

Dew Point Sensor – A Series

For refrigerant or desiccant dryers with dew point of -70°C or -40°C

Key Features

- Dew Point Range:
 - -110°C to +20°C | -166°F to +68°F or
 - -80°C to +20°C | -112 to +68°F
- IP65 rating
- Accuracy:
 - +/- 2°C for dew points between +20 to -80°C
 - +/- 3°C for dew points between -80 to -110°C
- Power Supply: 10 ... 30 VDC
- Output:
 - Digital - Modbus and
 - Analog - 4-20mA
- 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). The optional integrated pressure sensor makes measuring simpler and easier to manage, reducing wiring and installation costs.

The alumina sensor is suited to dew points down to -110°C (-166°F). It has excellent accuracy, response speed, long-term stability and anti-pollution ability.

The innovative temperature compensation algorithm and multi-point temperature compensation calibration reduced sensor drift, ensuring high-accuracy measurements over a wide temperature range.

Applications

- Manufacturing and industrial use
- Gas systems up to 4 Mpa (600psi)
- Permanent or temporary measurement
- Gas pressure up to 50 bar (725 psi)



More Info



sales@compressedairalliance.com
www.compressedairalliance.com

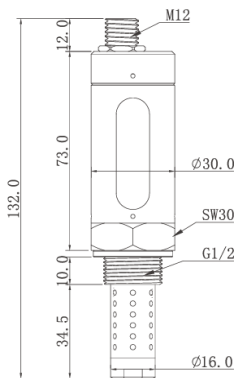
Specifications

Sensor	
Sensor Technology	Alumina sensor
Sensor Filter	Stainless steel mesh filter (filter level 70 um)
Contact us for other filter options	
Measurement Range	
Pressure Dew Point Range	-80 to +20 °C (-112 to +68°F) -110 to +20°C (-166 to +68°F)
Gas Temperature Measurement Range	-40 to +100 °C -40 to +212°F
Pressure Measurement Range	<ul style="list-style-type: none"> with pressure sensor 0 to 17 bar without pressure sensor 0 to 50 bar
Accuracy	
Dew Point Accuracy	<ul style="list-style-type: none"> +20 to -80°C ±2% -80 to -110°C ±3%
Temperature Accuracy	<ul style="list-style-type: none"> 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	
Operating Temperature	-30 to +70°C -22 to +158°F
Relative Humidity	0 to 95% RH
Minimum gas flow	> 1L /min

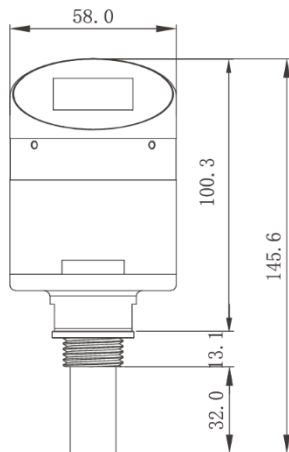
Output	
Outputs	4-20 mA (3 wire) Modbus RTU (RS485)
Current Output Resolution	0.002 mA
Current Output Temperature Drift	0.01% of span/°C
Current Output Load	Max 500 ohm
Alarm Relay Output	Not available
<ul style="list-style-type: none"> Standard Dew Point Sensor Sensor with Display 	Normally open 32 VDC/500 mA
Connector	<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Standard Dew Point Sensor Sensor with Display 	Max 50 mA @ 24 V 16 ... 30 VDC Max 150 mA @ 24 V
Electromagnetic Compatibility	Meets IEC 61326-1
Other	
Process Connection	G1/2" thread
Contact us for UNF process connection	
IP Rating	IP65
Casing	<ul style="list-style-type: none"> Standard Dew Point Sensor Stainless Steel Sensor with Display Anodised Aluminium
Display	<ul style="list-style-type: none"> Standard Dew Point Sensor NA Sensor with Display 1.5" touch screen
HS Code	9025.80.40



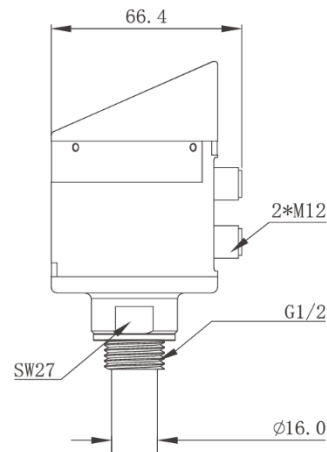
Dimensions



Standard Dew Point Sensor
(no display)

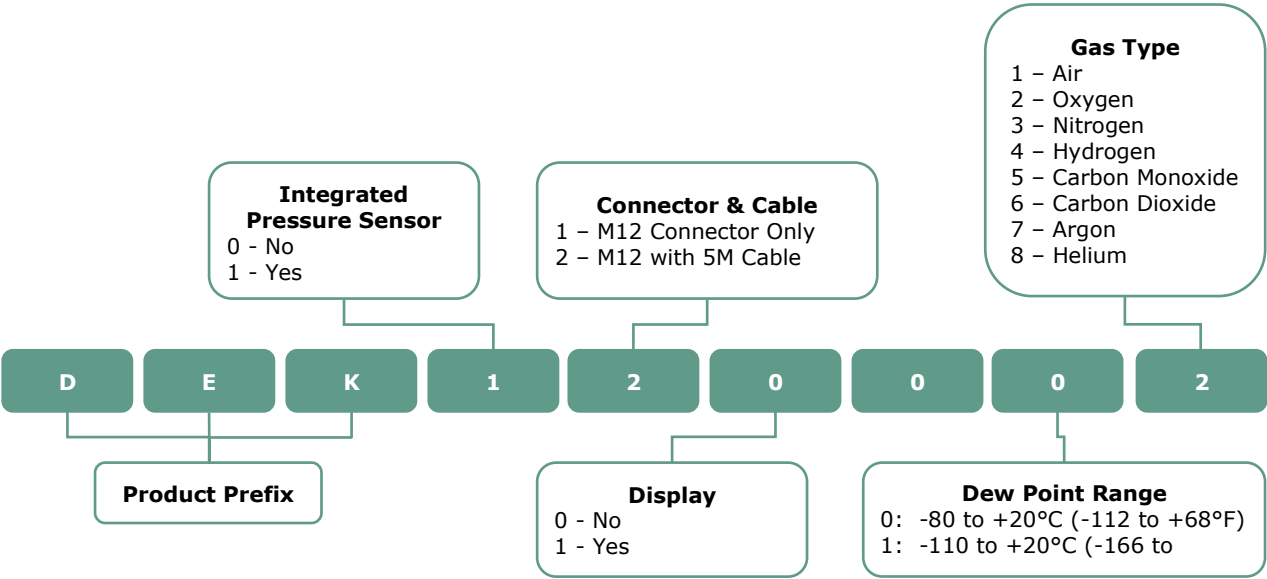


Dew Point Sensor with Display



How to Order

Buy online: www.compressedairalliance.com/products



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