

# DIRECT ACTING SOLENOID VALVES

## SERIES P

3/2-way - Normally Closed (NC) and Normally Open (NO)



- Can be mounted on a single base (M5 connections) or on manifold (M5 connections or fittings for Ø3 or Ø4 tube).

Series P directly operated solenoid valves are available as 3/2-way, either NC or NO. Both versions can be mounted on single sub-bases or manifolds and they are equipped with a monostable manual override.

Please note that all Series P solenoid valves are supplied with direct current (DC). To operate in alternating current (AC), it is necessary to use the connector with bridge rectifier Mod. 125-900.

### General Data

TECHNICAL FEATURES	
Function	3/2 NC - 3/2 NO
Operation	Direct acting poppet type
Pneumatic connections	On subbase with ISO 15218 interface
Orifice diameter	0.8 ... 1.5 mm
Flow coefficient kv (l/min)	0.21 ... 0.54
Operating pressure	0 ÷ 3 ... 10 bar
Operating temperature	0 ÷ 50 °C
Fluid	Filtered air class [5:4:4] according to ISO 8573-1:2010 (max oil viscosity 32 cSt), inert gas
Response time when discharging (ISO 12238)	ON <10 ms - OFF <15 ms
Manual override	Monostable
Installation	In any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	PBT
Seals	PU - NBR - FKM - EPDM
Internal parts	Stainless steel
ELECTRICAL FEATURES	
Voltage	12 ... 110 V DC - 24 ... 110 V AC 50/60 Hz - other voltages on demand
Voltage tolerance	±10%
Power consumption	1 ... 2 W
Duty cycle	ED 100%
Electrical connection	Industrial standard connector (9.4 mm)
Protection class	IP65 with connector

Special versions available on demand.

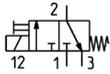
**DIRECT ACTING SOLENOID VALVES**  
**SERIES P - CODING EXAMPLES**
**Coding Example**

<b>P</b>	<b>0</b>	<b>00</b>	<b>-</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>-</b>	<b>P</b>	<b>5</b>	<b>3</b>
<b>P</b>	SERIES									
<b>0</b>	BODY DESIGN 0 = Single sub-base (M5 only) or interface 1 = Single manifold 2 = Double sided manifold									
<b>00</b>	NUMBER OF POSITIONS 00 = ISO 15218 interface 01 = Single base (M5 only) 02 + 99 = Manifold number of positions									
<b>3</b>	NUMBER OF WAYS - FUNCTIONS 0 = Manifold or single base 3 = 3/2-way - NC 4 = 3/2-way - NO 5 = 3/2-way - NC electric part revolved by 180° 6 = 3/2-way - NO electric part revolved by 180°									
<b>0</b>	VALVE PORTS 0 = ISO 15218 interface  MANIFOLD PORTS for P - PL - PN - W Series 2 = M5 thread - front outlets 3 = Tube Ø 3 mm fittings - front outlets 4 = Tube Ø 4 mm fittings - front outlets 6 = M5 thread - bottom outlets 7 = Tube Ø 3 mm fittings - bottom outlets 8 = Tube Ø 4 mm fittings - bottom outlets									
<b>3</b>	ORIFICE DIAMETER 1 = Ø 0.8 mm 3 = Ø 1.5 mm 5 = Ø 1.1 mm - NC versions 6 = Ø 1.5 mm - NC versions with voltage tolerance -25% ÷ +10% 5 = Ø 0.9 mm - NO versions									
<b>P</b>	MATERIALS E = PBT body - EPDM seals F = PBT body - FKM seals P = PBT body - NBR - FKM - PU seals									
<b>5</b>	ELECTRICAL CONNECTION 5 = Industrial standard (9.4 mm)									
<b>3</b>	VOLTAGE - POWER CONSUMPTION 2 = 12 V DC - 2 W (1 W only for NC - Ø 0.8 mm version)    B = 24 V 50/60 Hz - 2 W 3 = 24 V DC - 2 W (1 W only for NC - Ø 0.8 mm version)    C = 48 V 50/60 Hz - 2 W 4 = 48 V DC - 2 W    D = 110 V 50/60 Hz - 2 W 6 = 110 V DC - 2 W									
	FIXING = Fixing screws for metal P = Fixing screws for plastic									
	OPTIONS = Standard OX1 = For use with oxygen (non volatile residual less than 550 mg/m <sup>2</sup> ) OX2 = For use with oxygen (non volatile residual less than 33 mg/m <sup>2</sup> )									

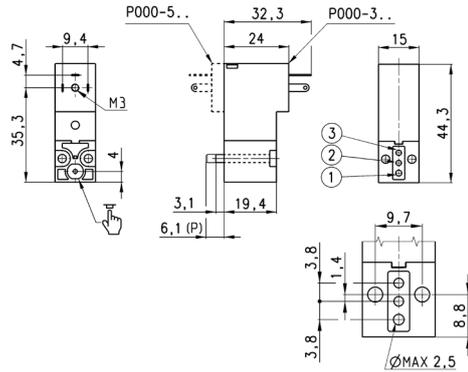
### Series P solenoid valve - 3/2-way NC



Supplied with:  
 1x interface seal  
 2x M 3x20 screws for mounting on metal  
 2x Ø 3x23 screws for mounting on plastic



EV04



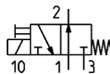
Mod.	Function	Orifice Ø [mm]	Kv [l/min]	Min÷max pressure [bar]	Power [W]
P000-301- <sup>5*</sup>	3/2 NC	0,8	0,21	0 ÷ 10	1
P000-305- <sup>5*</sup>	3/2 NC	1,1	0,39	0 ÷ 10	2
P000-303- <sup>5*</sup>	3/2 NC	1,5	0,54	0 ÷ 7	2
P000-306- <sup>5*</sup>	3/2 NC	1,5	0,54	0 ÷ 3	2
P000-501- <sup>5*</sup>	3/2 NC	0,8	0,21	0 ÷ 10	1
P000-505- <sup>5*</sup>	3/2 NC	1,1	0,39	0 ÷ 10	2
P000-503- <sup>5*</sup>	3/2 NC	1,5	0,54	0 ÷ 7	2
P000-506- <sup>5*</sup>	3/2 NC	1,5	0,39	0 ÷ 3	2

\* add  
 -MATERIALS  
 -VOLTAGE (see CODING EXAMPLE)

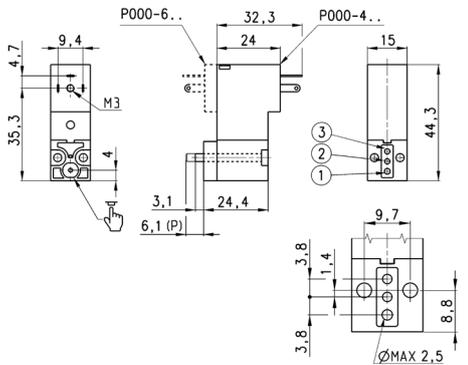
### Series P solenoid valve - 3/2-way NO



Supplied with:  
 1x interface for NO with position ports as per NC (ports 1 and 3 are inverted)  
 2x interface seals  
 2x M3x25 screws for mounting on metal



EV06



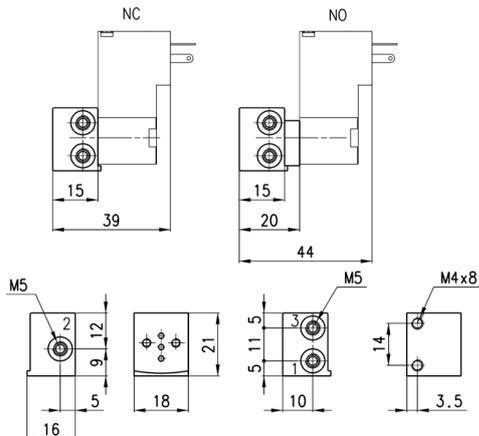
Mod.	Function	Orifice Ø [mm]	Kv [l/min]	Min÷max pressure [bar]	Power [W]
P000-405- <sup>5*</sup>	3/2 NO	0,9	0,23	0 ÷ 10	2
P000-403- <sup>5*</sup>	3/2 NO	1,5	0,39	0 ÷ 5	2
P000-605- <sup>5*</sup>	3/2 NO	0,9	0,23	0 ÷ 10	2
P000-603- <sup>5*</sup>	3/2 NO	1,5	0,39	0 ÷ 5	2

\* add  
 -MATERIALS  
 -VOLTAGE (see CODING EXAMPLE)

**DIRECT ACTING SOLENOID VALVES**  
**SERIES P - ACCESSORIES**
**Single sub-base for 3-way solenoid valve size 15 mm**


Single sub-base suitable for 3-way solenoid valve  
 Use solenoid valves with screws for mounting on metal (see coding)

**Material: anodized aluminium**  
 Connections: M5 threads



<b>Mod.</b>
P001-02

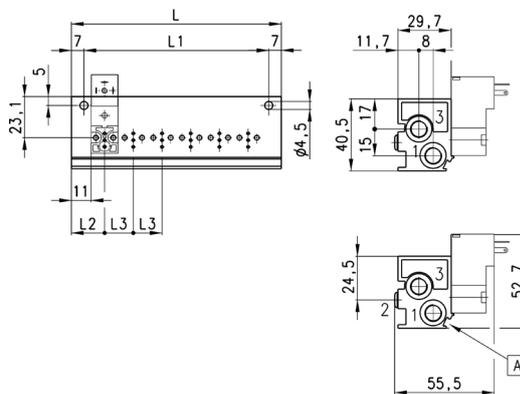
VALVES AND SOLENOID VALVES

6

**Manifold - single side valve - bottom outlets**


Manifold suitable for 3-way solenoid valve  
 Use solenoid valves with screws for mounting on metal (see coding)

**Material: anodized aluminium**



A= groove for identification label

Mod.	Positions	L	L1	L2	L3	1 [P]	3 [R]
P102-0*	2	53	39	18,5	16	G1/8	G1/8
P103-0*	3	69	55	18,5	16	G1/8	G1/8
P104-0*	4	85	71	18,5	16	G1/8	G1/8
P105-0*	5	101	87	18,5	16	G1/8	G1/8
P106-0*	6	117	103	18,5	16	G1/8	G1/8

\* Add manifold ports (see Coding example)

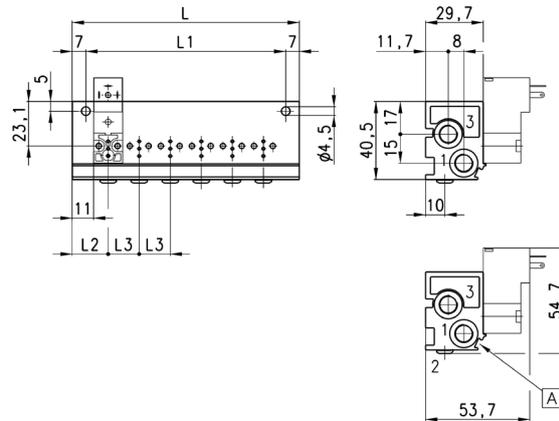
### Manifold - single side valve - frontal outlets



Manifold suitable for 3-way solenoid valve  
Use solenoid valves with screws for mounting on metal (see coding)

Can be fixed through DIN 46277/3 guide with the accessory PCF-E520.

Material: anodized aluminium



A = groove for identification label

Mod.	Positions	L	L1	L2	L3	1 [P]	3 [R]
P102-0*	2	53	39	18,5	16	G1/8	G1/8
P103-0*	3	69	55	18,5	16	G1/8	G1/8
P104-0*	4	85	71	18,5	16	G1/8	G1/8
P105-0*	5	101	87	18,5	16	G1/8	G1/8
P106-0*	6	117	103	18,5	16	G1/8	G1/8

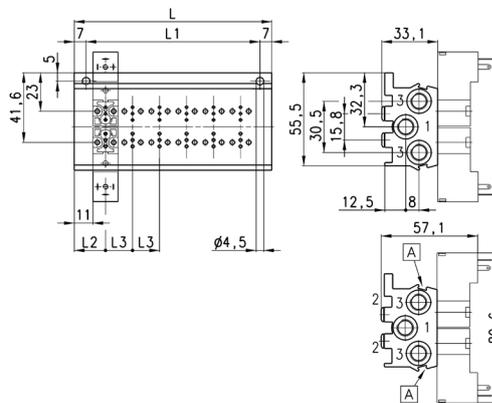
\* Add manifold ports (see Coding example)

### Manifold - double side valve - bottom outlets



Manifold suitable for 3-way solenoid valve  
Use solenoid valves with screws for mounting on metal (see coding)

Material: anodized aluminium



A = groove for identification label

Mod.	Positions	L	L1	L2	L3	1 [P]	3 [R]
P204-0*	4	53	39	18,5	16	G1/8	G1/8
P206-0*	6	69	55	18,5	16	G1/8	G1/8
P208-0*	8	85	71	18,5	16	G1/8	G1/8
P210-0*	10	101	87	18,5	16	G1/8	G1/8
P212-0*	12	117	103	18,5	16	G1/8	G1/8

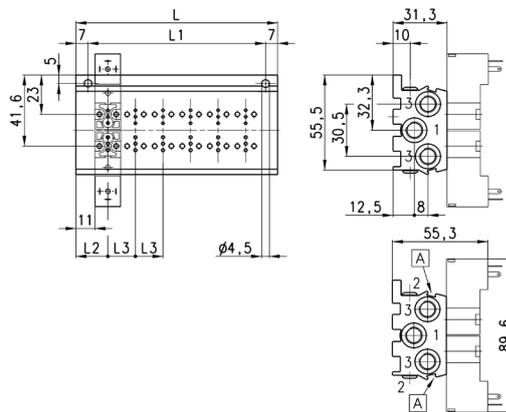
\* Add manifold ports (see Coding example)

**DIRECT ACTING SOLENOID VALVES**  
**SERIES P - ACCESSORIES**
**Manifold - double side valve - frontal outlets**


Manifold suitable for 3-way solenoid valve  
 Use solenoid valves with screws for mounting on metal (see coding)

Can be fixed through DIN 46277/3 guide with the accessory PCF-E520.

Material: anodized aluminium



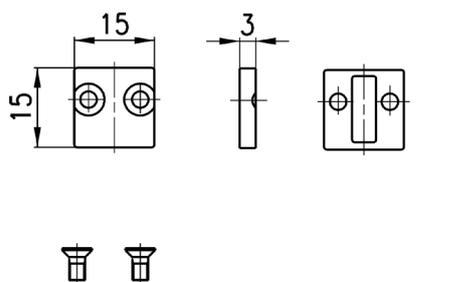
A = groove for identification label

Mod.	Positions	L	L1	L2	L3	1 [P]	3 [R]
P204-0*	4	53	39	18,5	16	G1/8	G1/8
P206-0*	6	69	55	18,5	16	G1/8	G1/8
P208-0*	8	85	71	18,5	16	G1/8	G1/8
P210-0*	10	101	87	18,5	16	G1/8	G1/8
P212-0*	12	117	103	18,5	16	G1/8	G1/8

\* Add manifold ports (see Coding example)

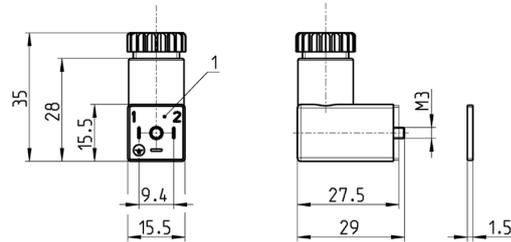
**Position valve cap**


Supplied with:  
 1x position valve cap  
 1x interface seal  
 2x screws



Mod.
P000-TP

### Connectors Mod. 125 industrial std. 9,4 mm



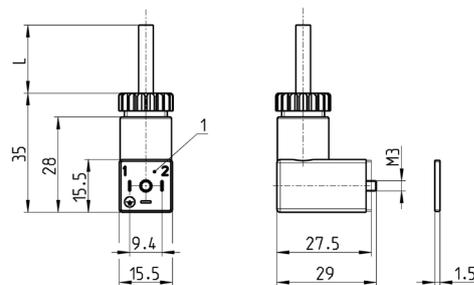
1 = 90° adjustable connector

Mod.	Description	Colour	Working voltage	Cable gland	Tightening torque
125-601	Connector, diode + Led	Transparent	10/50 V DC	PG7	0,3 Nm
125-701	Connector, varistor + Led	Transparent	24 V AC/DC	PG7	0,3 Nm
125-800	Connector, without electronics	Black	-	PG7	0,3 Nm

### Connectors Mod. 125 industrial std. 9,4 mm with cable



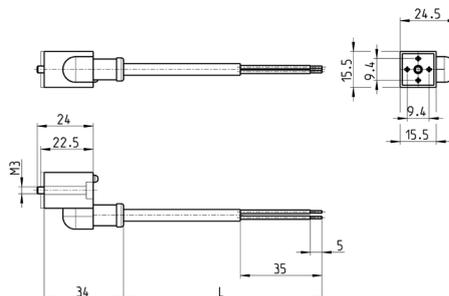
**DIN EN 175 301-803-C**  
 The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC.



1 = 90° adjustable connector

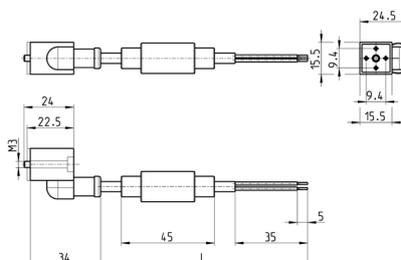
Mod.	Description	Colour	Working voltage	Cable length (L)	Cable gland	Tightening torque
125-501-2	moulded cable with diode + Led	black	10/50 V DC	2000 mm	-	0,3 Nm
125-550-1	moulded cable, without electronics	black	-	1000 mm	-	0,3 Nm
125-601-2	pre-wired cable, diode + Led	transparent	10/50 V DC	2000 mm	PG7	0,3 Nm
125-571-3	moulded cable, varistor + Led	black	24 V AC/DC	3000 mm	-	0,3 Nm
125-900	pre-wired cable with voltage rectifier	black	6 V - 110 V AC/DC	2000 mm	PG7	0,3 Nm

## Connectors Mod. 125 industrial std. 9,4 mm in-line cable



Mod.	Description	Colour	Working voltage	Cable length [L]	Cable gland	Tightening torque
125-503-2	In-line moulded cable, with diode + Led	Black	24 V DC	2000 mm	-	0,3 Nm
125-503-5	In-line moulded cable, with diode + Led	Black	24 V DC	5000 mm	-	0,3 Nm
125-553-2	In-line moulded cable, without electronics	Black	-	2000 mm	-	0,3 Nm
125-553-5	In-line moulded cable, without electronics	Black	-	5000 mm	-	0,3 Nm

## Connectors Mod. 125 industrial std. 9.4 mm in-line cable and rectifier



DIN EN 175 301-803-C

Mod.	Description	Colour	Working voltage	Cable length (L)	Cable gland	Tightening torque
125-903-2	in-line moulded cable with voltage rectifier	black	6 V - 230 V AC/DC	2000 mm	-	0,3 Nm
125-903-5	in-line moulded cable with voltage rectifier	black	6 V - 230 V AC/DC	5000 mm	-	0,3 Nm