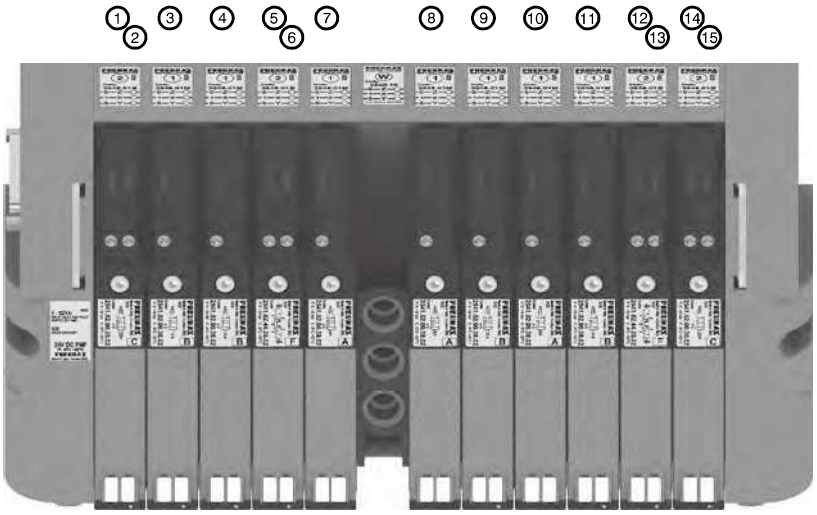
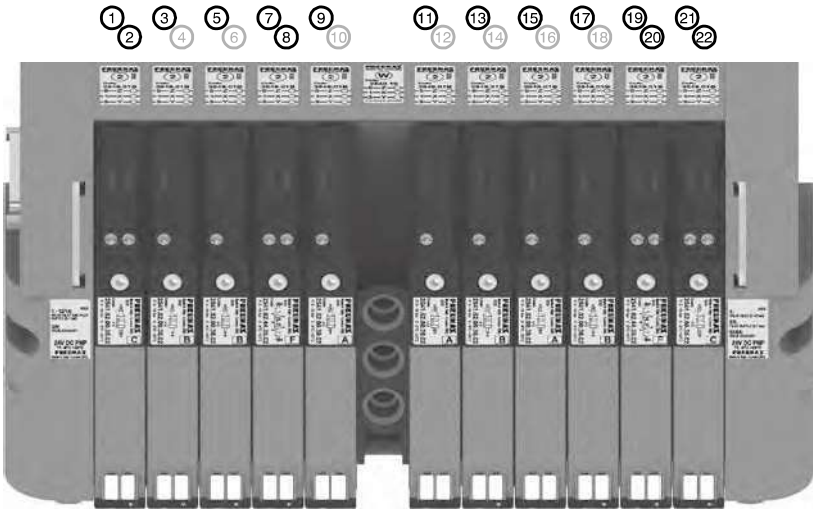
37 PIN Connector correspondence for valves assembled on mixed bases



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

POS.	1	2	3	4	5	6	7	8	9	10	11	12

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

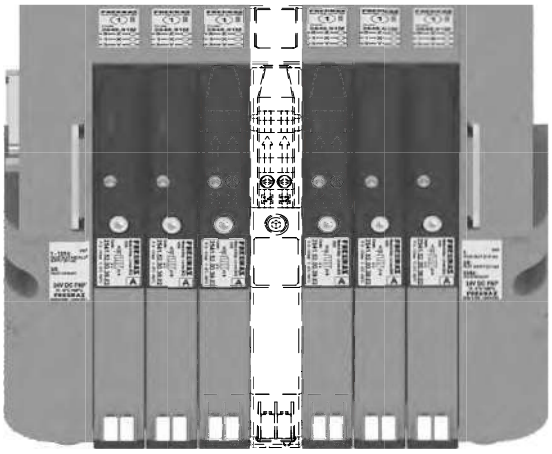


PIN 1 = PILOT 14 S POS.1
PIN 2 = PILOT 12 SV POS.1
PIN 3 = PILOT 14 SV POS.2
PIN 4 = NOT CONNECTED
PIN 5 = PILOT 14 SV POS.3
PIN 6 = NOT CONNECTED
PIN 7 = PILOT 14 SV POS.4
PIN 8 = PILOT 12 SV POS.4
PIN 9 = PILOT 14 SV POS.5
PIN 10 = NOT CONNECTED
PIN 11 = PILOT 14 SV POS.7
PIN 12 = NOT CONNECTED
PIN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

POS.	1	2	3	4	5	6	7	8	9	10	11	12

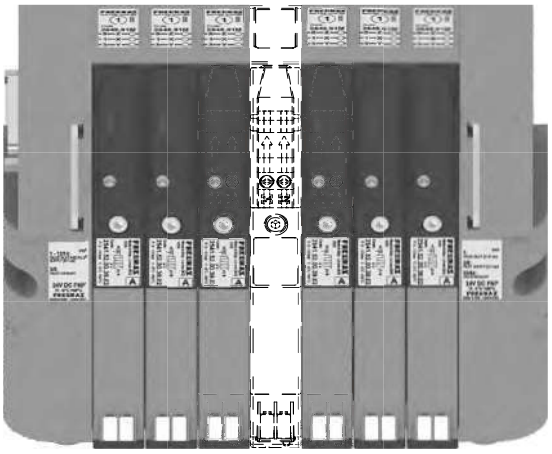
37 PIN Connector correspondence for manifold for 32 position manifold with monostable valves on base

37P



POS.	1	2	3	...	30	31	32

25P



POS.	1	2	3	...	20	21	22

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

General :

Using the 2540.03.25P output terminal it is possible to make any electrical signals not used by valves available on a 25 sub-D female connector at the right end of the manifold.
It is possible to then join a multi-core cable to link to the next manifold, or connect directly to one or two I/O modules.
The I/O modules can accept input or output signals, depending upon what is connected.

Ordering code

2540.08T

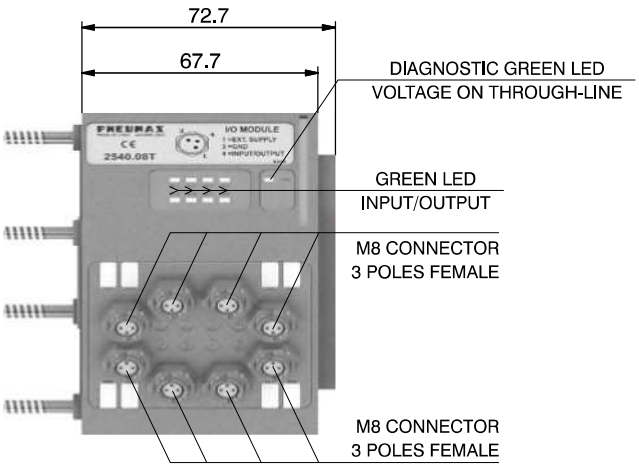
Please note: If the manifold is connected by a multi-core connection, each connection can be used as either an input or an output, while if the manifold is connected to a serial node the connections can only be used as an output.

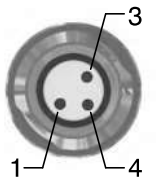
It is possible to connect the manifold to up to two I/O modules.

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

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

Overall dimensions and I/O layout :





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

Input features:

Each connection can accept either two wire (switches, magnetic switches, pressure switches, etc.) or three wire connections (photocells, electronic end of stroke sensors, etc.) If +24VDC is required on at Pin 1 of each connector, it is possible to provide this via the through-line pin of the multi-pole connector.
I.E :
Pin 25 of the 25 pin multi-pole connector (code 2540.02.25P or 2540.12.25P)
Pin 36-37 of the 37 pin multi-pole connector (code 2540.02.37P or 2540.12.37P)

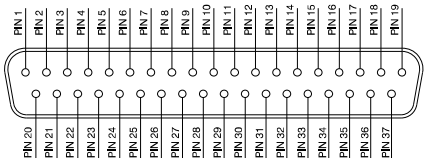
Output features:

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

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

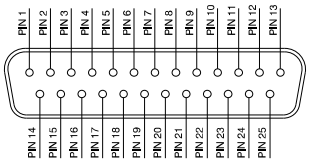
CORRESPONDENCE BETWEEN MULTI-POLE SIGNAL AND CONNECTOR

SUB-D TYPE 37 POLE MALE CONNECTOR

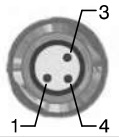


1 - 32 = SIGNALS
33 - 35 = GND
36 - 37 = THROUGH LINE

SUB-D TYPE 25 POLE MALE CONNECTOR



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



PIN	DESCRIPTION
1	THROUGH LINE
4	SIGNAL
3	GND

Connection modes:

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

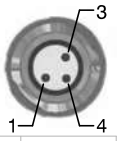
A) Control via multi-pole connection
B) Control via fieldbus

In order to use the I/O module, the correct right hand endplate with 25 pole female outlet connector must be used.
(Code 2540.03.25P).

A) Control via multi-pole :

M8 connector used as Input:

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

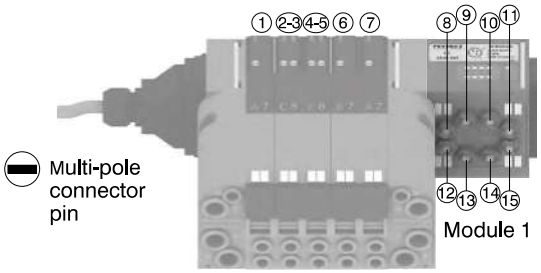


PIN	DESCRIPTION
1	THROUGH LINE
4	SIGNAL
3	GND

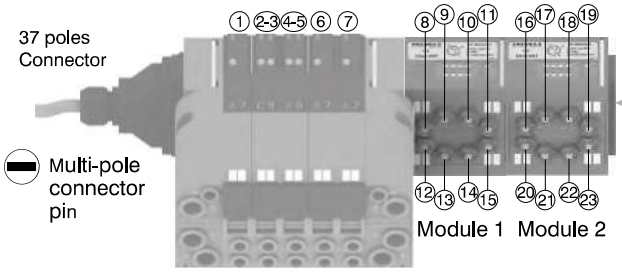
M8 connector used as Output:

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

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

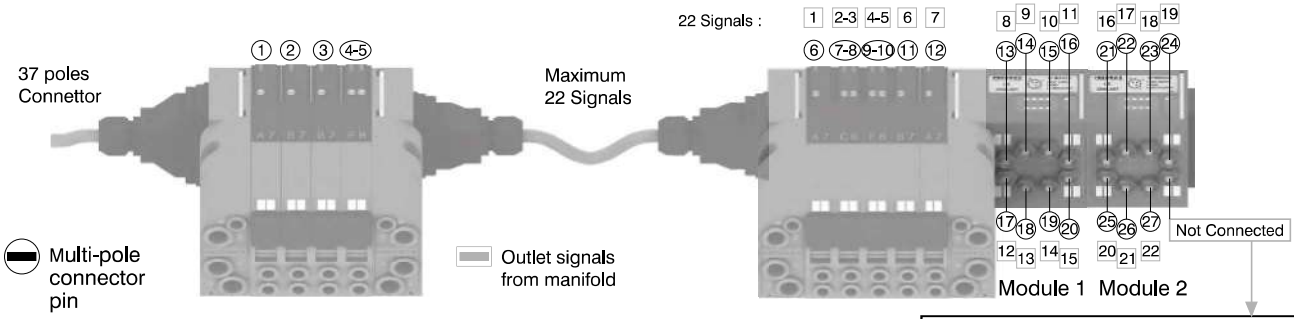


Attention:
Only one more I/O module can be added.



Attention:
No more additions are possible

Attention : Optyma 32-T solenoid valve manifolds permit up to 22 electrical signals that are not used by manifolds to be made available: these signals can be managed by another manifold and / or by I/O modules.
The I/O module will manage these unused signals. Connections that are not managing useful signals will remain unconnected.

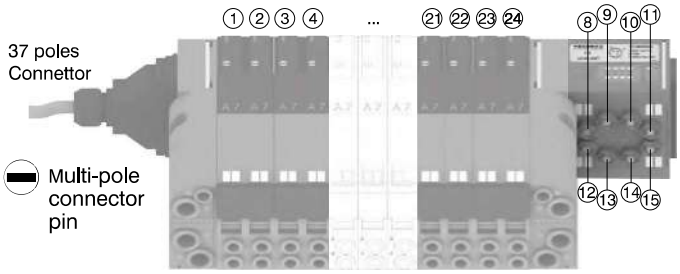


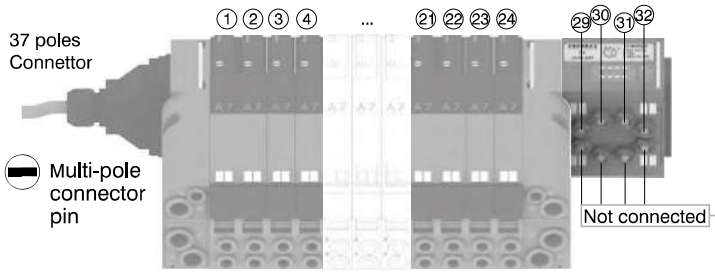
Please note: this example considers a 37 pin multi-pole connector.
The same configuration managed by a 25 pin multi-pole connector will stop at number 22 of multi-pole connector and at number 17 of the manifold. (22) [17]

Attention:
Signal Not connected
GND Connected
Through line Connected

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

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

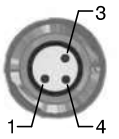




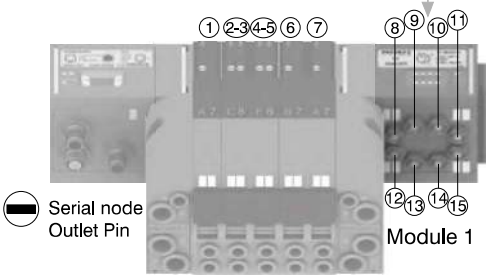
Attention:
Signal Not connected
GND Connected
Through line Connected

B) Control via fieldbus:

With this kind of control the I/O module can only be used as an output. Pin 1 of each connector is not connected. The output voltage will be 0.7V lower than that applied to Pin 4 of the connector.
The maximum output current for each output is 100mA. The correspondence between control byte and each single output depends on how many electrical signals are used by the manifold and by the relative position of the I/O module.

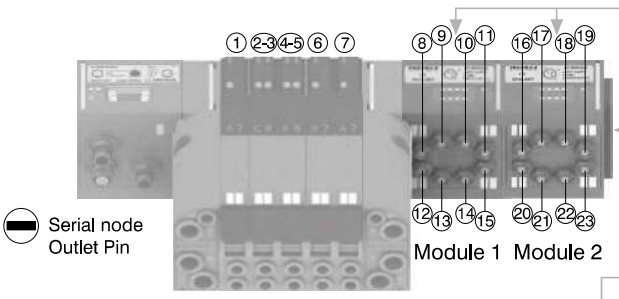


PIN	DESCRIPTION
1	NOT CONNECTED
4	SIGNAL
3	GND



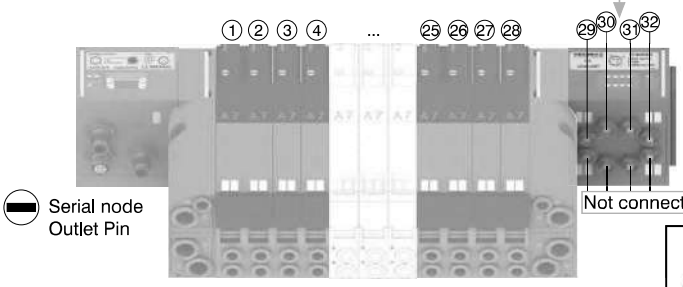
Attention:
Output only

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



Attention:
Output only

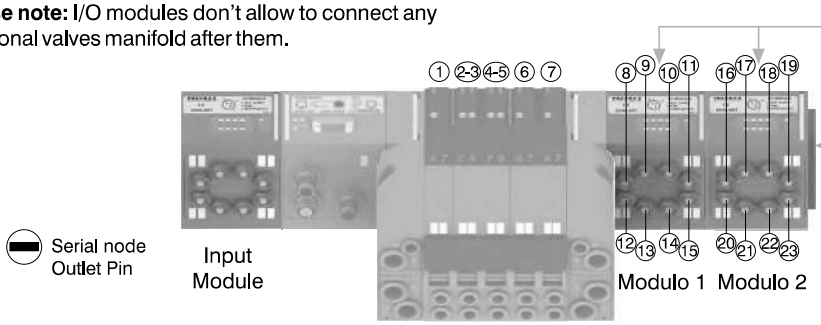
Attention:
No more additions
are possible



Attention:
Output only

Attention:
Signal Not connected
GND Connected

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



Attention:
Output only

Attention:
No more additions
are possible