## **DIRECT ACTING SOLENOID VALVES**

## **SERIES PN**

3/2-way - Normally Closed (NC)



- Can be mounted on a single base (M5 connections) or on manifold (M5 connections or fittings for Ø3 or Ø4 tube).
- Compact design suitable for use in reduced mounting space

Series PN direct acting solenoid valves are available as 3/2-way NC.

Please note that all Series PN 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
Operation	Direct acting poppet type
Pneumatic connections	On subbase with ISO 12238 interface
Orifice diameter	0.8 mm
Flow coefficient kv (l/min)	0.19
Operating pressure	0 ÷ 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
Installation	In any position
MATERIALS IN CONTACT WITH THE MEDIUM	
Body	PBT
Seals	FKM - NBR
Internal parts	Stainless steel
ELECTRICAL FEATURES	
Voltage	24 205 V DC - Other voltages on demand
Voltage tolerance	±10%
Power consumption	12W
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 PN - CODING EXAMPLES**

### Coding example

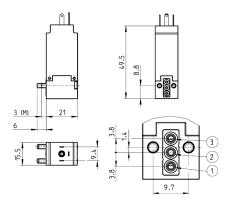
PN	0 00 - 3 0 1 - P 5 3
PN	SERIES
0	BODY DESIGN  0 = Single sub-base  1 = Single manifold  2 = Double sided manifold
00	NUMBER OF POSITIONS  00 = ISO 15218 interface  01 = Single base (M5 only)  02 ÷ 99 = manifold number of positions
3	NUMBER OF WAYS - FUNCTIONS  0 = Manifold or single base  3 = 3/2-way - NC
0	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  7 = Tube Ø 3 mm fittings - bottom outlets  8 = Tube Ø 4 mm fittings - bottom outlets
1	ORIFICE DIAMETER  1 = Ø 0.8 mm
Р	MATERIALS P = PBT body - seals FKM - NBR
5	ELECTRICAL CONNECTION 5 = Industrial standard (9.4 mm)
3	VOLTAGE - POWER CONSUMPTION 3 = 24 V DC - 1 W 4 = 48 V DC - 2 W 6 = 110 V DC - 2 W 7 = 205 V DC - 1.7 W
	FIXING = Fixing screws for plastic M = Fixing screws for metal

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



Supplied with: 1x interface seal 2x Ø3x25 screws for mounting on plastic 2x M3x22 screws for mounting on metal





Mod.	Function	Orifice Ø [mm]	Kv [l/m]	Min÷max pressure [bar]	Voltage Power
PN000-301-P53*	3/2 NC	0,8	0,19	0 ÷ 10	24 V DC 1 W
PN000-301-P54*	3/2 NC	0,8	0,19	0 ÷ 10	48 V DC 2 W
PN000-301-P56*	3/2 NC	0,8	0,19	0 ÷ 10	110 V DC 2 W
PN000-301-P57*	3/2 NC	0,8	0,19	0 ÷ 10	205 V DC 1,7 W

<sup>\*</sup> add - FIXING (see CODING EXAMPLE)

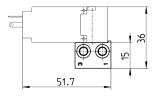
### Single sub-base for 3-way solenoid valve size 15 mm

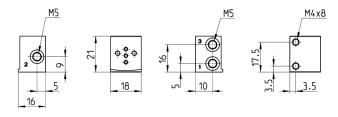
Single sub-base suitable for 3-way solenoid valve



Use solenoid valves with screws for mounting on metal (see coding)

Material: anodized aluminium Connections: M5 threads





Mod.

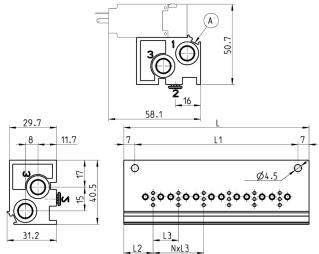
P001-02

### 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

<sup>\*</sup> Add manifold ports (see Coding example)



# DIRECT ACTING SOLENOID VALVES SERIES PN - ACCESSORIES

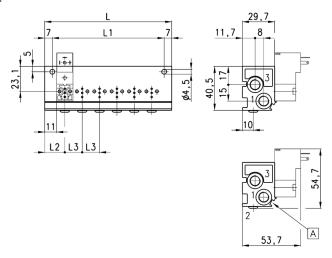
#### Manifold - single side valve - frontal outlets



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	

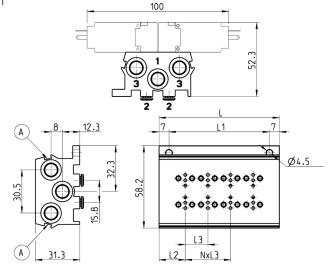
<sup>\*</sup> Add manifold ports (see Coding example)

#### 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	1	11	12	L3	1 [P]	3 [R]	
	1 031(10113	<u>-</u>						
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	

<sup>\*</sup> Add manifold ports (see Coding example)

DIRECT ACTING SOLENOID VALVES
SERIES PN - ACCESSORIES

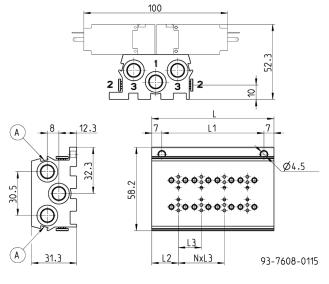
### Manifold - double side valve - frontal outlets



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

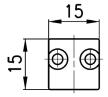
Mod.	Positions	L	l1	L2	L3	1 [P]	3 [R]	
P204-0*	4	53	39	18,5	16	G1/8	G1/8	
P206-0*	6	69	55	18,5	16	G1/8	G1/8	
P208-0*	8	85	71	18,5	16	G1/8	G1/8	
P210-0*	10	101	87	18,5	16	G1/8	G1/8	
P212-0*	12	117	103	18,5	16	G1/8	G1/8	

<sup>\*</sup> Add manifold ports (see Coding example)

#### Position valve cap



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











Mod.		
P000-TP		

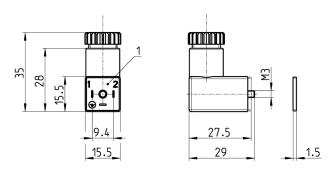


# DIRECT ACTING SOLENOID VALVES SERIES PN - ACCESSORIES

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







#### 1 = 90° adjustable connector

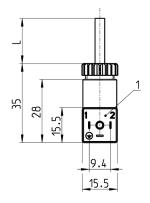
Mod.	Description	Colour	Working voltage	Cable gland	Tightening torque	
125-601	Connector, diode + Led	Transparent	10/50 V DC	PG7	0,3 Nm	
125-701	Connector, varistor + Led	Transparent	24 V AC/DC	PG7	0,3 Nm	
125-800	Connector, without electronics	Black	-	PG7	0,3 Nm	

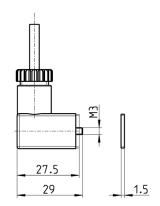
#### Connectors Mod. 125 industrial std. 9,4 mm with cable





DIN EN 175 301-803-C
The internal rectifier circuit
of the connector Mod. 125900 allows to use solenoid
valves with different AC
voltage, even if the voltage
indicated on the solenoid
valve is DC.



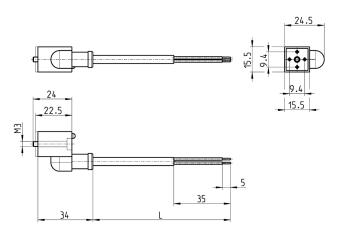


#### 1 = 90° adjustable connector

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



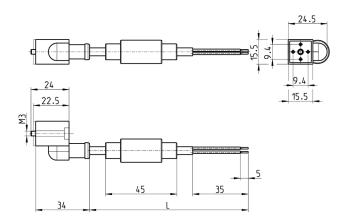


Mod.	Description	Colour	Working voltage	Cable length (L)	Cable gland	Tightening torque
125-503-2	In-line moulded cable, with diode + Led	Black	24 V DC	2000 mm	-	0,3 Nm
125-503-5	In-line moulded cable, with diode + Led	Black	24 V DC	5000 mm	-	0,3 Nm
125-553-2	In-line moulded cable, without electronics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