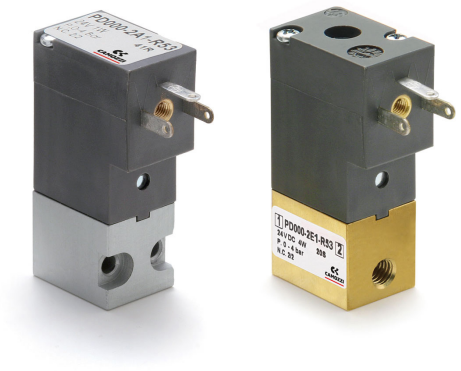
DIRECT ACTING SOLENOID VALVES
SERIES PD

2/2-way - Normally Closed (NC)



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.

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.

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
Fluid	Filtered air class [5:4:4] according to ISO 8573-1:2010 (max oil viscosity 32 cSt), inert gas - liquids (on demand)
Response time when discharging (ISO 12238)	<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 V DC - 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.

DIRECT ACTING SOLENOID VALVES
SERIES PD - CODING EXAMPLES

Coding example

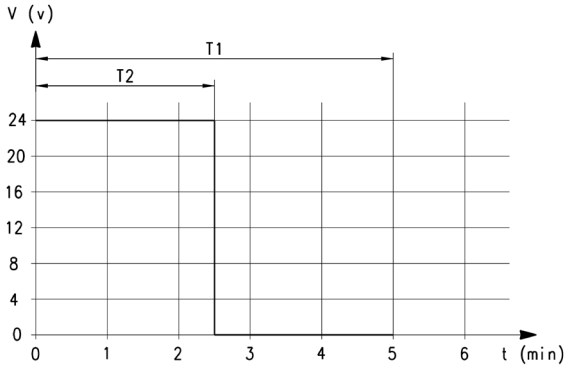
PD	0	00	2	A	1	R	5	3

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 = Bass 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

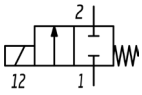
Operating factor lower than 50%

T1 = Cycle time (5 minutes max)
T2 = Energizing time
t = Time (minutes)
V = Working voltage (volt)
ED = T2/T1 x 100

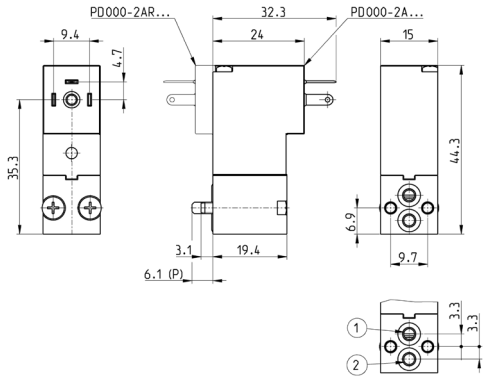


Series PD solenoid valve - aluminium body - lateral interface

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



EV01



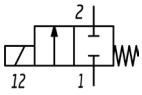
For vacuum applications connect the suction source to port 2

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

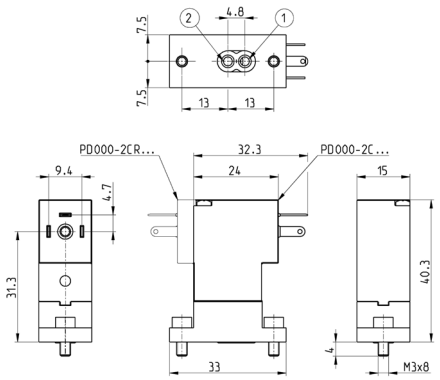
* add
-SEAL MATERIAL
-VOLTAGE (see Coding example)

Series PD solenoid valve - aluminium body - bottom interface

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



EV01



For vacuum applications connect the suction source to port 2

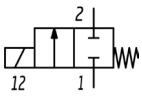
Mod.	Function	Orifice Ø [mm]	Kv [l/min]	Min÷max pressure [bar]	Power [W]	ED [%]
PD000-2C1-*5*	2/2 NC	0,8	0,39	0 ÷ 12	1	100
PD000-2CR1-*5*	2/2 NC	0,8	0,39	0 ÷ 12	1	100
PD000-2C2-*5*	2/2 NC	1,2	0,54	0 ÷ 12	2	100
PD000-2CR2-*5*	2/2 NC	1,2	0,54	0 ÷ 12	2	100
PD000-2C3-*5*	2/2 NC	1,6	0,70	0 ÷ 7	2	100
PD000-2CR3-*5*	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

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

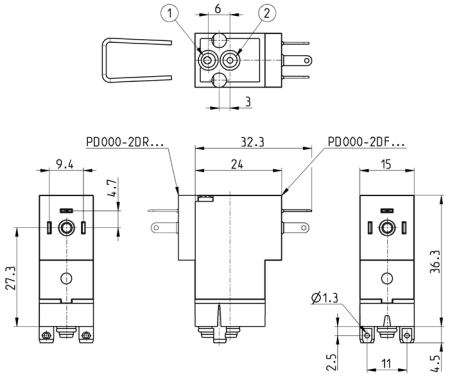
DIRECT ACTING SOLENOID VALVES
SERIES PD - DIMENSIONS

Series PD solenoid valve - POM body - bottom interface

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



EV01

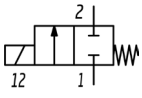


For vacuum applications connect the suction source to port 2

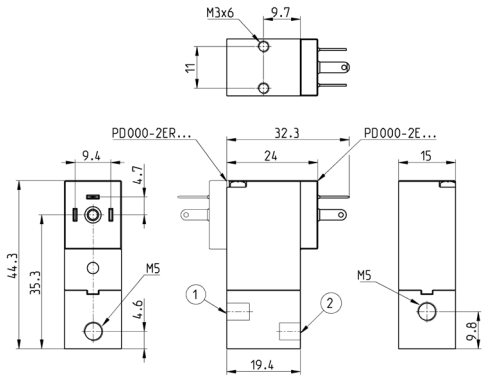
Mod.	Function	Orifice Ø [mm]	Kv [l/min]	Min÷max pressure [bar]	Power [W]	ED [%]
PD000-2DF3-E5*	2/2 NC	1,6	0,72	0 ÷ 6	2	100
PD000-2DR3-E5*	2/2 NC	1,6	0,72	0 ÷ 6	2	100

* add
-VOLTAGE (see CODING EXAMPLE)

Series PD solenoid valve - brass body - M5 threaded ports



EV01



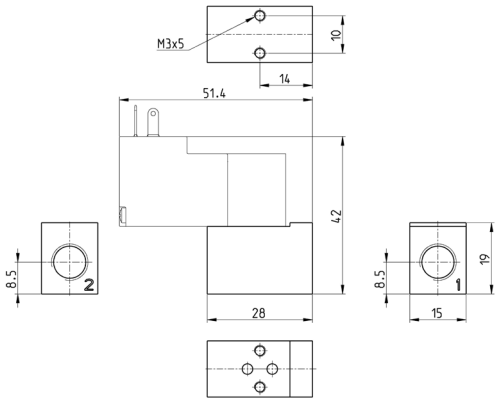
For vacuum applications connect the suction source to port 2

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

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

Single sub-base for Series PD lateral interface

Single sub-base suitable for 2-way solenoid valves
Use solenoid valves with fixing screws for metal (see codification page)

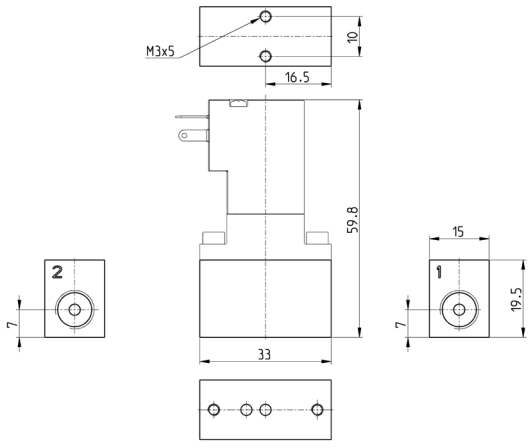


Material: anodized aluminium
Connections: G1/8 threads

Mod.
PDA01-1/8

Single sub-base for Series PD bottom interface

Single sub-base suitable for 2-way solenoid valves
Use solenoid valves with fixing screws for metal (see codification page)

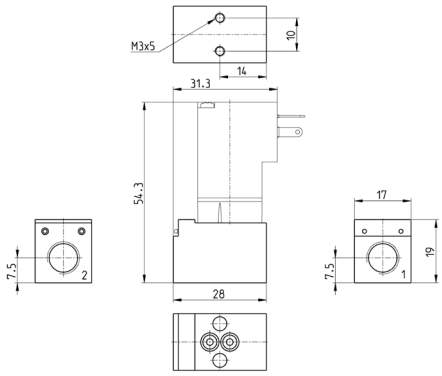


Material: anodized aluminium
Connections: G1/8 threads

Mod.
PDC01-1/8

Single sub-base for Series PD bottom interface

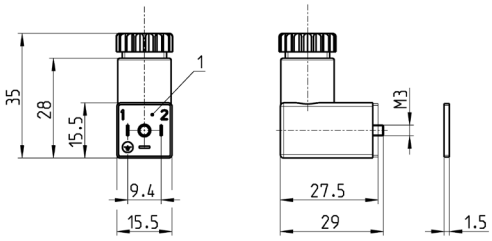
Single sub-base suitable for 2-way solenoid valves
Use solenoid valves with fixing screws for metal (see codification page)



Material: brass
Connections: G1/8 threads

Mod.
PDD01-1/8

Connectors Mod. 125 industrial std. 9,4 mm

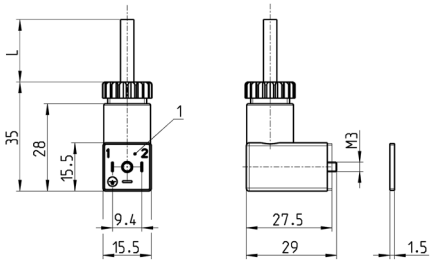


1 = 90° adjustable connector

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

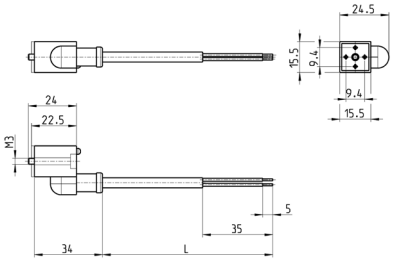
DIN EN 175 301-803-C
The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC.



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

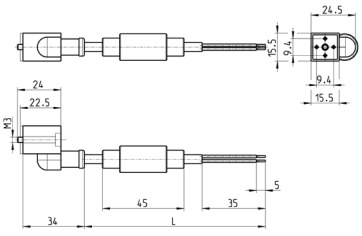
Connectors Mod. 125 industrial std. 9,4 mm in-line cable



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