

HMP260EX Intrinsically Safe Humidity Transmitter

FEATURES

- Meets classification EEx ia IIC (T6) Classes I, II, III, Div 1, Groups A-G
- Temperature compensation
- Full 0 to 100% RH measurement
- Includes zener barriers enclosed in separate NEMA 4 housing

FOR USE IN HAZARDOUS LOCATIONS

An intrinsically-safe humidity transmitter, the HMP260EX is designed for use in potentially explosive environments. Hospitals, chemical and petrochemical industries, as well as many processing industries should use this transmitter where substances, such as solvents and explosive dusts, present such a hazard. The HMP260EX can even be used in hydrogen, one of the most easily ignitable gases. Its classification means that it can be used in areas where an explosive gas atmosphere is continuously present, or is present for long periods of time, and that protection is maintained with up to two components or other faults. When used in environments where explosion protection is essential, the HMP260EX must always be connected to the power supply through the zener barriers.

FAST AND RELIABLE

Fast, stable, and accurate, the HMP260 EX has been fully temperature compensated over the entire measurement range of 0...100% RH in temperatures from -4 to +140 °F (-20 °C to +60 °C). It utilizes Vaisala's HUMICAP® capacitive thin-film humidity sensor which has proven successful in many demanding industrial applications with accuracies of up to ±2% RH. Furthermore, the sensor is not affected by most chemicals and dust particulates.



HMP260EX complete with barriers enclosed in separate NEMA 4 housing.

**Factory
Mutual
System**

Approved

TECHNICAL DATA - HMP260EX

General

Classification:	EEx ia II C T6 Classes I,II,III, Div.1, Groups A,B,C,D,E,F,G
Maximum supply voltage:	26 VDC
Current consumption:	4...20 mA
Operating temperature range:	-4...+140 °F (-20 ...+60 °C)
Storage temperature range:	-40...+167 °F (-40 ...+75 °C)
Housing material:	Cast AISI ₁₂ (DIN 1725)
Housing classification:	NEMA 4 (IP 65)
Sensor head:	AlMgsi ₁ (DIN 1725)
Sensor protection:	sintered filter 216 µm (part no. 6686)
Connections:	screw terminal 0,5 ...1.5 mm ²
Cable bushing:	for 5.5 ...10 mm cables
Grounding connection:	DFG/1 EN screw terminal (DIN EN 50014/19)
Barrier:	Stahl # 9001/51-280-110-14
Weight:	925 g

Relative Humidity

Measurement range:	0 ... 100% RH
Accuracy +68°F (+20°C) (including nonlinearity, repeatability and hysteresis)	±2% RH (0...90% RH) ±3% RH (90...100% RH)
Temperature dependence:	±0.02% RH/°F (±0.04% RH/°C)
Output:	4...20 mA (load 0...250 ohms)
Max. load with barrier	1000 ohms
Long-term stability	better than 1% RH per year (typical)
Response (90% at +68 °F (+20 °C))	15 s with sintered filter (in still air)
Sensor:	Capacitive thin-film HUMICAP® H

In explosive areas the HMP260EX must be connected to the power supply through a zener barrier.

Specifications subject to change without prior notice.

HMP260EX

Dimensions in mm

