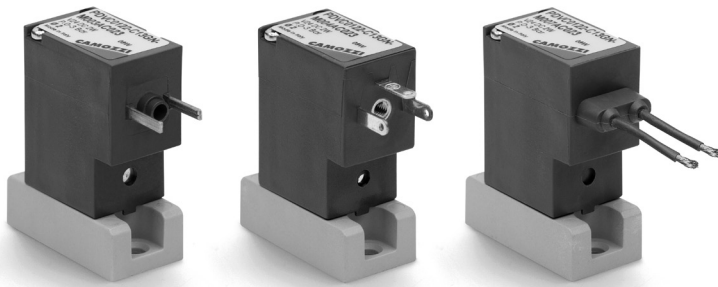


# Series PDV directly operated solenoid valves with separating diaphragm

New versions

2/2-way - Normally Closed (NC)



- » Suitable to be used with neutral or aggressive fluids
- » Suitable for specific applications on medical and analytical equipment or instruments
- » Compact design

To choose the most suitable model for a specific application, check the chemical compatibility of the medium to control with the available materials of body and seals.

Series PDV directly operated solenoid valve is available with several nominal diameters and in three different versions according to the electrical connection. Moreover, the separating diaphragm protects the medium from extreme changes of temperature due to heating of the solenoid.

## GENERAL DATA

### TECHNICAL FEATURES

|                             |  |
|-----------------------------|--|
| Function                    | 2/2 NC   |
| Operation                   | directly operated with separating diaphragm on subbase by means of M3 screws |
| Pneumatic connections       |  |
| Nominal diameter            | 0.8 ... 2 mm   |
| Nominal flow                | see kv   |
| Flow coefficient kv (l/min) | 0.25 ... 0.8   |
| Operating pressure          | 0 ... 7 bar  |
| Operating temperature       | 10°C ÷ 50°C  |
| Media                       | gas and liquids: air, water, reagents, solvents, etc...                      |
| Response time (ISO 12238)   | ≤ 15 ms  |
| Installation                | in any position  |

### MATERIALS IN CONTACT WITH THE MEDIUM

|       |            |
|-------|------------|
| Body  | PEEK       |
| Seals | FKM - EPDM |

### ELECTRICAL FEATURES

|                       |   |
|-----------------------|---|
| Voltage               | 24 V DC - 12 V DC - other voltages on request                               |
| Voltage tolerance     | ±10%  |
| Power consumption     | 2 W   |
| Duty cycle            | ED 100%   |
| Electrical connection | industrial standard (9.4 mm), DIN EN 175 301-803-C (8 mm), cable L = 300 mm |
| Protection class      | IP65 with connector   |

Special versions available on request

**CODING EXAMPLE**

|     |    |   |    |   |    |   |   |   |   |   |    |    |      |
|-----|----|---|----|---|----|---|---|---|---|---|----|----|------|
| PDV | C0 | 1 | 22 | - | B7 | 3 | G | N | - | M | 00 | 4A | C023 |
|-----|----|---|----|---|----|---|---|---|---|---|----|----|------|

|             |   |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|
| <b>PDV</b>  | SERIES  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>C0</b>   | BODY DESIGN:<br>C0 = body with interface for subbase  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>1</b>    | NUMBER OF WAYS - FUNCTIONS:<br>1 = 2/2-way NC   |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>22</b>   | PNEUMATIC CONNECTIONS:<br>22 = PDV-type interface, 2-way  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>B7</b>   | NOMINAL DIAMETER:<br>A7 = $\varnothing$ 0.8 mm<br>B3 = $\varnothing$ 1.2 mm<br>B7 = $\varnothing$ 1.6 mm<br>C1 = $\varnothing$ 2.0 mm   |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>3</b>    | SEAL MATERIAL:<br>3 = FKM<br>4 = EPDM   |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>G</b>    | BODY MATERIAL:<br>G = PEEK  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>N</b>    | MANUAL OVERRIDE:<br>N = not foreseen  |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>M</b>    | FIXING ACCESSORIES:<br>M = screws for metal   |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>00</b>   | OPTIONS:<br>00 = none   |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>4A</b>   | ELECTRICAL CONNECTION:<br>3A = DIN EN 175 301-803-C (8 mm)<br>4A = industrial standard (9.4 mm)<br>7A = cables (L = 300 mm)<br>3C = DIN EN 175 301-803-C (8 mm) with coil rotated 180°<br>4C = industrial standard (9.4 mm) with coil rotated 180°<br>7C = cables (L = 300 mm) with coil rotated 180° |  |  |  |  |  |  |  |  |  |  |  |  |
| <b>C023</b> | VOLTAGE - POWER CONSUMPTION:<br>C017 = 6V DC 2W<br>C020 = 12V DC 2W<br>C023 = 24V DC 2W   |  |  |  |  |  |  |  |  |  |  |  |  |

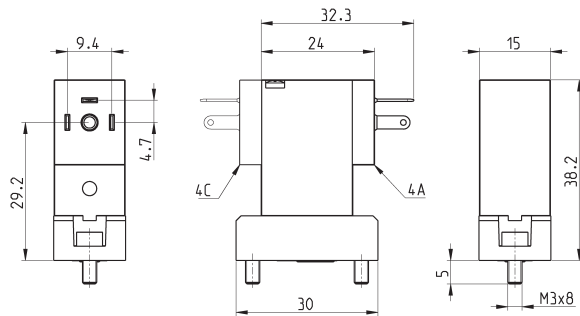
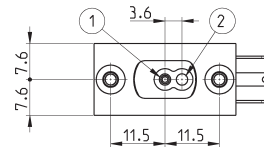
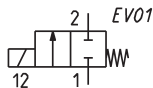
**2/2 NC solenoid valve, industrial standard (9.4 mm)**



Supplied with:  
1x seal  
2x M3x8 UNI 5931 screws

NOTE IN THE TABLE BELOW:  
\* to complete the code, add  
ELECTRICAL CONNECTION  
(4A or 4C options)  
and VOLTAGE  
(see CODING EXAMPLE)

NOTE IN THE DRAWING:  
1 = INLET PORT  
2 = OUTLET PORT



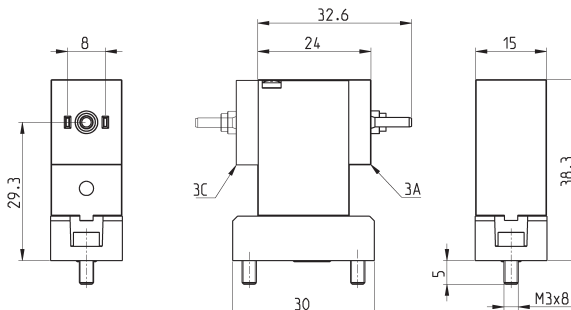
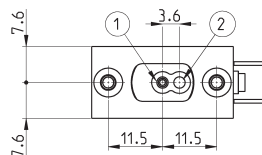
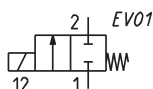
| Mod.                | Orifice $\varnothing$ (mm) | kv (l/min) | Min/max pressure (bar) | Max back pressure (bar) | Body material | Seal material |
|---------------------|----------------------------|------------|------------------------|-------------------------|---------------|---------------|
| PDVC0122-A73GN-M00* | 0.8                        | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-A74GN-M00* | 0.8                        | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B33GN-M00* | 1.2                        | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B34GN-M00* | 1.2                        | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B73GN-M00* | 1.6                        | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B74GN-M00* | 1.6                        | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-C13GN-M00* | 2.0                        | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-C14GN-M00* | 2.0                        | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | EPDM          |

**2/2 NC solenoid valve, DIN EN 175 301-803-C (8 mm)**

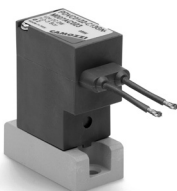

Supplied with:  
 1x seal  
 2x M3x8 UNI 5931 screws

NOTE IN THE TABLE BELOW:  
 \* to complete the code, add  
**ELECTRICAL CONNECTION**  
 (3A or 3C options)  
 and **VOLTAGE**  
 (see CODING EXAMPLE)

NOTE IN THE DRAWING:  
 1 = INLET PORT  
 2 = OUTLET PORT



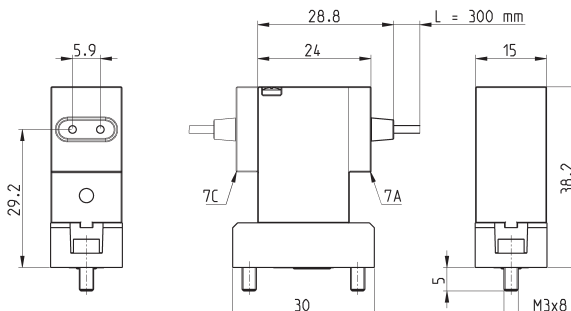
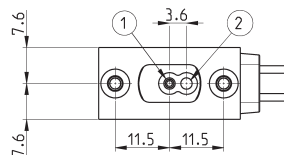
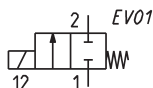
| Mod.                | Orifice Ø (mm) | kv (l/min) | Min/max pressure (bar) | Max back pressure (bar) | Body material | Seal material |
|---------------------|----------------|------------|------------------------|-------------------------|---------------|---------------|
| PDVC0122-A73GN-M00* | 0.8            | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-A74GN-M00* | 0.8            | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B33GN-M00* | 1.2            | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B34GN-M00* | 1.2            | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B73GN-M00* | 1.6            | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B74GN-M00* | 1.6            | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-C13GN-M00* | 2.0            | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-C14GN-M00* | 2.0            | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | EPDM          |

**2/2 NC solenoid valve, electrical connection with 300mm cable**


Supplied with:  
 1x seal  
 2x M3x8 UNI 5931 screws

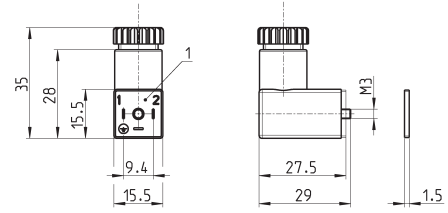
NOTE IN THE TABLE BELOW:  
 \* to complete the code, add  
**ELECTRICAL CONNECTION**  
 (7A or 7C options)  
 and **VOLTAGE**  
 (see CODING EXAMPLE)

NOTE IN THE DRAWING:  
 1 = INLET PORT  
 2 = OUTLET PORT



| Mod.                | Orifice Ø (mm) | kv (l/min) | Min/max pressure (bar) | Max back pressure (bar) | Body material | Seal material |
|---------------------|----------------|------------|------------------------|-------------------------|---------------|---------------|
| PDVC0122-A73GN-M00* | 0.8            | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-A74GN-M00* | 0.8            | 0.25       | 0 + 7.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B33GN-M00* | 1.2            | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B34GN-M00* | 1.2            | 0.55       | 0 + 4.5                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-B73GN-M00* | 1.6            | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-B74GN-M00* | 1.6            | 0.65       | 0 + 4.0                | 1.2                     | PEEK          | EPDM          |
| PDVC0122-C13GN-M00* | 2.0            | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | FKM           |
| PDVC0122-C14GN-M00* | 2.0            | 0.80       | 0 + 3.0                | 1.2                     | PEEK          | EPDM          |

Industrial standard (9.4 mm) connector Mod. 125-...

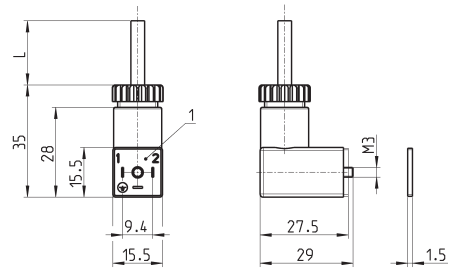


| Mod.    | description                    | colour      | working voltage | cable holding | tightening torque |
|---------|--------------------------------|-------------|-----------------|---------------|-------------------|
| 125-601 | connector, diode + Led         | transparent | 10/50 V DC      | 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

Industrial standard (9.4 mm) connector Mod. 125-... with cable

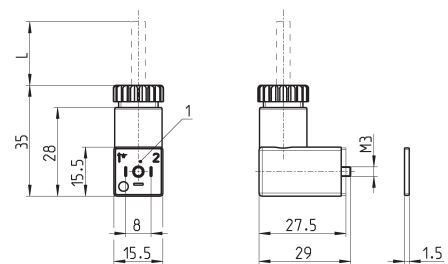
The internal rectifier circuit of the connector Mod. 125-900 allows to use solenoid valves with different AC voltage, even if the voltage indicated on the solenoid valve is DC.



| 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

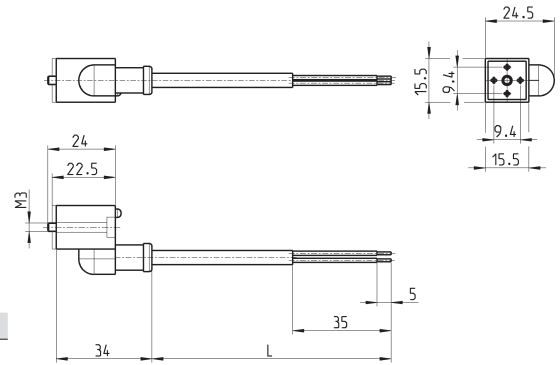
Connector Mod. 126-... DIN EN 175 301-803-C (8 mm)



| Mod.      | description                        | colour      | working voltage | cable length [ L ] | cable holding | tightening torque |
|-----------|------------------------------------|-------------|-----------------|--------------------|---------------|-------------------|
| 126-550-1 | moulded cable, without electronics | black       | -               | 1000 mm            | -             | 0.3 Nm            |
| 126-800   | connector, without electronics     | black       | -               | -                  | PG7           | 0.3 Nm            |
| 126-701   | connector, varistor + Led          | transparent | 24 V AC/DC      | -                  | PG7           | 0.3 Nm            |

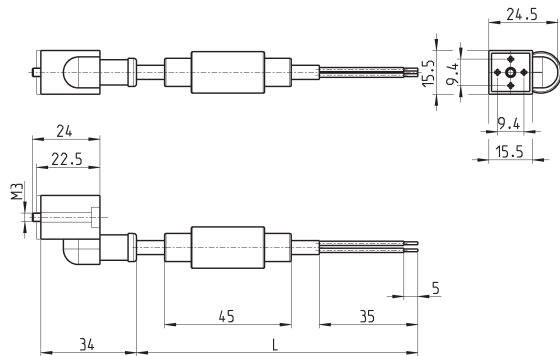
1 = 90° adjustable connector

## Industrial standard (9.4 mm) 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            |

## Industrial standard (9.4 mm) 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            |