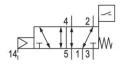
#### Series IS12-PM, size 1





### Technical data

Industry Industrial
Activation Electrically
Nominal flow Qn 1060 I/min

Compressed air connection output Base plate DIN ISO 5599 size 1

Min. working pressure -0.9 bar
Max. working pressure 10 bar
Manual override without

Actuating control Single Solenoid

Sealing principle

Pilot

Standards

Pilot valve width

Soft seal

External

ISO 5599-1

30 mm

Valve type Spool valve, positive overlapping

Blocking principle Single base plate principle

Connection type Plate connection
Return With spring return

Compressed air connection input

Compressed air connection, exhaust

Compressed air connection pilot input

Base plate DIN ISO 5599 size 1

Base plate DIN ISO 5599 size 1

Base plate DIN ISO 5599 size 1

# 5/2-directional valve, Series IS12-PD, size 1

2024-03-18

R422002646

Compressed air connection pilot exhaust M5

Basic valve equipment Basic valve without coil

Frame size ISO 1

Min. control pressure 3 bar

Max. control pressure 10 bar

Min. ambient temperature 0 °C

Max. ambient temperature 50 °C

Min. medium temperature 0 °C

Max. medium temperature 50 °C

Medium Compressed air

 $\begin{tabular}{lll} Max. particle size & 5 $\mu m$ \\ Min. oil content of compressed air & 0 $mg/m^3$ \\ Max. oil content of compressed air & 0.01 $mg/m^3$ \\ \end{tabular}$ 

Protection class with connection IP65
Compatibility index 15
Duty cycle 100 %
Switch-on time 18 ms
Switch-off time 40 ms

Type sensor electronic PNP, with LED

Electrical connection for sensor Plug
Sensor port size M8
Sensor number of poles 3-pin
Voltage drop sensor U at Imax  $\leq 2,5 \text{ V}$ 

Vibration resistance sensor 10 - 55 Hz, 1 mm Shock resistance sensor 30 g / 11 ms Protection class sensor acc. to DIN EN 61140 Class III

Sensor with knurled screw

Cable length sensor 0.3 m

Mounting screws M5 with hexagon socket

Weight 0.315 kg
Housing material Polyamide
Aluminum

Seal material Acrylonitrile butadiene rubber

Part No. R422002646

#### 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!

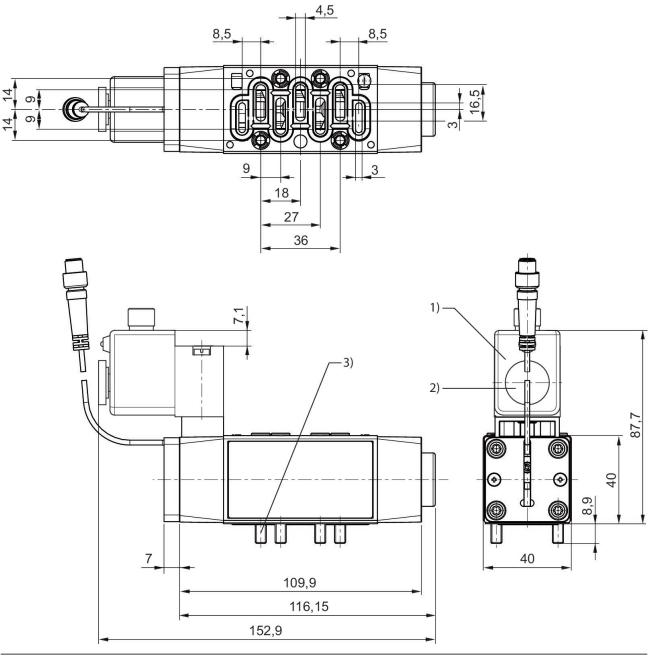
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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).

#### **Dimensions**

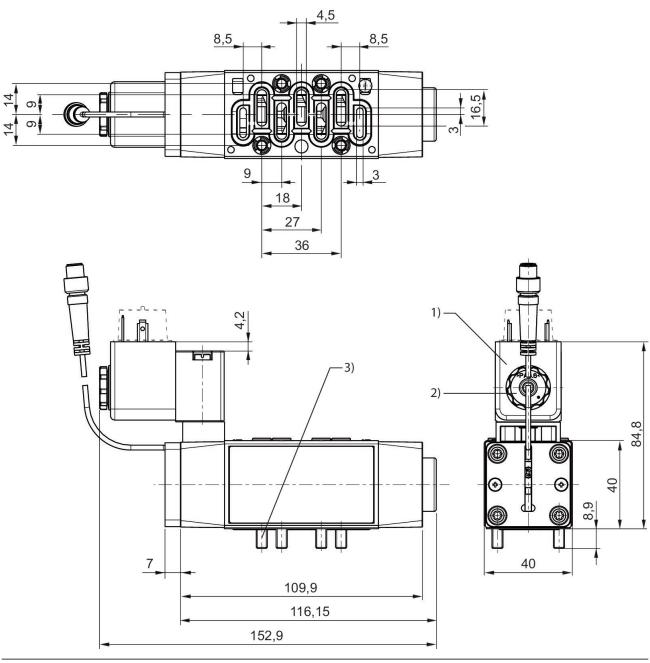
Fig. 2



- 1) Adjustable coil 5x45°
  2) Tightening torque for lock nut: 0.6 + 0.2 Nm
  3) Tightening torque for mounting screws: 2.2 ± 0.2 Nm

## **Dimensions**

Fig. 1



- 1) Adjustable coil 5x45°
  2) Tightening torque for lock nut: 0.6 + 0.2 Nm
  3) Tightening torque for mounting screws: 2.2 ± 0.2 Nm