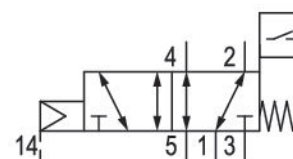


5/2-directional valve, Series IS12-PD, size 2

R422003654

Series IS12-PM, size 1



Technical data

Industry
Industrial

Activation
Electrically

Nominal flow Qn
2500 l/min

Switching principle
5/2

Compressed air connection output
Base plate DIN ISO 5599 size 2

Working pressure min.
-0.9 bar

Working pressure max
10 bar

Manual override
without

Actuating control
Single Solenoid

Sealing principle
Soft Seal

Pilot
External

Standards
ISO 5599-1

Pilot valve width
30 mm

Valve type
Spool valve, positive overlapping

Blocking principle
Single base plate principle

Connection type
Plate connection

Return
with differential piston

Compressed air connection input
Base plate DIN ISO 5599 size 2

Compressed air connection, exhaust Base plate DIN ISO 5599 size 2	Switch-on time 20 ms
Compressed air connection pilot input Base plate DIN ISO 5599 size 2	Switch-off time 50 ms
Compressed air connection pilot exhaust M5	Type sensor electronic PNP, with LED
basic valve with electrical connector Basic valve without coil	Electrical connection for sensor Plug
Frame size ISO 2	Sensor port size M8
Control pressure min. 3 bar	Sensor number of poles 3-pin
Control pressure max. 10 bar	Voltage drop sensor U at I _{max} ≤ 2,5 V
Min. ambient temperature 0 °C	Vibration resistance sensor 10 - 55 Hz, 1 mm
Max. ambient temperature 50 °C	Shock resistance sensor 30 g / 11 ms
Min. medium temperature 0 °C	Protection class sensor acc. to DIN EN 61140 Class III
Max. medium temperature 60 °C	Sensor with knurled screw
Medium Compressed air	Cable length sensor 0.3 m
Max. particle size 5 µm	mounting screws M6 with hexagon socket
Oil content of compressed air min. 0 mg/m ³	Weight 0.52 kg
Oil content of compressed air max. 0.01 mg/m ³	Housing material Polyamide Aluminum
Protection class with connection IP65	Seal material Acrylonitrile butadiene rubber
Compatibility index 15	Part No. R422003654
Duty cycle 100 %	

Technical information

When the valve is not actuated, the sensor sends a signal through pin 4 of the sensor connection.

When the valve is actuated, the sensor does not send a signal through pin 4 of the sensor connection.

The valve with position detection is possible to be used in categories 3 and 4 according to ISO 13849 in order to reach a Performance Level (PL) of the control system up to PL = e.

On its own, the valve with position detection is not a safety component and is not a complete safety solution. It is designed to increase the diagnostic coverage (DC) of the control system.

For use in categories 3 to 4, additional requirements of DIN EN ISO 13849-1:2008-12 (e.g. CCF, DC, PLr, software, systematic errors) are taken into consideration by the user.

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

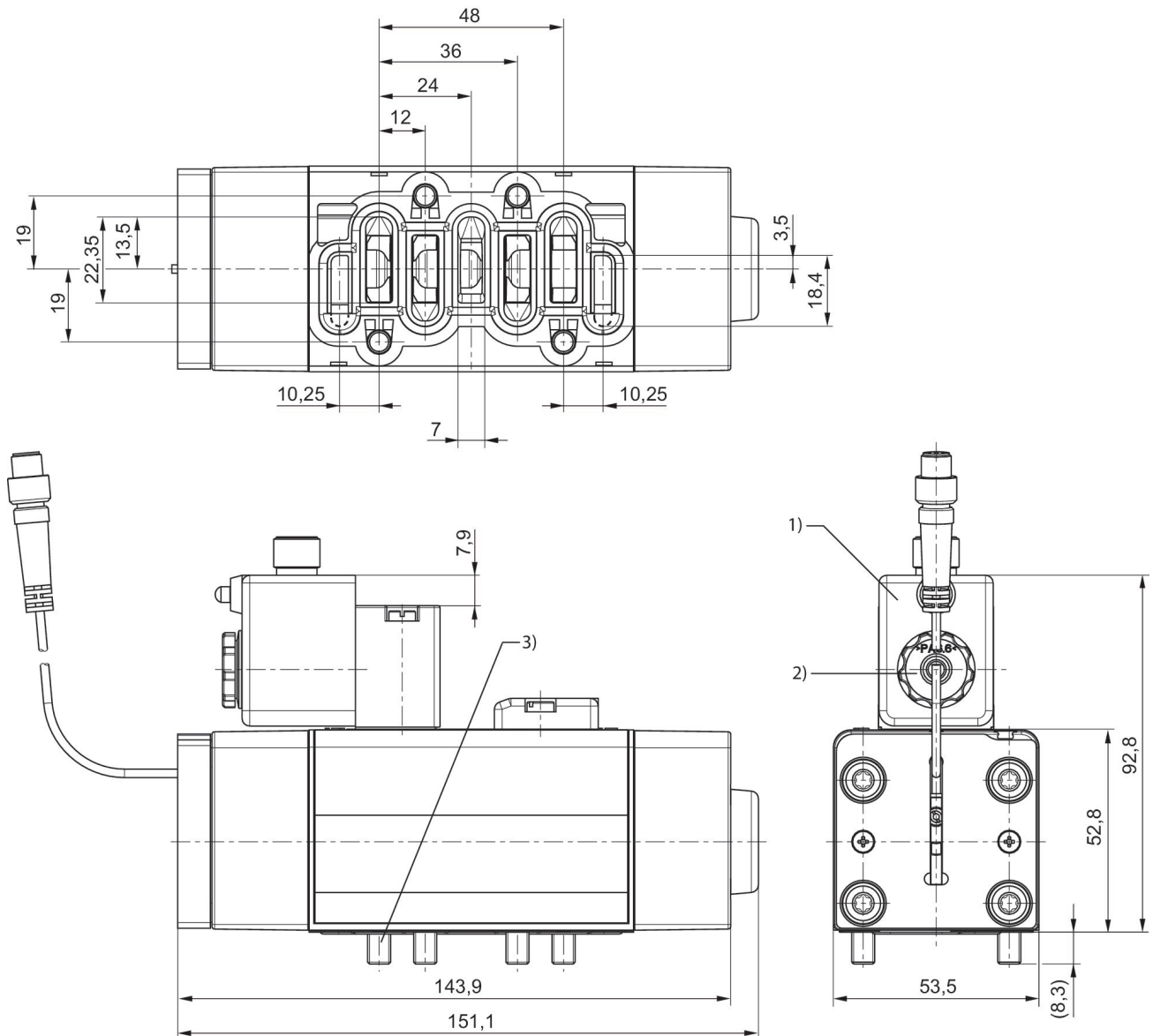
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .

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>).

Dimensions

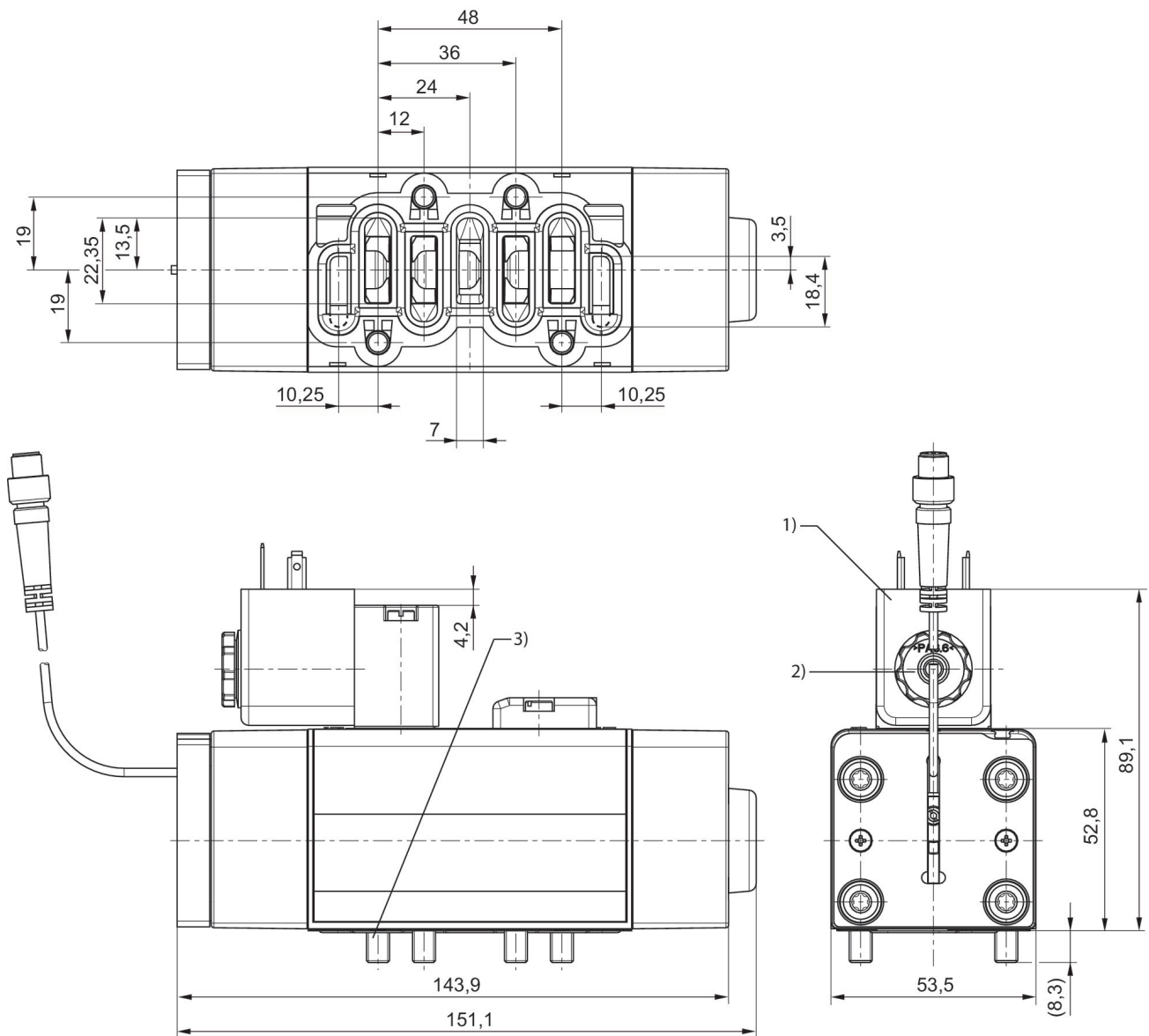
Fig. 2



- 1) Adjustable coil 3x90°
- 2) Tightening torque for lock nut: 0.6 + 0.2 Nm
- 3) Tightening torque for mounting screws: 4.0 ± 0.5 Nm

Dimensions

Fig. 1



- 1) Adjustable coil 3x90°
- 2) Tightening torque for lock nut: 0.6 + 0.2 Nm
- 3) Tightening torque for mounting screws: 4.0 ± 0.5 Nm