SF72

Dew-Point Transmitter

The SF72 dew-point transmitter is a compact sensor designed for use in industrial dryer applications at the key –50 to +10°Cdp measuring points, where response speed, reliability and long term stability of data within a control process is critical.

The transmitter is pressure rated to 450 bar, ensuring process gas safety, through the use of a 10-year field-proven stainless steel body and glass-to-metal seal. The SF72 has three alternative industry-standard sample block connections giving form, fit & function benefits.

Our polymer based sensor is calibrated on a high volume traceable calibration system, providing OEM quantities of units, each with an 8-point traceable calibration certificate.

Highlights

- Ideal for membrane and refrigeration dryer use
- Compatible with *Compressed Air Quality ISO8573.1* Class 2 to 6 requirements
- Dew point measurement range –60 to +60°Cdp
- Fast response
- 316 stainless steel IP66 construction
- 8-Point traceable calibration certificate
- Accuracy ±2°Cdp
- G 1/2" BSP, 3/4" and 5/8" UNF process connections
- Service exchange program

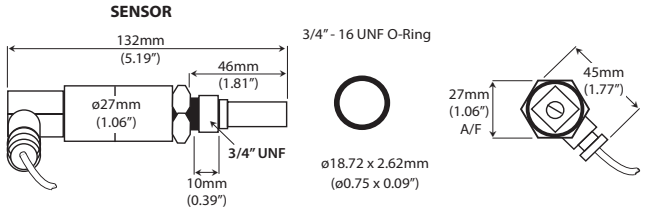
Applications

- Compressed air
- Membrane dryers
- Desiccant dryers
- Breathing air
- Hydrogen coolant
- Inert and bulk gases
- Glove boxes
- Welding gases
- Hazardous areas

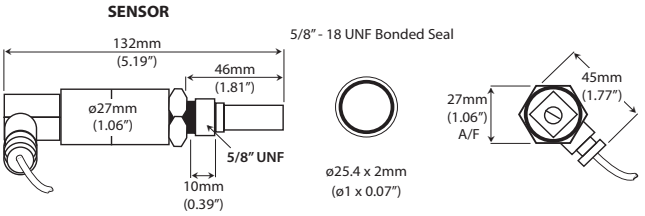
Technical Specifications

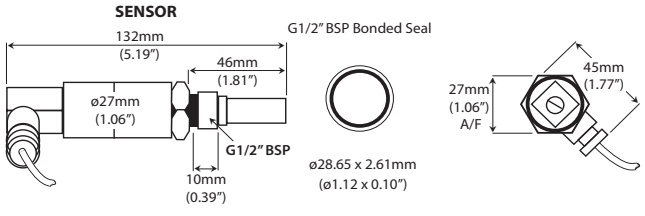
Performance	
Measurement range (dp)	–60 to +60°C dew point
Accuracy (dp)	±2°C dew point
Repeatability	±0.2°C dew point
Long term stability	Less than 1% per year at reference conditions
Calibration	Traceable 8-point calibration certificate
Electrical Specifications	
Output signal	4–20 mA (2-wire connection, current source)
Output	Dew point
Analog output scaled range	Standard –60 to +60°C –50 to +50°C –50 to +30°C Non-standard available upon request
Supply voltage	12–28 V DC
Load resistance	Max 250 Ω @ 12 V (500 Ω @ 24 V)
CE conformity	Approved
UL61010-1 & CAN/CSA C22.2 No. 61010-1	
Operating Specifications	
Operating temperature	–40 to +60°C
Operating pressure	45 MPa (450 barg) maximum
Over pressure rating	x2 operating pressure 90 MPa (900 barg)
Flow rate	1 to 5 Nl/min mounted in standard sampling block; 0 to 10 m/sec (0 to 32.8 fps) direct insertion
Thermal compensation	Characterized over operating range
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	316 Stainless steel
Dimensions	L=132mm (incl. connector & HDPE Filter) x ø27mm
Filter	Standard HDPE Guard <10µm Optional Sintered guard 80µm
Process connections and material	G 1/2" BSP, 3/4" — 16 UNF, 5/8" — 18 UNF 316 Stainless steel
Weight	150g
Electrical connections	Hirschmann GDS series (DIN 4350-C)
Digital diagnostic communications	RS485, 2-wire Modbus RTU

Dimensions

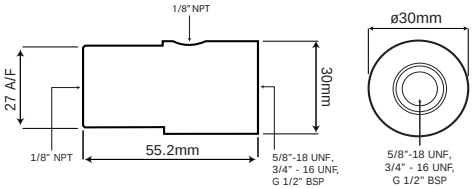


G 1/2" Process Connection





5/8" Process Connection



Sample Block (optional)

Electrical Connections

4-20 mA connections 2-wire	
Pin 1	4-20 mA
Pin 3	POWER

Related Process Products

SF52

Dew Point Transmitter

PCMini52

Digital Relative Humidity and Temperature Mini Probe

MDM300 I.S.

Advanced Dew-Point Hygrometer

MDM50

Portable Hygrometer

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Michell Instruments adopts a continuous development programme which sometimes necessitates specification changes without notice.
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