

# CAT

## COMPRESSED AIR TECHNOLOGY



The SUTO dew point sensor S 217 provides reliable and long term stable dew point monitoring in industrial applications. The newly developed sensor features improved signal and stability in demanding industrial applications.

It's designed for OEM applications in desiccant and refrigeration dryers. Through our new sensor technology paired with a compact casing, S 217-OEM can be offered at very attractive prices. This allows applications in smaller dryers and point of use dryers using a more energy efficient dew point control.

The measured dew point is output via the loop-powered 4 ... 20 mA signal or 3 wire 4 ... 20 mA output. Sensor parameters such as analogue output scaling, physical units, can be set ex factory.

#### Stated accuracy under following conditions:

- Ambient temperature 23°C ±3°C
- Process temperature 23°C ±3°C
- Ambient humidity < 95%, no condensation
- Airflow > 1 l/min at sensor tip

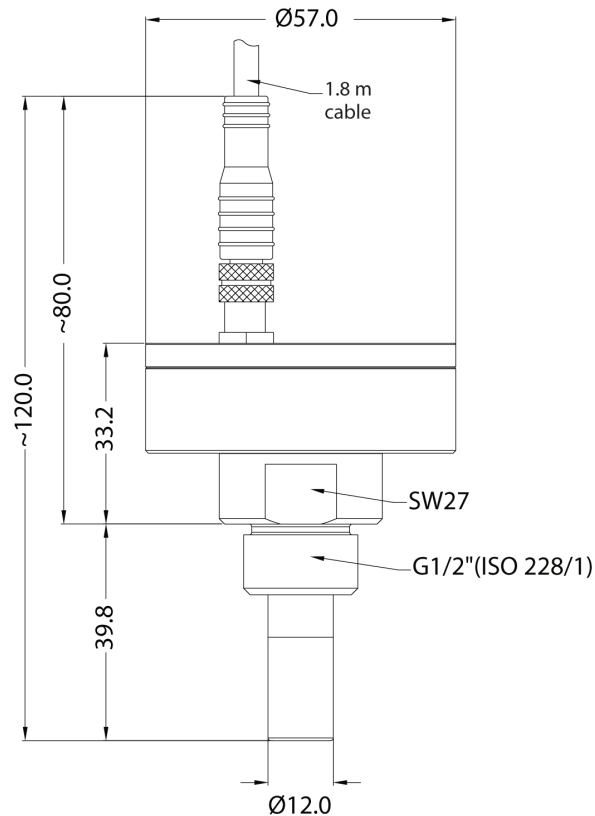
- Small size makes it ideal for dryer installations
- Measures dew points down to -50°C
- 2-wire or 3-wire output
- IP65 casing provides robust protection in rough industrial environment
- Very fast response time ensures safe and reliable indication whenever dew points are out of valid ranges
- Can be installed directly into dryers through G 1/2" thread
- High accuracy of 1°C ... 2°C dew point
- Withstands condensation
- M8 / M12 connector and cable with open wires

#### Technical data S 217

Measurement range (model depending)	Dew point	-50°C ... +20°C -20°C ... +50°C
	Temperature	-30°C ... +70°C
Dew point sensor	Polymer	
Temperature sensor	NTC	
Pressure sensor	N/A	
Accuracy	Dew point	±2°C
	Temperature	0.3°C
Operating Pressure	-0.1 ... 5.0 MPa	
Operating Temperature (Medium)	-30°C ... +70°C	
Measured gases (Medium)	Non-corrosive gases	
Response Time t90 (@ 4 l/min)	-40°C -> -20°C: 20 sec 0°C -> -40°C: 120 sec	
Ambient Temperature	-20°C ... +5°C	
Ambient Humidity	0 ... 100 %rH	
Supply Voltage	12 ... 30 VDC	
Current consumption (model depending)	30 mA @ 24 VDC 3-Wire 20 mA @ 24 VDC 2-Wire	
Output signals (model depending)	4 ... 20 mA 3-Wire 4 ... 20 mA 2-Wire	
Electrical connection	Cable, 1.8 m, open end wire, M8 connector, 4 pole	
Process connection	G 1/2" thread (ISO 228/1) Stainless steel 1.4301 (SUS 304)	
Casing material	Aluminium alloy	
Classification	IP65	
EMC	IEC 61326-1	
Approval	-	
Sensor protection	Sinter filter	
Transport Temperature	-30°C ... +70°C	
Storage Temperature	-20°C ... +50°C	
Weight	198 g	

## S 217-OEM DEW POINT SENSOR (-50°C ... +50°C)

### Dimensions



Order no.	Description
S699 2170	S 217-0, dew point sensor, 4 ... 20 mA (2-wire), -50°C ... +20°C, G 1/2" thread, 50 bar, M8
S699 2173	S 217-3, dew point sensor, 4 ... 20 mA (2-wire), -20°C ... +50°C, G 1/2" thread, 50 bar, M8
S699 2174	S 217-4, dew point sensor, 4 ... 20 mA (3-wire), -20°C ... +50°C, G 1/2" thread, 50 bar, M8
S699 2175	S 217-5, dew point sensor, 4 ... 20 mA (3-wire), -50°C ... +20°C, G 1/2" thread, 50 bar, M8
A1390	S 217, customized measuring range
A1391	S 217, high pressure option 35 MPa (350 bar)
A554 2005	Service kit for sensor configuration including software
A699 3491	Measuring chamber for easy installation in compressed air system up to 15 bar
A699 3493	Measuring chamber bypass type (in and out 6 mm hose connection)
C198 0002	Sinter cap stainless steel