

New

Series K8DV directly operated solenoid valves with fluid separation membrane

2/2-way - Normally Closed (NC)



- » Very compact design and reduced weight
- » High flow performances
- » Very low internal volume
- » Suitable to be applied in medical equipment and analytical instruments

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.

The K8DV solenoid valve was born to meet all the demands to shut off aggressive or heat sensitive fluids. Thanks to a fluid separation membrane, the fluid is isolated from all internal metal parts of the solenoid valve and avoids heating, even if minimum, generated by the solenoid positioned above.

GENERAL DATA

TECHNICAL FEATURES

| | |
|---------------------------|--|
| Function | 2/2 NC |
| Operation | directly operated with fluid separation membrane |
| Pneumatic connections | cartridge for manifold or flanged for subbase |
| Nominal diameter | 0.7 mm |
| Flow efficient kv (l/min) | 0.1 |
| Operating pressure | 0 ÷ 2.1 bar |
| Operating temperature | 5 ÷ 50°C |
| Media | liquids / aggressive or inert gases |
| Response time (ISO 12238) | ON ≤ 10 ms - OFF ≤ 15 ms |
| Installation | in any position |

MATERIALS IN CONTACT WITH THE MEDIUM

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

ELECTRICAL FEATURES

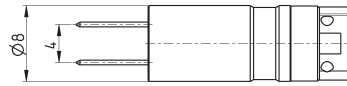
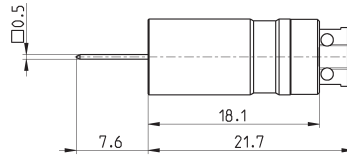
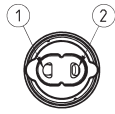
| | |
|-----------------------|---|
| Voltage | 24 V DC - 12 V DC - 6 V DC - 5 V DC - 3 V DC - other voltages on demand |
| Voltage tolerance | ±10% |
| Power consumption | 0.6 W |
| Duty cycle | ED 100% |
| Electrical connection | 2 Pins 0.5 x 0.5 spacing 4 mm |
| Protection class | IP00 |

CODING EXAMPLE

| | | | | | | | | | | |
|-------------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| K8DV | C | 00 | - | 5 | 0 | 5 | - | G | 2 | 3 |
|-------------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|

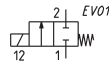
| | |
|-------------|---|
| K8DV | SERIES |
| C | TYPE OF BODY: C = cartridge version 0 = flanged version |
| 00 | NUMBER OF POSITIONS: 00 = valve without housing |
| 5 | NUMBER OF WAYS - FUNCTIONS: 5 = 2-way NC |
| 0 | SEAL MATERIAL: 0 = FKM 4 = EPDM |
| 5 | NOMINAL DIAMETER: 5 = Ø 0.7 mm |
| G | BODY MATERIAL: G = PEEK |
| 2 | ELECTRICAL CONNECTION: 2 = interface pin size 4 mm |
| 3 | VOLTAGE - POWER CONSUMPTION: 1 = 6V DC - 0.6 W 2 = 12V DC - 0.6 W 3 = 24V DC - 0.6 W 4 = 3V DC - 0.6 W 5 = 5V DC - 0.6 W |

Solenoid valve with fluid separation membrane, cartridge version



DRAWING LEGEND:
1 = inlet
2 = outlet

NOTE TO THE TABLE:
* to complete the code add
VOLTAGE - POWER
CONSUMPTION (see the
CODING EXAMPLE)

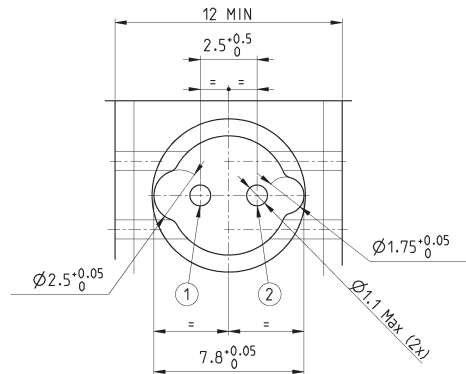
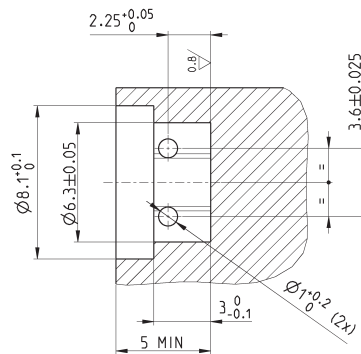


| Mod. | Nominal diameter Ø (mm) | kv (l/min) | Min÷max pressure (bar) | Body material | Seal material |
|-----------------|-------------------------|------------|------------------------|---------------|---------------|
| K8DVC00-505-G2* | 0.7 | 0.1 | 0 ÷ 2.1 | PEEK | FKM |
| K8DVC00-545-G2* | 0.7 | 0.1 | 0 ÷ 2.1 | PEEK | EPDM |

Solenoid valve seat, cartridge version

DRAWING LEGEND:

1 = supply
2 = inlet

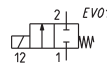
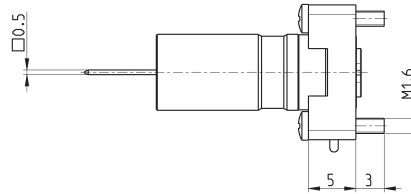
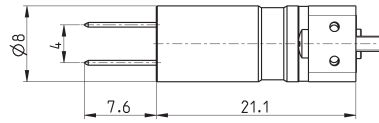
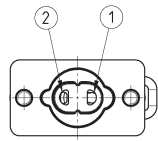


Solenoid valve with fluid separation membrane, flanged version



DRAWING LEGEND:
1 = supply
2 = inlet

NOTE TO THE TABLE:
* to complete the code add
VOLTAGE - POWER
CONSUMPTION (see the
CODING EXAMPLE)

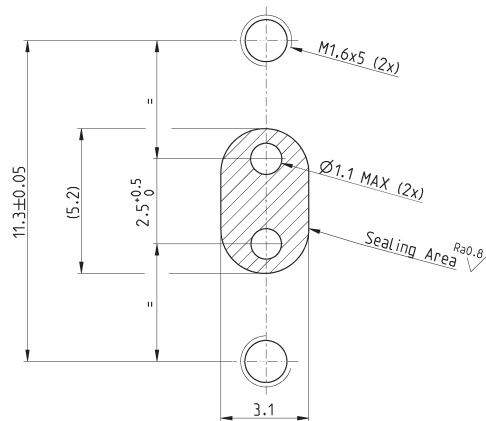


| Mod. | Nominal diameter Ø (mm) | kv (l/min) | Min+max pressure (bar) | Body material | Seal material |
|-----------------|-------------------------|------------|------------------------|---------------|---------------|
| K8DV000-505-G2* | 0.7 | 0.1 | 0 ÷ 2.1 | PEEK | FKM |
| K8DV000-545-G2* | 0.7 | 0.1 | 0 ÷ 2.1 | PEEK | EPDM |

Mounting pad of the flanged solenoid valve

DRAWING LEGEND:

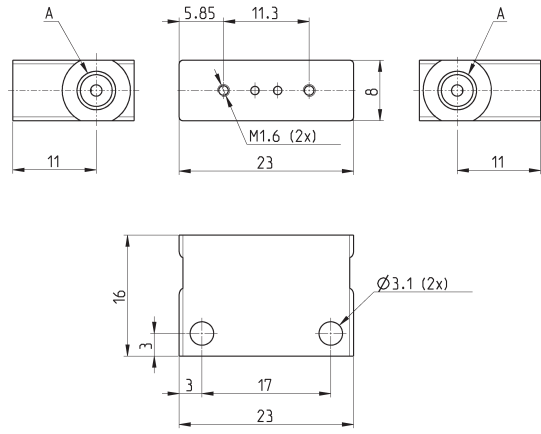
1 = inlet
2 = outlet



Single sub base for flanged version



Material: PEEK
Pneumatic connections: M5 or 1/4-28 UNF threads

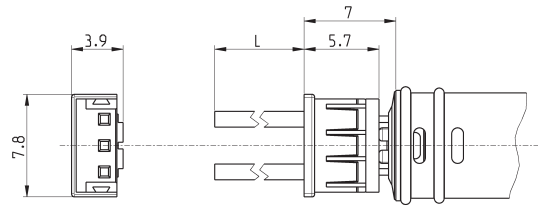


| Mod. | A (pneumatic connections) |
|--------------|---------------------------|
| K8DV0001-1/4 | 1/4 - 28 UNF |
| K8DV0001-M5 | M5 |

Connector Mod. 120-..



Cable section: 0.25 mm²
Cable external diameter: 1.2 mm
Material for the cable insulation: PVC

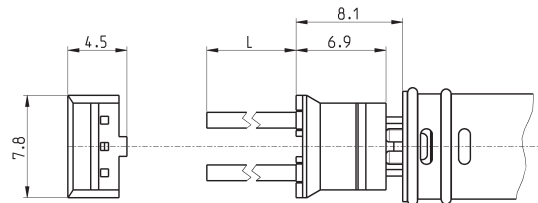


| Mod. | description | colour | L = cable length (mm) | cable holding |
|---------|---------------|--------|-----------------------|---------------|
| 120-803 | crimped cable | white | 300 | crimping |
| 120-806 | crimped cable | white | 600 | crimping |

Connector with flying leads Mod. 120-J...



Flying leads section: 0.25 mm²
Flying lead external diameter: 1.2 mm
Material for the flying leads insulation: PVC



| Mod. | description | colour | L = cable length (mm) | cable holding |
|----------|---------------------------|--------|-----------------------|---------------|
| 120-J803 | crimped cable connector J | white | 300 | crimping |
| 120-J806 | crimped cable connector J | white | 600 | crimping |