

SF52

Dew point transmitter

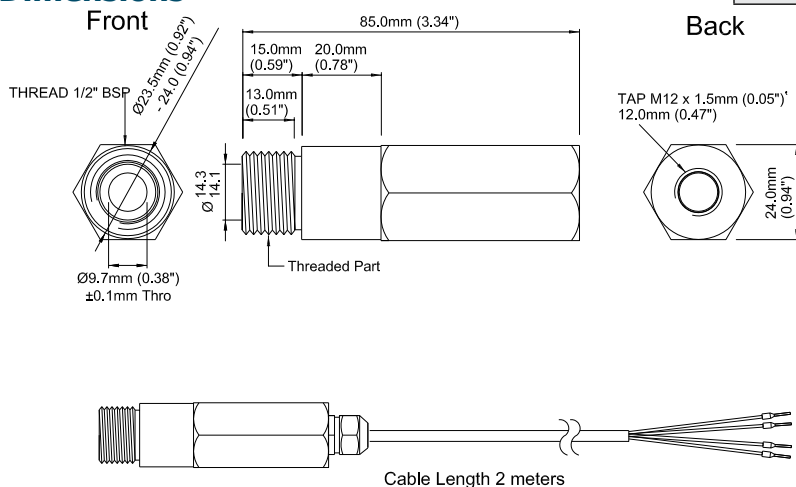


The SF Series of Dew Point Transmitters from Michell Instruments can provide 4–20mA or voltage signal for either dew point or absolute humidity with excellent accuracy and linearity. The robust housing, together with an operating pressure of up to 20 barg, makes the SF Series ideal for many dew point and moisture measurement applications.

Highlights

- Dew point or absolute humidity outputs
- Current or voltage output signals
- Excellent linearity and temperature compensation
- Small size
- Digital recalibration
- Flush fitting filter disc for minimal flow disturbance

Dimensions



Technical Specifications

Performance

Measurement range (dew point)	-40 to +60°C, dew point temperature
Measurement range (absolute humidity)	0 to 200g/m ³
Accuracy (dew point)	<±2°C (-20 to +60°C)
Accuracy (absolute humidity)	0.4–3g/m ³ on value of absolute humidity
Stability	<1°C/year
Response time	<10 sec typical (90% of the step change)

Electrical output/input

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

Operating conditions

Operating humidity Probe, Housing, Storage	0–95% RH (non-condensing)
Operating temperature Probe, Housing Storage	-30 to +70°C -40 to +75°C
Operating pressure	20 Barg maximum
Temperature coefficient	±0.05 %/°C

Mechanical specification

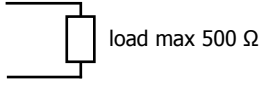
Ingress protection	IP65
Housing material	Nickel-coated brass
Dimensions	L=85mm, ø24mm (max)
Filter	HDPE front filter
Weight	320g
Mechanical connections	G1/2 (1/2" BSP)
Cable	2m

Accessories and spare parts

HDPE front filter (standard)	A000019
Bonded seal, G1/2"(BSP)	A000340
Sample block	A000350
Sample block with filter	A000351

Electrical Connections

Voltage output/mA output	
White	V+
Green	output Td+
Brown	GND



Order codes

Michell Instruments dew point transmitter SF52 4 S T1

Output configuration, 3 wire	
4–20mA (2 wire under development)	2
0–10V	3
0–5V	4
0–1V	5

Moisture signal configuration	
Td°C dew point signal	X
g/m ³ signal	S

Temperature operating range	
-20 to +80°C temperature range	T1
<i>The sensor is developed as a T-dew point sensor.</i>	

Example: SF52 4 S T1

Michell Instruments dew point transmitter SF52, 0–5 volt output, g/m³ moisture signal, -20 to +80°C operating range.

Please note: Michell Instruments adopts a continuous development programme which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: SF52_0309