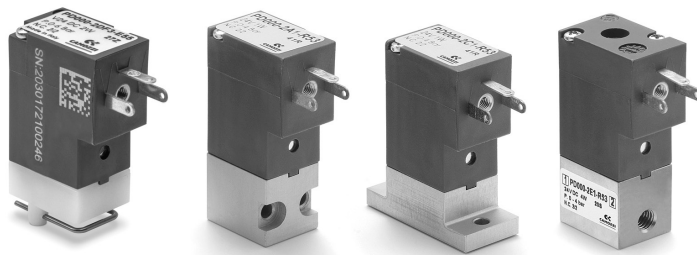


# Series PD directly operated solenoid valves

## 2/2-way - Normally Closed (NC)



Please note that all Series PD 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.

The Series PD directly operated solenoid valves are available in the 2/2-way normally closed (NC) version. Pneumatic interfaces allow installation on manifolds in horizontal or vertical position. Also available with threaded connections.

### GENERAL DATA

#### TECHNICAL FEATURES

Function	2/2 NC
Operation	direct acting poppet type
Pneumatic connections	on subbase - M5 threads
Orifice diameter	0.8 ... 2.5 mm
Flow coefficient 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 - liquids (on demand)
Response time	<15 ms
Installation	in any position

#### MATERIALS IN CONTACT WITH THE MEDIUM

Body	brass - anodized aluminium - POM
Seals	NBR - FKM - EPDM
Internal parts	stainless steel

#### ELECTRICAL FEATURES

Voltage	12 ... 24 V DC - other voltages on demand
Voltage tolerance	1 and 2 W ±10% - 4 W ±5%
Power consumption	1 ... 4 W
Duty cycle	ED 100% (1 and 2 W) - ED 50% (4W) see the ED definition diagram
Electrical connection	industrial standard connector (9.4 mm)
Protection class	IP65 with connector

#### Special versions available on demand

New models

**1.18.01**

63

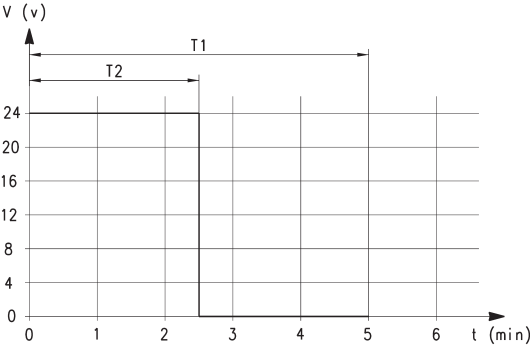
CODING EXAMPLE

PD	0	00	-	2	A	1	-	R	5	3	
PD	SERIES										
0	BODY DESIGN 0 = single body										
00	NUMBER OF POSITIONS 00 = interface										
2	NUMBER OF WAYS - FUNCTIONS 2 = 2/2-way - NC										
A	MATERIAL - BODY CONNECTIONS A = aluminium body - lateral interface AR = aluminium body - lateral interface - electric part revolved by 180° C = aluminium body - bottom interface CR = aluminium body - bottom interface - electric part revolved by 180° DF = POM body - bottom interface DR = POM body - bottom interface - electric part revolved by 180° E = brass body - M5 threaded ports ER = brass body - M5 threaded ports - electric part revolved by 180°										
1	ORIFICE DIAMETER 1 = Ø 0.8 mm 2 = Ø 1.2 mm 3 = Ø 1.6 mm 4 = Ø 2.0 mm 5 = Ø 2.5 mm										
R	SEAL MATERIAL R = NBR F = FKM E = EPDM										
5	ELECTRICAL CONNECTION 5 = industrial standard (9.4 mm)										
3	VOLTAGE - POWER CONSUMPTION 1 = 12 V DC - 1 W 2 = 12 V DC - 2 W 3 = 24 V DC - 1 W 5 = 24 V DC - 2 W 8 = 24 V DC - 4 W										
	FIXING = with screws for metal P = with screws for plastics										
	OPTIONS = standard OX1 = for use with oxygen (non volatile residual less than 550 mg/m²) OX2 = for use with oxygen (non volatile residual less than 33 mg/m²)										

ED definition diagram

Operating factor lower than 50%

T1 = cycle time (5 minutes max)  
T2 = energizing time  
t = time (minutes)  
V = working voltage (volt)  
 $ED = T2/T1 \times 100$



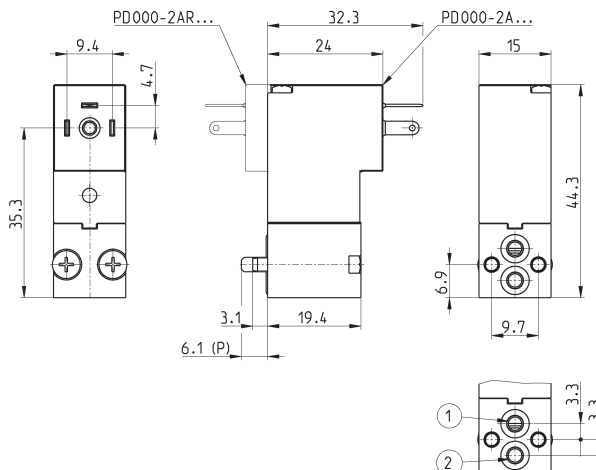
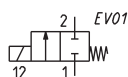
## Series PD solenoid valve - aluminium body - lateral interface



Supplied with:  
2x O-Rings  
2x M3x20 screws for mounting on metal  
or  
2x Ø3x23 screws for mounting on plastic

For vacuum applications connect the suction source to port 2

\* add  
- SEAL MATERIAL  
- VOLTAGE  
(see CODING EXAMPLE)



Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min ÷ max pressure (bar)	Power (W)	ED (%)
PD000-2A1-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2AR1-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2A2-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2AR2-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2A3-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100
PD000-2AR3-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100
PD000-2A4-*5*	2/2 NC	2.0	1.31	0 ÷ 6	4	50
PD000-2AR4-*5*	2/2 NC	2.0	1.31	0 ÷ 6	4	50
PD000-2A5-*5*	2/2 NC	2.5	1.93	0 ÷ 4	4	50
PD000-2AR5-*5*	2/2 NC	2.5	1.93	0 ÷ 4	4	50

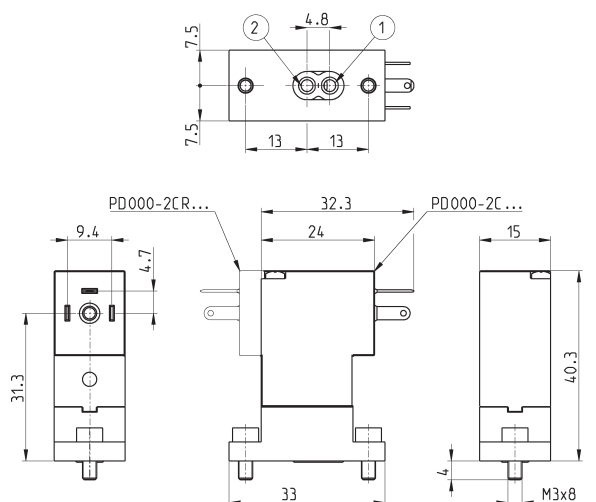
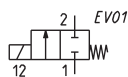
## Series PD solenoid valve - aluminium body - bottom interface



Supplied with:  
1x interface seal  
2x M3x8 screws for mounting on metal

For vacuum applications connect the suction source to port 2

\* add  
- SEAL MATERIAL  
- VOLTAGE  
(see CODING EXAMPLE)



Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min ÷ max pressure (bar)	Power (W)	ED (%)
PD000-2C1-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2CR1-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2C2-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2CR2-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2C3-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100
PD000-2CR3-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100
PD000-2C4-*5*	2/2 NC	2.0	1.31	0 ÷ 6	4	50
PD000-2CR4-*5*	2/2 NC	2.0	1.31	0 ÷ 6	4	50
PD000-2C5-*5*	2/2 NC	2.5	1.93	0 ÷ 4	4	50
PD000-2CR5-*5*	2/2 NC	2.5	1.93	0 ÷ 4	4	50

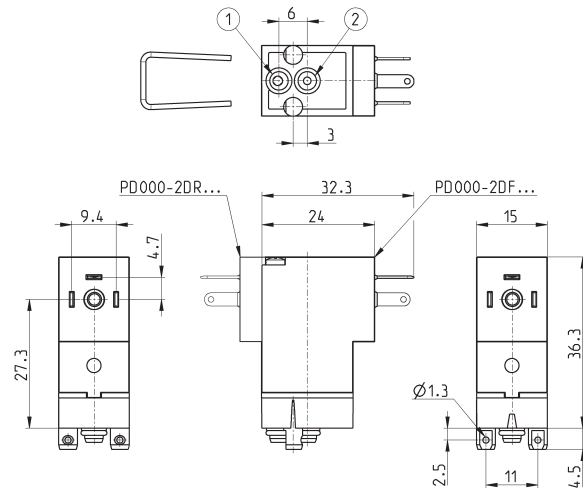
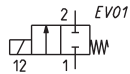
## Series PD solenoid valve - POM body - bottom interface

**New**


Supplied with:  
2x O-Rings  
1x mounting clip

For vacuum applications connect the suction source to port 2

\* add  
- VOLTAGE  
(see CODING EXAMPLE)



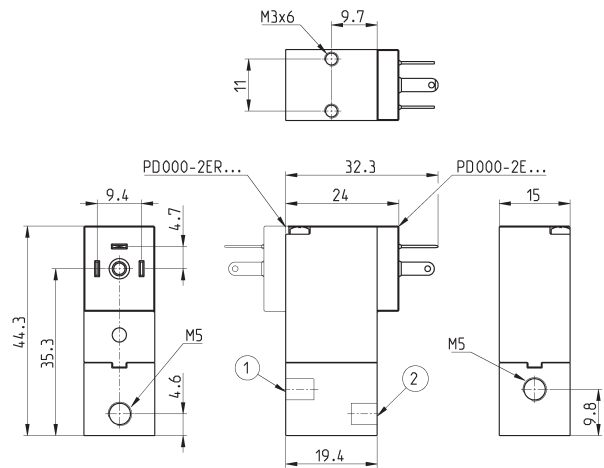
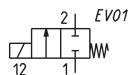
Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min ÷ max pressure (bar)	Power (W)	ED (%)
PD000-2DF3-E5*	2/2 NC	1.6	0.72	0 ÷ 6	2	100
PD000-2DR3-E5*	2/2 NC	1.6	0.72	0 ÷ 6	2	100

## Series PD solenoid valve - brass body - M5 threaded ports



For vacuum applications connect the suction source to port 2

\* add  
- SEAL MATERIAL  
- VOLTAGE  
(see CODING EXAMPLE)



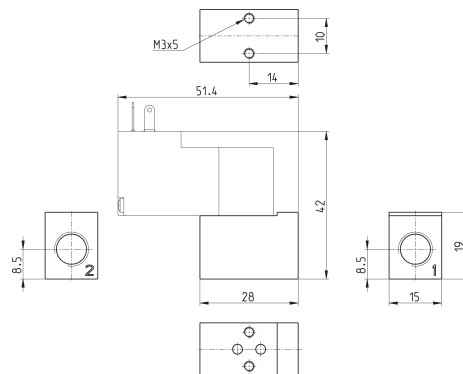
Mod.	Function	Orifice Ø (mm)	kv (l/min)	Min ÷ max pressure (bar)	Power (W)	ED (%)
PD000-2E1-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2E1R-*5*	2/2 NC	0.8	0.39	0 ÷ 12	1	100
PD000-2E2-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2E2R-*5*	2/2 NC	1.2	0.54	0 ÷ 12	2	100
PD000-2E3-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100
PD000-2E3R-*5*	2/2 NC	1.6	0.70	0 ÷ 7	2	100

## Single sub-base for Series PD lateral interface



Single sub-base suitable for 2-way solenoid valves  
Series PD and PL models PD000-2A..., PL000-9B...  
Use solenoid valves with fixing screws for metal (see  
codification page)

Material: anodized aluminium  
Connections: G1/8 threads



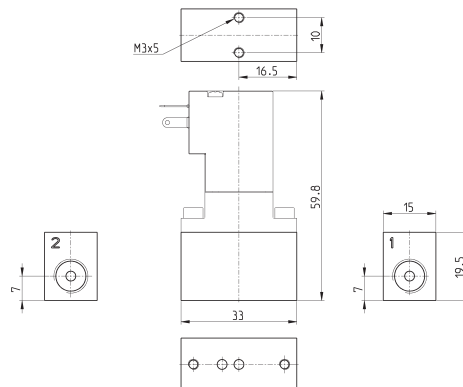
Mod.
PDA01-1/8

## Single sub-base for Series PD bottom interface



Single sub-base suitable for Series PD 2-way solenoid  
valve models PD000-2C... and PD000-2CR...

Material: anodized aluminium  
Connections: G1/8 threads



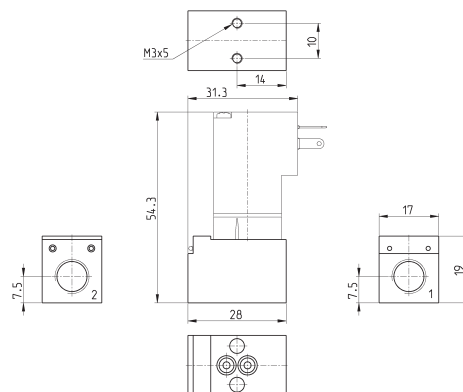
Mod.
PDC01-1/8

## Single sub-base for Series PD bottom interface



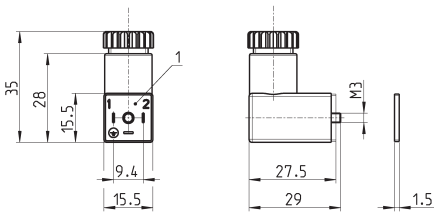
Single sub-base suitable for Series PD 2-way solenoid  
valve models PD000-2DF... and PD000-2DR...

Material: anodized aluminium  
Connections: G1/8 threads



Mod.
PDD01-1/8

**Connector Mod. 125-... - industrial std. 9.4 mm**



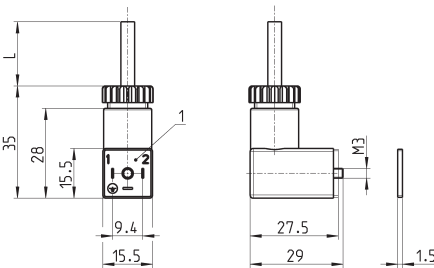
Mod.	description	colour	working voltage	cable gland	tightening torque
125-601	connector, diode + Led	transparent	10/50 V DC	PG7	0.3 Nm
125-701	connector, varistor + Led	transparent	24 V AC/DC	PG7	0.3 Nm
125-800	connector, without electronics	black	-	PG7	0.3 Nm

1 = 90° adjustable connector

**Connector Mod. 125-... - industrial std. 9.4 mm - 90° cable**



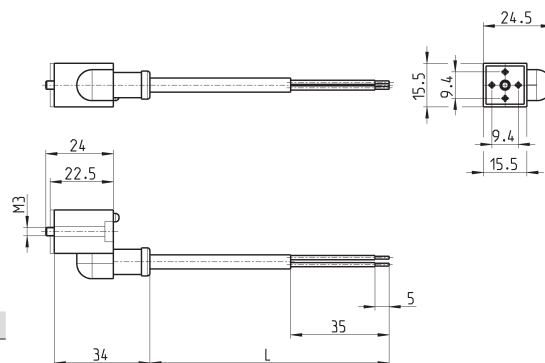
The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC.



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

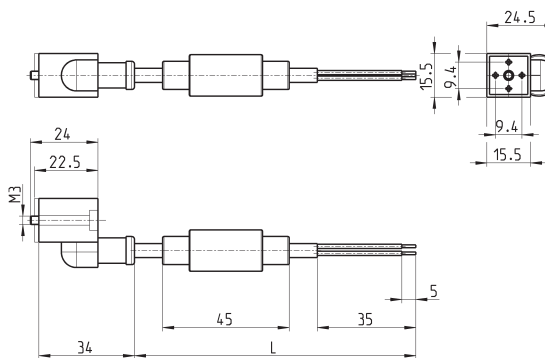
1 = 90° adjustable connector

## Connector 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

## Conn. Mod. 125-... - ind. std. 9.4 mm - in-line cable+rectifier



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