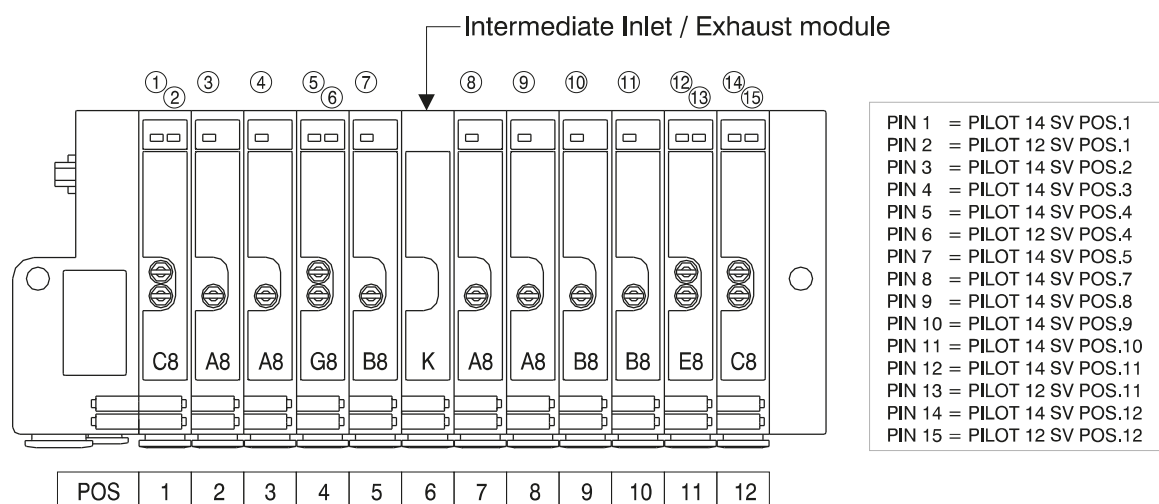
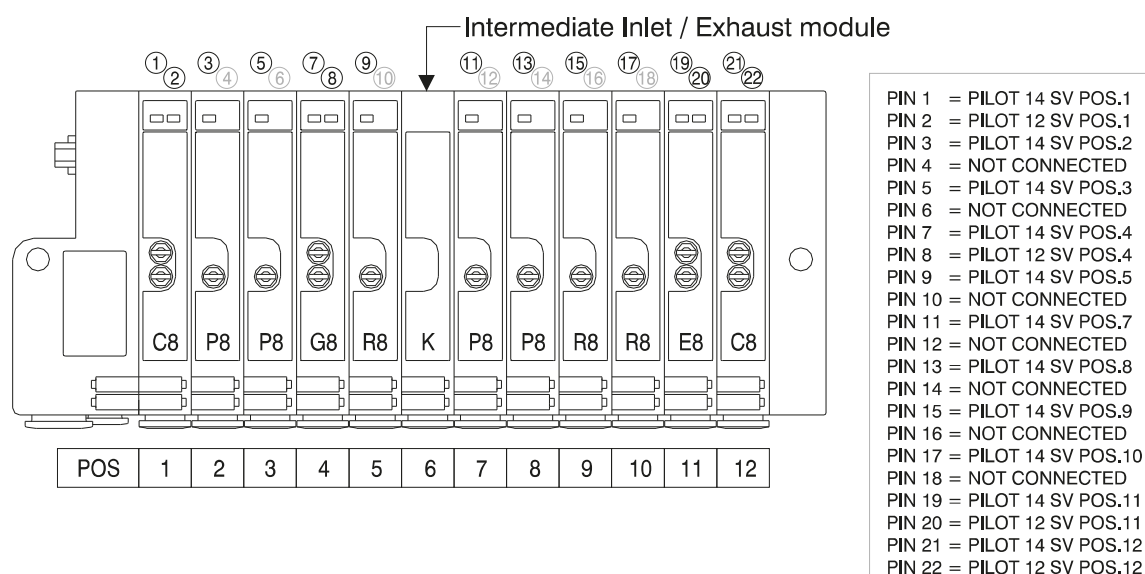


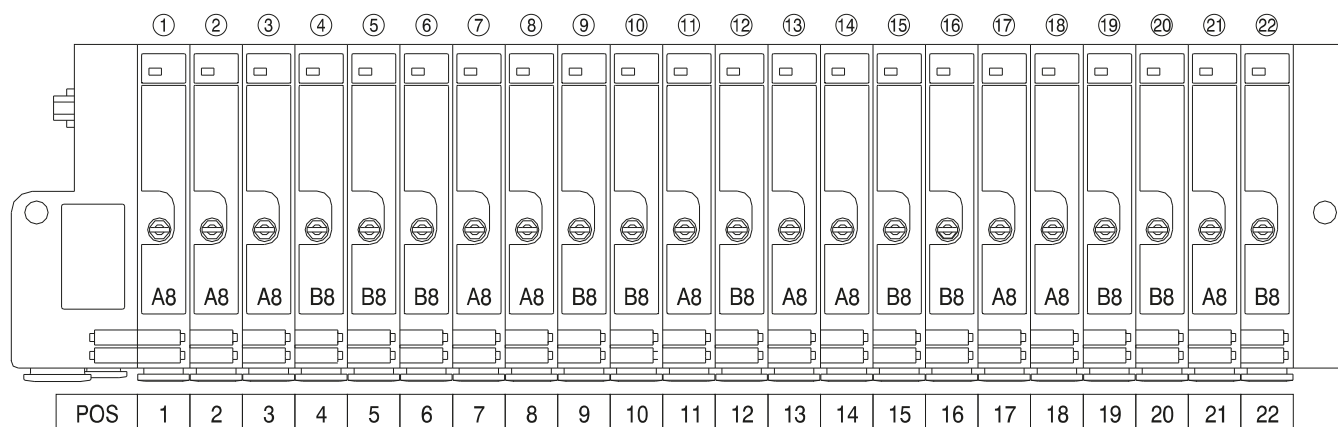
## 25 PIN Connector correspondence for bistable, 2x3/2, 5/3 and standard monostable valves manifold



## 25 PIN Connector correspondence for bistable, 2x3/2, 5/3 manifold and CEB monostable valves (electrical contact for bistable)

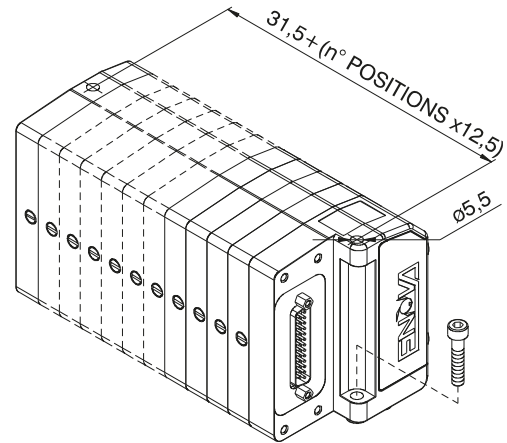
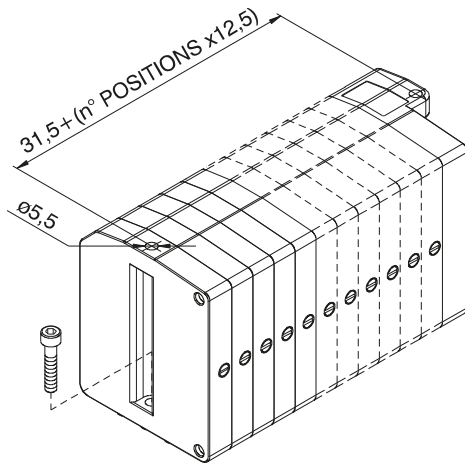


## 25 PIN Connector correspondence for manifold for 22 position manifold with standard monostable valves



## Mounting

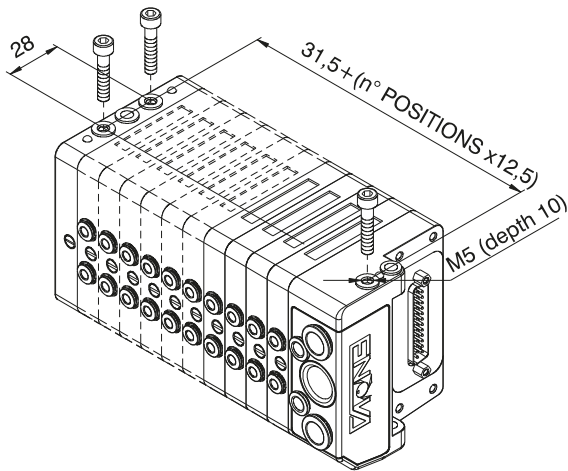
From the top



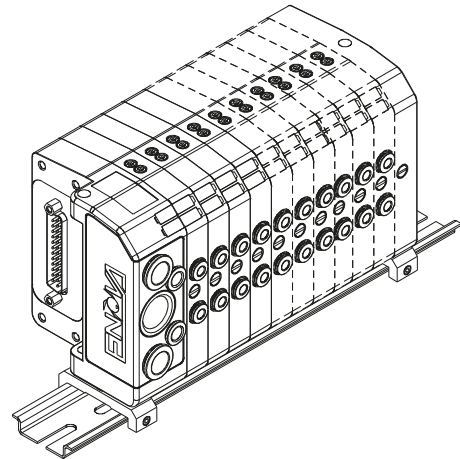
1

AIR DISTRIBUTION

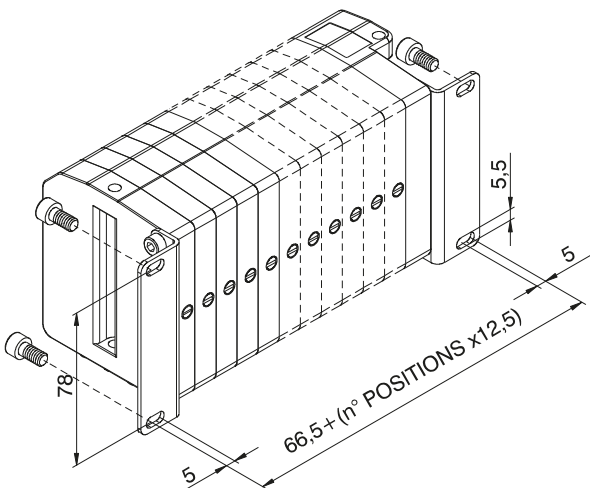
From the bottom



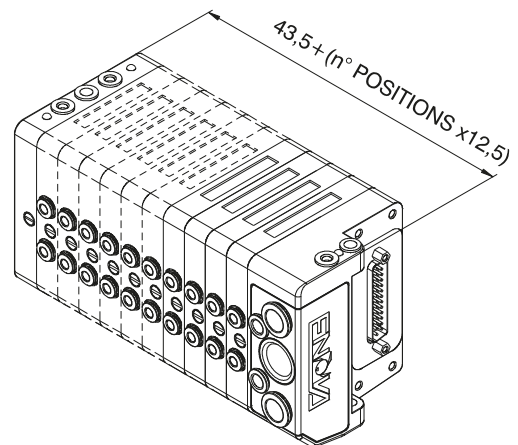
On DIN rail



90° Bracket



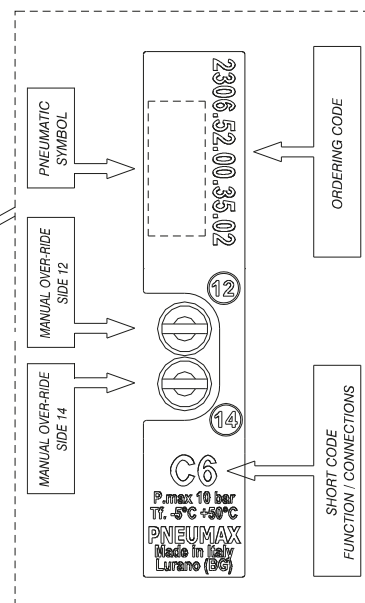
Maximum envelop size based  
on the number of positions



PILOT STATE IDENTIFICATION LED  
(LED "ON" IDENTIFIES ACTUATED PILOT)

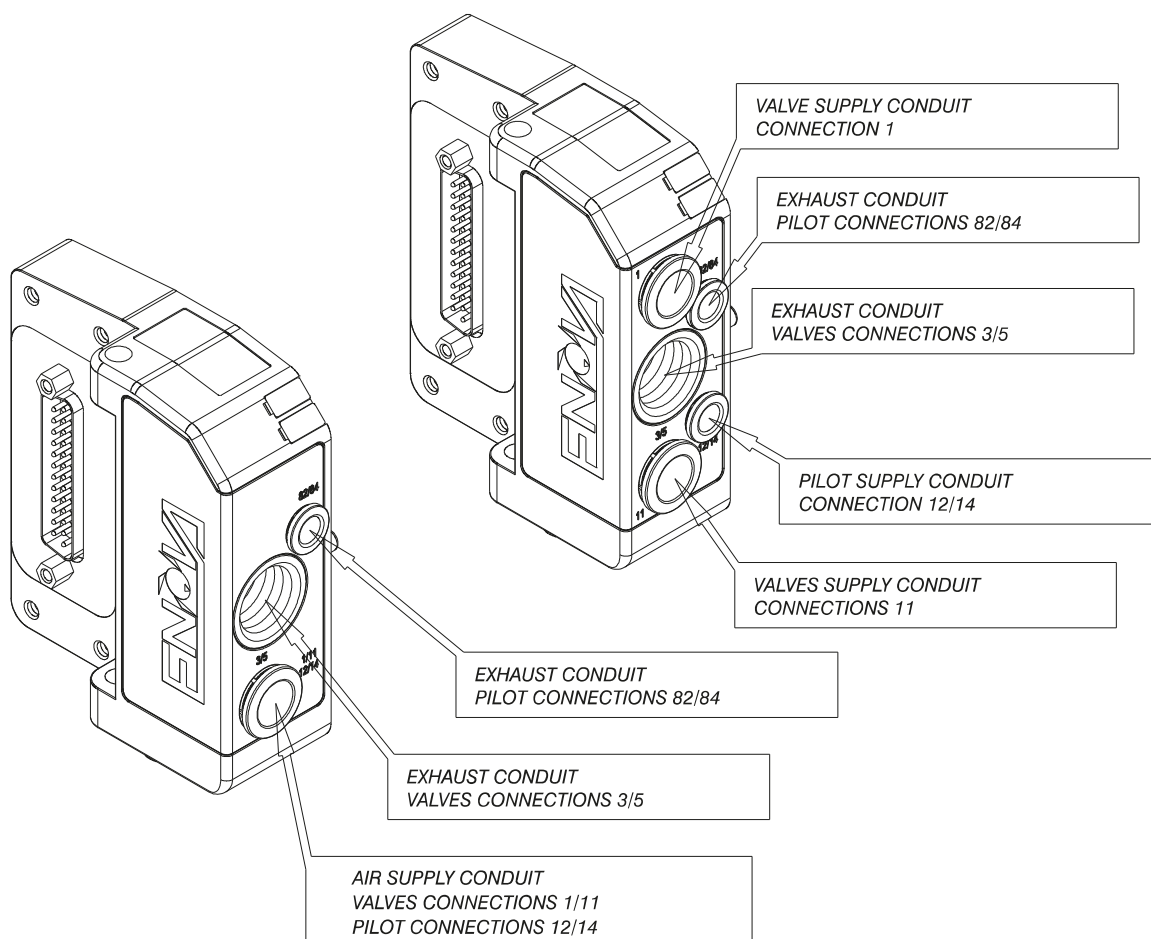
VALVE MANUAL OVER-RIDE

VALVE COUPLING SCREW



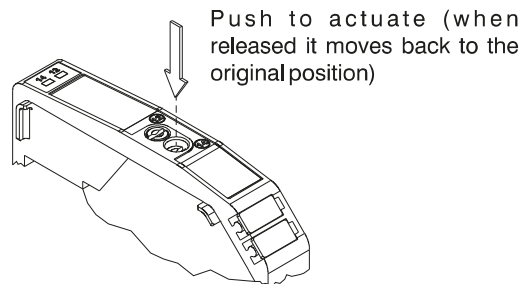
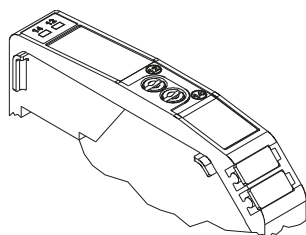
REMOVABLE LABELS  
EDITABLE BY THE CLIENTS

VALVE OUTLET  
(PORTS 2 & 4)

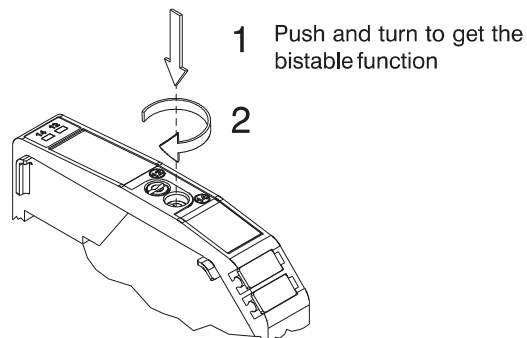
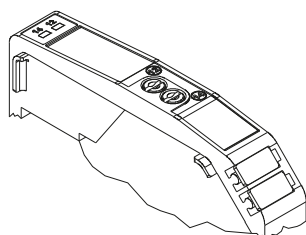


## Manual over-ride function

### Unstable function



### Bistable function



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

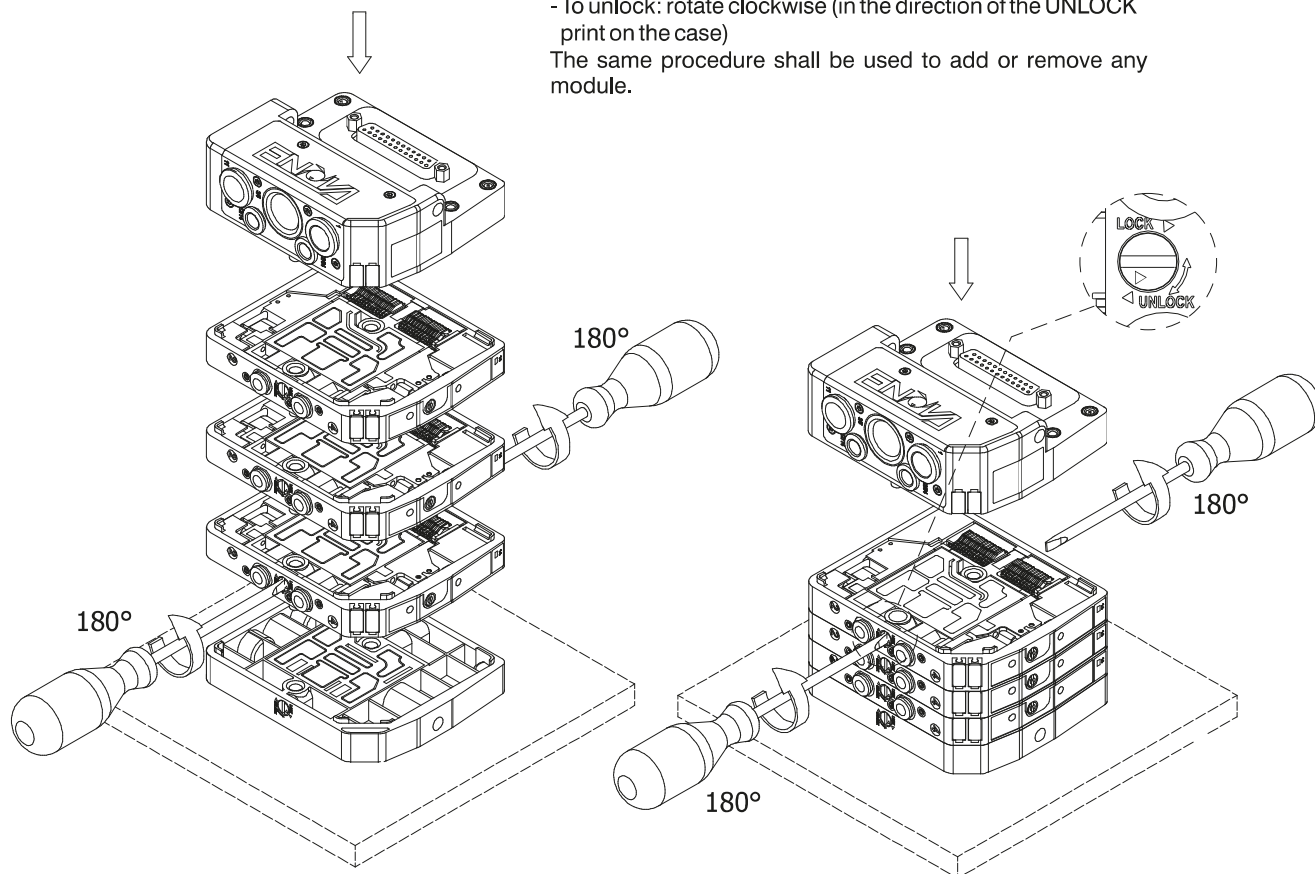
## Manifold assembly

The assembly procedure should start from the end-plate which should be positioned on a flat surface. Add the requested modules by simply rotating by 180° the fastening pins by means of a 1x5.5 flat screw driver. The last module to be assembled shall be the inlet module

Fastening pins rotation direction:

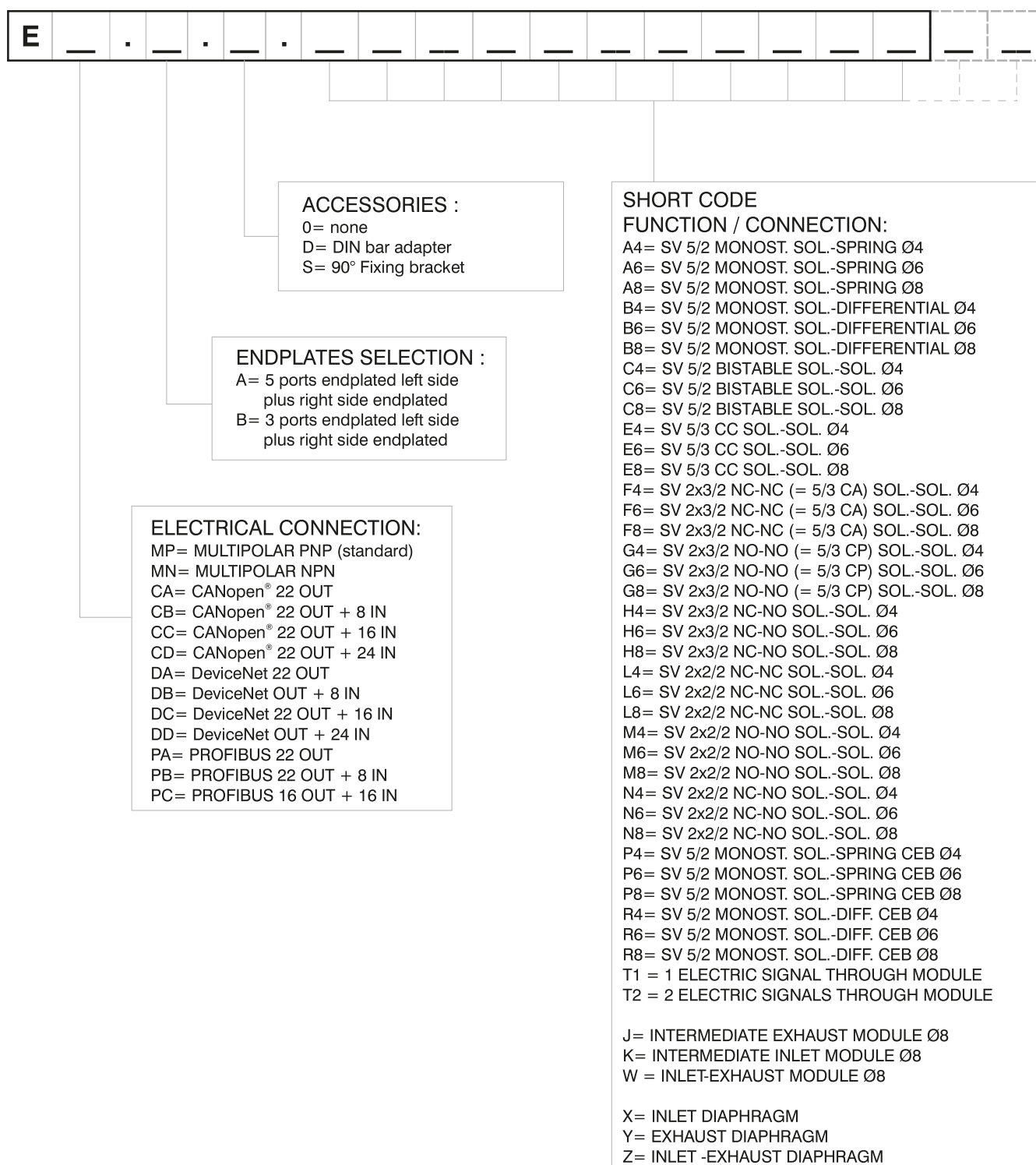
- To lock: rotate anticlockwise (in the direction of the LOCK print on the case)
- To unlock: rotate clockwise (in the direction of the UNLOCK print on the case)

The same procedure shall be used to add or remove any module.



## Manifold Lay-Out configuration

1  
AIR DISTRIBUTION



### 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.





General:

CANopen® module is directly integrated on Enova solenoid valves manifold via a 25 poles connector, normally used for multipolar cable connection.

Enova solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

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

Module can manage up to 22 solenoid valves, and, in the same time, a max number of 3 Input modules 5200.08.

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

Regardless of the number of Input modules connected, the managable solenoid valves are 22.

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

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

Connection to Bus CANopen® is possible via 2 M12 5P male - female circular connectors; these two are connected in parallel and according to CiA Draft Standard Proposal 301 V 4.10 (15 August 2006).

Transmission speed can be set by 3 dip-switches.

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

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

Ordering code

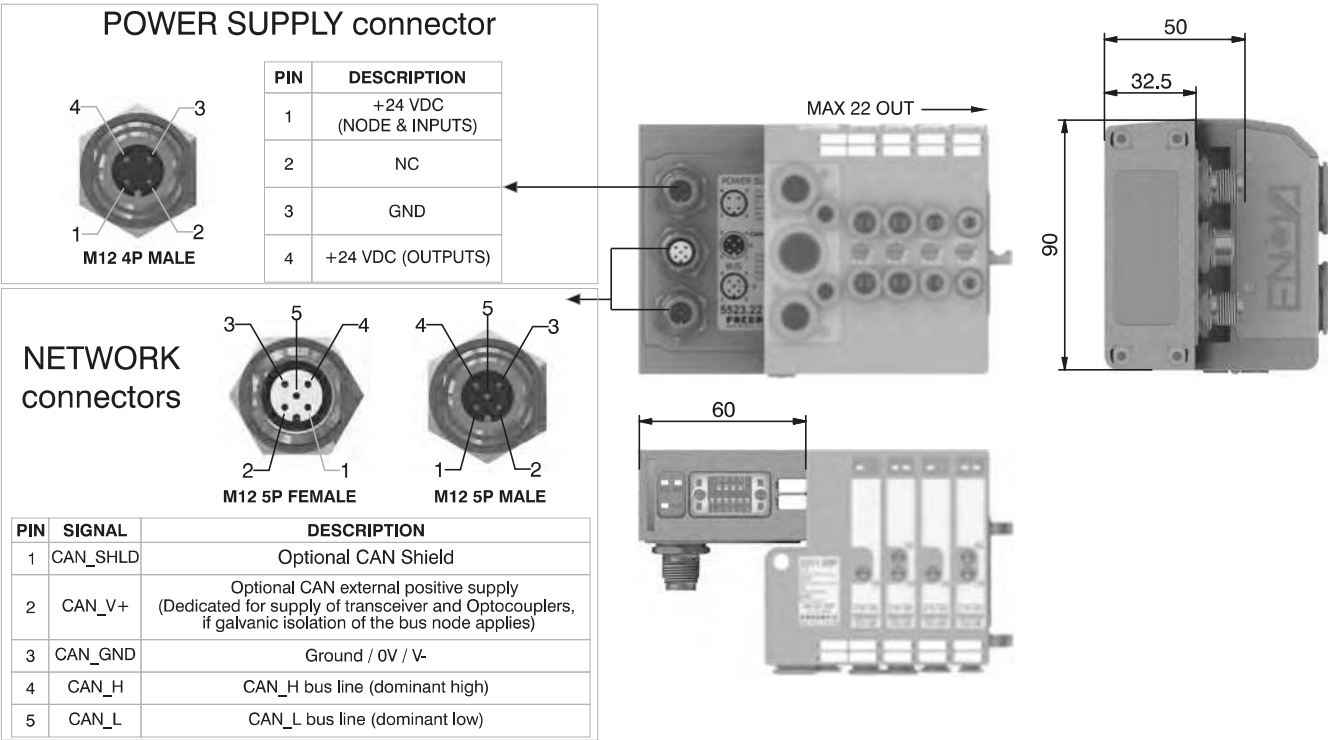
5523.22



1

AIR DISTRIBUTION

Scheme / Overall dimensions and I/O layout :



Technical characteristics

	Model	5523.22
	Specifications	CiA Draft Standard Proposal 301 V 4.10 (15 August 2006)
	Case	Reinforced technopolymer
Power supply	Power supply connection	M12 4P male connector (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	25 mA
	Power supply diagnosis	Green led PWR
	PNP equivalent outputs	+24 VDC +/- 10%
Outputs	Maximum current for output	100 mA
	Maximum output number	22
	Max output simultaneously actuated	22
	Network connectors	2 M12 5P connectors male-female (IEC 60947-5-2)
Network	Baud rate	10 - 20 - 50 - 125 - 250 - 500 - 800 - 1000 Kbit/s
	Addresses, possible numbers	From 1 to 63
	Max nodes in net	64 (slave + master)
	Bus maximum recommended length	100 m a 500 Kbit/s
	Bus diagnosis	Green led + Red led
	Configuration file	Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a>
	IP protection grade	IP65 when assembled
	Temperature range	From -0° to +50° C

## General:

DeviceNet module is directly integrated on Enova solenoid valves manifold via a 25 poles connector, normally used for multipolar cable connection.

Enova solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).

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

Module can manage up to 22 solenoid valves, and, in the same time, a max number of 3 Input modules 5200.08.

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

Regardless of the number of Input modules connected, the manageable solenoid valves are 22.

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

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

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

Transmission speed can be set by 3 dip-switches.

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

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

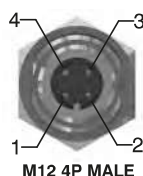
## Ordering code

**5423.22**



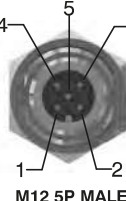
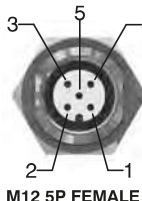
## Scheme / Overall dimensions and I/O layout :

### POWER SUPPLY connector

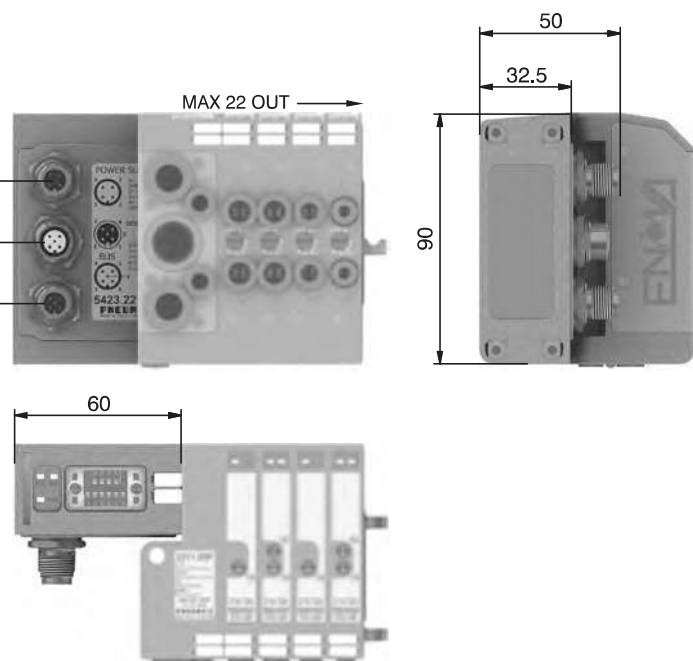


PIN	DESCRIPTION
1	+24 VDC (NODE & INPUTS)
2	NC
3	GND
4	+24 VDC (OUTPUTS)

### NETWORK connectors



PIN	SIGNAL	DESCRIPTION
1	CAN_SHLD	Optional CAN Shield
2	CAN_V+	Optional CAN external positive supply (Dedicated for supply of transceiver and Optocouplers, if galvanic isolation of the bus node applies)
3	CAN_GND	Ground / 0V / V-
4	CAN_H	CAN_H bus line (dominant high)
5	CAN_L	CAN_L bus line (dominant low)



## Technical characteristics

	Model		5423.22
	Specifications		DeviceNet Specifications Volume I, release 2.0.
	Case		Reinforced technopolymer
	Power supply	Power supply connection	M12 4P male connector (IEC 60947-5-2)
		Power supply voltage	+24 VDC +/- 10%
		Node consumption (without inputs)	25 mA
		Power supply diagnosis	Green led PWR
	Outputs	PNP equivalent outputs	+24 VDC +/- 10%
		Maximum current for output	100 mA
		Maximum output number	22
		Max output simultaneously actuated	22
	Network	Network connectors	2 M12 5P connectors male-female (IEC 60947-5-2)
		Baud rate	125 - 250 - 500 Kbit/s
		Addresses, possible numbers	From 1 to 63
		Max nodes in net	64 (slave + master)
		Bus maximum recommended length	100 m a 500 Kbit/s
		Bus diagnosis	Green led + Red led
		Configuration file	Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a>
		IP protection grade	IP65 when assembled
		Temperature range	From -0° to +50° C



**General:**

PROFIBUS DP module is directly integrated on Enova solenoid valves manifold via a 25 poles connector, normally used for multipolar cable connection.  
 Enova solenoid valves connected to node must be PNP equivalent (final 02 in ordering code).  
 The node can be easily installed also on solenoid valves manifold already mounted on equipment.  
 Module can manage up to 22 solenoid valves, when is connected 0 or 1 INPUT modules, or 16 if node is fitted with 2 INPUT modules. The max number of INPUT modules 5200.08, is 2.  
 PROFIBUS DP module recognizes automatically the presence of the Input modules on power on. Node power supply is made by a M12 4P male circular connector.  
 The separation between node 24 VDC Power supply and outputs 24 VDC allows to switch off the outputs maintaining powered the node and inputs, if present.  
 Connection to Bus PROFIBUS DP is possible via 2 M12 type B 5P male - female circular connectors; these two are connected in parallel and according to PROFIBUS Interconnection Technology (Version 1.1 : August 2001).  
 The node address can be set using BCD numeration: 4 dip-switches for the units and 4 dip-switches for the tens.  
 The module includes an internal terminating resistance that can be activated by a dip-switch.

**Ordering code**

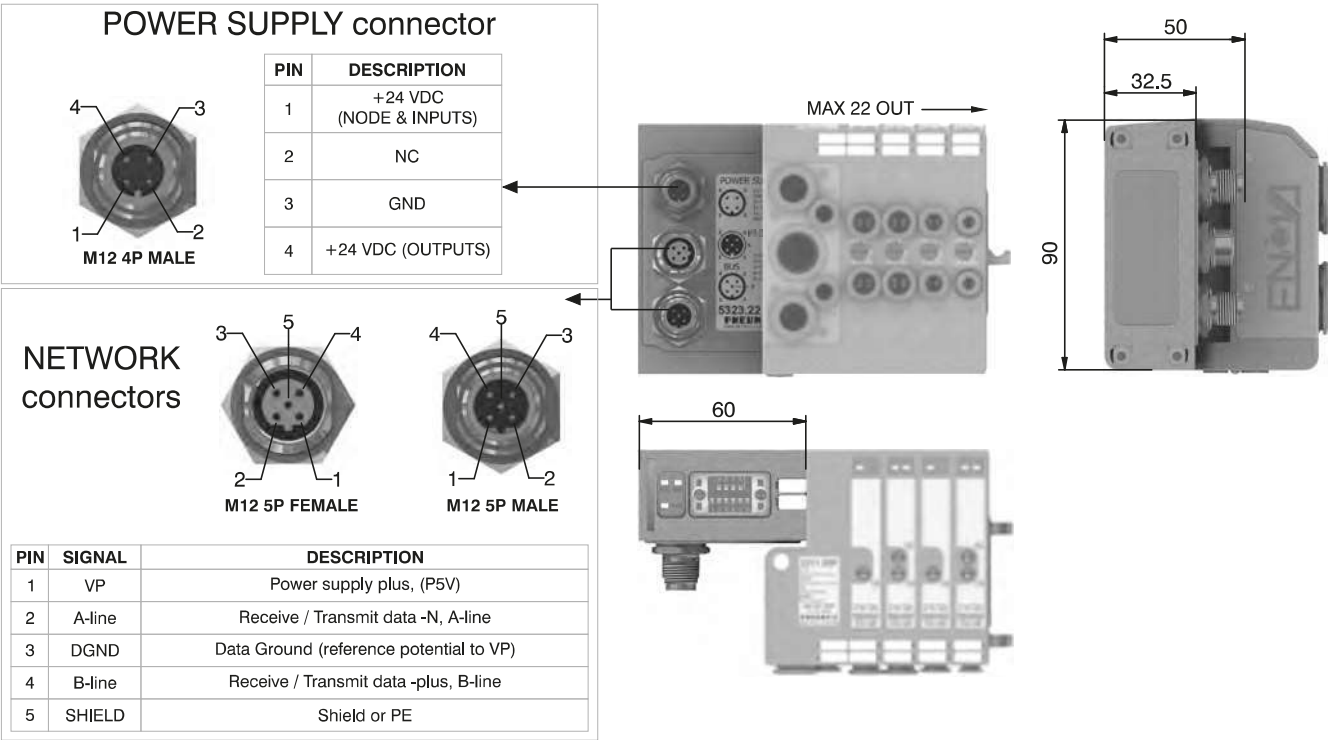
5323.22



1

AIR DISTRIBUTION

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



**Technical characteristics**

	Model	5323.22
	Specifications	PROFIBUS DP
	Case	Reinforced technopolymer
Power supply	Power supply connection	M12 4P male connector (IEC 60947-5-2)
	Power supply voltage	+24 VDC +/- 10%
	Node consumption (without inputs)	50 mA
	Power supply diagnosis	Green led PWR
Outputs	PNP equivalent outputs	+24 VDC +/- 10%
	Maximum current for output	100 mA
	Maximum output number	22 or 16 if node is fitted with 2 INPUT modules
	Max output simultaneously actuated	22
Network	Network connectors	2 M12 5P connectors male-female (IEC 60947-5-2)
	Baud rate	125 - 250 - 500 Kbit/s
	Addresses, possible numbers	From 1 to 63
	Max nodes in net	64 (slave + master)
	Bus maximum recommended length	100 m a 500 Kbit/s
	Bus diagnosis	Green led + Red led
	Configuration file	Available from our web site: <a href="http://www.pneumaxspa.com">http://www.pneumaxspa.com</a>
	IP protection grade	IP65 when assembled
	Temperature range	From -0° to +50° C



## General:

Modules have 8 connectors M8 3P female.

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

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

The maximum current available for all 8 Inputs is 200 mA.

Each module includes a 200 mA resettable fuse. If a short circuit or a overcharge (overall current >200mA) occur the safety device acts cutting the 24 VDC power supply to all M8 connectors on the module and switching off the green led PWR. Any other Input module connected to the node will remain powered and will function correctly.

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

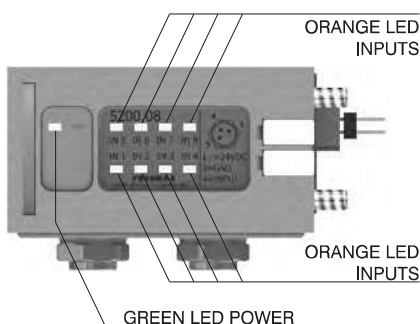
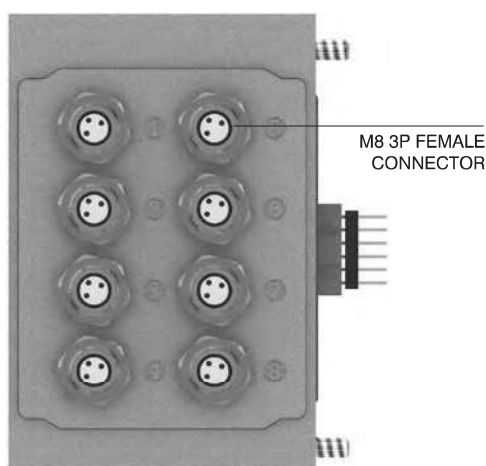
The Maximum number of Input modules supported is 3 for CANopen and DeviceNet, 2 for PROFIBUS DP.

## Ordering code

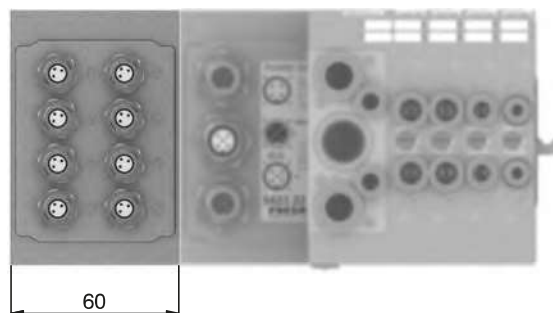
**5200.08**



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

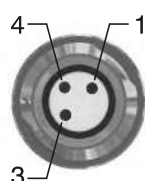
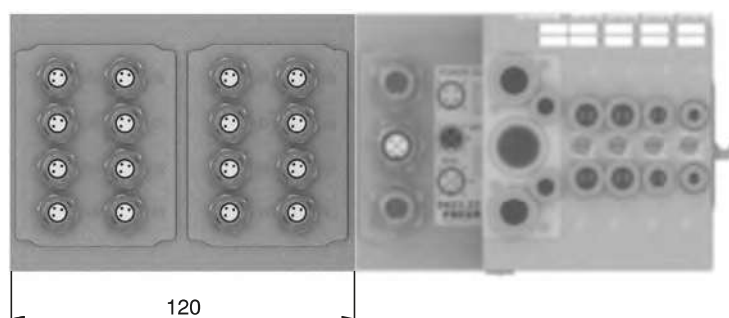


Module 1



Module 2

Module 1

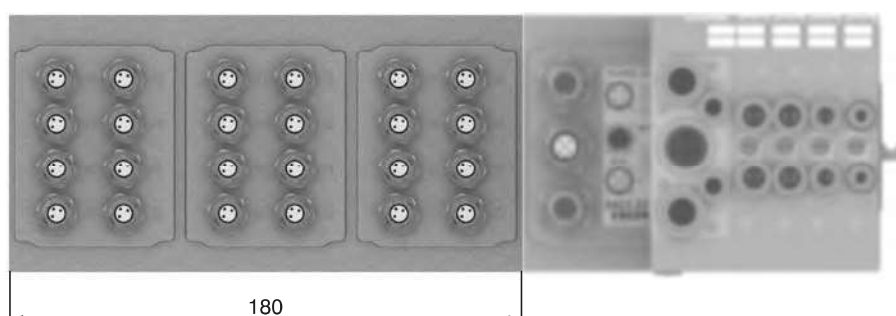


PIN	DESCRIPTION
1	+24 VDC
4	INPUT
3	GND

Module 3

Module 2

Module 1



Socket for Power Supply  
STRAIGHT CONNECTOR  
M12A 4P FEMALE

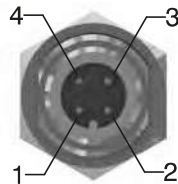
Ordering code

5312A.F04.00



POWER SUPPLY connector

Upper view  
Slave connector

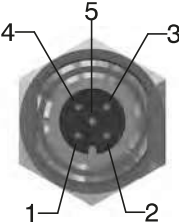


PIN	DESCRIPTION
1	+24 VDC Node
2	
3	0 V
4	+24 VDC Outputs

Socket for Bus CANopen®  
STRAIGHT CONNECTOR  
M12B 5P FEMALE

Ordering code

5312A.F05.00



NETWORK connectors

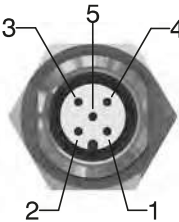
PIN	DESCRIPTION
1	(CAN_SHIELD)
2	(CAN_V+)
3	CAN_GND
4	CAN_H
5	CAN_L

Upper view  
Slave connector

Plug for Bus CANopen®  
STRAIGHT CONNECTOR  
M12A 5P MALE

Ordering code

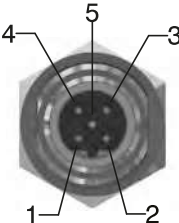
5312A.M05.00



Socket for Bus PROFIBUS  
STRAIGHT CONNECTOR  
M12B 5P FEMALE

Ordering code

5312B.F05.00

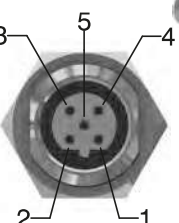


Upper view  
Slave connector

Plug for Bus PROFIBUS  
STRAIGHT CONNECTOR  
M12B 5P MALE

Ordering code

5312B.M05.00



Plug for Input module  
STRAIGHT CONNECTOR  
M8 3P MALE

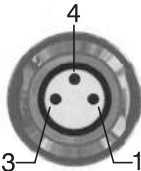
Ordering code

5308A.M03.00



INPUT connectors

Upper view  
Slave connector



PIN	DESCRIPTION
1	+24 VDC
4	INPUT
3	GND

M12 plug

Ordering code

5300.T12



Plugs

M8 plug

Ordering code

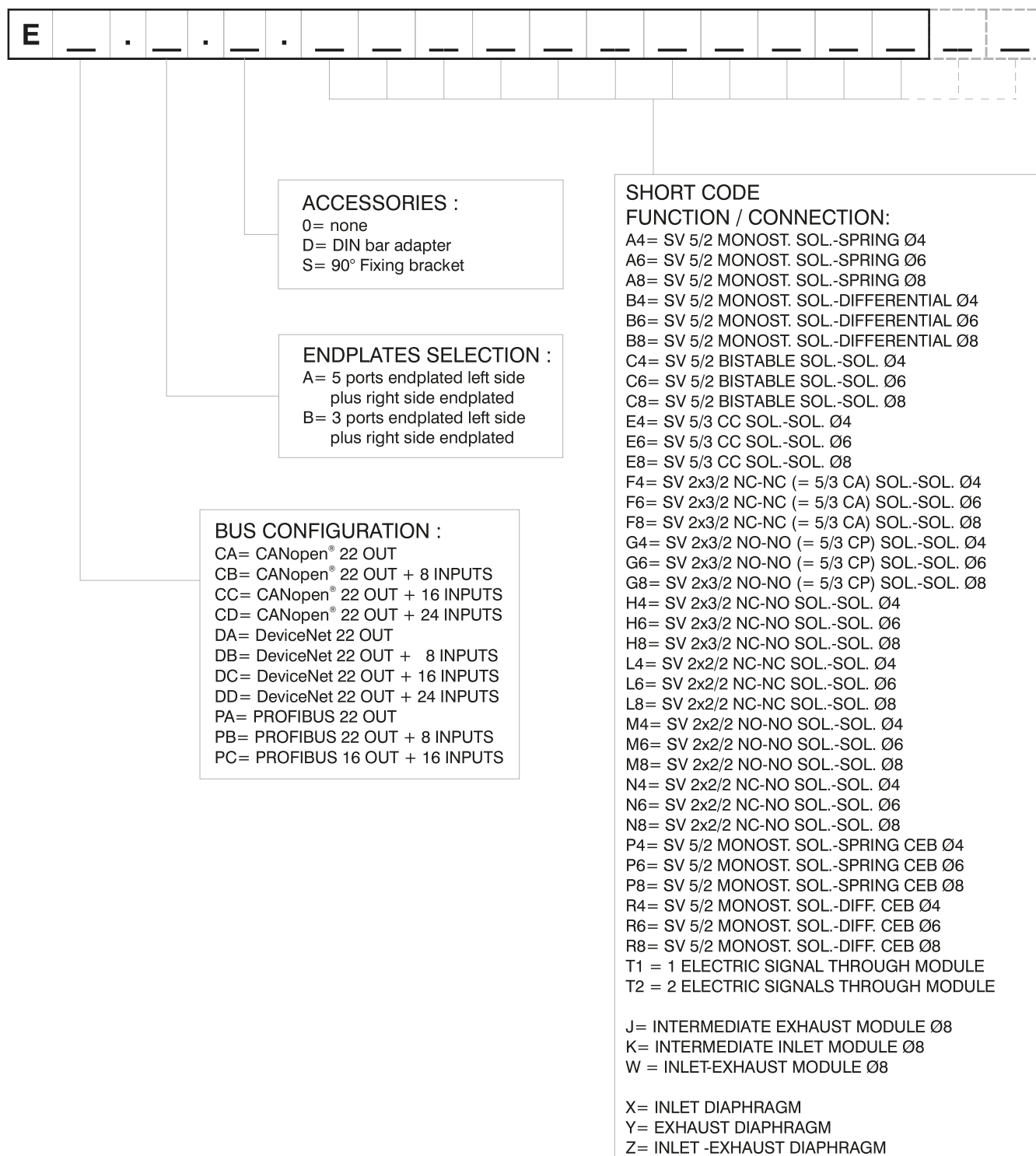
5300.T08



## Manifold layout configuration complete with Serial systems

1

## AIR DISTRIBUTION



**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.