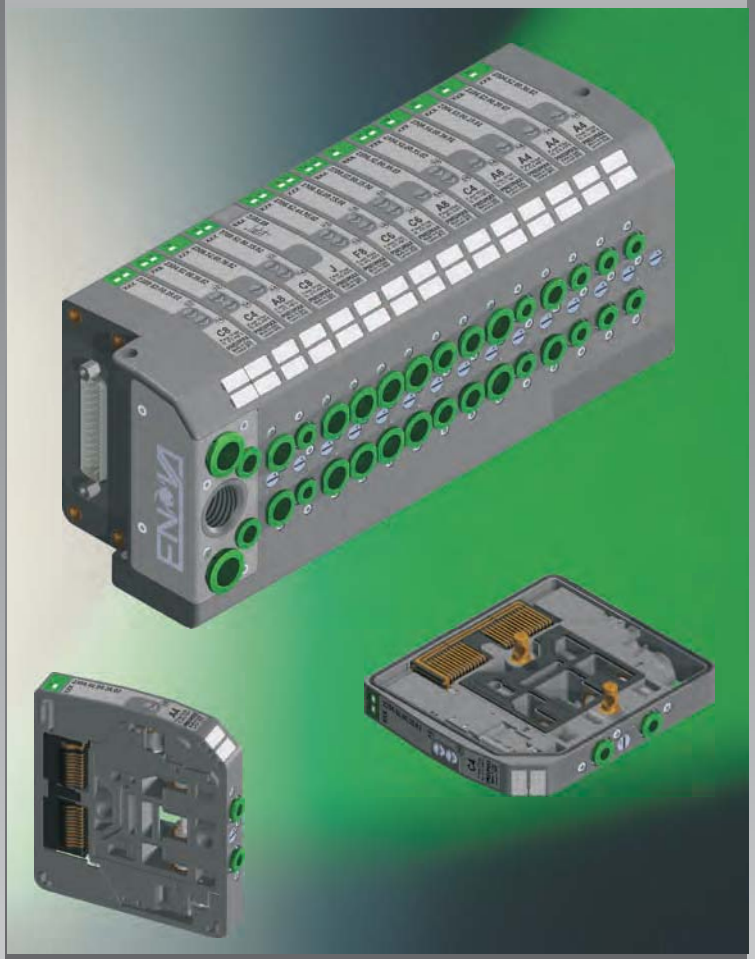
PNEUMAX®

Components for Pneumatic Automation

ENOVA®



PNEUMAX NEWS 40

PNEUMAX S.p.A.
LURANO (BG) - ITALY

Certified
Quality System
SQS
ISO 9001 : 2000
ISO 14001 : 2004
Reg. No. 10677

General

Technical innovation, rational design, high performance and extremely compact size: these are the main features the ENOVA® series bring to the market. The ENOVA® series is the latest in a string of achievements made by the Pneumax Spa R&D Department in the last few years.
The ENOVA® series has been developed according to the latest market requirements. Each valve comprises all the necessary pneumatic and electrical functions needed to produce a solenoid valve assembly. There are no limits to the configuration of the solenoid valve island, as full priority has been given to the end user's needs; the addition or removal of modules is a simple operation that can be swiftly and easily achieved.
The management of the electrical signals through the valves is optimized through a patented dedicated connector in each valve.
Electrical connections are made via a twenty-five pin connector, which is capable of controlling up to twenty-two solenoids. Electrical and pneumatic connections are located on the same module at one end of the assembly. Serial bus nodes compatible with most common protocols are easily integrated.
Most widely used and known communication protocols, such as Profibus, Can-Open, Device-Net and AS-Interface can be directly integrated with the valve manifold by simply plugging the necessary module onto the electrical connection, maintaining IP65 environmental protection. All electrical and pneumatic connections are positioned on one face of the assembly, simplifying system design, installation and commission. The management of inputs has also been foreseen, and can be achieved by adding one or more expansion modules directly to the serial module.

MAIN CHARACTERISTICS :
- Clean profile prevents accumulation of dirt
- Compact size: modules of 12.5 mm
- Connections available: 4 , 6 , 8 mm
- IP65 protection grade
- Optimized electrical connection system
- Electrical and pneumatic line connections on one side
- Quick coupling connection system with visual indicator: locked/unlocked
- Freedom of configuration

AVAILABLE CONFIGURATIONS:
- 5/2 monostable
- 5/2 bistable
- 5/3 closed centres
- 2x3/2 NC/NC (5/3 open centres)
- 2x3/2 NO/NO (5/3 pressured centres)
- 2x3/2 NC/NO
- 2x2/2 NC/NC
- 2x2/2 NO/NO
- 2x2/2 NC/NO

Construction

Central body	Reinforced Technopolymer
Operators	Reinforced Technopolymer
External casing	Reinforced Technopolymer
Spool	Aluminium 2011
Spool seals	Polyurethane
Piston seals	Oil resistant nitrile rubber - NBR
Spring	Spring steel with protective coating

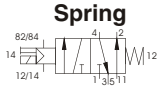
Technical characteristics

Voltage	24 VDC ± 10% PNP (NPN on request)
Pilot consuption	0,9 Watt
Valve working pressure (1-11)	from vacuum to 10 bar max.
Pilot working pressure (12-14)	from 2,5 to 7 bar max.
Operating temperature	-5°C +50°C
Protection degree	IP 65
Life (standard operating conditions)	50.000.000
Fluid	Filtered and lubricated air or no (if lubricated air, the lubrication must be continuous)

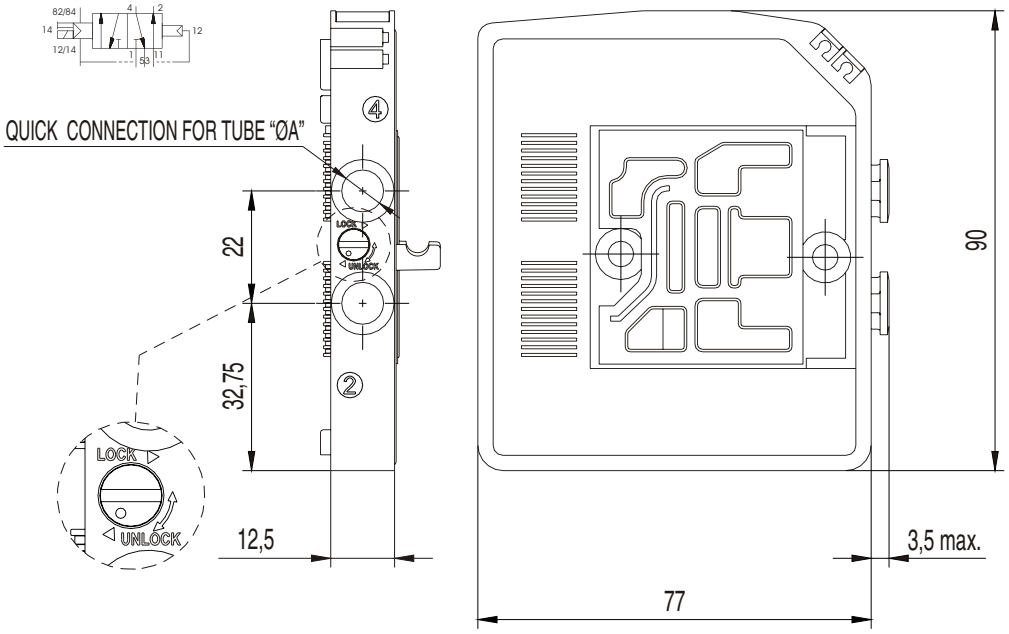
"**Attention:** dry air must be used for applications below 0°C"

Monostable 5/2

Solenoid Spring



Solenoid Differential



TUBE Ø4

TUBE Ø6

TUBE Ø8

Ordering code

23_ _ . 52 . 00 . _ _ . _ _

ELECTRICAL CONTACTS:
0 = STANDARD
(only one electric signal)
1 = CEB (Bistable Electrical Contact)
(two electric signal)

CONNECTION ØA:
4 = Quick connection for tube ø4
6 = Quick connection for tube ø6
8 = Quick connection for tube ø8

TYPE:
36 = Solenoid - Differential
39 = Solenoid - Spring

VOLTAGE:
02 = 24 VDC PNP
12 = 24 VDC NPN

SHORT CODE FUNCTION / CONNECTION :

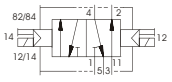
A4 = EV 5/2 MONOST. SOL.-SPRING Ø4
A6 = EV 5/2 MONOST. SOL.-SPRING Ø6
A8 = EV 5/2 MONOST. SOL.-SPRING Ø8
B4 = EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø4
B6 = EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø6
B8 = EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø8
P4 = EV 5/2 MONOST. SOL.-SPRING (CEB) Ø4
P6 = EV 5/2 MONOST. SOL.-SPRING (CEB) Ø6
P8 = EV 5/2 MONOST. SOL.-SPRING (CEB) Ø8
R4 = EV 5/2 MONOST. SOL.-DIFF. (CEB) Ø4
R6 = EV 5/2 MONOST. SOL.-DIFF. (CEB) Ø6
R8 = EV 5/2 MONOST. SOL.-DIFF. (CEB) Ø8

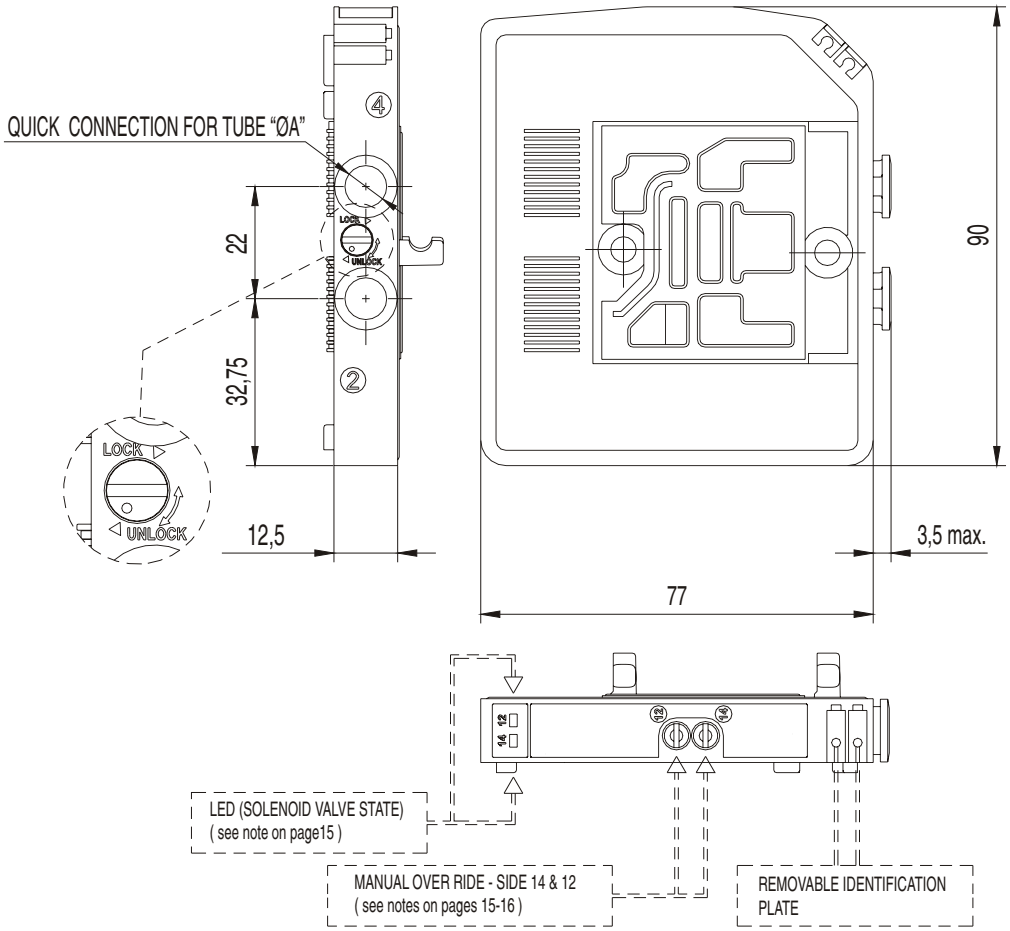
R.T.A. = Responce Time Activation
R.T.D. = Responce Time Disactivation

	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Flow rate at 6 bar with Δp=1	Responce time (according to ISO 12238)	Weight	Working connection ØA
Operational characteristics	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	700 Nl/min	R.T.A. 12 ms (Diff.) R.T.D. 15 ms (Diff.) R.T.A. 9 ms (Spring) R.T.D. 30 ms (spring)	115 gr.	ø4 - ø6 ø8

Bistable 5/2

Solenoid
Solenoid





TUBE Ø4

TUBE Ø6

TUBE Ø8

Ordering code

230 _ . 52 . 00 . 35 . _ _

CONNECTION ØA:
4 = Quick connection for tube ø4
6 = Quick connection for tube ø6
8 = Quick connection for tube ø8

VOLTAGE:
02 = 24 VDC PNP
12 = 24 VDC NPN

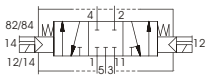
SHORT CODE FUNCTION / CONNECTION :
C4 = EV 5/2 BISTABILE SOL.-SOL. Ø4
C6 = EV 5/2 BISTABILE SOL.-SOL. Ø6
C8 = EV 5/2 BISTABILE SOL.-SOL. Ø8

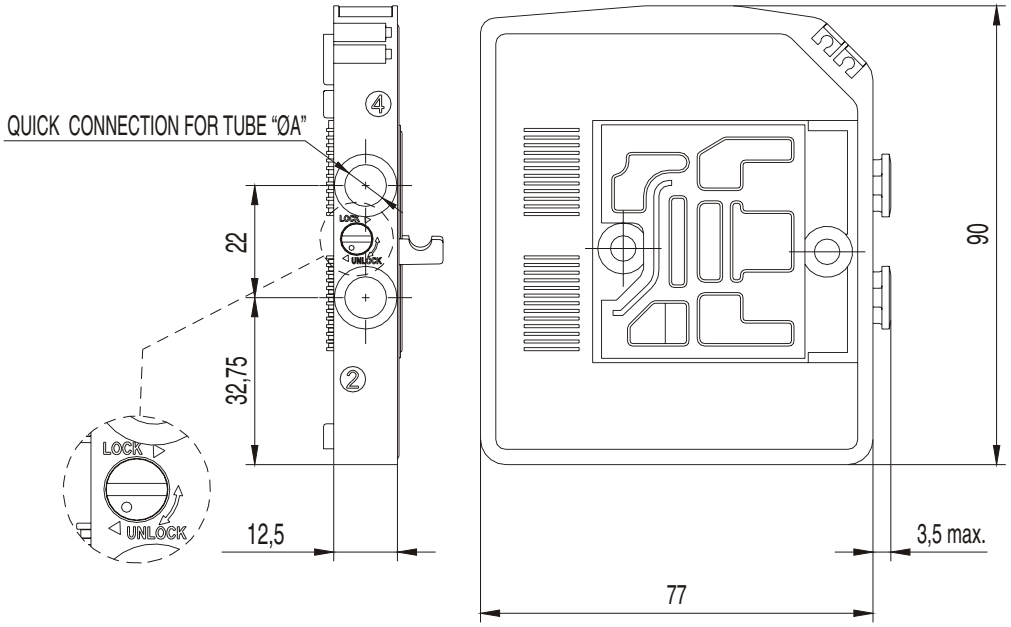
R.T.A. = Responce Time Activation
R.T.D. = Responce Time Disactivation

	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Flow rate at 6 bar with Δp=1	Responce time (according to ISO 12238)	Weight	Working connection ØA
Operational characteristics	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	700 Nl/min	R.T.A. 7 ms (Diff.) R.T.D. 7 ms (Diff.)	130 gr.	ø4 - ø6 ø8

5/3 Closed Centres

Solenoid
Solenoid





TUBE Ø4

TUBE Ø6

TUBE Ø8

Ordering code

230 _ . 53 . 31 . 35 . _ _

CONNECTION ØA:
4 = Quick connection for tube ø4
6 = Quick connection for tube ø6
8 = Quick connection for tube ø8

VOLTAGE:
02 = 24 VDC PNP
12 = 24 VDC NPN

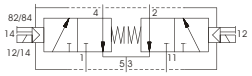
SHORT CODE FUNCTION / CONNECTION :
E4 = EV 5/3 CC SOL.-SOL. Ø4
E6 = EV 5/3 CC SOL.-SOL. Ø6
E8 = EV 5/3 CC SOL.-SOL. Ø8

R.T.A. = Responce Time Activation
R.T.D. = Responce Time Disactivation

	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Flow rate at 6 bar with Δp=1	Responce time (according to ISO 12238)	Weight	Working connection ØA
Operational characteristics	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	550 Nl/min	R.T.A. 15 ms (Diff.) R.T.D. 15 ms (Diff.)	130 gr.	ø4 - ø6 ø8

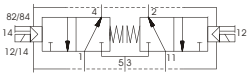
5/3 Open Centres - 2x3/2 NC-NC

Solenoid
Solenoid



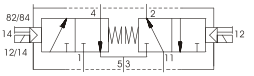
5/3 Pressured Centres - 2x3/2 NO-NO

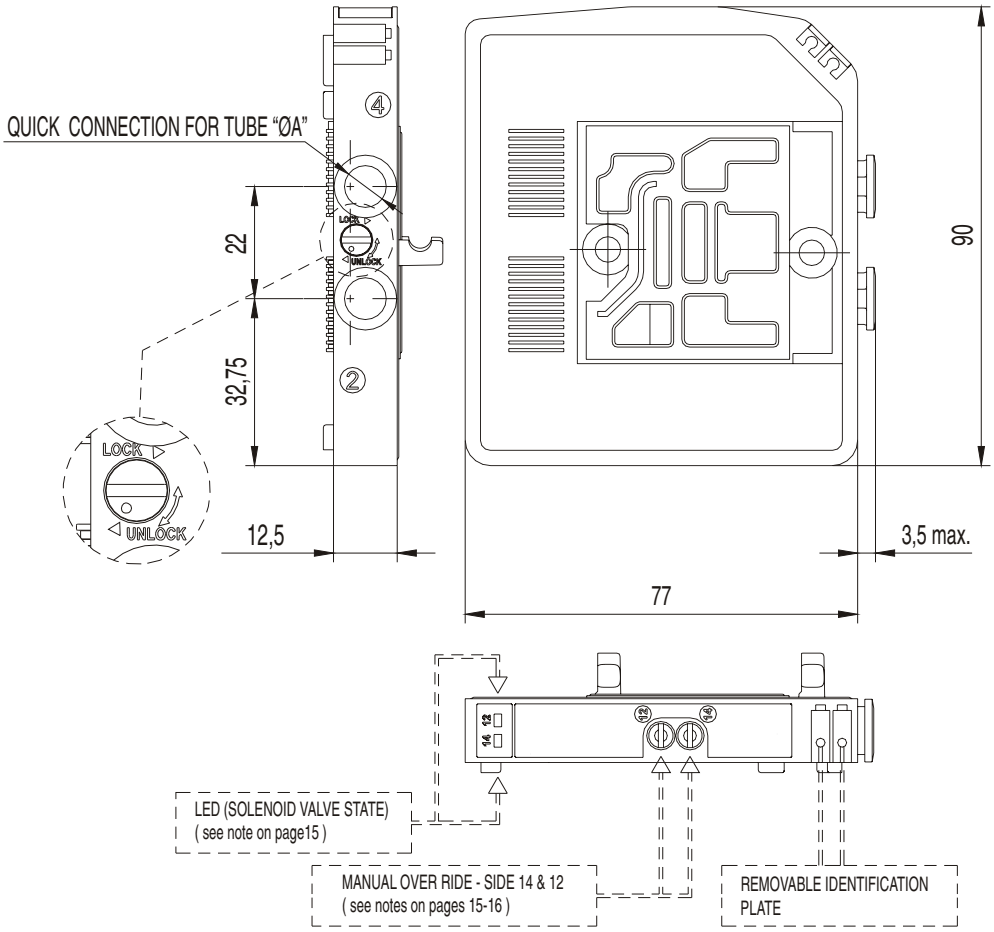
Solenoid
Solenoid



5/3 - 2x3/2 NC-NO

Solenoid
Solenoid






TUBE Ø4


TUBE Ø6


TUBE Ø8

Ordering code

230 _ . 62 . _ _ . 35 . _ _

CONNECTION ØA:	FUNCTION:(*)	VOLTAGE:
4 = Quick connection for tube ø4	44 = 2x3/2 NC-NC	02 = 24 VDC PNP
6 = Quick connection for tube ø6	45 = 2x3/2 NC-NO	12 = 24 VDC NPN
8 = Quick connection for tube ø8	55 = 2x3/2 NO-NO	

SHORT CODE FUNCTION / CONNECTION :
F4 = EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø4
F6 = EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø6
F8 = EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø8
G4 = EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø4
G6 = EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø6
G8 = EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø8
H4 = EV 2x3/2 NC-NO SOL.-SOL. Ø4
H6 = EV 2x3/2 NC-NO SOL.-SOL. Ø6
H8 = EV 2x3/2 NC-NO SOL.-SOL. Ø8

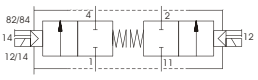
(*) = 5/3 Open Centres Function : use the Solenoid valve with 2x3/2 NC-NC function
5/3 Pressured Centres Funcion : use the Solenoid valve with 2x3/2 NO-NO funcion

R.T.A. = Responce Time Activation
R.T.D. = Responce Time Disactivation

	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Flow rate at 6 bar with Δp=1	Responce time (according to ISO 12238)	Weight	Working connection ØA
Operational characteristics	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	700 Nl/min	R.T.A. 9 ms (Diff.) R.T.D. 30 ms (Diff.)	130 gr.	ø4 - ø6 ø8

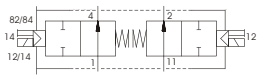
2x2/2 NC-NC

Solenoid
Solenoid



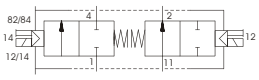
2x2/2 NO-NO

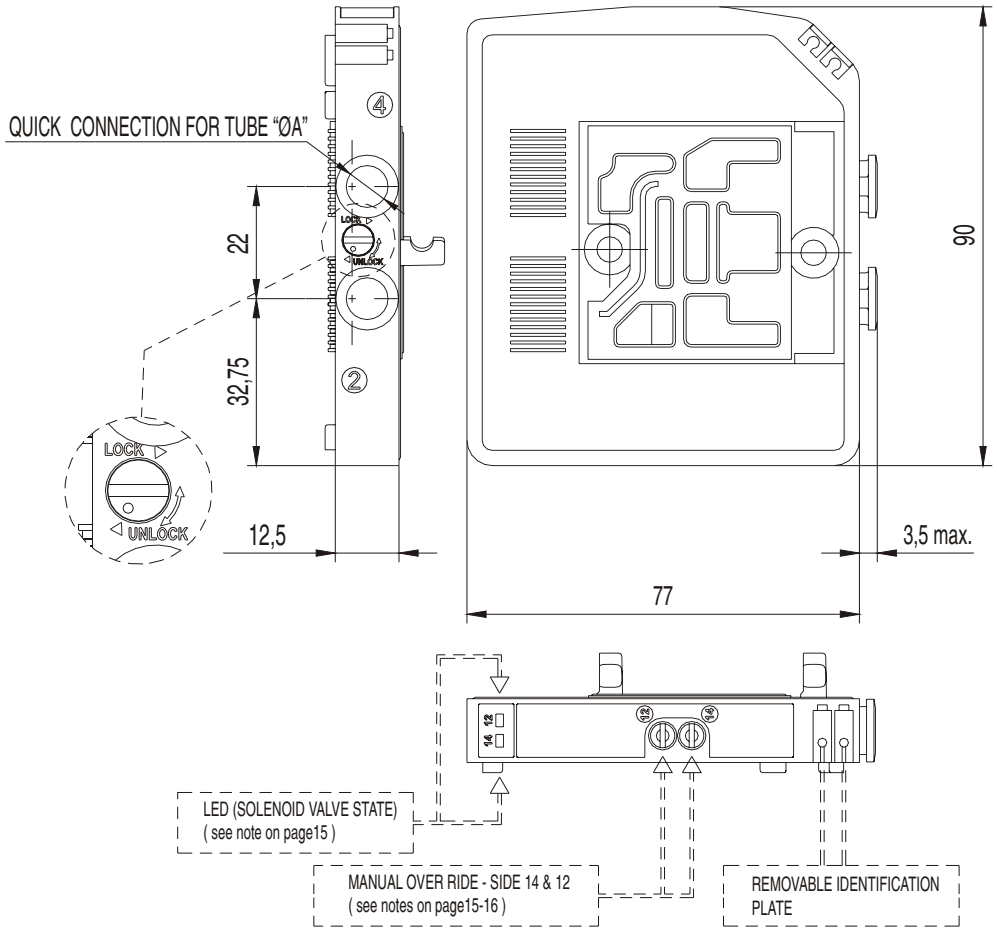
Solenoid
Solenoid



2x2/2 NC-NO

Solenoid
Solenoid





TUBE Ø4

TUBE Ø6

TUBE Ø8

Ordering code

230 _ . 42 . _ _ . 35 . _ _

CONNECTION ØA:
4 = Quick connection for tube ø4
6 = Quick connection for tube ø6
8 = Quick connection for tube ø8

FUNCTION:
44 = 2x2/2 NC-NC
45 = 2x2/2 NC-NO
55 = 2x2/2 NO-NO

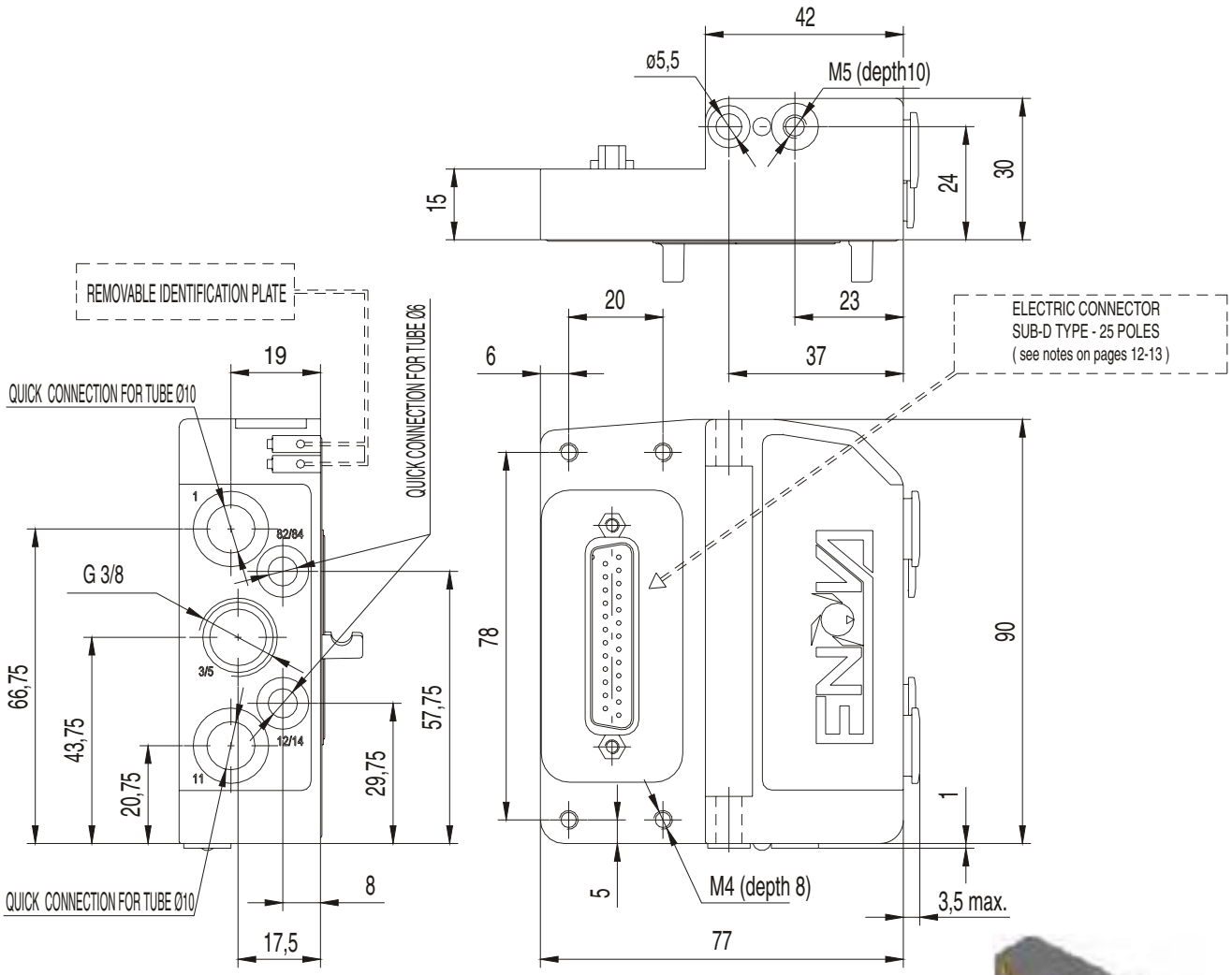
VOLTAGE:
02 = 24 VDC PNP
12 = 24 VDC NPN

SHORT CODE FUNCTION / CONNECTION :
L4 = EV 2x2/2 NC-NC SOL.-SOL. Ø4
L6 = EV 2x2/2 NC-NC SOL.-SOL. Ø6
L8 = EV 2x2/2 NC-NC SOL.-SOL. Ø8
M4 = EV 2x2/2 NO-NO SOL.-SOL. Ø4
M6 = EV 2x2/2 NO-NO SOL.-SOL. Ø6
M8 = EV 2x2/2 NO-NO SOL.-SOL. Ø8
N4 = EV 2x2/2 NC-NO SOL.-SOL. Ø4
N6 = EV 2x2/2 NC-NO SOL.-SOL. Ø6
N8 = EV 2x2/2 NC-NO SOL.-SOL. Ø8

R.T.A. = Responce Time Activation
R.T.D. = Responce Time Disactivation

	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Flow rate at 6 bar with Δp=1	Responce time (according to ISO 12238)	Weight	Working connection ØA
Operational characteristics	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	700 Nl/min	R.T.A. 9 ms (Diff.) R.T.D. 30 ms (Diff.)	130 gr.	ø4 - ø6 ø8

Left Endplates
5 ports



1/11 Conduit (tube ø10) :
Main solenoid valve feeding
(pressure from vacuum to 10 bar maximum)
3/5 Conduit (G 3/8") :
Main solenoid valve exhaust
12/14 Conduit (tube ø6) :
Pilot feeding (pressure from 2,5 to 7 bar)
82/84 Conduit (tube ø6) :
Pilot exhaust

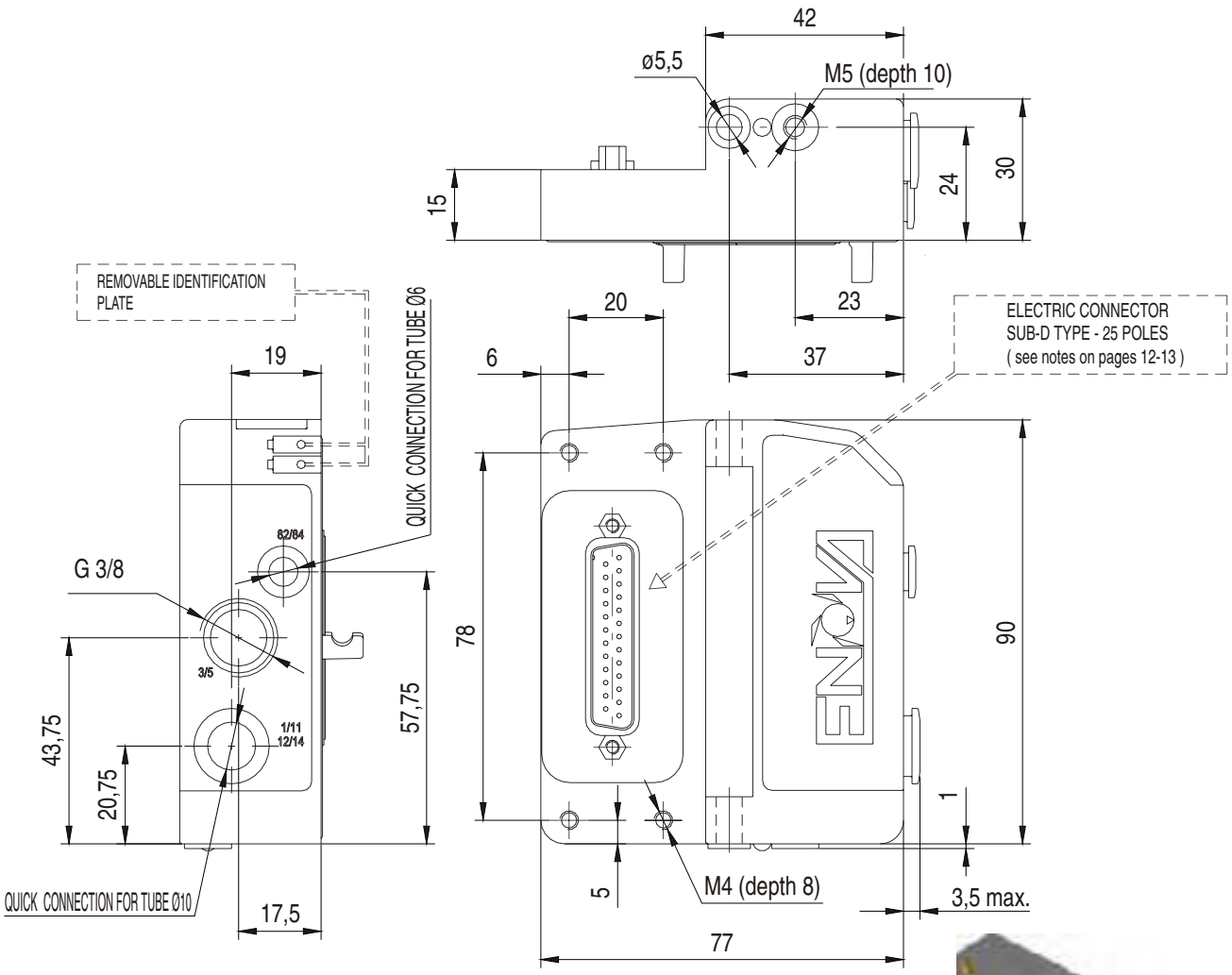
Ordering code

2311. 05P
(Electrical connection PNP)

2311. 05N
(Electrical connection NPN)

Operational characteristics	Fluid	Pressure Conduit 1-11	Pressure Pilot Conduit 12-14	Temperature		Weight
	Filtered and lubricated air or not	From vacuum to 10 bar	2,5 - 7 bar	min. -5° C	max. +50° C	190 gr.

Left Endplates
3 ports



1/11 - 12/14 Conduit (tube ø10) :
Main solenoid valve and pilot feeding
(pressure from 2,5 to 7 bar)
3/5 Conduit (G 3/8") :
Main solenoid valve exhaust
82/84 Conduit (tube ø6) :
Pilot exhaust

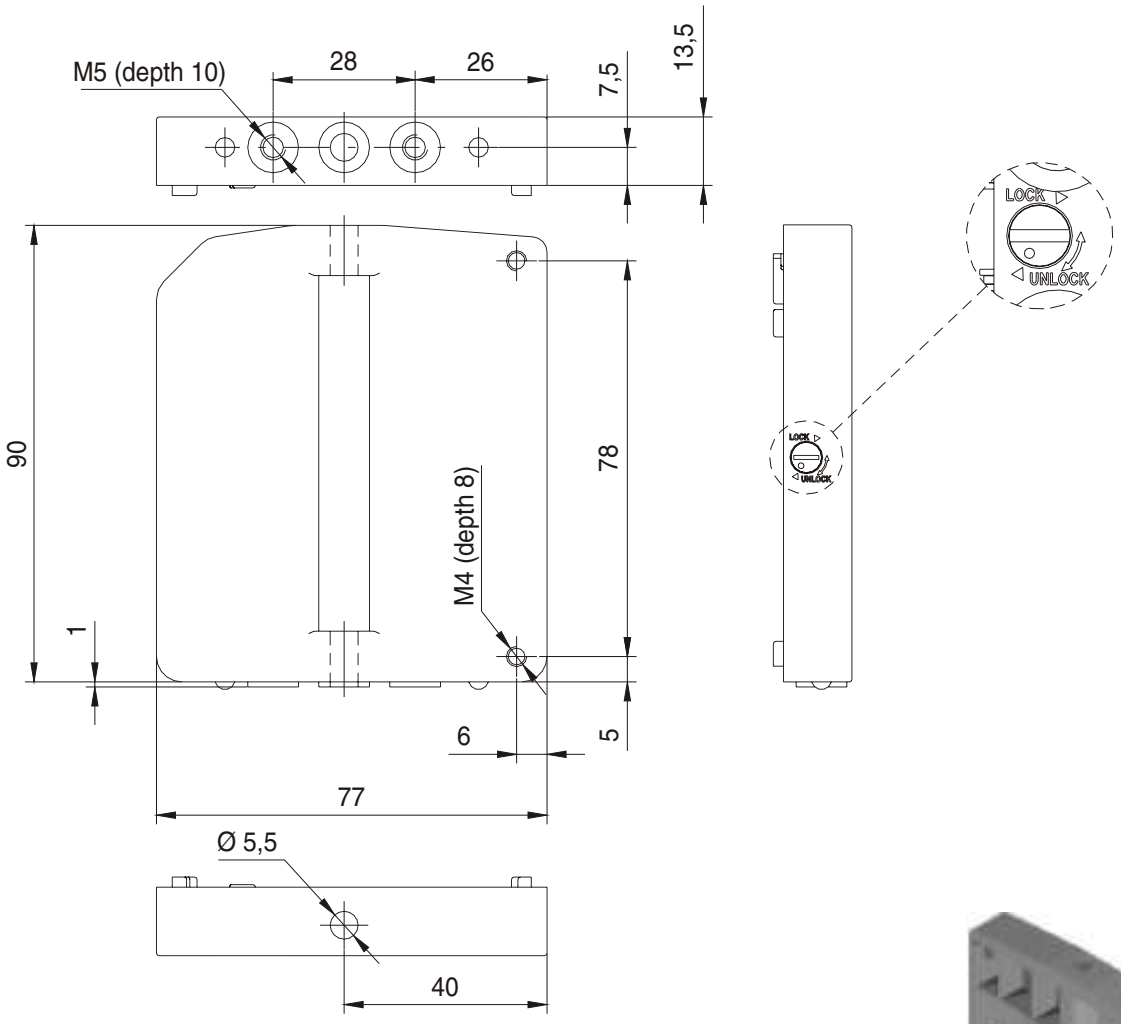
Ordering code

2311. 03P
(Electrical connection PNP)

2311. 03N
(Electrical connection NPN)

Operational characteristics	Fluid	Pressure Conduit 1-11 and 12-14	Temperature		Weight
	Filtered and lubricated air or not	2,5 - 7 bar	min. -5° C	max. +50° C	185 gr.

Right Endplates
Closed



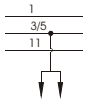
Weight gr. 100

Ordering code

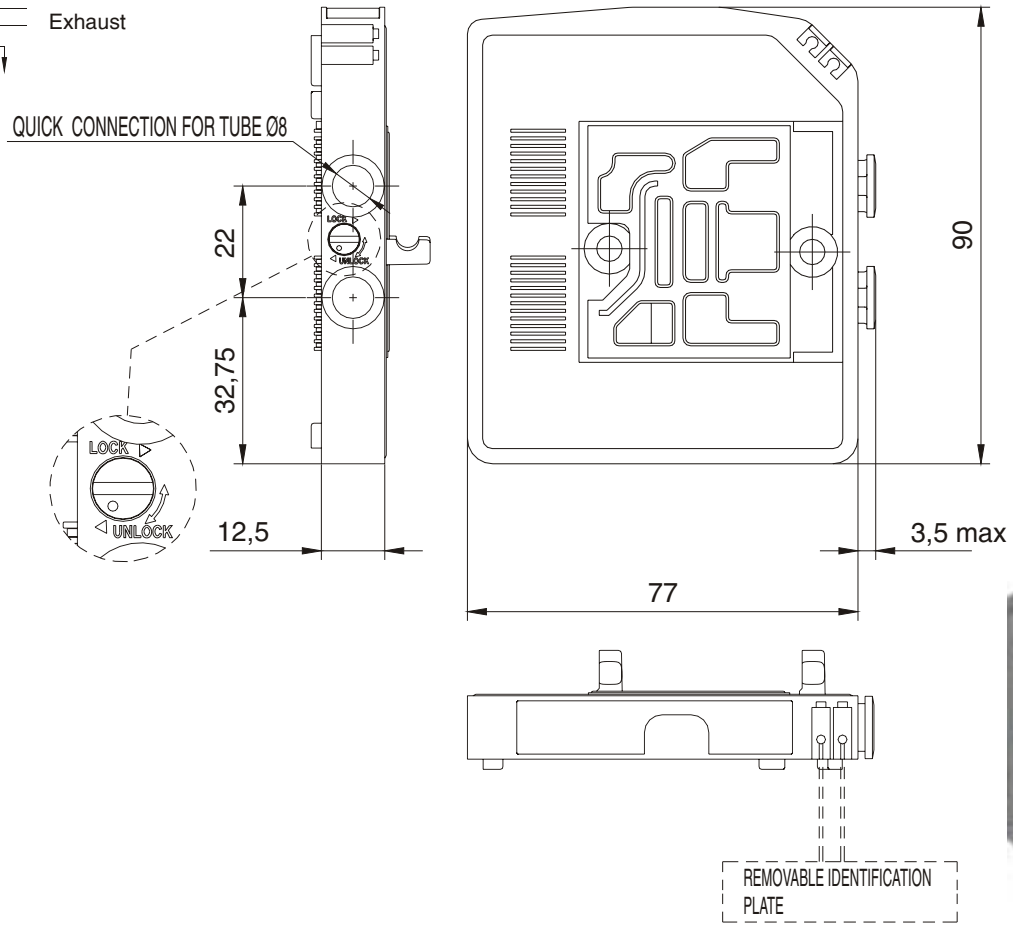
2312 . 00

Intermediate Inlet/Exhaust module

Inlet



Exhaust



Ordering code

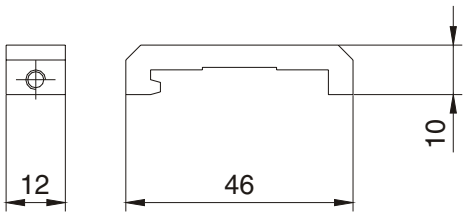
2308 . _ _

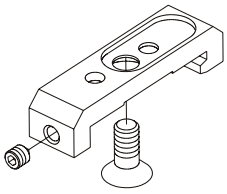
FUNCTION:
08 = Exhaust Module
12 = Inlet Module

SHORT CODE FUNCTION / CONNECTION :
J = INTERMEDIATE EXHAUST MODULE Ø8
K = INTERMEDITE INLET MODULE Ø8

Operational characteristics	Fluid	Temperature		Weight
	Filtered and lubricated air or not	minimum -5° C	maximum +50° C	90 gr.

DIN rail adapter



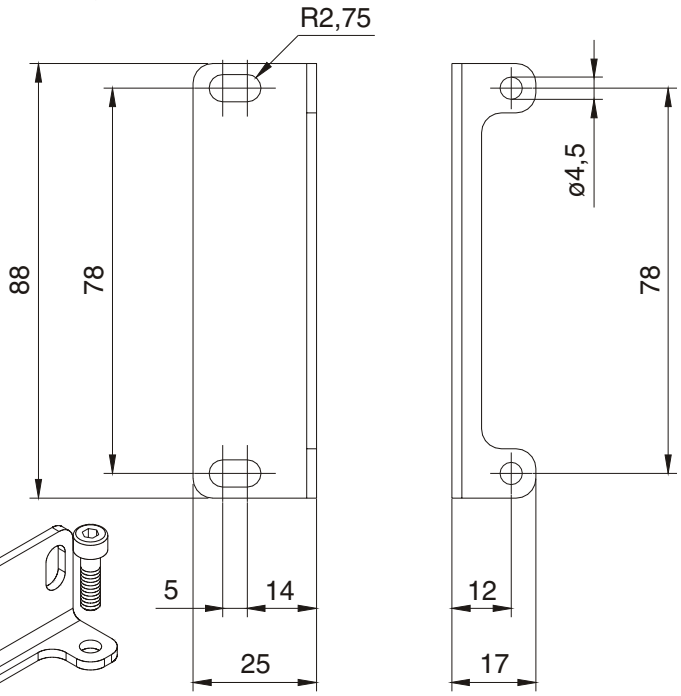


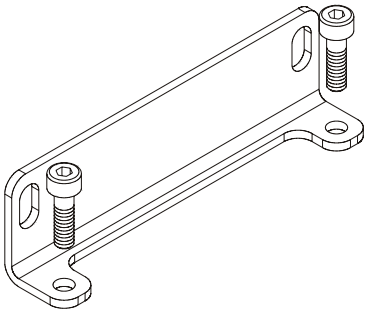
Ordering code

2300 . 16

Weight gr. 12

Fixing bracket



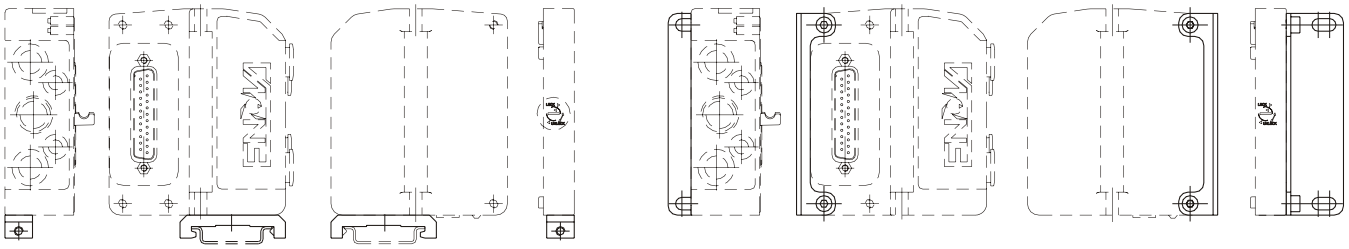


Ordering code

2300 . 50

Weight gr. 45

NOTE : for fixing dimensions see page 14



Diaphragm

Ordering code

2317 . 08

(Exhaust)

Weight gr. 5

SHORT CODE - FUNCTION :
Y = EXHAUST DIAPHRAGM

Ordering code

2317 . 12

(Inlet)

Weight gr. 5

SHORT CODE - FUNCTION :
X = INLET DIAPHRAGM

Ordering code

2317 . 20

(Complete)

Weight gr. 6

SHORT CODE - FUNCTION :
Z = INLET-EXHAUST DIAPHRAGM

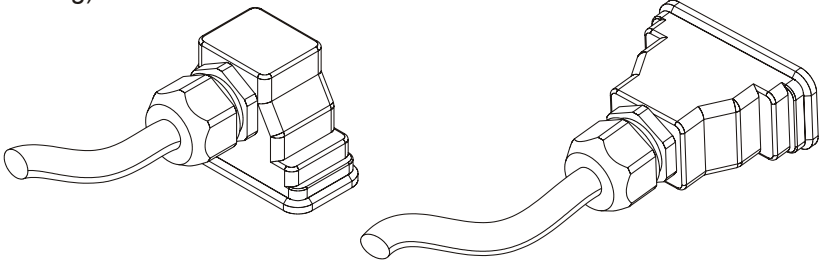
Cable c/w 25 poles, IP65 connector (with housing)

Ordering code

2300 . 25 . _ _ . _ _

CABLE LENGTH:
03 = 3 meters
05 = 5 meters
10 = 10 meters

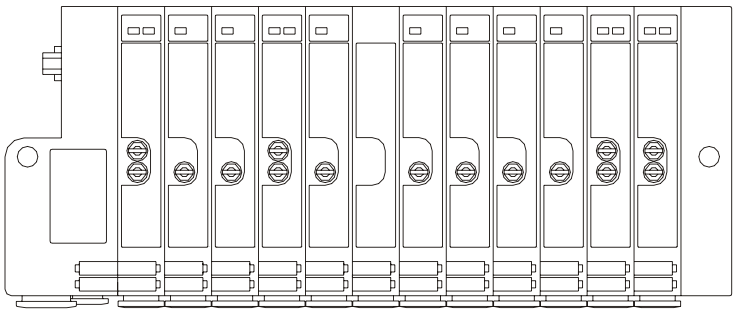
CONNECTOR:
10 = In line
90 = 90° Angle

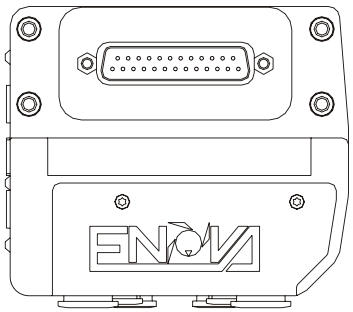


The electrical connection is achieved via a 25 pin connector and can manage up to 22 solenoid pilots.

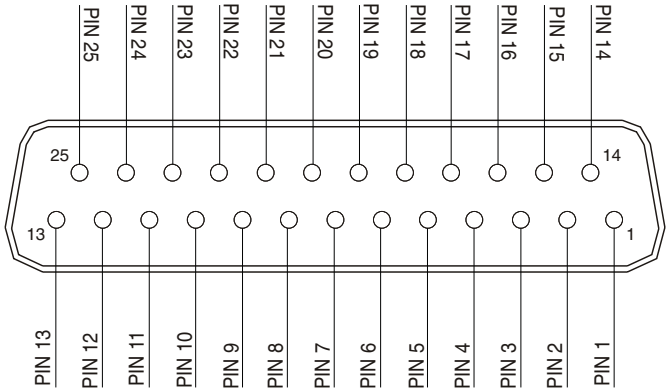
The management and distribution of the electrical signals between each valve is obtained thanks to a patented electrical connector which receives the signals from the previous module, uses one, two or none depending on the type, and carries forward to the next module the remaining. Bistable valves, 5/3 ; 2X3/2 e 2X2/2 valves which have two solenoid pilots built in, use two signals; the first is directed to the pilot side 14 the second to the pilot side 12.
Mono-stable valves can be fitted with two type of electrical connector: one that uses only one signal (connected to the pilot side 14) and carries forward the remaining and one called CEB (Electrical contact for bistable) which uses two signals, one is needed for the valve the other is not used.
This second solution (CEB) allows the modification of the manifold (replacement of monostable valves with bistable for example) without the need of reconfiguring the PLC outputs layout. On the other hand this solution limits the maximum number of valves to 11 (two signals for each position).
Intermediate supply / exhaust modules are fitted with a dedicated electrical connector which carries forward all electric signals without using any. This allows the use of intermediate modules in any position of the manifold.

Example of manifold samples with the corresponding pin layout.



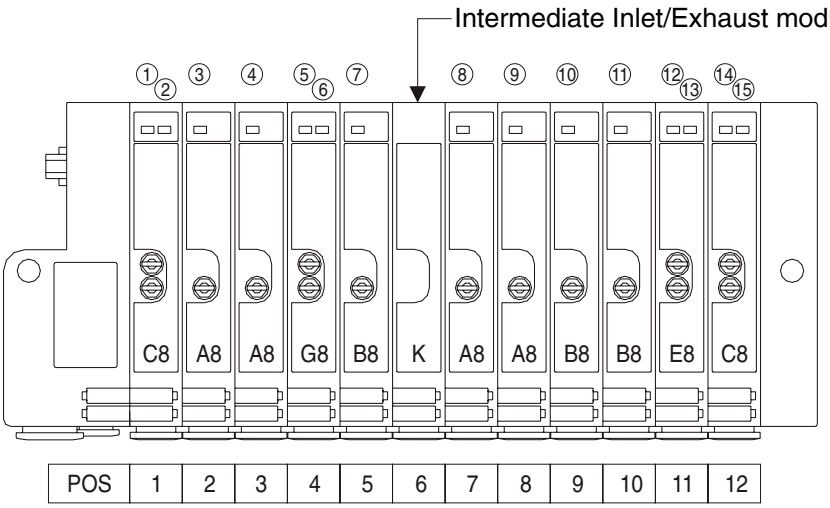


ELECTRIC CONNECTOR
SUB-D TYPE - 25 POLES



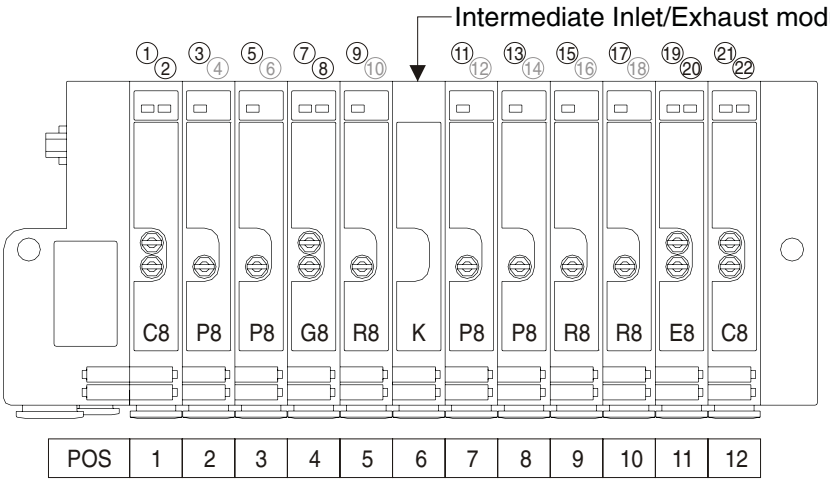
1 - 22 = Solenoid valves signals
23 - 24 = Common
25 = Not connected

25 PIN Connector correspondence for manifold with standard monostable valves



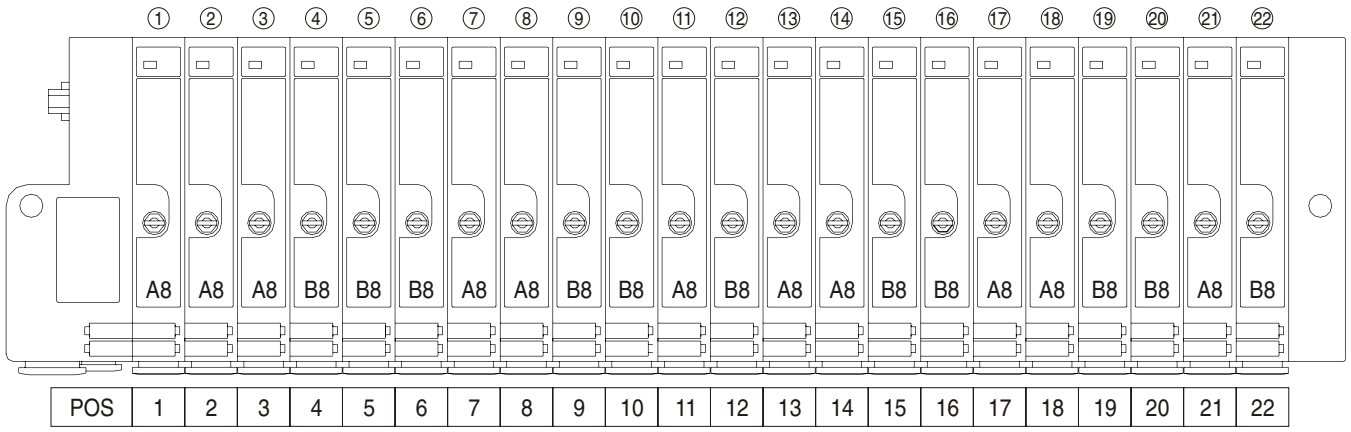
PIN 1 = PILOT 14 EV POS.1
PIN 2 = PILOT 12 EV POS.1
PIN 3 = PILOT 14 EV POS.2
PIN 4 = PILOT 14 EV POS.3
PIN 5 = PILOT 14 EV POS.4
PIN 6 = PILOT 12 EV POS.4
PIN 7 = PILOT 14 EV POS.5
PIN 8 = PILOT 14 EV POS.7
PIN 9 = PILOT 14 EV POS.8
PIN 10 = PILOT 14 EV POS.9
PIN 11 = PILOT 14 EV POS.10
PIN 12 = PILOT 14 EV POS.11
PIN 13 = PILOT 12 EV POS.11
PIN 14 = PILOT 14 EV POS.12
PIN 15 = PILOT 12 EV POS.12

25 PIN Connector correspondence for manifold with CEB monostable valves (electrical contact for bistable)



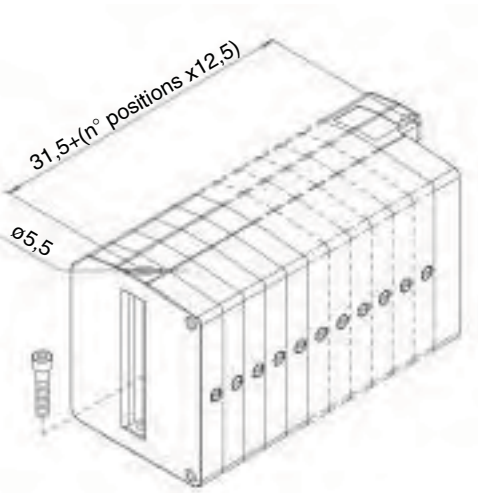
PIN 1 = PILOT 14 EV POS.1
PIN 2 = PILOT 12 EV POS.1
PIN 3 = PILOT 14 EV POS.2
PIN 4 = NOT CONNECTED
PIN 5 = PILOT 14 EV POS.3
PIN 6 = NOT CONNECTED
PIN 7 = PILOT 14 EV POS.4
PIN 8 = PILOT 12 EV POS.4
PIN 9 = PILOT 14 EV POS.5
PIN 10 = NOT CONNECTED
PIN 11 = PILOT 14 EV POS.7
PIN 12 = NOT CONNECTED
PIN 13 = PILOT 14 EV POS.8
PIN 14 = NOT CONNECTED
PIN 15 = PILOT 14 EV POS.9
PIN 16 = NOT CONNECTED
PIN 17 = PILOT 14 EV POS.10
PIN 18 = NOT CONNECTED
PIN 19 = PILOT 14 EV POS.11
PIN 20 = PILOT 12 EV POS.11
PIN 21 = PILOT 14 EV POS.12
PIN 22 = PILOT 12 EV POS.12

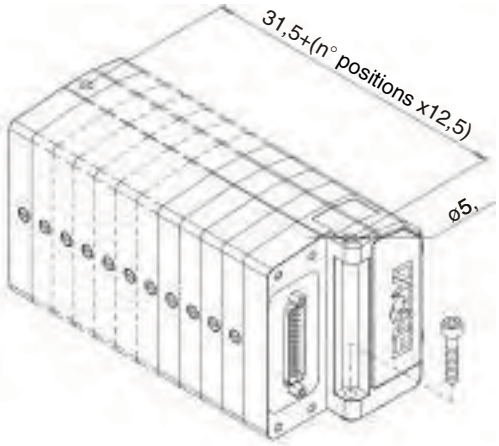
25 PIN Connector correspondence for manifold for 22 position manifold with standard monostable valves



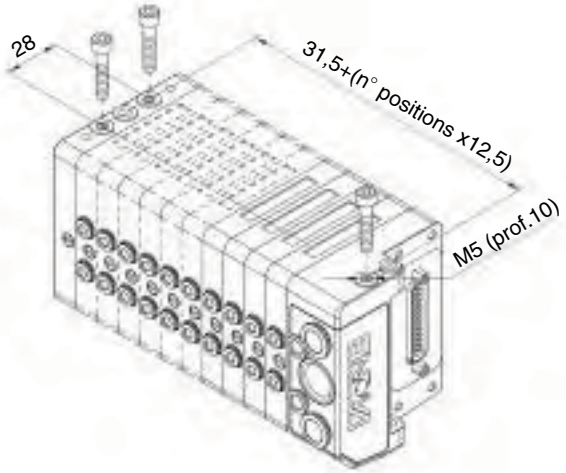
Mounting

From the top

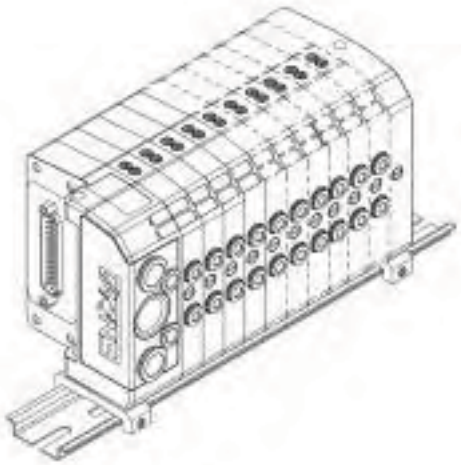




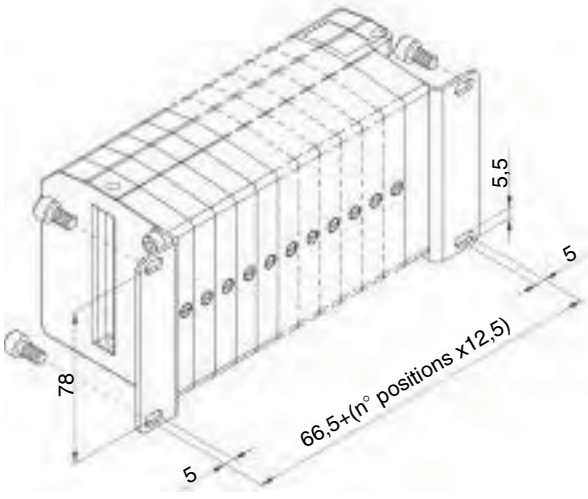
From the bottom



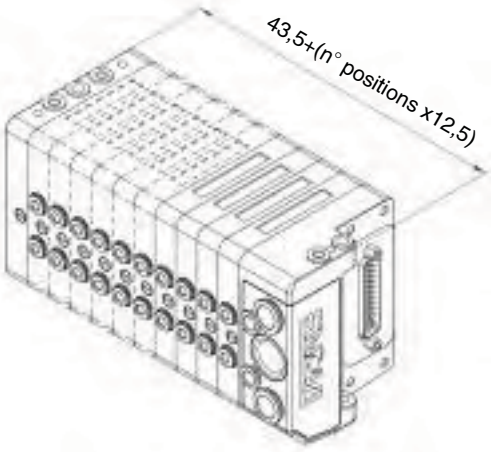
On DIN rail

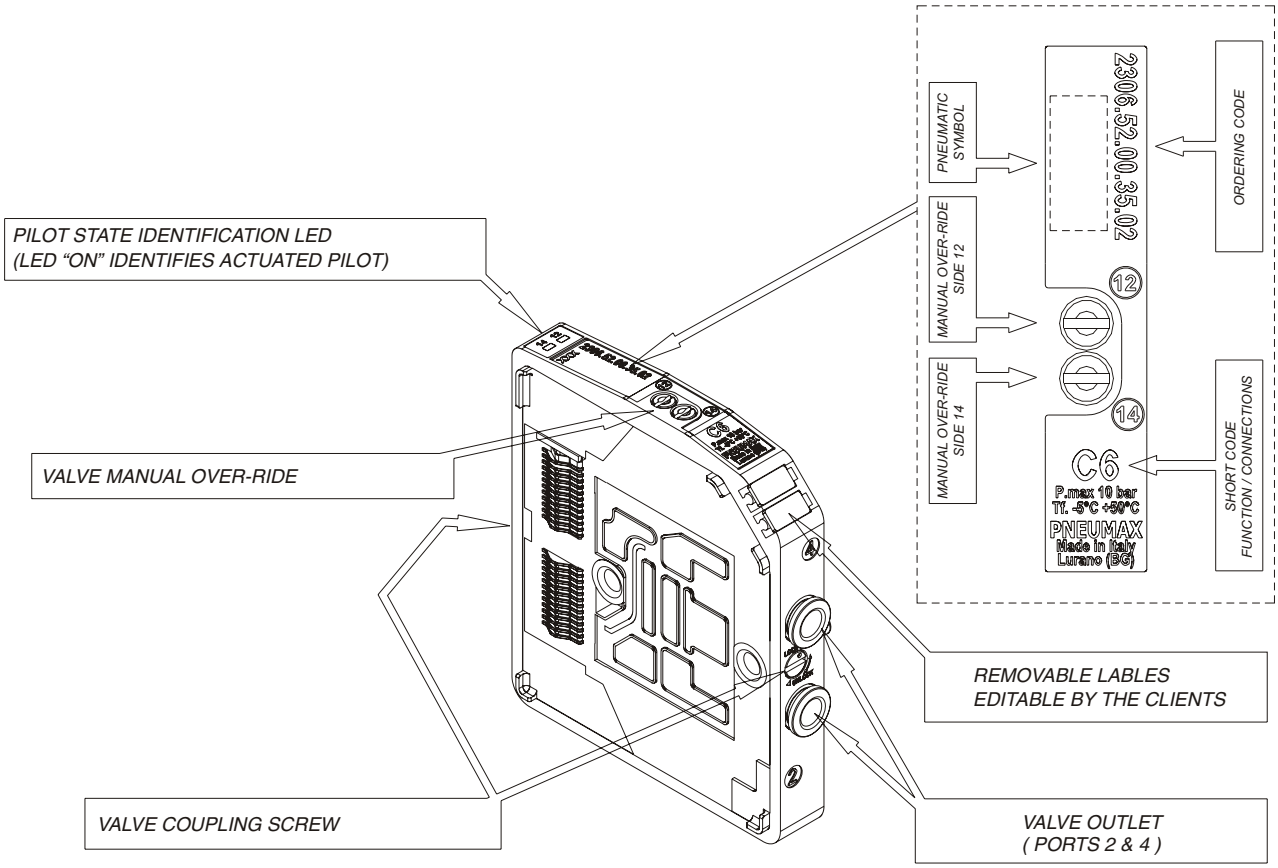


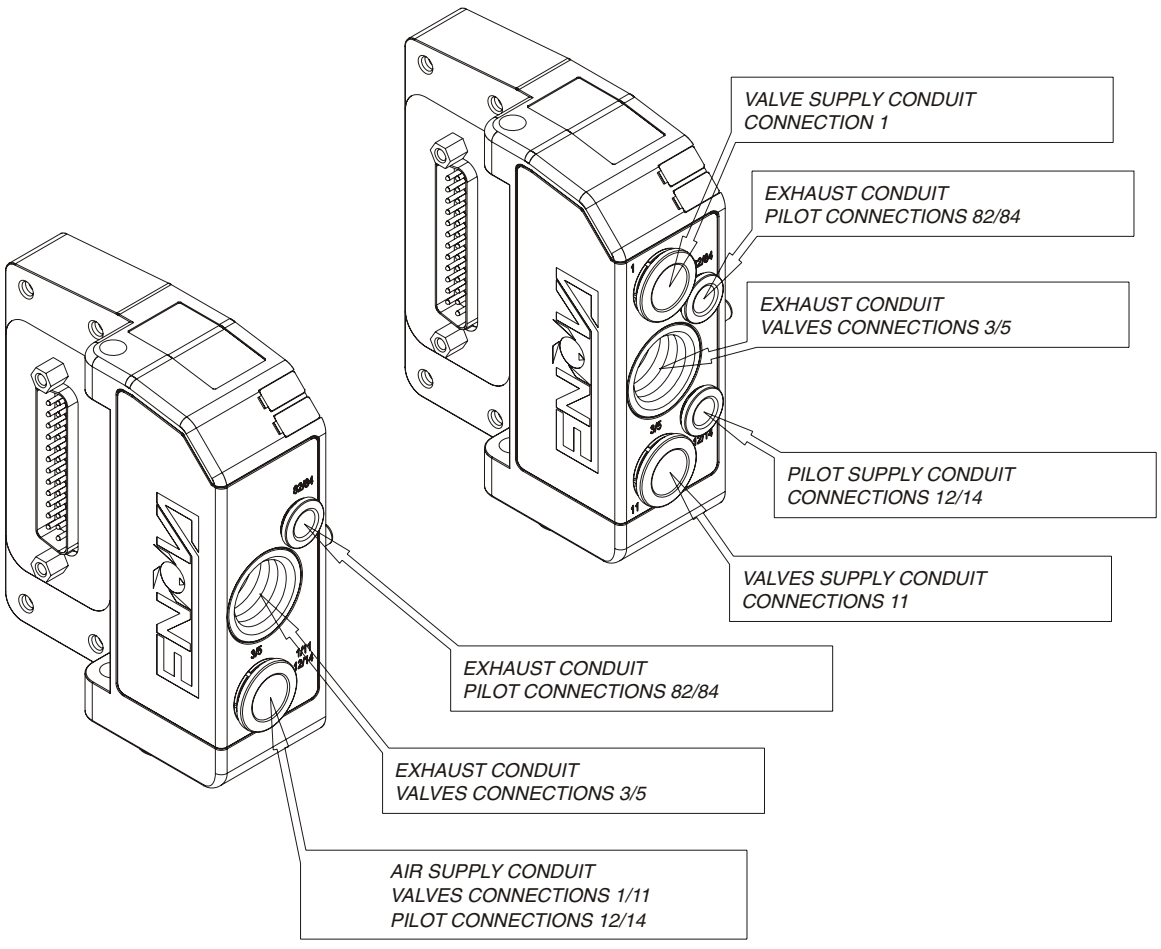
90° Bracket



Maximum envelop size based
on the number of positions

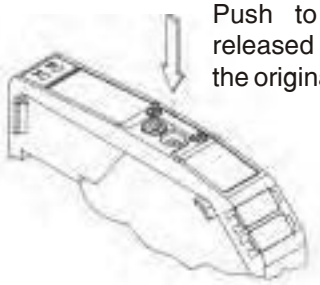



PILOT STATE IDENTIFICATION LED
(LED "ON" IDENTIFIES ACTUATED PILOT)
VALVE MANUAL OVER-RIDE
VALVE COUPLING SCREW
REMOVABLE LABLES
EDITABLE BY THE CLIENTS
VALVE OUTLET
(PORTS 2 & 4)
PNEUMATIC SYMBOL
MANUAL OVER-RIDE SIDE 12
MANUAL OVER-RIDE SIDE 14
2306.52.00.3502
ORDERING CODE
SHORT CODE
FUNCTION / CONNECTIONS
C6
P.max 10 bar
Tf. -5°C +50°C
PNEUMAX
Made in Italy
Lurano (BG)


VALVE SUPPLY CONDUIT
CONNECTION 1
EXHAUST CONDUIT
PILOT CONNECTIONS 82/84
EXHAUST CONDUIT
VALVES CONNECTIONS 3/5
PILOT SUPPLY CONDUIT
CONNECTIONS 12/14
VALVES SUPPLY CONDUIT
CONNECTIONS 11
EXHAUST CONDUIT
PILOT CONNECTIONS 82/84
EXHAUST CONDUIT
VALVES CONNECTIONS 3/5
AIR SUPPLY CONDUIT
VALVES CONNECTIONS 1/11
PILOT CONNECTIONS 12/14

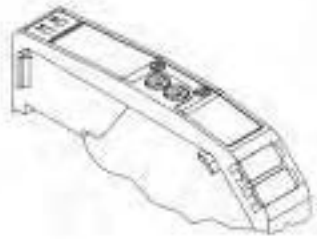
Manual over-ride function

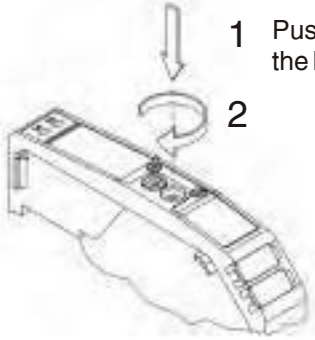
Unstable function



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

Bistable function



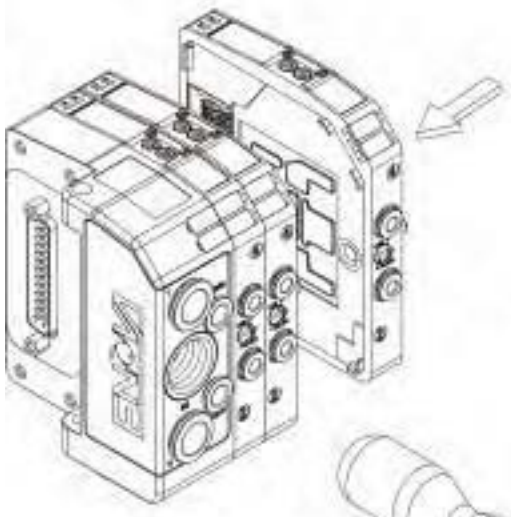


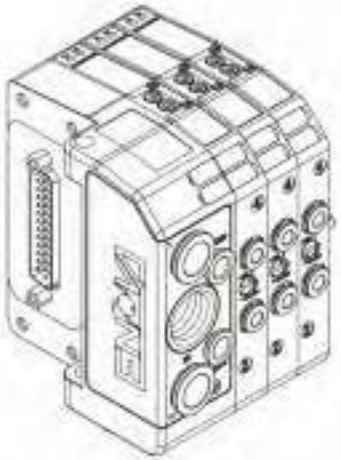
1 Push and turn to get the bistable function

2

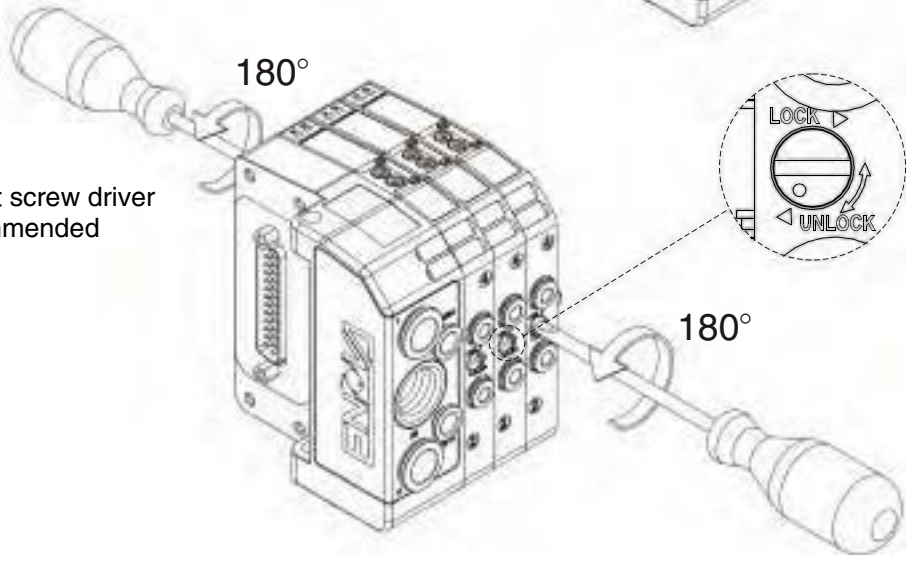
NOTE: It is strongly suggested to replace the original position after using

Manifold assembly





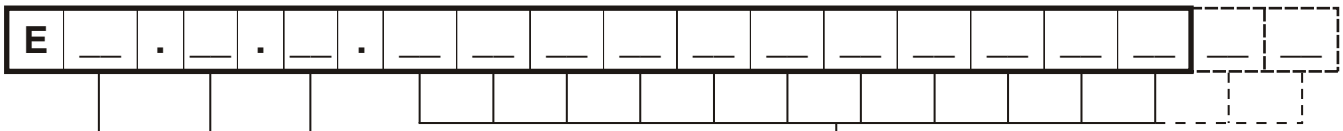
180°



180°

The use of a flat screw driver (1x5,5) is recommended

Manifold Lay-Out configuration



ACCESSORIES :
0= none
D= DIN bar adapter
S= 90° Fixing bracket

ENDPLATES SELECTION :
A= 5 ports endplated left side
plus right side endplated
B= 3 ports endplated left side
plus right side endplated

ELECTRICAL CONNECTION :
MP= MULTIPOLAR PNP (standard)
MN= MULTIPOLAR NPN
CA= CAN OPEN 22 OUT
CB= CAN OPEN 22 OUT + 8 IN
CC= CAN OPEN 22 OUT + 16 IN
CD= CAN OPEN 22 OUT + 24 IN
PA= PROFIBUS 22 OUT
PB= PROFIBUS 22 OUT + 8 IN
PC= PROFIBUS 16 OUT + 16 IN

SHORT CODE
FUNCTION / CONNECTION :
A4= EV 5/2 MONOST. SOL.-SPRING Ø4
A6= EV 5/2 MONOST. SOL.-SPRING Ø6
A8= EV 5/2 MONOST. SOL.-SPRING Ø8
B4= EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø4
B6= EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø6
B8= EV 5/2 MONOST. SOL.-DIFFERENTIAL Ø8
C4= EV 5/2 BISTABLE SOL.-SOL. Ø4
C6= EV 5/2 BISTABLE SOL.-SOL. Ø6
C8= EV 5/2 BISTABLE SOL.-SOL. Ø8
E4= EV 5/3 CC SOL.-SOL. Ø4
E6= EV 5/3 CC SOL.-SOL. Ø6
E8= EV 5/3 CC SOL.-SOL. Ø8
F4= EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø4
F6= EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø6
F8= EV 2x3/2 NC-NC (= 5/3 OC) SOL.-SOL. Ø8
G4= EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø4
G6= EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø6
G8= EV 2x3/2 NO-NO (= 5/3 PC) SOL.-SOL. Ø8
H4= EV 2x3/2 NC-NO SOL.-SOL. Ø4
H6= EV 2x3/2 NC-NO SOL.-SOL. Ø6
H8= EV 2x3/2 NC-NO SOL.-SOL. Ø8
L4= EV 2x2/2 NC-NC SOL.-SOL. Ø4
L6= EV 2x2/2 NC-NC SOL.-SOL. Ø6
L8= EV 2x2/2 NC-NC SOL.-SOL. Ø8
M4= EV 2x2/2 NO-NO SOL.-SOL. Ø4
M6= EV 2x2/2 NO-NO SOL.-SOL. Ø6
M8= EV 2x2/2 NO-NO SOL.-SOL. Ø8
N4= EV 2x2/2 NC-NO SOL.-SOL. Ø4
N6= EV 2x2/2 NC-NO SOL.-SOL. Ø6
N8= EV 2x2/2 NC-NO SOL.-SOL. Ø8
P4= EV 5/2 MONOST. SOL.-SPRING CEB Ø4
P6= EV 5/2 MONOST. SOL.-SPRING CEB Ø6
P8= EV 5/2 MONOST. SOL.-SPRING CEB Ø8
R4= EV 5/2 MONOST. SOL.-DIFF. CEB Ø4
R6= EV 5/2 MONOST. SOL.-DIFF. CEB Ø6
R8= EV 5/2 MONOST. SOL.-DIFF. CEB Ø8

J= INTERMEDIATE EXHAUST MODULE Ø8
K= INTERMEDITE INLET MODULE Ø8

X= INLET DIAPHRAGM
Y= EXHAUST DIAPHRAGM
Z= INLET-EXHAUST DIAPHRAGM

NOTE:
While configuring the manifold always bear in mind that the maximum number of electrical signals available is 22.
N.B. CEB = Electrical connector for bistable valves (uses two electric signals)
Intermediate supply / exhaust modules require the same space as a valve but do not use any electric signals (as the electric connector carries forward all signals received from the module immediately before).
The separation diaphragms are positioned between two modules and replace the standard seal therefore do not increase the dimension of the assembly. When using a separation diaphragm of any type, it is necessary to add, in any position between diaphragm and the manifold and plate, an extra air supply / exhaust module depending on the type of diaphragm used.

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