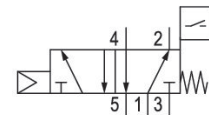
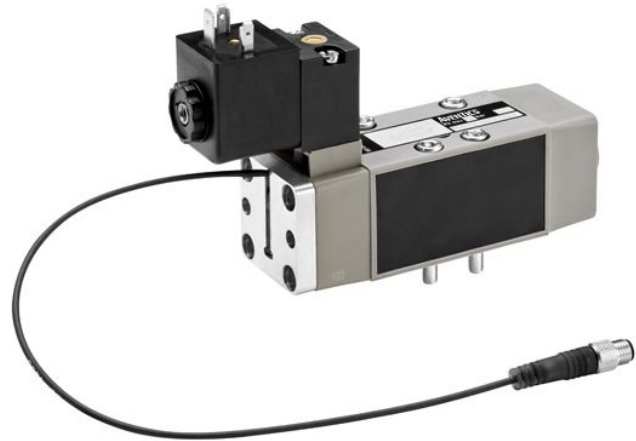


Series IS12-PD

The AVENTICS Series S12-PD is an ISO 5599-1, with safety function safe venting and protection against unexpected start-up. Its monostable version with spring return guarantees a default position in case of power failure. It includes a specific ST4 electronic sensor assembled and encapsulated in the valve as well as an electrical connection from A or M12.

- Integrated spool position detection with electronic proximity sensor
- With internal or external pilot air, optional manual override
- The dual valve is a safety component in accordance with the Machinery Directive 2006/42/EC and permits usage in categories 3 and 4 in accordance with ISO 13849-1 to achieve a control system performance level (PL) of up to PL = e



Technical data

Industry

Note

Activation

Nominal flow Q_n

Compressed air connection output

Min. working pressure

Max. working pressure

Manual override

Sealing principle

Pilot

Standards

Pilot valve width

Valve type

Blocking principle

Connection type

Return

Compressed air connection input

Compressed air connection, exhaust

Compressed air connection pilot input

Industrial

Archive product: Do not use in new constructions!

Electrically

1060 l/min

Base plate DIN ISO 5599 size 1

3 bar

10 bar

without

Soft seal

Internal

ISO 5599-1

30 mm

Spool valve, positive overlapping

Single base plate principle

Plate connection

With spring return

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

R422002645

Series IS12-
PD

2026-08-05

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
Max. particle size	5 µm
Min. oil content of compressed air	0 mg/m ³
Max. oil content of compressed air	0.01 mg/m ³
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 I _{max}	≤ 2,5 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.	R422002645

Technical information

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.

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.

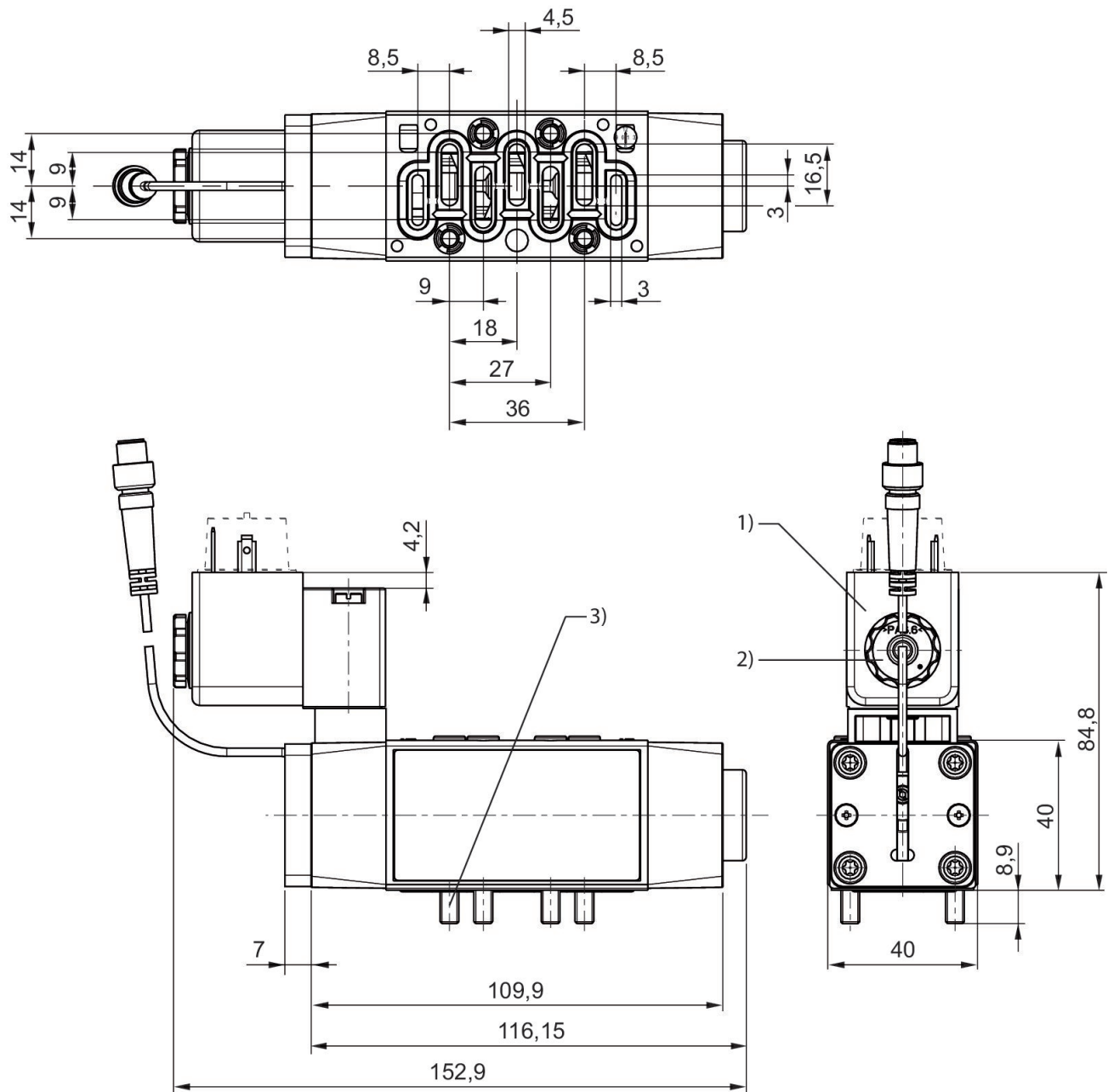
5/2-directional valve, Series IS12

R422002645

Series IS12-
PD

2026-08-05

Dimensions



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