

**General :**

Using the 2540.03.25P output terminal it is possible to make any electrical signals not used by valves available on a 25 sub-D female connector at the right end of the manifold.

It is possible to then join a multi-core cable to link to the next manifold, or connect directly to one or two I/O modules.

The I/O modules can accept input or output signals, depending upon what is connected.

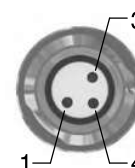
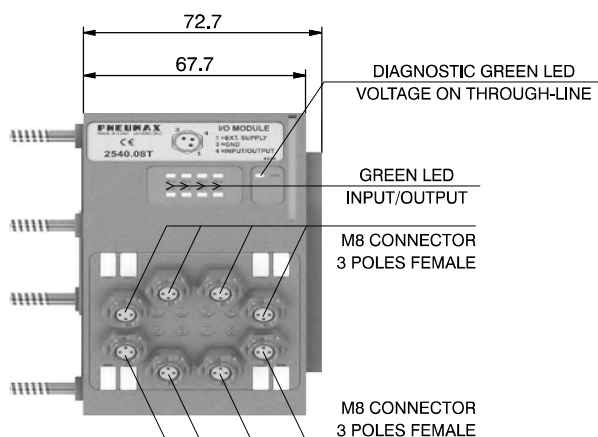
**Ordering code****2540.08T****1****AIR DISTRIBUTION**

**Please note:** If the manifold is connected by a multi-core connection, each connection can be used as either an input or an output, while if the manifold is connected to a serial node the connections can only be used as an output.

It is possible to connect the manifold to up to two I/O modules.

Each I/O module includes 8 diagnostic LEDs which indicate the presence of an Input / Output signal for each connector.

**Please note:** For an LED to function, a signal of at least +15VDC must be present on pin 4 of the connector. If this signal is lower, the LED will not light, this does not compromise the normal Input / Output function of the unit.

**Overall dimensions and I/O layout :**

| PIN | DESCRIPTION  |
|-----|--------------|
| 1   | +24 VDC      |
| 4   | INPUT/OUTPUT |
| 3   | GND          |

**Input features:**

Each connection can accept either two wire (switches, magnetic switches, pressure switches, etc.) or three wire connections (photocells, electronic end of stroke sensors, etc.) If +24VDC is required on at Pin 1 of each connector, it is possible to provide this via the through-line pin of the multi-pole connector.

I.E :

Pin 25 of the 25 pin multi-pole connector (code 2540.02.25P or 2540.12.25P)

Pin 36-37 of the 37 pin multi-pole connector (code 2540.02.37P or 2540.12.37P)

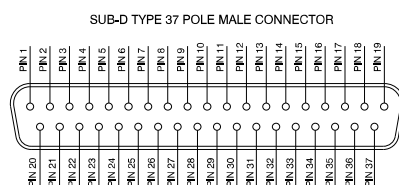
**Output features:**

**Attention:** The output connections are not protected against short-circuit. Please pay attention when wiring (avoid Pin 4 being connected to Pin 3 or Pin 1).

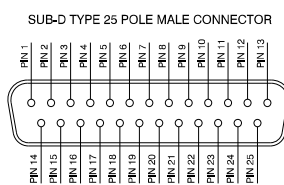
**General characteristics**

|                                         |                                              |
|-----------------------------------------|----------------------------------------------|
| Model                                   | 2540.08T                                     |
| Case                                    | Reinforced technopolymer                     |
| I/O Connector                           | M8 connector 3 poles female (IEC 60947-5-2)  |
| PIN 1 voltage (connector used as Input) | By the user                                  |
| PIN 4 voltage diagnosis                 | Green LED                                    |
| Node consumption (Outlets excluded)     | 7mA per each LED with 24 VDC signal          |
| Outlets voltage                         | +23,3 VDC (serial) /by the user (multipolar) |
| Input voltage                           | Depend by the using                          |
| Maximum outlet current                  | 100 mA (serial) / 400 mA (multipolar)        |
| Maximum Input/Output                    | 8 per module                                 |
| Multiconnector max. Current             | 100 mA                                       |
| Connections to manifold                 | Direct connection to 25 poles connector      |
| Maximum n. of moduls                    | 2                                            |
| Protection degree                       | IP65 when assembled                          |
| Ambient temperature                     | from -0° to +50° C                           |

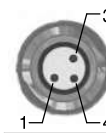
## CORRESPONDENCE BETWEEN MULTI-POLE SIGNAL AND CONNECTOR



1 - 32 = SIGNALS  
33 - 35 = GND  
36 - 37 = THROUGH LINE



1 - 22 = SIGNALS  
23 - 24 = GND  
25 = THROUGH LINE



| PIN | DESCRIPTION  |
|-----|--------------|
| 1   | THROUGH LINE |
| 4   | SIGNAL       |
| 3   | GND          |

**Connection modes:**

The I/O module changes its operation depending on the way the manifold is controlled. There are two possible modes:

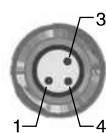
- A) Control via multi-pole connection  
B) Control via fieldbus

**A) Control via multi-pole :**

*M8 connector used as Input:*

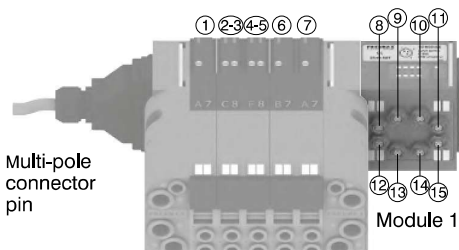


**Attention:** Voltage applied to each connector is passed to multi-pole connector pin.



| PIN | DESCRIPTION     |
|-----|-----------------|
| 1   | THROUGH<br>LINE |
| 4   | SIGNAL          |
| 3   | GND             |

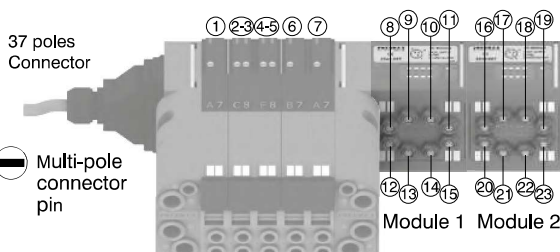
 Multi-pole connector pin



## Module 1

37 poles  
Connector

 Multi-pole connector pin



Module 1 Module 2

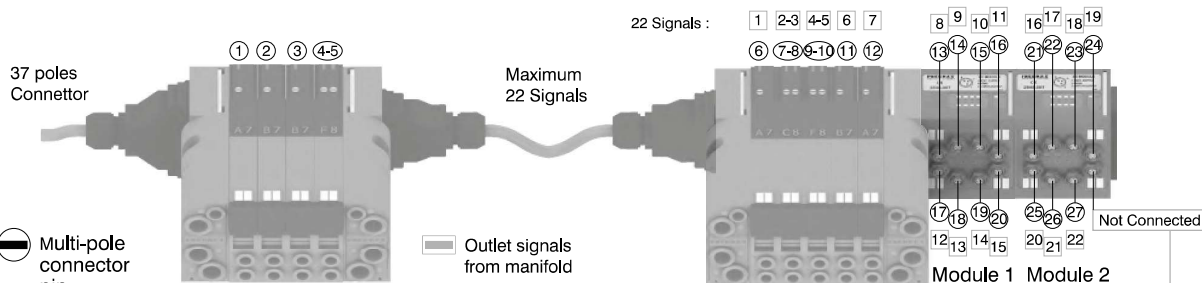


**Attention:**  
Only one more  
I/O module  
can be added.

**Attention:**  
No more additions  
are possible

**Attention :** Optyma 32-T solenoid valve manifolds permit up to 22 electrical signals that are not used by manifolds to be made available: these signals can be managed by another manifold and / or by I/O modules.

The I/O module will manage these unused signals. Connections that are not managing useful signals will remain unconnected.



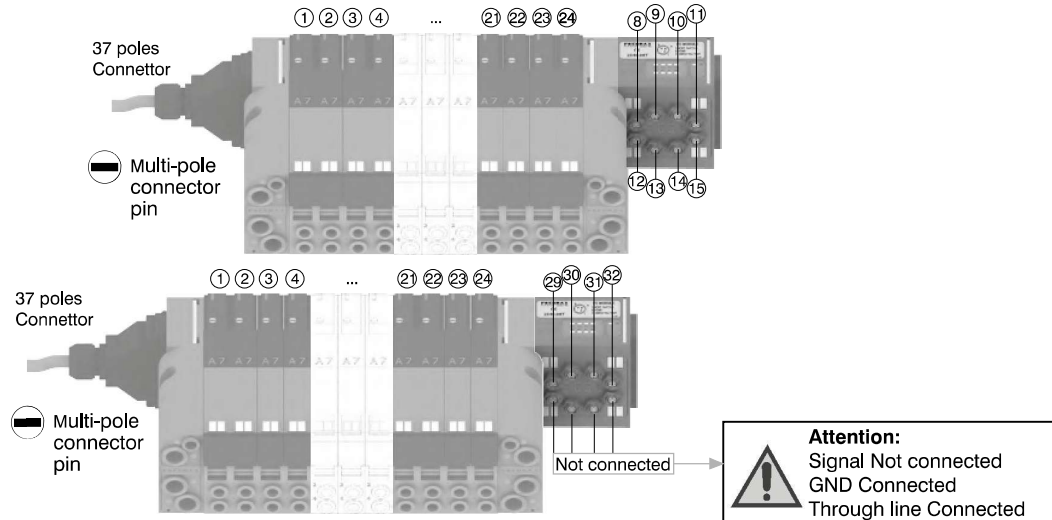
Not Connected

**Please note:** this example considers a 37 pin multi-pole connector.

The same configuration managed by a 25 pin multi-pole connector will stop at number 22 of multi-pole connector and at number 17 of the manifold. 22 17

**Attention:**  
Signal Not connected  
GND Connected  
Through line Connected

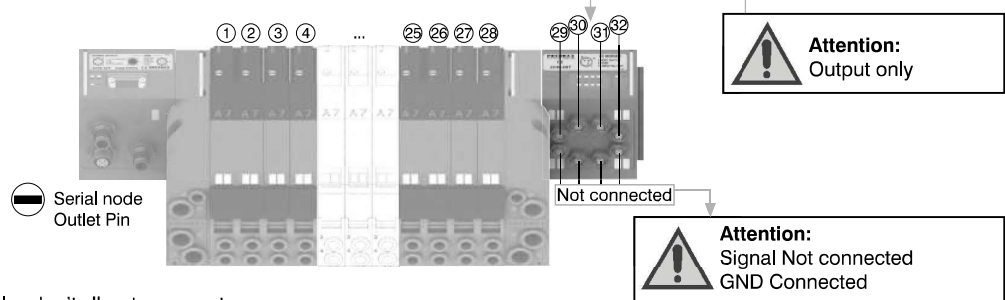
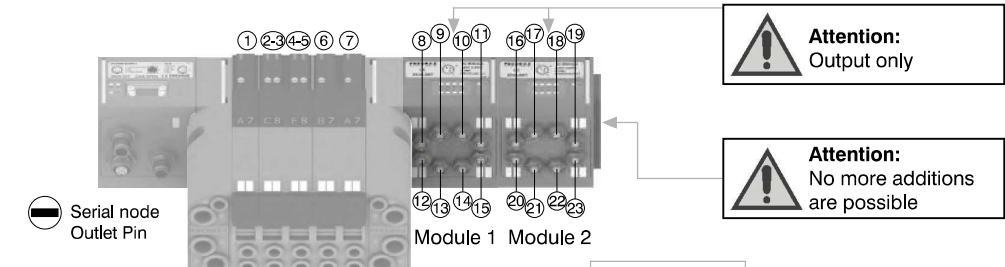
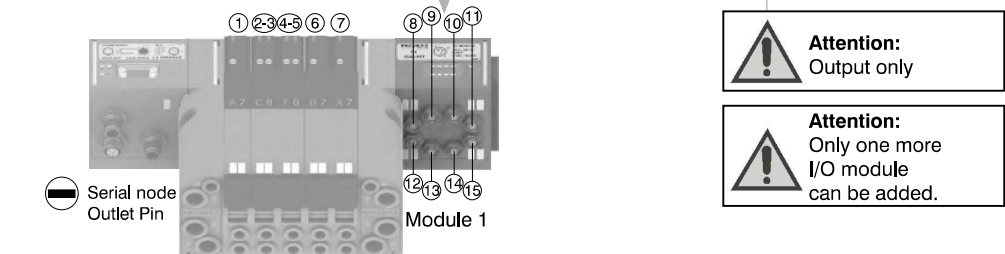
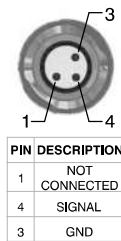
**Please note:** Optyma 32-T solenoid valve manifolds manage up to 32 signals. If the manifold uses more than 24 signals the I/O module will manage only the remainder. Connections that are not managing useful signals will remain unconnected.



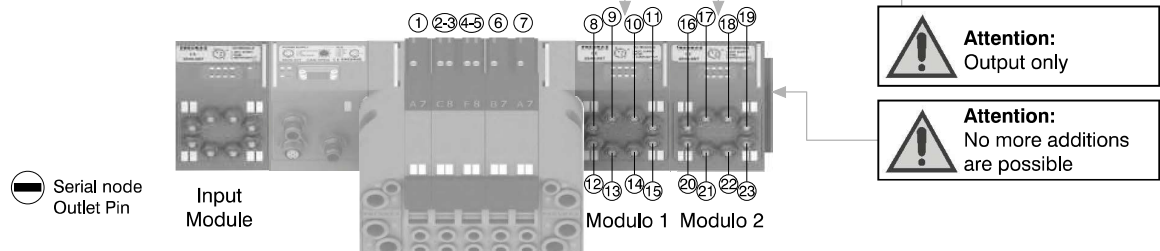
### B) Control via fieldbus:

With this kind of control the I/O module can only be used as an output. Pin 1 of each connector is not connected. The output voltage will be 0,7V lower than that applied to Pin 4 of the connector.

The maximum output current for each output is 100mA. The correspondence between control byte and each single output depends on how many electrical signals are used by the manifold and by the relative position of the I/O module.



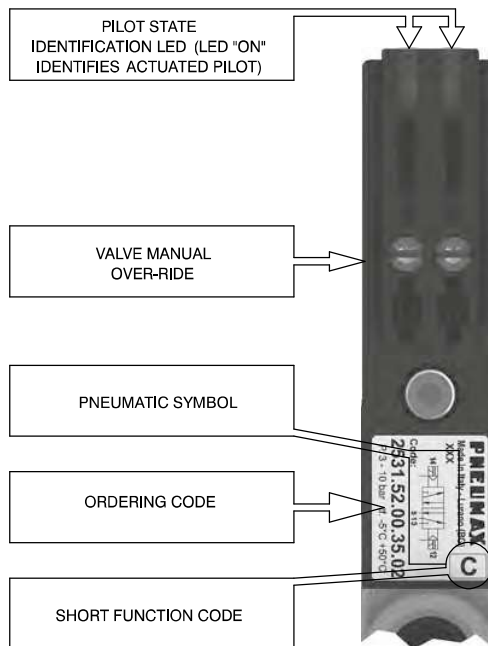
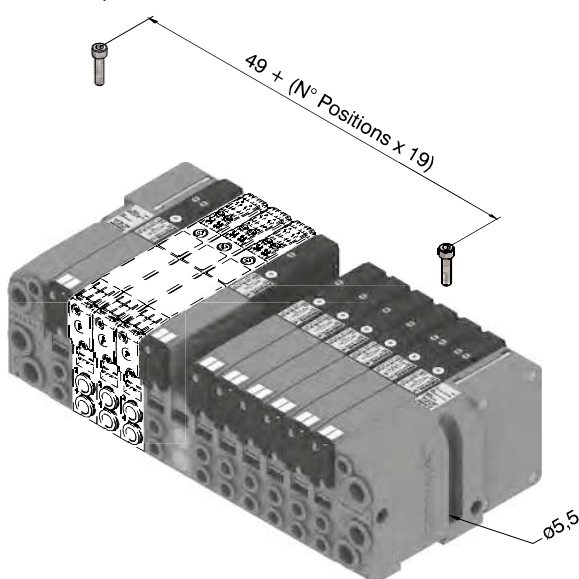
**Please note:** I/O modules don't allow to connect any additional valves manifold after them.



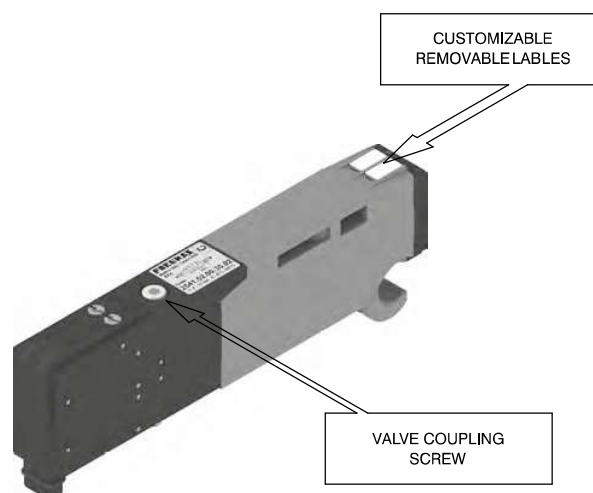
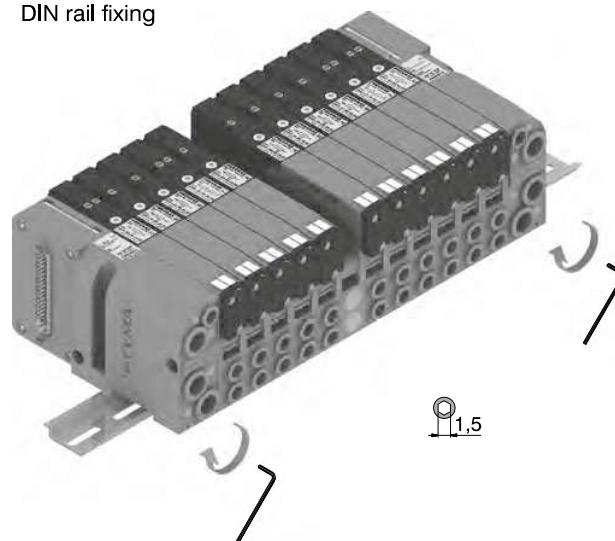
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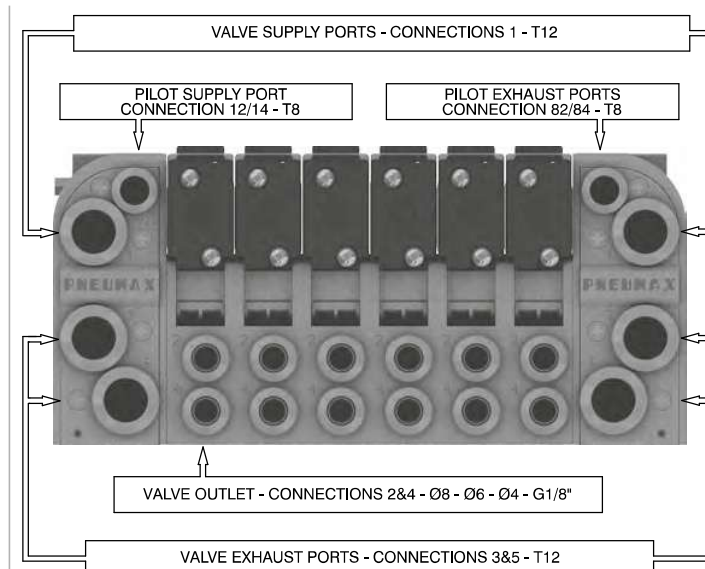
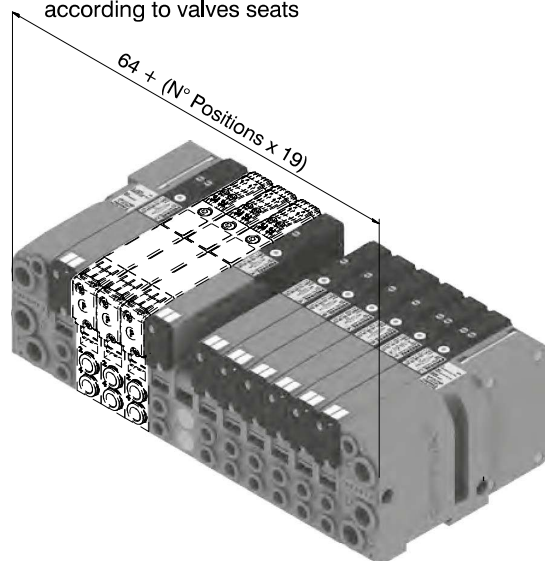
From the top



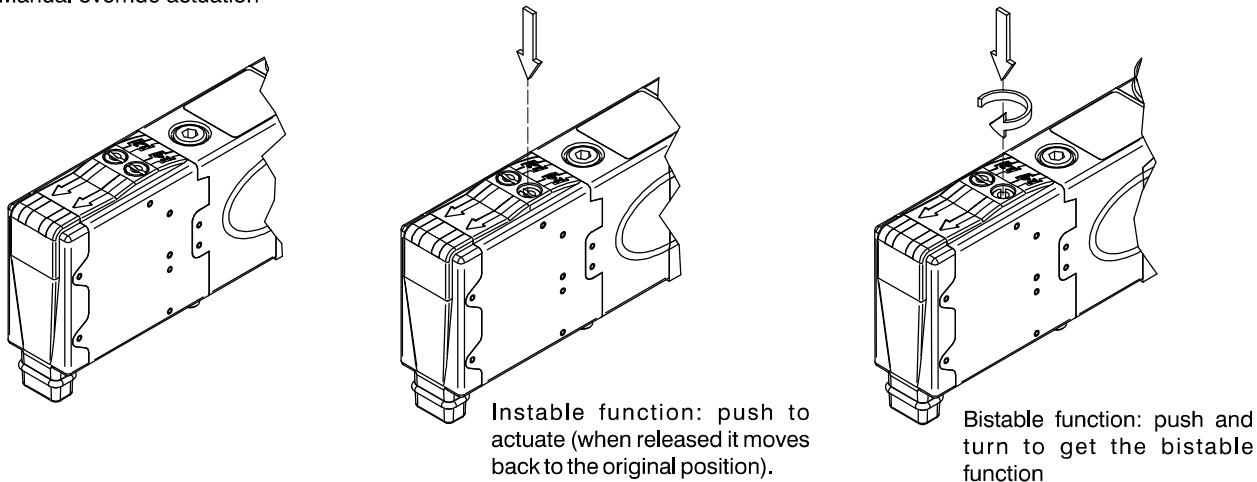
DIN rail fixing



Maximum possible size according to valves seats

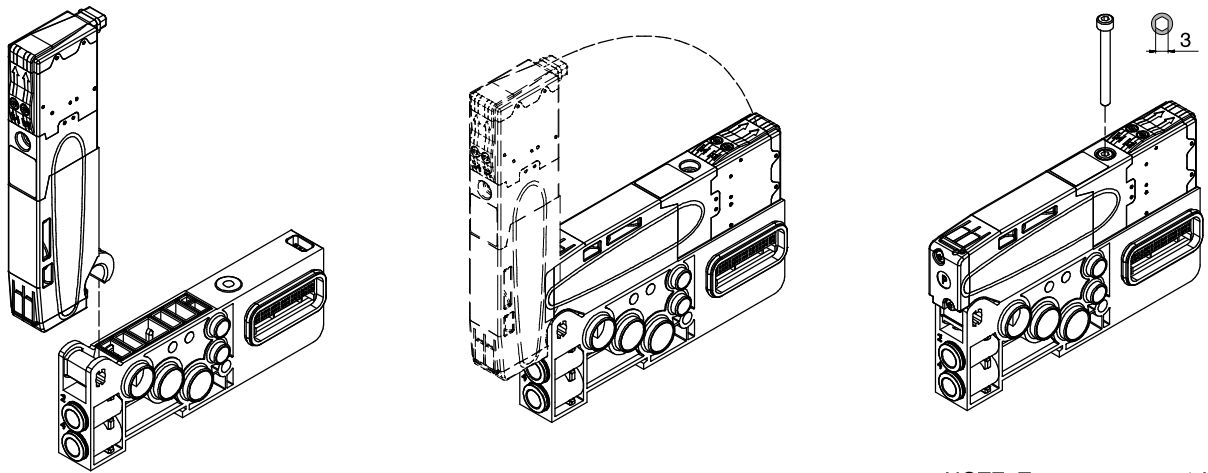


Manual override actuation



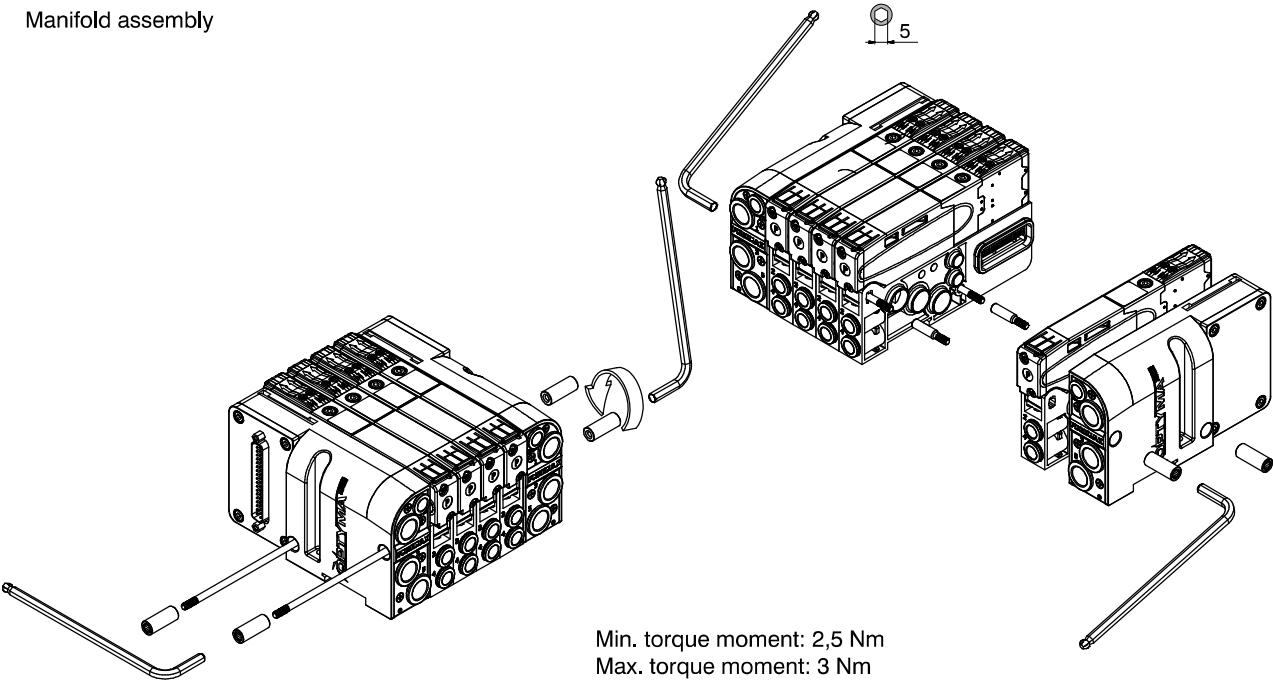
NOTE : It is strongly suggested to replace the original position after using

Valve Installation



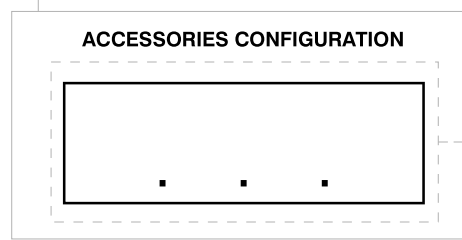
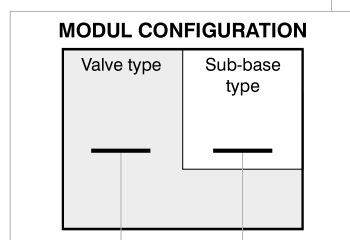
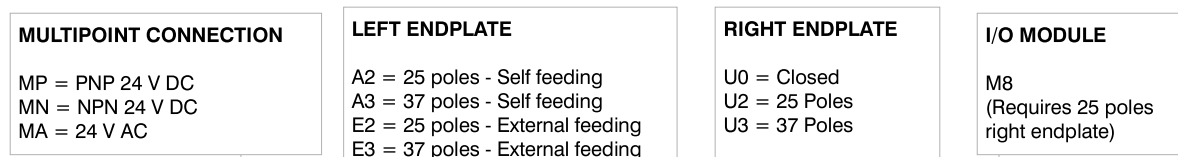
NOTE: Torque moment 1 Nm

Manifold assembly



## Manifold Layout configuration

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### SHORT CODE FUNCTION / CONNECTION :

A1= 5/2 Sol.-Spring + BASE 1 - CARTR. G1/8" GAS  
 A2= 5/2 Sol.-Spring + BASE 2 - CARTR. G1/8" GAS  
 A3= 5/2 Sol.-Spring + BASE 1 - CARTR. Ø4  
 A4= 5/2 Sol.-Spring + BASE 2 - CARTR. Ø4  
 A5= 5/2 Sol.-Spring + BASE 1 - CARTR. Ø6  
 A6= 5/2 Sol.-Spring + BASE 2 - CARTR. Ø6  
 A7= 5/2 Sol.-Spring + BASE 1 - CARTR. Ø8  
 A8= 5/2 Sol.-Spring + BASE 2 - CARTR. Ø8  
 B1= 5/2 Sol.-Diff. + BASE 1 - CARTR. G1/8" GAS  
 B2= 5/2 Sol.-Diff. + BASE 2 - CARTR. G1/8" GAS  
 B3= 5/2 Sol.-Diff. + BASE 1 - CARTR. Ø4  
 B4= 5/2 Sol.-Diff. + BASE 2 - CARTR. Ø4  
 B5= 5/2 Sol.-Diff. + BASE 1 - CARTR. Ø6  
 B6= 5/2 Sol.-Diff. + BASE 2 - CARTR. Ø6  
 B7= 5/2 Sol.-Diff. + BASE 1 - CARTR. Ø8  
 B8= 5/2 Sol.-Diff. + BASE 2 - CARTR. Ø8  
 C2= 5/2 Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 C4= 5/2 Sol.-Sol. + BASE 2 - CARTR. Ø4  
 C6= 5/2 Sol.-Sol. + BASE 2 - CARTR. Ø6  
 C8= 5/2 Sol.-Sol. + BASE 2 - CARTR. Ø8  
 E2= 5/3 CC Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 E4= 5/3 CC Sol.-Sol. + BASE 2 - CARTR. Ø4  
 E6= 5/3 CC Sol.-Sol. + BASE 2 - CARTR. Ø6  
 E8= 5/3 CC Sol.-Sol. + BASE 2 - CARTR. Ø8

F2= 2x3/2 NC-NC (= 5/3 OC) Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 F4= 2x3/2 NC-NC (= 5/3 OC) Sol.-Sol. + BASE 2 - CARTR. Ø4  
 F6= 2x3/2 NC-NC (= 5/3 OC) Sol.-Sol. + BASE 2 - CARTR. Ø6  
 F8= 2x3/2 NC-NC (= 5/3 OC) Sol.-Sol. + BASE 2 - CARTR. Ø8  
 G2= 2x3/2 NO-NO (= 5/3 PC) Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 G4= 2x3/2 NO-NO (= 5/3 PC) Sol.-Sol. + BASE 2 - CARTR. Ø4  
 G6= 2x3/2 NO-NO (= 5/3 PC) Sol.-Sol. + BASE 2 - CARTR. Ø6  
 G8= 2x3/2 NO-NO (= 5/3 PC) Sol.-Sol. + BASE 2 - CARTR. Ø8  
 H2= 2x3/2 NC-NO Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 H4= 2x3/2 NC-NO Sol.-Sol. + BASE 2 - CARTR. Ø4  
 H6= 2x3/2 NC-NO Sol.-Sol. + BASE 2 - CARTR. Ø6  
 H8= 2x3/2 NC-NO Sol.-Sol. + BASE 2 - CARTR. Ø8  
 I2= 2x3/2 NO-NC Sol.-Sol. + BASE 2 - CARTR. G1/8" GAS  
 I4= 2x3/2 NO-NC Sol.-Sol. + BASE 2 - CARTR. Ø4  
 I6= 2x3/2 NO-NC Sol.-Sol. + BASE 2 - CARTR. Ø6  
 I8= 2x3/2 NO-NC Sol.-Sol. + BASE 2 - CARTR. Ø8  
 T1= Free valve space plug + BASE 1 - CARTR. G1/8" GAS  
 T2= Free valve space plug + BASE 2 - CARTR. G1/8" GAS  
 T3= Free valve space plug + BASE 1 - CARTR. Ø4  
 T4= Free valve space plug + BASE 2 - CARTR. Ø4  
 T5= Free valve space plug + BASE 1 - CARTR. Ø6  
 T6= Free valve space plug + BASE 2 - CARTR. Ø6  
 T7= Free valve space plug + BASE 1 - CARTR. Ø8  
 T8= Free valve space plug + BASE 2 - CARTR. Ø8

### NOTE:

While configuring the manifold always be careful that the maximum number of electrical signals available is 32.  
 The use of monostable valve mounted on a base type 2 ( 2 electrical signals occupied ) causes the loss of one electric signal. In this case the monostable valve can be replaced by a bistable valve. The diaphragms  
 plugs are used to intercept the conduits 1,3 & 5 of the base. If it is necessary to interrupt more than one conduit in the same time then put in line the letters which identifies the position (for example : regarding the 3 & 5 conduits, put the Y & Z letters). Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.

### ACCESSORIES

U2 = Electric and electro-pneumatic cut off module 2 positions  
 K2 = Electric and electro-pneumatic cut off module 2 positions with external pilot  
 U4 = Electric and electro-pneumatic cut off module 4 positions  
 K4 = Electric and electro-pneumatic cut off module 4 positions with external pilot  
 U6 = Electric and electro-pneumatic cut off module 6 positions  
 K6 = Electric and electro-pneumatic cut off module 6 positions with external pilot  
 U8 = Electric and electro-pneumatic cut off module 8 positions  
 K8 = Electric and electro-pneumatic cut off module 8 positions with external pilot  
 W = Intermediate supply & exhaust module  
 X = Diaphragm plug on pipe 1  
 Y = Diaphragm plug on pipe 33  
 Z = Diaphragm plug on pipe 5  
 XY = Diaphragm plug on pipe 1 & 3  
 ZX = Diaphragm plug on pipe 5 & 1  
 ZY = Diaphragm plug on pipe 5 & 3  
 ZXY = Diaphragm plug on pipe 5, 1 & 3

**Series 2500 OPTYMA-T solenoid valve manifolds managed by multipoint connection are  
"well tried components"**

|                        |                             |                                                                                                                                                                                                                 |
|------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                        | <b>Well-tried component</b> | - The product is a well-tried product for a safety-related application according to ISO 13849-1.<br>- The relevant basic and well-tried safety principles according ISO 13849-2 for this product are fulfilled. |
| <b>B<sub>10d</sub></b> | 50.000.000                  | - The suitability of the product for a precise application must be verified and confirmed by the user.                                                                                                          |

**General:**

CANopen® module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 4 Input modules 5225.08T or a max number of 4 Input modules 5225.12T.

CANopen® module recognizes automatically the presence of the Input modules on power on.

Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus CANopen® is possible via 2 M12 5P male - female circular connectors; these two are connected in parallel and according to CiA Draft Recommendation 303-1 (V. 1.3 : 30 December 2004).

Transmission speed can be set by 3 dip-switches.

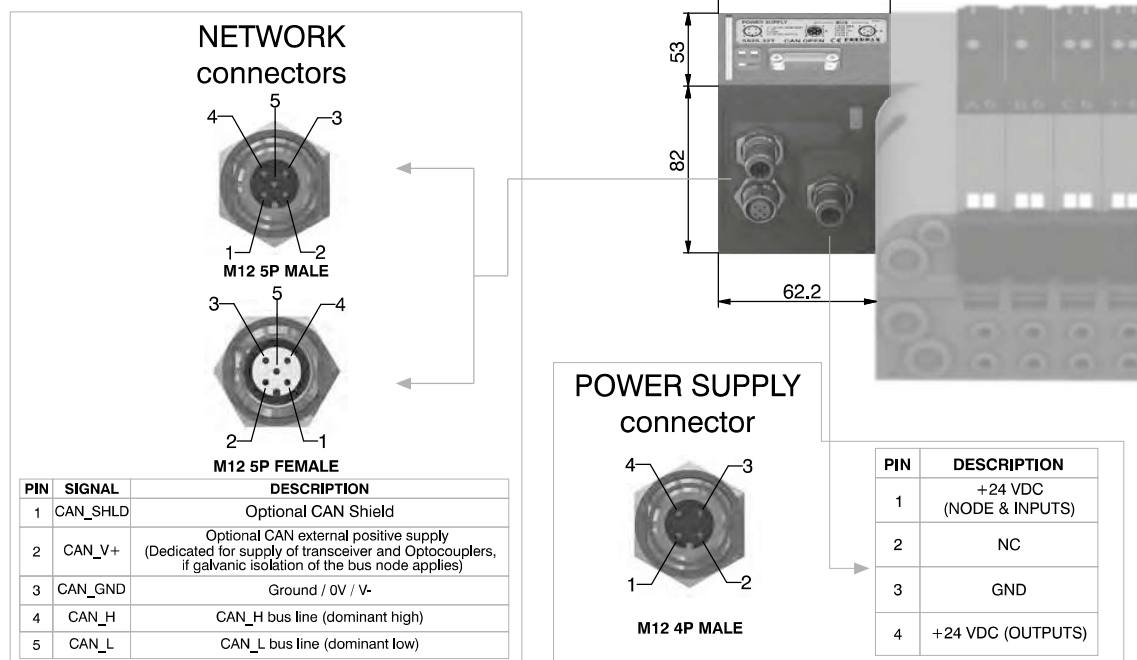
The node address can be set by 6 dip-switches using BCD numeration.

The module includes an internal terminating resistance that can be activated by a dip-switch.

**Ordering code****5525.32T**

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**Scheme / Overall dimensions and I/O layout :****Technical characteristics**

|                     |                                    |                                                                                                |
|---------------------|------------------------------------|------------------------------------------------------------------------------------------------|
| Power supply        | Model                              | 5525.32T                                                                                       |
|                     | Specifications                     | CiA Draft Standard Proposal 301 V 4.10 (15 August 2006)                                        |
| Outputs             | Case                               | Reinforced technopolymer                                                                       |
|                     | Power supply connection            | M12 4P male connector (IEC 60947-5-2)                                                          |
|                     | Power supply voltage               | +24 VDC +/- 10%                                                                                |
|                     | Node consumption (without inputs)  | 30 mA                                                                                          |
|                     | Power supply diagnosis             | Green LED PWR                                                                                  |
| Network             | PNP equivalent outputs             | +24 VDC +/- 10%                                                                                |
|                     | Maximum current for each output    | 100 mA                                                                                         |
|                     | Maximum output number              | 32                                                                                             |
|                     | Max output simultaneously actuated | 32                                                                                             |
|                     | Network connectors                 | 2 M12 5P 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 nodes in net                   | 64 (slave + master)                                                                            |
|                     | Bus maximum recommended length     | 100 m at 500 Kbit/s                                                                            |
|                     | Bus diagnosis                      | Green LED + Red LED                                                                            |
| IP protection grade | Configuration file                 | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|                     | IP protection grade                | IP65 when assembled                                                                            |
|                     | Temperature range                  | From 0° to +50° C                                                                              |

## General:

DeviceNet module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 4 Input modules 5225.08T or a max number of 4 Input modules 5225.12T.

DeviceNet module recognizes automatically the presence of the Input modules on power on.

Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus DeviceNet is possible via 2 M12 5P male - female circular connectors; these two are connected in parallel and according to DeviceNet Specifications Volume I, release 2.0.

Transmission speed can be set by 3 dip-switches.

The node address can be set by 6 dip-switches using BCD numeration.

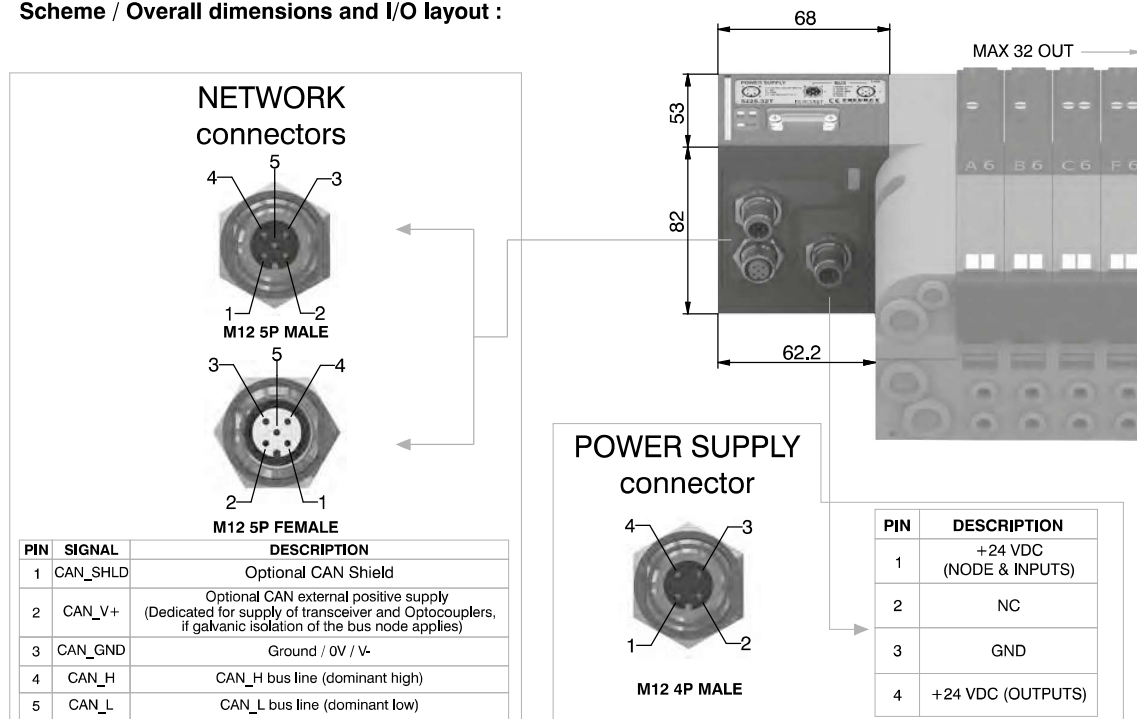
The module includes an internal terminating resistance that can be activated by a dip-switch.

## Ordering code

**5425.32T**



## Scheme / Overall dimensions and I/O layout :



## Technical characteristics

|              |                                    |                                                                                                |
|--------------|------------------------------------|------------------------------------------------------------------------------------------------|
|              | Model                              | 5425.32T                                                                                       |
|              | Specifications                     | DeviceNet Specifications Volume I, release 2.0.                                                |
|              | Case                               | Reinforced technopolymer                                                                       |
|              | Power supply connection            | M12 4P male connector (IEC 60947-5-2)                                                          |
| Power supply | Power supply voltage               | +24 VDC +/- 10%                                                                                |
|              | Node consumption (without inputs)  | 30 mA                                                                                          |
|              | Power supply diagnosis             | Green LED PWR                                                                                  |
|              | PNP equivalent outputs             | +24 VDC +/- 10%                                                                                |
| Outputs      | Maximum current for each output    | 100 mA                                                                                         |
|              | Maximum output number              | 32                                                                                             |
|              | Max output simultaneously actuated | 32                                                                                             |
|              | Network connectors                 | 2 M12 5P connectors male-female Type A (IEC 60947-5-2)                                         |
| Network      | Baud rate                          | 125 - 250 - 500 Kbit/s                                                                         |
|              | Addresses, possible numbers        | From 1 to 63                                                                                   |
|              | Max nodes 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: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|              | IP protection grade                | IP65 when assembled                                                                            |
|              | Temperature range                  | From 0° to +50° C                                                                              |

**General:**

PROFIBUS DP module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 8 Input modules 5225.08T or a max number of 8 Input modules 5225.12T.

PROFIBUS DP module recognizes automatically the presence of the Input modules on power on. Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus PROFIBUS DP is possible via 2 M12 type B 5P male - female circular connectors; these two are connected in parallel and according to PROFIBUS Interconnection Technology (Version 1.1 : August 2001).

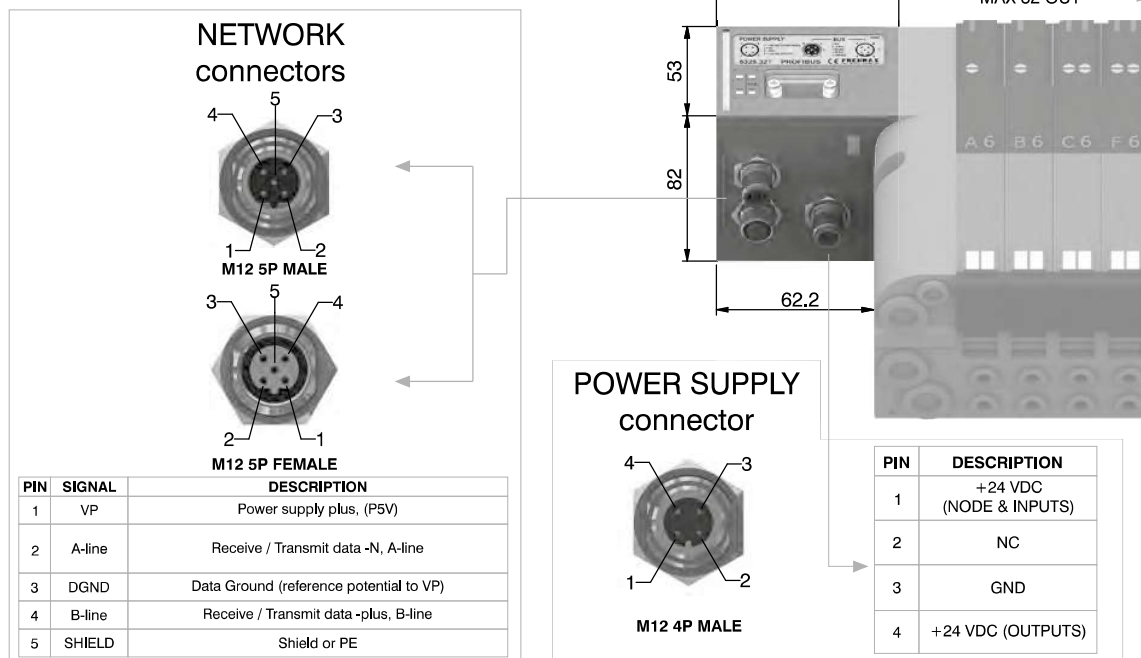
The node address can be set using BCD numeration: 4 dip-switches for the units and 4 dip-switches for the tens.

The module includes an internal terminating resistance that can be activated by 2 dip-switches.

**Ordering code****5325.32T**

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**Scheme / Overall dimensions and I/O layout :****Technical characteristics**

|               |                                    |                                                                                                |
|---------------|------------------------------------|------------------------------------------------------------------------------------------------|
| Power supply  | Model                              | 5325.32T                                                                                       |
|               | Specifications                     | PROFIBUS DP                                                                                    |
|               | Case                               | Reinforced technopolymer                                                                       |
|               | Power supply connection            | M12 4P male connector (IEC 60947-5-2)                                                          |
| Outputs       | Power supply voltage               | +24 VDC +/- 10%                                                                                |
|               | Node consumption (without inputs)  | 50 mA                                                                                          |
|               | Power supply diagnosis             | Green LED PWR / Green LED OUT                                                                  |
|               | PNP equivalent outputs             | +24 VDC +/- 10%                                                                                |
| Network       | Maximum current for each output    | 100 mA                                                                                         |
|               | Maximum output number              | 32                                                                                             |
|               | Max output simultaneously actuated | 32                                                                                             |
|               | Network connectors                 | 2 M12 5P male-female connectors 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 nodes 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 | Configuration file                 | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|               | IP protection grade                | IP65 when assembled                                                                            |
|               | Temperature range                  | From 0° to +50° C                                                                              |

## General:

EtherCAT® module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 4 Input modules 5225.08T or a max number of 4 Input modules 5225.12T.

The EtherCAT® module, regardless the number of Input module connected, reports to have connected 4 Input modules.

Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus EtherCAT® is possible via 2 M12 4P type D female circular connectors. These two connectors lead the signal to two different communication ports, so they are not connected in parallel.

The node address is assigned during configuration.

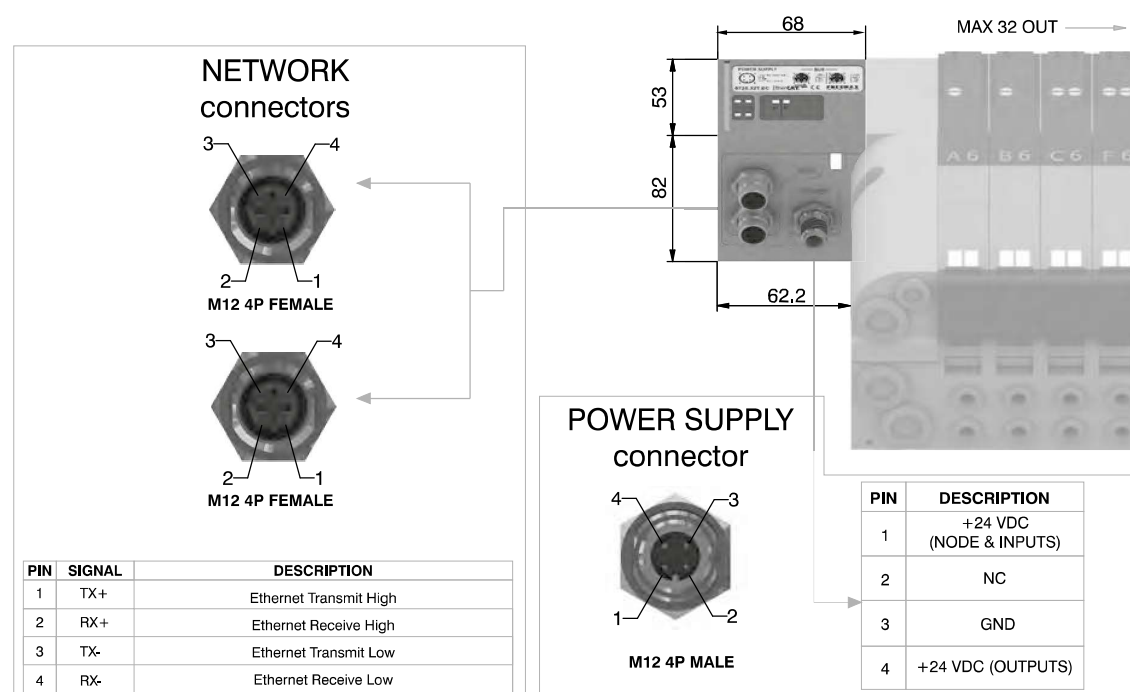
**Note: 5700 series has a different configuration file from series 5600.**

## Ordering code

**5725.32T.EC.A**



## Scheme / Overall dimensions and I/O layout :



## Technical characteristics

|              |                                   |                                          |
|--------------|-----------------------------------|------------------------------------------|
| Power supply | Model                             | 5725.32T.EC.A                            |
|              | Specifications                    | EtherCAT® Specifications ETG.1000 series |
|              | Case                              | Reinforced technopolymer                 |
|              | Power supply connection           | M12 4P male connector (IEC 60947-5-2)    |
|              | Power supply voltage              | +24 VDC +/- 10%                          |
|              | Node consumption (without inputs) | 400 mA                                   |
|              | Power supply diagnosis            | Green LED PWR / Green LED OUT            |
|              | Outputs                           | PNP equivalent outputs                   |
|              |                                   | +24 VDC +/- 10%                          |
|              |                                   | Maximum current for each output          |
|              |                                   | 100 mA                                   |
|              | Network                           | Maximum output number                    |
|              |                                   | 32                                       |
|              |                                   | Max output simultaneously actuated       |
|              |                                   | 32                                       |

|         |                                  |                                                                                                |
|---------|----------------------------------|------------------------------------------------------------------------------------------------|
| Network | Network connectors               | 2 M12 4P female connectors Type D (IEC 61076-2-101)                                            |
|         | Baud rate                        | 100 Mbit/s                                                                                     |
|         | Addresses, possible numbers      | From 1 to 65535                                                                                |
|         | Max nodes in net                 | 65536 (Master + Slave)                                                                         |
|         | Maximum distance between 2 nodes | 100 m                                                                                          |
|         | Bus diagnosis                    | 1 green and 1 red LED for status + 2 LEDs for link & activity                                  |
|         | Configuration file               | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|         | IP protection grade              | IP65 when assembled                                                                            |
|         | Temperature range                | From 0° to +50° C                                                                              |

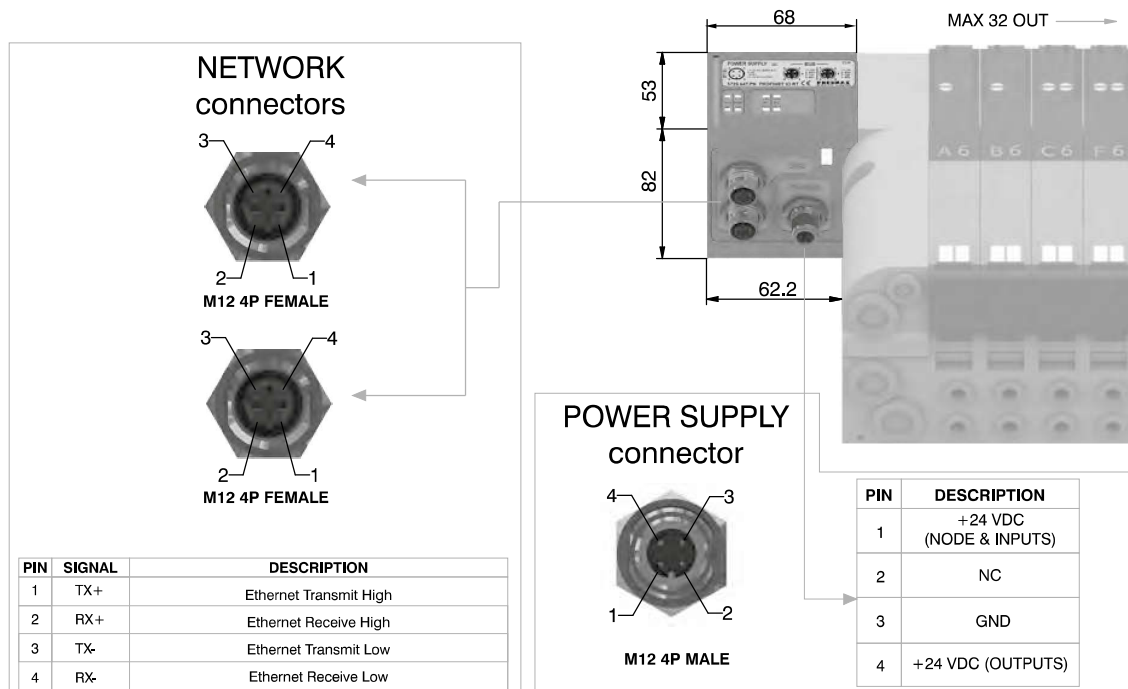
**General :**

PROFINET IO RT module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
The node can be easily installed also on solenoid valves manifold already mounted on equipment.  
Module can manage up to 32 solenoid valves, and, in the same time, a max number of 8 Input modules 5225.08T or a max number of 8 Input modules 5225.12T.  
The PROFINET IO RT module, regardless the number of Input module connected, reports to have connected 8 Input modules.  
Regardless of the number of Input modules connected, the manageable solenoid valves are 32.  
Node power supply is made by a M12 4P male circular connector.  
The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.  
Connection to Bus PROFINET IO RT is possible via 2 M12 4P type D female circular connectors. These two connectors lead the signal to two different communication ports, so they are not connected in parallel.  
The node address is assigned during configuration.

**Ordering code****5725.32T.PN.A**

1

AIR DISTRIBUTION

**Scheme / Overall dimensions and I/O layout :****Technical characteristics**

|                     |                                    |                                                                                                |
|---------------------|------------------------------------|------------------------------------------------------------------------------------------------|
| Power supply        | Model                              | 5725.32T.PN.A                                                                                  |
|                     | Specifications                     | PROFINET IO RT                                                                                 |
| Outputs             | Case                               | Reinforced technopolymer                                                                       |
|                     | Power supply connection            | M12 4P male connector (IEC 60947-5-2)                                                          |
|                     | Power supply voltage               | +24 VDC +/- 10%                                                                                |
|                     | Node consumption (without inputs)  | 400 mA                                                                                         |
| Network             | Power supply diagnosis             | Green LED PWR / Green LED OUT                                                                  |
|                     | PNP equivalent outputs             | +24 VDC +/- 10%                                                                                |
|                     | Maximum current for each output    | 100 mA                                                                                         |
|                     | Maximum output number              | 32                                                                                             |
|                     | Max output simultaneously actuated | 32                                                                                             |
|                     | Network connectors                 | 2 M12 4P female connectors Type D (IEC 61076-2-101)                                            |
|                     | Baud rate                          | 100 Mbit/s                                                                                     |
|                     | Addresses, possible numbers        | As an IP address                                                                               |
|                     | Max nodes in net                   | As an Ethernet Network                                                                         |
|                     | Maximum distance between 2 nodes   | 100 m                                                                                          |
| IP protection grade | Bus diagnosis                      | 1 green and 1 red LED for status + 4 LEDs for link & activity                                  |
|                     | Configuration file                 | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|                     | IP protection grade                | IP65 when assembled                                                                            |
|                     | Temperature range                  | From 0° to +50° C                                                                              |

## General :

EtherNet/IP module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 8 Input modules 5225.08T or a max number of 8 Input modules 5225.12T.

The EtherNet/IP module, regardless the number of Input module connected, reports to have connected 8 Input modules.

Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus EtherNet/IP is possible via 2 M12 4P type D female circular connectors. These two connectors lead the signal to two different communication ports, so they are not connected in parallel.

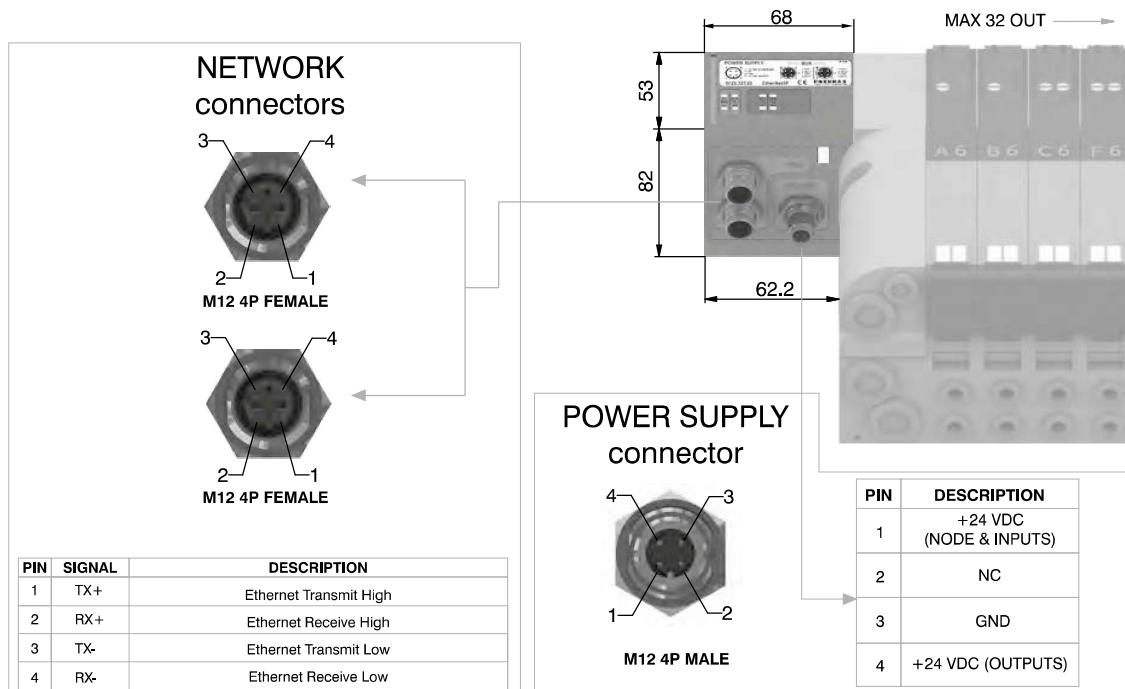
The node address is assigned during configuration.

## Ordering code

**5725.32T.EI.A**



## Scheme / Overall dimensions and I/O layout :



## Technical characteristics

|              |                                    |                                                                                                |
|--------------|------------------------------------|------------------------------------------------------------------------------------------------|
|              | Model                              | 5725.32T.EI.A                                                                                  |
|              | Specifications                     | The EtherNet/IP Specification                                                                  |
| Power supply | Case                               | Reinforced technopolymer                                                                       |
|              | Power supply connection            | M12 4P male connector (IEC 60947-5-2)                                                          |
|              | Power supply voltage               | +24 VDC +/- 10%                                                                                |
|              | Node consumption (without inputs)  | 400 mA                                                                                         |
|              | Power supply diagnosis             | Green LED PWR / Green LED OUT                                                                  |
| Outputs      | PNP equivalent outputs             | +24 VDC +/- 10%                                                                                |
|              | Maximum current for each output    | 100 mA                                                                                         |
|              | Maximum output number              | 32                                                                                             |
|              | Max output simultaneously actuated | 32                                                                                             |
| Network      | Network connectors                 | 2 M12 4P female connectors Type D (IEC 61076-2-101)                                            |
|              | Baud rate                          | 100 Mbit/s                                                                                     |
|              | Addresses, possible numbers        | As an IP address                                                                               |
|              | Max nodes in net                   | As an Ethernet Network                                                                         |
|              | Maximum distance between 2 nodes   | 100 m                                                                                          |
|              | Bus diagnosis                      | 2 bicolor red/green LEDs for status + 4 LEDs for link & activity                               |
|              | Configuration file                 | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|              | IP protection grade                | IP65 when assembled                                                                            |
|              | Temperature range                  | From 0° to +50° C                                                                              |

## General :

CC-Link IE Field Basic module is directly integrated on Optyma-T solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
Optyma-T solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

The node can be easily installed also on solenoid valves manifold already mounted on equipment.

Module can manage up to 32 solenoid valves, and, in the same time, a max number of 8 Input modules 5225.08T or a max number of 8 Input modules 5225.12T.

The CC-Link IE Field Basic module, regardless the number of Input module connected, reports to have connected 8 Input modules.

Regardless of the number of Input modules connected, the manageable solenoid valves are 32.

Node power supply is made by a M12 4P male circular connector.

The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.

Connection to Bus CC-Link IE Field Basic is possible via 2 M12 4P type D female circular connectors. These two connectors lead the signal to two different communication ports, so they are not connected in parallel.

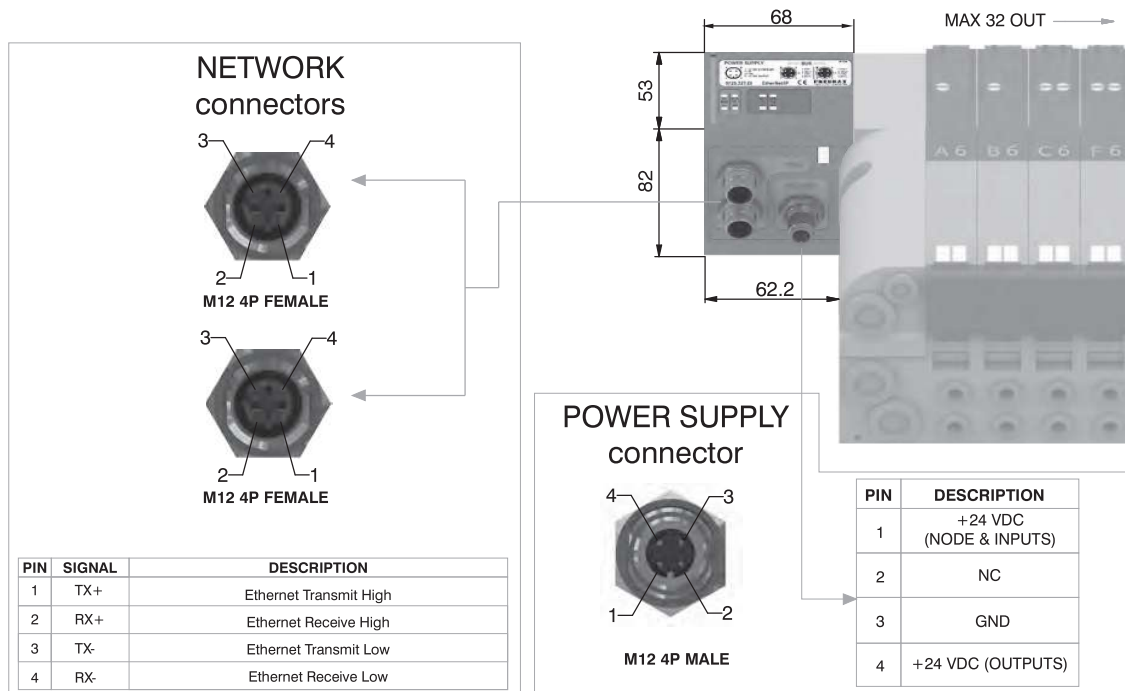
The node address is assigned during configuration.

## Ordering code

**5725.32T.CL.A**



## Scheme / Overall dimensions and I/O layout :



## Technical characteristics

|              |                                   |                                       |
|--------------|-----------------------------------|---------------------------------------|
| Power supply | Model                             | 5725.32T.El.A                         |
|              | Specifications                    | CC-Link IE Field Basic Specification  |
|              | Case                              | Reinforced technopolymer              |
|              | Power supply connection           | M12 4P male connector (IEC 60947-5-2) |
|              | Power supply voltage              | +24 VDC +/- 10%                       |
|              | Node consumption (without inputs) | 400 mA                                |
|              | Power supply diagnosis            | Green LED PWR / Green LED OUT         |
|              | Outputs                           | PNP equivalent outputs                |
|              |                                   | +24 VDC +/- 10%                       |
|              |                                   | Maximum current for each output       |
|              |                                   | 100 mA                                |
|              | Network                           | Maximum output number                 |
|              |                                   | 32                                    |
|              |                                   | Max output simultaneously actuated    |
|              |                                   | 32                                    |

|                   |                                  |                                                                                                |
|-------------------|----------------------------------|------------------------------------------------------------------------------------------------|
| Network           | Network connectors               | 2 M12 4P female connectors Type D (IEC 61076-2-101)                                            |
|                   | Baud rate                        | 100 Mbit/s                                                                                     |
|                   | Addresses, possible numbers      | As an IP address                                                                               |
|                   | Max nodes in net                 | As an Ethernet Network                                                                         |
|                   | Maximum distance between 2 nodes | 100 m                                                                                          |
|                   | Bus diagnosis                    | 1 green and 1 red LED for status + 2 LEDs for link & activity                                  |
|                   | Configuration file               | Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a> |
|                   | IP protection grade              | IP65 when assembled                                                                            |
| Temperature range | Temperature range                | From 0° to +50° C                                                                              |

General :

Modules have 8 connectors M8 3P female.

The Inputs are PNP equivalent 24 VDC  $\pm 10\%$ .  
To each connector it is possible to plug both 2 wires Inputs (switches, magnetic switches pressure switches, etc) or 3 wires Inputs (proximity, photocells, electronic sensors, etc).  
The maximum current available for all 8 Inputs is 300 mA.

Each module includes a 300 mA self-mending fuse. If a short circuit or a overcharge (overall current >300mA) occur the safety device acts cutting the 24 VDC power supply to all M8 connectors on the module and switching off the green LED PWR. Any other Input module connected to the node will remain powered and will function correctly.

Once the cause of the fault disappears the green LED PWR lights up indicating the ON state and the node will re-start to operate.

The maximum number of Input modules supported is 4 for CANopen®, DeviceNet and EtherCAT®.

The maximum number of Input modules supported is 8 for PROFIBUS DP, PROFINET IO RT EtherNet/IP and Powerlink.

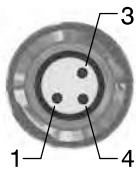
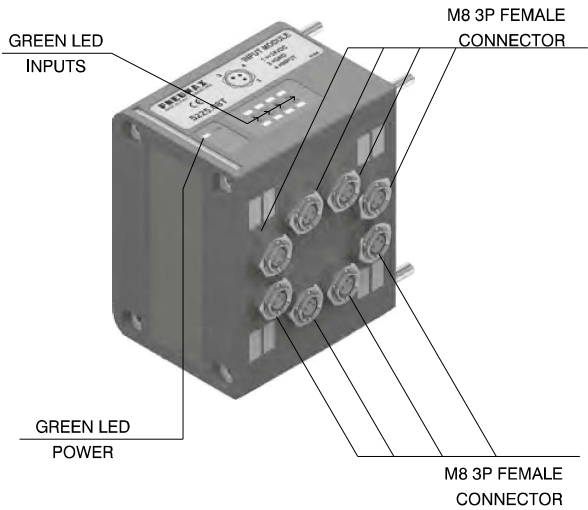
Ordering code

5225.08T

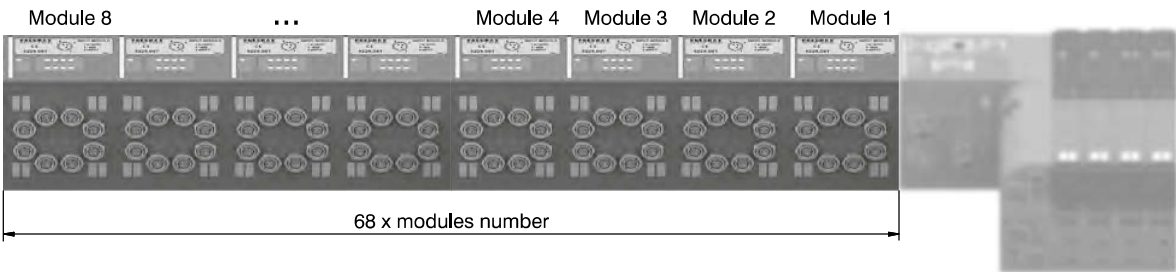
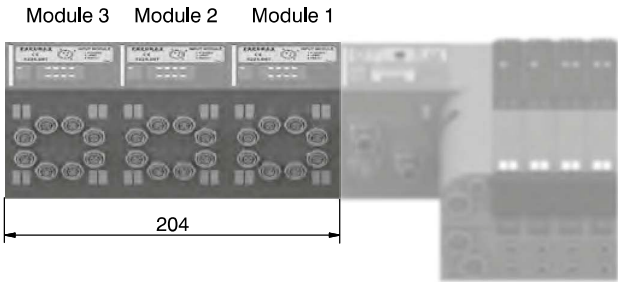
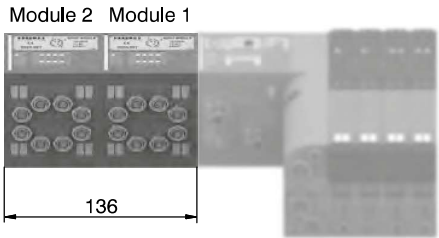
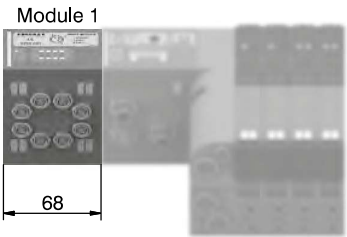


1  
AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout :



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | +24 VDC     |
| 4   | INPUT       |
| 3   | GND         |



## General :

Modules have 4 connectors M12 5P female.

The Inputs are PNP equivalent 24 VDC  $\pm 10\%$ .

To each connector it is possible to plug both 2 wires Inputs (switches, magnetic switches pressure switches, etc) or 3 wires Inputs (proximity, photocells, electronic sensors, etc).

The maximum current available for all 8 Inputs is 300 mA.

Each module includes a 300 mA self-mending fuse. If a short circuit or a overcharge (overall current  $>300\text{mA}$ ) occur the safety device acts cutting the 24 VDC power supply to all M8 connectors on the module and switching off the green LED PWR. Any other Input module connected to the node will remain powered and will function correctly.

Once the cause of the fault disappears the green LED PWR lights up indicating the ON state and the node will re-start to operate.

The maximum number of Input modules supported is 4 for CANopen<sup>®</sup>, DeviceNet and EtherCAT<sup>®</sup>.

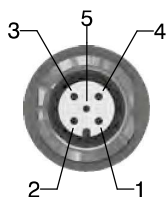
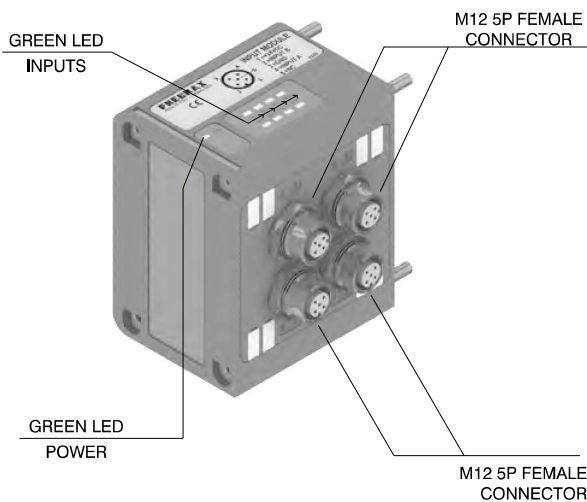
The maximum number of Input modules supported is 8 for PROFIBUS DP, PROFINET IO RT EtherNet/IP and Powerlink.

## Ordering code

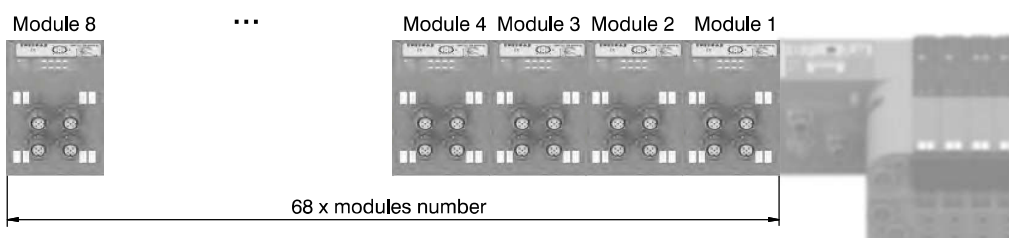
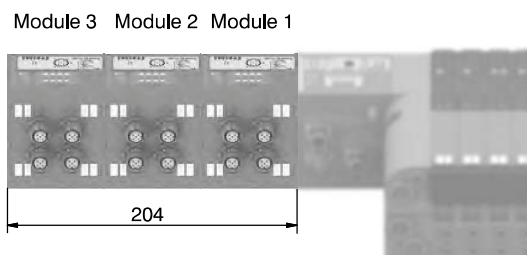
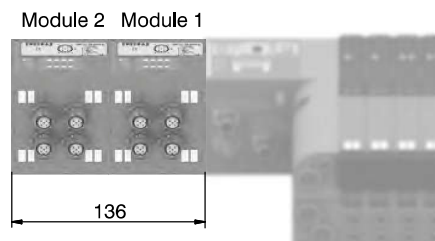
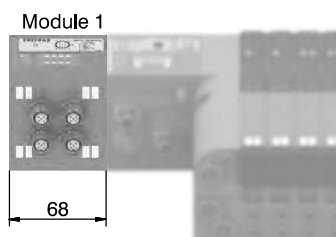
**5225.12T**



## Scheme / Overall dimensions and I/O layout :



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | +24 VDC     |
| 2   | INPUT B     |
| 3   | GND         |
| 4   | INPUT A     |
| 5   | NC          |





General :

This module is fitted with two M8 3 pin female connectors.  
With this module is possible to read two analogue inputs (voltage or current).  
The inputs are sampled at 12 bit.  
For practicality the sampled value is transmitted with 16 bit, of which the four less significant are fixed at zero.

Available models:  
5225.2T.00T (voltage signal 0 - 10V);  
5225.2T.01T (voltage signal 0 - 5V);  
5225.2C.00T (current signal 4 - 20mA);  
5225.2C.01T (current signal 0 - 20mA).

Each module includes a 300 mA self-mending fuse. Should a short circuit or a overcharge (overall current >300mA) occur the safety device intervenes cutting the 24VDC power supply to all M8 connectors on the module and switching off the green LED PWR. Any other Input module connected to the node will remain powered and will function correctly. Once the cause of the fault is removed the green LED lights up indicating the ON state and the node will re-start to operate.

This module is counted as four 8 digital Inputs modules.

The Maximum number of 2 analogue Inputs modules supported is 1 for CANopen®, DeviceNet, PROFIBUS DP and EtherCAT®.  
The Maximum number of 2 analogue Inputs modules supported is 2 for PROFINET IO RT, EtherNet/IP and Powerlink.

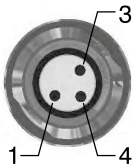
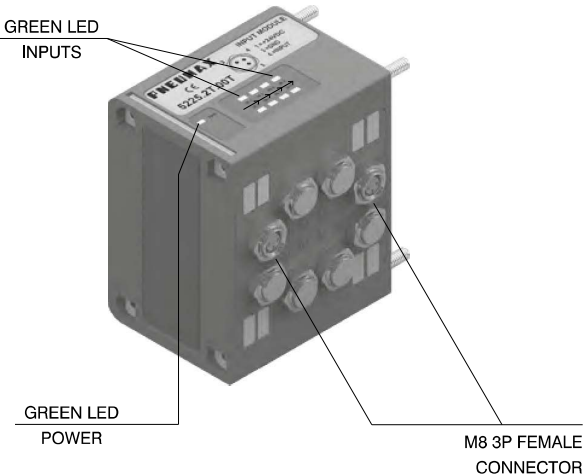
Ordering code

5225.2 \_ . \_ T

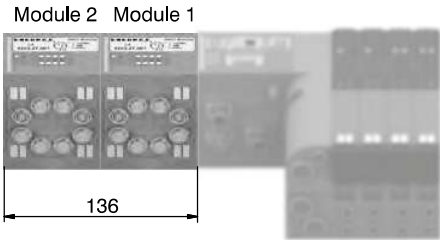
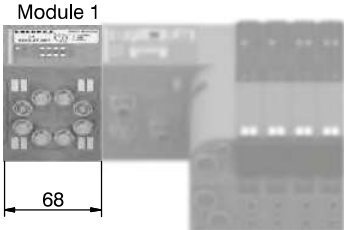


1  
AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout :



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | +24 VDC     |
| 4   | INPUT       |
| 3   | GND         |



## General :

This module is fitted with two M8 3 pin female connectors.

With this module is possible to read two Pt100 probes.

The inputs are sampled at 12 bit.

For practicality the sampled value is transmitted with 16 bit, of which the four less significant are fixed at zero.

It is possible to plug 3-wires probes or 2-wires probes.

The temperature is expressed in tenths of degree.

The temperature range is 0 – 250°C, beyond which the green LED for probe presence doesn't light on.

The module returns a value correspondent to 250°C when the probe is not connected.

Available models:

5225.2P.00T (2-wires probes);

5225.2P.01T (3-wires probes).

Each module includes a 300 mA self-mending fuse. Should a short circuit or a overcharge (overall current >300mA) occur the safety device intervenes cutting the 24VDC power supply to all M8 connectors on the module and switching off the green LED PWR. Any other Input module connected to the node will remain powered and will function correctly.

Once the cause of the fault is removed the green LED lights up indicating the ON state and the node will re-start to operate.

This module is counted as four 8 digital Inputs modules.

The Maximum number of 2 Pt100 Inputs modules supported is 1 for CANopen®, DeviceNet, PROFIBUS DP and EtherCAT®.

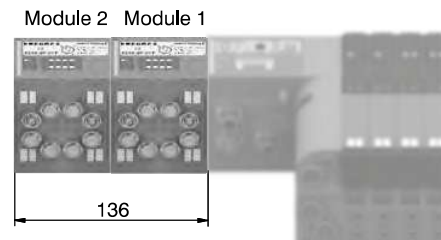
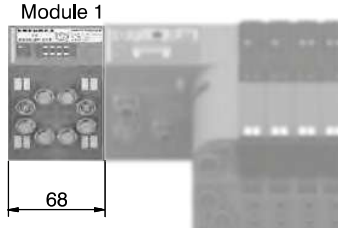
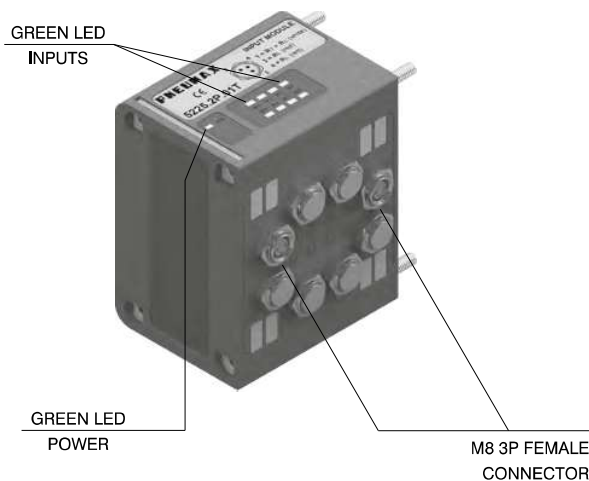
The Maximum number of 2 Pt100 Inputs modules supported is 2 for PROFINET IO RT, EtherNet/IP and Powerlink.

## Ordering code

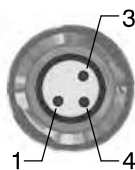
**5225.2P . 0\_T**



## Scheme / Overall dimensions and I/O layout :

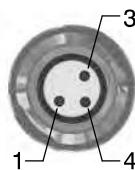


### 3 WIRES



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | RT (white)  |
| 4   | RL (red)    |
| 3   | RL (red)    |

### 2 WIRES



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | RT (white)  |
| 4   | NC          |
| 3   | RL (red)    |



General :

This module is fitted with two M8 3 pin female connectors.  
With this module is possible to read two Pt100 probes.  
The inputs are sampled at 12 bit.  
For practicality the sampled value is transmitted with 16 bit, of which the four less significant are fixed at zero.

It is possible to plug 3-wires probes or 2-wires probes.  
The temperature is expressed in points according to the formula

Temperature=  $\left(\frac{\text{Points}}{4095} \times 600\right) - 200$

The temperature range is -200 to +400°C, beyond which the green LED for probe presence doesn't light on.  
The module returns a value correspondent to 400°C when the probe is not connected.

Available models:  
5225.2P10T (2-wires probes);  
5225.2P11T (3-wires probes).

Each module includes a 300 mA self-mending fuse. Should a short circuit or a overcharge (overall current >300mA) occur the safety device intervenes cutting the 24VDC power supply to all M8 connectors on the module and switching off the green LED PWR. Any other INPUT module connected to the node will remain powered and will function correctly.  
Once the cause of the fault is removed the green LED lights up indicating the ON state and the node will re-start to operate.  
This module is counted as four 8 digital Inputs modules.

The Maximum number of 2 Pt100 Inputs modules supported is 1 for CANopen®, DeviceNet, PROFIBUS DP and EtherCAT®.  
The Maximum number of 2 Pt100 Inputs modules supported is 2 for PROFINET IO RT, EtherNet/IP and Powerlink.

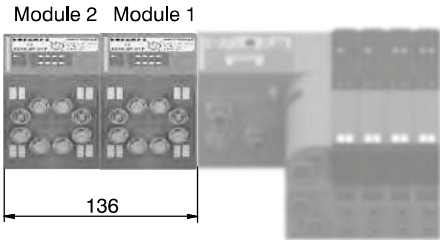
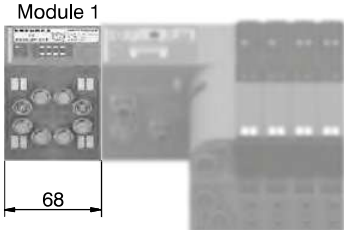
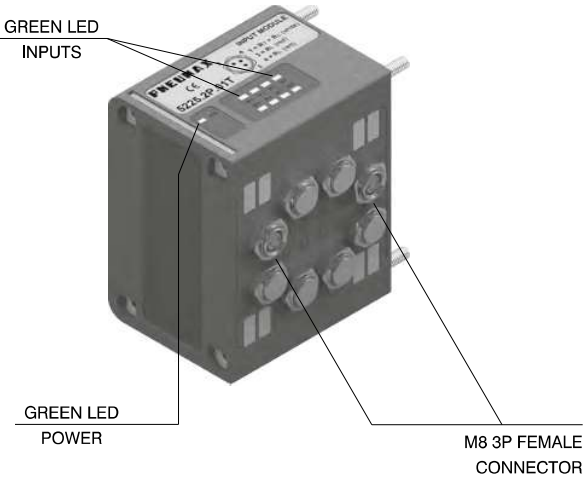
Ordering code

5225.2P . 1\_T

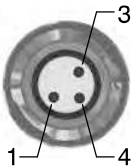


1  
AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout :

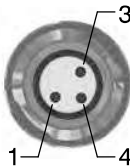


3 WIRES



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | RT (white)  |
| 4   | RL (red)    |
| 3   | RL (red)    |

2 WIRES



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | RT (white)  |
| 4   | NC          |
| 3   | RL (red)    |

1

AIR DISTRIBUTION

Socket for Power Supply  
STRAIGHT CONNECTOR  
M12A 4P FEMALE

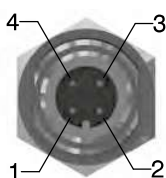
**Ordering code**

**5312A.F04.00**



## POWER SUPPLY connector

Upper view  
Slave connector

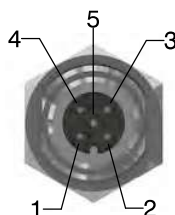


| PIN | DESCRIPTION     |
|-----|-----------------|
| 1   | +24 VDC Node    |
| 2   |                 |
| 3   | 0 V             |
| 4   | +24 VDC Outputs |

Socket for Bus CANopen®/DeviceNet  
STRAIGHT CONNECTOR  
M12A 5P FEMALE

**Ordering code**

**5312A.F05.00**



| PIN | DESCRIPTION  |
|-----|--------------|
| 1   | (CAN_SHIELD) |
| 2   | (CAN_V+)     |
| 3   | CAN_GND      |
| 4   | CAN_H        |
| 5   | CAN_L        |

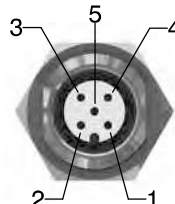
Upper view  
Slave connector

## NETWORK connectors

Plug for Bus CANopen®/DeviceNet  
STRAIGHT CONNECTOR  
M12A 5P MALE

**Ordering code**

**5312A.M05.00**



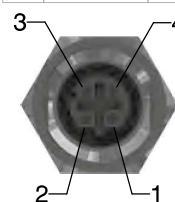
Plug for Bus EtherCAT®,  
PROFINET IO RT  
and EtherNet/IP  
STRAIGHT CONNECTOR M12D 4P MALE

**Ordering code**

**5312D.M04.00**



| PIN | SIGNAL | DESCRIPTION            |
|-----|--------|------------------------|
| 1   | TX+    | Ethernet Transmit High |
| 2   | RX+    | Ethernet Receive High  |
| 3   | TX-    | Ethernet Transmit Low  |
| 4   | RX-    | Ethernet Receive Low   |

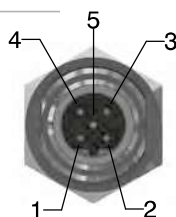


Upper view  
Slave connector

Socket for Bus PROFIBUS DP  
STRAIGHT CONNECTOR  
M12B 5P FEMALE

**Ordering code**

**5312B.F05.00**



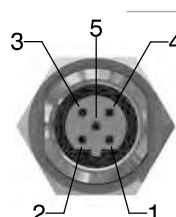
| PIN | DESCRIPTION  |
|-----|--------------|
| 1   | Power Supply |
| 2   | A-line       |
| 3   | DGND         |
| 4   | B-line       |
| 5   | SHIELD       |

Upper view  
Slave connector

Plug for Bus PROFIBUS DP  
STRAIGHT CONNECTOR  
M12B 5P MALE

**Ordering code**

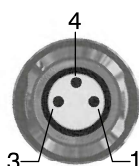
**5312B.M05.00**



Plug for Input module  
STRAIGHT CONNECTOR  
M8 3P MALE

**Ordering code**

**5308A.M03.00**



## INPUT connectors

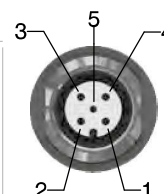
Upper view  
Slave connector

| PIN | DESCRIPTION |
|-----|-------------|
| 1   | +24 VDC     |
| 4   | INPUT       |
| 3   | GND         |

Plug for Input module  
STRAIGHT CONNECTOR  
M12A 5P MALE

**Ordering code**

**5312A.M05.00**



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | +24 VDC     |
| 2   | INPUT B     |
| 3   | GND         |
| 4   | INPUT A     |
| 5   | NC          |

M12 plug

**Ordering code**

**5300.T12**



Plugs

M8 plug

**Ordering code**

**5300.T08**

