

SF52

Dew-Point Transmitter



The SF52 dew-point transmitter from Michell Instruments can provide 4–20 mA or voltage signal for either dew point or absolute humidity with excellent accuracy and linearity. The robust housing, together with an operating pressure of up to 20 bar (290 psi), makes the SF52 ideal for many dew-point and moisture measurement applications.

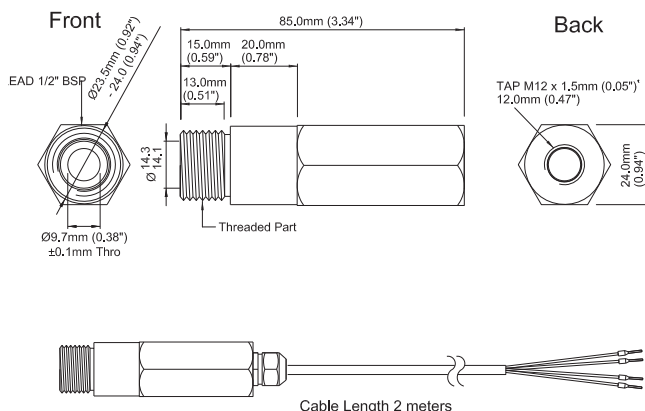
Highlights

- Designed for OEM dryer applications
- Dew-point or absolute humidity output
- Flush fitting filter disc for minimal flow disturbance
- Cost-effective dew-point solution

Technical Specifications

Performance	
Measurement range (dew point)	-40 to +60°C (-40 to +140°F), dew-point temperature
Measurement range (absolute humidity)	0 to 200 g/m ³ (0 to 87.4 gr/ft ³)
Accuracy (dew point)	±2°C (±3.6°F) dew point
Accuracy (absolute humidity)	0.4 to 3 g/m ³ (0.175 to 1.311 gr/ft ³) on value of absolute humidity
Stability	<1°C / year (<1.8°F / year)
Response time	<10 sec typical (for 90% of the step change)
Electrical output/input	
Output signal	0–1, 0–5, 0–10 V or 4–20 mA
Supply voltage	14–30 V DC (for 0–10 V output) 8–30 V DC (for 0–1 / 0–5 V / 4–20 mA output)
Current consumption	9 mA + load current
Supply voltage influence	±0.005% RH/V
Operating conditions	
Operating temperature	Probe, Housing: -30 to +85°C (-22 to +185°F) Storage: -40 to +85°C (-40 to +185°F)
Operating pressure	20 bar (290 psi) maximum
Temperature coefficient	Temperature compensated across operating temperature range
Mechanical specification	
Ingress protection	IP65 (NEMA 4 level)
Housing material	Nickel-coated brass
Dimensions	L=85mm, ø24mm (L=3.34", ø0.94") (max)
Filter	HDPE front filter
Weight	320g (11.29oz)
Mechanical connections	G 1/2" BSP (DIN ISO 228) or 1/2" NPT
Cable	2m (6.5')

Dimensions




Accessories and Spare Parts

HDPE filter	A000019
Bonded seal, (DIN ISO 228) G1/2" (BSP)	A000340
Sample block without filter	A000350
Sample block with filter	A000351

Electrical Connections

Cable	Voltage output/mA output
White	Power supply V+
Green	Output Td+
Brown	Common ground



load max 500 Ω

Ordering Codes

To construct the order code, select the relevant feature from the tables below, starting with the base model, which is {Feature A} and then add on options to create a string: {Feature A}+{Feature B}+{Feature C}+{Feature D}+{Feature E}

Order example: SF52+4+X+T1+N

Dew-point transmitter SF52, 0-5 V output, Td °C/°F dp signal -40 to +60°C (-40 to +140°F), temperature range -20 to +80°C (-4 to +176°F), 1/2" NPT pressure port

