



PNEUMAX



SERIES 3000 SOLENOID VALVES

TECHNOLOGY AND FLEXIBILITY



PNEUMAX



Pneumax

Smart Technologies and Human Competence

Founded in 1976, **Pneumax S.p.A.** is today one of the leading, international manufacturers of components and systems for automation. It is at the fore front of a group comprised of 27 companies, with over 800 employees worldwide. Ongoing investment in research and development has allowed **Pneumax** to continually expand its range of standard products and customised solutions, adding to the well-established pneumatic technology, a range of electric drive actuators and fluid control components. The desire to provide the service and specific application skills has led to the creation of 3 business units, dedicated to Industrial Automation, Process Automation and Automotive sector.



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

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

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

This represents the main Pneumax distinguishing factor.



Pneumatic technology



Electric actuation



Fluid control



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Solenoid valves series 3000

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

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

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Solenoid valves series 3000



AIR DISTRIBUTION

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

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

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

Construction characteristics	
Body	Aluminium
Operators	Technopolymer
Spool	Aluminium
Seals	NBR
Piston seals	NBR
Springs	AISI 302 stainless steel
Pistons	Alluminium / Technopolymer
Operational characteristics	
Voltage	24 VDC \pm 10%
Pilot power consumption	1.3W nominal in energy saving mode 0,25W
Valve working pressure [1]	from vacuum to 10 bar max.
Pilot working pressure [12-14]	from 2,5 to 7 bar max.
Operating temperature	from -5°C to +50°C
Fluid	Filtered air. No lubrication needed, if applied it shall be continuous
IP Rating	IP65

▶ **STAND ALONE solenoid valve version**



General

The range of series 3000 solenoid valves Version 3100 (10mm) and 3400 (15,5mm), are available in STAND ALONE self feeding or external feeding versions and realised with M8 point to point and 90° H connection with an integrated snap-on fitting.

Main characteristics

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

Functions

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

Solenoid valve ordering code

3 1 15. 52.00 . 39 . 82

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

Function
52.00: S.V. 5/2
53.31: S.V. 5/3
62.44: 2x3/2 N.C.-N.C.
62.55: 2x3/2 N.O.-N.O.
62.45: 2x3/2 N.C.-N.O.
62.54: 2x3/2 N.O.-N.C.

Valves type
36: Solenoid - Differential self feeding
39: Solenoid - Spring self feeding
35: Solenoid - Solenoid self feeding
29: Solenoid - Spring external feeding
25: Solenoid - Solenoid external feeding

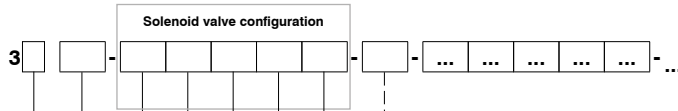
Connection
02: H 90° SPEED-UP connector
82: M8 SPEED-UP connector

Example in the table : 3115.52.00.39.82 : Solenoid valve size 10mm 5/2 solenoid-spring self feeding with M8 SPEED-UP connector



Configurator

AIR DISTRIBUTION



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

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

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

Power supply
2: External feeding
3: Self feeding

Connector type
H: H 90° SPEED-UP connector
M: M8 SPEED-UP connector

Voltage
1: 24 VDC

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

Accessories (optional)
T: Free valve space plug

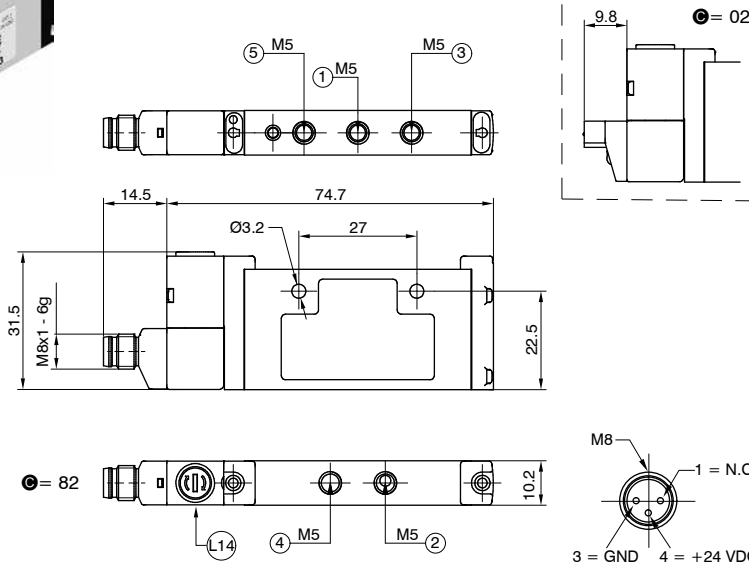
Accessories (optional)	no valve position occupied on the manifold
0X0: Diaphragm plug on pipe 1	
00Y: Diaphragm plug on pipe 3	
Z00: Diaphragm plug on pipe 5	
0XY: Diaphragm plugs on pipes 1 and 3	
ZX0: Diaphragm plugs on pipes 5 and 1	
Z0Y: Diaphragm plugs on pipes 5 and 3	
ZXY: Diaphragm plugs on pipes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

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

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

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

Coding: 3115.52.00.③⑥



FUNCTION	
③	36 = Solenoid-Differential
⑥	39 = Solenoid-Spring
CONNECTIONS	
②	02 = H 90° SPEED-UP connector 24VDC
⑧	82 = M8 SPEED-UP connector 24VDC

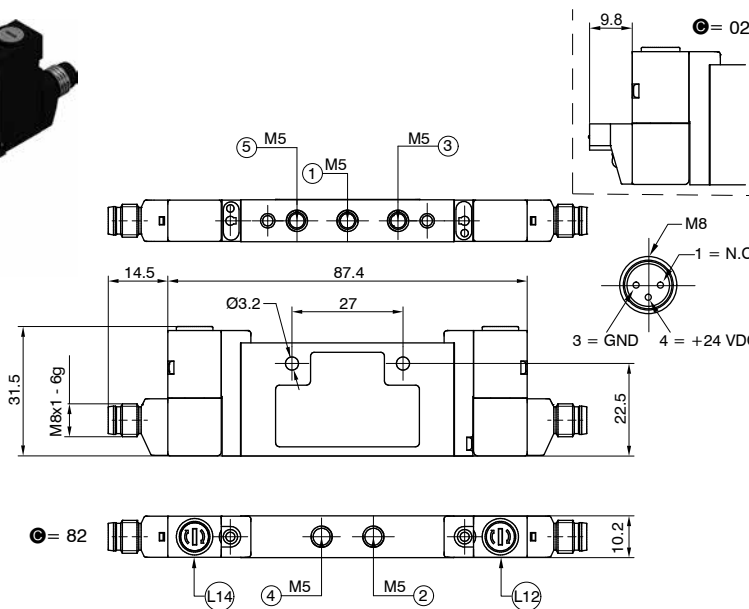
SHORT FUNCTION CODE "A" (39)
SHORT FUNCTION CODE "B" (36)

L14 = Manual over ride - side 14

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Temperature °C	Weight (g)
3115.52.00.39.③ Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	20	2.5 ... 7	-5 ... +50	49
3115.52.00.36.⑥ Solenoid-Differential				15			

Solenoid-Solenoid - Version 3100 (10mm)

Coding: 3115.52.00.35.③



CONNECTION	
②	02 = H 90° SPEED-UP connector 24VDC
⑧	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "C"

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

Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Temperature °C	Weight (g)
3115.52.00.35.③ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	160	10	20	2.5 ... 7	-5 ... +50	59

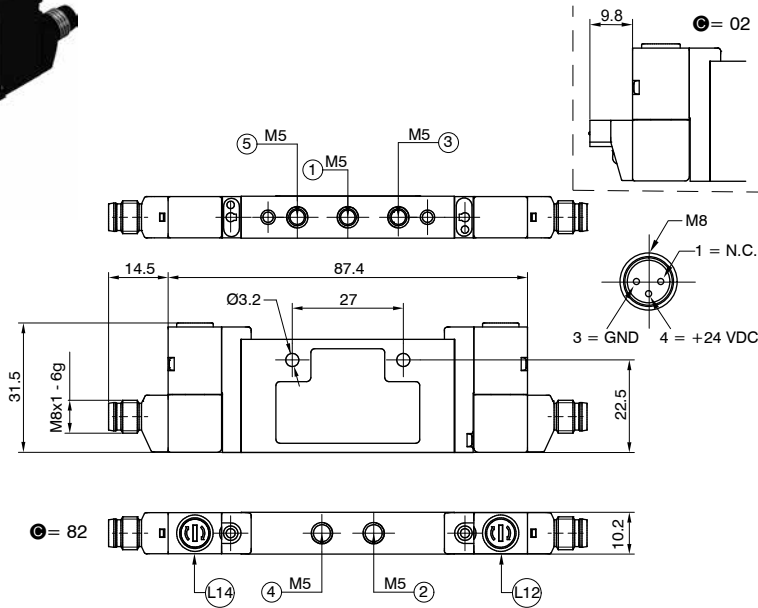


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3100 (10mm) - Self feeding

AIR DISTRIBUTION

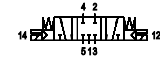
Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3115.53.31.35. **C**



CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

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

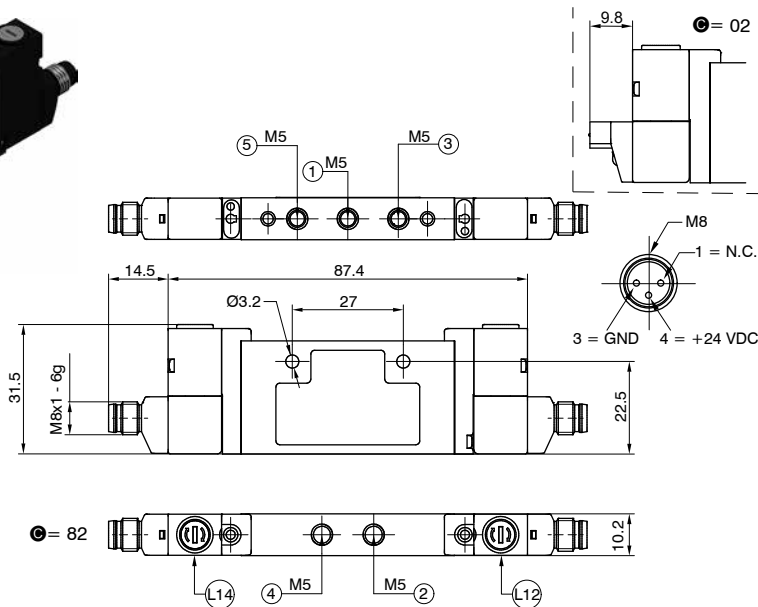


SHORT FUNCTION CODE "E"

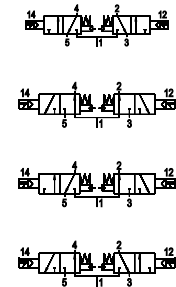
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response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

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

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



FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
	45 = N.C.-N.O.
	55 = N.O.-N.O. (5/3 Pressured centres)
	54 = N.O.-N.C.
CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



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

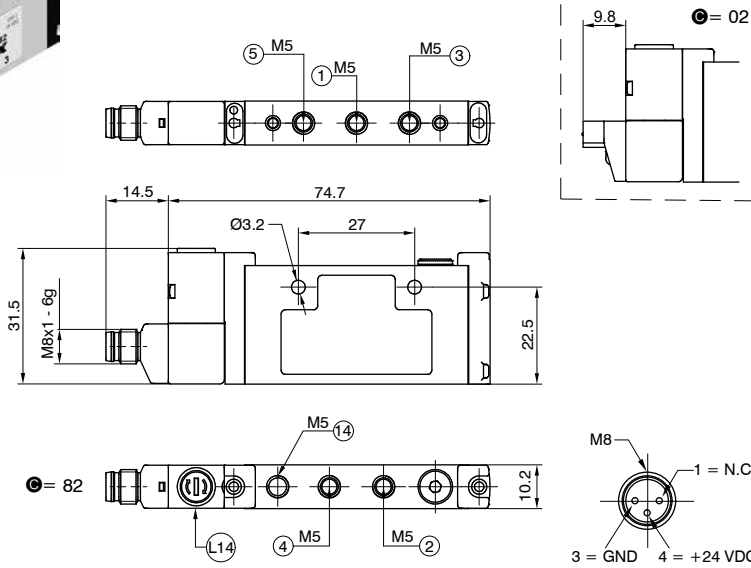
L12 = Manual over ride - side 12
L14 = Manual over ride - side 14

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



Solenoid-Spring - Version 3100 (10mm)

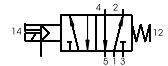
Coding: 3115.52.00.29. **C**



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

SHORT FUNCTION CODE "A" (29)

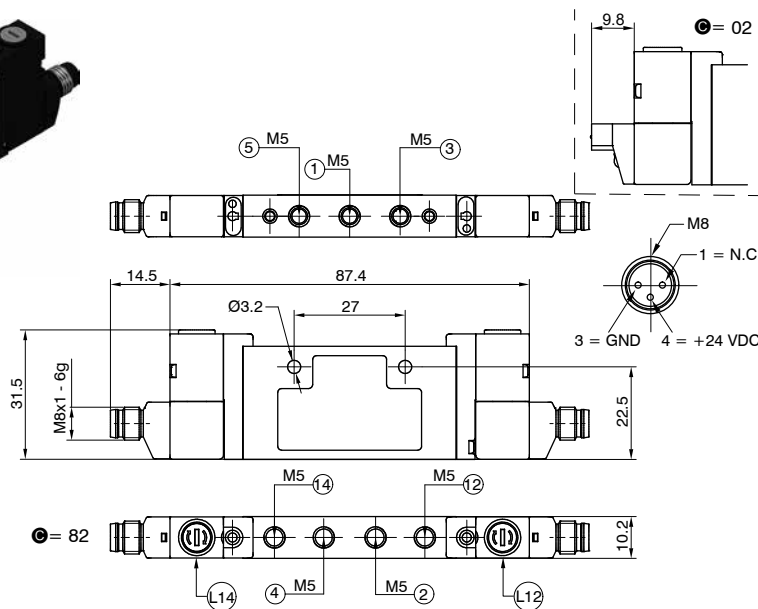
CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



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

Solenoid-Solenoid - Version 3100 (10mm)

Coding: 3115.52.00.25. **C**



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

SHORT FUNCTION CODE "C"

CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



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

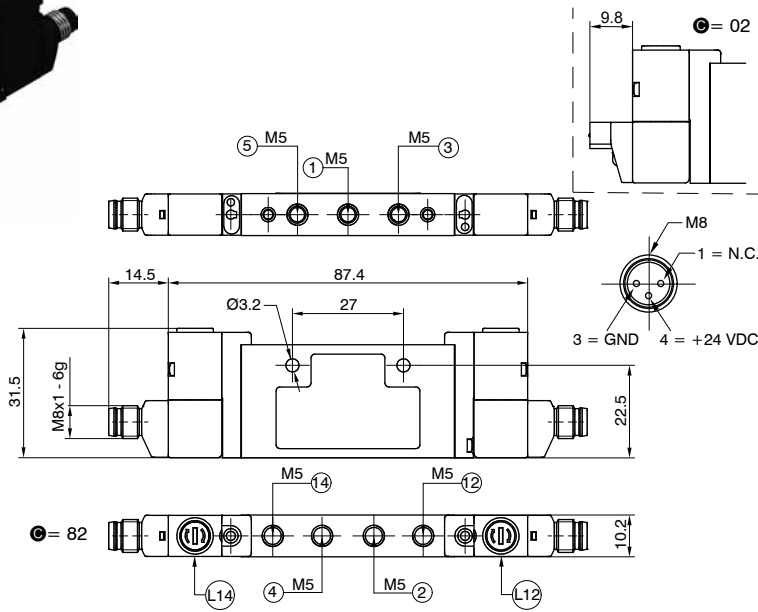


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3100 (10mm) - External feeding

AIR DISTRIBUTION

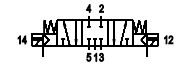
Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3115.53.31.25. **C**



CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

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

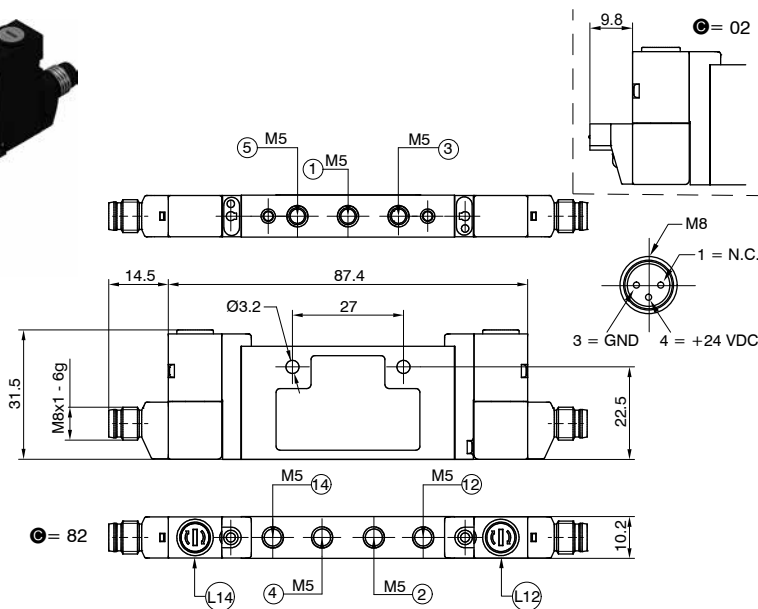


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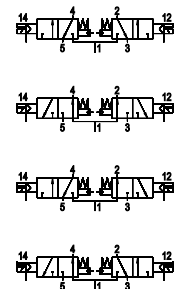
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (NI/min)	Response time according to ISO 12238, activation time (ms)	Response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

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

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



FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
	45 = N.C.-N.O.
	55 = N.O.-N.O. (5/3 Pressured centres)
	54 = N.O.-N.C.
CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



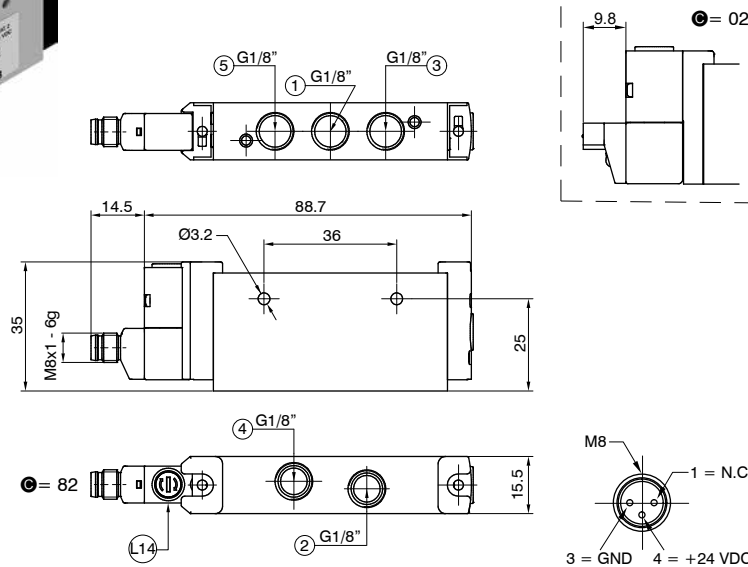
SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

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

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

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

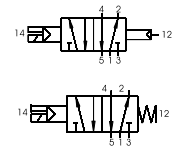
Coding: 3415.52.00.①②③



FUNCTION	
①	36 = Solenoid-Differential
②	39 = Solenoid-Spring
CONNECTION	
③	02 = H 90° SPEED-UP connector 24VDC
④	82 = M8 SPEED-UP connector 24VDC

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

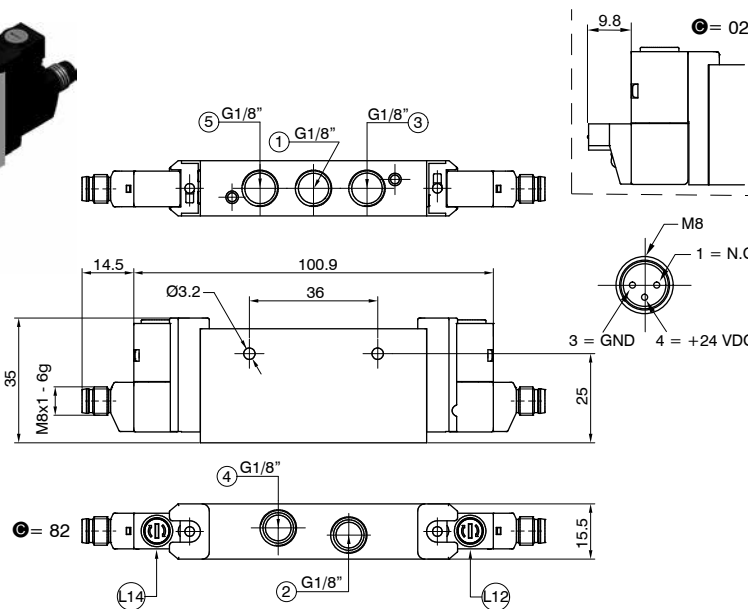
L14 = Manual over ride - side 14



Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Temperature °C	Weight (g)
3415.52.00.39.② Solenoid-Spring	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	20	2.5 ... 7	-5 ... +50	90
3415.52.00.36.③ Solenoid-Differential				15			

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

Coding: 3415.52.00.35.④



CONNECTION	
④	02 = H 90° SPEED-UP connector 24VDC
⑤	82 = M8 SPEED-UP connector 24VDC

SHORT FUNCTION CODE "C"

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



Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*					
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Temperature °C	Weight (g)
3415.52.00.35.④ Solenoid-Solenoid	Filtered air. No lubrication needed, if applied it shall be continuous	600	10	10	2.5 ... 7	-5 ... +50	100

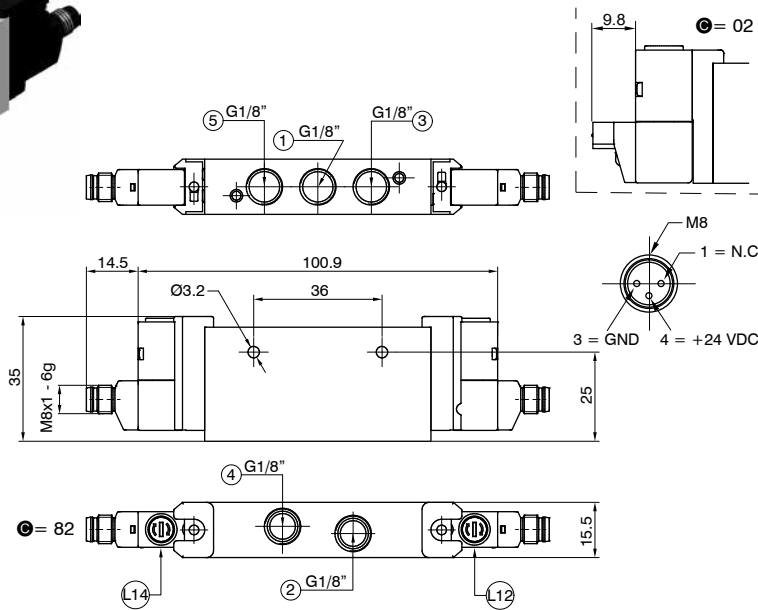


Solenoid valves manifold
Series 3000 - STAND ALONE - Version 3400 (15,5mm) - Self feeding

AIR DISTRIBUTION

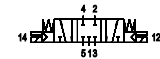
Solenoid-Solenoid 5/3 (Closed centres) - Version 3400 (15,5mm)

Coding: 3415.53.31.35. **C**



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

CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

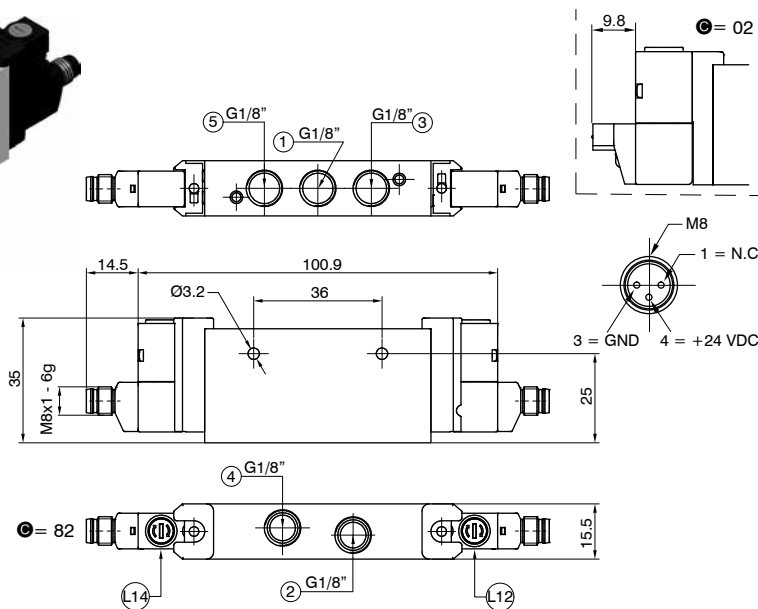


SHORT FUNCTION CODE "E"

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

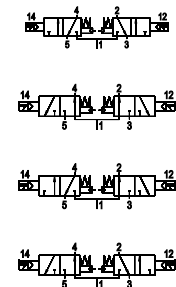
Solenoid-Solenoid 2x3/2 - Version 3400 (15,5mm)

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



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

FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
	45 = N.C.-N.O.
	55 = N.O.-N.O. (5/3 Pressured centres)
	54 = N.O.-N.C.
CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



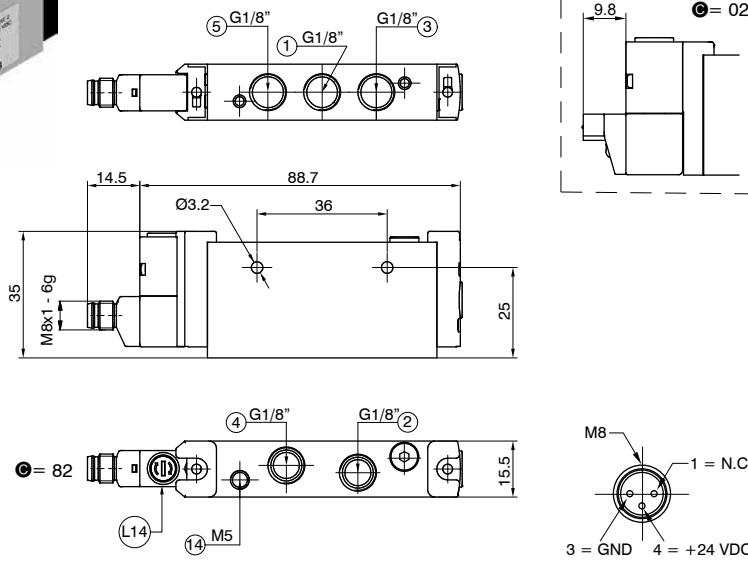
SHORT FUNCTION CODE:
 N.C.-N.C. (5/3 Open centres) = "F"
 N.O.-N.O. (5/3 Pressured centres) = "G"
 N.C.-N.O. = "H"
 N.O.-N.C. = "I"

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



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

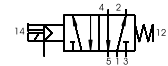
Coding: 3415.52.00.29. **C**



CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

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

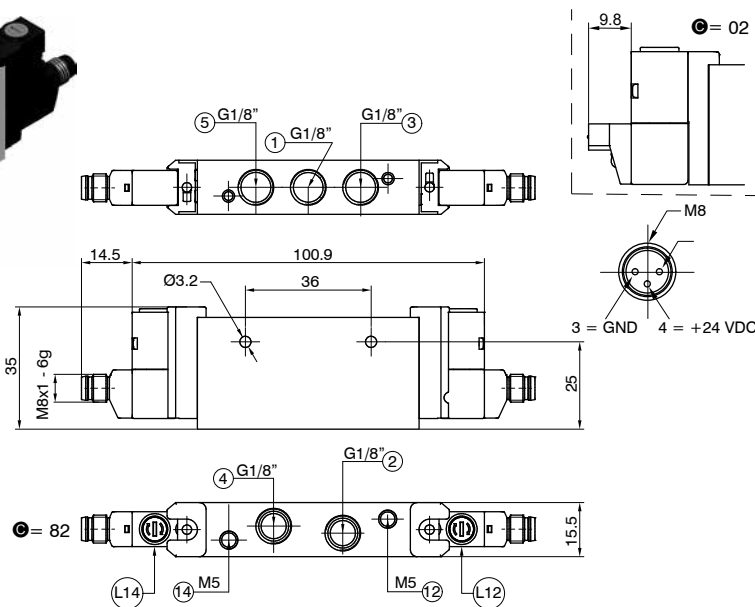
SHORT FUNCTION CODE "A" (29)



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

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

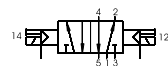
Coding: 3415.52.00.25. **C**



CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

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

SHORT FUNCTION CODE "C"



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



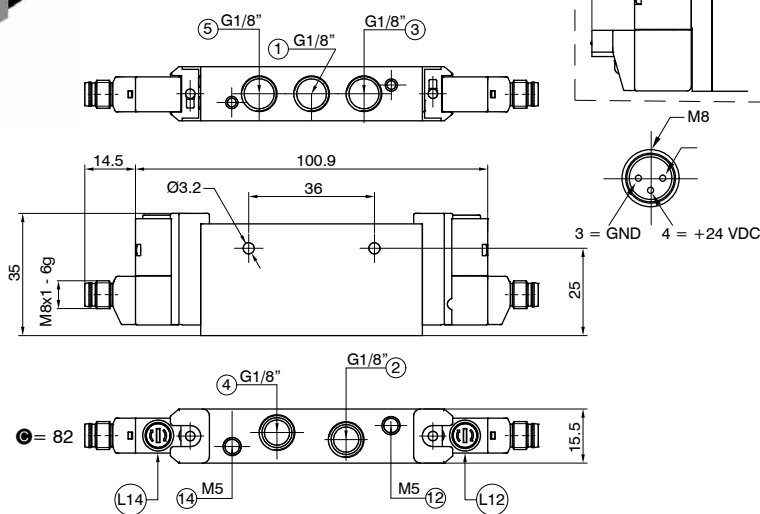
Solenoid valves manifold Series 3000 - STAND ALONE - Version 3400 (15,5mm) - External feeding

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

Coding: 3415.53.31.25. **C**

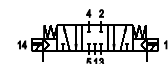


CAUS



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

CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC



SHORT FUNCTION CODE "E"

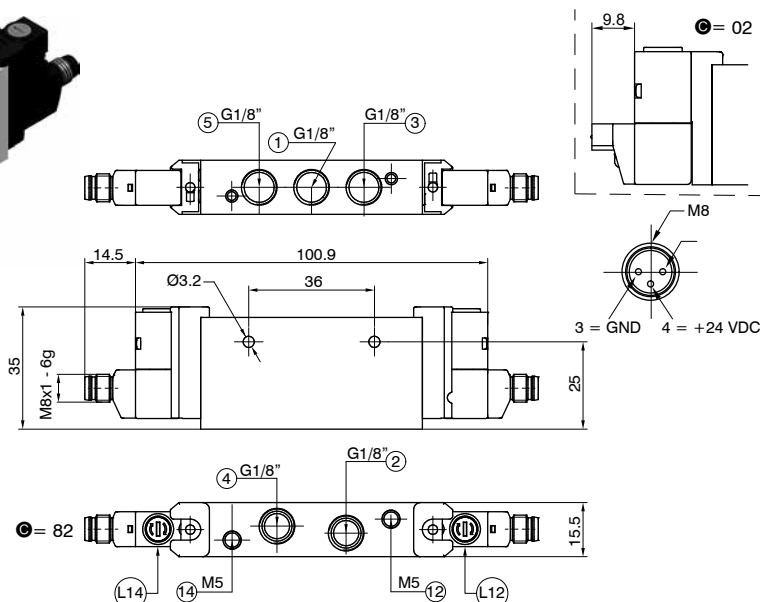
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response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

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

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

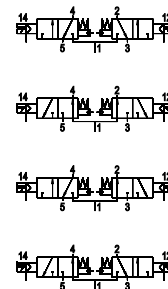


CAUS



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

FUNCTION	
F	44 = N.C.-N.C. (5/3 Open centres)
	45 = N.C.-N.O.
	55 = N.O.-N.O. (5/3 Pressured centres)
	54 = N.O.-N.C.
CONNECTION	
C	02 = H 90° SPEED-UP connector 24VDC
	82 = M8 SPEED-UP connector 24VDC

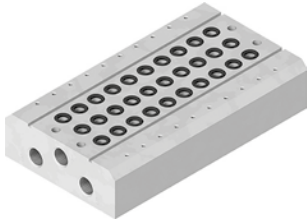


SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

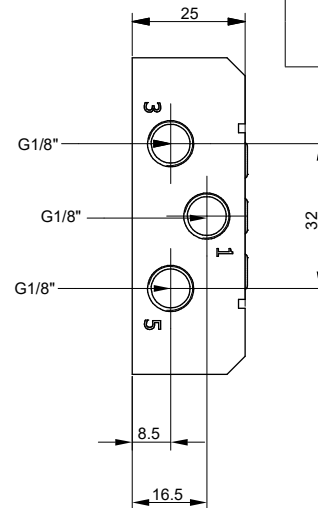
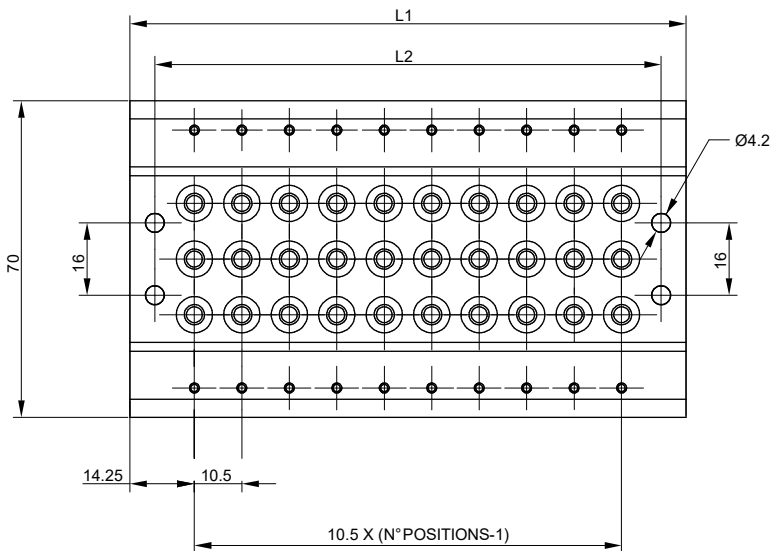
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response time according to ISO 12238, deactivation time (ms)	Working pressure (bar)	Pilot pressure (bar)	Temperature °C	Weight (g)
3415.62.44.25. C N.C.-N.C. (5/3 Open centres)	Filtered air. No lubrication needed, if applied it shall be continuous	500	10	15	From vacuum to 10	$\geq 3 + (02 \times \text{Inlet } p.)$	-5 ... +50	100
3415.62.55.25. C N.O.-N.O. (5/3 Pressured centres)								
3415.62.45.25. C N.C.-N.O.								
3415.62.54.25. C N.O.-N.C.								

Manifold - Version 3100 (10mm)

Coding: 3115.P



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



AIR DISTRIBUTION

Assembling kit - Version 3100 (10mm)

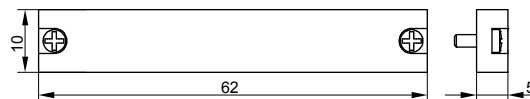
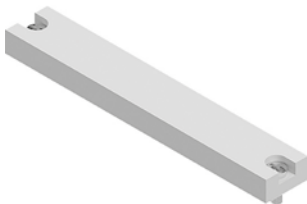
Coding: 3115.KV



Weight 2 g

Closing plate - Version 3100 (10mm)

Coding: 3115.00



Weight 10 g

Diaphragm plug - Version 3100 (10mm)

Coding: 3130.17

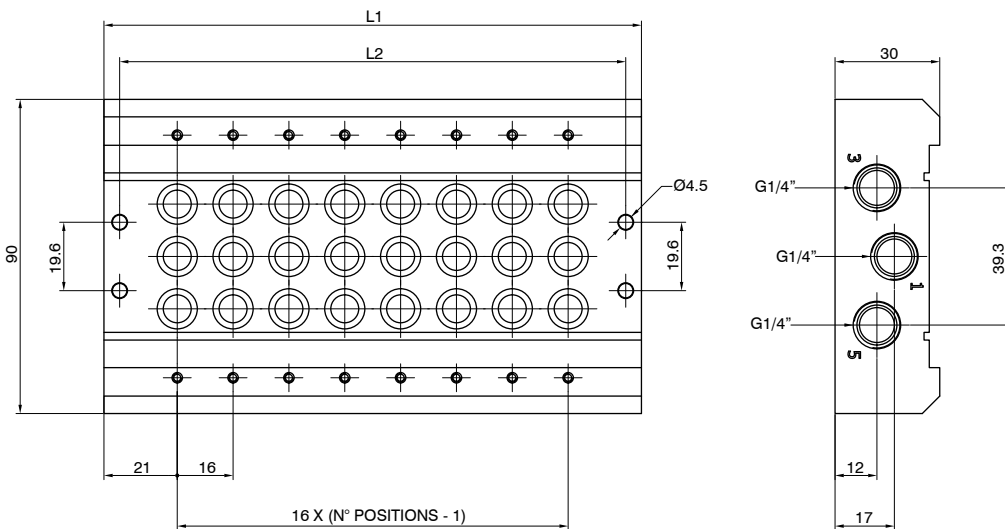


Weight 1,5 g



Manifold - Version 3400 (15,5mm)

Coding: 3415.Ⓟ



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

AIR DISTRIBUTION

Assembling kit - Version 3400 (15,5mm)

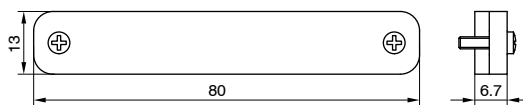
Coding: 3415.KV



Weight 3 g

Closing plate - Version 3400 (15,5mm)

Coding: 3415.00



Weight 25 g

Diaphragm plug - Version 3400 (15,5mm)

Coding: 3430.17



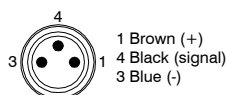
Weight 3 g

M8 connector with 3 wires cable (PUR Ø2,6mm 3x0,15mm²) - Version 3100 (10mm) and 3400 (15,5mm)

Coding: MCH[Ⓛ]

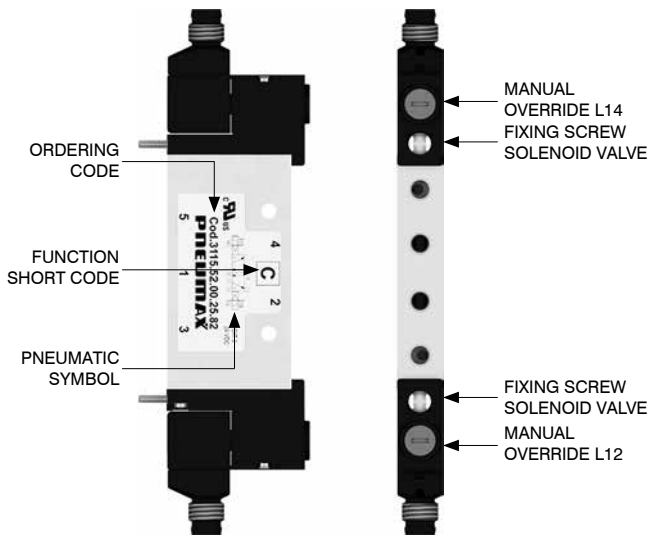


Connection 3 wires 3 PIN

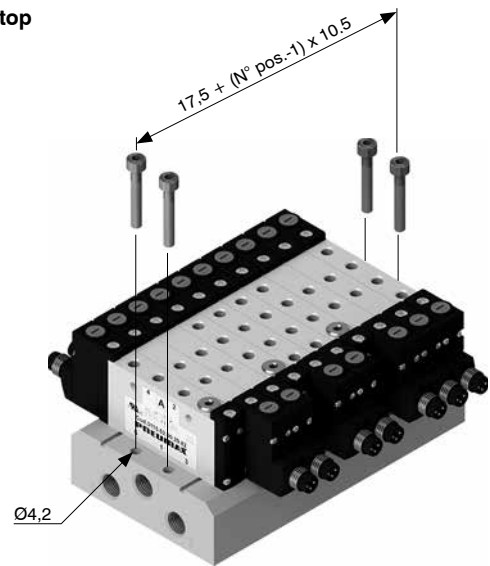


CABLE LENGTH
Ⓛ 1 = 2,5 meters
2 = 5 meters
3 = 10 meters

Solenoid valve description

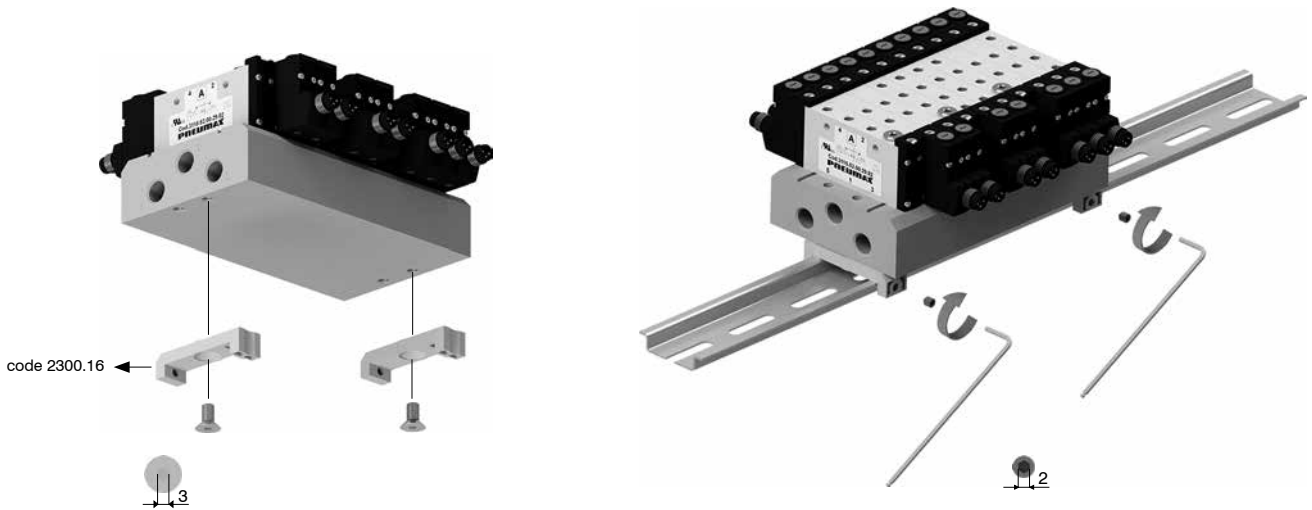


From the top

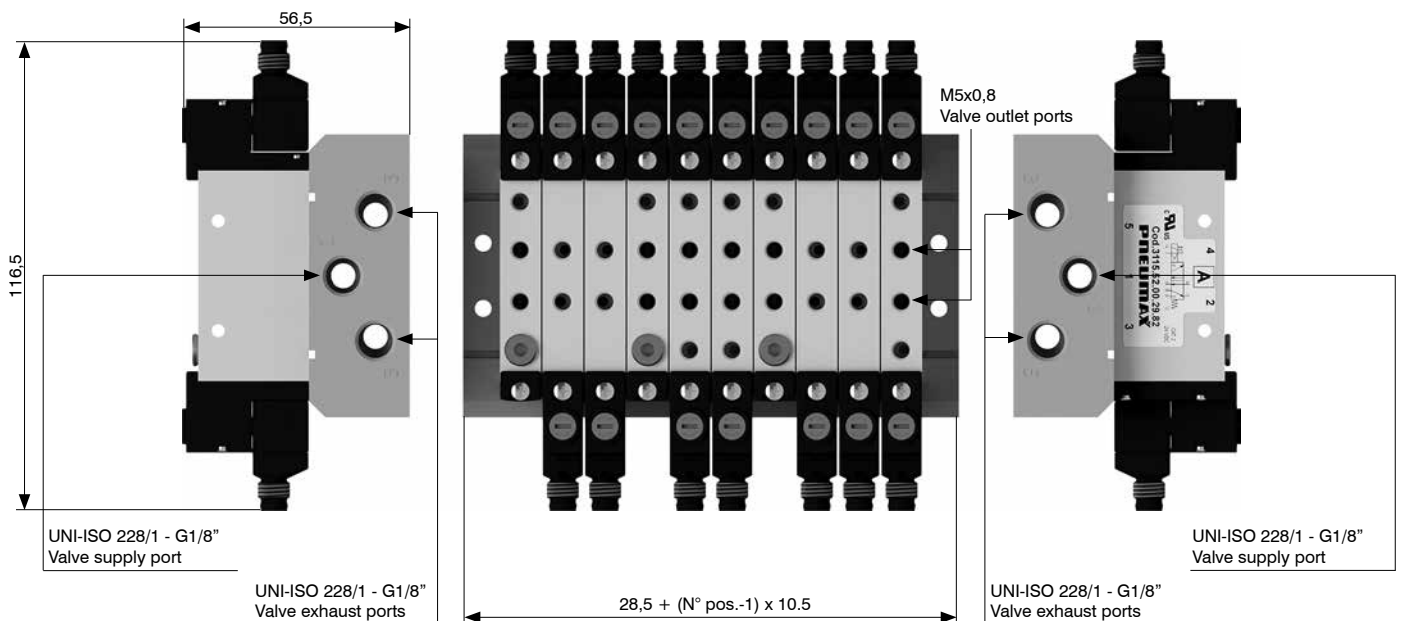


AIR DISTRIBUTION

DIN rail fixing

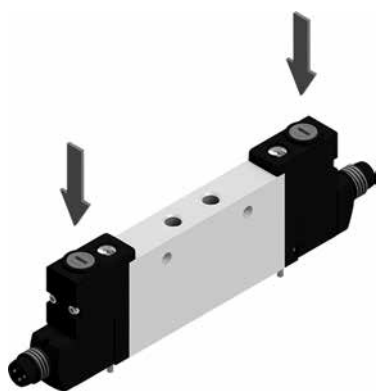


Supply ports and maximum possible size according to valves used

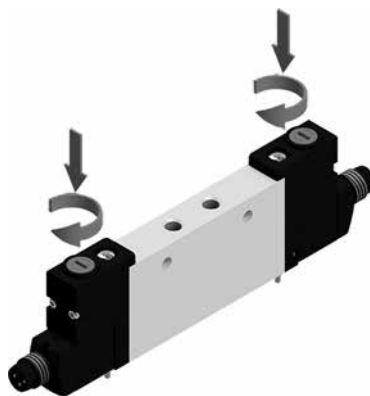




Manual override actuation



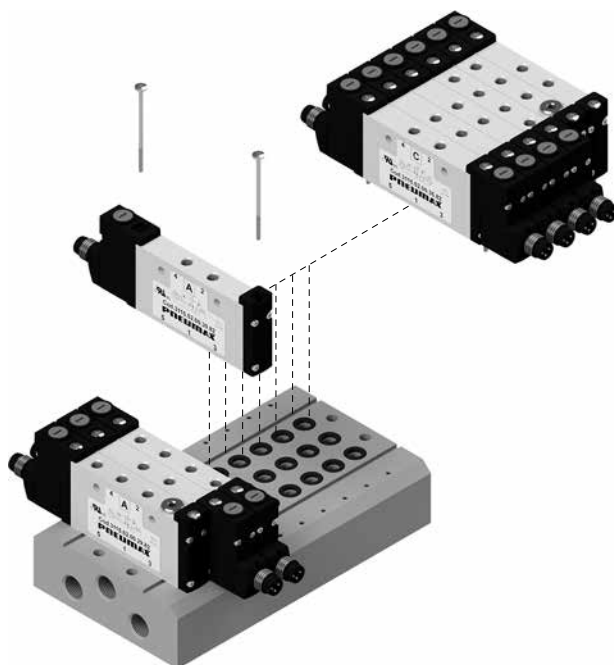
Instable function:
Push to actuate
(when released it moves back
to the original position)



Bistable function:
Push and turn to get the
bistable function

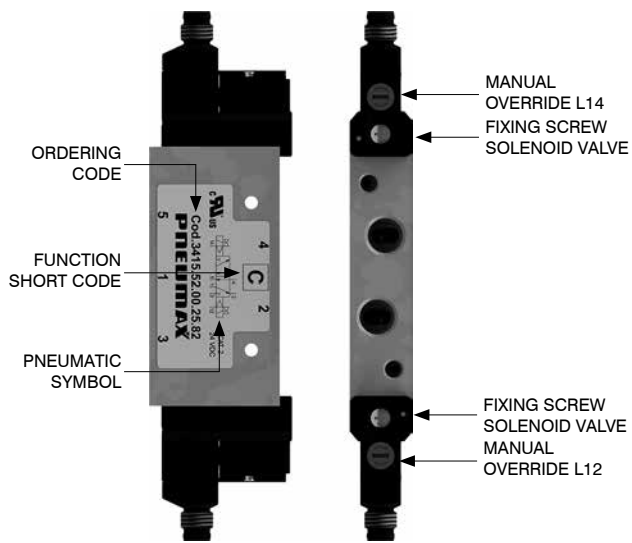
Note: we recommend the manual override is returned to it's original position when not in use

Solenoid valves installation

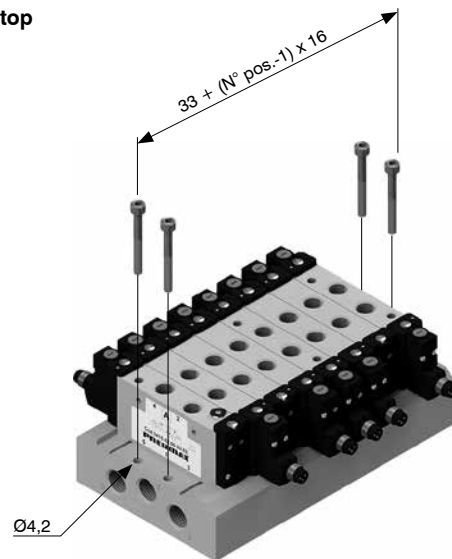


Max. torque moment: 0,2 Nm

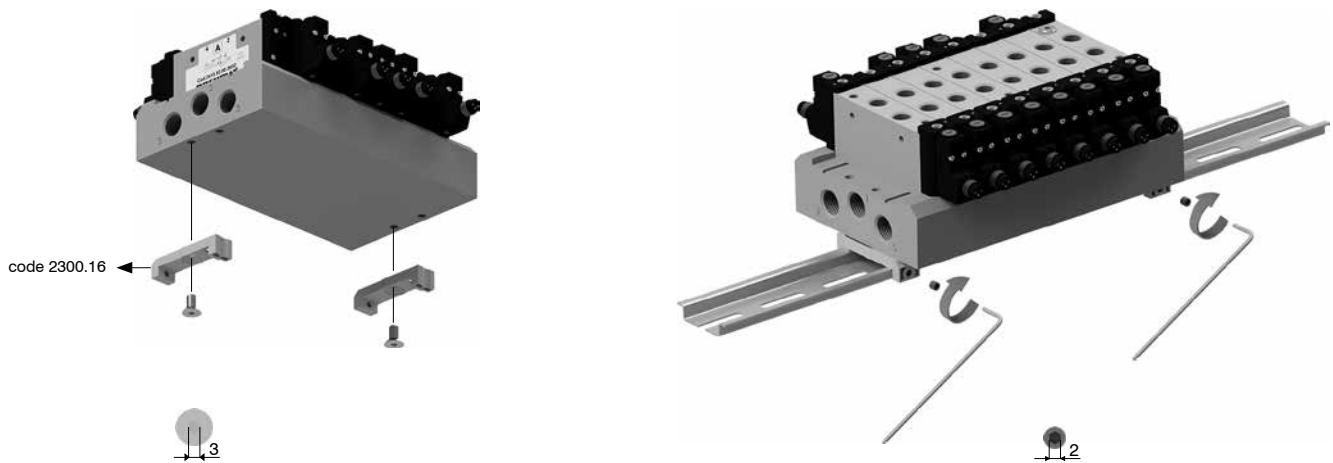
Solenoid valve description



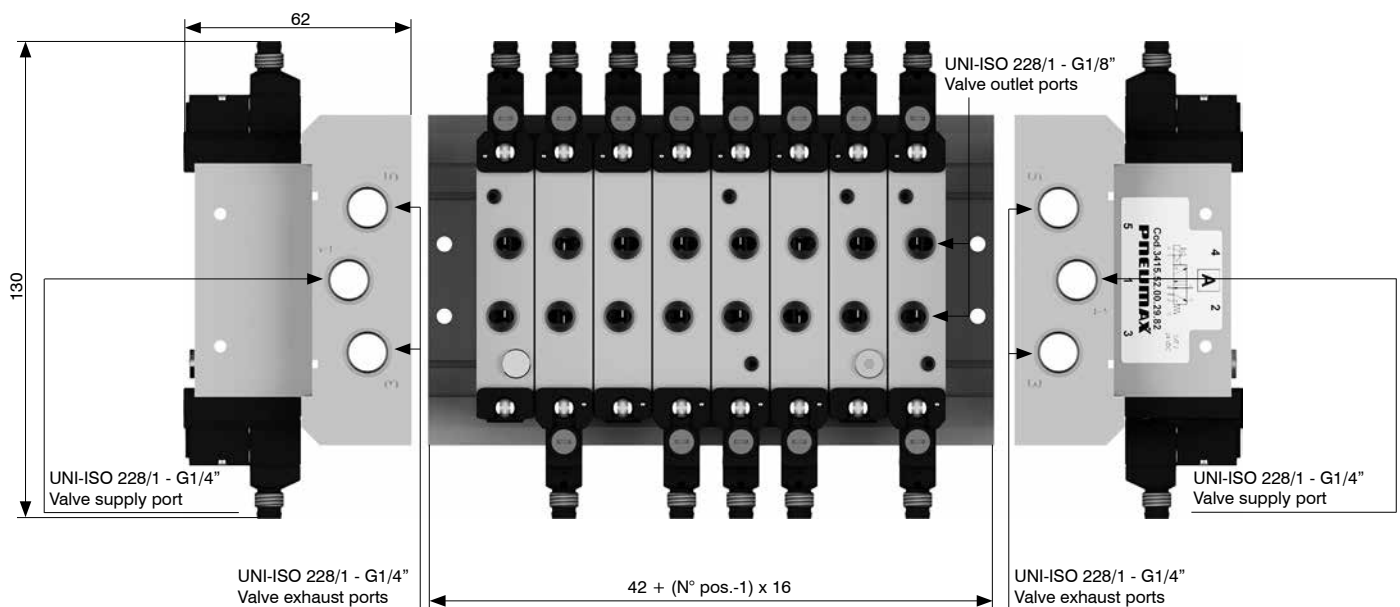
From the top



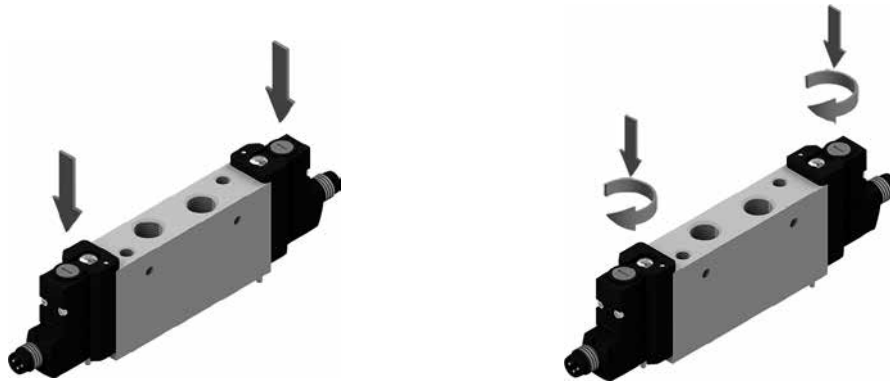
DIN rail fixing



Supply ports and maximum possible size according to valves used



Manual override actuation

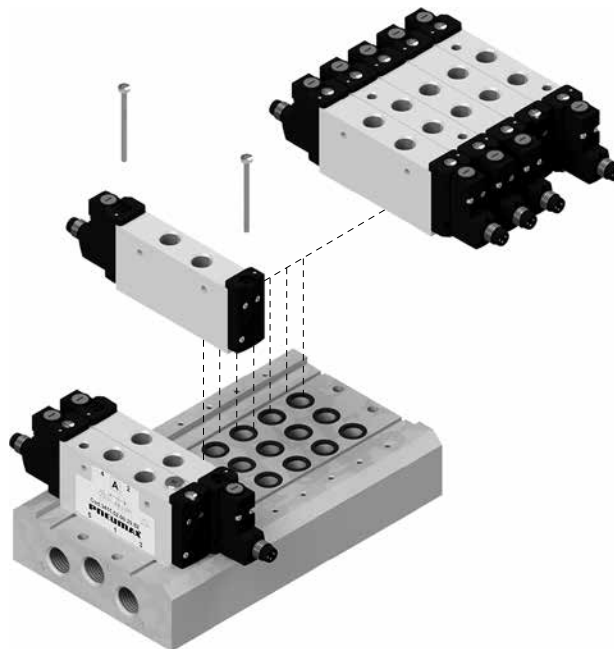


Instable function:
Push to actuate
(when released it moves back
to the original position)

Bistable function:
Push and turn to get the
bistable function

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

Solenoid valves installation



Max. torque moment: 0,2 Nm

MANIFOLD version



General

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

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

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

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

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

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

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

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

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

Main characteristics

10 and 15,5 mm size.

Multi-position sub-bases in different lengths.

Integrated and optimized electrical connection as standard.

Functions

S.V. 5/2 Monostable Solenoid-Spring

S.V. 5/2 Monostable Solenoid-Differential

S.V. 5/2 Bistable Solenoid-Solenoid

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

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

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

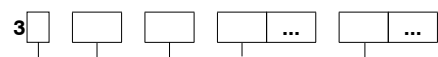
S.V. 2x3/2 N.C.-N.O. Solenoid-Solenoid

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



Configurator

AIR DISTRIBUTION



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

Power supply
A: Self feeding
E: External feeding

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

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

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

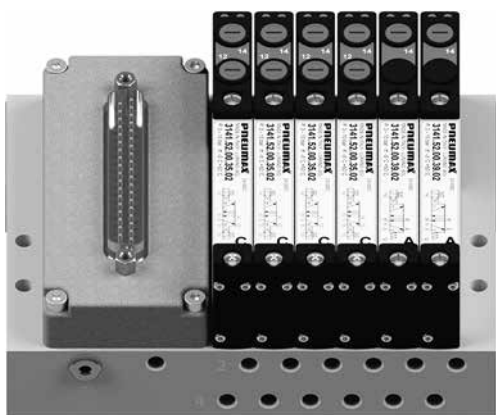
Additional modules (Optional)
P12: M12 additional power supply module

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

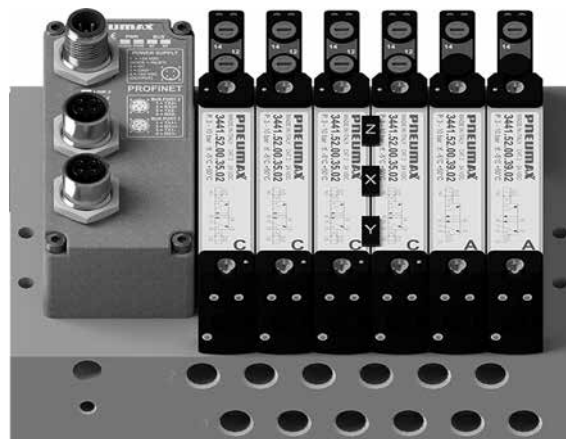
Check the number of available solenoid valves seats

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

Configuration examples



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



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

AIR DISTRIBUTION



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



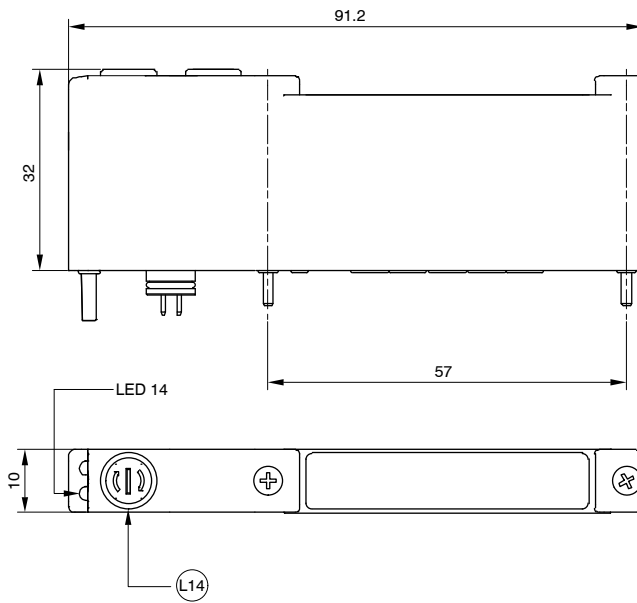
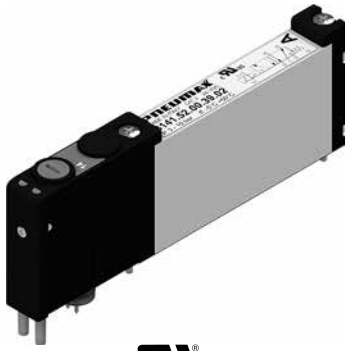
Example shown : 34AC4D8D8M12CBIITT
Self feeding manifold with serial node, M8 input module, M12 output module, solenoid valves.



Solenoid valves manifold
Series 3000 - MANIFOLD - Version 3100 (10mm)

AIR DISTRIBUTION

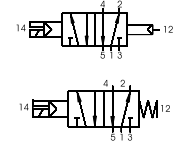
Solenoid-Spring / Solenoid-Differential - Version 3100 (10mm)



L14 = Manual over ride - side 14

Coding: 3141.52.00. **F** **C**

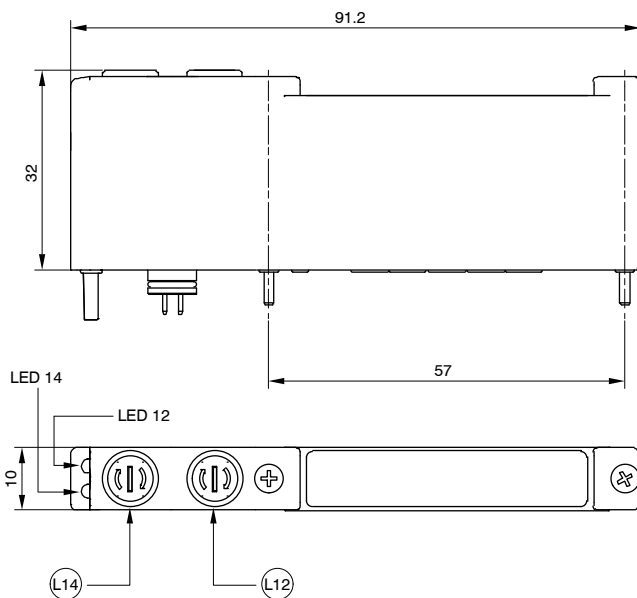
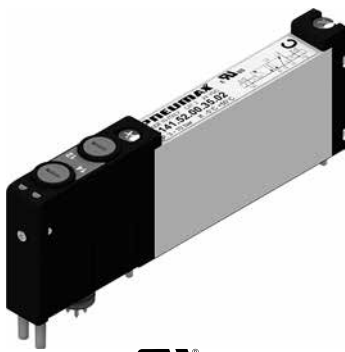
FUNCTION	
F	36 = Solenoid-Differential
	39 = Solenoid-Spring
CONNECTION	
C	02 = 24VDC



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

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

Solenoid-Solenoid - Version 3100 (10mm)



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

Coding: 3141.52.00.35 **C**

C CONNECTION	
	02 = 24VDC



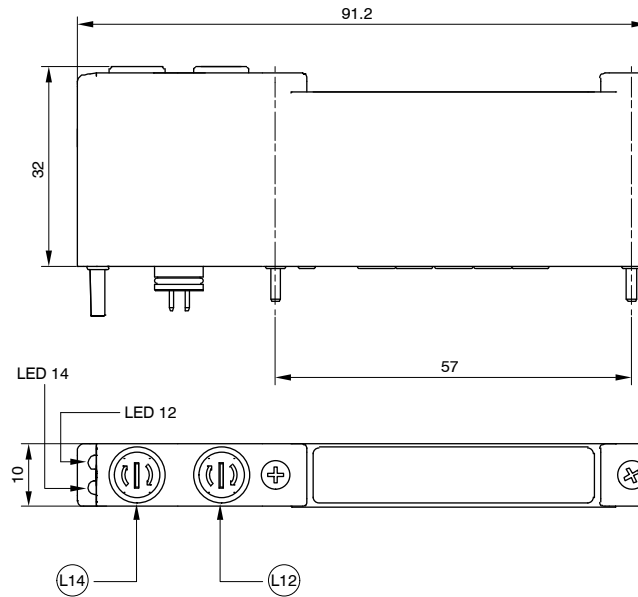
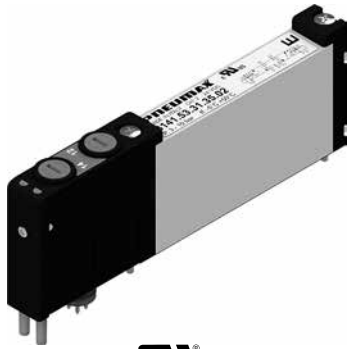
SHORT FUNCTION CODE "C"

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

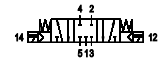
Solenoid-Solenoid 5/3 (Closed centres) - Version 3100 (10mm)

Coding: 3141.53.31.35.Ⓒ

Ⓒ CONNECTION
02 = 24VDC



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



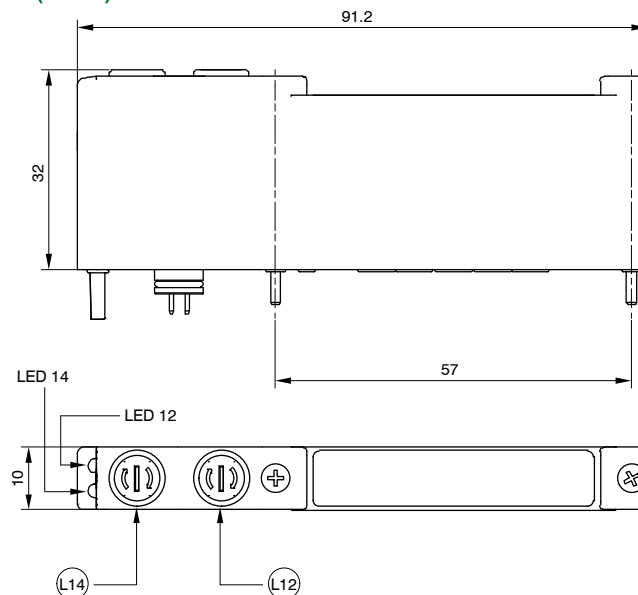
SHORT FUNCTION CODE "E"

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

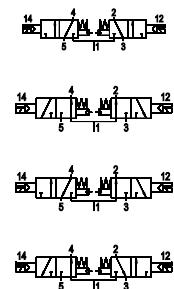
Solenoid-Solenoid 2x3/2 - Version 3100 (10mm)

Coding: 3141.62.Ⓕ.35.Ⓒ

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



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

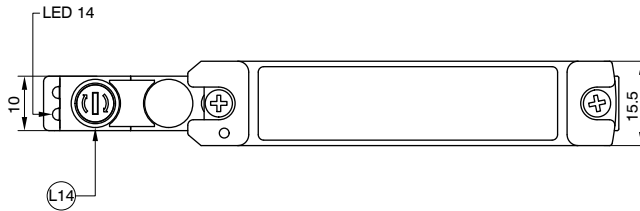
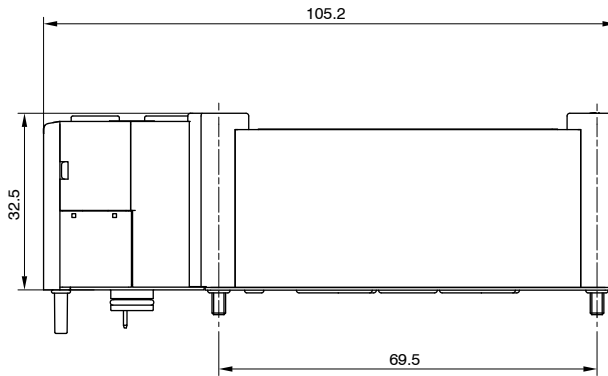
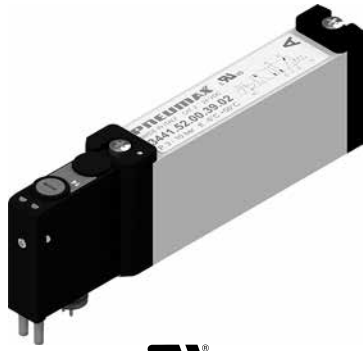


SHORT FUNCTION CODE:
N.C.-N.C. (5/3 Open centres) = "F"
N.O.-N.O. (5/3 Pressured centres) = "G"
N.C.-N.O. = "H"
N.O.-N.C. = "I"

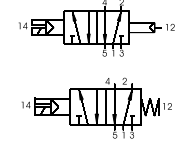
Operational characteristics		*Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001*						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (l/min)	Response time according to ISO 12238, activation time (ms)	Response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

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

Coding: 3441.52.00.ⒻⒸ



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



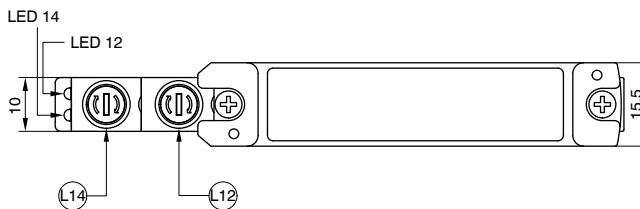
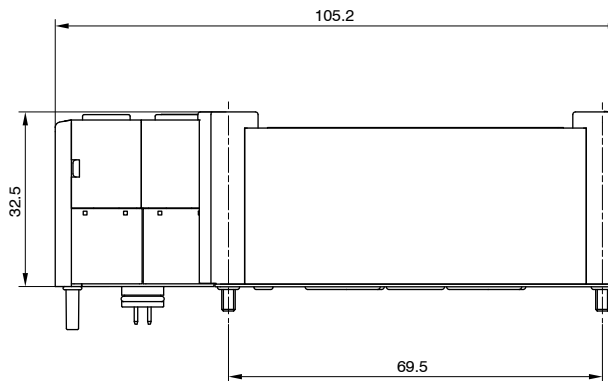
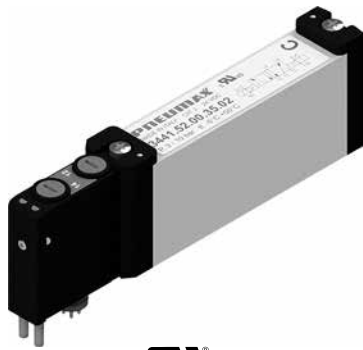
L14 = Manual over ride - side 14

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

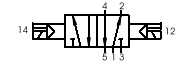
Operational characteristics		"Operating time of pneumatic directional control valves or moving parts, logic devices were measured in accordance to ISO 12238:2001"						
Coding example	Fluid	Flow rate at 6 bar with $\Delta p=1$ (Nl/min)	Response time according to ISO 12238, activation time (ms)	Response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

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

Coding: 3441.52.00.35 Ⓒ



CONNECTION	
02	= 24VDC



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

SHORT FUNCTION CODE "C"

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



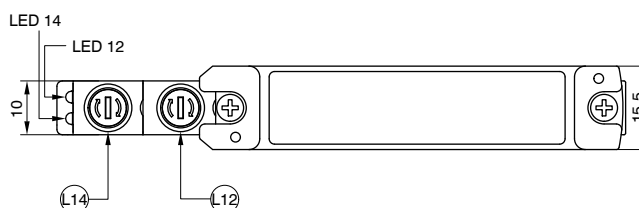
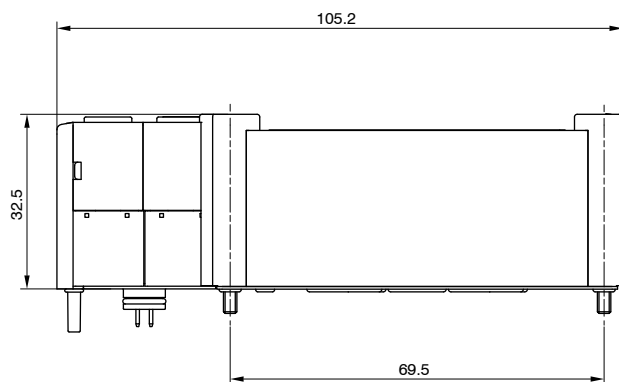
Solenoid-Solenoid 5/3 (Closed centres) - Version 3400 (15,5mm)

Coding: 3441.53.31.35.Ⓒ

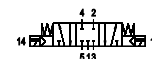
Ⓒ CONNECTION
02 = 24VDC



C **RU** US



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



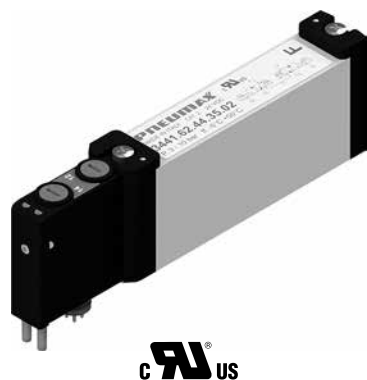
SHORT FUNCTION CODE "E"

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

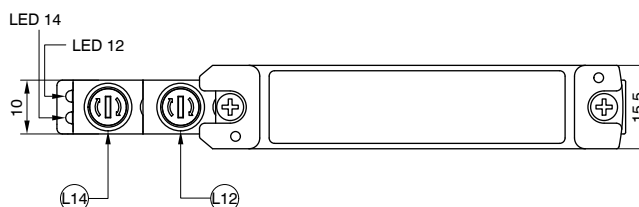
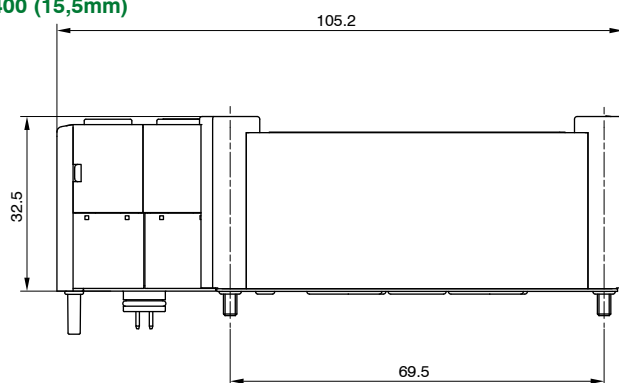
Solenoid-Solenoid 2x3/2 - Version 3400 (15,5mm)

Coding: 3441.62.Ⓕ.35.Ⓒ

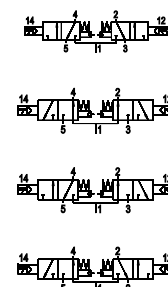
FUNCTION
44 = N.C.-N.C. (5/3 Open centres)
Ⓕ 45 = N.C.-N.O.
55 = N.O.-N.O. (5/3 Pressured centres)
54 = N.O.-N.C.
CONNECTION
02 = 24VDC



C **RU** US



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



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

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

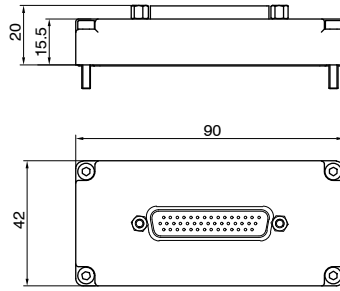


Solenoid valves manifold

Series 3000 - MANIFOLD - Multipoint connections

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

Coding: 3140.00.Ⓢ

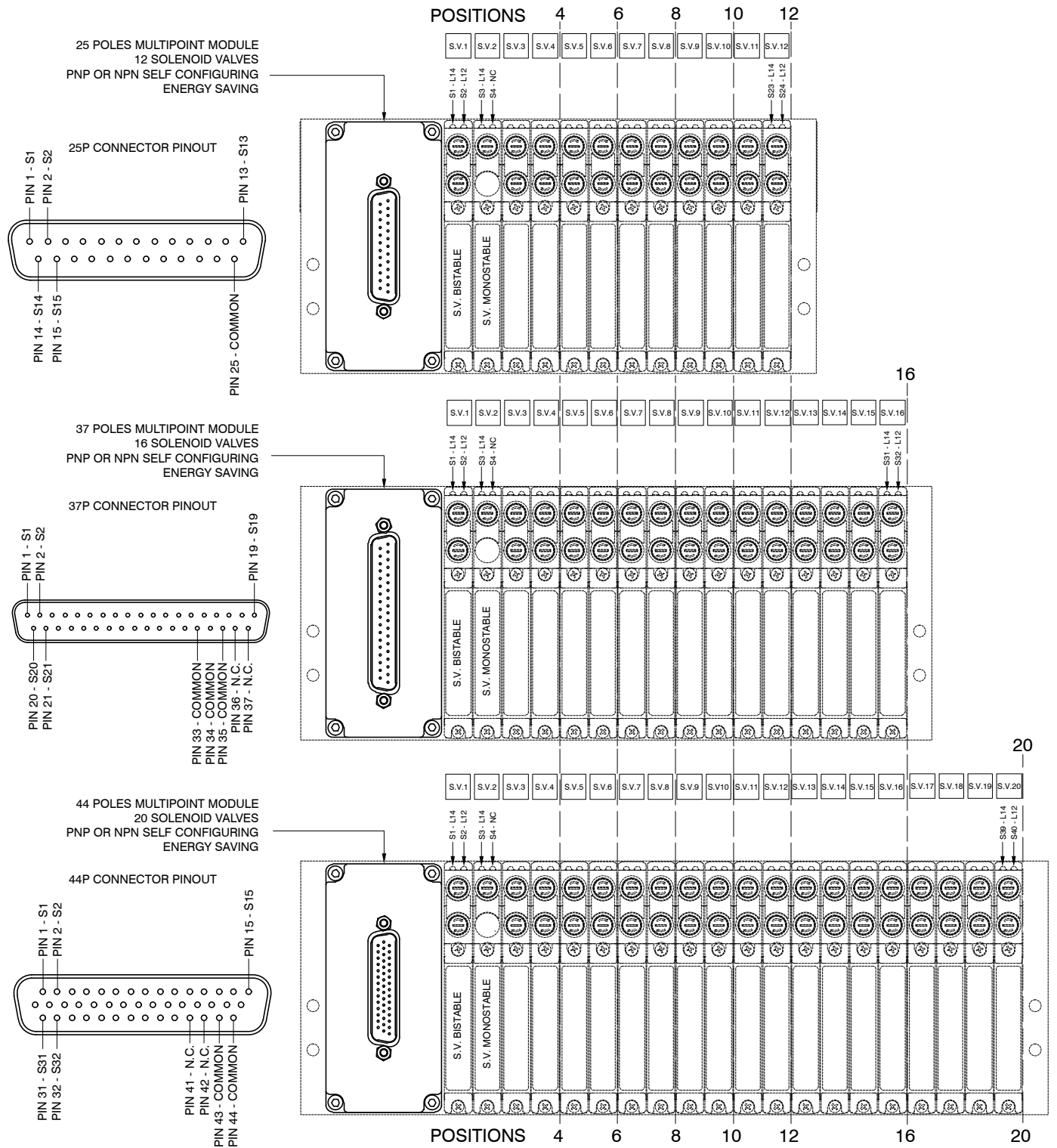


ELECTRICAL CONNECTION	
Ⓢ	25P = Connector 25 poles
	37P = Connector 37 poles
	44P = Connector 44 poles

AIR DISTRIBUTION

Operational characteristics

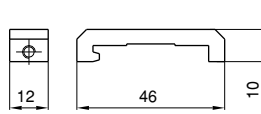
Coding example	3140.00.25P (25 poles)	3140.00.37P (37 poles)	3140.00.44P (44 poles)
Temperature °C	-5 ... +50		
Weight (g)	47,4	51,3	49,1



► DIN rail adapter - Version 3100 (10mm)

Coding: 3100.16

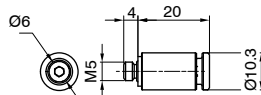
Weight 12 g



► Fitting M5 Ø6 - Version 3100 (10mm)

Coding: RDR560

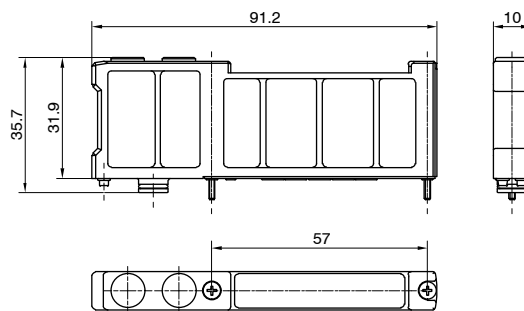
Weight 7 g



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

Coding: 3140.00

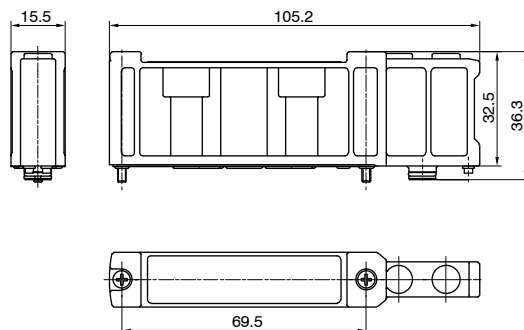
Weight 21 g



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

Coding: 3440.00

Weight 38 g



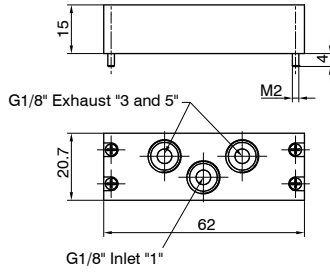


Inlet/Exhaust module - Version 3100 (10mm)

Coding: 3140.10



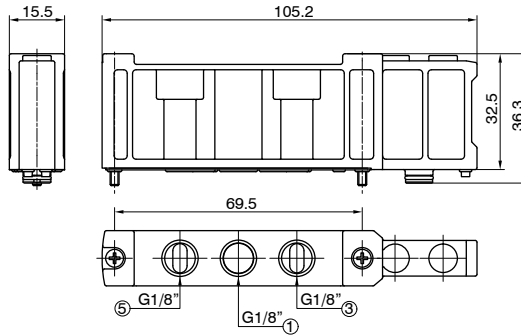
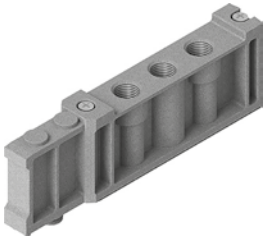
Weight 50 g



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

Coding: 3440.10

Weight 37 g



Diaphragm plug - Version 3100 (10mm)

Coding: 3130.17

Weight 1,5 g



Diaphragm plug - Version 3400 (15,5mm)

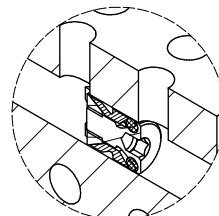
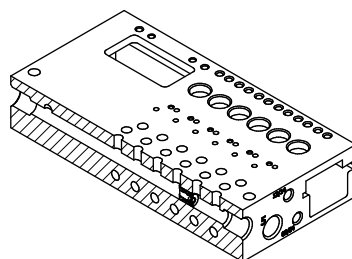
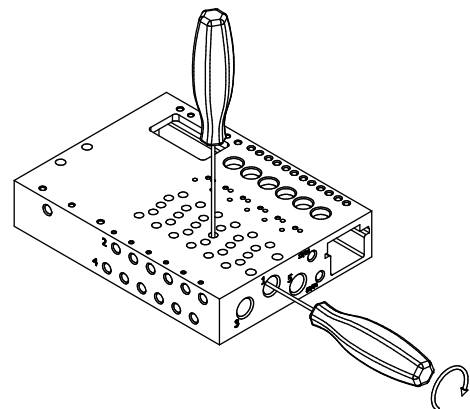
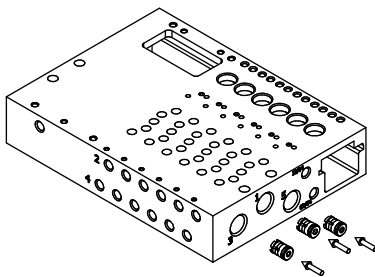
Coding: 3430.17

Weight 3 g



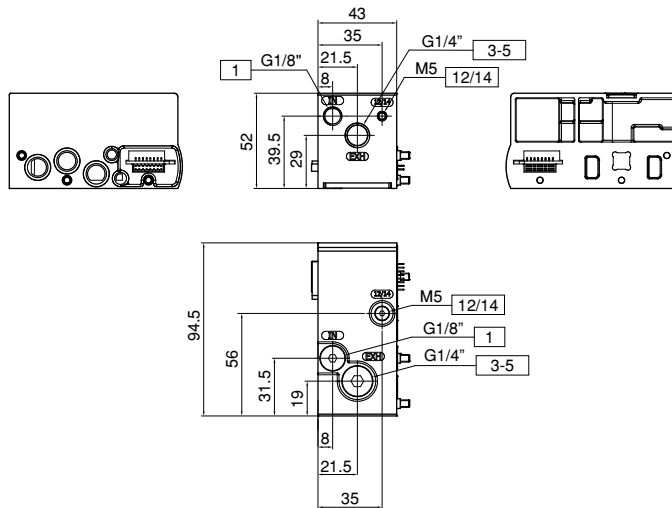
Diaphragm plug installation

Diaphragm plug fixing



► **Module adapter kit - Version 3100 (10mm)**

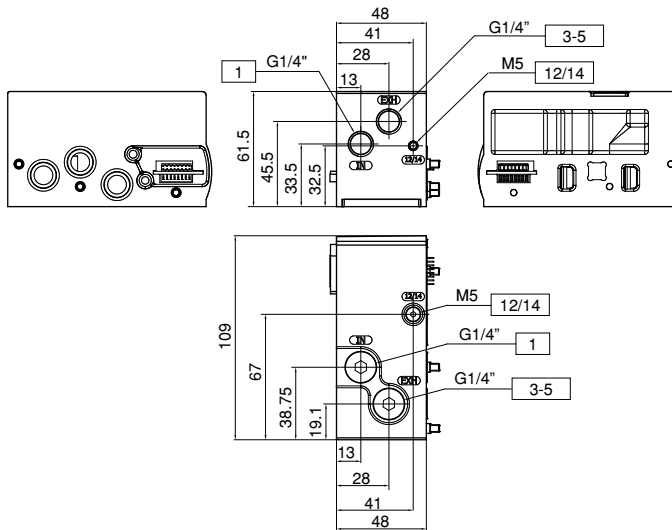
Coding: 3100.KA.▼



VERSION	
▼	02 = External feeding
	12 = Self feeding

► **Module adapter kit - Version 3400 (15,5mm)**

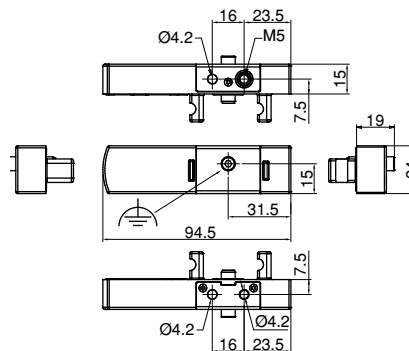
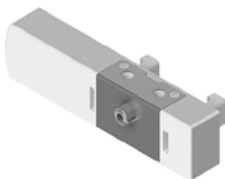
Coding: 3400.KA.▼



VERSION	
▼	02 = External feeding
	12 = Self feeding

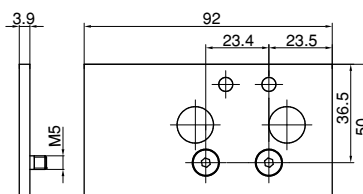
► **Left endplate kit - Version 3100 (10mm) and 3400 (15,5mm)**

Coding: 3100.KT.00



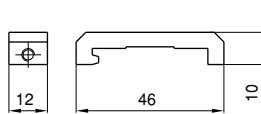
► **Offset compensation plate - Version 3400 (15,5mm)**

Coding: 3400.P0



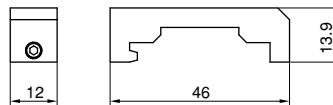
► DIN rail adapter - Version 3400 (15,5mm)

Coding: 3400.16



► DIN rail extension adapter - Version 3400 (15,5mm)

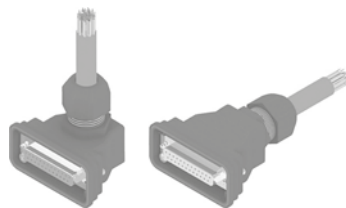
Coding: 3400.16P



Note: For use if an additional DIN rail mount is required, assembled on a single I/O module.

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

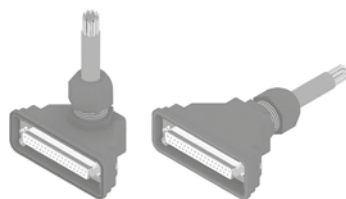
Coding: 2300.25. **L** **C**



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

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

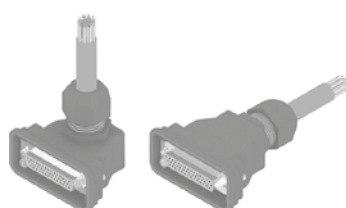
Coding: 2300.37. **L** **C**



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

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

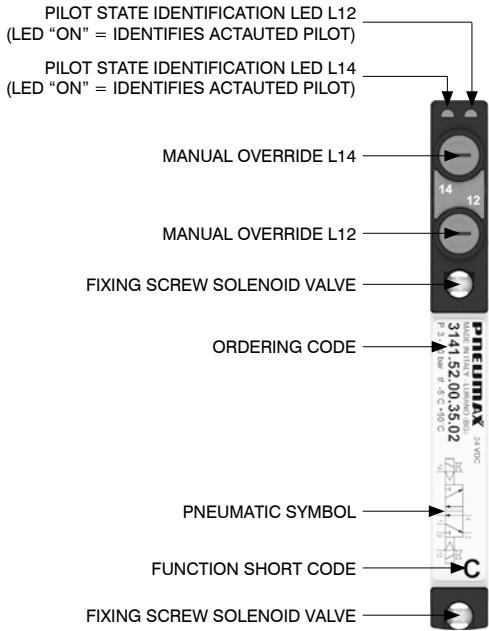
Coding: 2300.44. **L** **C**



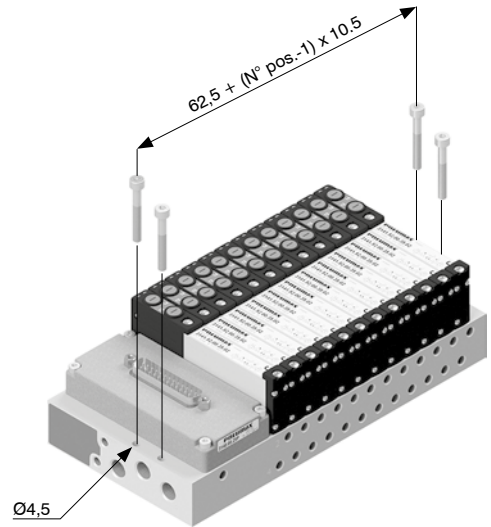
	CABLE LENGTH
L	03 = 3 meters
	05 = 5 meters
	10 = 10 meters
	CONNECTOR
C	10 = In line
	90 = 90° angle



Solenoid valve description

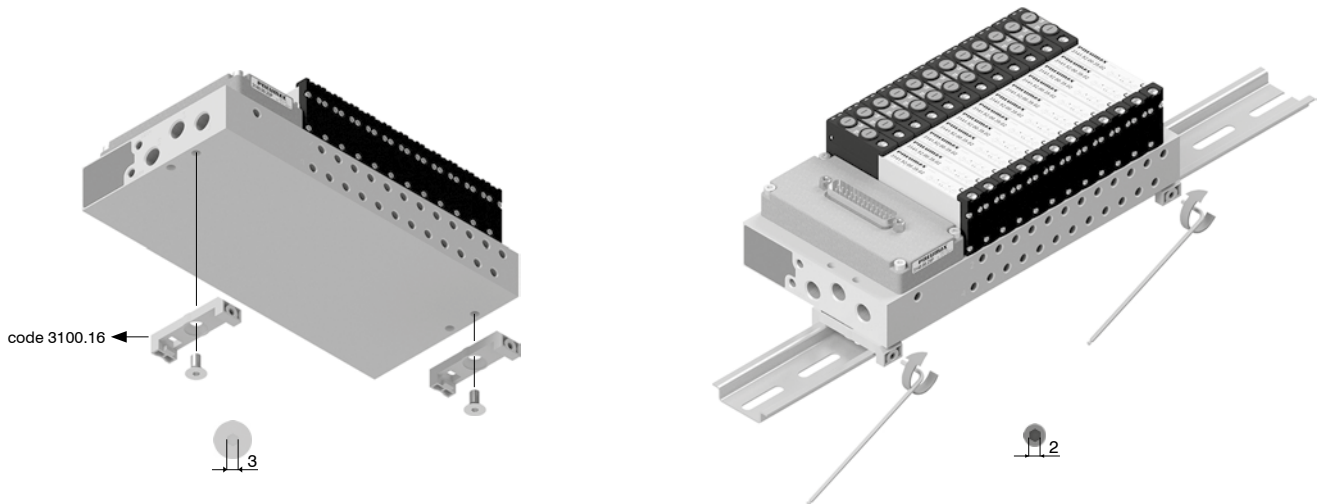


From the top



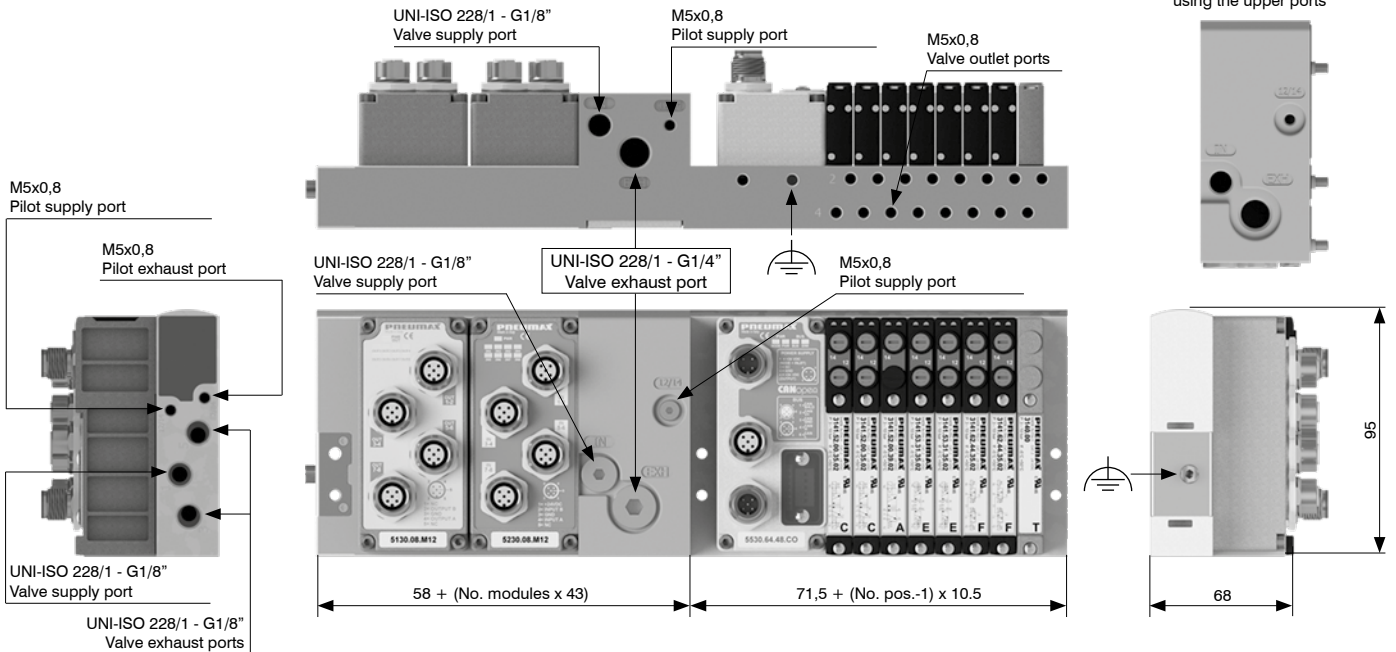
AIR DISTRIBUTION

DIN rail fixing



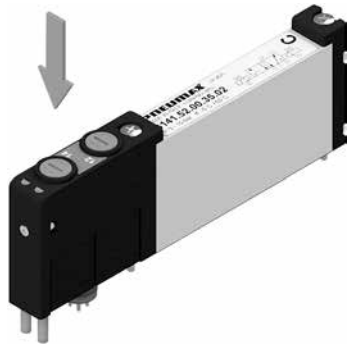
Supply ports and maximum possible size according to valves used

It is possible to supply/exhaust the manifold by removing the plugs and using the upper ports





Manual override actuation



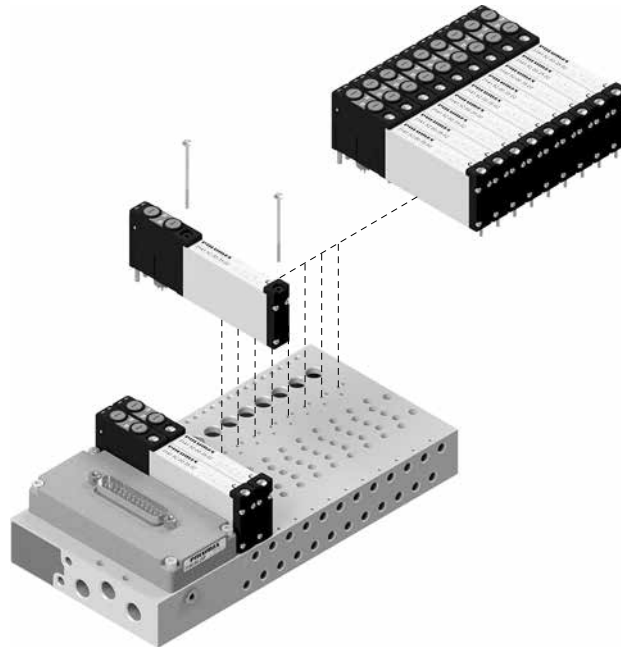
Unstable function:
Push to actuate
(when released it moves back to the original position)



Bistable function:
Push and turn to get the bistable function

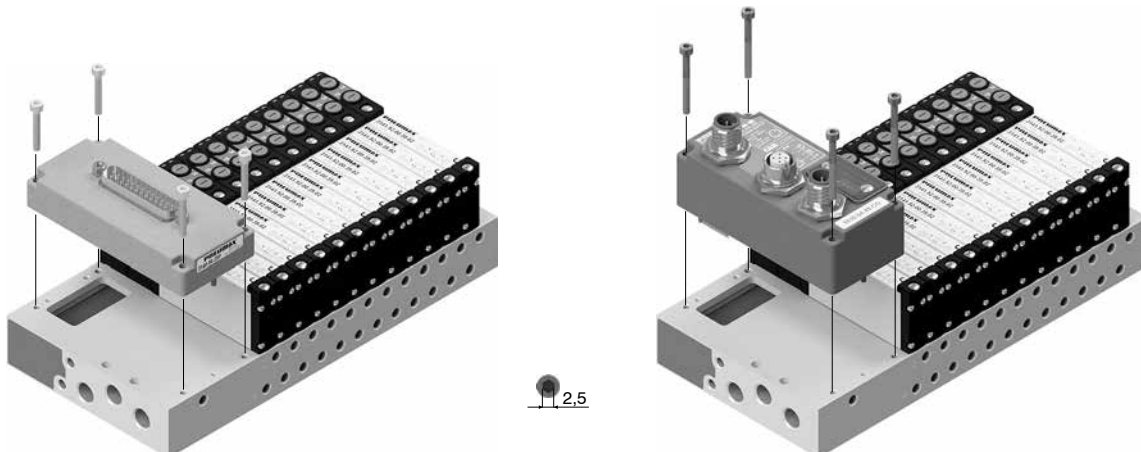
Note: we recommend the manual override is returned to its original position when not in use

Solenoid valves installation



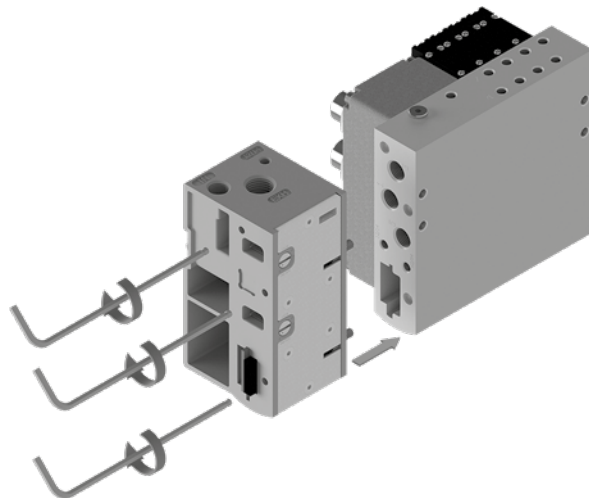
Max. torque moment: 0,2 Nm

Serial systems and multipoint system installation

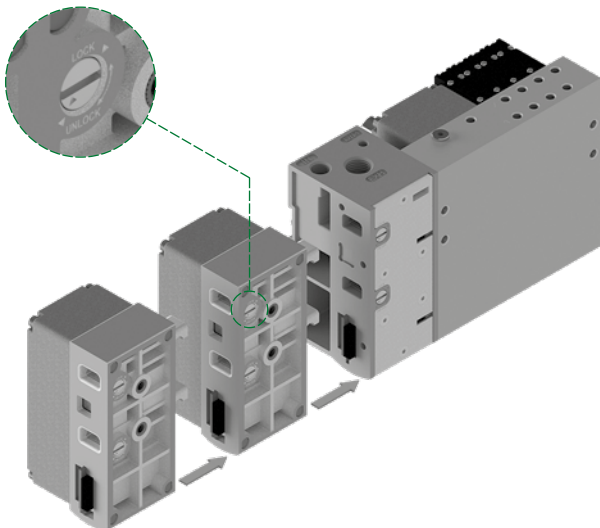


Max. torque moment: 0,5 Nm

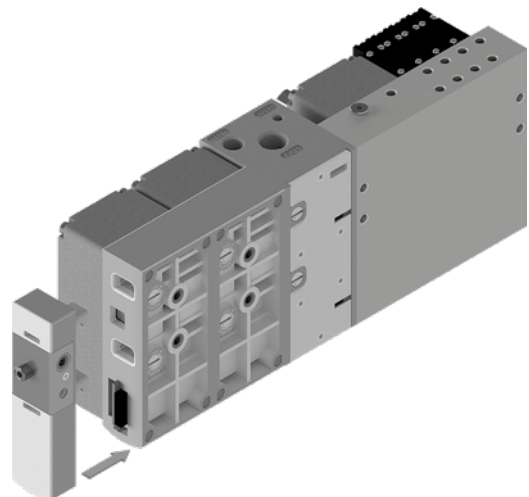
1. Fix the dedicated adapter (code 3100.KA.00) to the manifold.



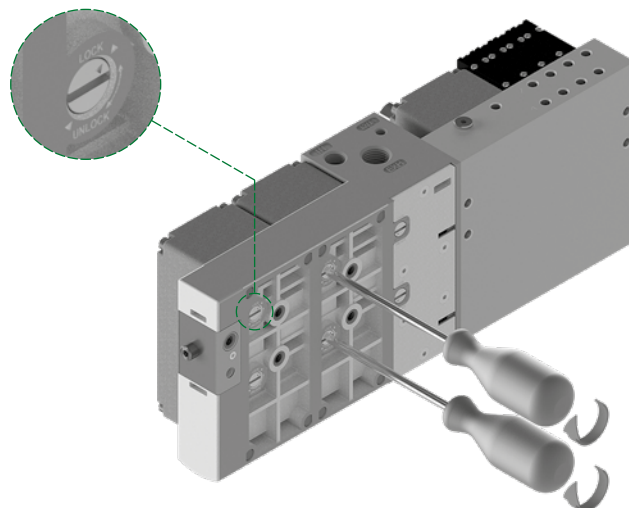
2. Assemble the required modules.



3. Complete the assembly with the 3100.KT.00 end plate kit.



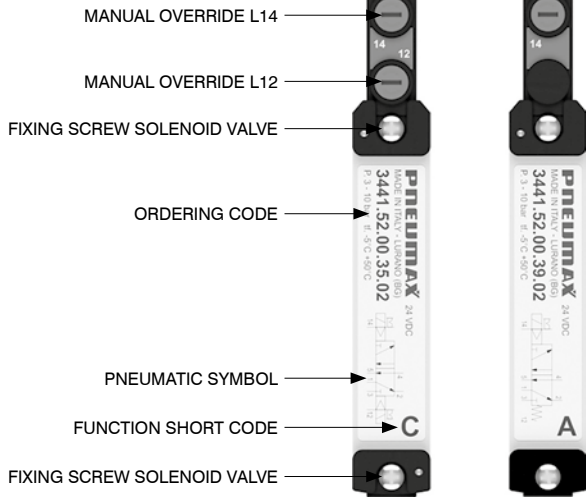
4. To lock: rotate anticlockwise (in the direction of the LOCK print on the case).
To unlock: rotate clockwise (in the direction of the UNLOCK print on the case).
The same procedure shall be used to add or remove any module.



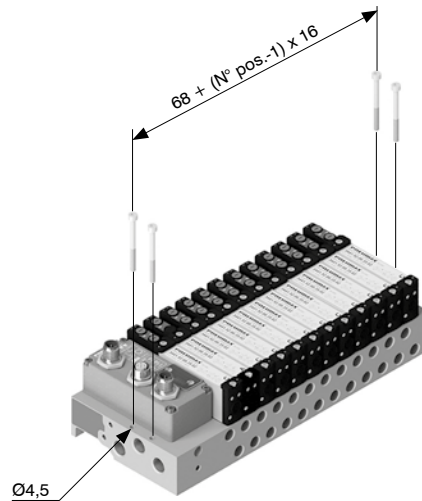


Solenoid valve description

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

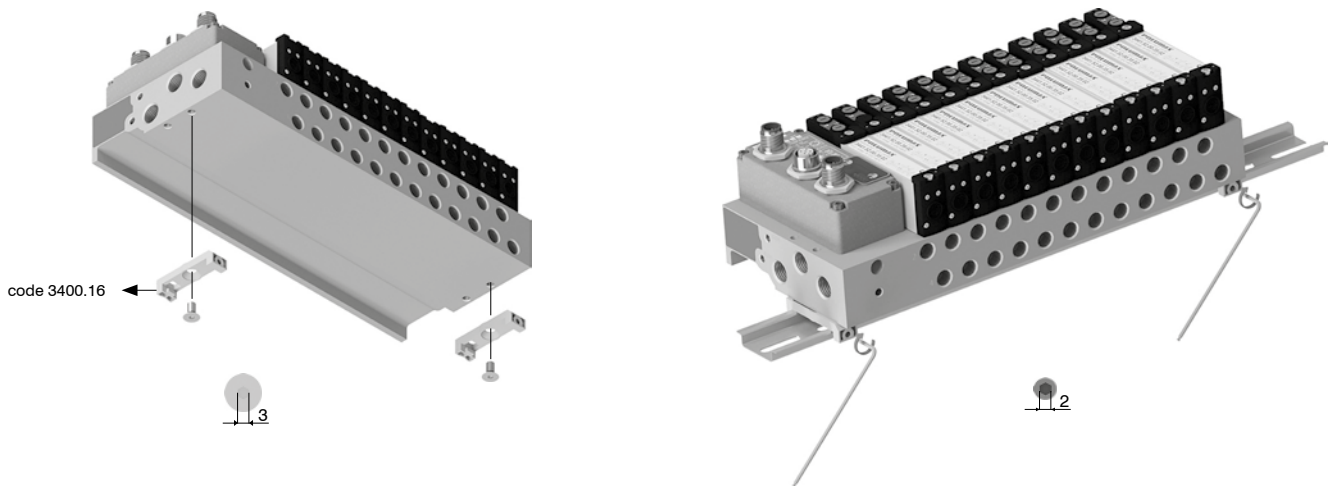


From the top



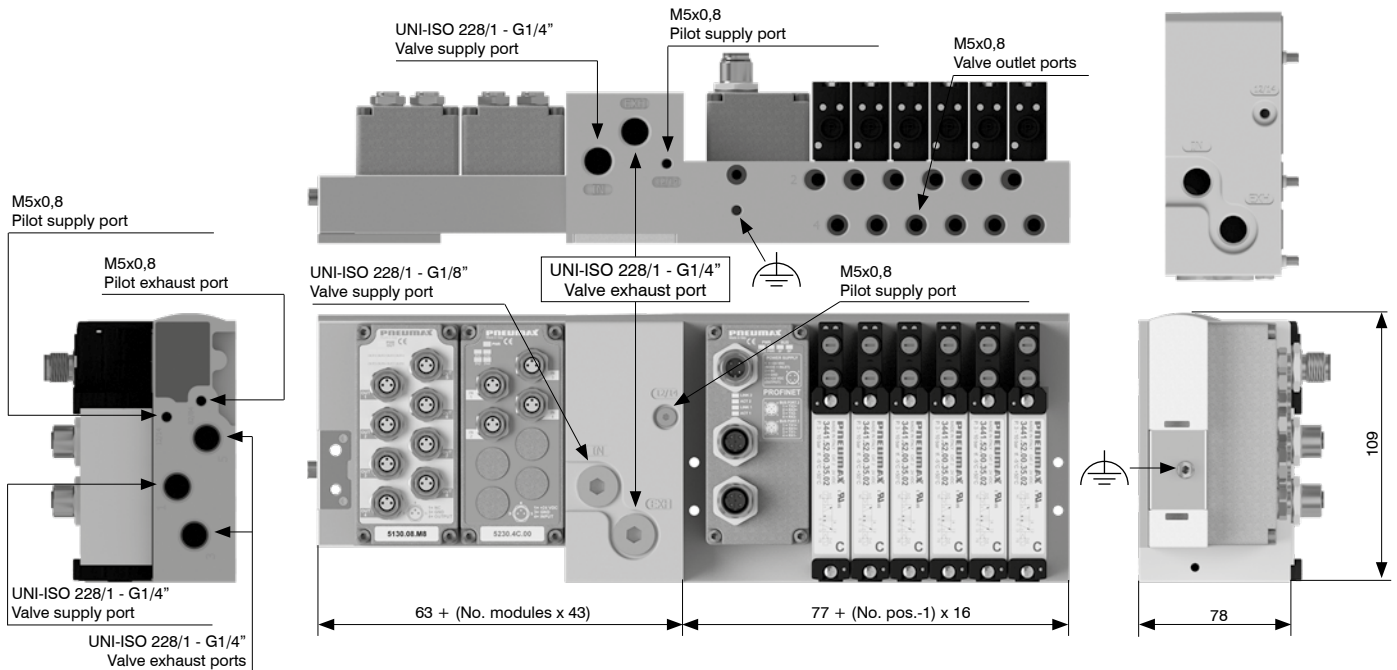
AIR DISTRIBUTION

DIN rail fixing



Supply ports and maximum possible size according to valves used

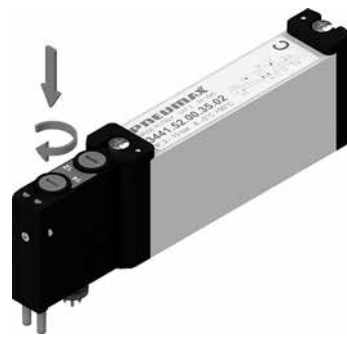
It is possible to supply/exhaust the manifold by removing the plugs and using the upper ports



Manual override actuation



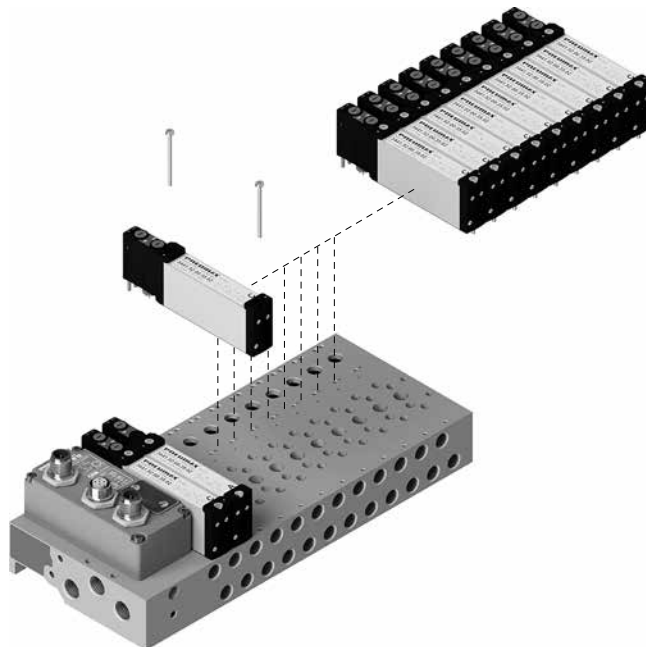
Instable function:
Push to actuate
(when released it moves back
to the original position)



Bistable function:
Push and turn to get the
bistable function

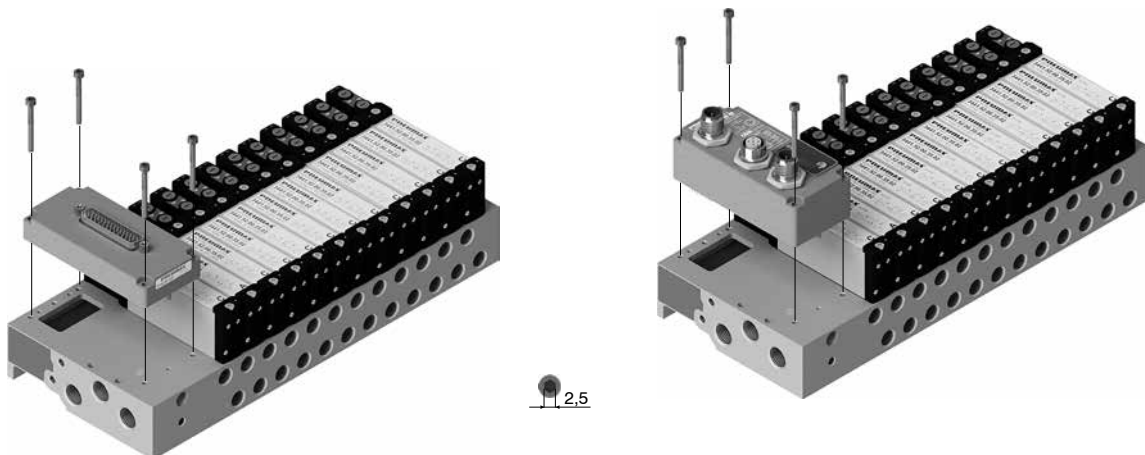
Note: we recommend the manual override is returned to it's original position when not in use

Solenoid valves installation



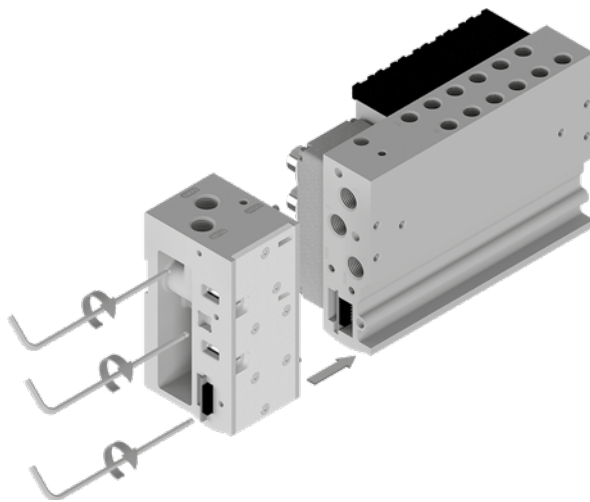
Max. torque moment: 0,2 Nm

Serial systems and multipoint system installation

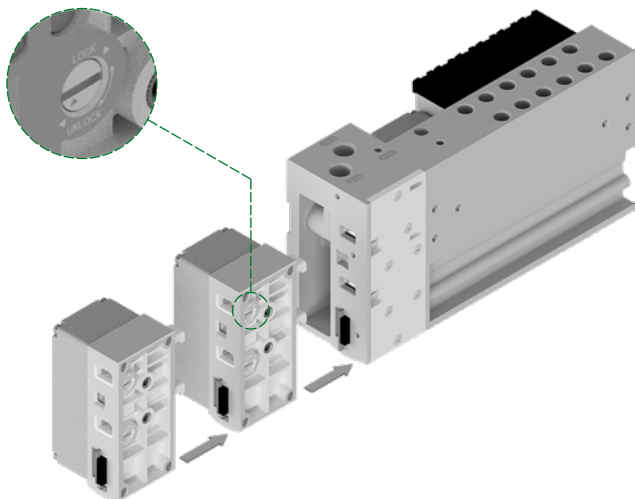


Max. torque moment: 0,5 Nm

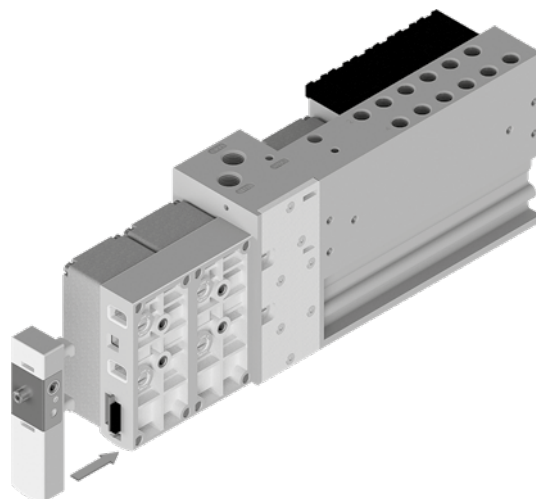
1. Fix the dedicated adapter (code 3100.KA.00) to the manifold.



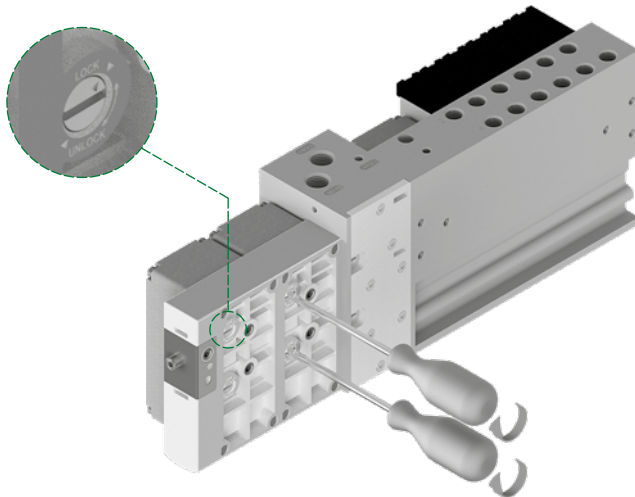
2. Assemble the required modules.



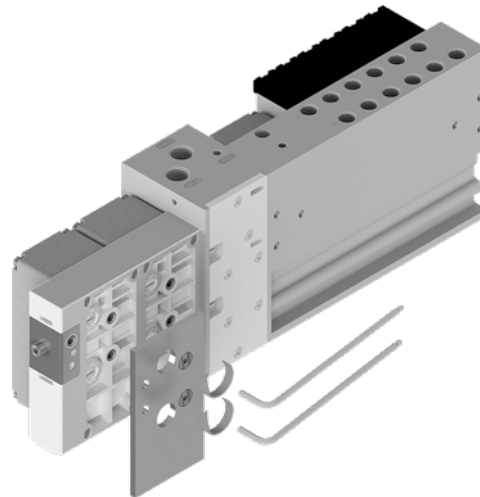
3. Complete the assembly with the 3100.KT.00 end plate kit.



4. To lock: rotate anticlockwise (in the direction of the LOCK print on the case).
To unlock: rotate clockwise (in the direction of the UNLOCK print on the case).
The same procedure shall be used to add or remove any module.



5. Fix the offset compensation plate 3400.P0 to the last single module





General - CANopen® protocol nodes

CANopen® nodes handle up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analogue outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analogue input modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration.

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

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

Transmission speed and address are set via DIP-switch.

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

CANopen® node versions differ by number of outputs directly allocated to solenoid valve positions.

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

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

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

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

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

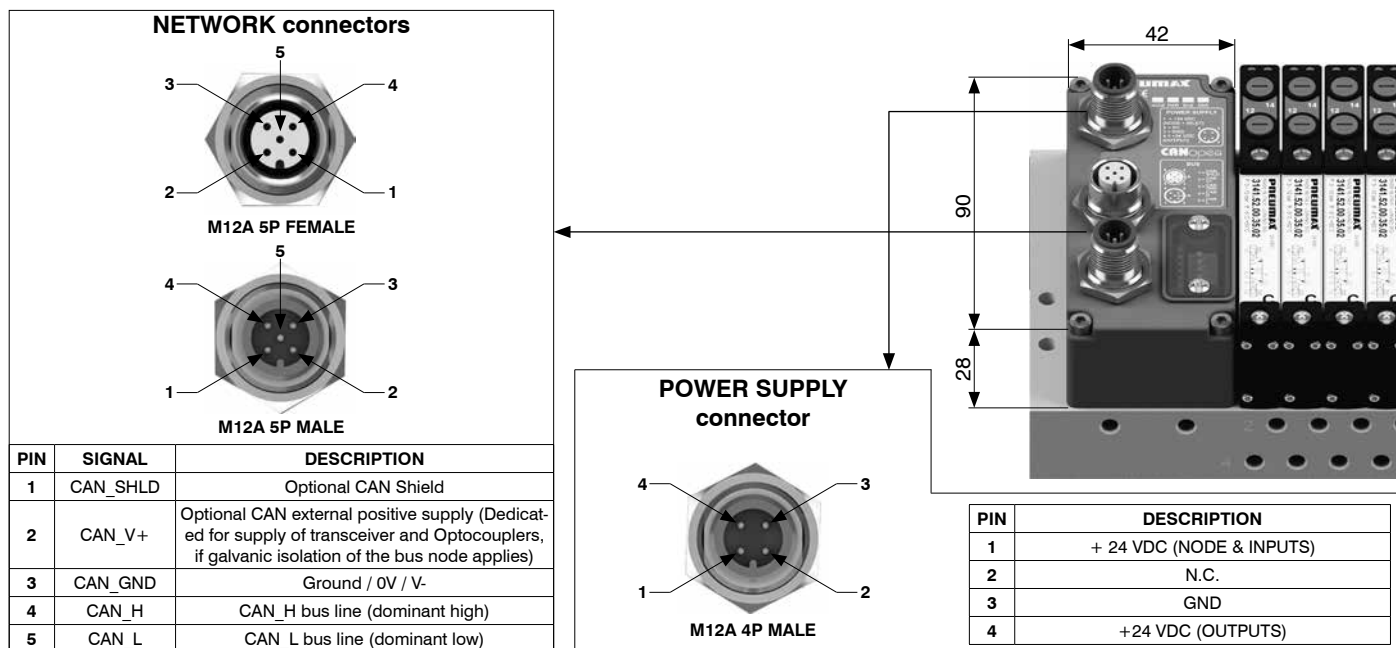
Ordering code

5530.64.32CO
5530.64.48CO



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

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

General - PROFIBUS DP protocol nodes

PROFIBUS DP nodes handle up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analogue outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analogue inputs modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration.

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

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

Network node address is set via DIP-switch.

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

PROFIBUS DP node versions differ by number of outputs directly allocated to solenoid valve positions.

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

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

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

5330.64.32PB part number is recommended in case increased flexibility is needed for digital outputs.

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

Ordering code

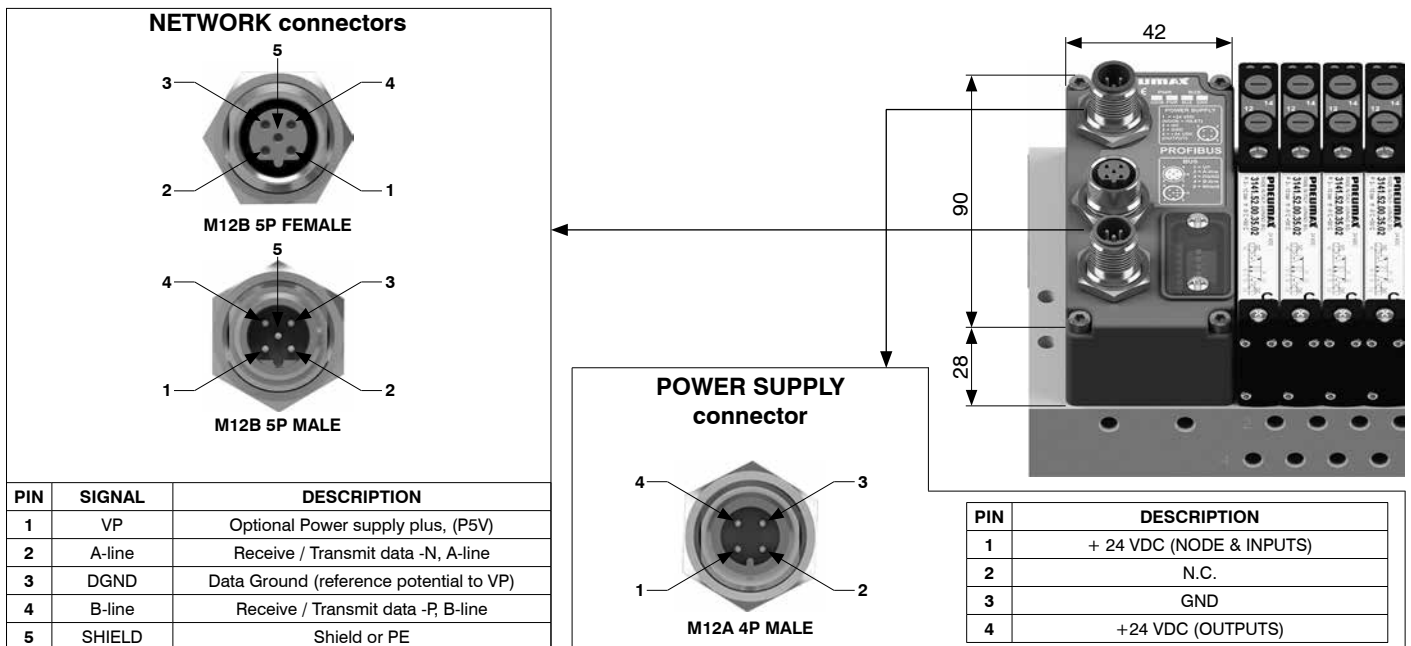
5330.64.32PB

5330.64.48PB



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

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



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

5730.128.48PN, 5730.128.48EC and 5730.128.48EI nodes handle up to 128 inputs and outputs, both divided into 16 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analogue outputs (e.g. 5130.2T.00). Connectable input types include digital inputs modules (e.g. 5230.08.M8), analogue inputs modules (e.g. 5230.2T.00) and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration.

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

The network connection is achieved via two circular female connectors (M12 4 pins, type D); these two circular connectors belong to two separate communication ports.

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

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

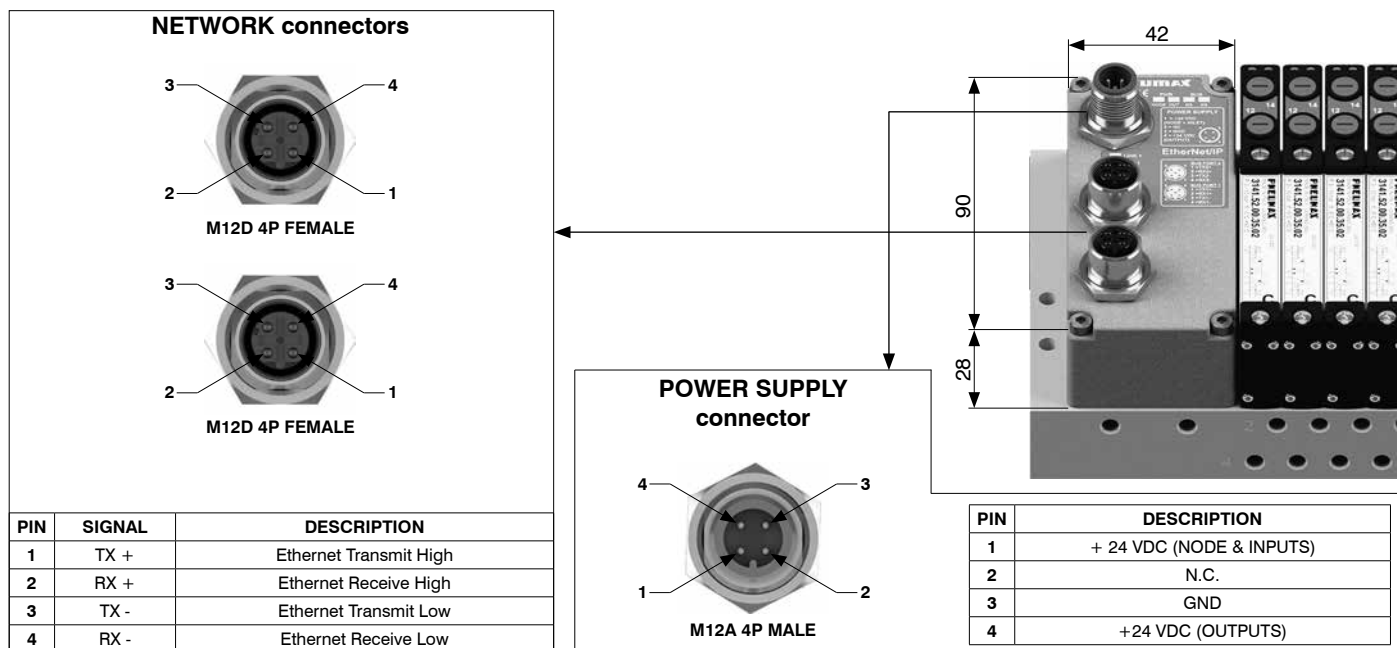
Ordering code

- 5730.128.48EI
- 5730.128.48EC
- 5730.128.48PN



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

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

General - IO-Link protocol interfaces

IO-Link interfaces handle up to 64 inputs and outputs, both divided into 8 bytes. Output typologies include solenoid valves, digital outputs (e.g. 5130.08.M8) and analogue outputs (e.g. 5130.2T.00). Connectable inputs typologies include digital inputs modules (e.g. 5230.08.M8), analogue inputs modules (e.g. 5230.2T.00), and Pt100 inputs modules (e.g. 5230.4P.02). Optional modules can be connected to the manifold in any order and configuration.

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

IO-Link interface versions differ by number of outputs directly allocated to solenoid valve positions.

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

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

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

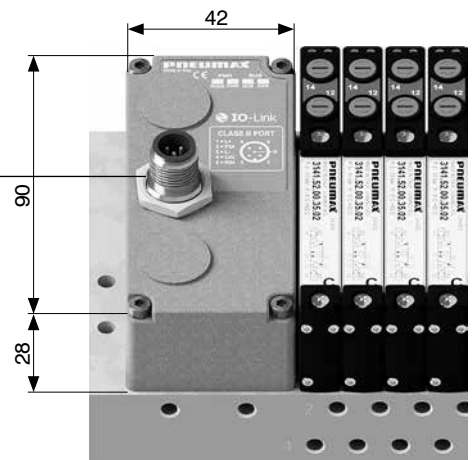
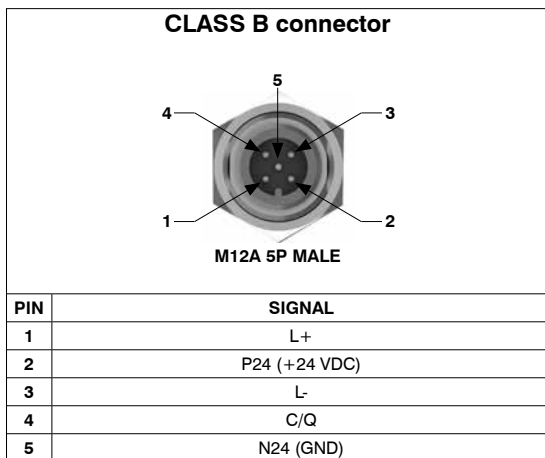
Ordering code

5830.64.32IK
5830.64.48IK



AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout



Technical characteristics

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



General - 8 M8 digital inputs module kit

M8 digital inputs module provides 8 M8, 3 pins, female connectors.

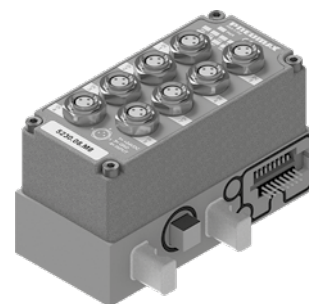
Inputs have PNP logic, 24VDC ± 10%.

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

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

Ordering code

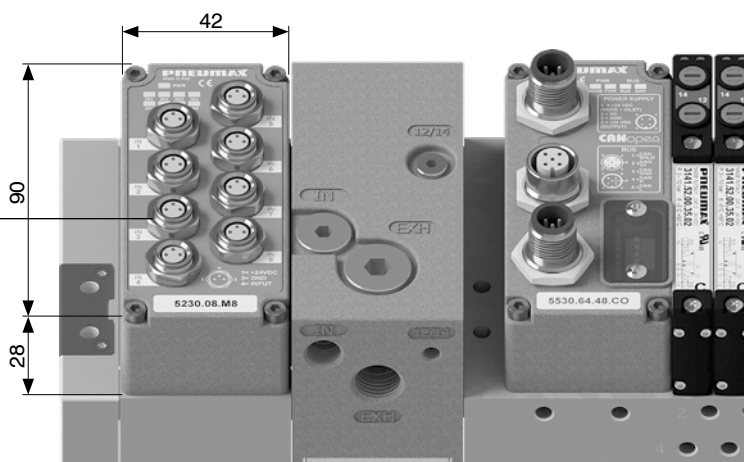
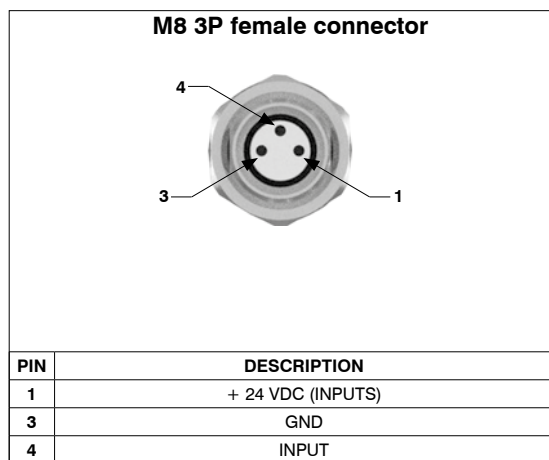
K5230.08.M8



Technical data

Maximum current per module	300mA
Protection	Overcurrent (auto-resettable fuse) Reverse polarity
Input impedance	3kΩ
Maximum cable length	< 30m
Input data allocation	8 bit

Scheme / Overall dimensions and I/O layout



General - 8 M12 digital inputs module kit

M12 digital inputs module provides 4 M12, 5 pins, female connectors.

Inputs have PNP logic, 24VDC ± 10%.

Every connector takes two input channels.

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

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

Ordering code

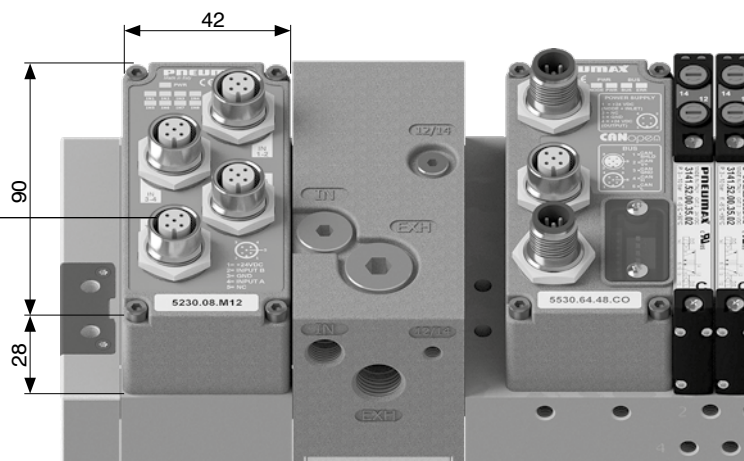
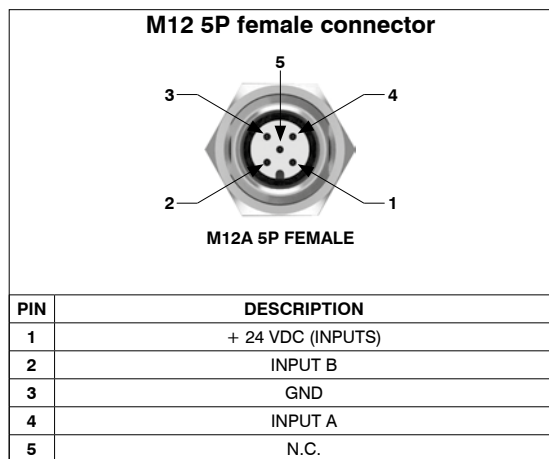
K5230.08.M12



Technical data

Maximum current per module	300mA
Protection	Overcurrent (auto-resettable fuse) Reverse polarity
Input impedance	3kΩ
Maximum cable length	< 30m
Input data allocation	8 bit

Scheme / Overall dimensions and I/O layout



AIR DISTRIBUTION

General - 8 M8 digital outputs module kit

Module has 8 M8 female connectors.

Outputs have PNP logic, 24VDC ± 10%.

Outputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 4) or by 5030.M12 additional power supply module, in case it were installed upstream of the outputs module. Power supply presence is displayed by "PWR OUT" green LED light-on.

Each output has a LED indicator associated which lights up when output's signal status is high.

Ordering code

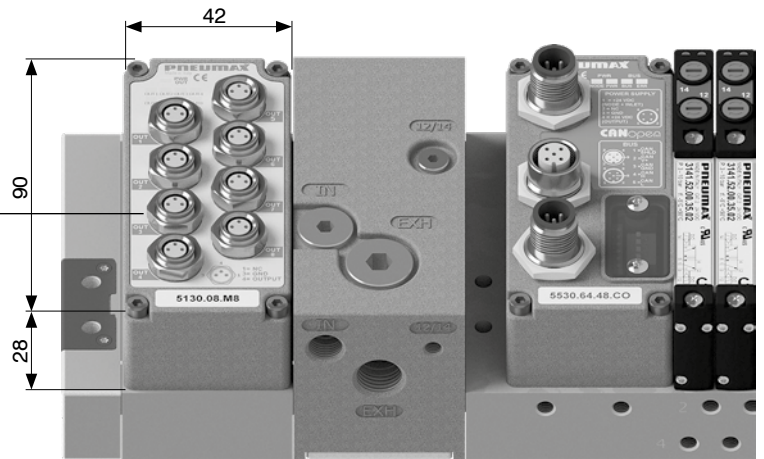
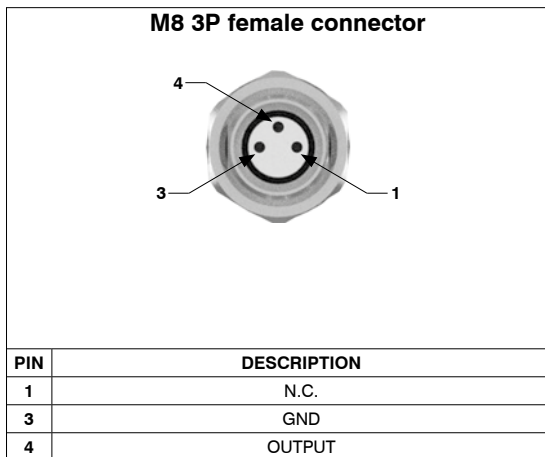
K5130.08.M8



Technical data

Maximum current per output	100mA
Protection	Short circuit (electronic), trigger at 2.8A
Maximum cable length	< 30m
Output data allocation	8 bit

Scheme / Overall dimensions and I/O layout



General - 8 M12 digital outputs module kit

Module has 4 M12 female connectors.

Outputs have PNP logic, 24VDC ± 10%.

Outputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 4) or by 5030.M12 additional power supply module, in case it were installed upstream of the outputs module. Power supply presence is displayed by "PWR OUT" green LED light-on.

Each output has a LED indicator associated which lights up when output's signal status is high.

Ordering code

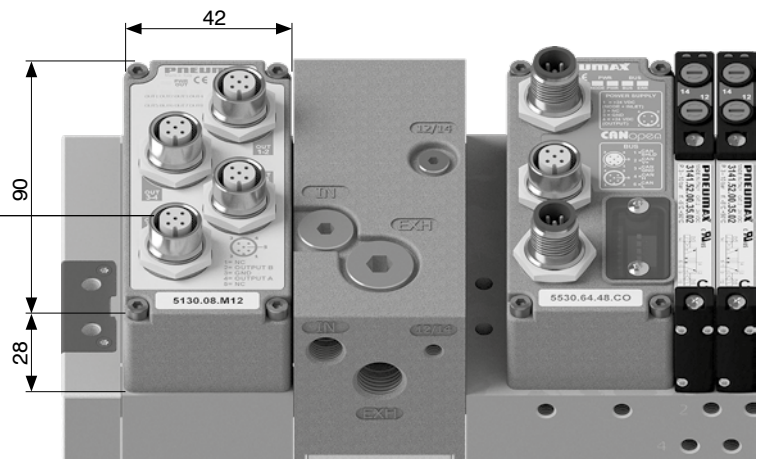
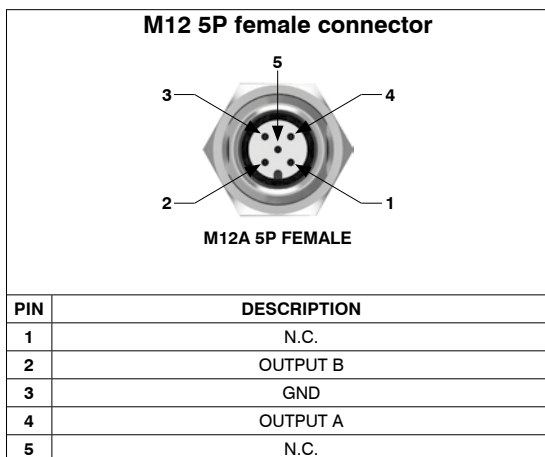
K5130.08.M12



Technical data

Maximum current per output	100mA
Protection	Short circuit (electronic), trigger at 2.8A
Maximum cable length	< 30m
Output data allocation	8 bit

Scheme / Overall dimensions and I/O layout





General - 32 digital inputs module kit (37 pin SUB-D connector)

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

Inputs have PNP logic, 24VDC ± 10%.

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

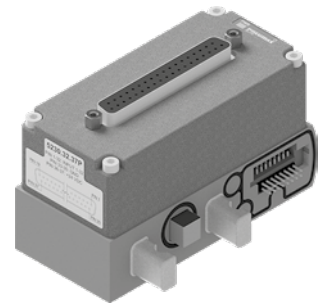
Inputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module.

Technical data

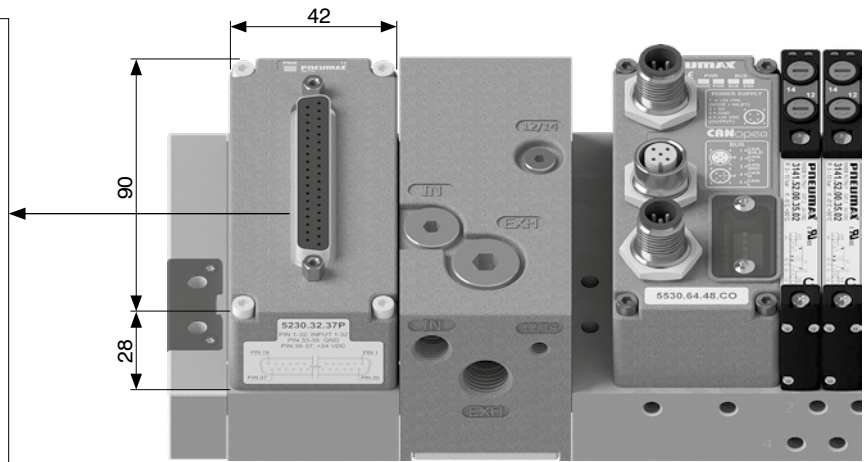
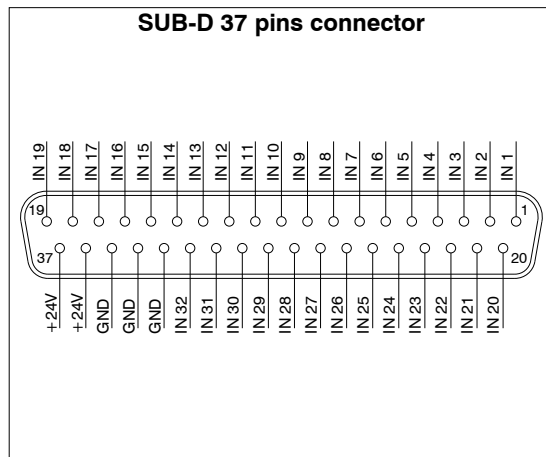
Maximum current per module	1A
Protection	Overcurrent (auto-resettable fuse) Reverse polarity
Input impedance	3kΩ
Maximum cable length	< 30m
Input data allocation	32 bit

Ordering code

K5230.32.37P



Scheme / Overall dimensions and I/O layout



General - 32 digital outputs module kit (37 pin SUB-D connector)

Module has a SUB-D 37 pins female connector.

Outputs have PNP logic, 24VDC ± 10%.

Outputs module power supply is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 4) or by 5030.M12 additional power supply module, in case it were installed upstream of the outputs module. Power supply presence is displayed by "PWR OUT" green LED light-on.

Each output has a red LED indicator associated which lights up when output's signal status is high.

Technical data

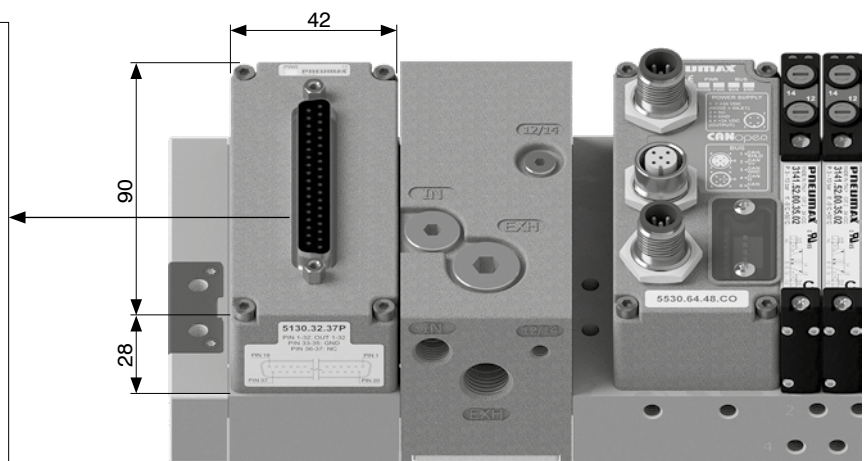
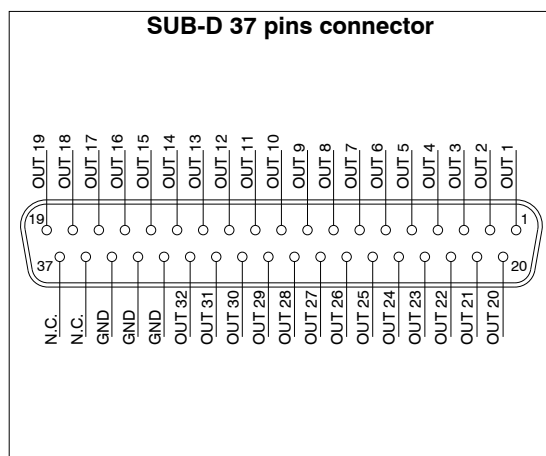
Maximum current per output	100mA
Protection	Short circuit (electronic), trigger at 2.8A
Maximum cable length	< 30m
Output data allocation	32 bit

Ordering code

K5130.32.37P



Scheme / Overall dimensions and I/O layout



AIR DISTRIBUTION

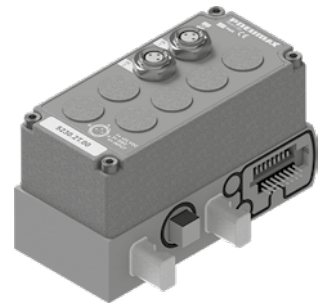
General - M8 analogue inputs modules kit

M8 analogue inputs module converts analogue signals into digital signals and transfers acquired data to field bus, via network node.

Power supply of the M8 analogue inputs module is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 1) or by 5030.M12 additional power supply module, in case it were installed upstream of the inputs module. Modules provide M8 3 pins female connectors and a diagnostic LED for every analogue input. The LED indicates signal presence (green) or signal out of range (red).

Ordering code

K5230._._0_



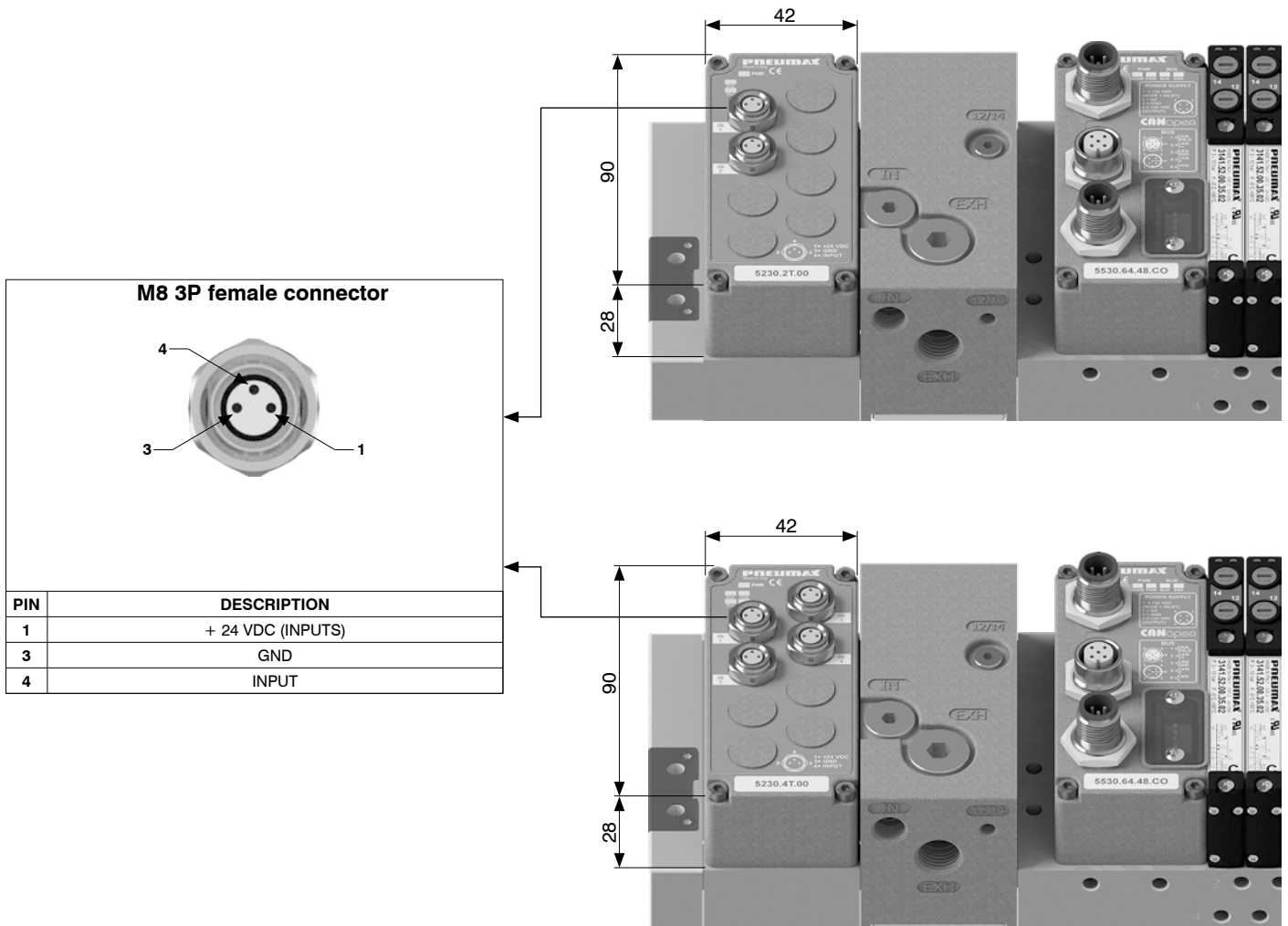
Technical data

Protection (pin 1)	Overcurrent (auto-resettable fuse) Reverse polarity
Input impedance (voltage inputs)	33kΩ
Digital conversion resolution	12 bit
Maximum cable length	< 30m
Input data allocation	16 bit per channel
Diagnostic LED	Input signal overcurrent or overvoltage
Precision	0,3% F.S.

Available models

CODE	SIGNAL	ANALOGUE INPUTS	MAX. CURRENT PER MODULE (pin1)	OCCUPIED INPUTS
K5230.2T.00	VOLTAGE 0-10V	2	300 mA	32 (4 bytes)
K5230.2T.01	VOLTAGE 0-5V	2	300 mA	32 (4 bytes)
K5230.4T.00	VOLTAGE 0-10V	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
K5230.4T.01	VOLTAGE 0-5V	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
K5230.2C.00	CURRENT 4-20mA	2	300 mA	32 (4 bytes)
K5230.2C.01	CURRENT 0-20mA	2	300 mA	32 (4 bytes)
K5230.4C.00	CURRENT 4-20mA	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)
K5230.4C.01	CURRENT 0-20mA	4	750 mA (375 mA for each pair of channels)	64 (8 bytes)

Scheme / Overall dimensions and I/O layout





General - M8 analogue outputs modules kit

M8 analogue outputs module converts output data, received from field bus via network node, into analogue signal. Power supply of the M8 analogue outputs module is provided by 24VDC power input on the serial system (type A, 4 pin M12 power connector, pin 4) or by 5030.M12 additional power supply module, in case it were installed upstream of the outputs module.

Ordering code

K5130._._0



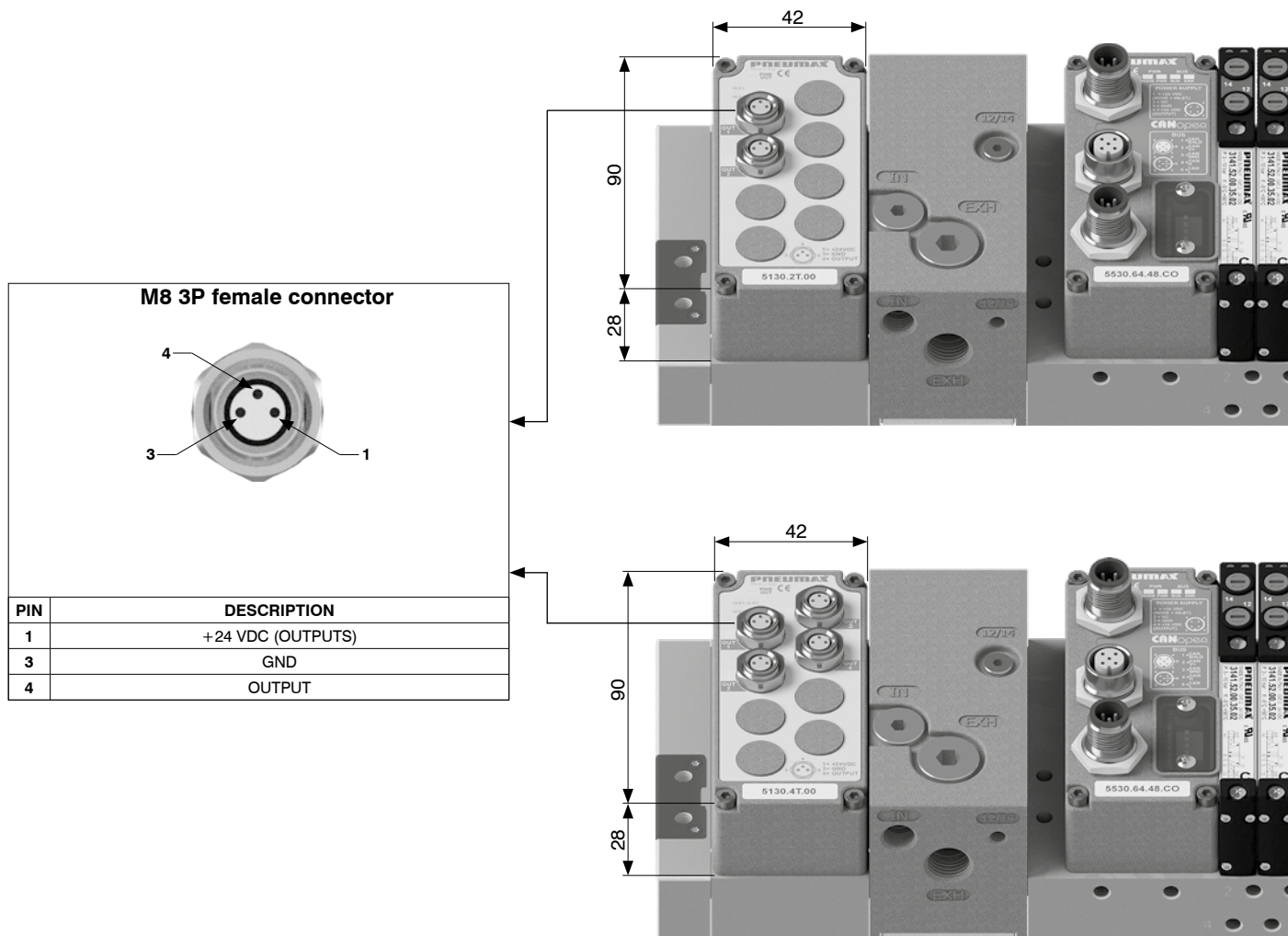
Technical data

Protection (pin 1)	Overcurrent (auto-resettable fuse)
Protection (pin 4)	Short circuit (electronic), trigger at 20mA
Digital conversion resolution	12 bit
Maximum cable length	< 30m
Output data allocation	16 bit per channel
Diagnostic LED	Output signal overcurrent
Precision	0,3% F.S.

Available models

CODE	SIGNAL	ANALOGUE OUTPUTS	MAX. CURRENT PER MODULE (pin1)	OCCUPIED OUTPUTS
K5130.2T.00	VOLTAGE 0-10V	2	1 A	32 (4 bytes)
K5130.2T.01	VOLTAGE 0-5V	2	1 A	32 (4 bytes)
K5130.4T.00	VOLTAGE 0-10V	4	2 A (1A for each pair of channels)	64 (8 bytes)
K5130.4T.01	VOLTAGE 0-5V	4	2 A (1A for each pair of channels)	64 (8 bytes)
K5130.2C.00	CURRENT 4-20mA	2	1 A	32 (4 bytes)
K5130.2C.01	CURRENT 0-20mA	2	1 A	32 (4 bytes)
K5130.4C.00	CURRENT 4-20mA	4	2 A (1A for each pair of channels)	64 (8 bytes)
K5130.4C.01	CURRENT 0-20mA	4	2 A (1A for each pair of channels)	64 (8 bytes)

Scheme / Overall dimensions and I/O layout





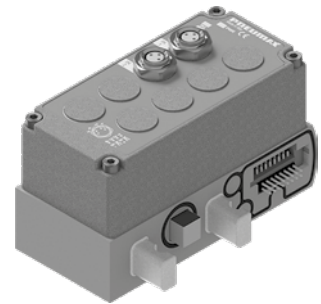
General - Pt100 inputs modules kit

Pt100 inputs module digitizes signals from Pt100 sensors and transfers acquired data to field bus, via network node. It is possible to connect two, three or four wire sensors.

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

Ordering code

K5230._P0_



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Technical data

Digital conversion resolution	12 bit
Maximum cable length	< 30m
Input data allocation	16 bit per channel
Diagnostic LED	Probe presence Temperature out of range
Precision	±0,2°C
Probe temperature range	-100°C ... +300°C

Conversion formula (°C)

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

Available models

CODE	MODEL	INPUTS NUMBER	OCCUPIED INPUTS
K5230.2P00	Pt100 2 wires	2	32 (4 bytes)
K5230.2P01	Pt100 3 wires	2	32 (4 bytes)
K5230.2P02	Pt100 4 wires	2	32 (4 bytes)
K5230.4P00	Pt100 2 wires	4	64 (8 bytes)
K5230.4P01	Pt100 3 wires	4	64 (8 bytes)
K5230.4P02	Pt100 4 wires	4	64 (8 bytes)

Scheme / Overall dimensions and I/O layout

M8 4P female connector

Connection scheme 2 wires probe

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

Connection scheme 3 wires probe

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

Connection scheme 4 wires probe

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

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Overall dimensions and technical information are provided solely for informative purposes and may be modified without notice

General - Additional power supply module kit

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

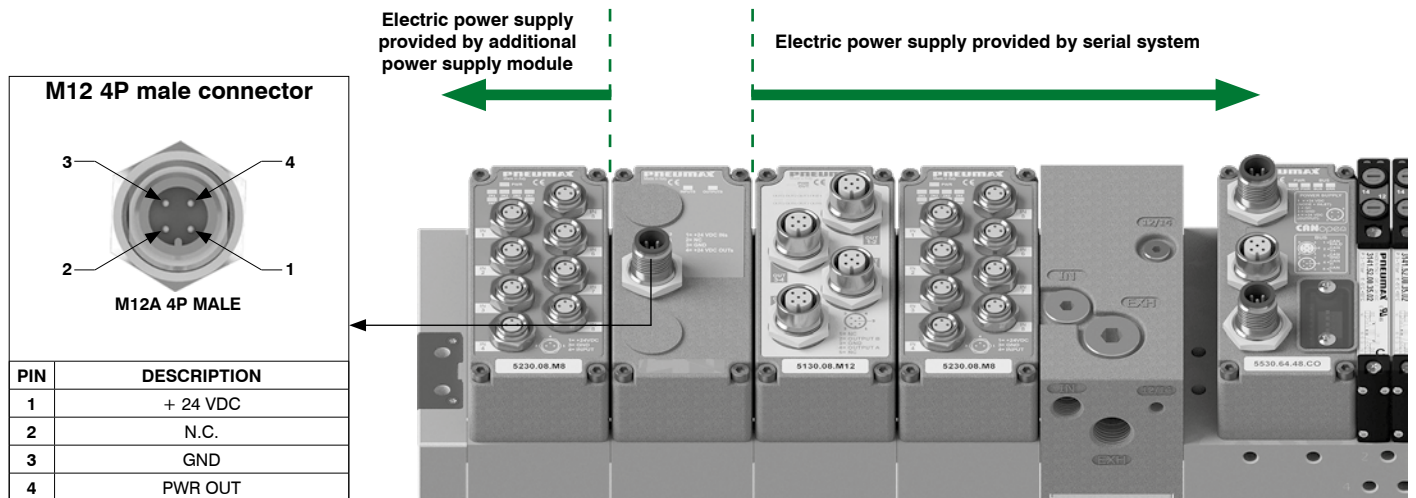
Electric connection of the module to external power supply unit occurs via an M12 4 pins type A male connector. M12 connector has two different pins to power up inputs (pin 1) and outputs (pin 4). Presence of each power supply rail is indicated by corresponding green LED.

Ordering code

K5030.M12



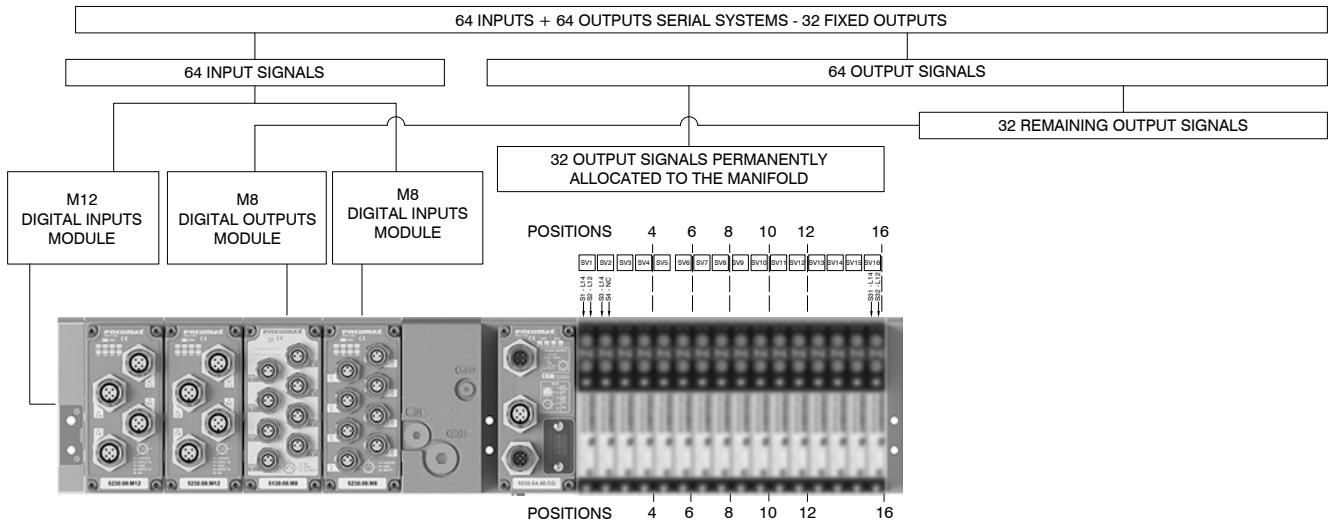
Scheme / Overall dimensions and I/O layout



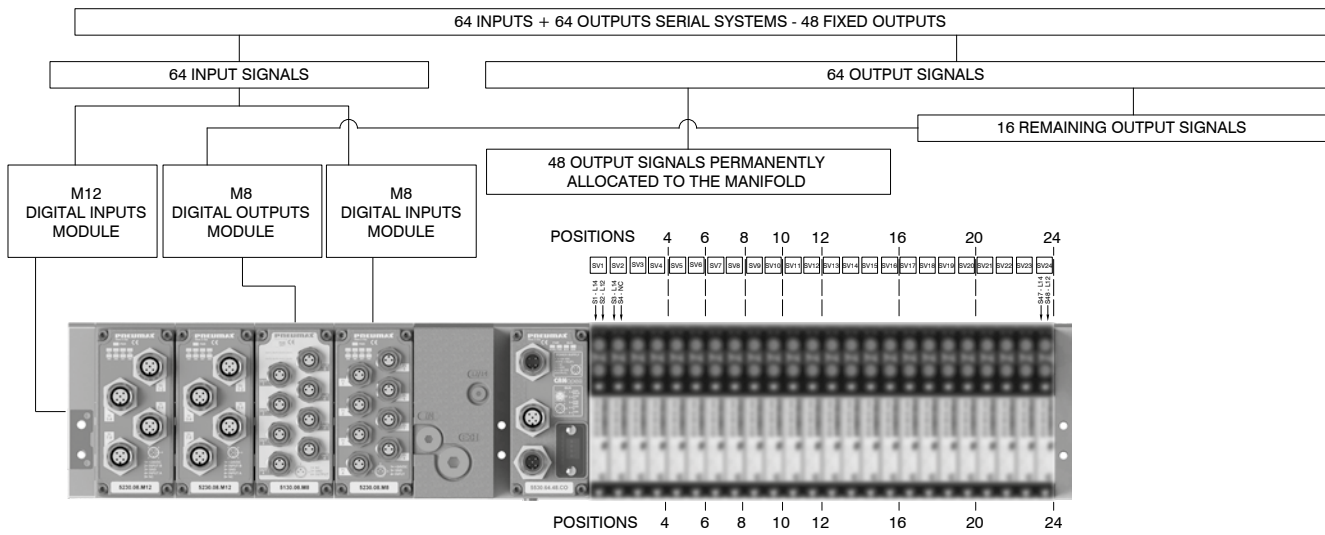


Signal management

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

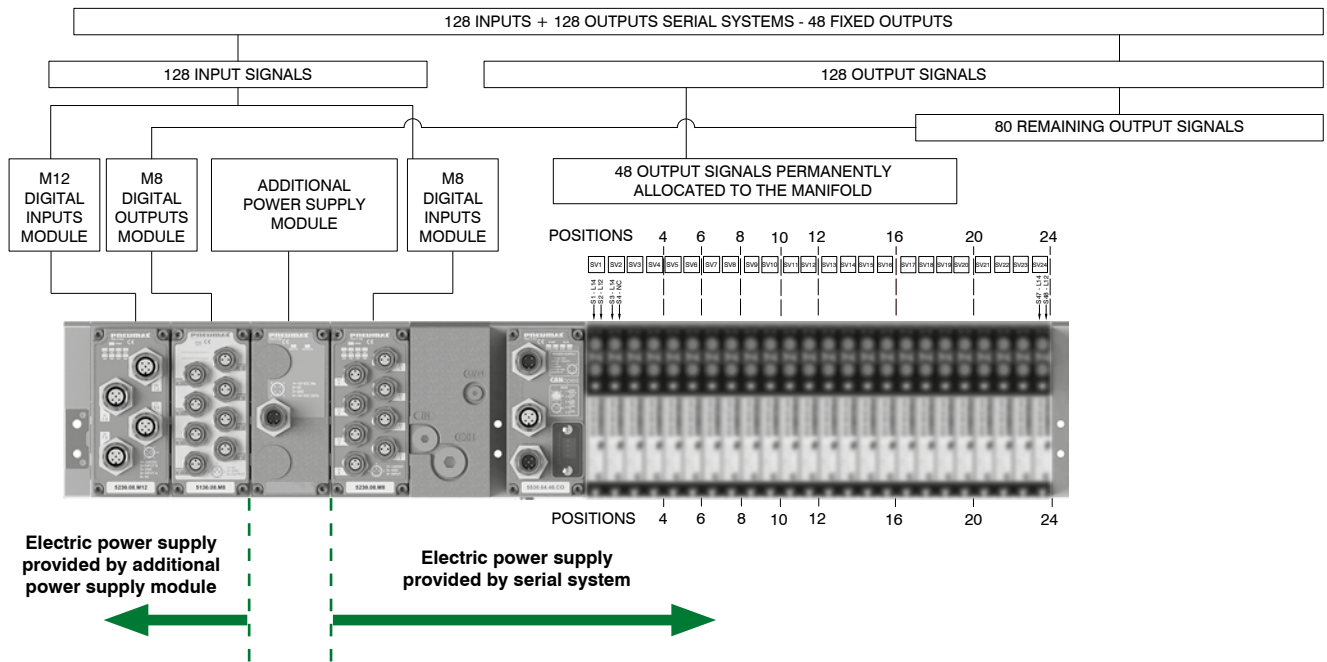


64 INPUT + 64 OUTPUT serial systems - 48 fixed OUTPUT (Ex. PROFIBUS DP and CANopen®)





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



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PNEUMAX

PNEUMAX S.p.A.

Via Cascina Barbellina, 10
24050 Lurano (BG) - Italy
P. +39 035 41 92 777
info@pneumaxspa.com