

## 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 | -20 ... +50 °Ctd   |
| Temperature measurement range        | -20 ... +70 °C   |
| Precision                            | ±1 °C at +50 ... -20 °Ctd<br>±2 °C at -20 ... -50 °Ctd<br>± 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<br>10-36 V DC  |
| Protection class                     | IP66   |
| Certificates                         | EMV in according with DIN EN 61326-1<br>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

R412029179

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)<br>IO-Link |
| Weight                                | 0.197 kg                                 |

## Material

|                  |                 |
|------------------|-----------------|
| Housing material | Stainless Steel |
| Part No.         | R412029179      |

## 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>).

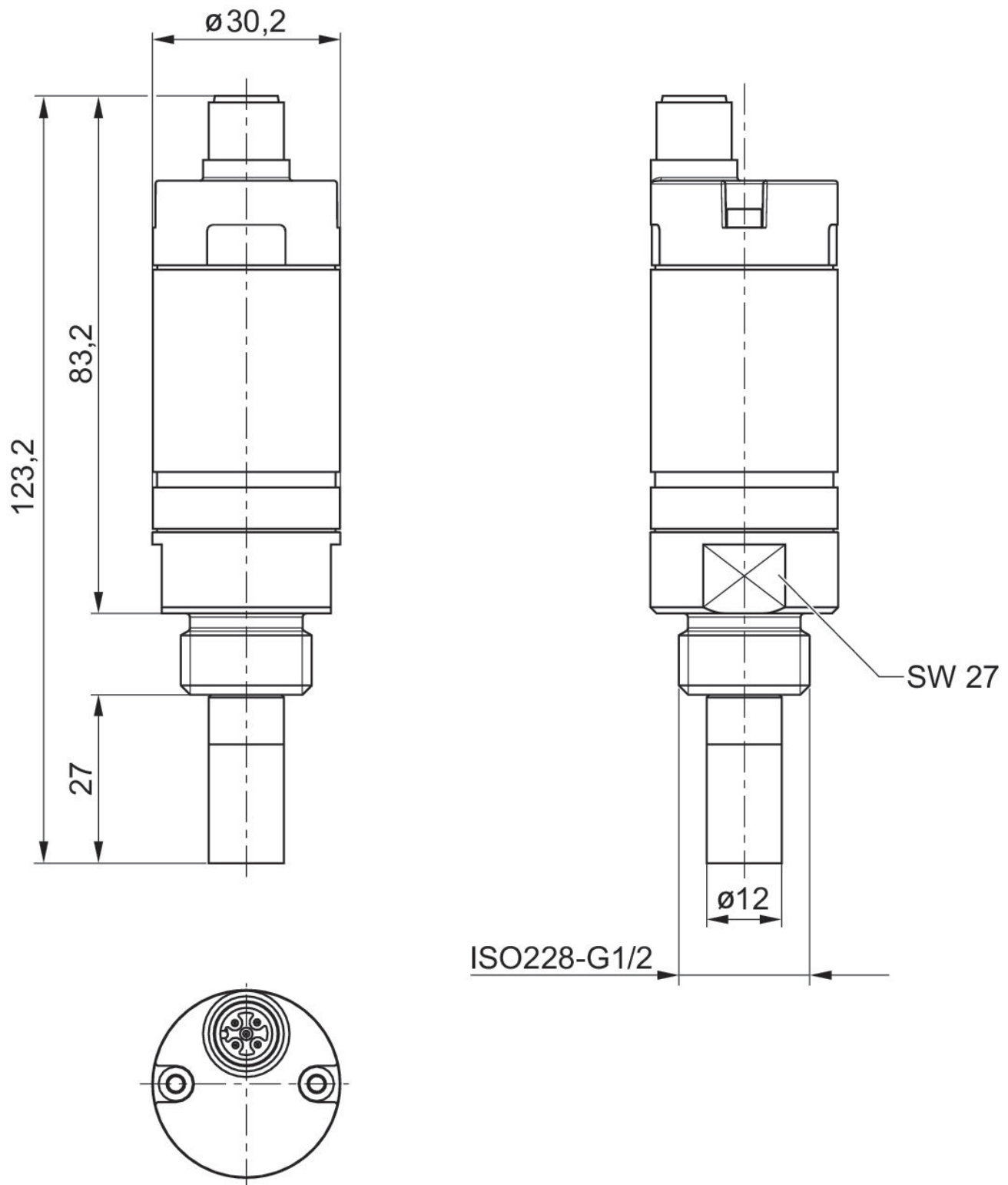
# Series DS2 Pressure Dew Point Sensor

R412029179

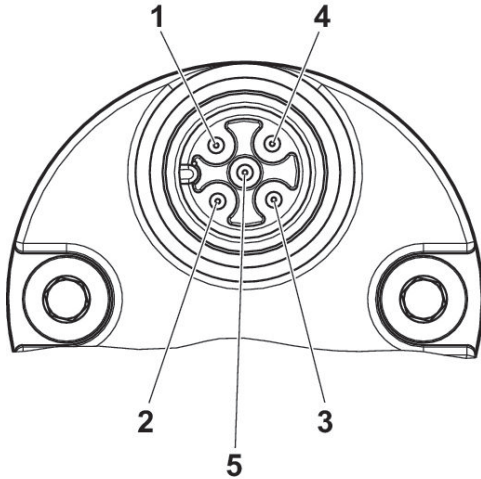
Series DS2

2026-02-26

## Dimensions



## Pin assignments



## M12 socket 5-pin

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