Series PDV directly operated solenoid valves with separating diaphragm

2/2-way - Normally Closed (NC)

Series PDV directly operated solenoid valves are 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.

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.

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

### GENERAL DATA

#### TECHNICAL FEATURES

**Function**
2/2 NC

**Operation**
directly operated with separating diaphragm

**Pneumatic connections**
on subbase by means of M3 screws

**Nominal diameter**
0.8 … 2 mm

**Flow coefficient kv (l/min)**
see kv

**Operating pressure**
0.25 ... 0.8

**Operating temperature**
0 ... 7 bar

**Media**
10°C ÷ 50°C

**Response time (ISO 12238)**
gas and liquids: air, water, reagents, solvents, etc...

≤ 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**

<table>
<thead>
<tr>
<th>PDV</th>
<th>C0</th>
<th>1</th>
<th>22</th>
<th>-</th>
<th>B7</th>
<th>3</th>
<th>G</th>
<th>N</th>
<th>-</th>
<th>M</th>
<th>00</th>
<th>4A</th>
<th>C023</th>
</tr>
</thead>
</table>

**PDV SERIES**

**C0**
- **BODY DESIGN:**
  - C0 = body with interface for subbase

**1**
- **NUMBER OF WAYS - FUNCTIONS:**
  - 1 = 2/2-way NC

**22**
- **PNEUMATIC CONNECTIONS:**
  - 22 = PDV-type interface, 2-way

**B7**
- **NOMINAL DIAMETER:**
  - A7 = ø 0.8 mm
  - B3 = ø 1.2 mm
  - B7 = ø 1.6 mm
  - C1 = ø 2.0 mm

**3**
- **SEAL MATERIAL:**
  - 3 = FKM
  - 4 = EPDM

**G**
- **BODY MATERIAL:**
  - G = PEEK

**N**
- **MANUAL OVERRIDE:**
  - N = not foreseen

**M**
- **FIXING ACCESSORIES:**
  - M = screws for metal

**00**
- **OPTIONS:**
  - 00 = none

**4A**
- **ELECTRICAL CONNECTION:**
  - 3A = DIN EN 175 301-803-C (8 mm)
  - 4A = industrial standard (9.4 mm)
  - 7A = cables (L = 300 mm)

**C023**
- **VOLTAGE - POWER CONSUMPTION:**
  - C017 = 6V DC 2W
  - C020 = 12V DC 2W
  - 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
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 DRAWING:
- 1 = INLET PORT
- 2 = OUTLET PORT

<table>
<thead>
<tr>
<th>Mod.</th>
<th>Orifice Ø (mm)</th>
<th>kv (l/min)</th>
<th>Min/max pressure (bar)</th>
<th>Max back pressure (bar)</th>
<th>Body material</th>
<th>Seal material</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDVC0122-A73GN-M00*</td>
<td>0.8</td>
<td>0.25</td>
<td>0 ÷ 7.0</td>
<td>1.2</td>
<td>PEEK</td>
<td>FKM</td>
</tr>
<tr>
<td>PDVC0122-A74GN-M00*</td>
<td>0.8</td>
<td>0.25</td>
<td>0 ÷ 7.0</td>
<td>1.2</td>
<td>PEEK</td>
<td>EPDM</td>
</tr>
<tr>
<td>PDVC0122-B33GN-M00*</td>
<td>1.2</td>
<td>0.55</td>
<td>0 ÷ 4.5</td>
<td>1.2</td>
<td>PEEK</td>
<td>FKM</td>
</tr>
<tr>
<td>PDVC0122-B34GN-M00*</td>
<td>1.2</td>
<td>0.55</td>
<td>0 ÷ 4.5</td>
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<td>PEEK</td>
<td>EPDM</td>
</tr>
<tr>
<td>PDVC0122-B73GN-M00*</td>
<td>1.6</td>
<td>0.65</td>
<td>0 ÷ 4.0</td>
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</tr>
<tr>
<td>PDVC0122-C13GN-M00*</td>
<td>2.0</td>
<td>0.80</td>
<td>0 ÷ 3.0</td>
<td>1.2</td>
<td>PEEK</td>
<td>FKM</td>
</tr>
<tr>
<td>PDVC0122-C14GN-M00*</td>
<td>2.0</td>
<td>0.80</td>
<td>0 ÷ 3.0</td>
<td>1.2</td>
<td>PEEK</td>
<td>EPDM</td>
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2/2 NC solenoid valve, electrical connection with 300mm cable

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

NOTE IN THE DRAWING:
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<td>EPDM</td>
</tr>
<tr>
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<td>0.55</td>
<td>0 ÷ 4.5</td>
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</tbody>
</table>
Industrial standard (9.4 mm) connector Mod. 125-...

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

1 = 90° adjustable connector

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.

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

<table>
<thead>
<tr>
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<th>colour</th>
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<th>cable holding</th>
<th>tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>125-501-2</td>
<td>moulded cable with diode + Led</td>
<td>black</td>
<td>10/50 V DC</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-550-1</td>
<td>moulded cable, without electronics</td>
<td>black</td>
<td>-</td>
<td>1000 mm</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-601-2</td>
<td>pre-wired cable, diode + Led</td>
<td>transparent</td>
<td>10/50 V DC</td>
<td>PG7</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-571-3</td>
<td>moulded cable, varistor + Led</td>
<td>black</td>
<td>24 V AC/DC</td>
<td>PG7</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-900</td>
<td>pre-wired cable with voltage rectifier</td>
<td>black</td>
<td>6 V - 110 V AC/DC</td>
<td>PG7</td>
<td>0.3 Nm</td>
</tr>
</tbody>
</table>

1 = 90° adjustable connector

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

<table>
<thead>
<tr>
<th>Mod.</th>
<th>description</th>
<th>colour</th>
<th>working voltage</th>
<th>cable holding</th>
<th>tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>126-550-1</td>
<td>moulded cable, without electronics</td>
<td>black</td>
<td>-</td>
<td>1000 mm</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>126-800</td>
<td>connector, without electronics</td>
<td>black</td>
<td>-</td>
<td>PG7</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>126-701</td>
<td>connector, varistor + Led</td>
<td>transparent</td>
<td>24 V AC/DC</td>
<td>PG7</td>
<td>0.3 Nm</td>
</tr>
</tbody>
</table>

1 = 90° adjustable connector
Industrial standard (9.4 mm) in-line connectors with cable

<table>
<thead>
<tr>
<th>Mod.</th>
<th>description</th>
<th>colour</th>
<th>working voltage</th>
<th>cable length</th>
<th>cable holding</th>
<th>tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>125-803-2</td>
<td>in-line moulded cable, with diode + Led</td>
<td>black</td>
<td>24 V DC</td>
<td>2000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-803-5</td>
<td>in-line moulded cable, with diode + Led</td>
<td>black</td>
<td>24 V DC</td>
<td>5000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-853-2</td>
<td>in-line moulded cable, without electronics</td>
<td>black</td>
<td>-</td>
<td>2000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-853-5</td>
<td>in-line moulded cable, without electronics</td>
<td>black</td>
<td>-</td>
<td>5000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
</tbody>
</table>

Industrial standard (9.4 mm) in-line connectors with bridge rectifier

<table>
<thead>
<tr>
<th>Mod.</th>
<th>description</th>
<th>colour</th>
<th>working voltage</th>
<th>cable length</th>
<th>cable holding</th>
<th>tightening torque</th>
</tr>
</thead>
<tbody>
<tr>
<td>125-903-2</td>
<td>in-line moulded cable, with voltage rectifier</td>
<td>black</td>
<td>6 V - 230 V AC/DC</td>
<td>2000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
<tr>
<td>125-903-5</td>
<td>in-line moulded cable, with voltage rectifier</td>
<td>black</td>
<td>6 V - 230 V AC/DC</td>
<td>5000 mm</td>
<td>-</td>
<td>0.3 Nm</td>
</tr>
</tbody>
</table>