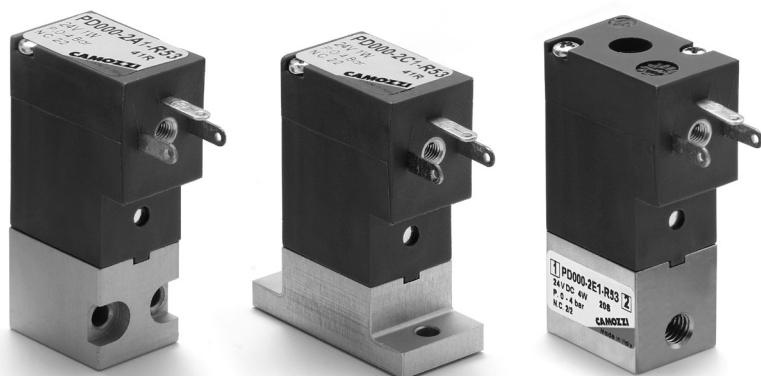


# Series PD directly operated solenoid valves

2/2-way Normally Closed (NC)



Note: all Series PD 2/2-way solenoid valves are basically in DC.  
To operate in AC at the same target voltage, the valves need to use the connector Mod. 125-800 or Mod. 125-900.

This directly operated solenoid valve is available as 2/2-way, NC, in several sizes and in three different versions.

## GENERAL DATA

### TECHNICAL FEATURES

Function	2/2 NC
Operation	direct acting poppet type
Pneumatic connections	on subbase by means of M3 screws - M5 threads
Nominal diameter	0.8 ... 2.5 mm
Nominal flow	25 ... 125 NI/min (air @ 6 bar $\Delta P$ 1 bar)
Kv (l/min)	0.39 ... 1.93
Operating pressure	-0.9 + 4 ... 12 bar
Operating temperature	0 + +50°C
Media	filtered air, class 5.4.4 according to ISO 8573-1 (max oil viscosity 32 cSt), inert gas
Response time	ON <10 msec - OFF <15 msec
Installation	in any position

### MATERIALS IN CONTACT WITH THE MEDIUM

Body	brass, anodized aluminium
Seals	NBR, (FKM on demand)
Internal parts	stainless steel

### ELECTRICAL FEATURES

Voltage	24 V DC - 12 V DC - other voltages on demand
Voltage tolerance	1 and 2 W $\pm 10\%$ - 4 W $\pm 5\%$
Power consumption	1 ... 4 W
Duty cycle	ED 100% (1 and 2 W) - ED 50% (4W) see the ED definition diagram
Electrical connection	DIN 43650 connector, (C Shape), 9.4 mm
Protection class	IP65 with connector

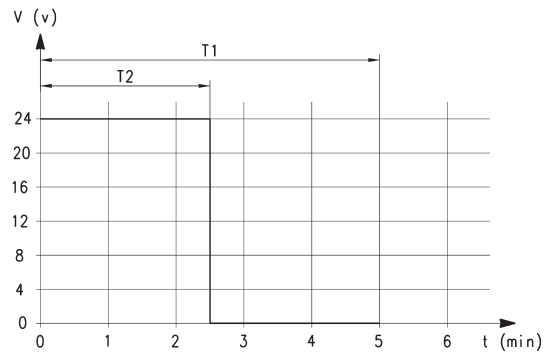
Special versions available on demand

CODING EXAMPLE											
PD	0	00	-	2	A	1	-	R	5	3	
<b>PD</b>	SERIES										
<b>0</b>	BODY DESIGN: 0 = single body										
<b>00</b>	NUMBER OF POSITIONS: 00 = interface										
<b>2</b>	NUMBER OF WAYS - FUNCTIONS: 2 = 2-way NC										
<b>A</b>	BODY MATERIALS AND VALVE PORTS: A = aluminium body, rear pneumatic interface C = aluminium body, low pneumatic interface E = brass body, M5 ports (for ø up to 1.6mm)										
<b>1</b>	NOMINAL DIAMETER: 1 = ø 0.8 2 = ø 1.2 3 = ø 1.6 4 = ø 2 5 = ø 2.5										
<b>R</b>	POPPET SEAL MATERIALS: R = NBR F = FKM (on request)										
<b>5</b>	ELECTRICAL CONNECTION: 5 = 3 faston pitch 9,4										
<b>3</b>	SOLENOID VOLTAGE: 1 = 12V DC 1W 2 = 12V DC 2W 3 = 24V DC 1W 5 = 24V DC 2W 8 = 24V DC 4W										
	FIXING: = with screws for metal (standard) P = with screws for plastics										

**ED definition diagram**

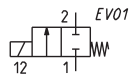
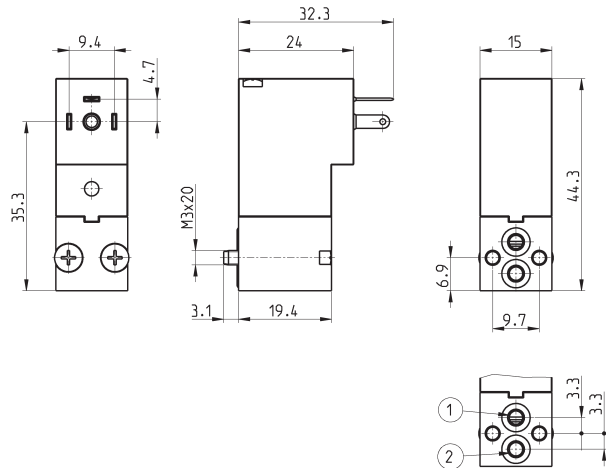
Operating factor lower than 50%

- T1 = cycle time (5 minutes max)
- T2 = energizing time
- t = time (minutes)
- V = working voltage (volt)
- ED = T2/T1 x 100



**2/2-way NC solenoid valve, rear pneumatic interface**

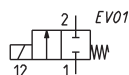
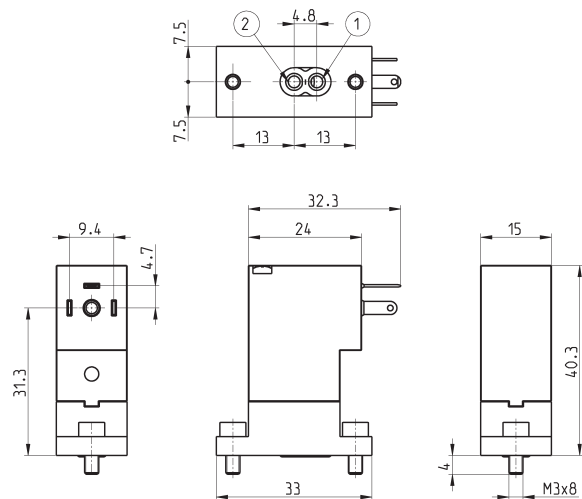

Supplied with:  
 2x OR seals  
 2x screws M3x20 UNI 8112  
 (for standard version)  
 or  
 2x screws M3x23 UNI 10227  
 (for version P)  
 For use with vacuum invert channel  
 1 and channel 2.



Mod.	Orifice Ø (mm)	Qn (NI/min)	Kv	Pressure min-max (bar)	Consumption (W)	ED (%)
PD000-2A1-R51	0.8	25	-	0 + 12	1	100
PD000-2A1-R53	0.8	25	-	0 + 12	1	100
PD000-2A2-R52	1.2	35	-	0 + 12	2	100
PD000-2A2-R55	1.2	35	-	0 + 12	2	100
PD000-2A3-R52	1.6	45	-	0 + 7	2	100
PD000-2A3-R55	1.6	45	-	0 + 7	2	100
PD000-2A4-R58	2	85	-	0 + 6	4	50
PD000-2A5-R58	2.5	125	-	0 + 4	4	50

**2/2-way NC solenoid valve, low pneumatic interface**

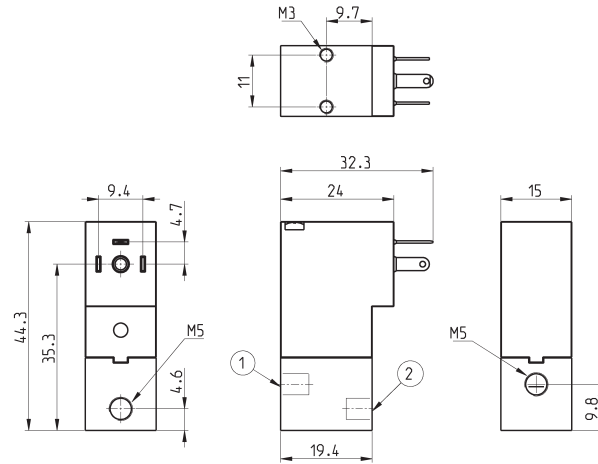
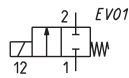

Supplied with:  
 1x seal  
 2x screws M3x8 UNI 5931  
 For use with vacuum invert channel  
 1 and channel 2.



Mod.	Orifice Ø (mm)	Qn (NI/min)	Kv	Pressure min-max (bar)	Consumption (W)	ED (%)
PD000-2C1-R51	0.8	25	-	0 + 12	1	100
PD000-2C1-R53	0.8	25	-	0 + 12	1	100
PD000-2C2-R52	1.2	35	-	0 + 12	2	100
PD000-2C2-R55	1.2	35	-	0 + 12	2	100
PD000-2C3-R52	1.6	45	-	0 + 7	2	100
PD000-2C3-R55	1.6	45	-	0 + 7	2	100
PD000-2C4-R58	2	85	-	0 + 6	4	50
PD000-2C5-R58	2.5	125	-	0 + 4	4	50

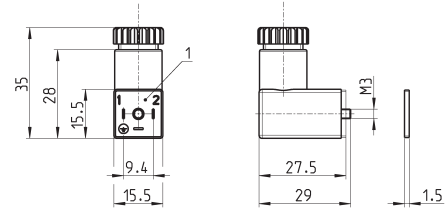
2/2-way NC solenoid valve, M5 ports

For use with vacuum invert channel 1 and channel 2.



Mod.	Orifice Ø (mm)	Qn (NI/min)	Kv	Pressure min-max (bar)	Consumption (W)	ED (%)
PD000-2E1-R51	0.8	25	-	0 ÷ 12	1	100
PD000-2E1-R53	0.8	25	-	0 ÷ 12	1	100
PD000-2E2-R52	1.2	35	-	0 ÷ 12	2	100
PD000-2E2-R55	1.2	35	-	0 ÷ 12	2	100
PD000-2E3-R52	1.6	45	-	0 ÷ 7	2	100
PD000-2E3-R55	1.6	45	-	0 ÷ 7	2	100

## Connector Mod. 125-... DIN 43650 pitch 9.4 mm

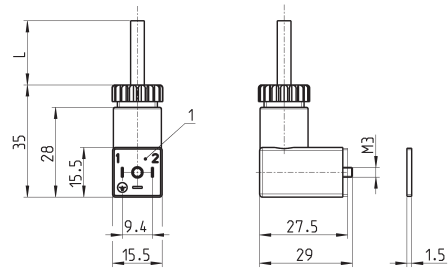


Mod.	description	colour	working voltage	cable holding	tightening torque
125-601	connector, diode + Led	transparent	10/50 V DC	PG7	0.3 Nm
125-701	connector, varistor + Led	transparent	24 V AC/DC	PG7	0.3 Nm
125-800	connector, without electronics	black	-	PG7	0.3 Nm

1 = 90° adjustable connector

## Connector Mod. 125-... DIN 43650 pitch 9.4 mm with cable

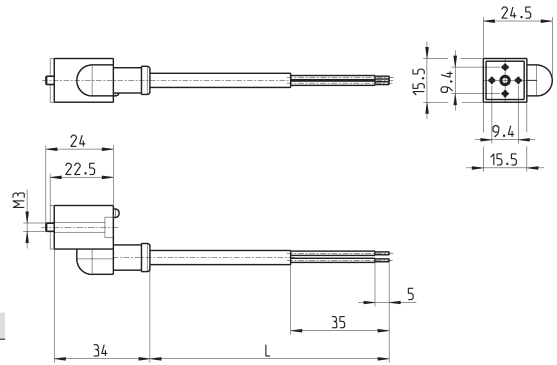
The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC.



Mod.	description	colour	working voltage	cable length [ L ]	cable holding	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

1 = 90° adjustable connector

In-line connectors with cable

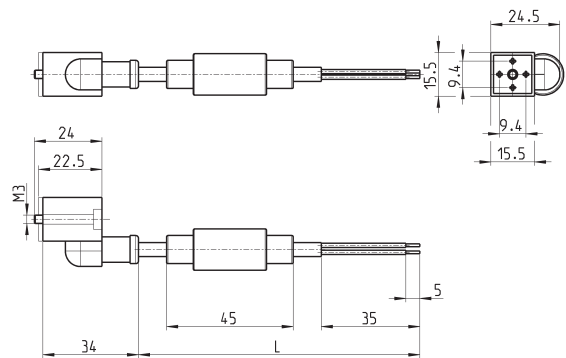


Mod.	description	colour	working voltage	cable length [ L ]	cable holding	tightening torque
<b>125-503-2</b>	in-line moulded cable, with diode + Led	black	24 V DC	2000 mm	-	0.3 Nm
<b>125-503-5</b>	in-line moulded cable, with diode + Led	black	24 V DC	5000 mm	-	0.3 Nm
<b>125-553-2</b>	in-line moulded cable, without electronics	black	-	2000 mm	-	0.3 Nm
<b>125-553-5</b>	in-line moulded cable, without electronics	black	-	5000 mm	-	0.3 Nm

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CONTROL

In-line connectors with bridge rectifier



Mod.	description	colour	working voltage	cable length [ L ]	cable holding	tightening torque
<b>125-903-2</b>	in-line moulded cable with voltage rectifier	black	6 V - 230 V AC/DC	2000 mm	-	0.3 Nm
<b>125-903-5</b>	in-line moulded cable with voltage rectifier	black	6 V - 230 V AC/DC	5000 mm	-	0.3 Nm