SF52
Dew-Point Transmitter

The SF52 dew-point transmitter is a simple, cost effective sensor designed for use in harsh industrial dryer applications where reliability and toughness are required at an economical cost.

The SF52 is available with a choice of G1/2” and 1/2” NPT process connections and voltage or mA outputs. A key feature of the unit is the recessed and protected measuring element giving an extended sensor life cycle.

Our polymer based sensor is calibrated on a high volume traceable calibration system, providing OEM quantities of units on short deliveries, each with a 3 point calibration certificate.

Highlights

- Ideal for OEM dryer use
- Dew-point measurement range –40 to +60°C (–40 to +140°F)
- Fast response
- Rugged IP65 construction
- 3-Point traceable calibration certificate
- Accuracy ±2°C (±3.6°F)
- Voltage or mA outputs

Technical Specifications

Performance

Measurement range	–40 to +60°C (–40 to +140°F) dew point
Accuracy	±2°C (±3.6°F) dew point
Repeatability	0.5°C (0.9°F) dew point
Accuracy (absolute humidity)	0.4 to 3g/m³ on value of absolute humidity
Stability	<1°C (<1.8°F) / year
Calibration	Traceable 3-point calibration certificate

Electrical Specifications

Output signal	0 to 1, 0 to 5, 0 to 10 V or 4–20 mA (3-wire)
Output	Dew point, absolute humidity
Analog output scaled range	Standard –40 to +60°Cdp (–40 to +140°Fdp) –30 to +30°Cdp (–22 to +86°Fdp) 0 to 200 g/m³ Non-standard available upon request
Supply voltage	14 to 30 V DC (for 0 to 10 V output) 8 to 30 V DC (for 0 to 1 / 0 to 5 V / 4–20 mA output)
Current consumption	V output <9 mA mA output <29 mA
CE marked	Certified

Operating Specifications

Operating humidity	0–100% RH
Operating temperature	–40 to +60°C (–40 to +140°F)
Operating pressure	2 MPa (20 barg / 290 psig maximum)
Thermal compensation	Characterized over operating range temperature

Mechanical Specifications

Ingress protection	IP66 in accordance with standard BS EN 60529:1992 NEMA 4 in protection accordance with standard NEMA 250-2003
Housing material	Nickel-coated brass
Dimensions	L=85mm, ø24mm (maximum)
Filter	HDPE front filter
Process connection	G1/2” BSP, 1/2” NPT
Weight	320g (11.3oz)
Cable	2m (6.6’) of halogen-free TPE cable

Diagnostic conditions (factory programmed)	**Condition**	**Output**
	Sensor fault	23 mA
	Under-range dew point	4 mA
	Over-range dew point	20 mA

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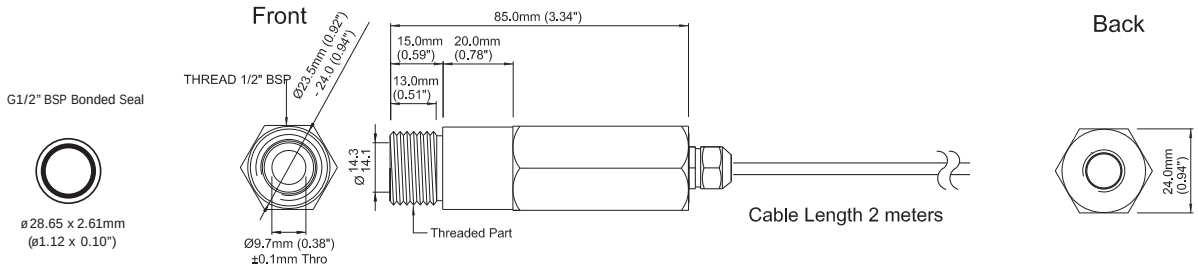
Dimensions



Electrical Connections

4–20 mA connections 3-wire		Voltage connections 3-wire	
White	Power	White	Power
Green	Output mA	Green	Output voltage
Brown	Common ground	Brown	Common ground

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