

Series DS2 Pressure Dew Point Sensor

The Aventics DS2 Pressure Dew Point Sensor is a highly reliable and precise instrument designed to measure the dew point temperature in compressed air systems. This sensor plays a crucial role in ensuring the air quality within pneumatic systems by detecting the moisture content. By providing accurate and real-time data, the DS2 helps in preventing moisture-related issues such as corrosion, freezing, and malfunctioning of equipment. Its compact design and easy integration into existing systems make it an ideal choice for maintaining optimal performance and longevity of pneumatic components. The Aventics DS2 is essential for applications requiring stringent air quality standards, helping to enhance overall system efficiency and product quality.



Technical data

Industry	Industrial
Pressure dew point measurement range	-80 ... +20 °Ctd
Temperature measurement range	-20 ... +70 °C
Precision	±1 °C at +50 ... -20 °Ctd ±2 °C at -20 ... -50 °Ctd ± 3 °C at - 50 ... - 80 °Ctd
Temperature sensor accuracy	-20 ... +50 °C ±1,5 °C
Min. working pressure	-1 bar
Max. working pressure	50 bar
Operational voltage	24 V DC 10-36 V DC
Protection class	IP66
Certificates	EMV in according with DIN EN 61326-1 UL (Underwriters Laboratories)
Min. ambient temperature	-40 °C
Max. ambient temperature	80 °C
Min. medium temperature	-20 °C
Max. medium temperature	70 °C
Note	ideal 0...50 °C
Electrical connection type	Plug

Series DS2 Pressure Dew Point Sensor

R412029180

Series DS2

2026-02-26

Electrical connection size	M12
Electrical connection number of poles	5-pin
Electrical connection coding	A-coded
Max. power consumption	5 W
Output signal	Modbus-RTU Interface (RS 485) IO-Link
Weight	0.197 kg

Material

Housing material	Stainless Steel
Part No.	R412029180

Technical information

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>).

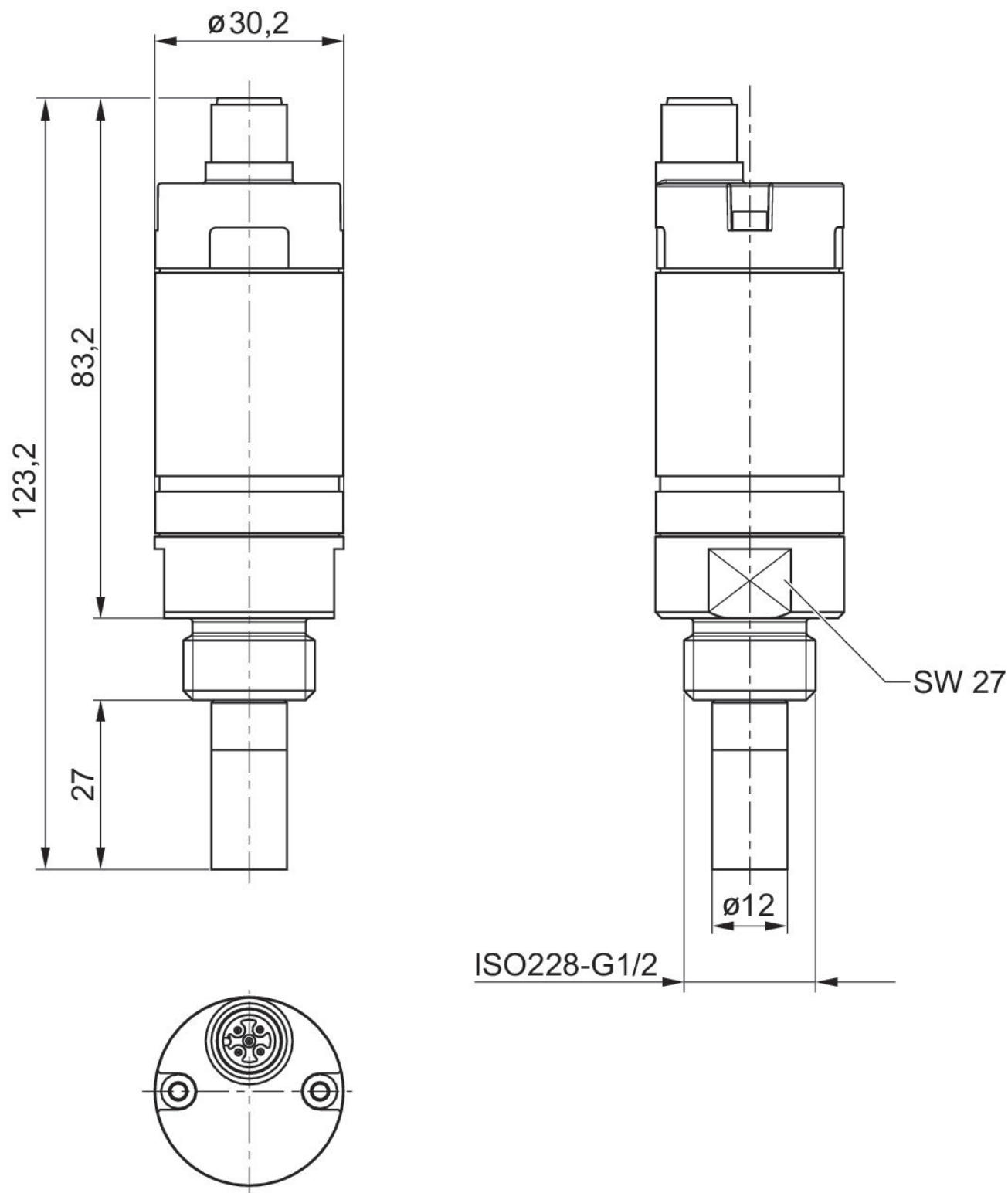
Series DS2 Pressure Dew Point Sensor

R412029180

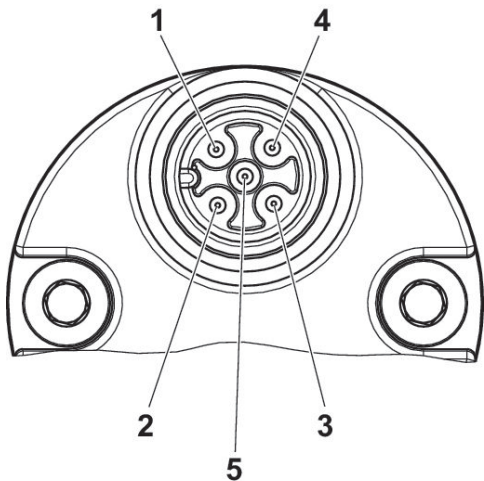
Series DS2

2026-02-26

Dimensions



Pin assignments



M12 socket 5-pin

Pin	Allocation
1	+VB
2	RS 485 (A)
3	-VB (GND)
4	IO-Link COM 2 1.1
5	RS 485 (B)