

Humidity Sensor NP524-G

Dual humidity measurement in gases



For relative and absolute moisture in air

- The humidity monitoring sensor NP524-G is designed for inline measurement of the relative and of the absolute water content in air at once.
- Accuracy of relative humidity is $\pm 2\%$ RH
- Accuracy of absolute humidity is $\pm 2^\circ\text{C}$
- Two linear voltage outputs (0 ... 10 V)
- Polymeric sensor element based on CMOS chip technology ensures highest reliability and excellent long-term stability.
- Stainless steel housing with protection type IP67

Features

- Simultaneous humidity measurement with dual voltage output
- Inline humidity monitoring
- Relative humidity (% RH)
- Absolute humidity (dew point)
- Excellent long-term stability
- High accuracy over large range
- Polymeric sensor element with CMOS technology

Humidity Sensor

NP524-G

Humidity

- **Range 1**
0...100 % RH
- **Range 2**
-50°C DP...+60 °C DP
- **Repeatability**
± 0,1% RH
- **Nonlinearity below**
below 1% RH
- **Resolution**
0,03% RH
- **Response time**
4 seconds
- **Hysteresis**
± 1% RH
- **Accuracy**
± 2% RH (10...90 %)
± 2°C dew point (-40...+40 °C TP)
- **Long term stability**
below 2% RH per year

Electronic

- **Power supply**
12...24 V DC
- **Power consumption**
0,1 W
- **Output 1 (RH)**
0...10 V
- **Output 2 (°C DP)**
0...10 V
- **Load**
max. 3 kOhm

Mechanical

- **Operating temperature**
-20°C...+80°C
- **Operating pressure up to 300 bar**
Thread ½ Inch
- **Housing**
stainless steel
- **Diameter housing**
27 mm
- **Protection sleeve**
stainless steel 80 μ m
- **Mounting depth**
50 mm
- **Protection rate**
IP67
- **Connector circular**
4 Pins, M12x IEC 61076-2-101

Applications

- Pharmaceutical- and Food Industry
- Humidifiers Research and Development
- Greenhouses
- Medical Applications