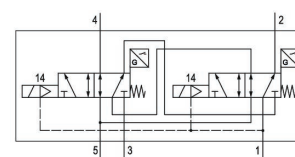
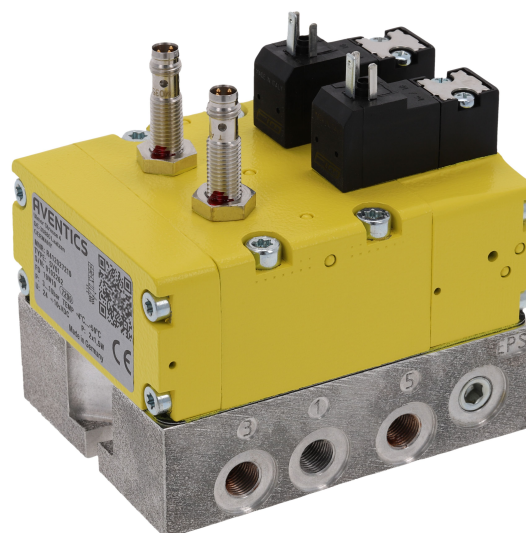


5/2 directional safety valve, Series SV01

R412027211

General series information
AVENTICS Series SV01/03/05 Safety valves

- The AVENTICS Series SV01/03/05 double valves are redundant 3/2 and 5/2 valves for external monitoring that are designed to meet the needs and requirements of safe air supply and exhaust 3/2 valves and safe cylinder return 5/2 valves applications for machinery with pneumatic controls according to the requirements of ISO 13849-1-2 for safety functions.
- According to ISO 13849-1, Cat. 4, PL e



Technical data

| | |
|----------------------------------|--|
| Industry | Industrial |
| Activation | Electrically |
| Switching principle | 5/2 |
| Compressed air connection output | 1/8 NPT |
| DC operating voltage | 24 V |
| Voltage tolerance DC | -10% / +10% |
| Actuating control | Single Solenoid |
| Sealing principle | soft seal |
| Pilot | Internal |
| Standards | ISO 13849-1, category 4, performance level: e (possible) |
| Valve type | Double spool valve |
| Return | With spring return |
| Compressed air connection input | 1/8 NPT |
| Power consumption DC | 1.5 W |
| Working pressure min. internal | 3 bar |

| | |
|------------------------------------|--------------------------------|
| Working pressure max. internal | 10 bar |
| Working pressure min. external | 0 bar |
| Working pressure max. external | 10 bar |
| Control pressure min. | 3 bar |
| Control pressure max. | 10 bar |
| Min. ambient temperature | 4 °C |
| Max. ambient temperature | 50 °C |
| Min. medium temperature | 4 °C |
| Max. medium temperature | 50 °C |
| Medium | Compressed air |
| Max. particle size | 5 µm |
| Oil content of compressed air min. | 0 mg/m ³ |
| Oil content of compressed air max. | 5 mg/m ³ |
| Connector standard | EN 175301-803, form C |
| Nominal flow Qn 1 to 2 | 1000 l/min |
| Nominal flow Qn 1 to 4 | 780 l/min |
| Nominal flow Qn 2 to 3 | 700 l/min |
| Nominal flow Qn 4 to 5 | 980 l/min |
| Protection class with connection | IP65 |
| Duty cycle | 100 % |
| Typ. switch-on time | 23 ms |
| Typ. switch-off time | 45 ms |
| Max. current consumption | 23 mA |
| Type sensor | PNP |
| Electrical connection for sensor | Plug |
| Sensor port size | M8 |
| Sensor number of poles | 3-pin |
| Weight | 1.25 kg |
| Housing material | Die-cast aluminum |
| Seal material | Acrylonitrile butadiene rubber |
| Part No. | R412027211 |

Technical information

silencer (not included in scope of delivery)

The min. control pressure must be adhered to, since otherwise faulty switching and valve failure may result!

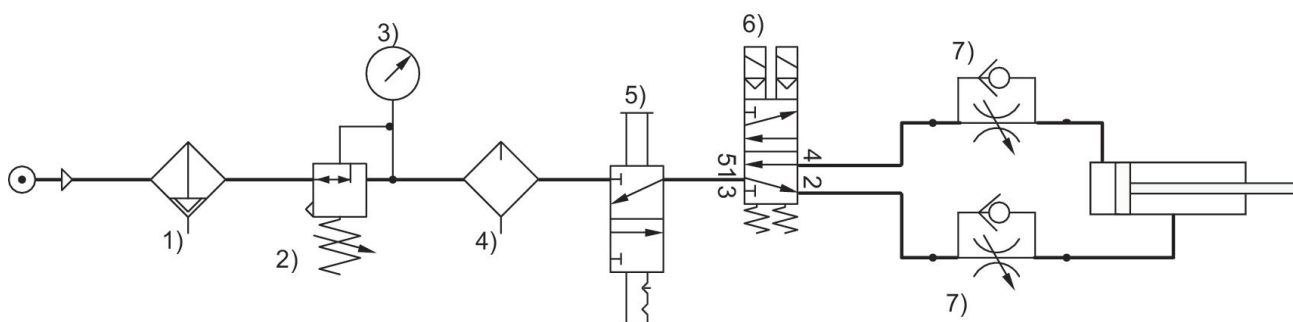
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in <https://www.emerson.com/en-us/support>).

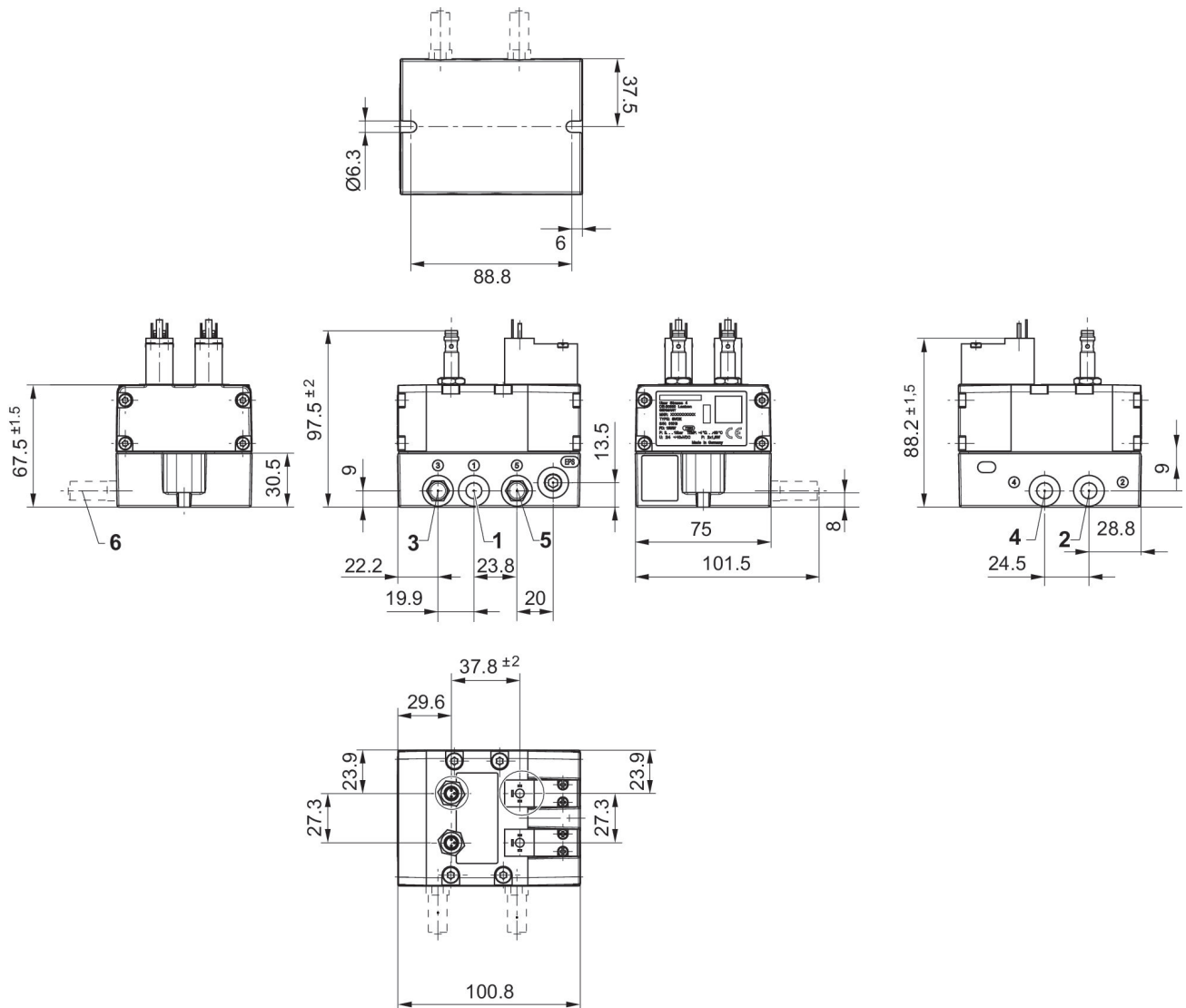
Directional safety valve series SV is delivered and configured for internal control pressure. It can easily be converted to external control pressure. Please refer to the operating instructions. The control pressure must be > 3 bar.

Safe air supply and cylinder return via 5/2 directional valve



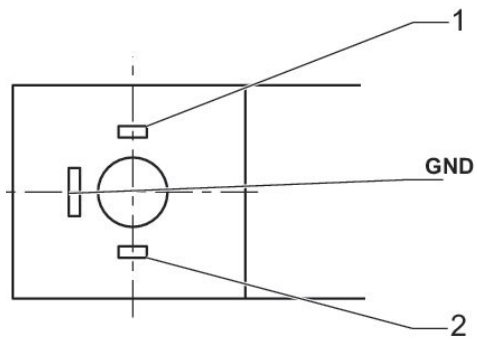
1) Filter 2) Pressure regulator 3) Pressure gauge 4) Lubricator 5) Lockout valve 6) Safety valve, Series SV 7) Check-choke valve

Dimensions



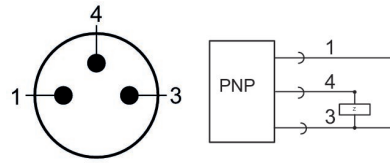
- 1) Port 1 (Input)
- 2) Port 2 (Output)
- 3) Port 3 (Exhaust)
- 4) Port 4 (Output)
- 5) Port 5 (Exhaust)
- 6) silencer (not included in scope of delivery)

Valve plug connector form C



- 1) + 24 / 0 VDC
- 2) 0 / + 24 VDC

PIN assignment sensor, plug M8 3-pin



- 1) + 20 ... + 28 VDC
- 3) 0 VDC
- 4) OUT