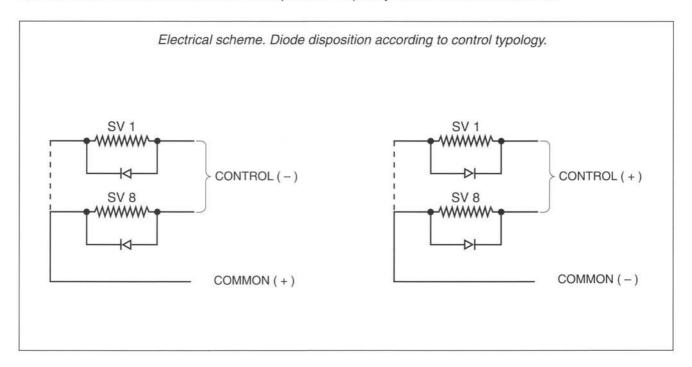
Integrated anti-disturbance diodes (surge voltage suppressor) 750 Series

When you interrupt feeding in an inductive circuit, the magnetic energy stored in the core zeroes. In the spire of the coil, this variation produces a contro-electromotor force, the polarity of which is inverse to that of feeding. In some cases the peak-value of this induced tension can result high and cause electromagnetic disturbance. It can also affect negatively the integrity of the driver and the insulation of the coil itself. The use of anti-disturbance diodes eliminates these phenomena.

Marginal note

Anti-disturbance diodes limit the maximum operative frequency of solenoid valves to 50 Hz.



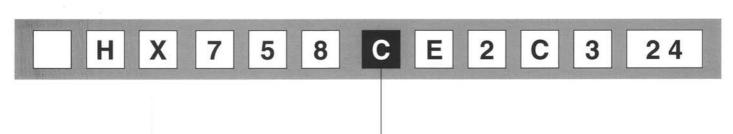
Models available with anti-disturbance diodes

Almost all 750 series models in the catalogue can be equipped with anti-disturbance diodes which are integrated in the valve.

In this series single control models and all speed-up control versions are an exception.

9

How to order solenoid valves with anti-disturbance diodes. Control typologies



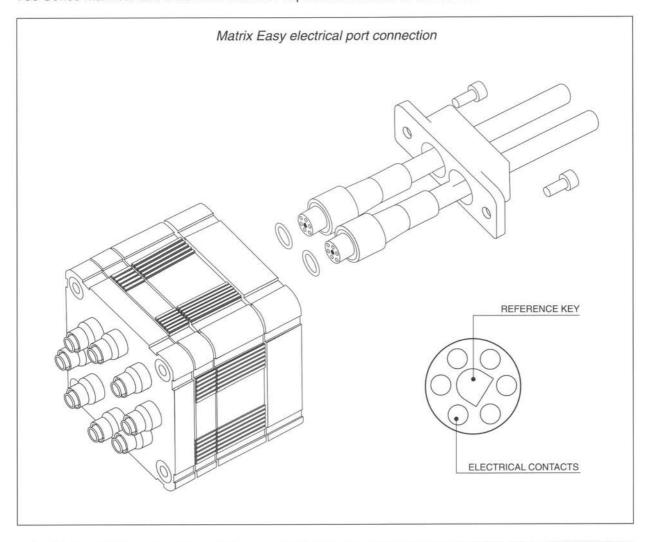
N. ELECTRICAL CONTROLS

- C 4 Controls / Integrated diodes with common 0 Volt
- D 8 Controls / Integrated diodes with common 0 Volt
- F 4 Controls / Integrated diodes with common 12/24 Volt
- G 8 Controls / Integrated diodes with common 12/24 Volt

Matrix Easy electrical port connection - 750 Series

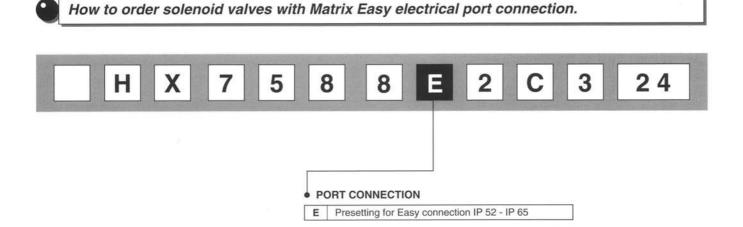
Matrix Easy port connection is suitable to use a wide range of cables which are expressly developed for 750 Series and it allows to obtain different levels of protection according to CEI EN 60947 and CEI 60529 norms

The port connection also allows a significant simplification of electrical connections, it is consistent with 750 Series manifold and it can interface with expansion modules of this series.

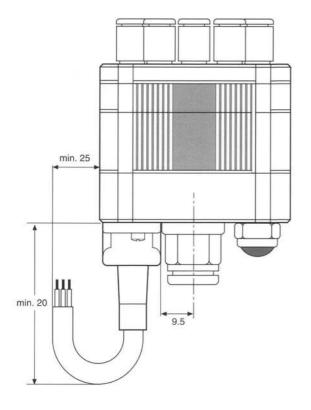


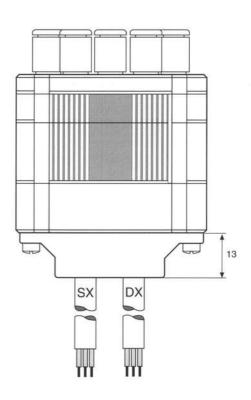
Models available with Matrix Easy electrical port connection

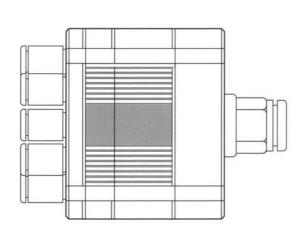
750 Series models can be equipped with Matrix Easy electrical port connection (6 poles with reference key).

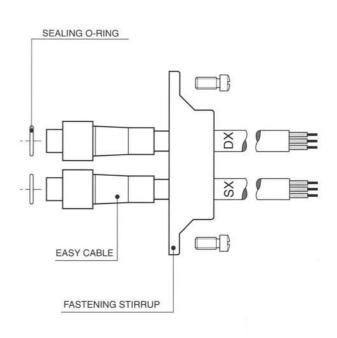


Matrix Easy electrical port connection - 750 Series









Easy IP 65 port connection cables - 750 Series

Protection rate means the intrinsic capability of electrical equipment under tension to protect and protect itself against solid bodies and water. Such protection rate is identified with the IP abbreviation followed by 2 numbers whose relative definition is established by CEI EN 60947 and CEI 60529 norms. The first number, from 0 to 6, classifies the protection against solid bodies, the second one, from 0 to 8, the protection against water.

Protection rates of Easy IP 65 port connection cables follow:

	Protection rate of coverings against solid bodies and water.				
6	Totally protected against dust	Dust penetration is not admitted			
5	Protected against water jets	Water jets thrown on the covering from all directions, must not cause damaging effects.			

Models available with IP 65 port connection cables

750 Series models come with Matrix Easy port connection and can be equipped with IP 65 cables.

Characteristics of IP 65 cable - UL 1581 and UL 758 norms				
Type of port connection on valve Matrix Easy 6 poles				
Cable diameter	6.5 mm			
Maximum temperature use	105° C for PVC - Class 43 (Style 2517) 80° C for polyurethane (Style 20235)			
Insulation	300 Volt			
Resistance against oil	ASTM 2 at 60° C			



How to order IP 65 port connection cables - Length and endings (see following page)

Cables come with assembly kit composed of fastening stirrup, fastening screws and sealing O-rings. For 4 electrical-control valves the kit is composed of a single cable. For 8 electrical-control valves the kit is composed of two cables.

1.1 Ending with soldered threads cable - 4 electrical-control valves (1 cable)

Cable length	PVC	POLYURETHANE
1.000 mm	cod. 868.851 J	
2.000 mm	. cod. 868.854 M	cod. 868.883 P
3.000 mm	cod. 868.855 N	
4.000 mm		cod. 868.884 Q

1.2 Ending with soldered threads cable - 8 electrical-control valves (2 cables)

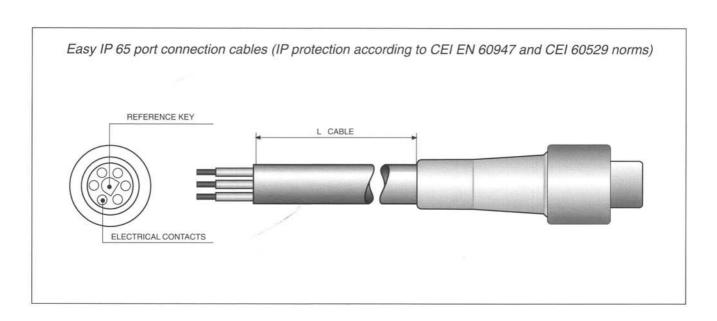
Cable length	PVC	POLYURETHANE
1.000 mm	cod. 868.850 I	
2.000 mm	cod. 868.852 K	cod. 868.885 R
3.000 mm	cod. 868.853 L	
4.000 mm		cod. 868.886 S

2.1 Ending with Sub-D 15 poles connector - 4 electrical-control valves (2 cables)

Cable length	PVC	
1.000 mm	cod. 868.858 Q	-3TM 10 8 (50)
2.000 mm	cod. 868.859 R	
3.000 mm	cod. 868.861 T	

2.2 Ending with Sub D 15 poles connector - 8 electrical-control valves (2 cables)

Cable length	PVC	
1.000 mm	cod. 868.856 O	
2.000 mm	cod. 868.857 P	TO MILE
3.000 mm	cod. 868.860 S	1-21-17



Easy IP 52 port connection cables - 750 Series

This series guarantees an IP 52 protection level according to CEI EN 60947 and CEI 60529 norms and it is consistent with all 750 Series models that come with Matrix Easy port connection. Protection rates of Easy IP 52 port connection cables follow:

Protection rate of coverings against solid bodies and water		
5	Protected against dust	Dust penetration is not totally excluded but dust must not penetrate in such a quantity that could damage the good working of the equipment of jeopardise its safety.
2	Protected against vertical fall of water drops with an inclination of the covering until 15°.	The water drops which fall vertically must not cause damaging effects when the covering is inclined until 15° in comparison with its vertical position

Characteristics of IP 52 cable - UL 1569 norms

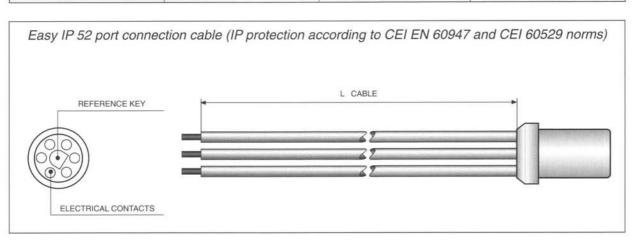
Type of port connection on valve	Matrix Easy 6 poles	
Threads diameter	1.4 mm	
Conductor diameter	AWG 24	
Maximum temperature use	105° C	
Insulation	300 Volt	
Covering threads	PVC (polyvinyl chloride)	



How to order Easy IP 52 port connection cables - Available lengths

Ending with soldered threads cable - 2, 4 and 8 electrical control valves

Cable length	2 Controls	4 Controls	8 Controls
500 mm	cod. 868.870 C	cod. 868.871 D	cod. 868.872 E
1.000 mm	cod. 868.873 F	cod. 868.875 H	cod. 868.877 J
2.000 mm	cod. 868.874 G	cod. 868.876 I	cod. 868.878 K
3.000 mm	cod. 868.845 D	cod. 868.880 M	cod. 868.881 N



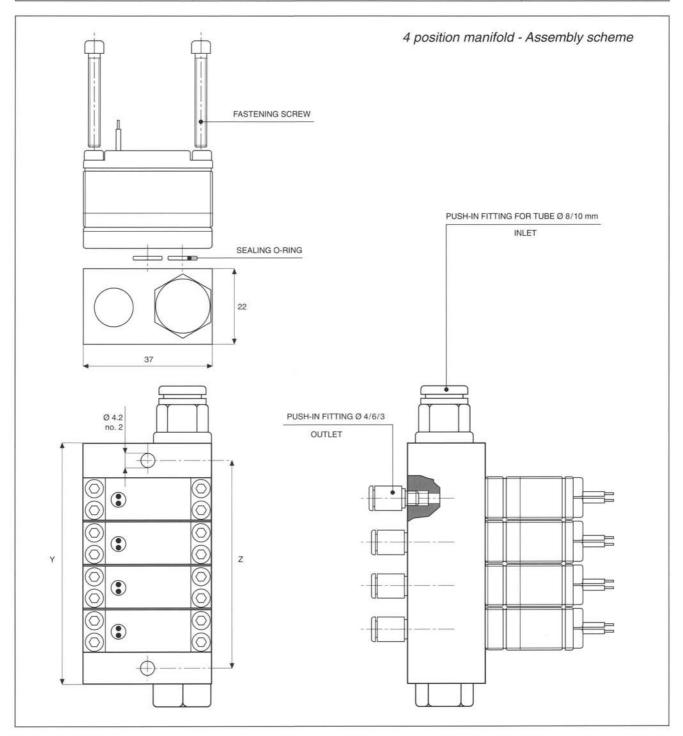
Manifold - 820 Series

Manifolds for multiple installing represent a fast and safe system of connection for all 820 Series models. Manifolds are available in patterns for 4 and 8 solenoid valves. They come in a kit with fastening screws, inlet push-in fittings, closure plug and sealing O-Rings.



How to order manifolds - Available patterns

Pattern	Kit code	Y (mm)	Z (mm)
no. 4 Solenoid valves	820.041 B	70	60
no. 8 Solenoid valves	820.042 C	120	110



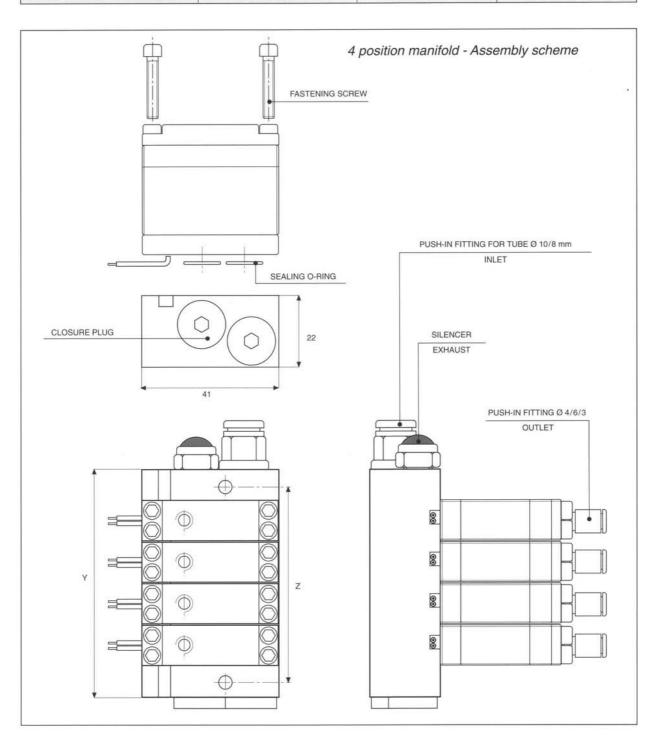
Manifold - 720 Series

Manifolds for multiple installing represent a fast and safe system of connection for all 720 Series models. Manifolds are available in patterns for 4 and 8 solenoid valves. They come in a kit with fastening screws, inlet push-in fittings, closure plug and sealing O-Rings.

9

How to order manifolds - Available patterns

Pattern	Kit code	Y (mm)	Z (mm)
no. 4 Solenoid valves	861.310 I	70	60
no. 8 Solenoid valves	861.321 T	120	110



Manifold - 750 Series

Manifolds for multiple installing represent a fast and safe system of fastening and connection for all 750 Series models.

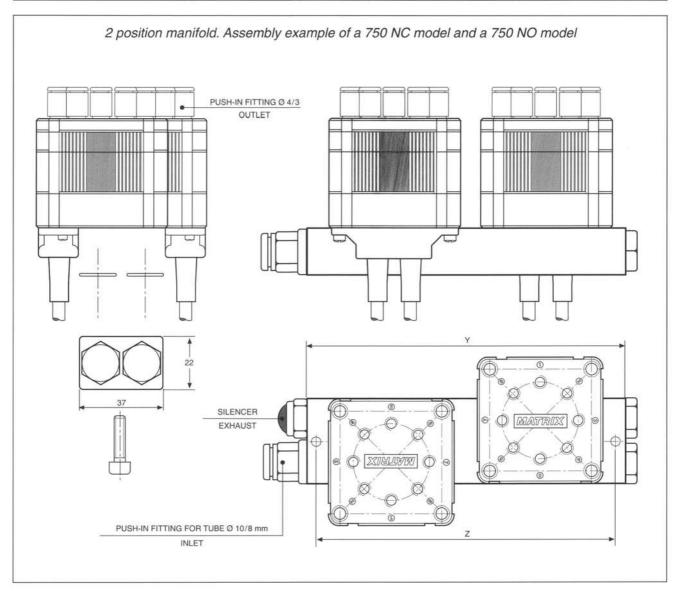
They are suitable for the rationalisation of complex pneumatic systems thanks to their simplicity of the assembly and their total modularity.

Manifolds are available for patterns from 2 to 8 solenoid valves of 750 series and are consistent with Matrix Easy electrical port connection and cables. They come in kit with fastening screws, push-in fittings and sealing O-Rings.

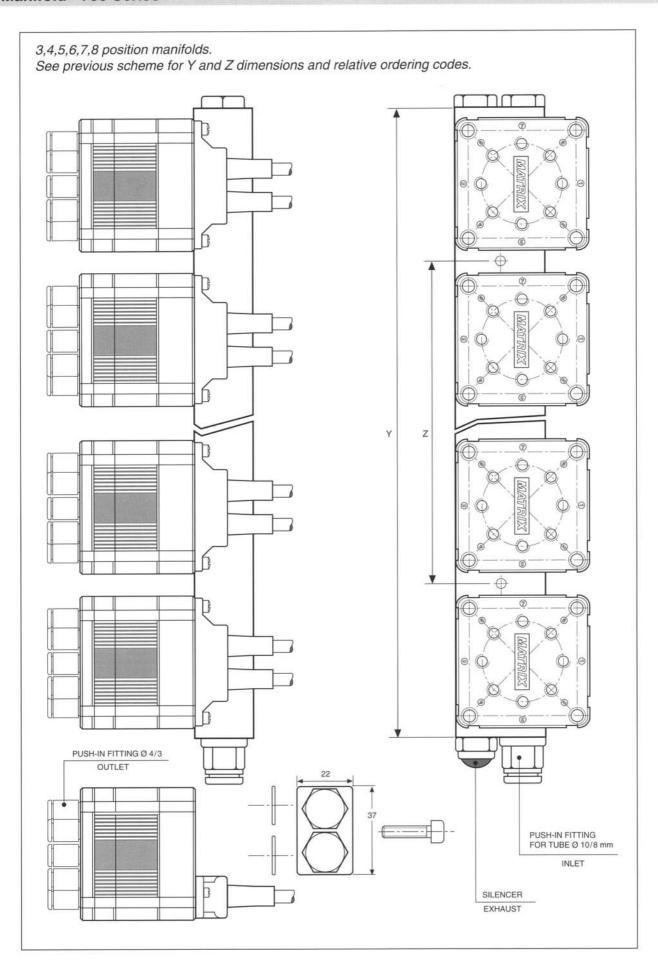
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How to order Manifolds - Available patterns

Pattern	Kid code	Y (mm)	Z (mm)
no. 2 Solenoid valves	868.950 E	140	130
no. 3 Solenoid valves	868.951 F	195	65
no. 4 Solenoid valves	868.952 G	260	130
no. 5 Solenoid valves	868.953 H	325	195
no. 6 Solenoid valves	868.954 I	390	260
no. 7 Solenoid valves	868.955 J	455	325
no. 8 Solenoid valves	868.956 K	520	390



Manifold - 750 Series



Manifold - 630 Series

Manifolds for multiple installing represent a fast and safe system of fastening and connection for all 630 Series models.

Manifolds, in nickel-plated brass, is available in a single pattern able to contain up to 8 solenoid valves. It comes in kit with fastening screws, inlet push-in fittings and closure plugs.



How to order manifolds

Pattern	Kit code	A (mm)	B (mm)
no. 8 Solenoid valves	831.100 K	123	99.5

