

SF52

Dew-Point Transmitter

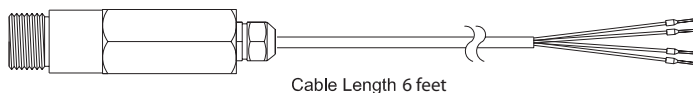
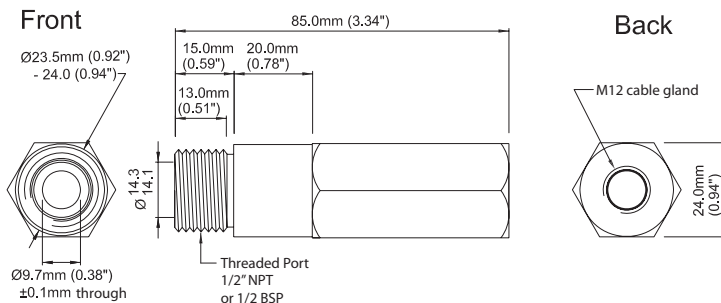


The SF52 dew-point transmitter from Michell Instruments can provide 4–20 mA or voltage signal for either dew point or absolute humidity with excellent accuracy and linearity. The robust housing, together with an operating pressure of up to 300 psi, makes the SF52 ideal for many dew-point and moisture measurement applications.

Highlights

- Designed for OEM applications
- Dew-point or absolute humidity output
- Flush fitting filter disc for minimal flow disturbance
- Excellent linearity and temperature compensation

Dimensions



Technical Specifications

Performance

Measurement range (dew point temperature)	-40 to +140°F / -40 to +60°C T_d
Measurement range (absolute humidity)	0 to 87.4 gr/ft ³ / 0 to 200 g/m ³
Accuracy (dew point)	<±3.6°F (-4 to +140°F) <±2°C (-20 to +60°C)
Accuracy (absolute humidity)	0.175 to 1.311 gr/ft ³ / 0.4 to 3 g/m ³ on value of absolute humidity
Stability	<1.8°F / 1°C T_d per year
Response time	<10 sec typical (90% of the step change)

Electrical output/input

Output signal	0–1, 0–5, 0–10VDC or 4–20 mA
Supply voltage	8–30 VDC (14–30 VDC for 0–10 V output)
Current consumption	9 mA + load current
Supply voltage influence	±0.005% RH per Volt

Operating conditions

Operating humidity	Probe, Housing, Storage	0–95% RH (non-condensing)
Operating temperature	Probe, Housing	-20 to +185°F / -30 to +85°C
	Storage	-40 to +185°F / -40 to +85°C
Operating pressure		300 psi maximum
Temperature coefficient		±0.03%/°F, ±0.05 %/°C

Mechanical specification


Ingress protection	IP65
Housing material	Nickel-coated brass
Dimensions	L=3.34", ø 0.94" / L=85mm, ø24mm (max)
Filter	HDPE front filter
Weight	11.3oz / 320g
Mechanical connections	1/2" NPT or G1/2" BSP male
Cable	6.5ft / 2m

Accessories and spare parts

HDPE front filter (standard)	A000019
Bonded seal, (DIN ISO 228) G½"(BSP)	A000340
Sample block (BSP only)	A000350
Sample block with filter (BSP only)	A000351

Electrical Connections

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



Order codes

Dew-point transmitter SF52 4 X T1 N

Output configuration, 3-wire	
4–20 mA	2
0–10 V	3
0–5 V	4
0–1 V	5

Moisture signal configuration	
Dew-point signal, -40 to 140°F / -40 to +60°C	X
Absolute Humidity, g/m ³ / gr/ft ³	S

Pressure Port	
1/2" NPT male	N
1/2" BSP male	B

Ambient operating temperature range	
-20 to +185°F / -30 to +85°C	T1

Example: SF522 S T1 N

Dew-point transmitter SF52, 4-20mA output, dewpoint signal, -20 to + 185°F / -30 to +85°C operating temperature range, 1/2"NPT pressure port.

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: SF52_1001US_P



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