

Dew Point Sensor – K Series

For membrane, drum, refrigerant & hybrid dryers

Key Features

- Dew Point Range:
 - -60°C to +60°C | -76°F to +140°F
- IP65 rating
- Accuracy: ±2%
- Power Supply: 10 ... 30 VDC
- Output:
 - Digital: Modbus RTU
 - Analogue: 4...20 mA
- Measure:
 - Pressure Dew Point (PDP), Relative Humidity (RH) and Temperature.
 - Optional: Pressure
- Alarm relay – only available on the 'Dew Point Sensor with Display'



About

This precision dew point sensor is ideal for compressed air and inert gas systems up to 4 Mpa (600psi) with refrigerant, desiccant, hybrid, or membrane dryers.

The optional integrated pressure sensor makes measuring simpler and easier to manage, reducing wiring and installation costs.

With polymer technology and strong contamination resistance, sensor calibration can be performed every 2 years. The fast response time ensures an accurate and up to date reading, giving you peace of mind that your system is under control.

Applications

- Manufacturing and industrial use
- Gas systems up to 4 Mpa (600psi)
- Temporary or permanent installation
- Gas pressure up to 50 bar (725 psi)

Specifications

Sensor

Sensor Technology	Polymer sensor
Sensor Filter	Stainless steel mesh filter (filter grade 40-50 um)

Contact us for other filter options

Measurement Range

Pressure Dew Point Range	-60°C to +60°C (-76°F to +140°F)
Gas Temperature Measurement Range	-40 to +100 °C -40 to +212°F
Pressure Measurement Range	
· with pressure sensor	0 to 17 bar
· without pressure sensor	0 to 50 bar

Accuracy

Dew Point Accuracy	±2%
Temperature Accuracy	
· 0 to + 50°C	±0.3°C
· -40 to 0°C and +50 to +100°C	±0.5°C
Pressure Accuracy (@23°C)	±0.3% F.S
Pressure changes with temperature	±0.01 bar / 10°C

Dew Point Measurement Response Time

-50 to +20 °Ctd	20 sec [40 sec]
+20 to -50 °Ctd	1 min [3 min]

Reference Conditions: 63% [90%], 20 °C, 1bar(a),
4L/min

Working Environment

Ambient Temperature	-30 to +70°C -22 to +158°F
Relative Humidity	0 to 95% RH
Minimum gas flow	> 1L /min

Output

Outputs	4-20 mA (3 wire) Modbus RTU (RS485)
Current Output Resolution	0.002 mA
Current Output Temperature Drift	0.01% of span/°C
Current Output Load	Max 500 ohm
Alarm Relay Output	Not available
· Standard Dew Point Sensor	
· Sensor with Display	Normally open 32 VDC/500 mA
Connector	
· Standard Dew Point Sensor	1 x 5 pin M12, female
· Sensor with Display	2 x 5 pin M12, female

Power Supply

Power Requirement	10 ... 30 VDC
· Standard Dew Point Sensor	Max 50 mA @ 24 V
· Sensor with Display	16 ... 30 VDC Max 150 mA @ 24 V
Electromagnetic Compatibility	Meets IEC 61326-1

Other

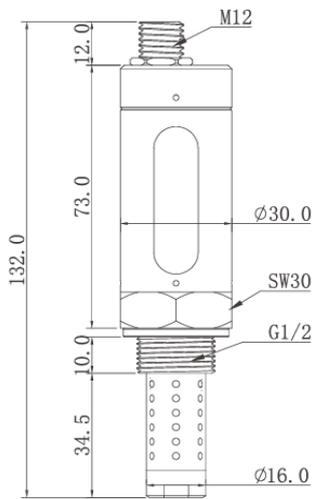
Process Connection	G1/2" thread
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Contact us for UNF process connection

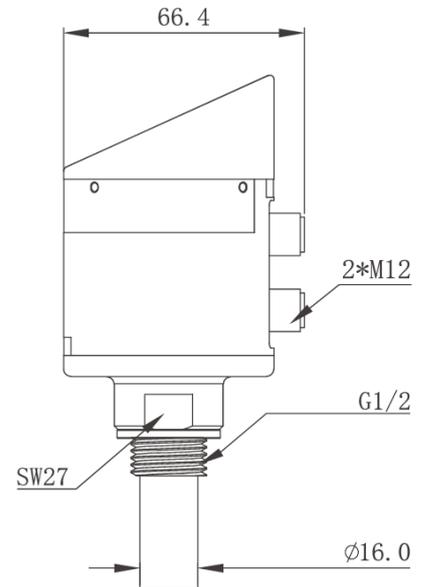
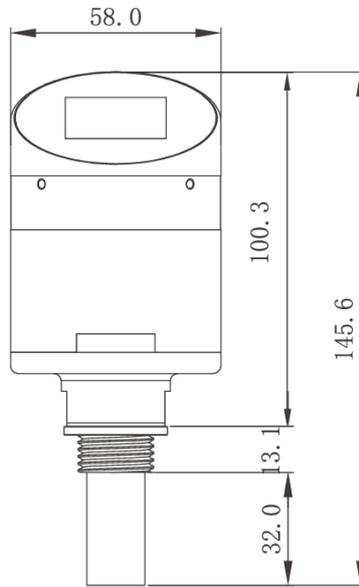
IP Rating	IP65
Casing	
· Standard Dew Point Sensor	Stainless Steel
· Sensor with Display	Anodised Aluminium
Display	
· Standard Dew Point Sensor	NA
· Sensor with Display	1.5" touch screen
HS Code	9025.80.40

Dimensions

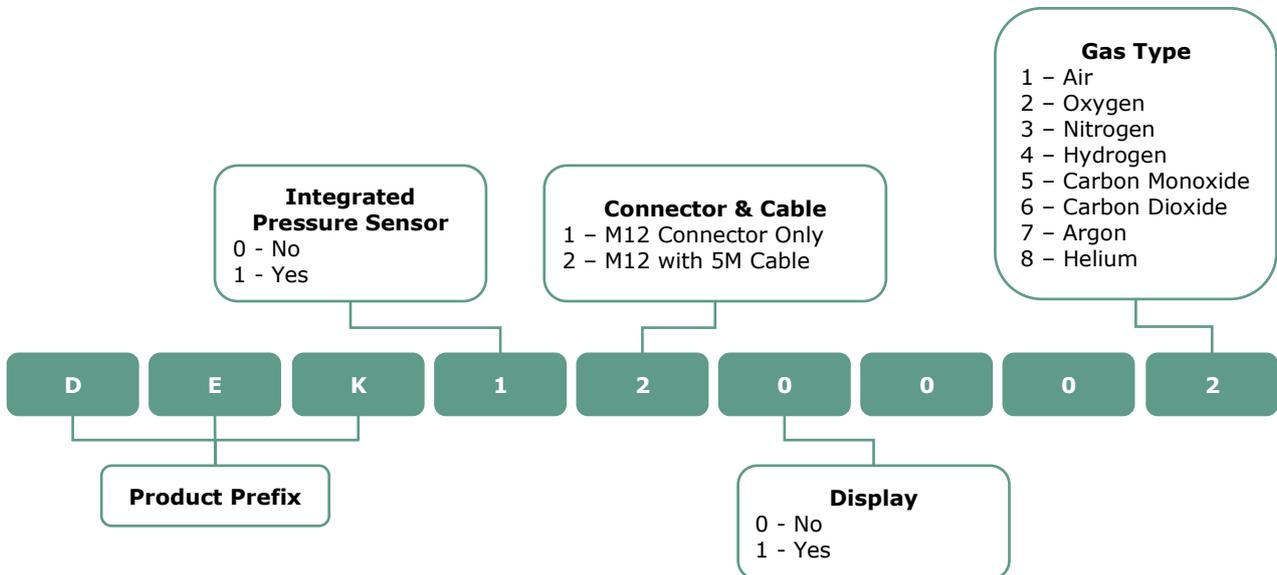
Standard Dew Point Sensor



Dew Point Sensor with Display



How to Order



Other Dew Point Sensors



W Series Dew Point Sensor

Wall mount dew point monitor. Comes with a large display and alarm (red/green light, siren)

Pressure Dew Point Range

-110°C to +20°C (-166°F to +68°F) or

-80°C to +20°C (-112°F to +68°F) or

-60°C to +60°C (-76°F to +140°F)

Gas Contamination

Minimal to moderate contamination

Outputs

4-20mA and alarm relay

Technology

Alumina-Oxide or Polymer sensor (depending on dew point range)

Options

Integrated pressure sensor

Power Plug (USA, Euro, UK or Australian plug)



A Series Dew Point Sensor

Ideal for very low dew points

Pressure Dew Point Range

-110°C to +20°C (-166 °F to +68°F) or

-80°C to +20°C (-112°F to +68°F)

Gas Contamination

Minimal contamination

Outputs

Modbus & 4-20mA

Technology

Alumina-Oxide sensor

Options

Integrated pressure sensor, in-built display, data cable, outdoor casing (IP67 rating)



K Series Dew Point Sensor

Robust sensor, suitable for harsh conditions

Pressure Dew Point Range

-60°C to +60°C (-76°F to +140°F)

Gas Contamination

Moderate levels of contamination

Outputs

Modbus & 4-20mA

Technology

Polymer sensor

Options

Integrated pressure sensor, in-built display, data cable, outdoor casing (IP67 rating)



Mini Dew Point Sensor

Entry level sensor. Compact design. Can be used in small spaces

Pressure Dew Point Range

-60°C to +60°C (-76°F to +140°F)

Gas Contamination

Moderate levels of contamination

Outputs

Modbus & 4-20mA

Technology

Polymer sensor

Options

Stainless Steel or Aluminium casing

Note: No integrated pressure or in-built display option available



H Series Dew Point Meter

Portable / Handheld dew point meter. Ideal for temporary measurement

Pressure Dew Point Range

-110°C to +20°C (-166°F to +68°F)

-60°C to +60°C (-76°F to +140°F)

Gas Contamination

Minimal to moderate contamination

Outputs

None. Stand alone unit

Technology

Alumina-Oxide or Polymer sensor (depending on dew point range)

Options

None – comes with integrated pressure sensor and measurement chamber



Strength

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