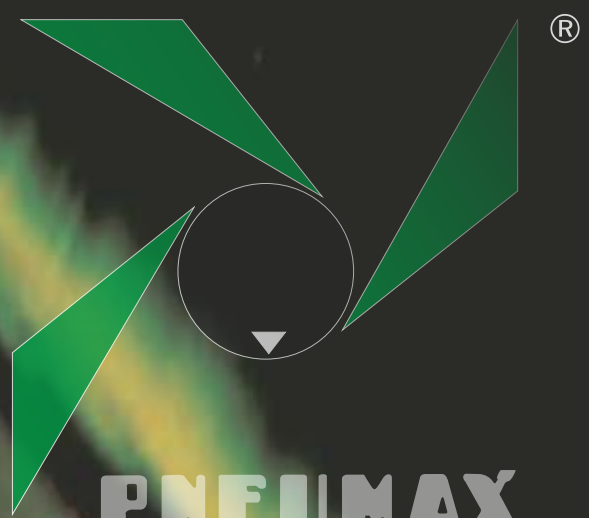
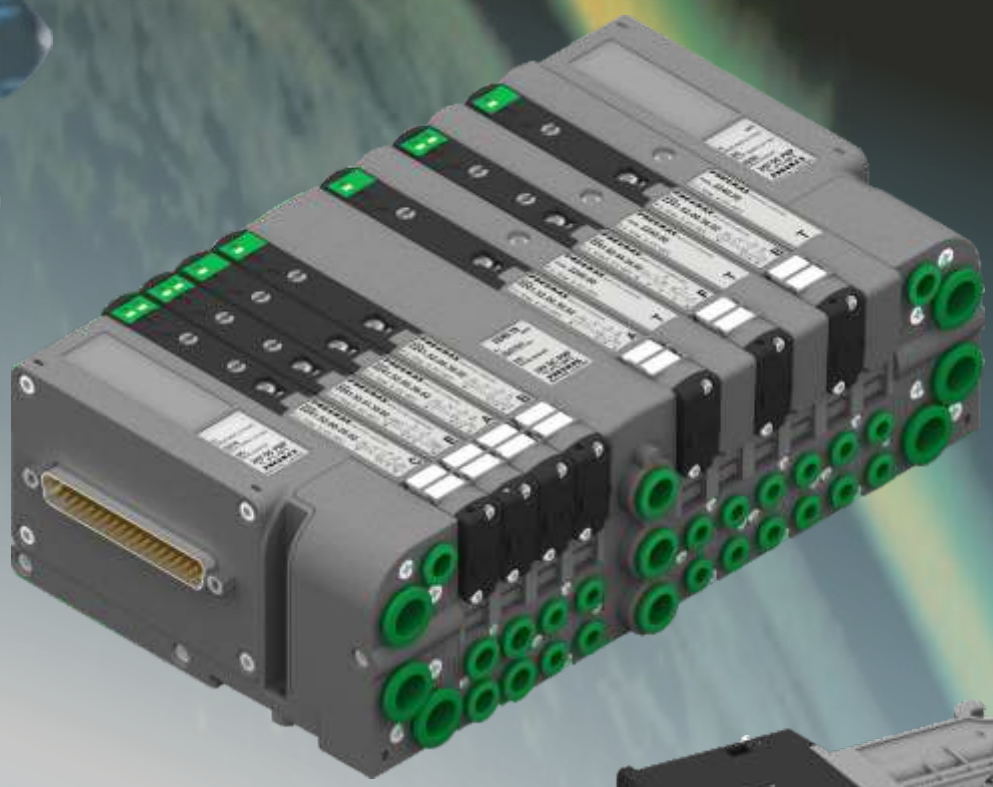


COMPONENTS FOR PNEUMATIC AUTOMATION



**PNEUMAX**  
OPTYMA 32-S



# OPTYMA<sup>32</sup>-S

## General characteristics

Optyma32-S has been designed in order to complete the Optyma series of valves. Optyma -S, 12.5mm size, integrates all the technical features already developed and implemented on the Optima T & F such as the integrated electrical connection.

Further technical specifications are:

- Flow rate: up to 400NI, the solenoid pilots are low consumption and fitted on the same side of the valve
- Mono and bi-stable valves have the same dimension
- Easy and fast assembly on the sub base thanks to the "one screw" mounting solution
- Possibility to replace a valve without the need of disconnecting the pneumatic pipes
- Electrical and pneumatic connections positioned on the same side
- Possibility to operate with different pressures and vacuum
- Quick coupling connections for consumption, exhaust and air supply all on the same side
- Management of 32 electrical signals, ( 16 bi-stable or any combination off mono and bi-stable vales up to max 32 signals).
- The electrical connection is achieved thanks to a 37 pole connector, as an alternative it is possible to use a 25 pole connector which can handle a maximum of 22 electrical signals.
- The protection grade is IP65 directly integrated in the manifold components.
- Manifolds can be directly integrated with the most common field bus systems.

## Main characteristics

- One size: 12.5mm thick
- Mono stable and bistable valves with same dimensions
- Modular subbase with two positions
- Modular subbases assembled via tie rods
- Quick coupling connections directly integrated in the sub base
- Integrated and optimized electrical connections as standard
- IP65 protection grade as standard

## Construction characteristics

Body	Technopolymer
Operators	Technopolymer
Spools	Nickel plated steel / Technopolymer
Spacers	Technopolymer
Seals	Nitrile rubber (NBR) oil resistant
Piston seals	Nitrile rubber (NBR) oil resistant
Springs	AISI 302 stainless steel
Pistons	Technopolymer

## Functions

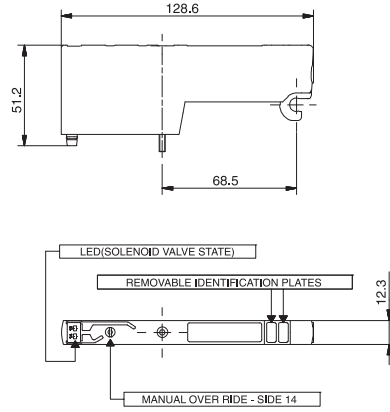
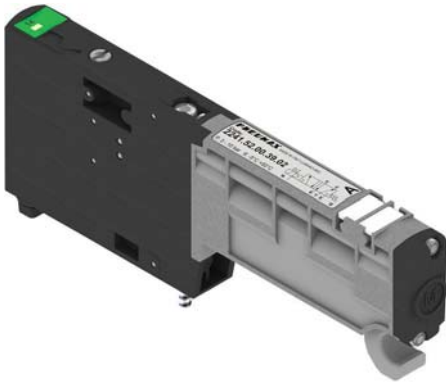
EV 5/2 MONOST. SOL. SPRING
EV 5/2 MONOST. SOL. DIFFERENTIAL
EV 5/2 BISTABLE SOL. SOL.
EV 5/3 CC SOL. SOL.
EV 2x3/2 NC-NC (= 5/3 OC) SOL. SOL.
EV 2x3/2 NO-NO (= 5/3 PC) SOL. SOL.
EV 2x3/2 NC-NO SOL. SOL.
EV 2x3/2 NO-NC SOL. SOL.

## Technical characteristics

Voltage	24 VDC ±10% PNP
Pilot consumption	1,2 Watt
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
Protection degree	IP65
Fluid	Filtered and lubricated air or not (if lubricated air, the lubrication must be continuous)

**Solenoid - Spring**

Ordering code	
<b>2241.52.00.39.V</b>	
VOLTAGE	
02 = 24 VDC PNP	



Weight gr. 67

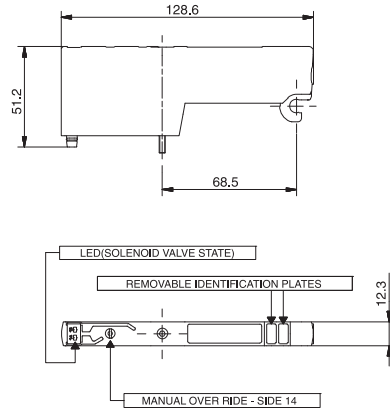


SHORT FUNCTION CODE "A"

Operational characteristic	Fluid	Pressure range	Flow rate at 6 bar with $\Delta p=1$	Response time according to ISO 12238	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	400 NI/min	T.R.E. 12 ms T.R.D. 20 ms	2,5 - 7 bar	Min. -5°C	Max. +50°C

**Solenoid - Differential**

Ordering code	
<b>2241.52.00.36.V</b>	
VOLTAGE	
02 = 24 VDC PNP	



Weight gr. 67

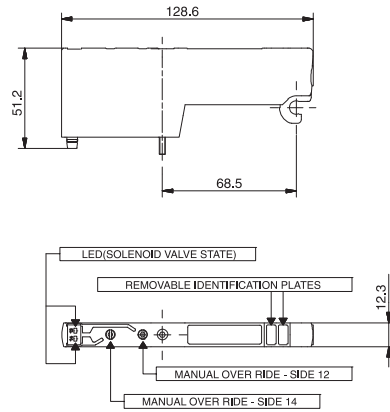


SHORT FUNCTION CODE "B"

Operational characteristic	Fluid	Pressure range	Flow rate at 6 bar with $\Delta p=1$	Response time according to ISO 12238	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	400 NI/min	T.R.E. 20 ms T.R.D. 25 ms	2,5 - 7 bar	Min. -5°C	Max. +50°C

**Solenoid - Solenoid**

Ordering code	
<b>2241.52.00.35.V</b>	
VOLTAGE	
02 = 24 VDC PNP	



Weight gr. 67



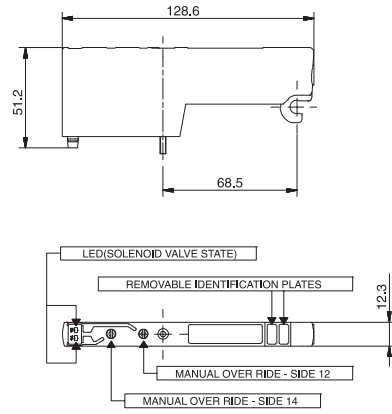
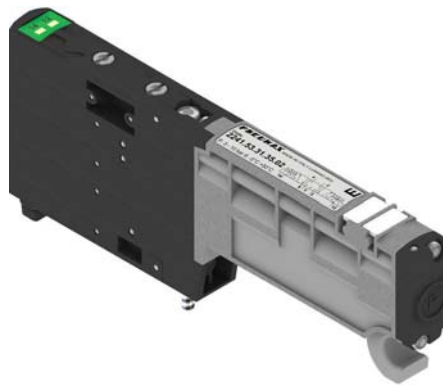
SHORT FUNCTION CODE "C"

Operational characteristic	Fluid	Pressure range	Flow rate at 6 bar with $\Delta p=1$	Response time according to ISO 12238	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	400 NI/min	T.R.E. 10 ms T.R.D. 10 ms	2,5 - 7 bar	Min. -5°C	Max. +50°C

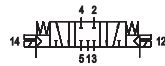


**Solenoid - Solenoid - (5/3 Closed centres)**

Ordering code
<b>2241.53.31.35.V</b>
VOLTAGE
02 = 24 VDC PNP



Weight gr. 83

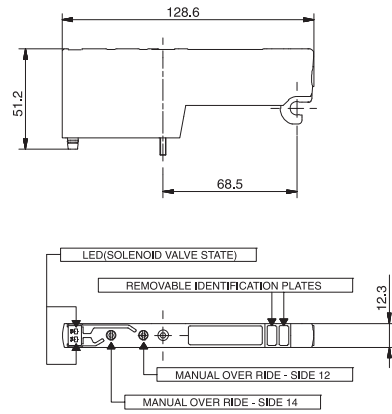
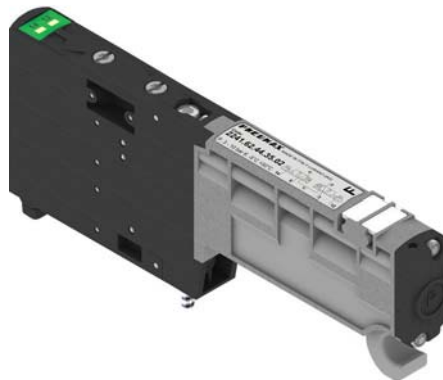


SHORT FUNCTION CODE "E"

Operational characteristic	Fluid	Pressure range	Flow rate at 6 bar with $\Delta p=1$	Response time according to ISO 12238	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	200 NI/min	T.R.E. 15 ms T.R.D. 20 ms	2,5 - 7 bar	Min. -5°C	Max. +50°C

**Solenoid - Solenoid 2x3/2**

Ordering code
<b>2241.62.F.35.V</b>
FUNCTION
44 = NC - NC (5/3 Open centres)
55 = NO - NO (5/3 Pressured centres)
45 = NC - NO (Normally Closed - Normally Open)
54 = NO - NC (Normally Open - Normally Closed)
VOLTAGE
02 = 24 VDC PNP



Weight gr. 75

SHORT FUNCTION CODE:  
NC-NC (5/3 Open centres) = "F"  
NO-NO (5/3 Pressured centres) = "G"

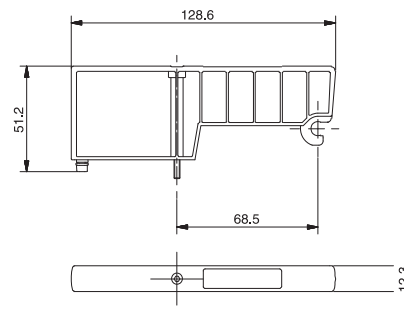
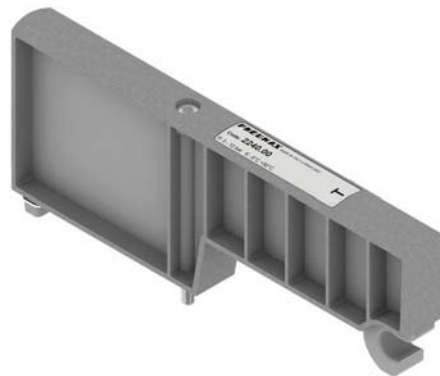


SHORT FUNCTION CODE:  
NC-NO = "H"  
NO-NC = "I"

Operational characteristic	Fluid	Pressure range	Flow rate at 6 bar with $\Delta p=1$	Response time according to ISO 12238	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	360 NI/min	T.R.E. 15 ms T.R.D. 25 ms	2,5 - 7 bar	Min. -5°C	Max. +50°C

**Closing plate**

Ordering code
<b>2240.00</b>



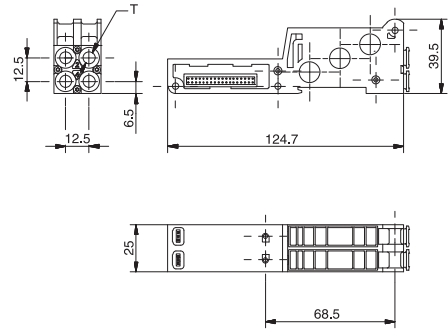
Weight gr. 30

SHORT FUNCTION CODE "T"

Operational characteristic	Fluid	Pressure range	Temperature
	Filtered and lubricated air or non	From vacuum to 10 bar	Min. -5°C Max. +50°C

**Modular base for monostable solenoid valve (2 places)**

Ordering code
<b>2240.01M</b>
CONNECTIONS
4 = Quick fitting tube Ø 4
6 = Quick fitting tube Ø 6



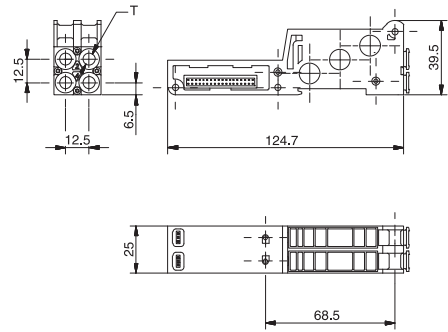
Weight gr. 75

SHORT FUNCTION CODE "3" (tube Ø 4)  
SHORT FUNCTION CODE "5" (tube Ø 6)

Operational characteristic	Fluid	Pressure range	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	Min. -5°C	Max. +50°C

**Modular base for bistable solenoid valve (2 places)**

Ordering code
<b>2240.01B</b>
CONNECTIONS
4 = Quick fitting tube Ø 4
6 = Quick fitting tube Ø 6



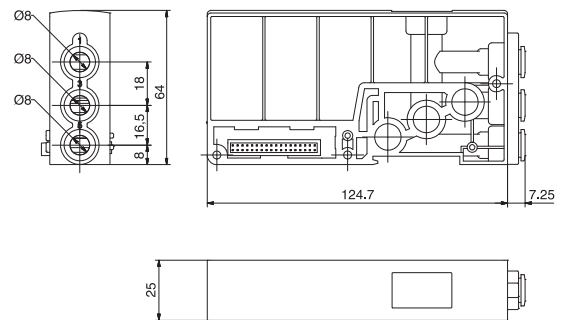
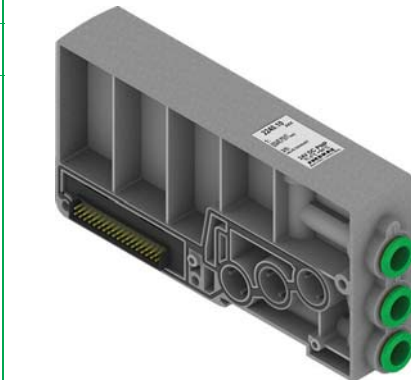
Weight gr. 75

SHORT FUNCTION CODE "4" (tube Ø 4)  
SHORT FUNCTION CODE "6" (tube Ø 6)

Operational characteristic	Fluid	Pressure range	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	Min. -5°C	Max. +50°C

**Intermediate Inlet/Exhaust module**

Ordering code
<b>2240.10</b>



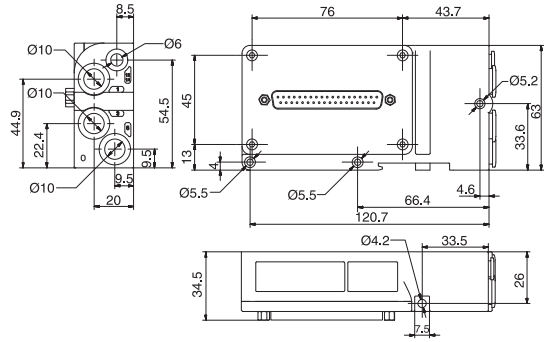
Weight gr. 105

SHORT FUNCTION CODE "W"

Operational characteristic	Fluid	Pressure range	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	Min. -5°C	Max. +50°C

**Left Endplates - External pilot base**

Ordering code
<b>2240.02.©</b>
CONNECTOR TYPE
© 37P = Connector 37 poles PNP
25P = Connector 25 poles PNP

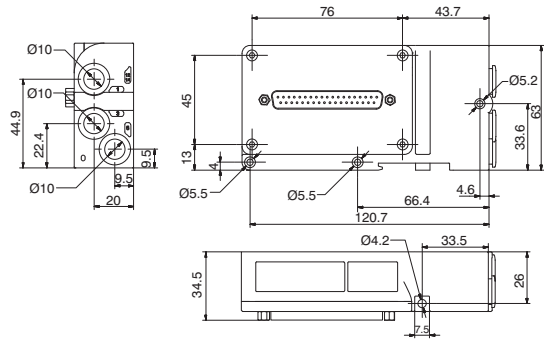


Weight gr. 174  
12/14 separated from port 1

Operational characteristic	Fluid	Pressure range	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	3 - 7 bar	Min. -5°C	Max. +50°C

**Left Endplates - Self-feeding base**

Ordering code
<b>2240.12.©</b>
CONNECTOR TYPE
© 37P = Connector 37 poles PNP
25P = Connector 25 poles PNP

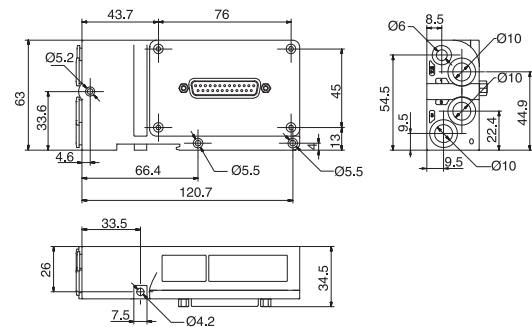


Weight gr. 174  
12/14 connected to port 1

Operational characteristic	Fluid	Pressure range	Pressure range pilots 12-14	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	3 - 7 bar	Min. -5°C	Max. +50°C

**Right Endplates**

Ordering code
<b>2240.03.©</b>
CONNECTOR TYPE
© 00 = Exhaust electrical connection closed
25P = Connector 25 poles PNP



Weight gr. 147

Operational characteristic	Fluid	Pressure range	Temperature	
	Filtered and lubricated air or non	From vacuum to 10 bar	Min. -5°C	Max. +50°C

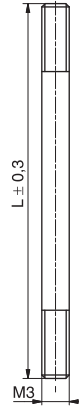
**Tie-rod M3**

Ordering code

**2240.KT.P**

**N. POSITIONS**

- 02 = Nr. 2 Position
- 04 = Nr. 4 Position
- 06 = Nr. 6 Position
- 08 = Nr. 8 Position
- 10 = Nr. 10 Position
- 12 = Nr. 12 Position
- 14 = Nr. 14 Position
- P** 16 = Nr. 16 Position
- 18 = Nr. 18 Position
- 20 = Nr. 20 Position
- 22 = Nr. 22 Position
- 24 = Nr. 24 Position
- 26 = Nr. 26 Position
- 28 = Nr. 28 Position
- 30 = Nr. 30 Position
- 32 = Nr. 32 Position

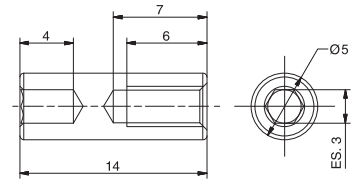


CODE LIST	Description	"L" Dimension
	2240.KT.02	68 mm
	2240.KT.04	93mm
	2240.KT.06	118mm
	2240.KT.08	143mm
	2240.KT.10	168mm
	2240.KT.12	193mm
	2240.KT.14	214mm
	2240.KT.16	243mm
	2240.KT.18	266mm
	2240.KT.20	293mm
	2240.KT.22	318mm
	2240.KT.24	343mm
	2240.KT.26	368mm
	2240.KT.28	393mm
	2240.KT.30	416mm
	2240.KT.32	443mm

**Nut**

Ordering code

**2240.KD.00**



**Accessories table for manifolds**

Ordering code

**Set of N° positions**

<b>2</b>	2240.KD.00 + 2240.KT.02
<b>4</b>	2240.KD.00 + 2240.KT.04
<b>6</b>	2240.KD.00 + 2240.KT.06
<b>8</b>	2240.KD.00 + 2240.KT.08
<b>10</b>	2240.KD.00 + 2240.KT.10
<b>12</b>	2240.KD.00 + 2240.KT.12
<b>14</b>	2240.KD.00 + 2240.KT.14
<b>16</b>	2240.KD.00 + 2240.KT.16
<b>18</b>	2240.KD.00 + 2240.KT.18
<b>20</b>	2240.KD.00 + 2240.KT.20
<b>22</b>	2240.KD.00 + 2240.KT.22
<b>24</b>	2240.KD.00 + 2240.KT.24
<b>26</b>	2240.KD.00 + 2240.KT.26
<b>28</b>	2240.KD.00 + 2240.KT.28
<b>30</b>	2240.KD.00 + 2240.KT.30
<b>32</b>	2240.KD.00 + 2240.KT.32

2240.KD.00

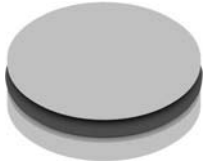



Nr. 6 pieces

2240.KT.XX



Nr. 3 pieces

Diaphragm plug		Polyethylene Silencer Series SPL-R	
Ordering code		Ordering code	
<b>2230.17</b>		<b>SPLR.ⓕ</b>	
		DIAMETRO TUBO ⓕ 6 = 6 mm ⓕ 10 = 10 mm	
Weight gr. 6.5			

Cable complete with connector, 25 Poles IP65	
Ordering code	
<b>2300.25.L.ⓑ</b>	
CABLE LENGTH	
ⓐ 03 = 3 meters	
05 = 5 meters	
10 = 10 meters	
CONNECTORS	
ⓑ 10 = In line	
90 = 90° Angle	

Cable complete with connector, 37 Poles IP65	
Ordering code	
<b>2400.37.L.ⓑ</b>	
CABLE LENGTH	
ⓐ 03 = 3 meters	
05 = 5 meters	
10 = 10 meters	
CONNECTORS	
ⓑ 10 = In line	
90 = 90° Angle	

Cable complete with connector, 25 Poles IP65	
Ordering code	
<b>2400.25.L.25</b>	
CABLE LENGTH	
ⓐ 03 = 3 meters	
05 = 5 meters	
10 = 10 meters	

**General :**

Using the 2240.03.25P 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.

**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.

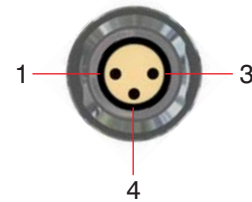
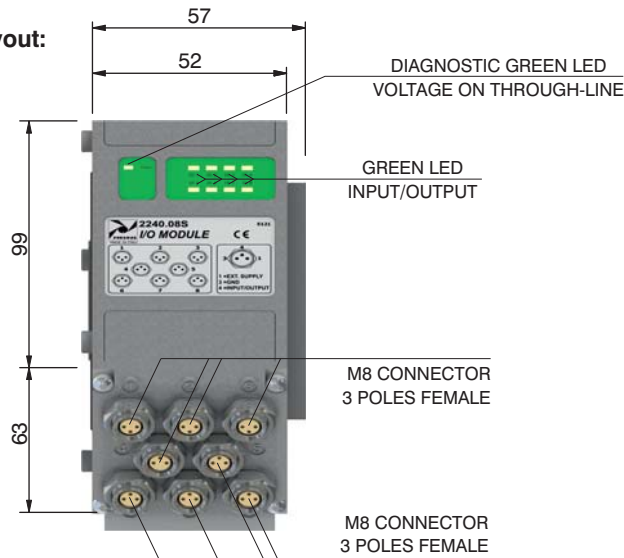
**Please note:** For an LED to function, a signal of at least +15VDC must be present on pin 4 of the connector. If this signal is lower, the LED will not light, this does not compromise the normal Input / Output function of the unit.

**Ordering code**

**2240.08S**



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



PIN	DESCRIPTION
1	+24 VDC
4	INPUT
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 2240.02.25P or 2240.12.25P)

Pin 36-37 of the 37 pin multi-pole connector (code 2240.02.37P or 2240.12.37P)

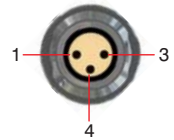
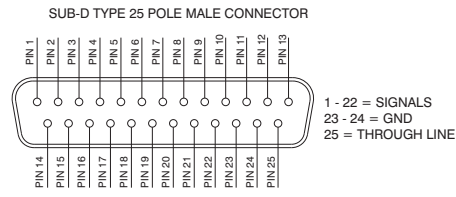
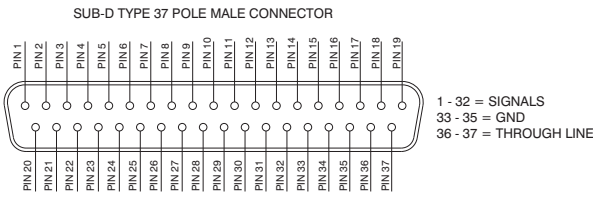
**Output features:**



**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).

<b>Caratteristiche generali</b>	Model	2240.08S
	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



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:

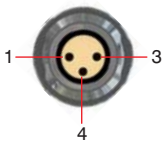
- A) Control via multi-pole connection
- B) Control via fieldbus

**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 LINE
4	SIGNAL
3	GND

In order to use the I/O module, the correct right hand endplate with 25 pole female outlet connector must be used. (Code 2240.03.25P).

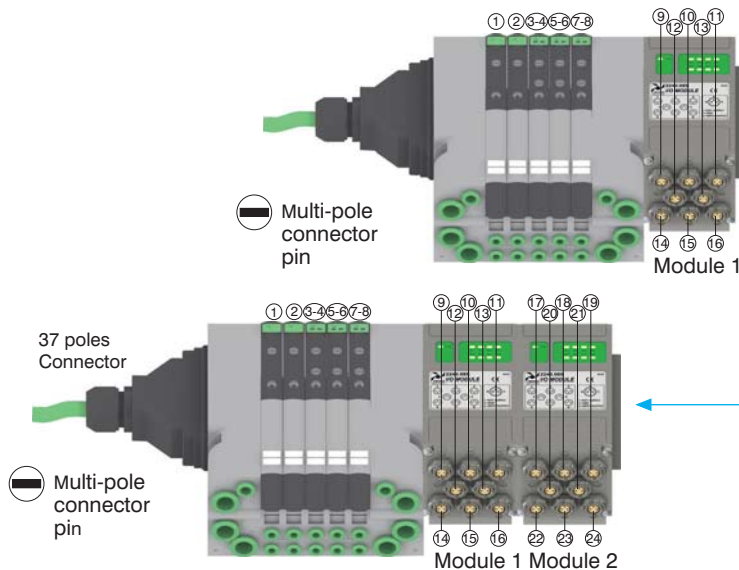


*M8 connector used as Output:*

Output voltage will be the same as is applied at the multi-pole connector pin. The maximum output current depends upon the power unit used, but we recommend no more than 250mA.



**Attention:** Since every cable has a degree of resistance, there will always be a voltage drop depending on the cable's length, sectional area and the current.

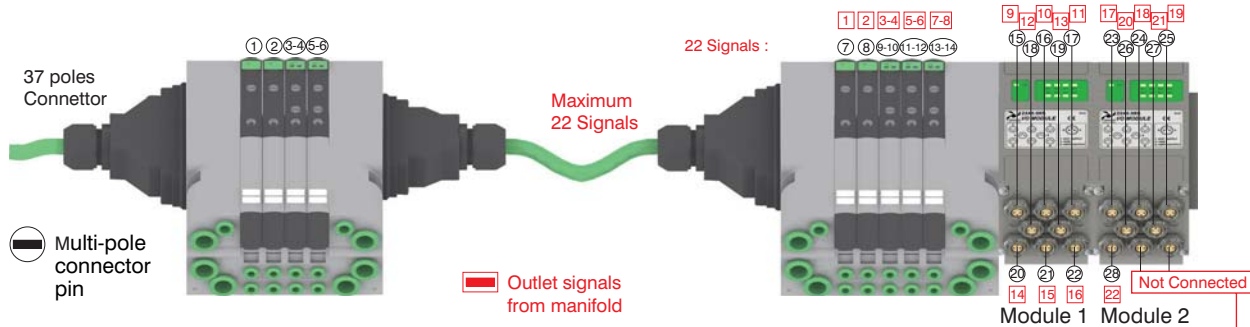


**Attention:** Only one more I/O module can be added.

**Attention:** No more additions are possible

**Attention :** Optyma 32-S 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.

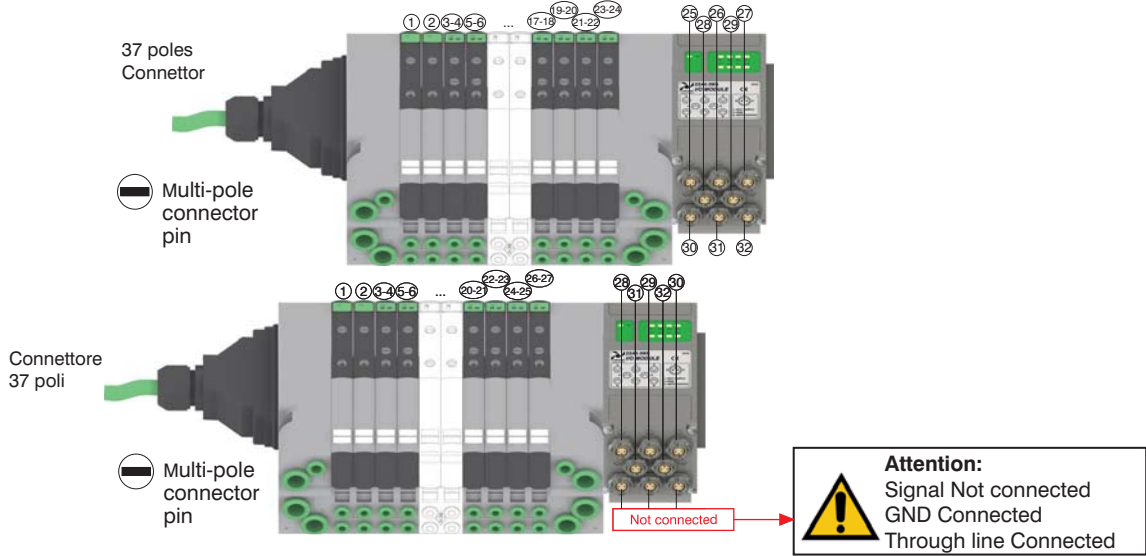
The I/O module will manage these unused signals. Connections that are not managing useful signals will remain unconnected.



**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 16

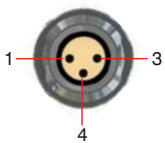
**Attention:** Signal Not connected  
GND Connected  
Through line Connected

**Please note:** Optyma 32-S 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.

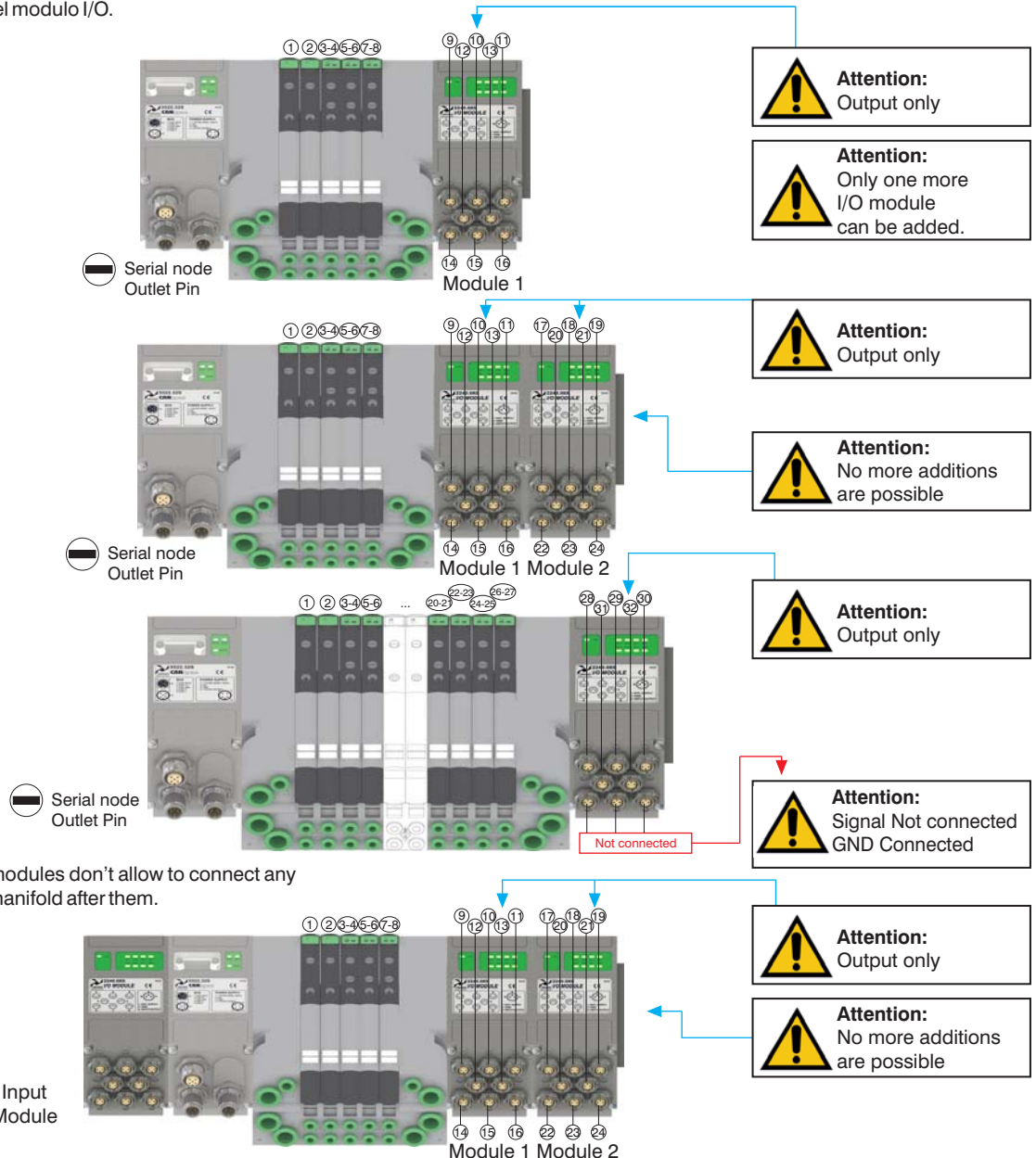


**B) Controllo con Bus di Campo :**

Con questo tipo di controllo i moduli I/O possono essere utilizzati solamente come uscite. Il piedino 1 di ciascun connettore risulta non connesso. La tensione di uscita sarà di circa 0,7 V inferiore a quella applicata al piedino 4 del connettore di alimentazione. La corrente massima di uscita è 100 mA per ogni uscita. La corrispondenza tra byte di controllo e singola uscita dipende dal numero di segnali elettrici utilizzati dall'isola di valvole e dalla posizione relativa del modulo I/O.



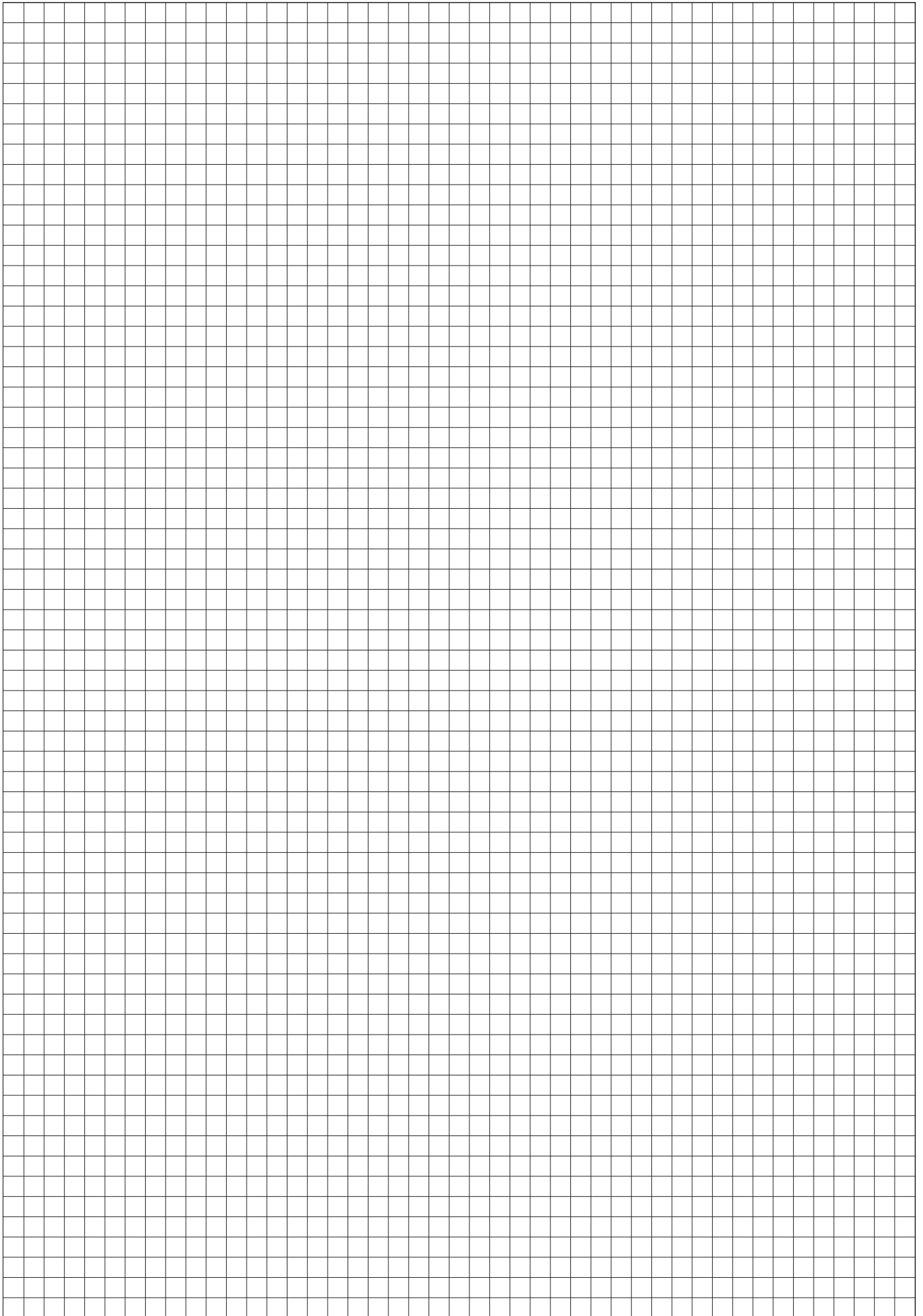
PIN	DESCRIPTION
1	NOT CONNECTED
4	SIGNAL
3	GND



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

Serial node Outlet Pin

Input Module



**Electrical connection**

The electrical connection is made using a 37 pin connector and can manage up to 32 electrical signals. Alternatively a 25 pin connector can be used which is suitable for up to 22 electrical signals. The distributions of the electrical signals between sub-bases achieved thanks to a dedicated electrical connector positioned in each sun-base which diverts the signals needed to operate the solenoid pilots of the valve mounted on the sub-base and passing unused signals forward to the next base.

The Optyma-S sub-bases are designed to carry two valves and are available in the following configurations:

Sub-base configurations	Signals used for the single position	Total number of used signal
Sub-base for 2 bistable valves	2 signals used for the first position	4
	2 signals used for the second position	
Sub-base for 2 monostable valves	1 signal used for the first position	2
	1 signal used for the second position	

**Sub-base for 2 bistable valves**

On the sub base for 2 bistable valves the first electrical signal is used to actuate the solenoid pilot on side 14 of the first position, the second signal is used to actuate the solenoid pilot on side 12 of the first position. Each sub base uses 4 electric signals. The same layout applies to the following position therefore the third signal is used to actuate the solenoid pilot on side 14 of the second position and the fourth signal is used to actuate the solenoid pilot on side 12 of the second position.

The remaining signals are transferred downstream.

On a bistable sub base it is possible to mount both bistable or monostable valves (in the second case 1 electrical signal for each valve is wasted). This solutions enables the user to change the manifold layout without the need to re-configure the output correspondence on the PLC. The use of bistable sub-bases reduces the maximum number of valves that can be mounted on the manifold: If the 37 pole connector is used the maximum number of valves is 16 If the 25 pole connector is used the maximum number of valves is 10.

**Sub-base for 2 monostable valves**

On the sub base for 2 monostable valves the first electrical signal is used to actuate the solenoid pilot on side 14 of the first position, the second signal is used to actuate the solenoid pilot on side 12 of the second position. Each sub base uses 2 electric signals.

The remaining signals are transferred downstream. On a monostable sub base it is possible to mount only monostable valves (shoud a bistable valve be mounted on a monostable sub base it will not be possible to actuate the solenoid pilot on side 12). This solutions enables the user to maximise the manifold lay out using all the electrical signals available.

If the 37 pole connector is used the maximum number of valves is 32

If the 25 pole connector is used the maximum number of valves is 22



*Note:*

Monostable valves, which are fitted with only one solenoid pilot can be mounted on both monostable or bistable sub bases.

Bistable valves ,5/3; 2x3/2;2x2/2, which are fitted with 2 solenoid pilots and therefore always use two electrical signals must always be mounted on bistable subbases.

**Additional exhaust and air supply modules:**

The Additional exhaust and air supply module is fitted with a dedicated electrical connector which does not use any electric signal but simply carries forward all signals which have not been used by the valves mounted before it.

This enables its use in any position of the manifold.



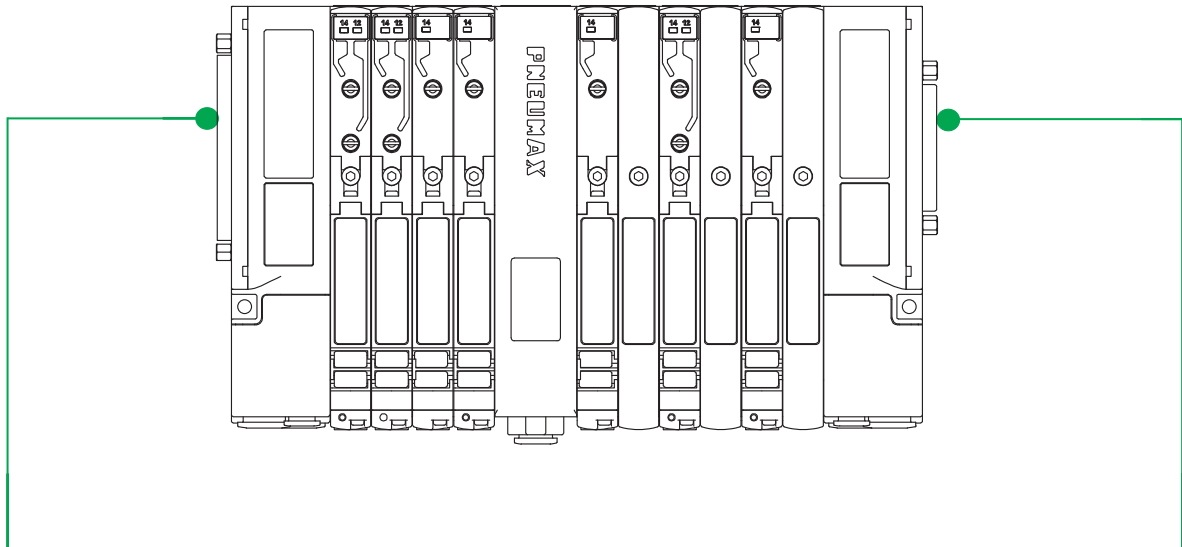
**Unused electrical signals**

The electrical signals which have not been used in the manifold can be made available by using the end plate fitted with the 25 pole connector.

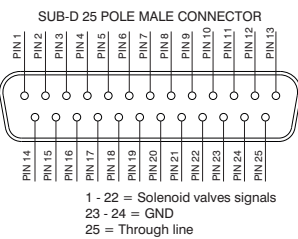
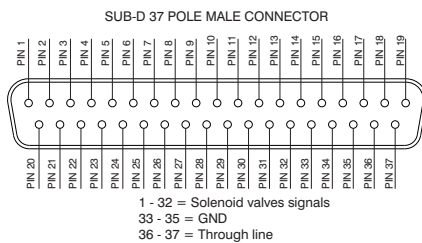
The number of electric signals available depends on the type of connector mounted on the inlet plate and on the number of signals used in the manifold:

- 37 pole Inlet connector : N. of outputs= 32 – used signals (max 22)
- 25 pole Inlet connector : N. of outputs= 22 – used signals

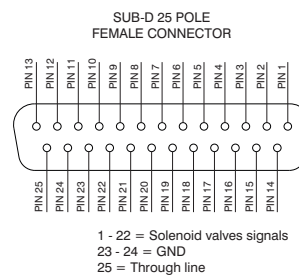
Here are some examples of possible configurations and the corresponding pin layout both on the inlet and end plate :



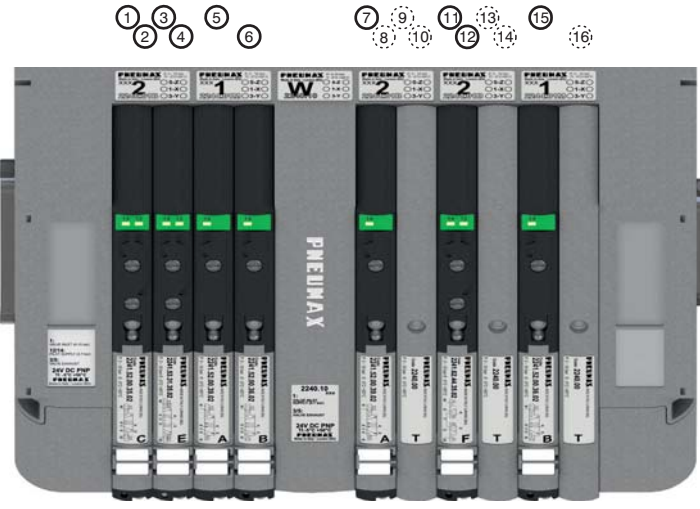
**INLET ELECTRIC CONNECTIONS**



**OUTLET ELECTRIC CONNECTIONS (IF PRESENT)**



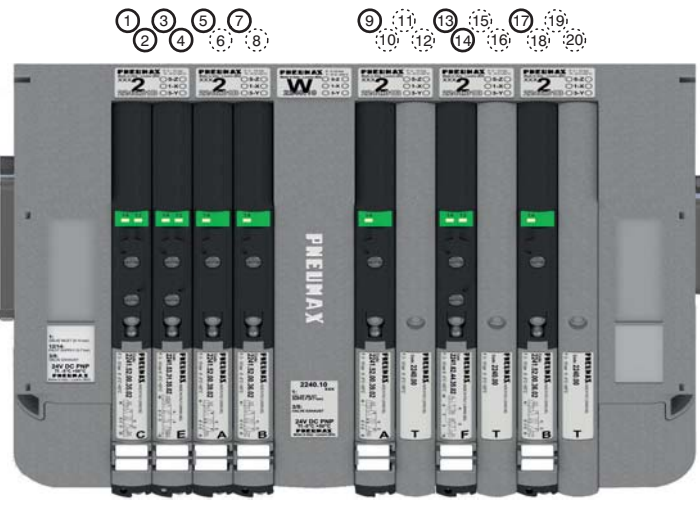
**37 PIN Connector correspondence for valves assembled on mixed bases**



- PIN 1 = PILOT 14 EV POS.1
- PIN 2 = PILOT 12 EV POS.1
- PIN 3 = PILOT 14 EV POS.2
- PIN 4 = PILOT 12 EV POS.2
- PIN 5 = PILOT 14 EV POS.3
- PIN 6 = PILOT 14 EV POS.4
- PIN 7 = PILOT 14 EV POS.6
- PIN 8 = NOT CONNECTED
- PIN 9 = NOT CONNECTED
- PIN 10 = NOT CONNECTED
- PIN 11 = PILOT 14 EV POS.8
- PIN 12 = PILOT 12 EV POS.8
- PIN 13 = NOT CONNECTED
- PIN 14 = NOT CONNECTED
- PIN 15 = PILOT 14 EV POS.10
- PIN 16 = NOT CONNECTED

POS.	1	2	3	4	5	6	7	8	9	10	11
------	---	---	---	---	---	---	---	---	---	----	----

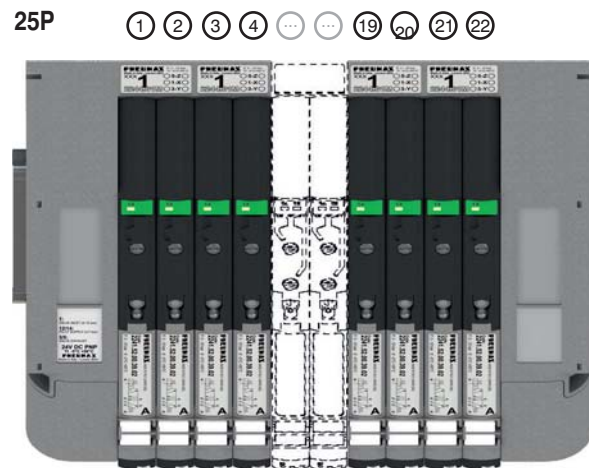
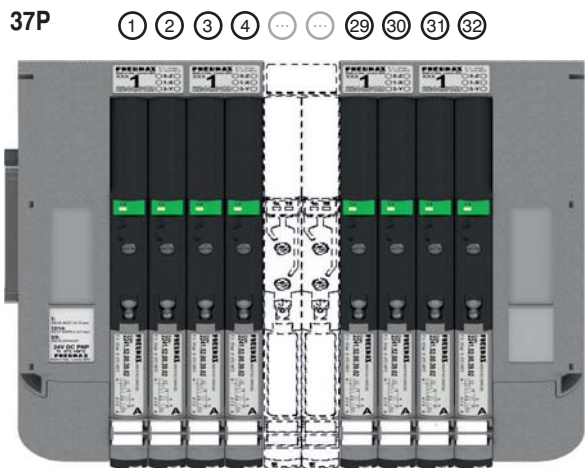
**37 PIN Connector correspondence for manifold mounted on bases for bistable valves**



- PIN 1 = PILOT 14 EV POS.1
- PIN 2 = PILOT 12 EV POS.1
- PIN 3 = PILOT 14 EV POS.2
- PIN 4 = PILOT 12 EV POS.2
- PIN 5 = PILOT 14 EV POS.3
- PIN 6 = NOT CONNECTED
- PIN 7 = PILOT 14 EV POS.4
- PIN 8 = NOT CONNECTED
- PIN 9 = PILOT 14 EV POS.6
- PIN 10 = NOT CONNECTED
- PIN 11 = NOT CONNECTED
- PIN 12 = NOT CONNECTED
- PIN 13 = PILOT 14 EV POS.8
- PIN 14 = PILOT 12 EV POS.8
- PIN 15 = NOT CONNECTED
- PIN 16 = NOT CONNECTED
- PIN 17 = PILOT 14 EV POS.10
- PIN 18 = NOT CONNECTED
- PIN 19 = NOT CONNECTED
- PIN 20 = NOT CONNECTED

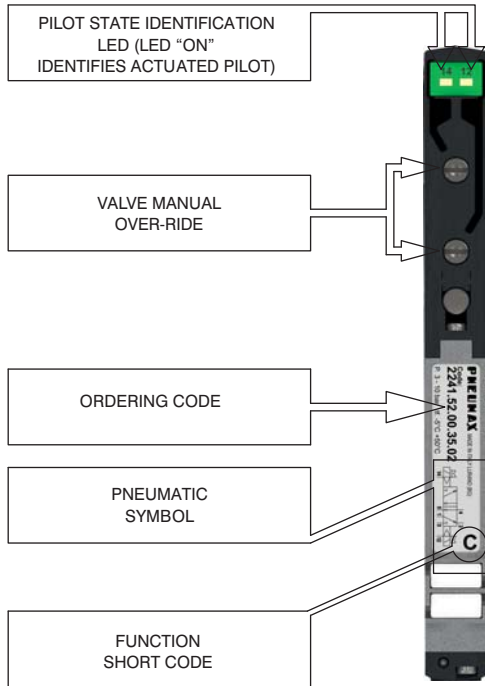
POS.	1	2	3	4	5	6	7	8	9	10	11
------	---	---	---	---	---	---	---	---	---	----	----

**37 PIN Connector correspondence for manifold for 32 position manifold with monostable valves on double bases**

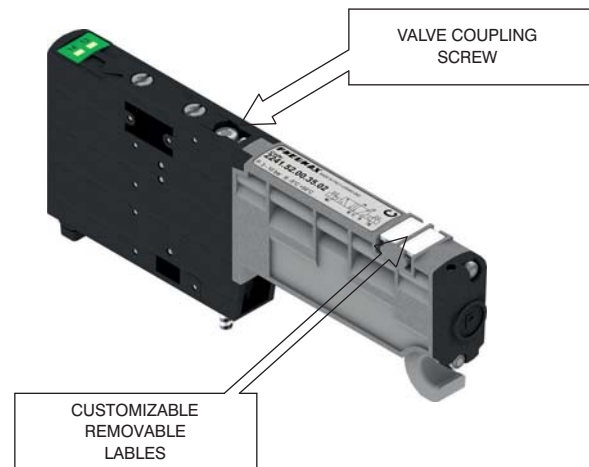
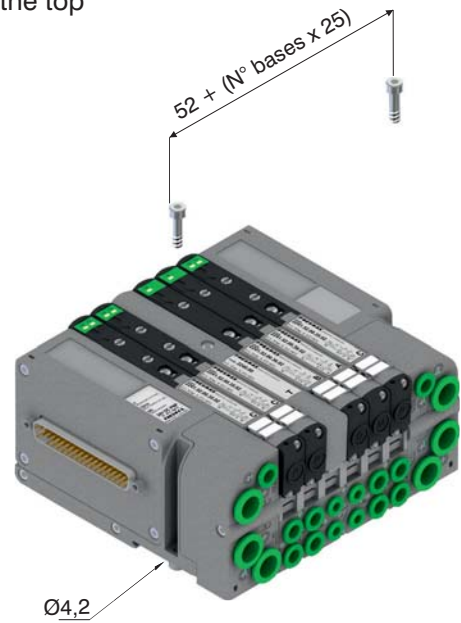


POS.	1	2	3	4	...	29	30	31	32
------	---	---	---	---	-----	----	----	----	----

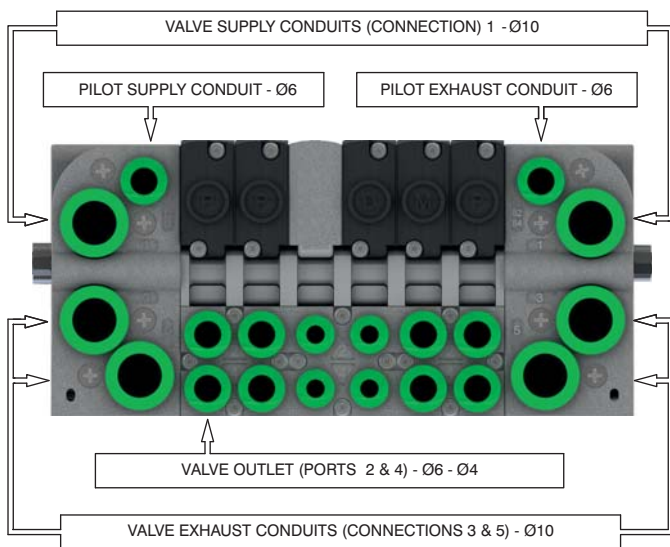
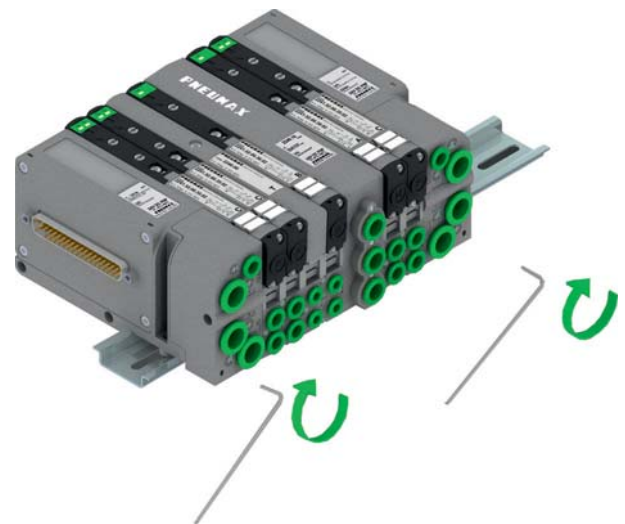
POS.	1	2	3	4	...	19	20	21	22
------	---	---	---	---	-----	----	----	----	----



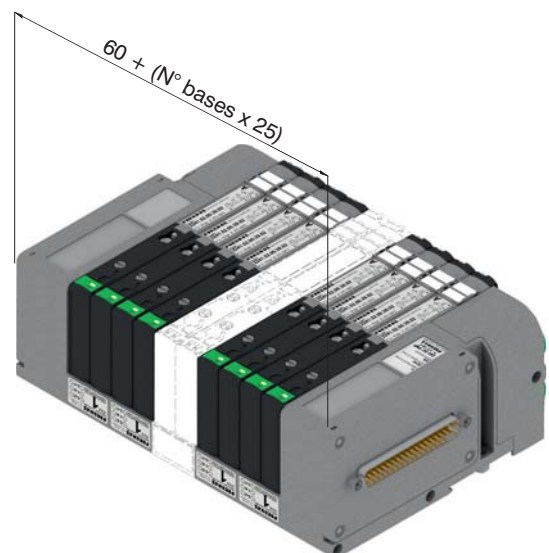
From the top



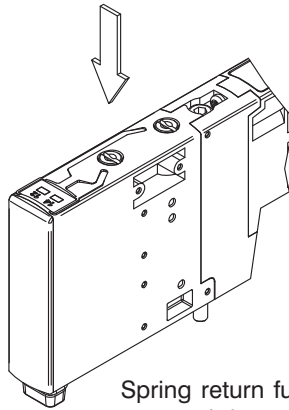
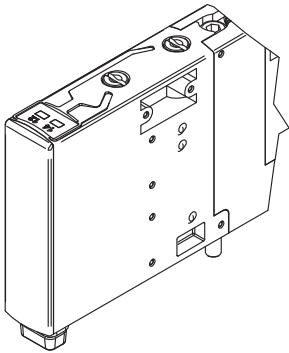
DIN rail fixing



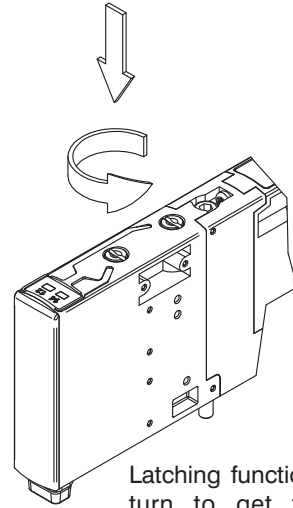
Maximum possible size  
According to valves used



Manual override actuation



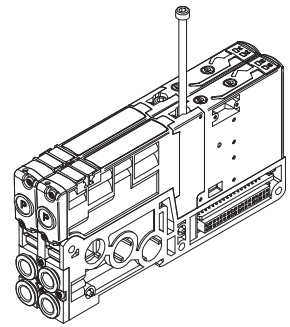
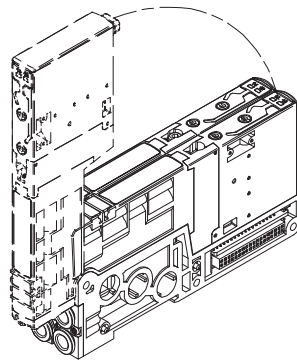
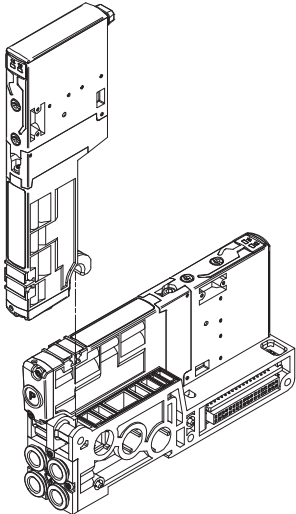
Spring return function: push to actuate (when released it moves back to the original position).



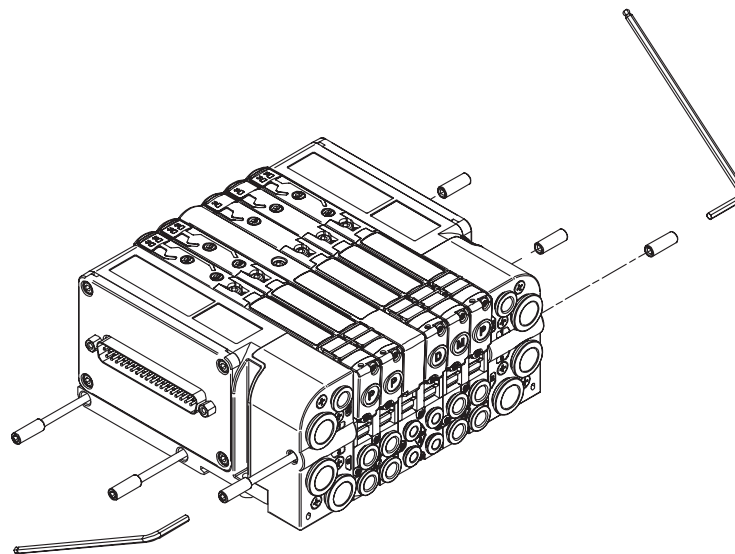
Latching function: push and turn to get the latching function

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

Valve Installation



Manifold assembly



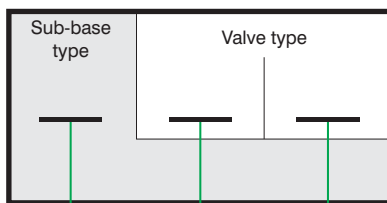
## Manifold Layout configuration

## ENDPLATES SELECTION:

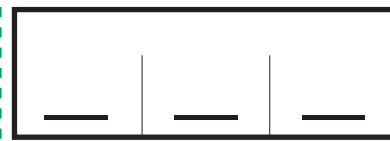
- A= 37 poles - external feeding left endplate plus closed right endplate
- B= 37 poles - self feeding left endplate plus closed right endplate
- C= 37 poles - external feeding left endplate plus 25 poles OUT closed right endplate
- D= 37 poles - self feeding left endplate plus 25 poles OUT closed right endplate
- E= 25 poles - external feeding left endplate plus closed right endplate
- F= 25 poles - self feeding left endplate plus closed right endplate
- G= 25 poles - external feeding left endplate plus 25 poles OUT closed right endplate
- H= 25 poles - self feeding left endplate plus 25 poles OUT closed right endplate



## MODUL CONFIGURATION



## ACCESSORIES CONFIGURATION



## SUB-BASE TYPE

- 3 = 2 Position Monostable sub base  $\varnothing 4$  (2 electric signal used)
- 4 = 2 Position Bistable sub base  $\varnothing 4$  (4 electric signals used)
- 5 = 2 Position Monostable sub base  $\varnothing 6$  (2 electric signal used)
- 6 = 2 Position Bistable sub base  $\varnothing 6$  (4 electric signals used)

## VALVES TYPE

- A = 5/2 Solenoid - Spring
- B = 5/2 Solenoid - Differential
- C = 5/2 Solenoid - Solenoid
- E = 5/3 CC Solenoid - Solenoid
- F = 2x3/2 NC-NC (= 5/3 OC) Solenoid - Solenoid
- G = 2x3/2 NO-NO (= 5/3 PC) Solenoid - Solenoid
- H = 2x3/2 NC-NO Solenoid - Solenoid
- I = 2x3/2 NO-NC Solenoid - Solenoid
- T = Free valve space plug

## ACCESSORIES

- W00 = Intermediate supply & exhaust module
- 0X0 = Diaphragm plug on pipe 1
- 00Y = Diaphragm plug on pipe E 3
- Z00 = Diaphragm plug on pipe 5
- 0XY = Diaphragm plug on pipe 1 & 3
- ZX0 = Diaphragm plug on pipe 5 & 1
- Z0Y = Diaphragm plug on pipe 5 & 3
- ZXY = Diaphragm plug on pipe 5, 1 & 3

## NOTE:

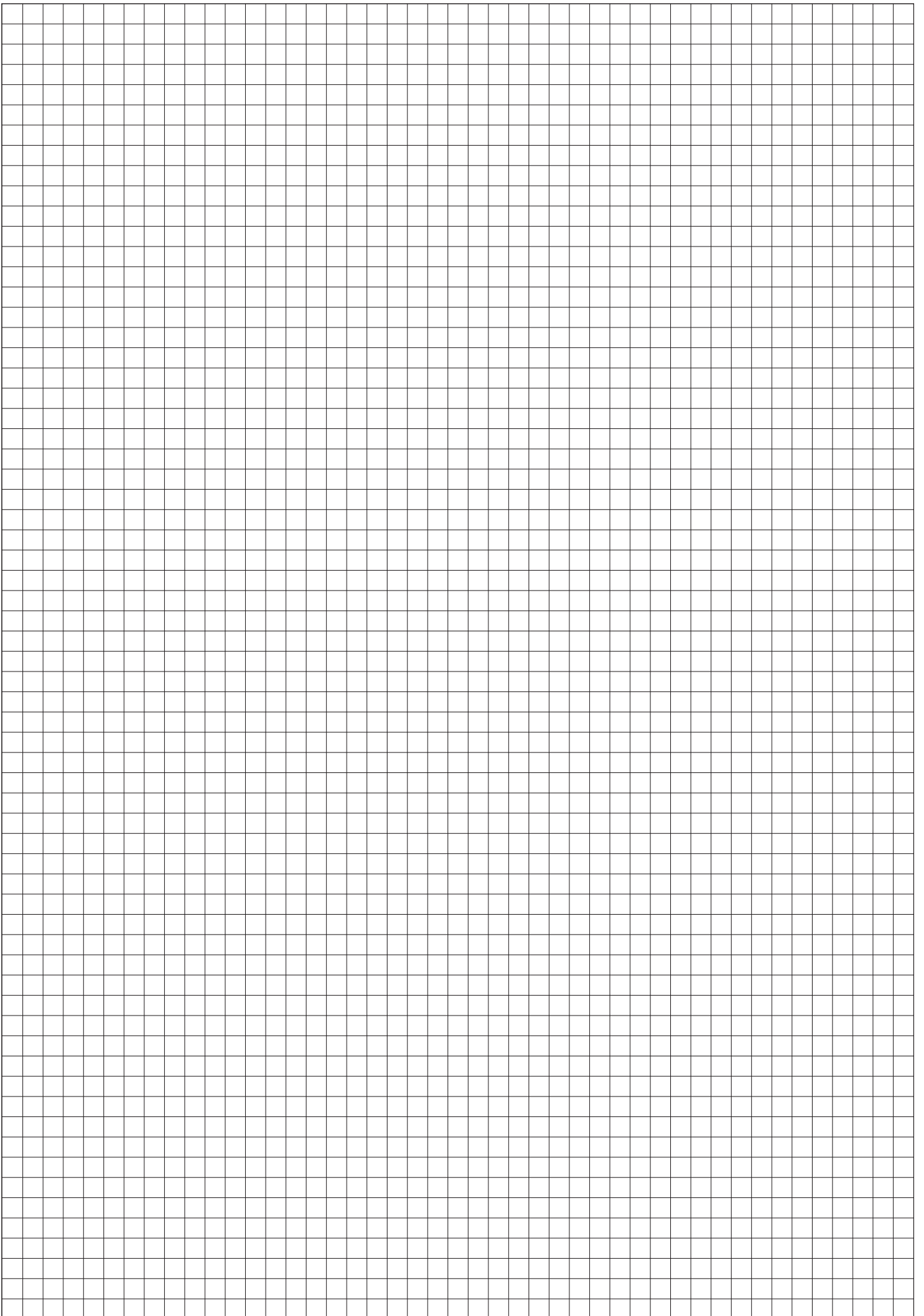
While configuring the manifold always be careful that the maximum number of electrical signals available is 32

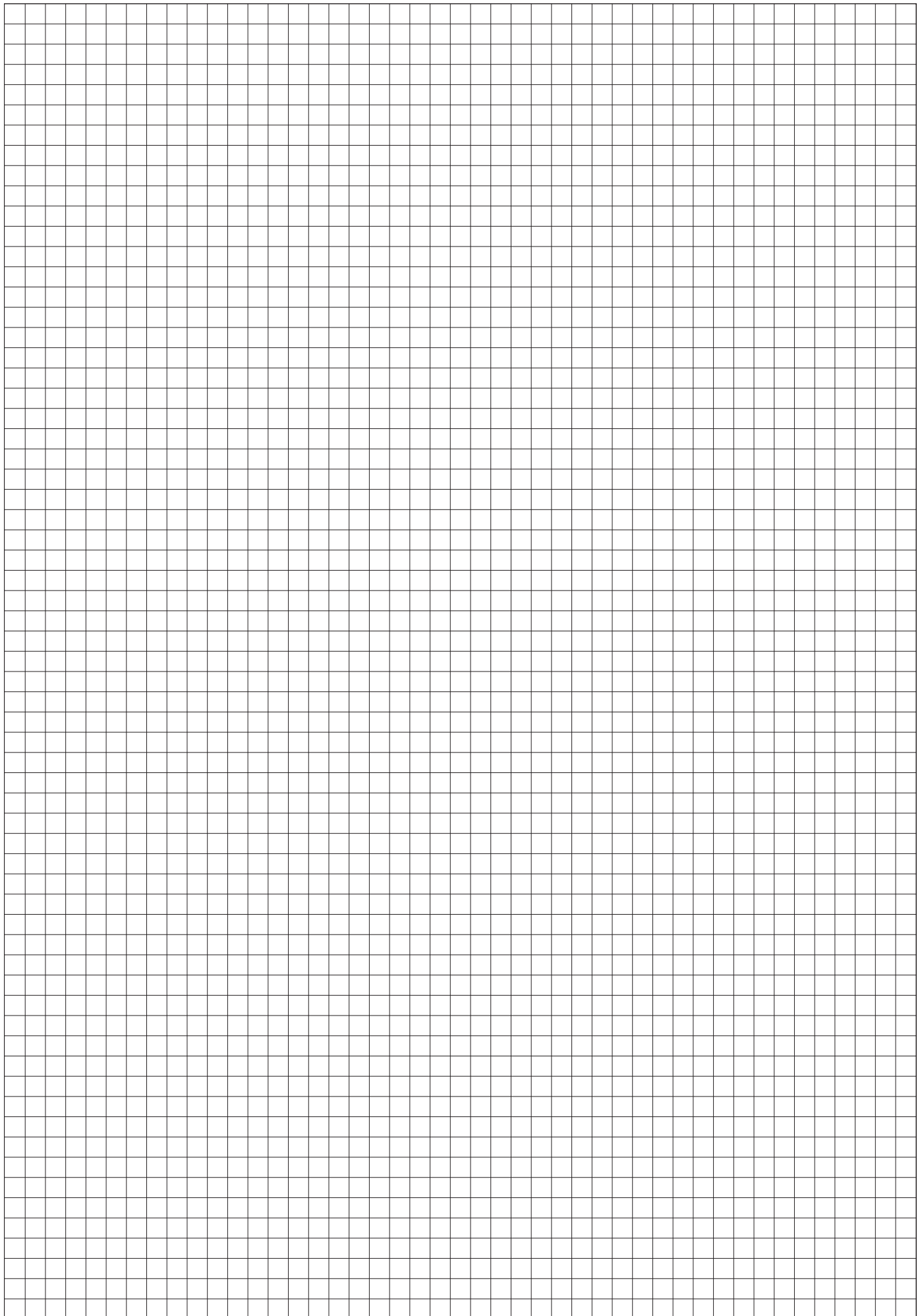
The use of monostable valve mounted on a bistable base (2 electrical signals occupied for each position) causes the loss of one electric signal.

In this case the monostable valve can be replaced by a bistable valve without reconfiguring the PLC.

The diaphragms plugs are used to intercept the conduits 1, 3 & 5 of the base.

Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.





**General:**

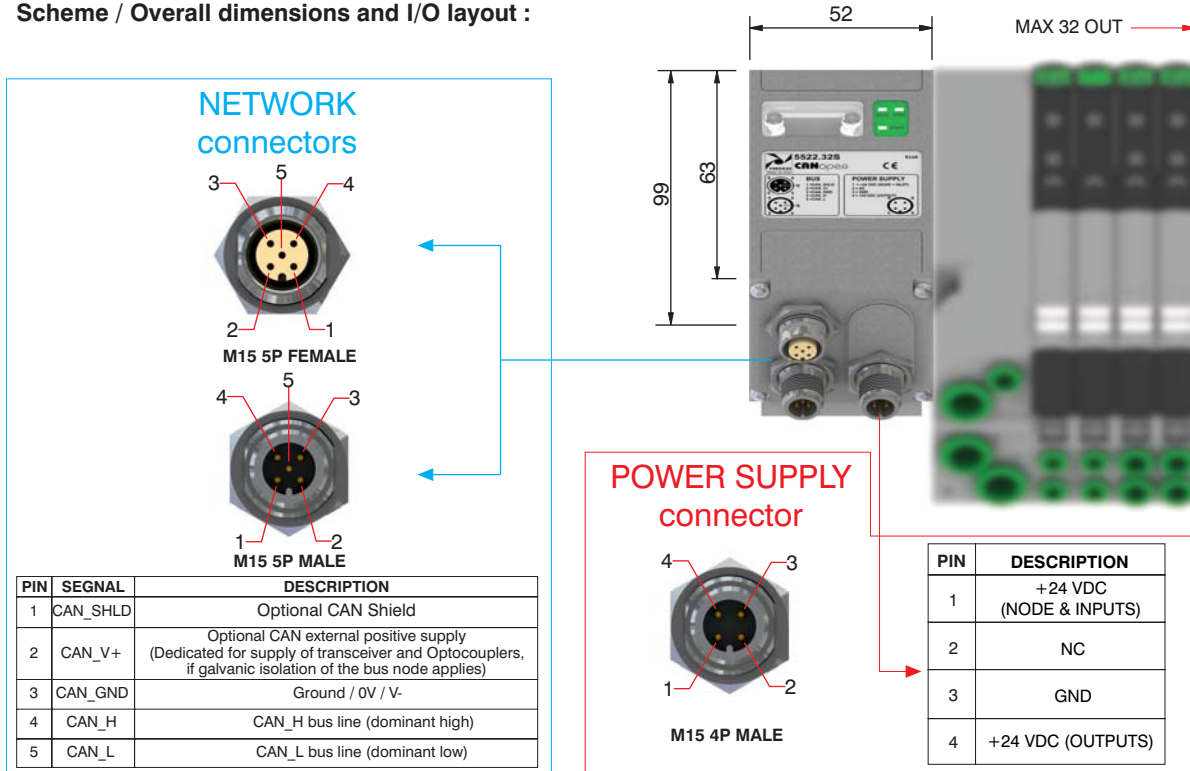
CANopen module is directly integrated on Optyma-S solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
 Optyma-S solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
 The node can be easily installed also on solenoid valves 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 5222.08S.  
 CANopen module recognizes automatically the presence of the Input modules on power on.  
 Regardless of the number of Input modules connected, the managable 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 mantaning 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**

**5522.32S**



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



**Technical characteristics**

Model	5522.32S
Specifications	CiA Draft Standard Proposal 301 V 4.10 (15 August 2006)
Case	Reinforced technopolymer
<b>Power supply</b>	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 PW
<b>Outputs</b>	PNP equivalent outputs +24 VDC +/- 10%
	Maximum voltage for output 100 mA
	Maximum output number 32
	Max output simultaneously actuated 32
<b>Network</b>	Network connectors 2 M12 5P connectors male-female (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
	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

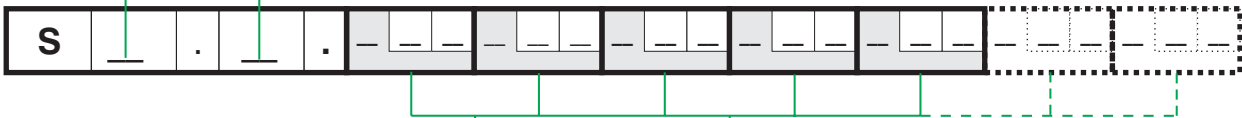
Manifold layout configuration complete with CANopen node

**BUS CONFIGURATION :**

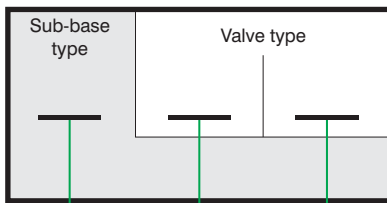
CA = CANopen 32 OUT  
CB = CANopen 32 OUT plus 8 INPUTS  
CC = CANopen 32 OUT plus 16 INPUTS  
CD = CANopen 32 OUT plus 24 INPUTS  
CE = CANopen 32 OUT plus 32 INPUTS

**ENDPLATES SELECTION:**

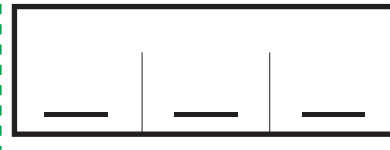
A= 37 poles - external feeding left endplate plus closed right endplate  
B= 37 poles - self feeding left endplate plus closed right endplate  
C= 37 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
D= 37 poles - self feeding left endplate plus 25 poles OUT closed right endplate  
E= 25 poles - external feeding left endplate plus closed right endplate  
F= 25 poles - self feeding left endplate plus closed right endplate  
G= 25 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
H= 25 poles - self feeding left endplate plus 25 poles OUT closed right endplate



**MODUL CONFIGURATION**



**ACCESSORIES CONFIGURATION**



**SUB-BASE TYPE**

3 = 2 Position Monostable sub base ø4 (2 electric signal used)  
4 = 2 Position Bistable sub base ø4 (4 electric signals used)  
5 = 2 Position Monostable sub base ø6 (2 electric signal used)  
6 = 2 Position Bistable sub base ø6 (4 electric signals used)

**VALVES TYPE**

A = 5/2 Solenoid - Spring  
B = 5/2 Solenoid - Differential  
C = 5/2 Solenoid - Solenoid  
E = 5/3 CC Solenoid - Solenoid  
F = 2x3/2 NC-NC (= 5/3 OC) Solenoid - Solenoid  
G = 2x3/2 NO-NO (= 5/3 PC) Solenoid - Solenoid  
H = 2x3/2 NC-NO Solenoid - Solenoid  
I = 2x3/2 NO-NC Solenoid - Solenoid  
T = Free valve space plug

**ACCESSORIES**

W00 = Intermediate supply & exhaust module  
0X0 = Diaphragm plug on pipe 1  
00Y = Diaphragm plug on pipe E 3  
Z00 = Diaphragm plug on pipe 5  
0XY = Diaphragm plug on pipe 1 & 3  
ZX0 = Diaphragm plug on pipe 5 & 1  
Z0Y = Diaphragm plug on pipe 5 & 3  
ZXY = Diaphragm plug on pipe 5, 1 & 3

**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 bistable base (2 electrical signals occupied for each position) causes the loss of one electric signal. In this case the monostable valve can be replaced by a bistable valve without reconfiguring the PLC.  
The diaphragms plugs are used to intercept the conduits 1, 3 & 5 of the base.  
Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.

**General:**

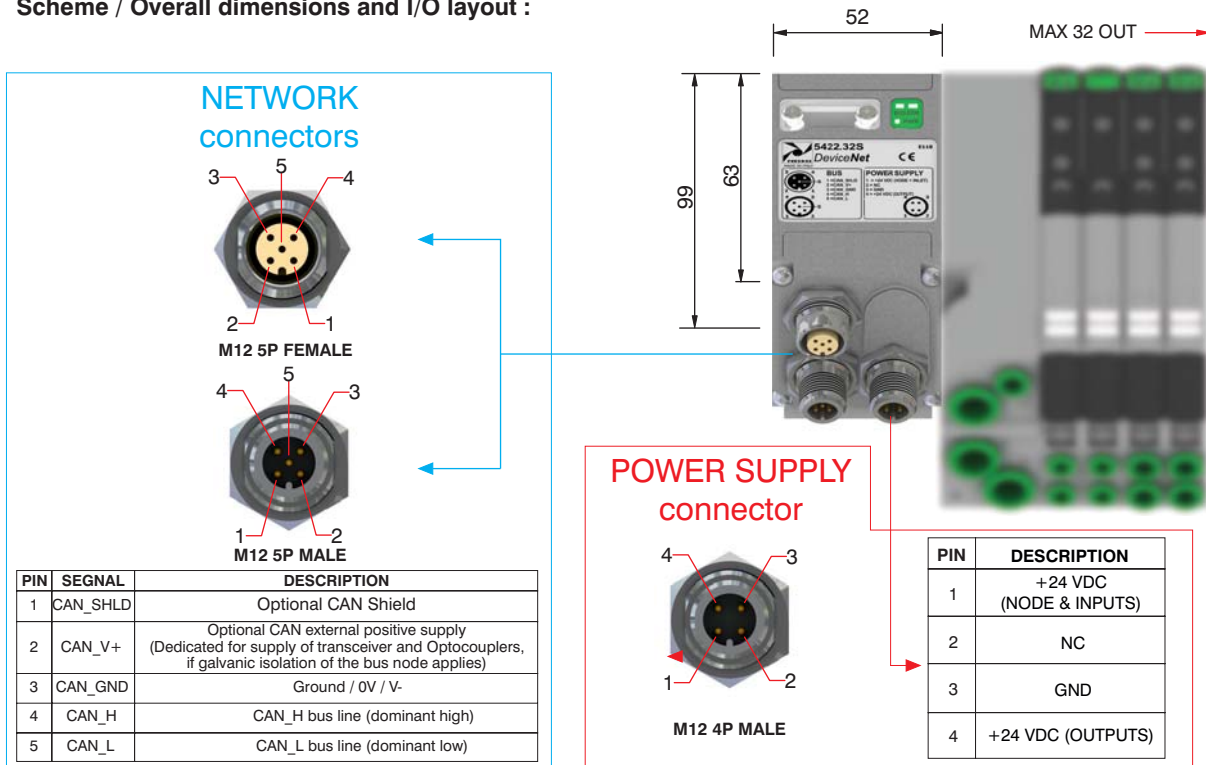
DeviceNet module is directly integrated on Optyma-S solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
 Optyma-S solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
 The node can be easily installed also on solenoid 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 5225.08S.  
 DeviceNet module recognizes automatically the presence of the Input modules on power on.  
 Regardless of the number of Input modules connected, the managable 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 mantaning 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**

**5422.32S**



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



**Technical characteristics**

	Model	5422.32S
	Specifications	DeviceNet Specifications Volume I, release 2.0.
	Case	Reinforced technopolymer
<b>Power supply</b>	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
<b>Outputs</b>	PNP equivalent outputs	+24 VDC +/- 10%
	Maximum voltage for output	100 mA
	Maximum output number	32
	Max output simultaneously actuated	32
<b>Network</b>	Network connectors	2 M12 5P connectors male-female (IEC 60947-5-2)
	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

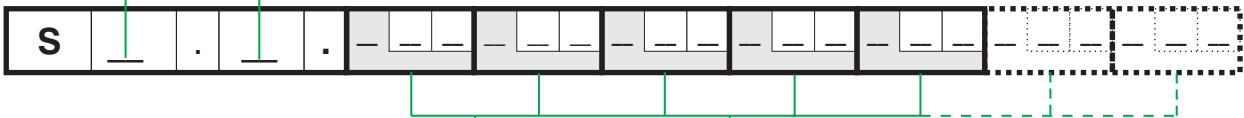
Manifold layout configuration complete with DeviceNet node

**BUS CONFIGURATION :**

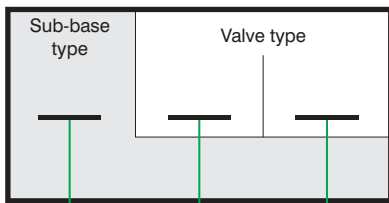
DA = DeviceNet 32 OUT  
DB = DeviceNet 32 OUT plus 8 INPUTS  
DC = DeviceNet 32 OUT plus 16 INPUTS  
DD = DeviceNet 32 OUT plus 24 INPUTS  
DE = DeviceNet 32 OUT plus 32 INPUTS

**ENDPLATES SELECTION:**

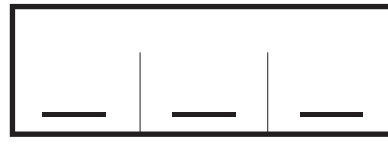
A= 37 poles - external feeding left endplate plus closed right endplate  
B= 37 poles - self feeding left endplate plus closed right endplate  
C= 37 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
D= 37 poles - self feeding left endplate plus 25 poles OUT closed right endplate  
E= 25 poles - external feeding left endplate plus closed right endplate  
F= 25 poles - self feeding left endplate plus closed right endplate  
G= 25 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
H= 25 poles - self feeding left endplate plus 25 poles OUT closed right endplate



**MODUL CONFIGURATION**



**ACCESSORIES CONFIGURATION**



**SUB-BASE TYPE**

3 = 2 Position Monostable sub base ø4 (2 electric signal used)  
4 = 2 Position Bistable sub base ø4 (4 electric signals used)  
5 = 2 Position Monostable sub base ø6 (2 electric signal used)  
6 = 2 Position Bistable sub base ø6 (4 electric signals used)

**VALVES TYPE**

A = 5/2 Solenoid - Spring  
B = 5/2 Solenoid - Differential  
C = 5/2 Solenoid - Solenoid  
E = 5/3 CC Solenoid - Solenoid  
F = 2x3/2 NC-NC (= 5/3 OC) Solenoid - Solenoid  
G = 2x3/2 NO-NO (= 5/3 PC) Solenoid - Solenoid  
H = 2x3/2 NC-NO Solenoid - Solenoid  
I = 2x3/2 NO-NC Solenoid - Solenoid  
T = Free valve space plug

**ACCESSORIES**

W00 = Intermediate supply & exhaust module  
0X0 = Diaphragm plug on pipe 1  
00Y = Diaphragm plug on pipe E 3  
Z00 = Diaphragm plug on pipe 5  
0XY = Diaphragm plug on pipe 1 & 3  
ZX0 = Diaphragm plug on pipe 5 & 1  
Z0Y = Diaphragm plug on pipe 5 & 3  
ZXY = Diaphragm plug on pipe 5, 1 & 3

**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 bistable base ( 2 electrical signals occupied for each position) causes the loss of one electric signal. In this case the monostable valve can be replaced by a bistable valve without reconfiguring the PLC.  
The diaphragms plugs are used to intercept the conduits 1,3 & 5 of the base.  
Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.

**General:**

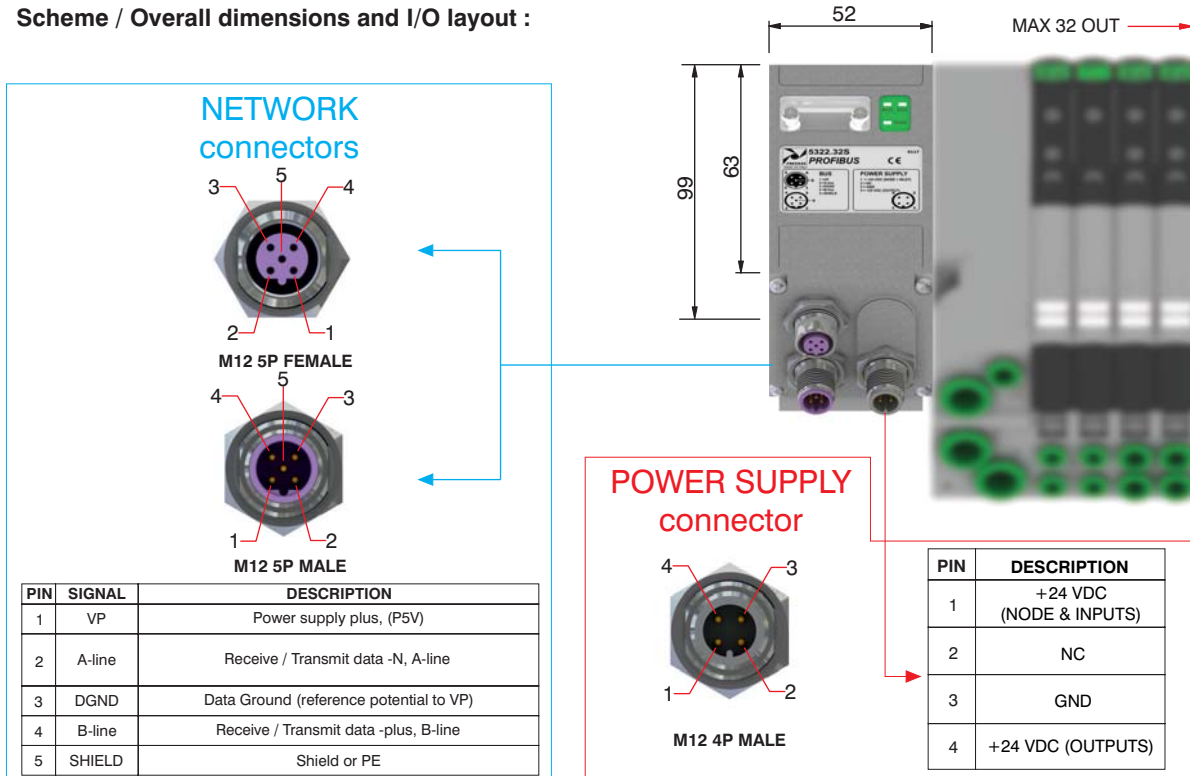
PROFIBUS DP module is directly integrated on Optyma-S solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
 Optyma-S solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
 The node can be easily installed also on solenoid 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 5222.08S.  
 PROFIBUS DP module recognizes automatically the presence of the Input modules on power on.  
 Regardless of the number of Input modules connected, the managable 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 mantaning 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 a dip-switch.

**Ordering code**

**5322.32S**



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



**Technical characteristics**

	Model	5322.32S
	Specifications	PROFIBUS DP
	Case	Reinforced technopolymer
<b>Power supply</b>	Power supply connection	M12 4P male connector (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	50 mA
<b>Outputs</b>	Power supply diagnosis	Green led PWR
	PNP equivalent outputs	+24 VDC +/- 10%
	Maximum voltage for output	100 mA
	Maximum output number	32
	Max output simultaneously actuated	32
<b>Network</b>	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 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

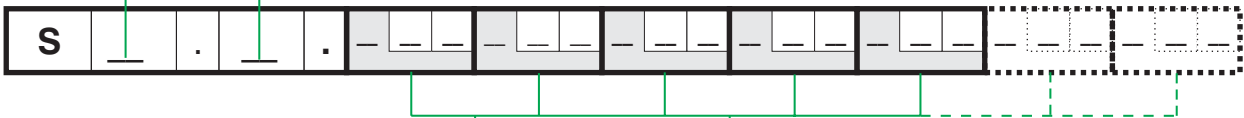
Manifold layout configuration complete with PROFIBUS node

**BUS CONFIGURATION :**

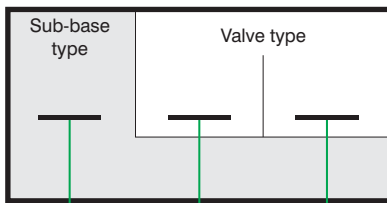
PA = PROFIBUS 32 OUT  
PB = PROFIBUS 32 OUT plus 8 INPUTS  
PC = PROFIBUS 32 OUT plus 16 INPUTS  
PD = PROFIBUS 32 OUT plus 24 INPUTSP  
PE = PROFIBUS 32 OUT plus 32 INPUTS

**ENDPLATES SELECTION:**

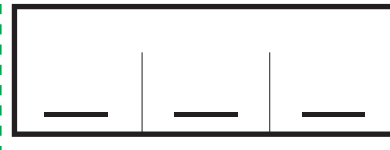
A= 37 poles - external feeding left endplate plus closed right endplate  
B= 37 poles - self feeding left endplate plus closed right endplate  
C= 37 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
D= 37 poles - self feeding left endplate plus 25 poles OUT closed right endplate  
E= 25 poles - external feeding left endplate plus closed right endplate  
F= 25 poles - self feeding left endplate plus closed right endplate  
G= 25 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
H= 25 poles - self feeding left endplate plus 25 poles OUT closed right endplate



**MODUL CONFIGURATION**



**ACCESSORIES CONFIGURATION**



**SUB-BASE TYPE**

3 = 2 Position Monostable sub base ø4 (2 electric signal used)  
4 = 2 Position Bistable sub base ø4 (4 electric signals used)  
5 = 2 Position Monostable sub base ø6 (2 electric signal used)  
6 = 2 Position Bistable sub base ø6 (4 electric signals used)

**VALVES TYPE**

A = 5/2 Solenoid - Spring  
B = 5/2 Solenoid - Differential  
C = 5/2 Solenoid - Solenoid  
E = 5/3 CC Solenoid - Solenoid  
F = 2x3/2 NC-NC (= 5/3 OC) Solenoid - Solenoid  
G = 2x3/2 NO-NO (= 5/3 PC) Solenoid - Solenoid  
H = 2x3/2 NC-NO Solenoid - Solenoid  
I = 2x3/2 NO-NC Solenoid - Solenoid  
T = Free valve space plug

**ACCESSORIES**

W00 = Intermediate supply & exhaust module  
0X0 = Diaphragm plug on pipe 1  
00Y = Diaphragm plug on pipeE 3  
Z00 = Diaphragm plug on pipe 5  
0XY = Diaphragm plug on pipe 1 & 3  
ZX0 = Diaphragm plug on pipe 5 & 1  
Z0Y = Diaphragm plug on pipe 5 & 3  
ZXY = Diaphragm plug on pipe 5,1 & 3

**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 bistable base (2 electrical signals occupied for each position) causes the loss of one electric signal. In this case the monostable valve can be replaced by a bistable valve without reconfiguring the PLC.  
The diaphragms plugs are used to intercept the conduits 1,3 & 5 of the base.  
Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.

**General:**

EtherCAT<sup>®</sup> module is directly integrated on Optyma-S solenoid valves manifold via a 37 poles connector, normally used for multipolar cable connection.  
 Optyma-S 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 5222.08S.  
 EtherCAT<sup>®</sup> 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 EtherCAT<sup>®</sup> 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. They are according to EtherCAT<sup>®</sup> Specifications ETG.1000 series.  
 By specifications, node ID should be automatically set during network configuration, but it is also possible to set the address via 6 dip-switches on the module, using BCD numeration.

**Ordering code**

**5622.32S**

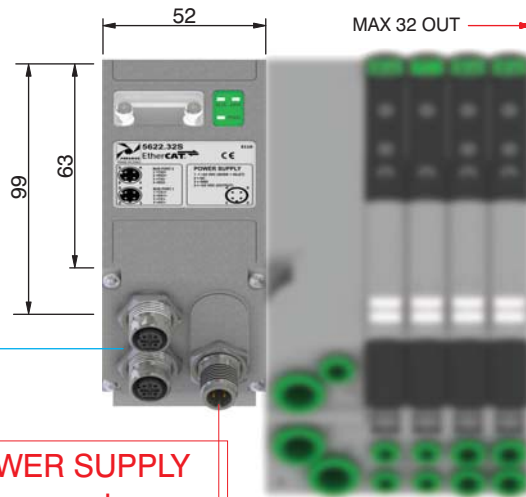


**Scheme / Overall dimensions and I/O layout :**

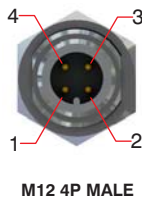
**NETWORK connectors**



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



**POWER SUPPLY connector**



PIN	DESCRIPTION
1	+24 VDC (NODE & INPUTS)
2	NC
3	GND
4	+24 VDC (OUTPUTS)

**Technical characteristics**

Model	5622.32S	
Specifications	EtherCAT Specifications ETG.1000 series	
Case	Reinforced technopolymer	
<b>Power supply</b>	Power supply connection	M12 4P male connector (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	310 mA
	Power supply diagnosis	Green led PWR
<b>Outputs</b>	PNP equivalent outputs	+24 VDC +/- 10%
	Maximum voltage for output	100 mA
	Maximum output number	32
	Max output simultaneously actuated	32
<b>Network</b>	Network connectors	2 M12 4P female connectors type D (IEC 61076-2-101)
	Baud rate	100 Mbit/s
	Addresses, possible numbers	From 0 to 65535 (from 1 to 63 with dip-switches)
	Max nodes in net	65536 (master + slaves)
	Bus maximum recommended length	100 m
	Bus diagnosis	1 status green led + 2 activity green 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

Manifold layout configuration complete with EtherCAT® node

**BUS CONFIGURATION :**

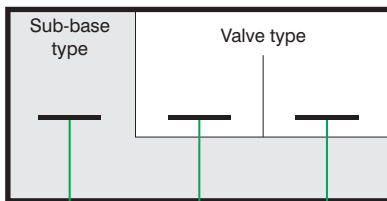
EA = EtherCAT® 32 OUT  
EB = EtherCAT® 32 OUT plus 8 INPUTS  
EC = EtherCAT® 32 OUT plus 16 INPUTS  
ED = EtherCAT® 32 OUT plus 24 INPUTS  
EE = EtherCAT® 32 OUT plus 32 INPUTS

**ENDPLATES SELECTION:**

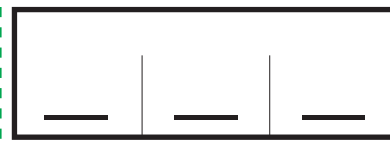
A= 37 poles - external feeding left endplate plus closed right endplate  
B= 37 poles - self feeding left endplate plus closed right endplate  
C= 37 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
D= 37 poles - self feeding left endplate plus 25 poles OUT closed right endplate  
E= 25 poles - external feeding left endplate plus closed right endplate  
F= 25 poles - self feeding left endplate plus closed right endplate  
G= 25 poles - external feeding left endplate plus 25 poles OUT closed right endplate  
H= 25 poles - self feeding left endplate plus 25 poles OUT closed right endplate



**MODUL CONFIGURATION**



**ACCESSORIES CONFIGURATION**



**SUB-BASE TYPE**

3 = 2 Position Monostable sub base ø4 (2 electric signal used)  
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6 = 2 Position Bistable sub base ø6 (4 electric signals used)

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A = 5/2 Solenoid - Spring  
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G = 2x3/2 NO-NO (= 5/3 PC) Solenoid - Solenoid  
H = 2x3/2 NC-NO Solenoid - Solenoid  
I = 2x3/2 NO-NC Solenoid - Solenoid  
T = Free valve space plug

**ACCESSORIES**

W00 = Intermediate supply & exhaust module  
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Z00 = Diaphragm plug on pipe 5  
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**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 bistable base (2 electrical signals occupied for each position) causes the loss of one electric signal. In this case the monostable valve can be replaced by a bistable valve without reconfiguring the PLC.  
The diaphragms plugs are used to intercept the conduits 1, 3 & 5 of the base.  
Should one or more conduits be cut more than one time it is necessary to add the relevant intermediate Supply/Exhaust module.

**General:**

Modules have 8 connectors M8 3P female.

The Inputs are PNP equivalent 24 VDC ± 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 resettable 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 light up indicating the ON state and the node will re-start to operate.

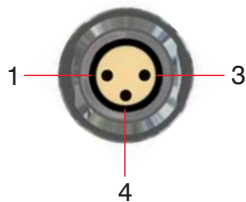
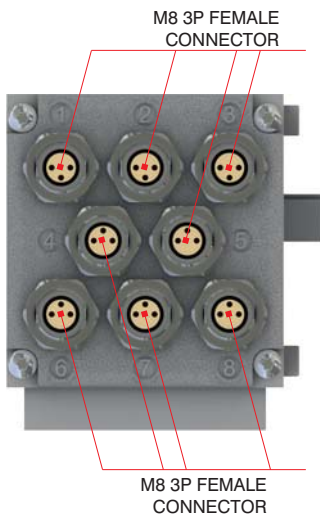
The maximum number of Input modules supported is 4.

**Ordering code**

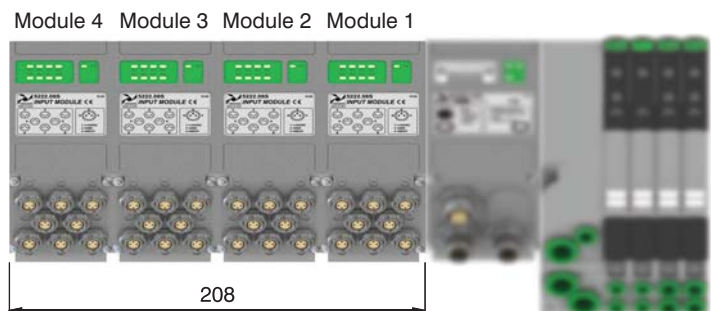
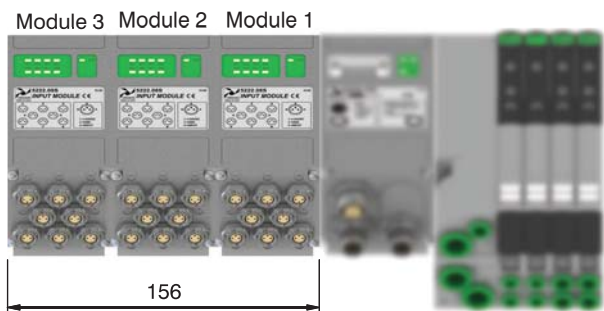
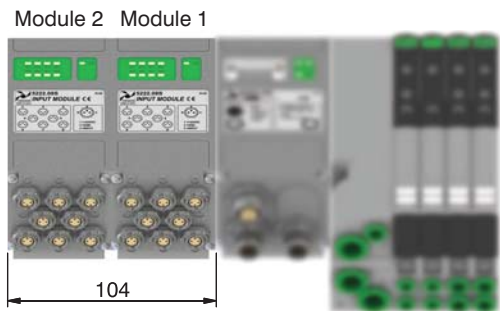
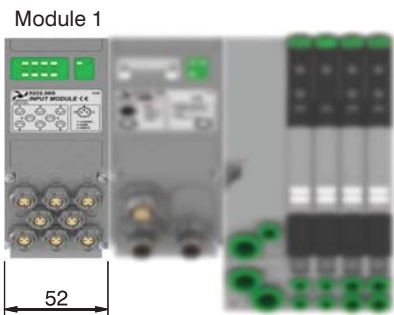
**5222.08F**



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



PIN	DESCRIPTION
1	+24 VDC
4	INPUT
3	GND





Socket for Power Supply  
STRAIGHT CONNECTOR  
M12A 4P FEMALE

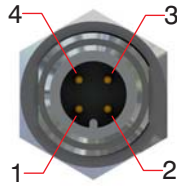
Ordering code

5312A.F04.00



### POWER SUPPLY connector

Upper view  
Slave connector

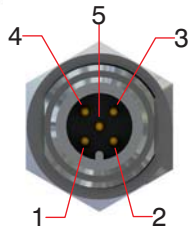


PIN	DESCRIPTION
1	+24 VDC Node
2	
3	0 V
4	+24 VDC Outputs

Socket for Bus CANopen  
STRAIGHT CONNECTOR  
M12B 5P FEMALE

Ordering code

5312A.F05.00



### NETWORK connectors

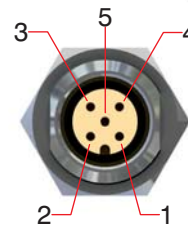
PIN	DESCRIPTION
1	(CAN_SHIELD)
2	(CAN_V+)
3	CAN_GND
4	CAN_H
5	CAN_L

Upper view  
Slave connector

Plug for Bus CANopen  
STRAIGHT CONNECTOR  
M12A 5P MALE

Ordering code

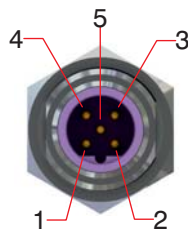
5312A.M05.00



Socket for Bus PROFIBUS  
STRAIGHT CONNECTOR  
M12B 5P FEMALE

Ordering code

5312B.F05.00



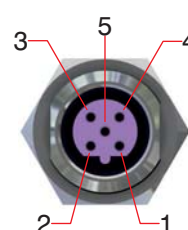
PIN	DESCRIPTION
1	Power Supply
2	A-line
3	DGND
4	B-line
5	SHIELD

Upper view  
Slave connector

Plug for Bus PROFIBUS  
STRAIGHT CONNECTOR  
M12B 5P MALE

Ordering code

5312B.M05.00



Plug for Input module  
STRAIGHT CONNECTOR  
M8 3P MALE

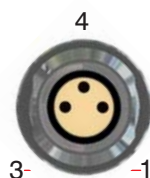
Ordering code

5308A.M03.00



### INPUT connectors

Upper view  
Slave connector



PIN	DESCRIPTION
1	+24 VDC
4	INPUT
3	GND

M12 plug

Ordering code

5300.T12



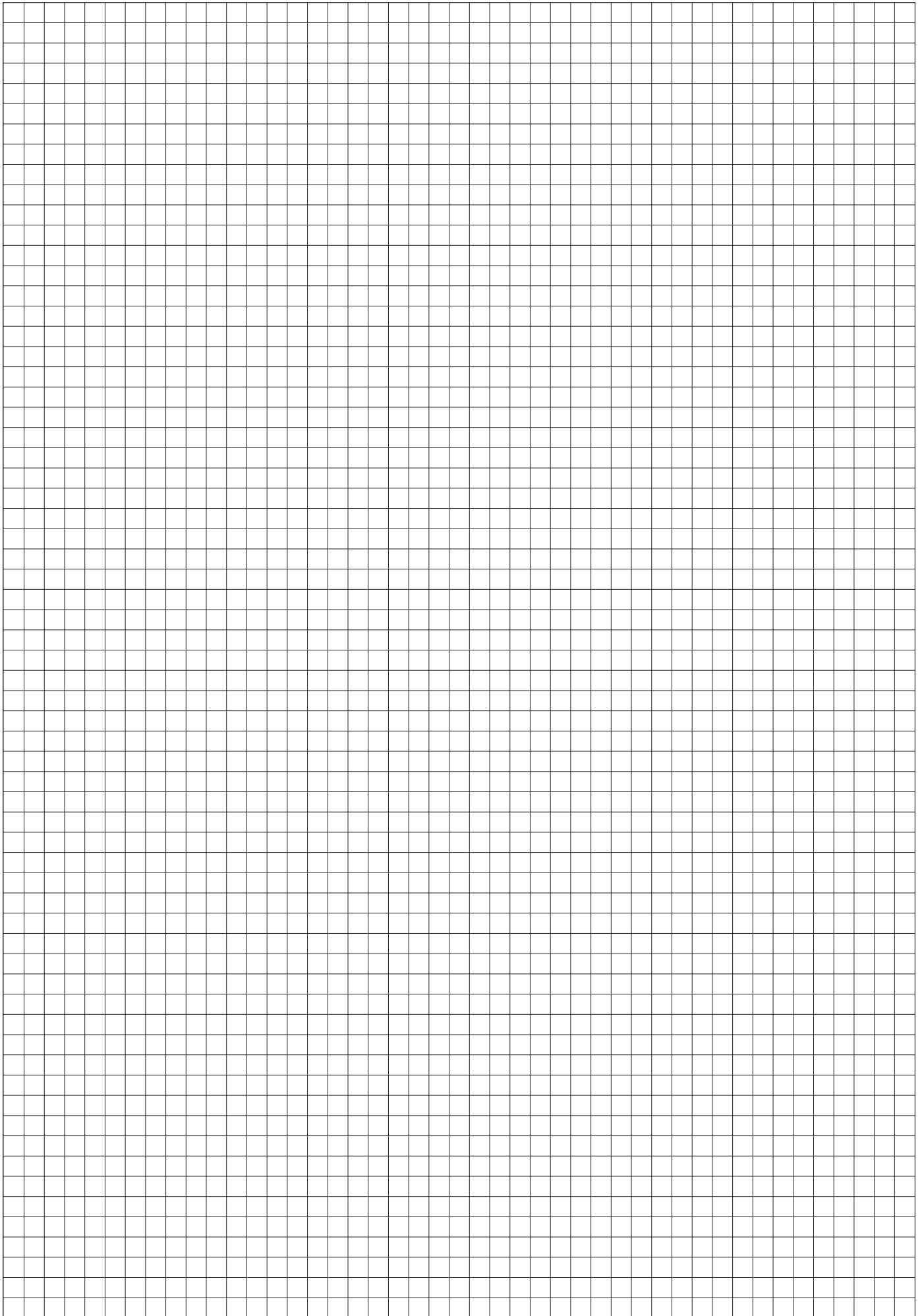
Plugs

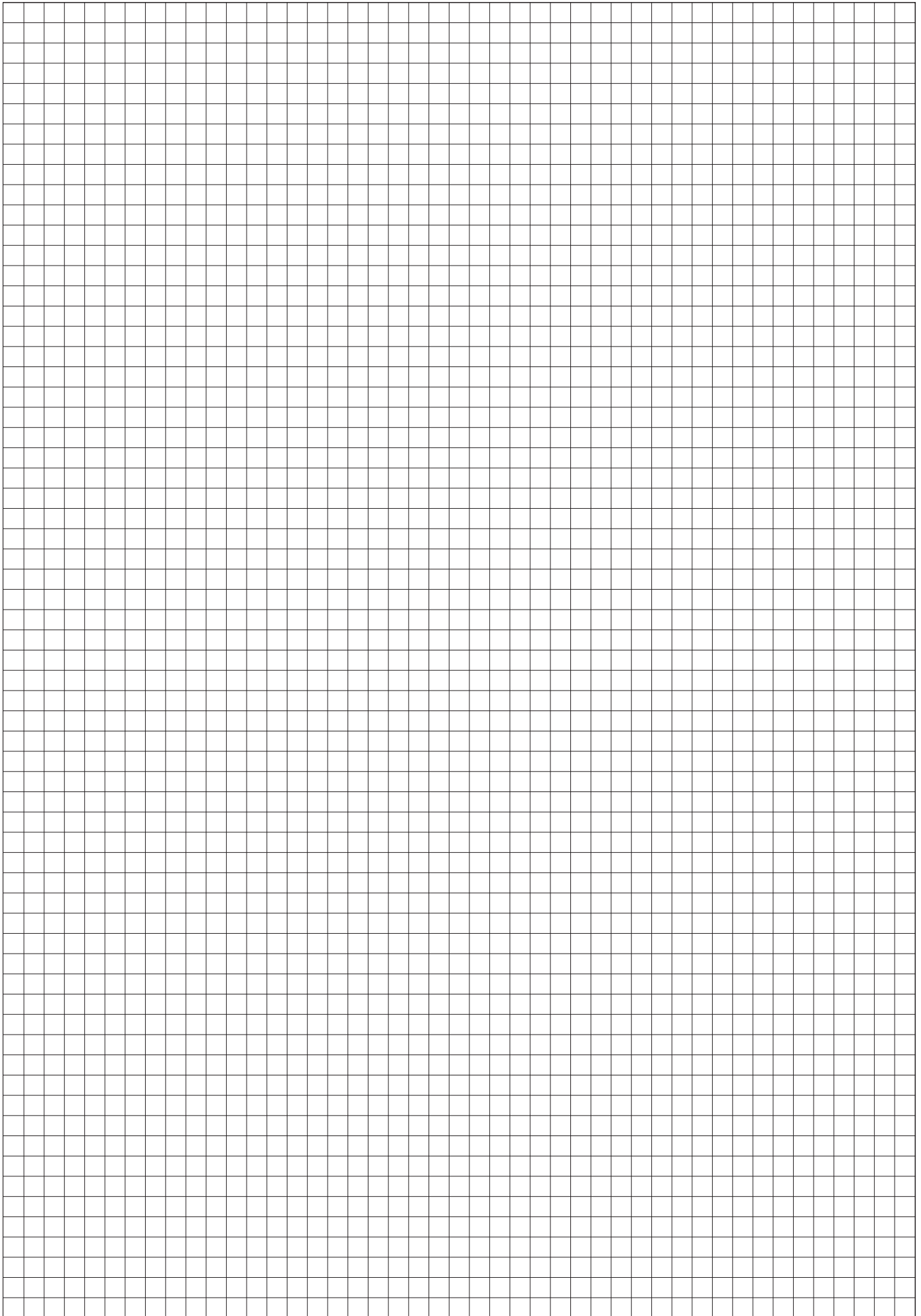
M8 plug

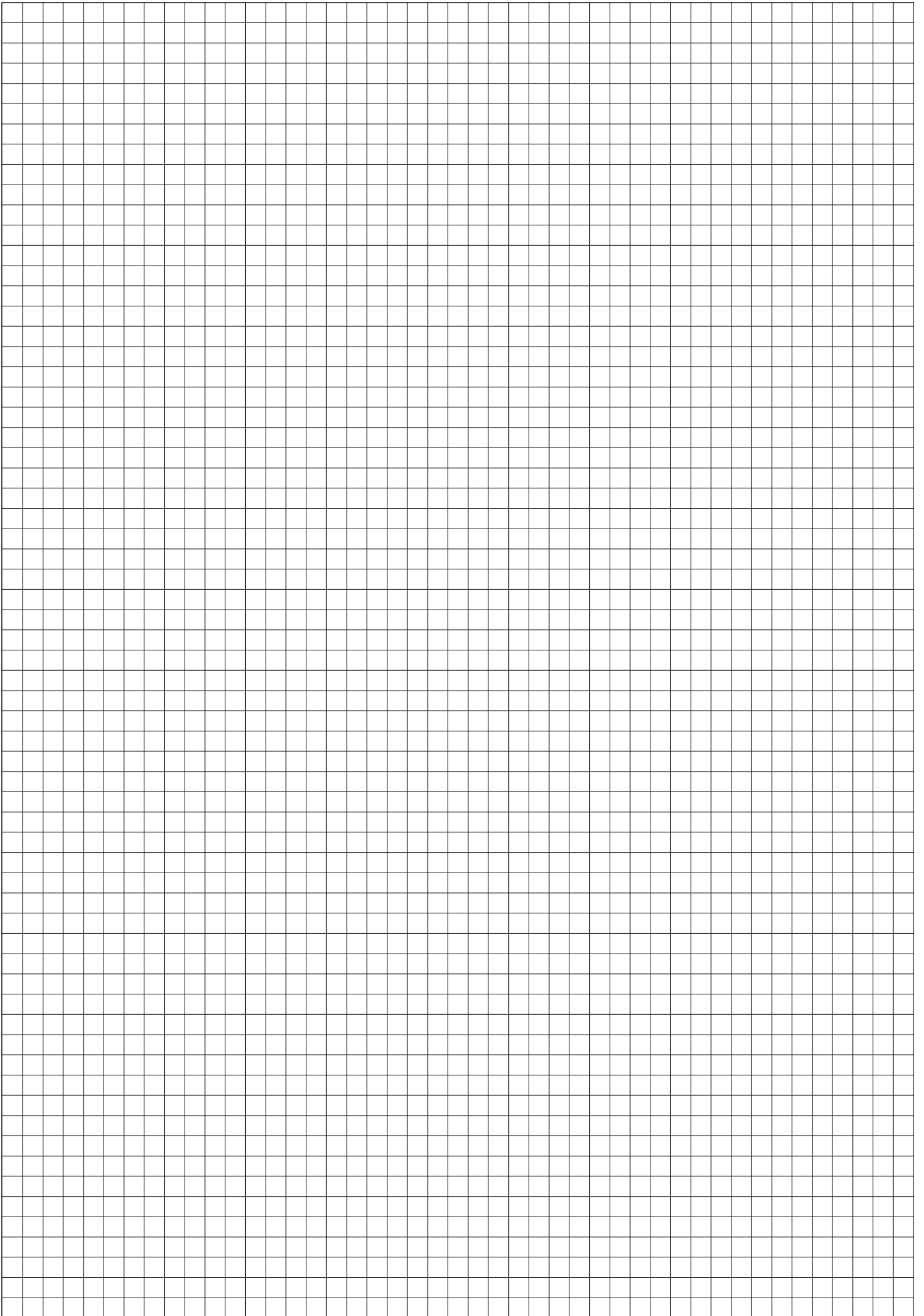
Ordering code

5300.T08











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