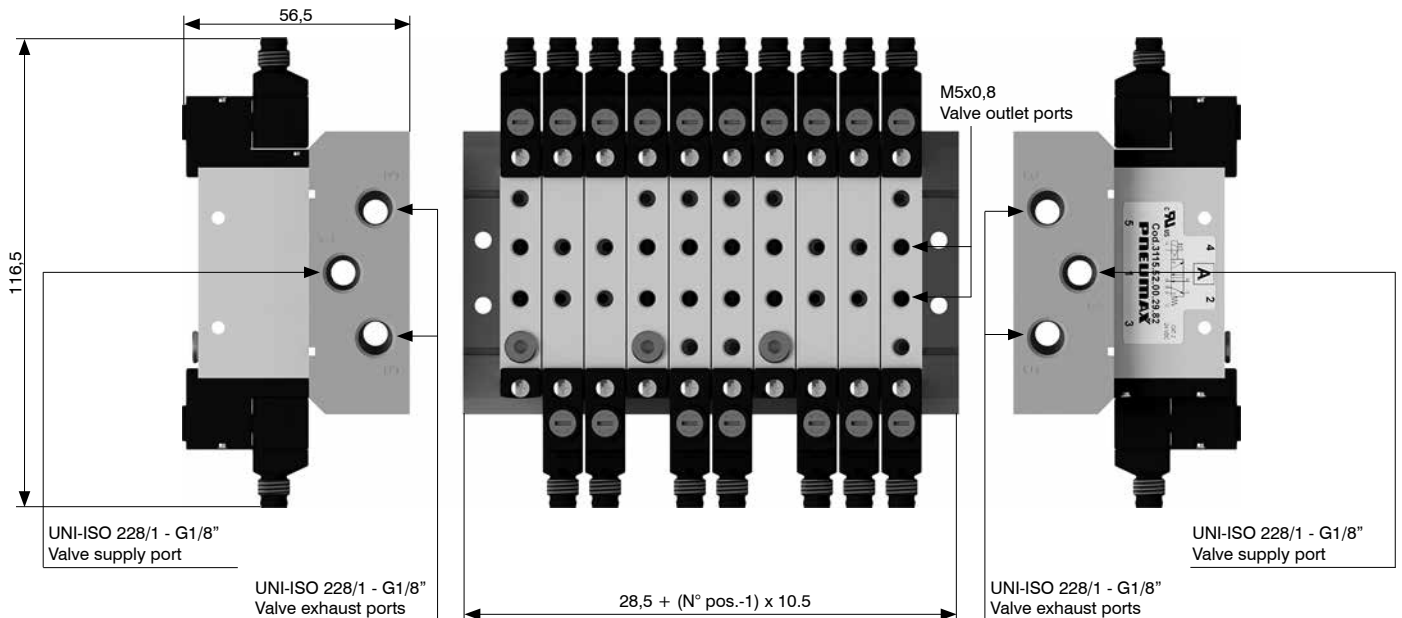


AIR DISTRIBUTION

DIN rail fixing

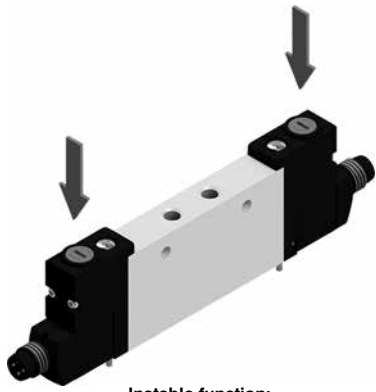


Supply ports and maximum possible size according to valves used

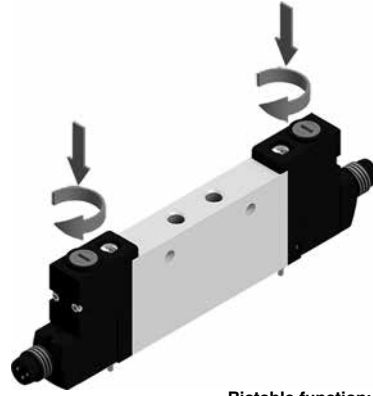




Manual override actuation



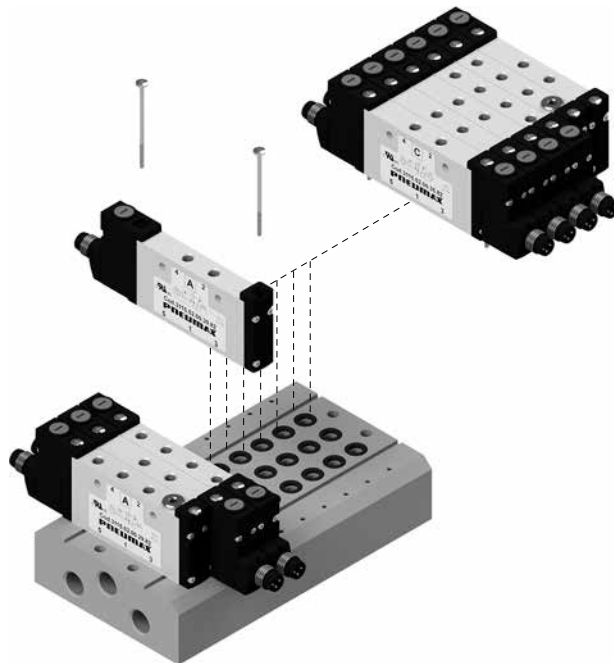
Instable function:
Push to actuate
(when released it moves back
to the original position)



Bistable function:
Push and turn to get the
bistable function

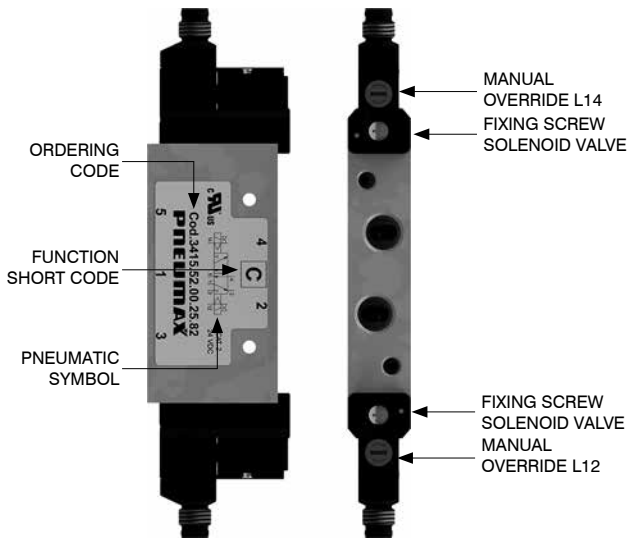
Note: we recommend the manual override is returned to it's original position when not in use

Solenoid valves installation

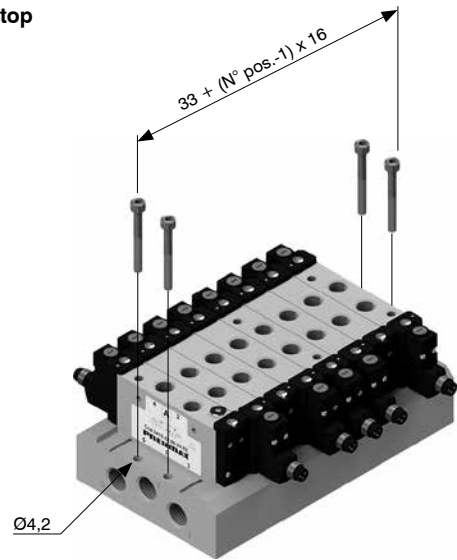


Max. torque moment: 0,2 Nm

Solenoid valve description

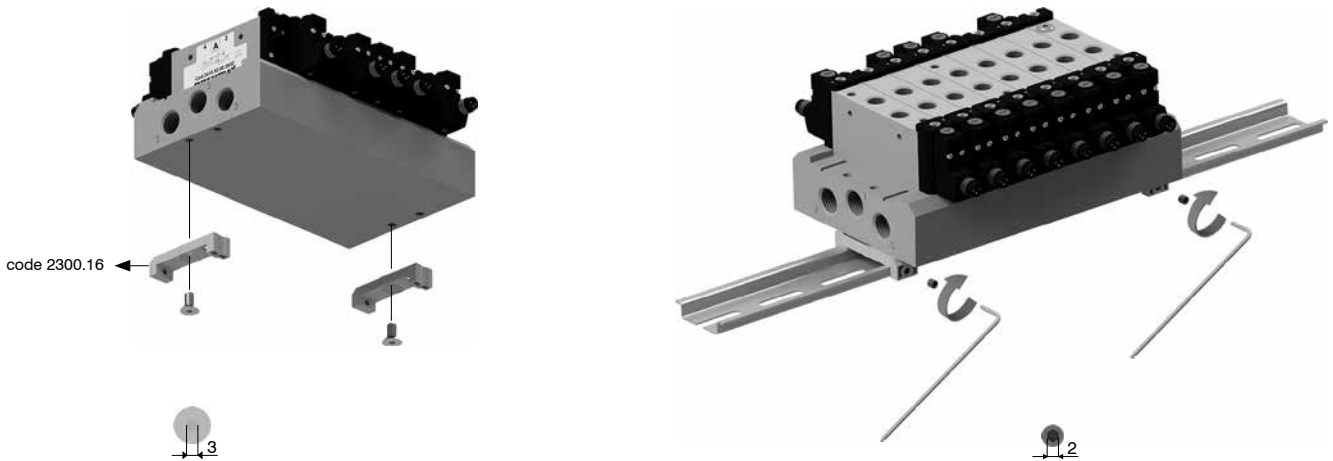


From the top

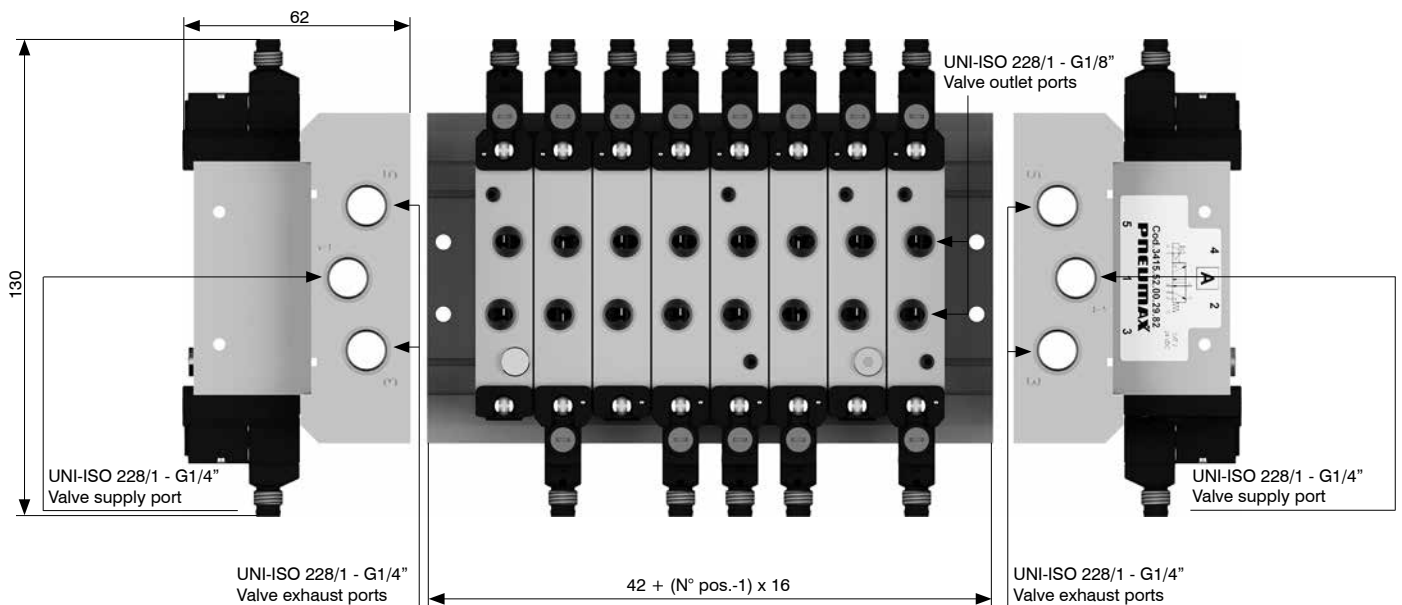


AIR DISTRIBUTION

DIN rail fixing

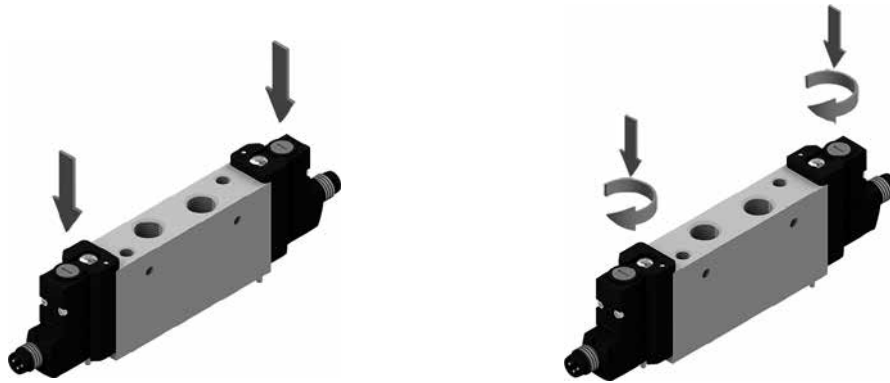


Supply ports and maximum possible size according to valves used





Manual override actuation

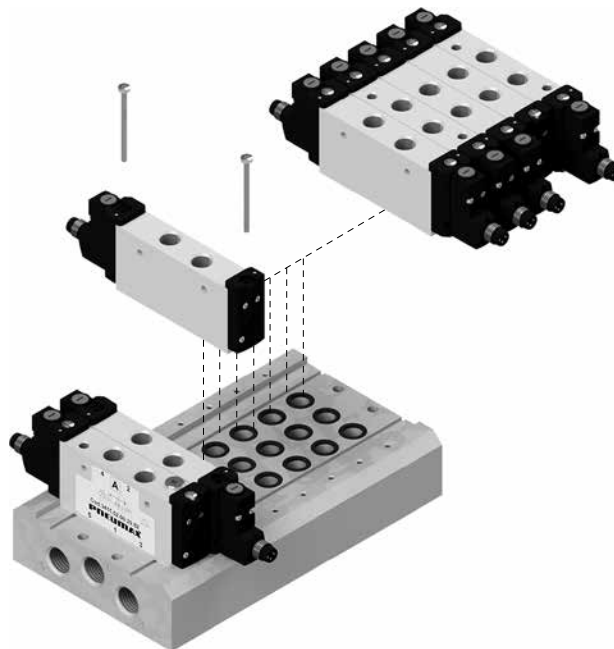


Instable function:
Push to actuate
(when released it moves back
to the original position)

Bistable function:
Push and turn to get the
bistable function

Note: we recommend the manual override is returned to it's original position when not in use

Solenoid valves installation



Max. torque moment: 0,2 Nm

MANIFOLD version



General

The range of solenoid valves to be assembled in pre-configured manifold, is available in multipolar and serial versions, with a vast choice of connectors and analogue and digital input and output accessories. The compact and clean design of both the valve body and the manifold, each one produced in aluminum, allows their use in applications requiring space optimization and weight reduction without sacrificing reliability and the prerogatives of aluminum. The multipolar version is available in three different types of connections:

- SUB-D 25 poles equipped with 24 outputs and configurable in different lengths up to 12 bistable valve positions on the manifold
- SUB-D 37 poles equipped with 32 outputs and configurable in different lengths up to 16 bistable valve positions on the manifold
- SUB-D 25 poles HD (44 poles) equipped with 40 outputs and configurable in different lengths up to 20 bistable valve positions on the manifold

Every one of these options covers the wide range of application requirements and provides electronic management by default capable of energy saving on individual coils and managing PNP and NPN connections automatically without any difference in installation for the end user.

Precisely in order to guarantee maximum integration versatility in different machines and applications, the 3000 series valves in the serial version are designed to interface with all main communication protocols: CANopen®, EtherCAT®, PROFINET IO RT, EtherNet/IP, PROFIBUS DP and IO-Link. Each implemented protocol has been provided to guarantee the best expandability and input/outputs management.

In particular it has been provided protocols to manage up to 64 inputs and 64 outputs (for PROFIBUS DP, CANopen® e IO-Link) and other protocols to manage up to 128 inputs and 128 outputs (for example EtherCAT®, EtherNet/IP e PROFINET IO RT).

Taking advantage of the output signals it is possible to connect components to manage, for example, proportional pressure regulator or to control other solenoid valves.

The 3000 series allows the use of modules dedicated to managing input signals up to the maximum number of inputs manageable by the specific serial node used.

Input modules with different interfaces and different technologies have been provided: modules with eight digital inputs with M8 or M12 connection, analogue or voltage input modules with M8 connection interface and others.

One of the strengths of this system is the possibility to freely configure the series of input and output modules, giving the advantage of installation flexibility.

Main characteristics

10 and 15,5 mm size.

Multi-position sub-bases in different lengths.

Integrated and optimized electrical connection as standard.

Functions

S.V. 5/2 Monostable Solenoid-Spring

S.V. 5/2 Monostable Solenoid-Differential

S.V. 5/2 Bistable Solenoid-Solenoid

S.V. 5/3 C.C. Solenoid-Solenoid

S.V. 2x3/2 N.C.-N.C. (= 5/3 O.C.) Solenoid-Solenoid

S.V. 2x3/2 N.O.-N.O. (= 5/3 P.C.) Solenoid-Solenoid

S.V. 2x3/2 N.C.-N.O. Solenoid-Solenoid

S.V. 2x3/2 N.O.-N.C. Solenoid-Solenoid



Configurator

AIR DISTRIBUTION



Size
1: Version 3100 (10mm)
4: Version 3400 (15,5mm)

Power supply
A: Self feeding
E: External feeding

Electric connection
MP2: 25 poles multipoint module
MP3: 37 poles multipoint module
MP4: 44 poles HD multipoint module
C3: CANopen® node 64 IN - 64 OUT (32 fixed)
C4: CANopen® node 64 IN - 64 OUT (48 fixed)
P3: PROFIBUS DP node 64 IN - 64 OUT (32 fixed)
P4: PROFIBUS DP node 64 IN - 64 OUT (48 fixed)
I4: EtherNet/IP node 128 IN - 128 OUT (48 fixed)
A4: EtherCAT® node 128 IN - 128 OUT (48 fixed)
N4: PROFINET IO RT node 128 IN - 128 OUT (48 fixed)
K3: IO-Link node 64 IN - 64 OUT (32 fixed)
K4: IO-Link node 64 IN - 64 OUT (48 fixed)

Inputs module - Analog / Digital (Optional)
D8: 8 M8 digital inputs module
D12: 8 M12 digital inputs module
D3: 32 digital inputs SUB-D 37 pins
T1: 2 analogue inputs 0-5V module (voltage signal)
T2: 2 analogue inputs 0-10V module (voltage signal)
T3: 4 analogue inputs 0-5V module (voltage signal)
T4: 4 analogue inputs 0-10V module (voltage signal)
C1: 2 analogue inputs 0-20mA module (current signal)
C2: 2 analogue inputs 4-20mA module (current signal)
C3: 4 analogue inputs 0-20mA module (current signal)
C4: 4 analogue inputs 4-20mA module (current signal)
P1: 2 Pt100 2 wires inputs module
P2: 2 Pt100 3 wires inputs module
P3: 2 Pt100 4 wires inputs module
P4: 4 Pt100 2 wires inputs module
P5: 4 Pt100 3 wires inputs module
P6: 4 Pt100 4 wires inputs module

Outputs module - Analog / Digital (Optional)
M8: 8 M8 digital outputs module
M12: 8 M12 digital outputs module
M3: 32 digital outputs SUB-D 37 pins
V1: 2 analogue outputs 0-5V module (voltage signal)
V2: 2 analogue outputs 0-10V module (voltage signal)
V3: 4 analogue outputs 0-5V module (voltage signal)
V4: 4 analogue outputs 0-10V module (voltage signal)
L1: 2 analogue outputs 0-20mA module (current signal)
L2: 2 analogue outputs 4-20mA module (current signal)
L3: 4 analogue outputs 0-20mA module (current signal)
L4: 4 analogue outputs 4-20mA module (current signal)

Additional modules (Optional)
P12: M12 additional power supply module
J0: Optional position module

Check the number of available optional position modules

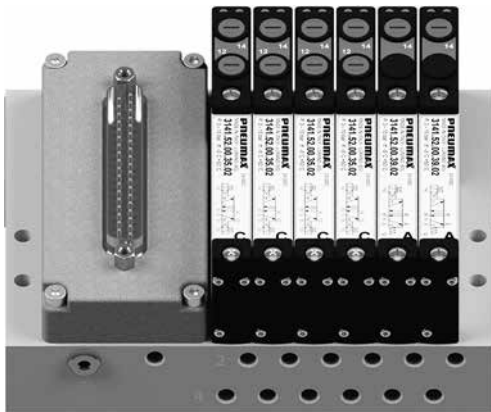
Number of available optional position modules (standard)				
1	2	4	8	12

Valve type
A: S.V. 5/2 Solenoid - Spring
B: S.V. 5/2 Solenoid - Differential
C: S.V. 5/2 Solenoid - Solenoid
E: S.V. 5/3 C.C. Solenoid - Solenoid
F: S.V. 2X3/2 N.C.-N.C. (=5/3 O.C.) Solenoid - Solenoid
G: S.V. 2X3/2 N.O.-N.O. (=5/3 P.C.) Solenoid - Solenoid
H: S.V. 2X3/2 N.C.-N.O. Solenoid - Solenoid
I: S.V. 2X3/2 N.O.-N.C. Solenoid - Solenoid
T: Free valve space plug
X: Diaphragm plug on pipe 1
Y: Diaphragm plug on pipe 3
Z: Diaphragm plug on pipe 5
W: Intermediate supply and exhaust module

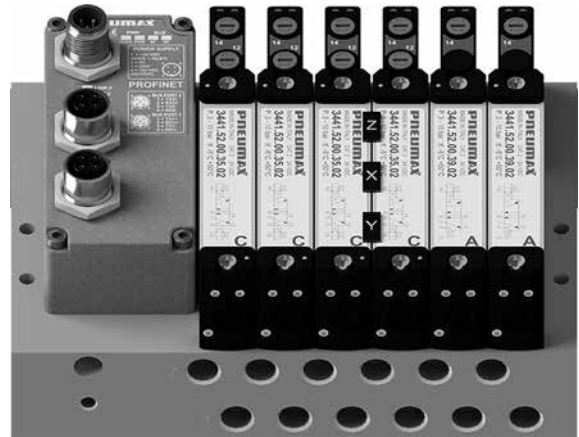
Check the number of available solenoid valves seats

Number of available solenoid valves seats (standard)							
4	6	8	10	12	16	20	24

Configuration examples

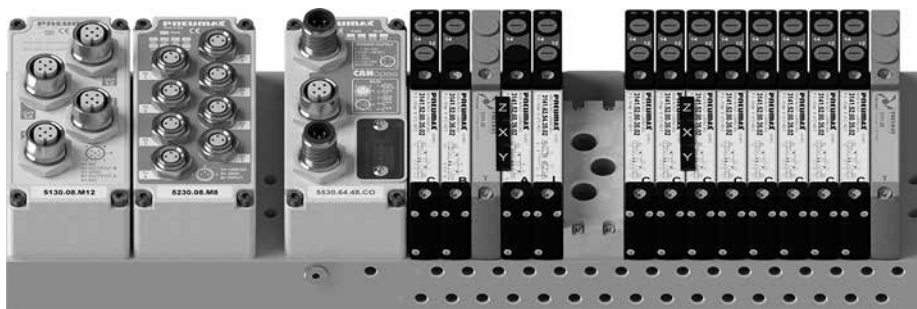


Example shown : 31EMP3CCCCAA
Manifold with external feeding, multipolar 37 poles and solenoid valves.



Example shown : 34EN4CCCXYZCAA
Manifold with external feeding, serial node, solenoid valves and diaphragm plugs.

AIR DISTRIBUTION



Example shown : 31EC4D8M12CBTXYZAIWCCXYZCCCCCT
Manifold with external feeding, serial node, M8 input module, M12 output module; solenoid valves, multi-position diaphragm plugs, additional power supply module.

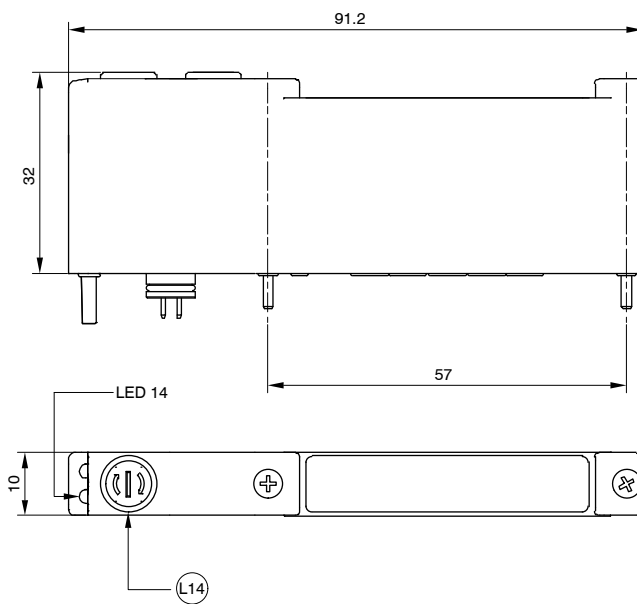
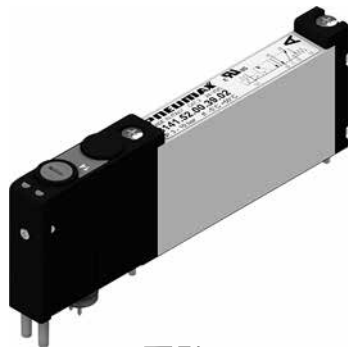


Example shown : 34AC4D8D8M12J0CBIIITTT
Self feeding manifold with serial node, M8 input module, M12 output module, optional position module, solenoid valves.

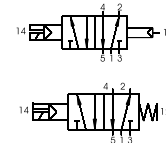
► Solenoid-Spring / Solenoid-Differential - Version 3100 (10mm)

Coding: 3141.52.00.ⒻⒼ

FUNCTION	
Ⓕ	36 = Solenoid-Differential
Ⓖ	39 = Solenoid-Spring
CONNECTION	
Ⓒ	02 = 24VDC



L14 = Manual over ride - side 14



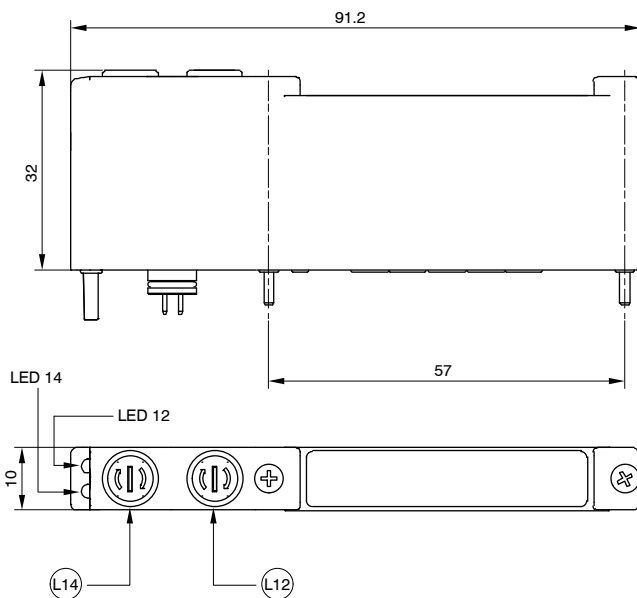
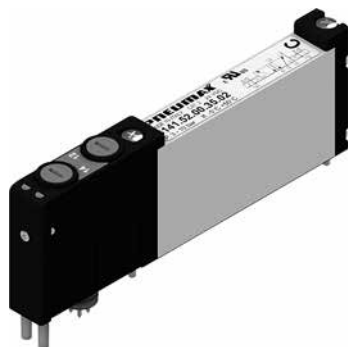
SHORT FUNCTION CODE "A" (39)
SHORT FUNCTION CODE "B" (36)

Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3141.52.00.39.Ⓒ Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	200	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	55,7
3141.52.00.36.Ⓒ Solenoid-Differential								

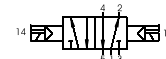
► Solenoid-Solenoid - Version 3100 (10mm)

Coding: 3141.52.00.35.Ⓒ

CONNECTION	
Ⓒ	02 = 24VDC



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



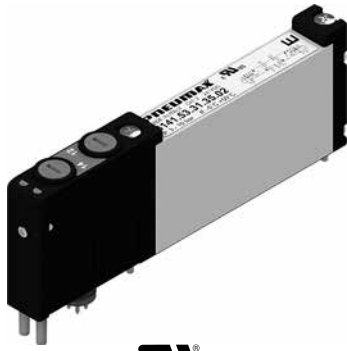
SHORT FUNCTION CODE "C"

Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3141.52.00.35.Ⓒ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	200	10	10	From vacuum to 10	2,5 ... 7	-5 ... +50	55,7

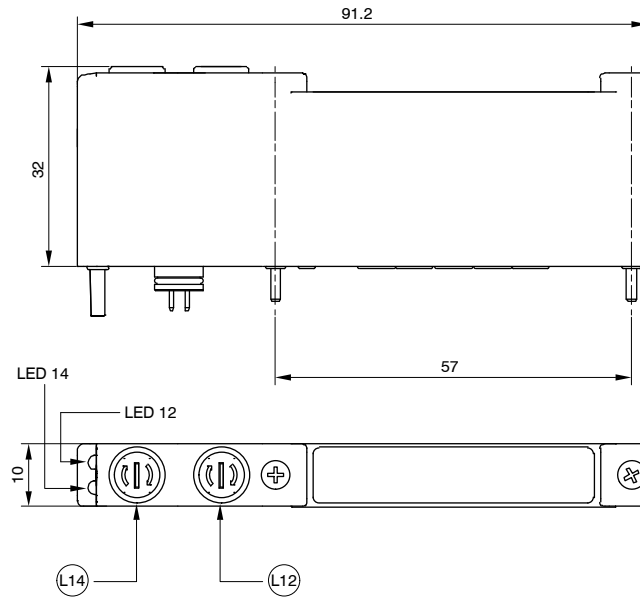
Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3141.53.31.35.Ⓒ

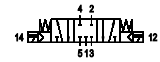
Ⓒ CONNECTION
02 = 24VDC



C **RU** US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14



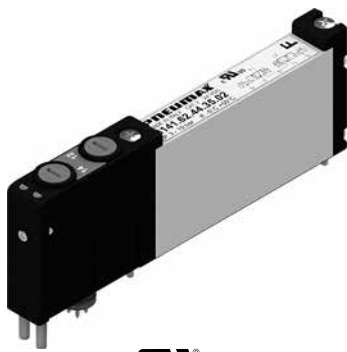
SHORT FUNCTION CODE "E"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (l/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3141.53.31.35.Ⓒ Solenoid-Solenoid 5/3 (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	170	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	60,3

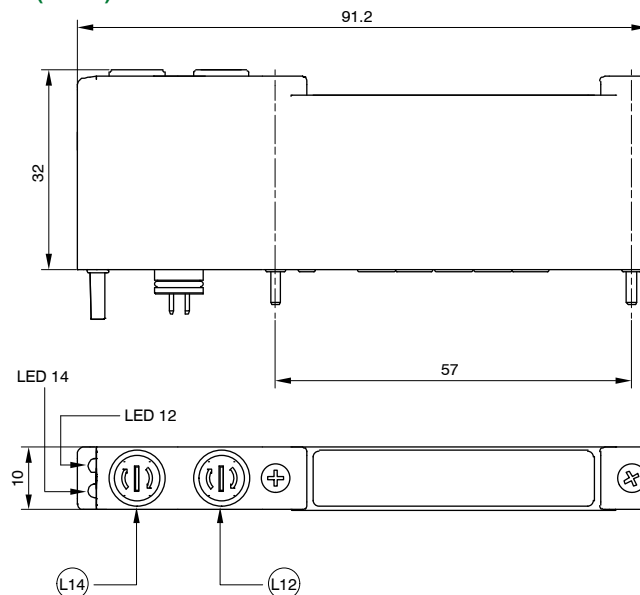
Solenoid-Solenoid 2x3/2 - Version 3100 (10mm)

Coding: 3141.62.Ⓕ.35.Ⓒ

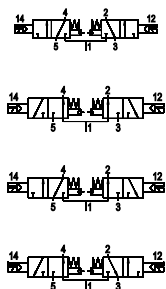
FUNCTION
44 = N.C.-N.C. (5/3 Open centres)
Ⓕ 45 = N.C.-N.O.
55 = N.O.-N.O. (5/3 Pressured centres)
54 = N.O.-N.C.
CONNECTION
02 = 24VDC



C **RU** US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

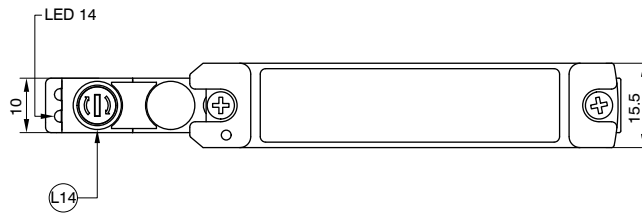
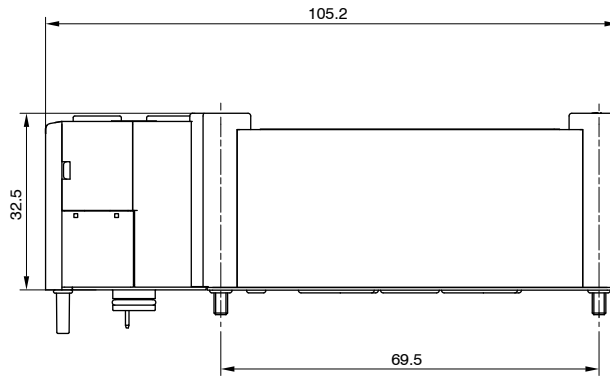


SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

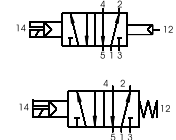
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (l/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3141.62.44.35.Ⓒ N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	170	10	15	From vacuum to 10	$\geq 3 + (0,2 \times \ln p)$	-5 ... +50	60,7
3141.62.55.35.Ⓒ N.O.-N.O. (5/3 Pressured centres)								
3141.62.45.35.Ⓒ N.C.-N.O.								
3141.62.54.35.Ⓒ N.O.-N.C.								

Solenoid-Spring / Solenoid-Differential - Version 3400 (15,5mm)

Coding: 3441.52.00.ⒻⒸ



FUNCTION	
Ⓕ	36 = Solenoid-Differential
Ⓒ	39 = Solenoid-Spring
CONNECTION	
02	= 24VDC



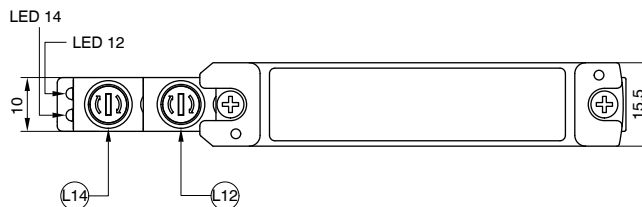
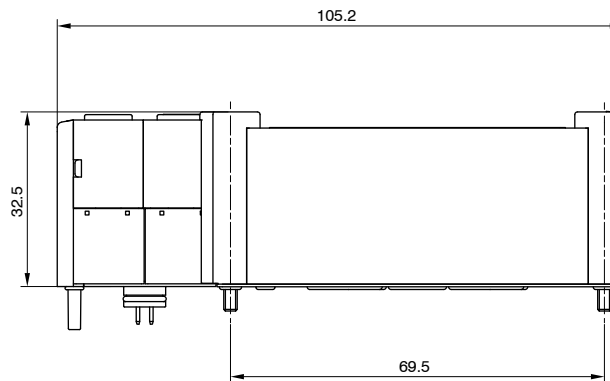
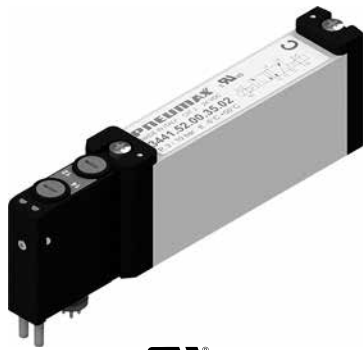
L14 = Manual over ride - side 14

SHORT FUNCTION CODE "A" (39)
 SHORT FUNCTION CODE "B" (36)

Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3441.52.00.39 Ⓒ Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	92
3441.52.00.36 Ⓕ Solenoid-Differential								

Solenoid-Solenoid - Version 3400 (15,5mm)

Coding: 3441.52.00.35 Ⓒ



CONNECTION	
02	= 24VDC



L12 = Manual over ride - side 12
 L14 = Manual over ride - side 14

SHORT FUNCTION CODE "C"

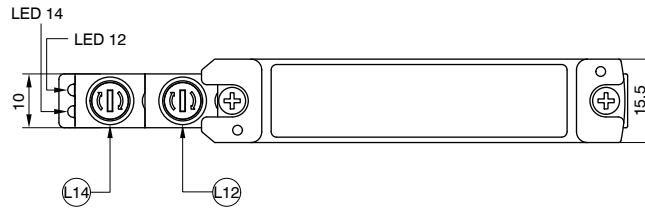
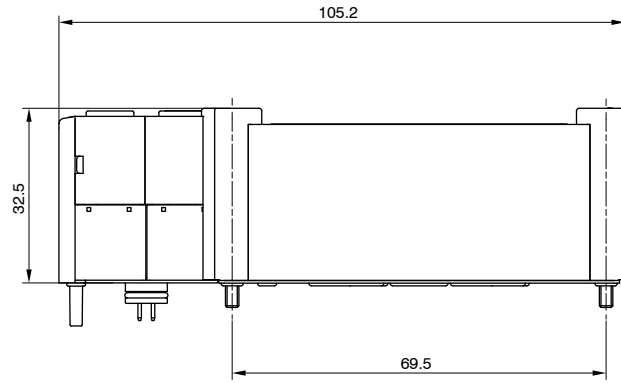
Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3441.52.00.35 Ⓒ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	10	From vacuum to 10	2,5 ... 7	-5 ... +50	99

Solenoid-Solenoid 5/3 (Closed centres) - Version 3400 (15,5mm)

Coding: 3441.53.31.35.Ⓒ



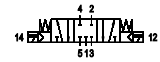
C **RU** US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

Ⓒ CONNECTION
02 = 24VDC

SHORT FUNCTION CODE "E"



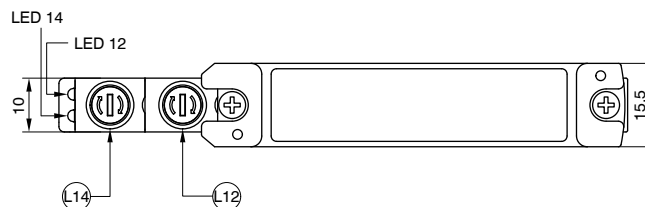
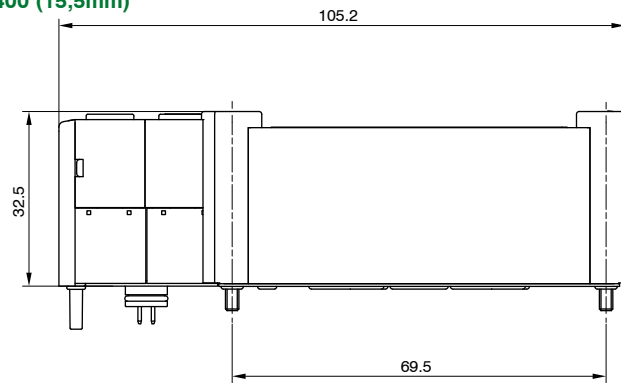
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3441.53.31.35.Ⓒ Solenoid-Solenoid 5/3 (Closed centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	20	From vacuum to 10	2,5 ... 7	-5 ... +50	99

Solenoid-Solenoid 2x3/2 - Version 3400 (15,5mm)

Coding: 3441.62.Ⓕ.35.Ⓒ

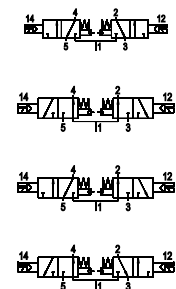


C **RU** US



L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

FUNCTION
44 = N.C.-N.C. (5/3 Open centres)
Ⓕ 45 = N.C.-N.O.
55 = N.O.-N.O. (5/3 Pressured centres)
54 = N.O.-N.C.
CONNECTION
02 = 24VDC



SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3441.62.44.35.Ⓒ N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	20	From vacuum to 10	$\geq 3 + (0.2 \times \ln p.)$	-5 ... +50	99
3441.62.55.35.Ⓒ N.O.-N.O. (5/3 Pressured centres)								
3441.62.45.35.Ⓒ N.C.-N.O.								
3441.62.54.35.Ⓒ N.O.-N.C.								

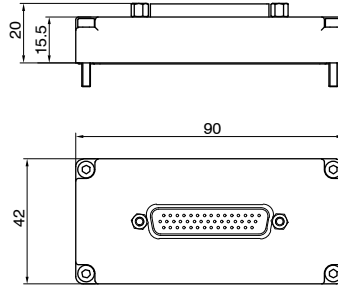


Solenoid valves manifold Series 3000 - MANIFOLD - Multipoint connections

Multipoint module - Version 3100 (10mm) and 3400 (15,5mm)

Coding: 3140.00.Ⓢ

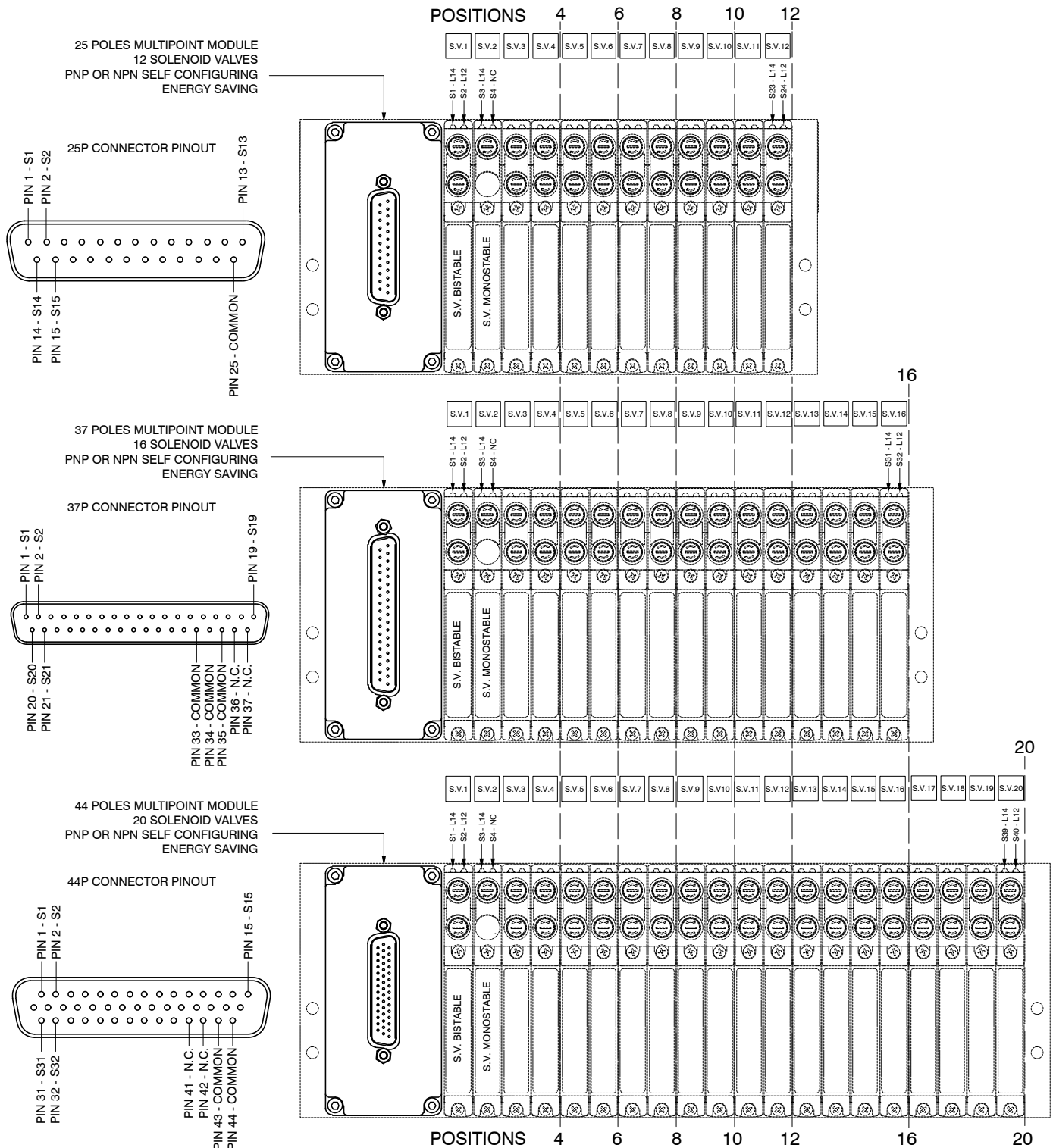
ELECTRICAL CONNECTION	
Ⓢ	25P=Connector 25 poles
	37P=Connector 37 poles
	44P=Connector 44 poles



AIR DISTRIBUTION

Operational characteristics

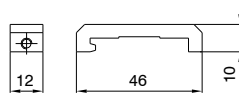
Coding example	3140.00.25P (25 poles)	3140.00.37P (37 poles)	3140.00.44P (44 poles)
Temperature °C	-5 ... +50		
Weight (g)	47,4	51,3	49,1



► DIN rail adapter - Version 3100 (10mm) and 3400 (15,5mm)

Coding: 2300.16

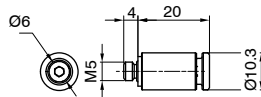
Weight 12 g



► Fitting M5 Ø6 - Version 3100 (10mm)

Coding: RDR560

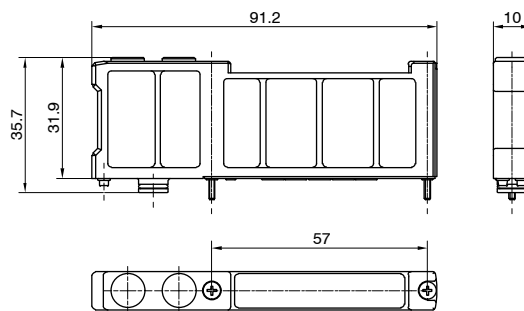
Weight 7 g



► Free valve space plug - Version 3100 (10mm)

Coding: 3140.00

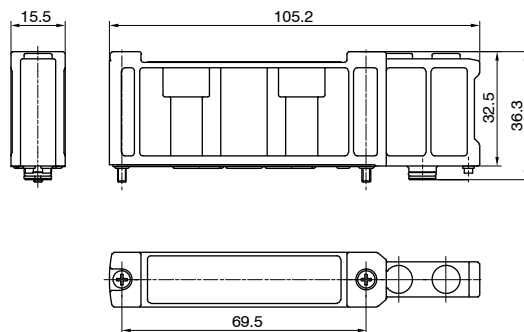
Weight 21 g



► Free valve space plug - Version 3400 (15,5mm)

Coding: 3440.00

Weight 38 g



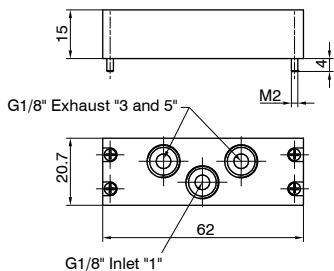


Inlet/Exhaust module - Version 3100 (10mm)

Coding: 3140.10



Weight 50 g

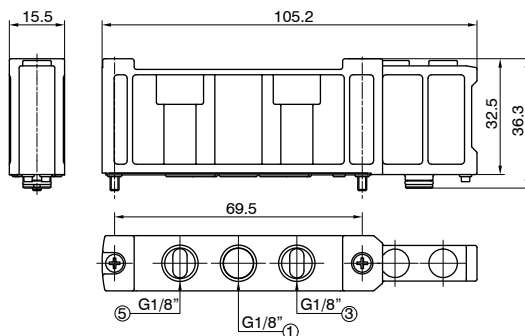


Inlet/Exhaust module - Version 3400 (15,5mm)

Coding: 3440.10



Weight 37 g



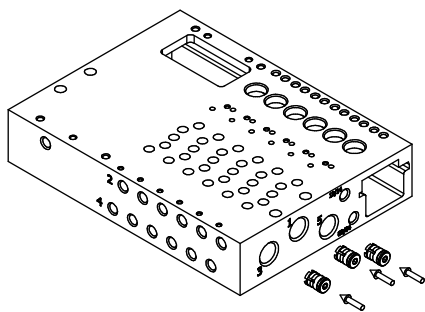
Diaphragm plug - Version 3100 (10mm)

Coding: 3130.17

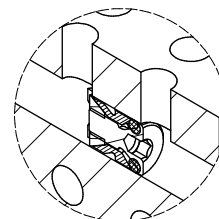
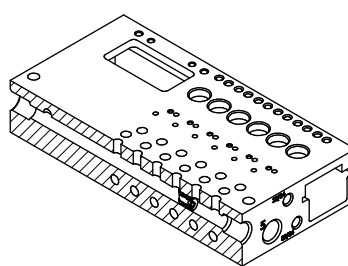
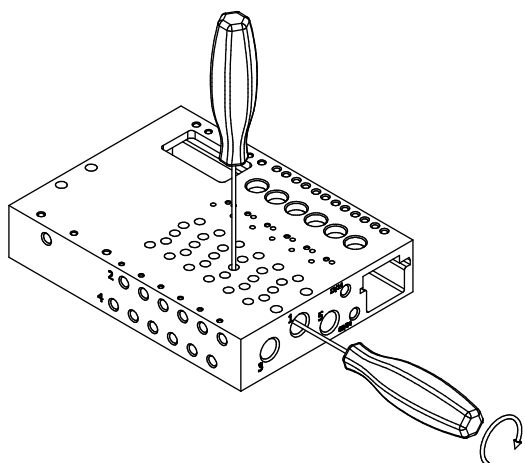


Weight 1,5 g

Diaphragm plug installation



Diaphragm plug fixing



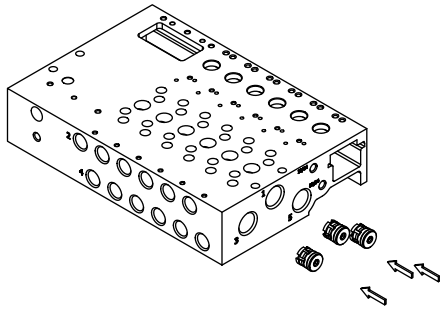
▶ Diaphragm plug - Version 3400 (15,5mm)

Coding: 3430.17

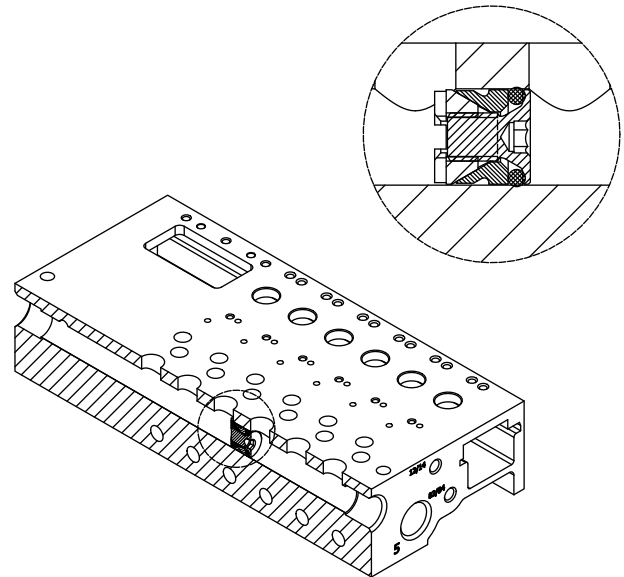
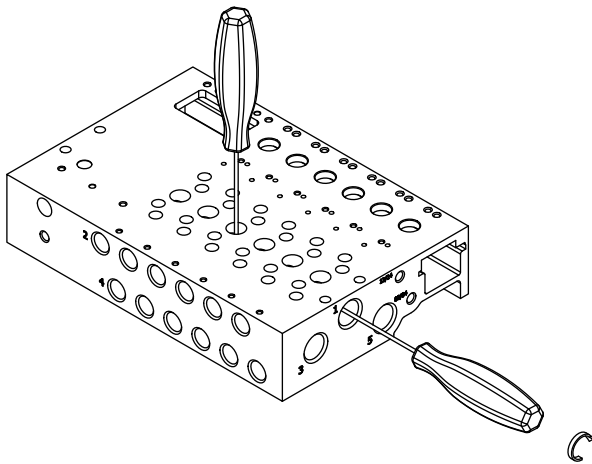
Weight 3 g



Diaphragm plug installation



Diaphragm plug fixing



AIR DISTRIBUTION

▶ Cable complete with connector 25 poles, IP65 - Version 3100 (10mm) and 3400 (15,5mm)

Coding: 2300.25.L.C



	CABLE LENGTH
L	03=3 meters 05=5 meters 10=10 meters
	CONNECTOR
C	10=In line 90=90° angle

▶ Cable complete with connector 37 poles, IP65 - Version 3100 (10mm) and 3400 (15,5mm)

Coding: 2300.37.L.C



	CABLE LENGTH
L	03=3 meters 05=5 meters 10=10 meters
	CONNECTOR
C	10=In line 90=90° angle

▶ Cable complete with connector 44 poles, IP65 - Version 3100 (10mm) and 3400 (15,5mm)

Coding: 2300.44.L.C



	CABLE LENGTH
L	03=3 meters 05=5 meters 10=10 meters
	CONNECTOR
C	10=In line 90=90° angle



Solenoid valve description

PILOT STATE IDENTIFICATION LED L12
 (LED "ON" = IDENTIFIES ACTAUTED PILOT)

PILOT STATE IDENTIFICATION LED L14
 (LED "ON" = IDENTIFIES ACTAUTED PILOT)

MANUAL OVERRIDE L14

MANUAL OVERRIDE L12

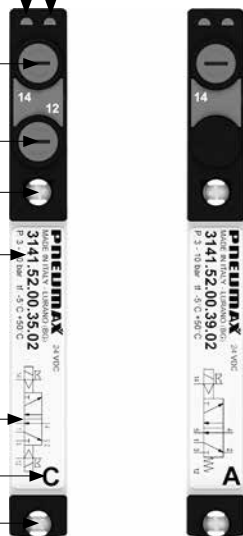
FIXING SCREW SOLENOID VALVE

ORDERING CODE

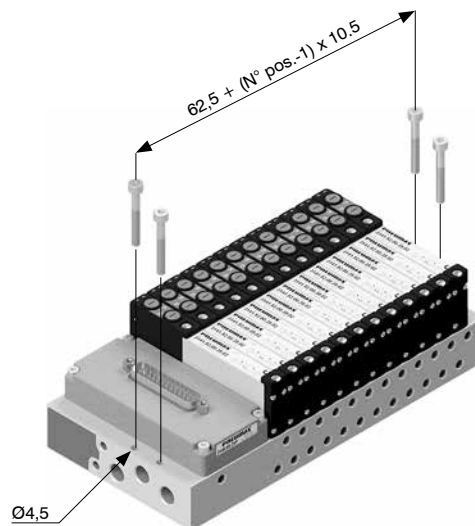
PNEUMATIC SYMBOL

FUNCTION SHORT CODE

FIXING SCREW SOLENOID VALVE

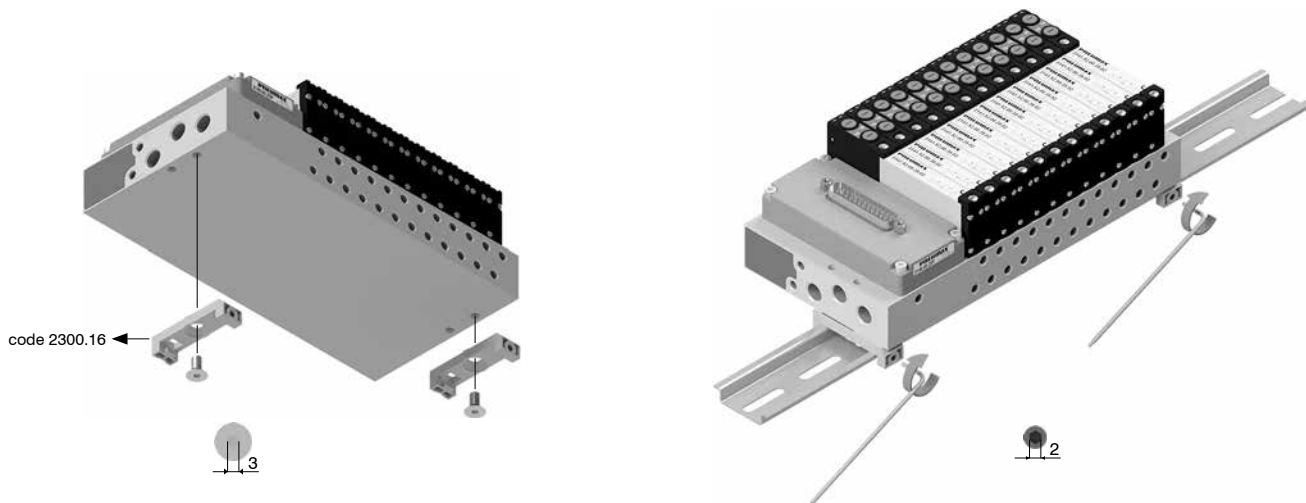


From the top

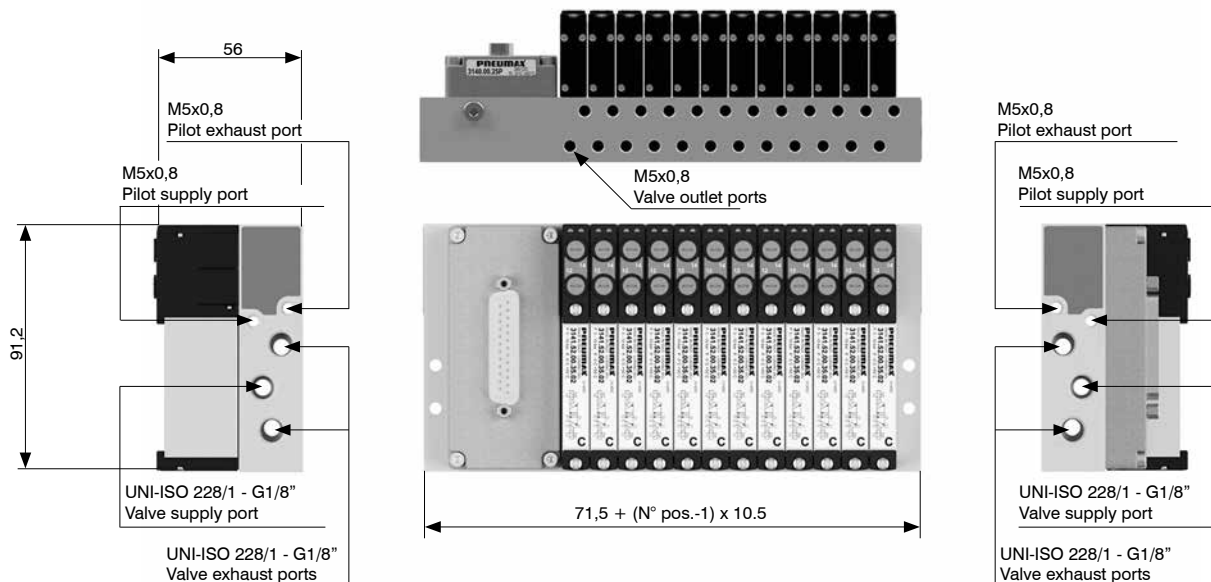


AIR DISTRIBUTION

DIN rail fixing



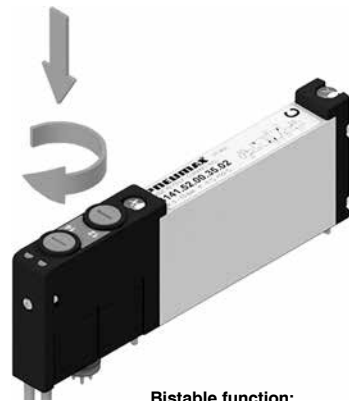
Supply ports and maximum possible size according to valves used



Manual override actuation



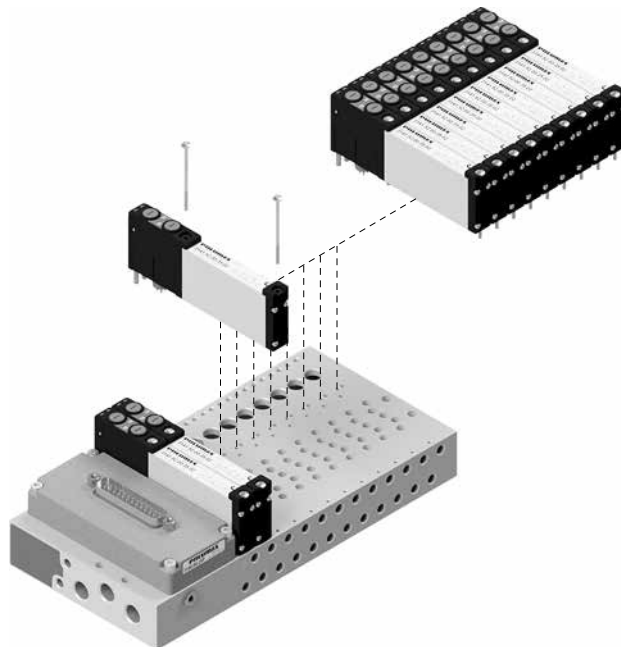
Instable function:
 Push to actuate
 (when released it moves back
 to the original position)



Bistable function:
 Push and turn to get the
 bistable function

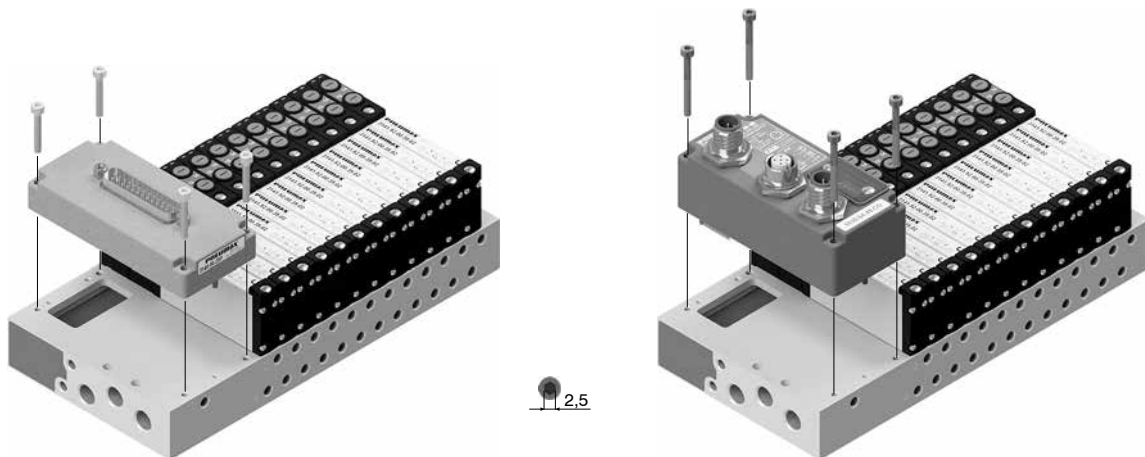
Note: we recommend the manual override is returned to its original position when not in use

Solenoid valves installation



Max. torque moment: 0,2 Nm

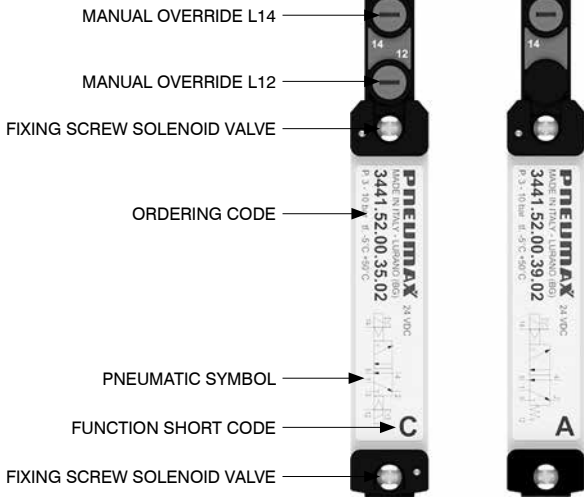
Serial systems and multipoint system installation



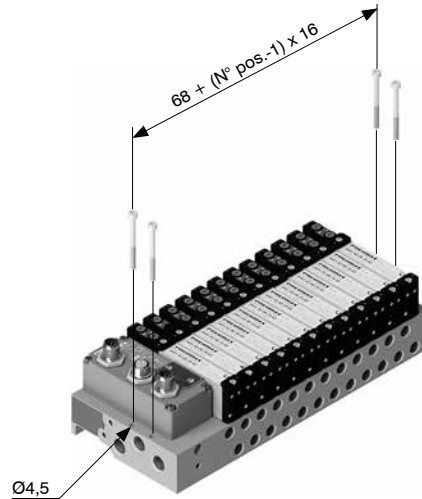
Max. torque moment: 0,5 Nm

Solenoid valve description

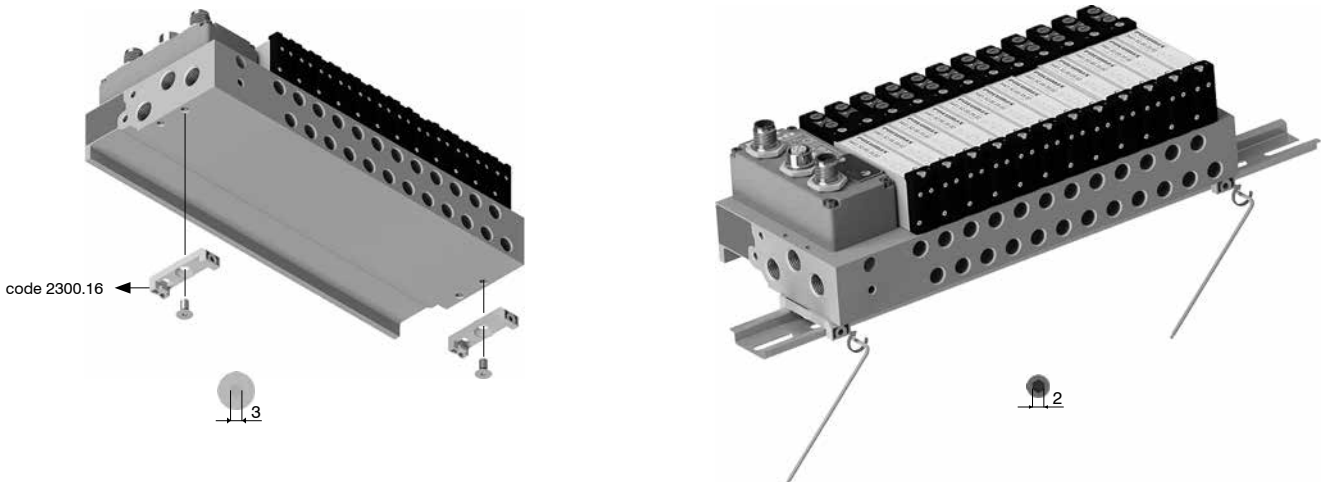
PILOT STATE IDENTIFICATION LED L12
 (LED "ON" = IDENTIFIES ACTAUTED PILOT)
 PILOT STATE IDENTIFICATION LED L14
 (LED "ON" = IDENTIFIES ACTAUTED PILOT)



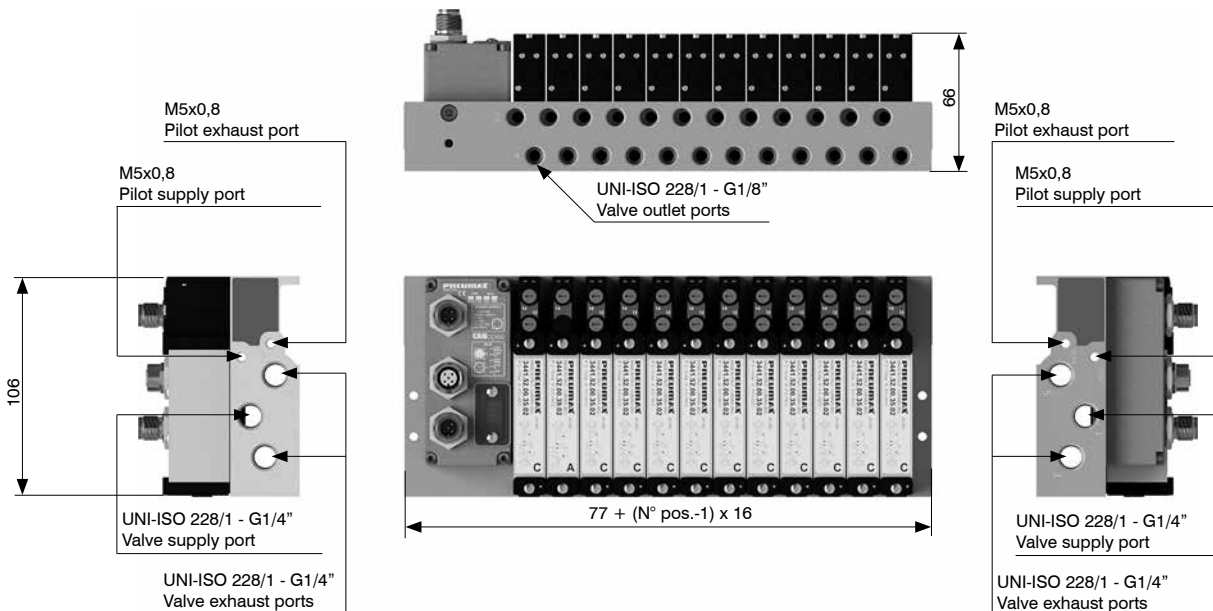
From the top



DIN rail fixing



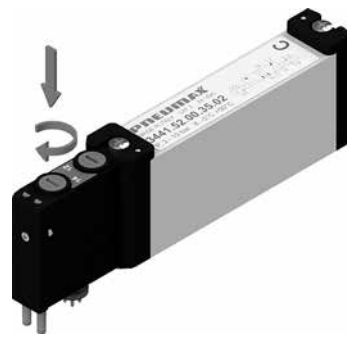
Supply ports and maximum possible size according to valves used



Manual override actuation



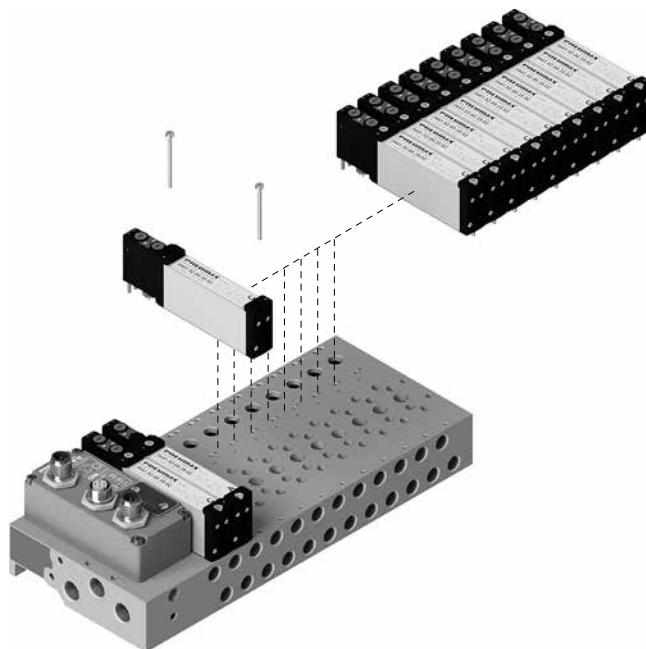
Instable function:
Push to actuate
(when released it moves back
to the original position)



Bistable function:
Push and turn to get the
bistable function

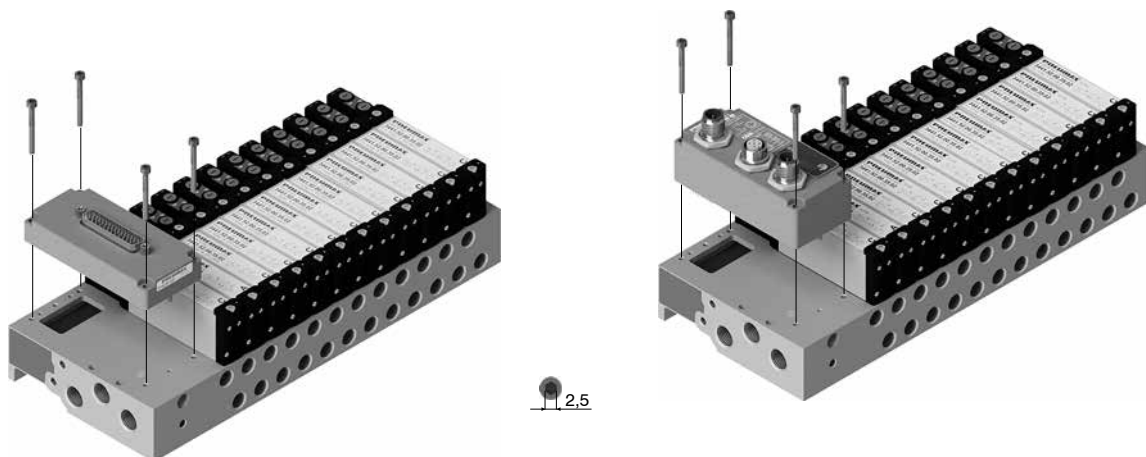
Note: we recommend the manual override is returned to it's original position when not in use

Solenoid valves installation



Max. torque moment: 0,2 Nm

Serial systems and multipoint system installation



Max. torque moment: 0,5 Nm

General - CANopen® nodes

CANopen® node handles up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analog outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analog input modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration, provided that modules are installed starting from the node and optional position modules left to furthest end.

Electrical power must be supplied via circular M12 4 pins type A male connector. The separation between 24VDC supply of the node and 24VDC of the outputs allows to turn off outputs leaving the node and eventual inputs operational.

CANopen® network connection is achieved via two circular male-female M12 5 pins type A connectors connected in parallel; connectors pinout is compliant to CiA Draft Recommendation 303-1 (V. 1.3 : 30 December 2004).

Transmission speed and address are set via DIP-switch.

Internal termination resistance is on-board and can be enabled via DIP-switch as well.

There are two CANopen® node versions: they differ by number of outputs directly allocated to solenoid valve positions.

5530.64.32CO part number provides the first 32 out of 64 outputs, corresponding to less significant 4 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 32 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

5530.64.48CO part number provides the first 48 out of 64 outputs, corresponding to less significant 6 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 16 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

Two part-numbers have been provided to tailor configuration on your needs. 5530.64.48CO part number is recommended in case several solenoid valves must be handled, whilst ensuring room for future expansions.

5530.64.32CO part number is recommended in case increased flexibility is needed for digital outputs.

To better understand different possibilities offered during configuration, some examples follow.

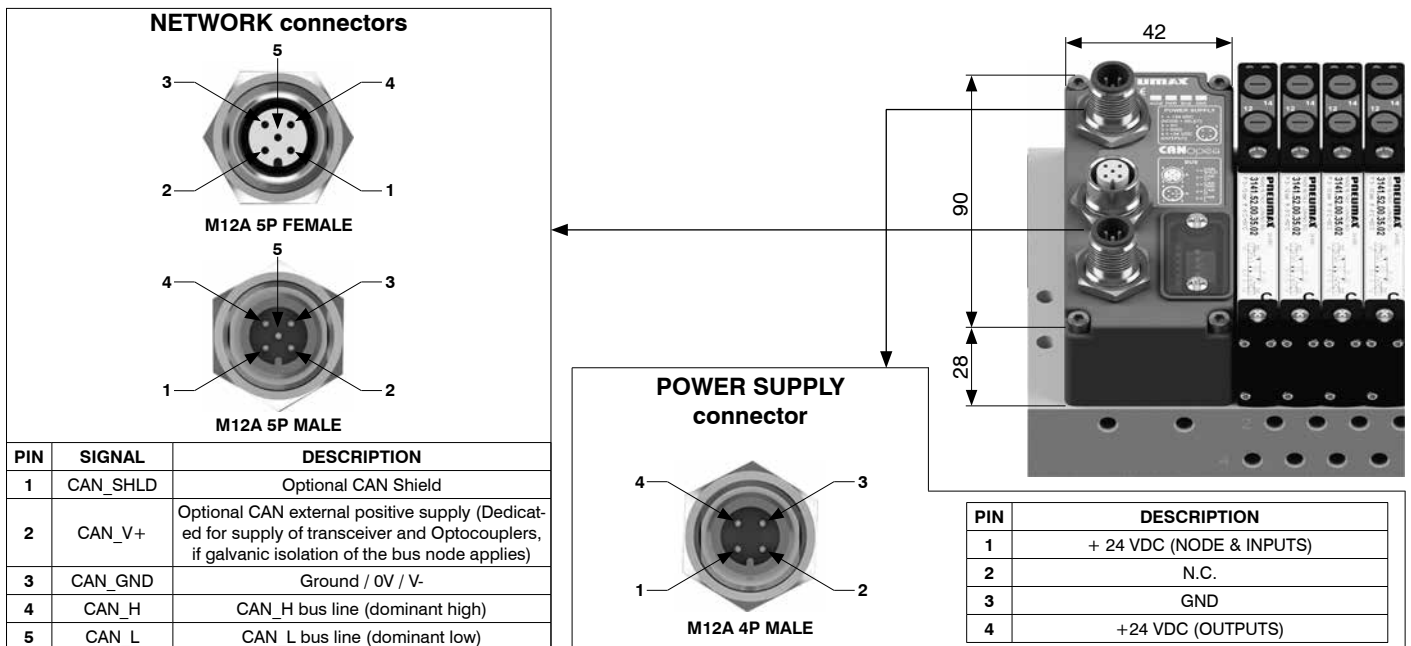
Ordering code

5530.64.32CO
5530.64.48CO



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

	Specifications	CiA Draft Standard Proposal 301 V 4.10 (15 August 2006)
	Case	Reinforced technopolymer
Power supply	Power supply connection	M12 4 P male connector type A (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	30 mA
	Power supply diagnosis	Green LED PWR / Green LED OUT
Network	Network connectors	2 M12 5 P connectors male-female type A (IEC 60947-5-2)
	Baud rate	10 - 20 - 50 - 125 - 250 - 500 - 800 - 1000 Kbit/s
	Addresses possible numbers	From 1 to 63
	Max. node in net	64 (slave + master)
	Bus maximum recommended length	100 m at 500 Kbit/s
	Bus diagnosis	Green LED + red LED
	Configuration file	Available from our web site http://www.pneumaxspa.com
	IP Rating	IP65 when assembled
	Temperature range	0°C ... +50°C



General - PROFIBUS DP nodes

PROFIBUS DP node handles up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analog outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analog input modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P02). Optional modules can be connected to the manifold in any order and configuration, provided that modules are installed starting from the node and optional position modules left to furthest end. Electrical power must be supplied via circular M12 4 pins type A male connector. The separation between 24VDC supply of the node and 24VDC of the outputs allows to turn off outputs leaving the node and eventual inputs operational.

PROFIBUS DP network connection is achieved via two circular male-female M12 5 pins type B connectors, connected in parallel; connector pinout is PROFIBUS Interconnection Technology compliant (Version 1.1 August 2001).

Network node address is set via DIP-switch.

Internal termination resistance is on-board and can be enabled via DIP-switch as well.

There are two PROFIBUS DP node versions: they differ by number of outputs directly allocated to solenoid valve positions.

5330.64.32PB part number provides the first 32 out of 64 outputs, corresponding to less significant 4 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 32 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

5330.64.48PB part number provides the first 48 out of 64 outputs, corresponding to less significant 6 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 16 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

Two part-numbers have been provided to tailor configuration on your needs. 5330.64.48PB part number is recommended in case several solenoid valves must be handled, whilst ensuring room for future expansions. 5330.64.32PB part number is recommended in case increased flexibility is needed for digital outputs.

To better understand different possibilities offered, some configuration examples are made in the following pages.

Ordering code

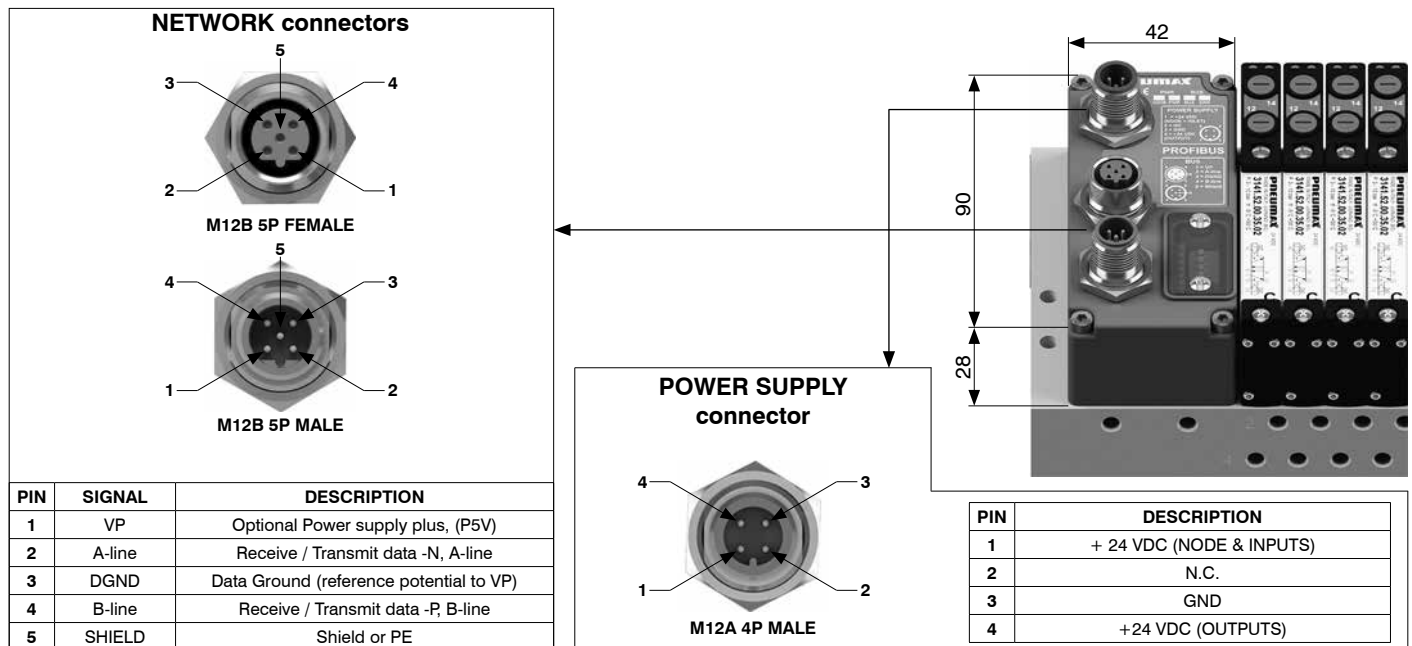
5330.64.32PB

5330.64.48PB



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

Specifications	PROFIBUS DP	
Case	Reinforced technopolymer	
Power supply	Power supply connection	M12 4 P male connector type A (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	50 mA
	Power supply diagnosis	Green LED PWR / Green LED OUT
Network	Network connectors	2 M12 5 P connectors male-female type B
	Baud rate	9,6 - 19,2 - 93,75 - 187,5 - 500 - 1500 - 3000 - 6000 - 12000 Kbit/s
	Addresses possible numbers	From 1 to 99
	Max. node in net	100 (slave + master)
	Bus maximum recommended length	100 m at 12 Mbit/s - 1200 m at 9,6 Kbit/s
	Bus diagnosis	Green LED + red LED
	Configuration file	Available from our web site http://www.pneumaxspa.com
IP Rating	IP65 when assembled	
Temperature range	0°C ... +50°C	

General - EtherNet/IP - EtherCAT® - PROFINET IO RT nodes

5730.128.48PN, 5730.128.48EC and 5730.128.48EI nodes handle up to 128 inputs and outputs, both divided into 16 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analog outputs (e.g. 5130.2T.00). Connectable input types include digital inputs modules (e.g. 5230.08.M8), analog inputs modules (e.g. 5230.2T.00) and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration, provided that modules are installed starting from the node and optional position modules left to furthest end.

Electric power must be supplied via circular M12 4 pins male type A connector. The separation between 24VDC supply of the node and 24VDC of the outputs allows to turn off outputs leaving the node and eventual inputs operational.

The network connection is achieved via two circular female connectors (M12 4 pins, type D); these two circular connectors belong to two separate communication ports; hence they are not connected in parallel.

In 5730.128.48PN, 5730.128.48EC and 5730.128.48EI part numbers the first 48 out of 128 outputs, corresponding to less significant 6 bytes, are permanently allocated to the solenoid valve positions, regardless how many they are and how many valves are installed. The remaining 80 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

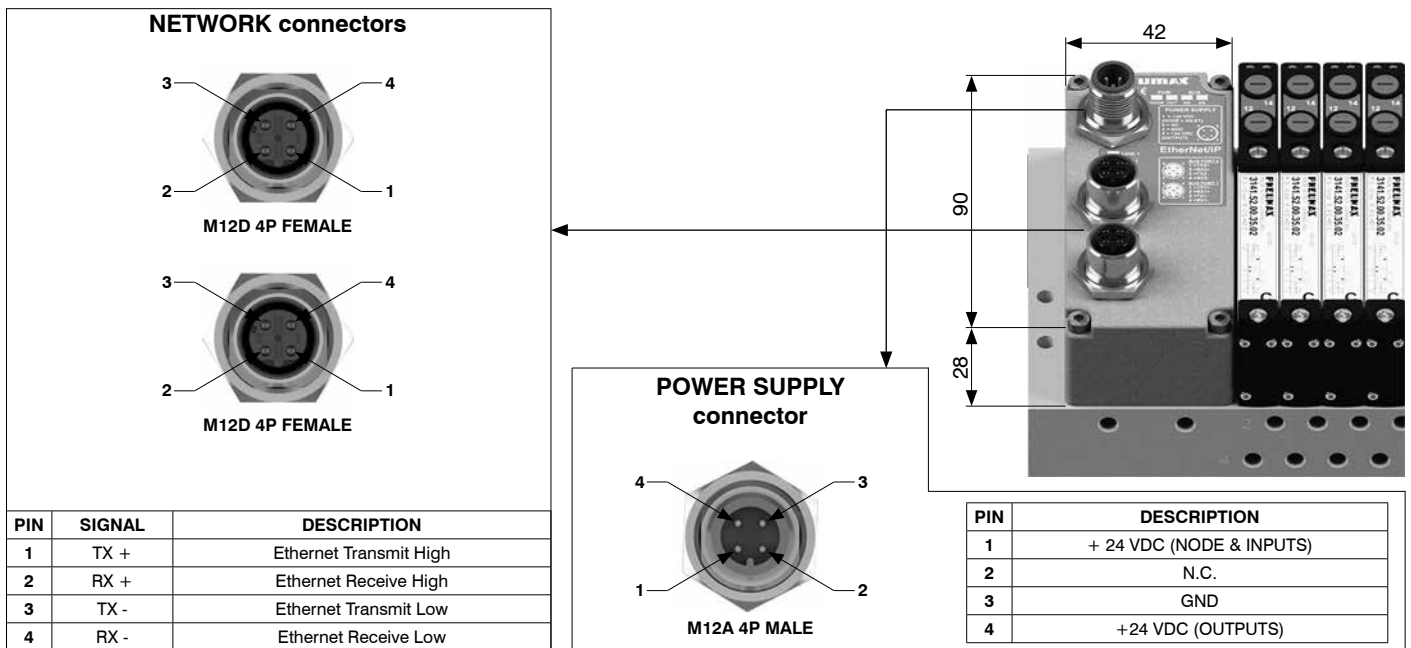
When more than 64 inputs are needed and current coming from 24VDC rail is higher than 2.5A, the use of additional power supply module (part number 5030.M12) is mandatory. 5030.M12 additional power supply module must be plugged-in upstream to the modules exceeding the above stated current limit, therefore close to the network node. On the other hand, whenever 64 outputs are used and further optional outputs modules are required, if total computed simultaneous current is higher than 2A, the 5030.M12 additional power supply module is mandatory. 5030.M12 additional power supply module is plugged-in upstream to additional modules; it will supply electrical power to downstream modules. If 5030.M12 additional power supply module has been already integrated to supply inputs modules, it is not necessary to install a second one, since it already supplies outputs modules.

Ordering code

- 5730.128.48EI**
- 5730.128.48EC**
- 5730.128.48PN**



Scheme / Overall dimensions and I/O layout



Technical characteristics

Power supply	Case	Reinforced technopolymer
	Power supply connection	M12 4 P male connector type A (IEC 60947-5-2)
	Power supply voltage	+ 24 VDC +/- 10%
	Node consumption (without inputs)	100 mA
Network	Power supply diagnosis	Green LED PWR / Green LED OUT
	Network connectors	2 M12 4 P female connectors type D (IEC 61076-2-101)
	Baud rate	100 Mbit/s
	Addresses possible numbers	As an IP address
	Maximum distance between 2 nodes	100 m
	Bus diagnosis	2 bicolor red / green LEDs + 4 LEDs for link & activity
	Configuration file	Available from our web site http://www.pneumaxspa.com
	IP Rating	IP65 when assembled
Temperature range	0°C ... +50°C	

General - IO-Link nodes

IO-Link node handles up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analog outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analog input modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P02). Optional modules can be connected to the manifold in any order and configuration, provided that modules are installed starting from the node and optional position modules left to furthest end.

Electrical power and connection to IO-Link Master come through male circular connector M12, 5 poles, type A, "CLASS B" according to IO-Link specifications. L+/L- electrical power allows to supply the node while P24/N24 electrical power allows to supply inputs and outputs modules, including solenoid valves, connected to the manifold. L+/L- and P24/N24 power supplies are galvanically isolated into the IO-Link node.

IO-Link node exists in two versions: they differ by number of outputs directly allocated to solenoid valve positions. 5830.64.32IK part number provides the first 32 out of 64 outputs, corresponding to less significant 4 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 32 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

5830.64.48IK part number provides the first 48 out of 64 outputs, corresponding to less significant 6 bytes, are permanently allocated to solenoid valve positions, regardless how many they physically are and how many valves are installed. The remaining 16 outputs can be used to handle optional output modules. Bytes allocation to optional modules is done automatically.

Two part-numbers have been provided to tailor configuration on your needs. 5830.64.48IK part number is recommended in case several solenoid valves must be handled, whilst ensuring room for future expansions. 5830.64.32IK part number is recommended in case increased flexibility is needed for digital outputs.

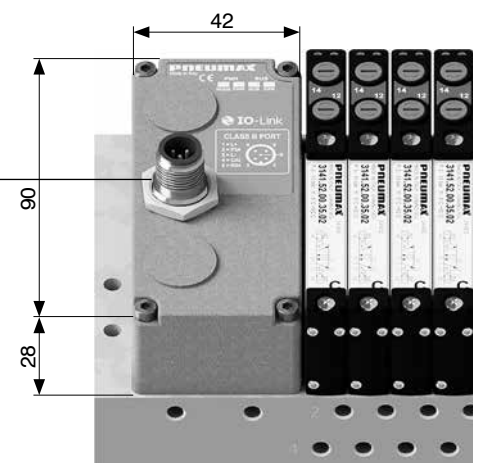
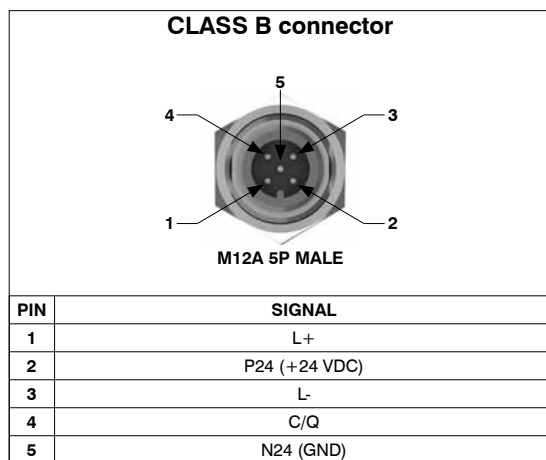
Ordering code

5830.64.32IK

5830.64.48IK



Scheme / Overall dimensions and I/O layout



Technical characteristics

	Specifications	IO-Link Specification v1.1
	Case	Reinforced technopolymer
Outputs	PNP equivalent outputs	+24 VDC +/- 10%
	Maximum output number	64
	Maximum output simultaneously actuated	64
Network	Network connectors	Class B port
	Communication speed	COM2 (38.4 kbaud)
	Maximum distance from Master	20 m
	Bus diagnosis	1 green and 1 red LED for status
	Vendor ID / Device ID	1257 (hex 0x04E9) / 3000 (hex 0x0BB8)
	Configurations file IODD	Available from our web site http://www.pneumaxspa.com
	IP Rating	IP65 when assembled
	Temperature range	0°C ... +50°C

General - 8 M8 digital inputs module

M8 digital inputs module provides 8 M8, 3 pins, female connectors. Inputs have PNP logic, 24VDC ± 10%.

It is possible to connect 2 wires devices (e.g. switches, magnetic limit switches, pressure switches, etc...) as well as 3 wires devices (e.g. proximity sensors, photocells, electronic magnetic limit switches, etc.).

Inputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module. Maximum overall available current for 8 inputs on 24VDC rail is 300mA, since every module is equipped with an auto-resettable fuse with 300mA threshold, thus, in case of overload or short circuit, 24VDC rail is interrupted and, as a consequence, all 8 inputs 24VDC is turned off along with green PWR LED. Other eventually connected inputs modules stays operational. Removing fault cause, green PWR LED gets back in on status and module becomes operational again.

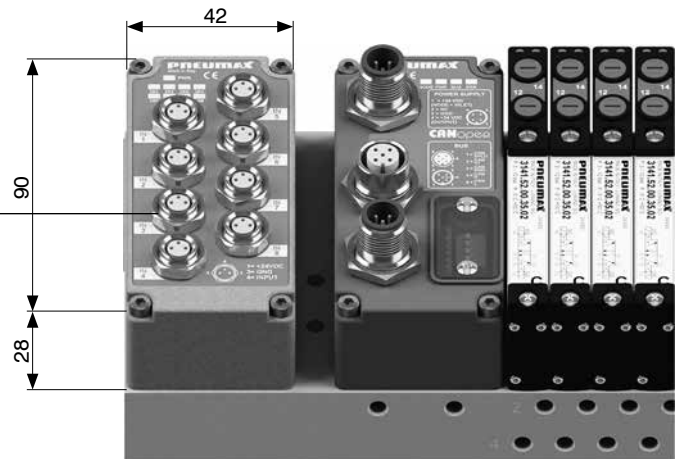
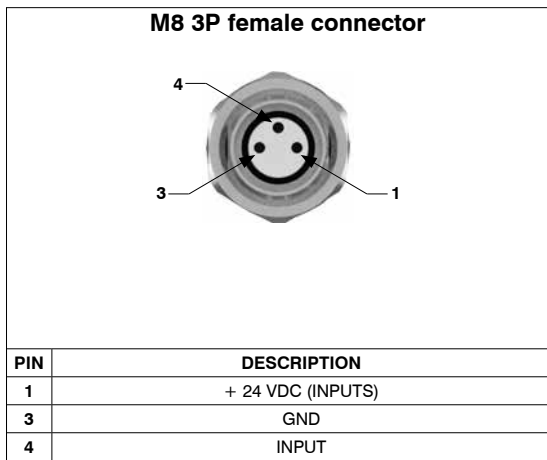
The M8 digital inputs module takes up 8 input bits of the serial node installed on the manifold.

Ordering code

5230.08.M8



Scheme / Overall dimensions and I/O layout



General - 8 M12 digital inputs module

M12 digital inputs module provides 4 M12, 5 pins, female connectors. Inputs have PNP logic, 24VDC ± 10%.

Every connector takes two independent input channels.

It is possible to connect 2 wires devices (e.g. switches, magnetic limit switches, pressure switches, etc...) as well as 3 wires devices (e.g. proximity sensors, photocells, electronic magnetic limit switches, etc.).

Inputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module. Maximum overall available current for all 4 connectors on 24VDC rail is 300mA, since every module is equipped with an auto-resettable fuse with 300mA threshold, thus, in case of overload or short circuit, 24VDC rail is interrupted and as a consequence all inputs 24VDC is turned off along with green PWR LED. Other eventually connected inputs modules remains operational. Removing fault cause, green PWR LED gets back in on status and module becomes operational again.

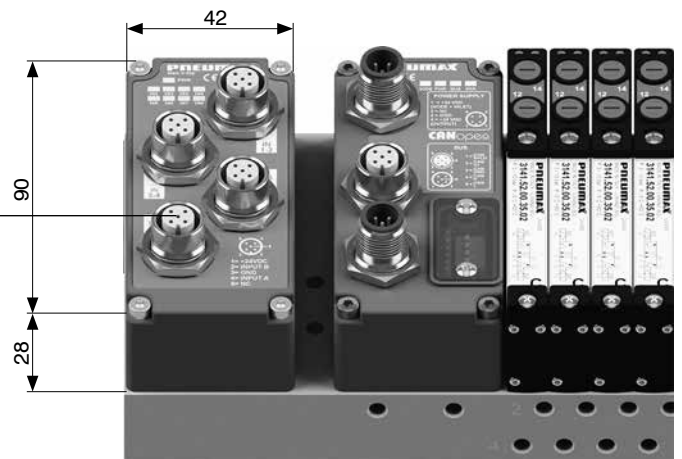
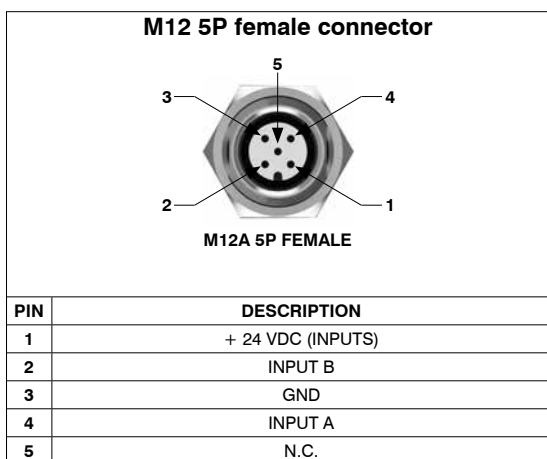
The M12 digital inputs module takes up 8 input bits of the serial node installed on the manifold.

Ordering code

5230.08.M12



Scheme / Overall dimensions and I/O layout





General - 8 M8 digital outputs module

Module has 8 M8 female connectors.

Outputs have PNP logic, 24VDC ± 10%.

Maximum available current per output is 100mA.

Electric power on outputs module is supplied by pin 4 of the M12 power connector on the network node or by the additional power supply module (5030.M12 part number). Power supply presence is displayed by "PWR OUT" green LED light-on.

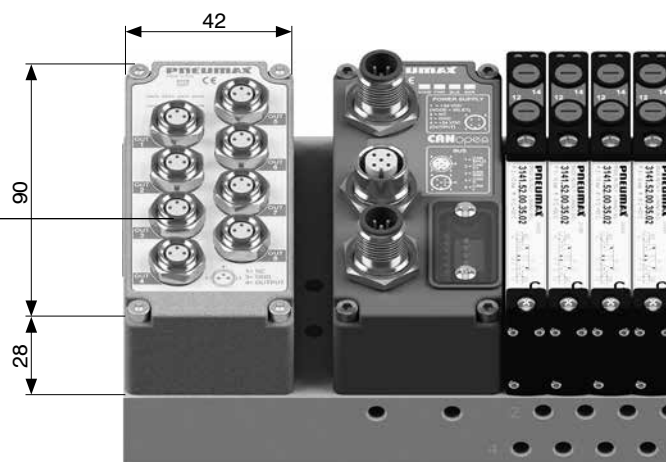
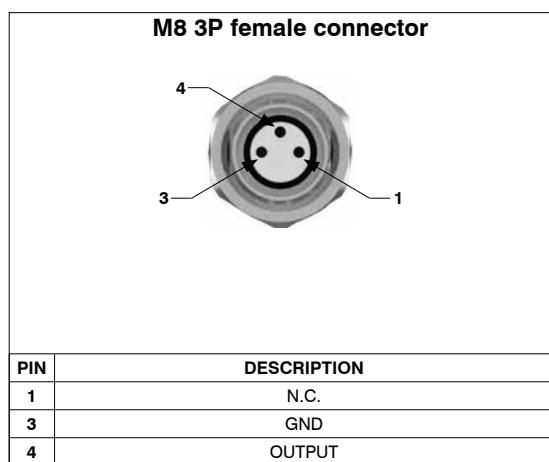
The module takes up 8 outputs (8 bits of the output bytes) of the serial node.

Ordering code

5130.08.M8



Scheme / Overall dimensions and I/O layout



AIR DISTRIBUTION

General - 8 M12 digital outputs module

Module has 4 M12 female connectors.

Outputs have PNP logic, 24VDC ± 10%.

Maximum available current per output is 100mA.

Electric power on outputs module is supplied by pin 4 of the M12 power connector on the network node or by the additional power supply module (5030.M12 part number). Power supply presence is displayed by "PWR OUT" green LED light-on.

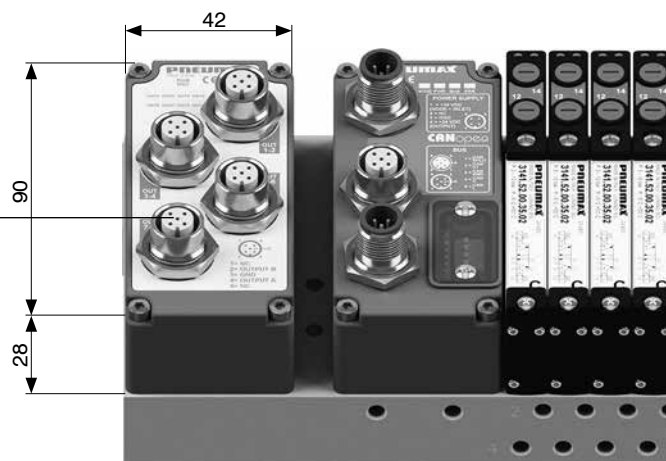
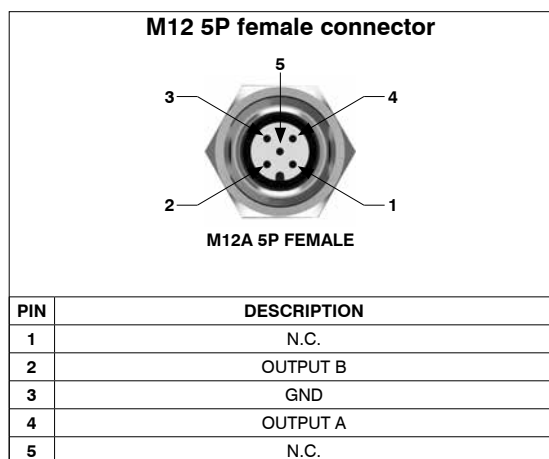
The module takes up 8 outputs (8 bits of the output bytes) of the serial node.

Ordering code

5130.08.M12



Scheme / Overall dimensions and I/O layout



General - 32 digital inputs SUB-D 37 pins module

The module provides a SUB-D 37 pins female connector.

Inputs have PNP logic, 24VDC ± 10%.

It is possible to connect 2 wires devices (e.g. switches, magnetic limit switches, pressure switches, etc...) as well as 3 wires devices (e.g. proximity sensors, photocells, electronic magnetic limit switches, etc.).

Inputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module. Maximum overall available current for all 32 inputs on 24VDC rail is 1A, since every module is equipped with an auto-resettable fuse with 1A threshold, thus, in case of overload or short circuit, 24VDC rail is interrupted and as a consequence all 32 inputs 24VDC is turned off along with green PWR LED. Other eventually connected inputs modules stays operational. Removing fault cause, green PWR LED gets back in on status and module becomes operational again.

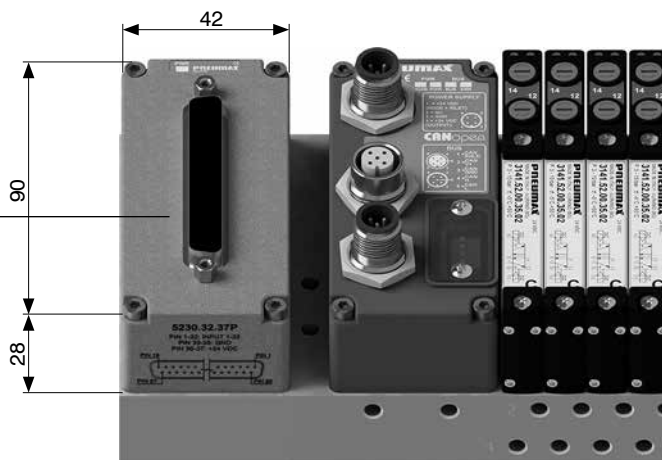
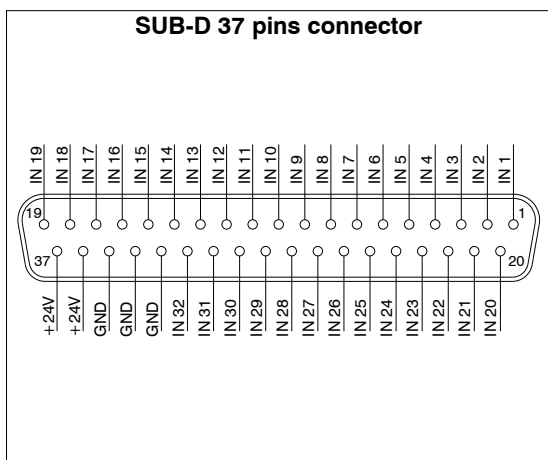
The module takes up 32 bits on the input data of the serial node installed.

Ordering code

5230.32.37P



Scheme / Overall dimensions and I/O layout



General - 32 digital outputs SUB-D 37 pins module

Module has a SUB-D 37 pins female connector.

Outputs have PNP logic, 24VDC ± 10%.

Maximum available current per output is 100mA.

Electric power on outputs module is supplied by pin 4 of the M12 power connector on the network node or by the additional power supply module (5030.M12 part number). Power supply presence is displayed by "PWR OUT" green LED light-on.

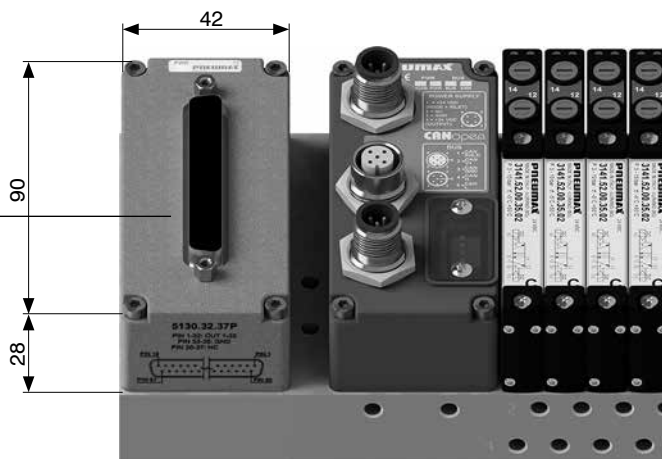
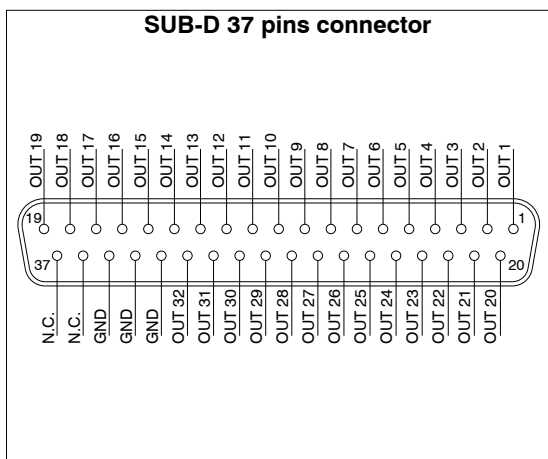
The module takes up 32 outputs (32 bits of the output bytes) of the serial node.

Ordering code

5130.32.37P



Scheme / Overall dimensions and I/O layout





General - M8 analogue inputs modules

M8 analog inputs module digitizes analog signals and transfer acquired data to field bus, via network node. Each input is sampled at 12 bits and transmitted, for convenience, at 16 bit, whose less significant bits padded to 0. Therefore, each digitized signal takes 16 inputs (2 bytes) of the serial node. During the ordering process, it is necessary to verify that the serial node has enough free inputs. Following table reports available models:

CODE	SIGNAL	ANALOGUE INPUTS	MAXIMUM CURRENT ON +24 VDC RAIL	OCCUPIED INPUTS
5230.2T.00	VOLTAGE 0-10V	2	300 mA	32 (4 bytes)
5230.2T.01	VOLTAGE 0-5V	2	300 mA	32 (4 bytes)
5230.4T.00	VOLTAGE 0-10V	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
5230.4T.01	VOLTAGE 0-5V	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
5230.2C.00	CURRENT 4-20mA	2	300 mA	32 (4 bytes)
5230.2C.01	CURRENT 0-20mA	2	300 mA	32 (4 bytes)
5230.4C.00	CURRENT 4-20mA	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
5230.4C.01	CURRENT 0-20mA	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)

Power supply of the M8 analog inputs module is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module. Modules provide M8 3 pins female connectors and a diagnostic LED for every analog input. The LED indicates signal presence (green) or signal out of range (red). Maximum available current for each couple of channels on 24VDC rail (pin 1) is reported in the table. Each module provides an internal resettable fuse, which cuts 24VDC power supply to every M8 connector and turning off green PWR LED when thresholds are exceeded. Inputs of other eventual modules connected to the node continue to operate uninterrupted. By removing the cause of the threshold overrun, green PWR LED gets back in ON status and the module becomes operational again.

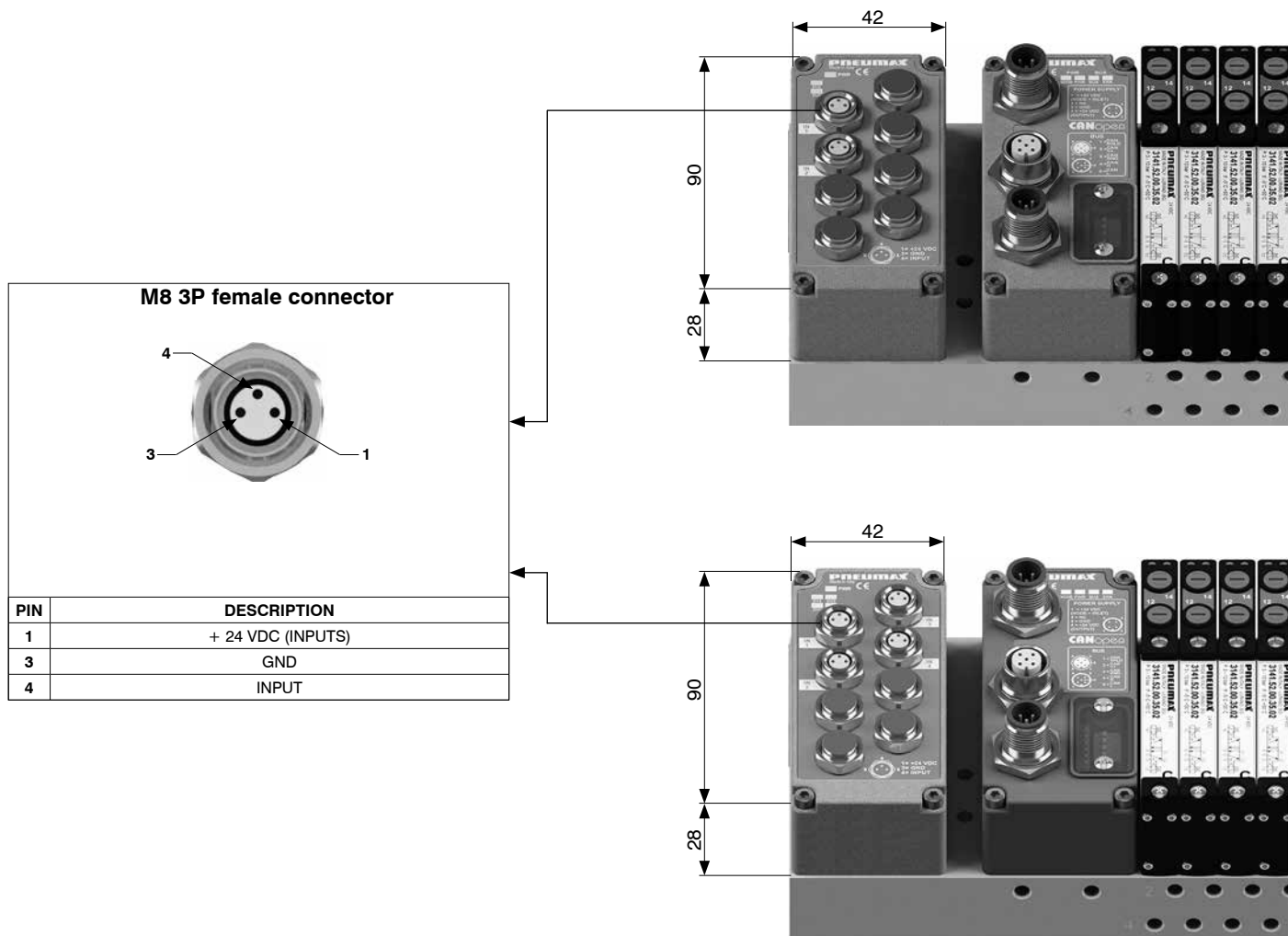
Ordering code

5230. __ _ 0_



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



General - M8 analogue outputs modules

M8 analog outputs module converts output data, received from field bus via network node, into analog signal. Each analog output has a resolution of 12 bits, processed from 16 outputs (2 bytes), ignoring 4 less significant bits. During the ordering process, it is necessary to verify that the serial node has enough free outputs. Different models are available:

Ordering code

5130._._0_

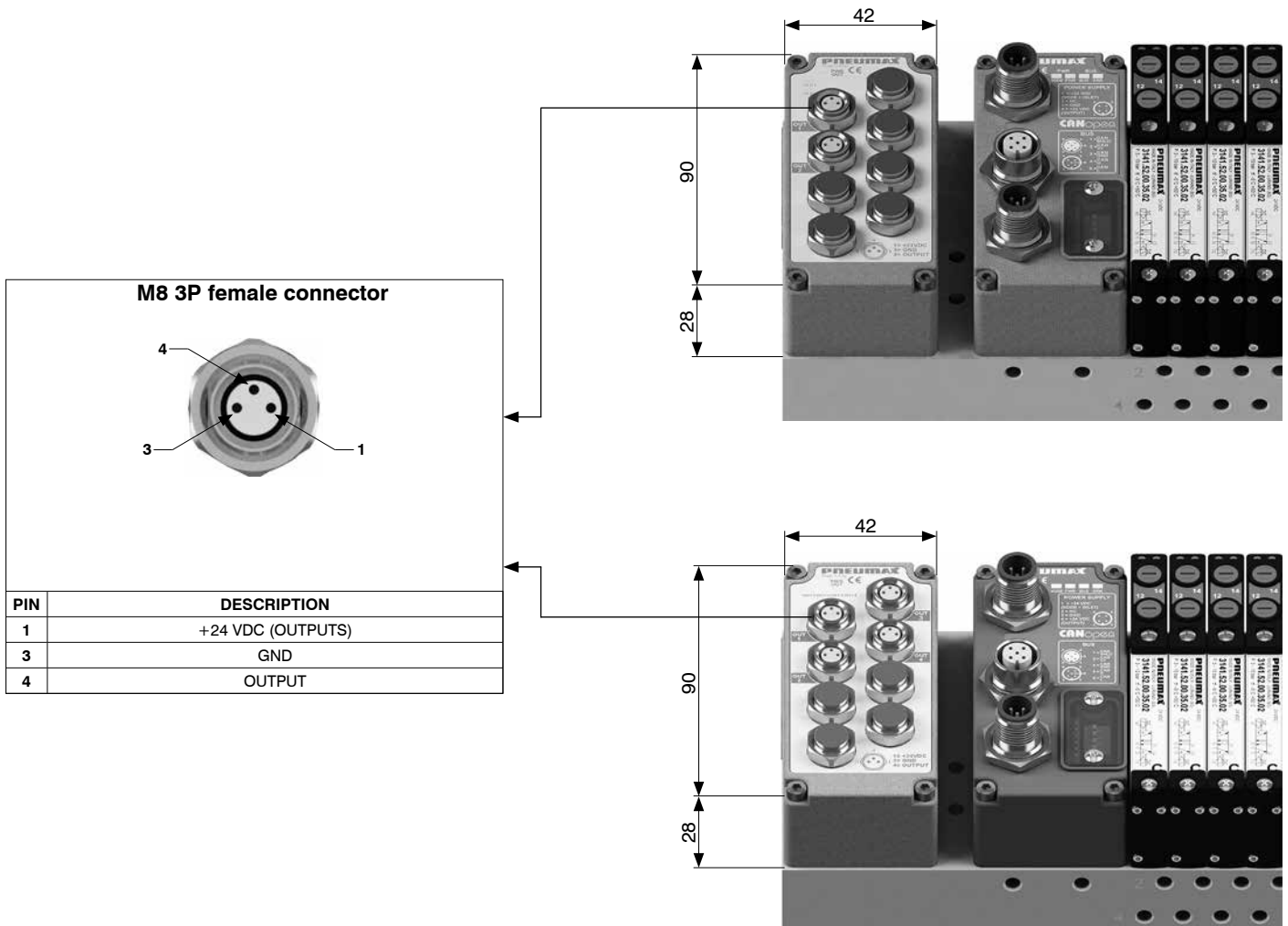


AIR DISTRIBUTION

CODE	SIGNAL	ANALOGUE OUTPUTS	MAXIMUM CURRENT ON + 24 VDC RAIL	OCCUPIED OUTPUTS
5130.2T.00	VOLTAGE 0-10V	2	1 A	32 (4 bytes)
5130.2T.01	VOLTAGE 0-5V	2	1 A	32 (4 bytes)
5130.4T.00	VOLTAGE 0-10V	4	2 A (1A for each pair of channels)	64 (8 bytes)
5130.4T.01	VOLTAGE 0-5V	4	2 A (1A for each pair of channels)	64 (8 bytes)
5130.2C.00	CURRENT 4-20mA	2	1 A	32 (4 bytes)
5130.2C.01	CURRENT 0-20mA	2	1 A	32 (4 bytes)
5130.4C.00	CURRENT 4-20mA	4	2 A (1A for each pair of channels)	64 (8 bytes)
5130.4C.01	CURRENT 0-20mA	4	2 A (1A for each pair of channels)	64 (8 bytes)

Power supply of the M8 analog outputs module is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 4) or by 5030.M12 additional power supply module, in case it were installed upstream of the outputs module. Modules provide M8 3 pins female connectors and a diagnostic LED for every analog input. The LED indicates signal presence (green) or overload fault (red). Maximum available current for each pair of channel on 24VDC rail (pin 1) is reported in the table. Each module provides an internal resettable fuse, which cuts 24VDC power supply to every M8 connector and turning off green PWR LED when thresholds are exceeded. Outputs of other eventual modules connected to the node continue to operate uninterrupted. By removing the cause of the threshold overrun, green PWR LED gets back in ON status and the module becomes operational again.

Scheme / Overall dimensions and I/O layout





General - Pt100 inputs modules

Pt100 inputs module digitizes signals from Pt100 sensors and transfers acquired data to field bus, via network node. Each input is sampled at 12 bits and transmitted, for convenience, at 16 bits, whose less significant bits padded to 0. Therefore, each digitized signal takes 16 inputs (2 bytes) of the serial node. During the ordering process, it is necessary to verify that the serial node has enough free inputs.

It is possible to connect two, three or four wire sensors.
Temperature range is from -100°C to 300°C.
When sensor is not connected, it is returned a value corresponding to -100°C.

Temperature can be obtained from node read value (in points) using this formula:

$$\text{Temperature (}^\circ\text{C)} = \left(\frac{\text{Points} \times 400}{4095} \right) - 100$$

Following table reports available models:

CODE	MODEL	INPUTS NUMBER	OCCUPIED INPUTS
5230.2P00	Pt100 2 wires	2	32 (4 bytes)
5230.2P01	Pt100 3 wires	2	32 (4 bytes)
5230.2P02	Pt100 4 wires	2	32 (4 bytes)
5230.4P00	Pt100 2 wires	4	64 (8 bytes)
5230.4P01	Pt100 3 wires	4	64 (8 bytes)
5230.4P02	Pt100 4 wires	4	64 (8 bytes)

Module provides M8 4 pins female connectors and a diagnostic LED for every input.
The LED indicates the presence of the PT100 sensor or the overcoming of set temperature threshold.

Inputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module.

Presence of power supply +24VDC is indicated by a PWR green LED.

Ordering code

5230. __ _ 0



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout

M8 4P female connector

Connection scheme 2 wires probe

PIN	DESCRIPTION
1	N.C.
2	SENSOR +
3	POWER SUPPLY -
4	N.C.

Connection scheme 3 wires probe

PIN	DESCRIPTION
1	POWER SUPPLY +
2	SENSOR +
3	POWER SUPPLY -
4	N.C.

Connection scheme 4 wires probe

PIN	DESCRIPTION
1	POWER SUPPLY +
2	SENSOR +
3	POWER SUPPLY -
4	SENSOR -

General - Additional power supply module

5030.M12 additional power supply module supplies additional electric power for downstream optional modules, where "downstream" means farther from serial node.

Electric connection of the module to external power supply unit occurs via an M12 4 pins type A male connector. M12 connector has two different pins to power up inputs (pin 1) and outputs (pin 4). Presence of each power supply rail is indicated by corresponding green LED.

Ordering code

5030.M12



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout

M12 4P male connector

M12A 4P MALE

PIN	DESCRIPTION
1	+ 24 VDC
2	N.C.
3	GND
4	PWR OUT

Electric power supply provided by additional power supply module

Electric power supply provided by serial system



General - Optional position module

5030.T00 optional position module is employed to protect manifold connections where no module has yet been installed.

5030.T00 optional position modules must be installed at the left end of the system, that is downstream the other modules.

Ordering code

5030.T00



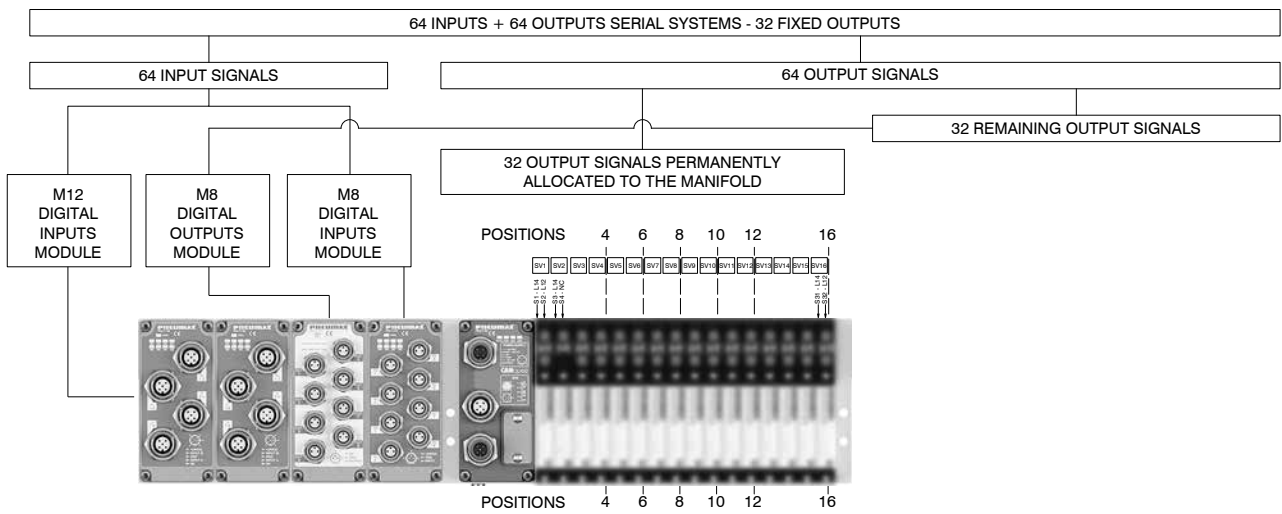
Configuration example

The code 5030.T00 can be replaced by any of the modules presented in the previous pages, as long as the availability of the necessary inputs or outputs is checked on the node.

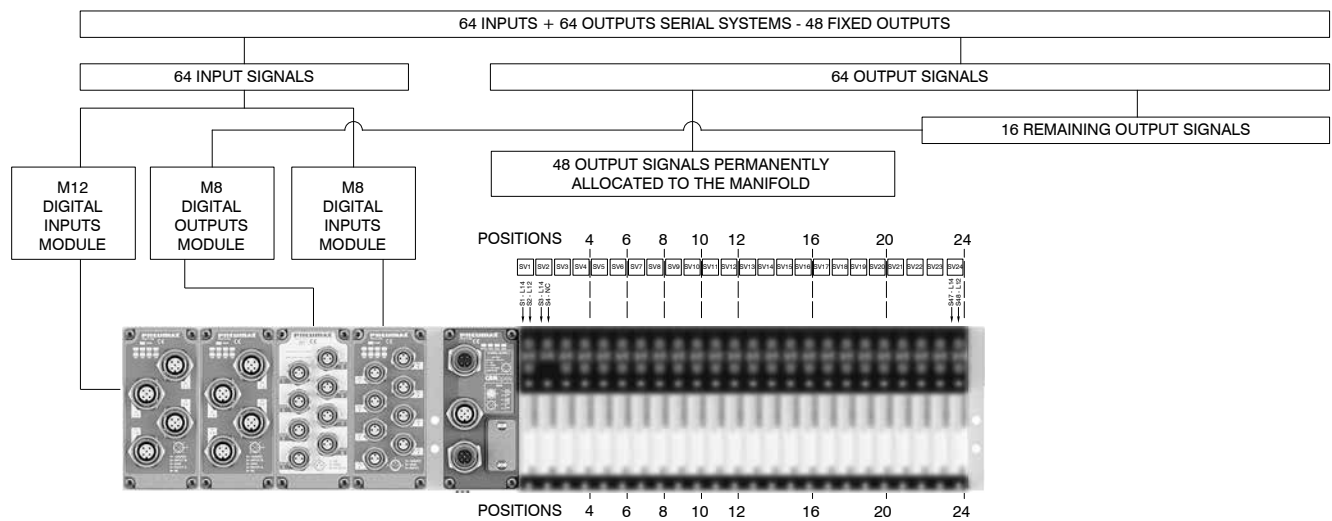


Signal management

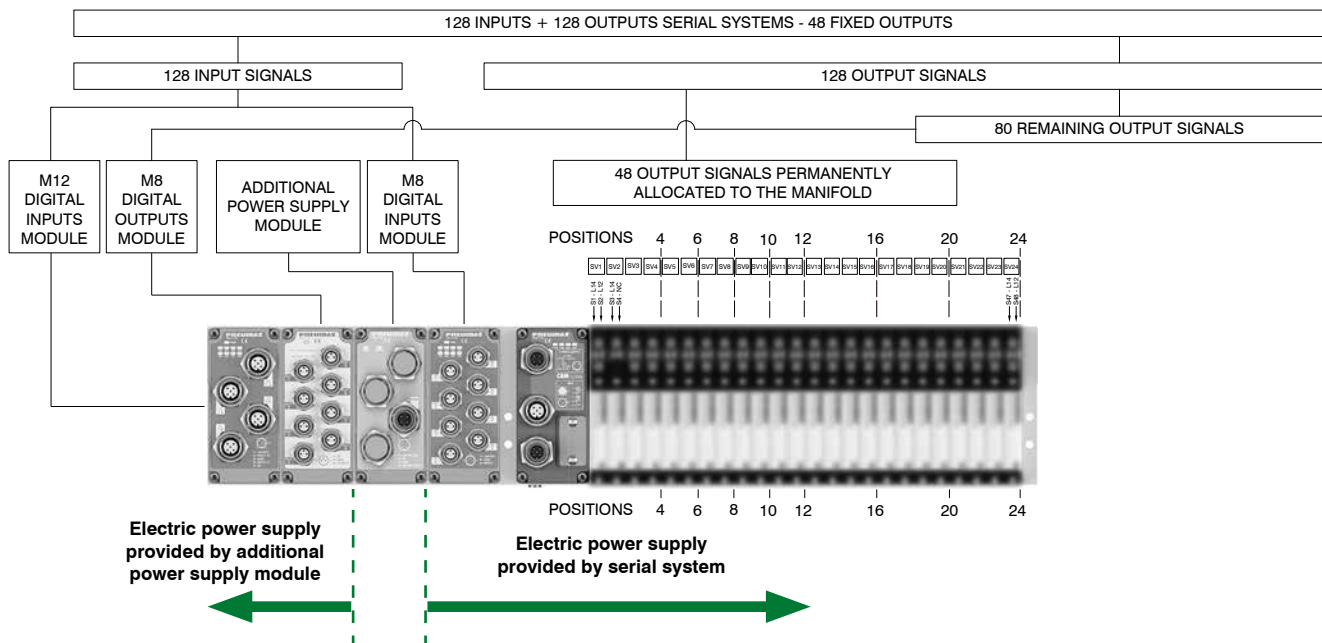
64 INPUT + 64 OUTPUT serial systems - 32 fixed OUTPUT (Ex. PROFIBUS DP and CANopen®)



64 INPUT + 64 OUTPUT serial systems - 48 fixed OUTPUT (Ex. PROFIBUS DP and CANopen®)



128 INPUT + 128 OUTPUT serial systems - 48 fixed OUTPUT (Ex. EtherNet/IP - EtherCAT® - PROFINET IO RT)







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