

Temperature / Humidity sensor Galltec KPC active

S52100



Temperature / Humidity sensor Galltec KPC active

Order number

S52100

Availability

Usually on stock

Compact sensor in a rod-design with plug-in connection

Description

- The temperature and humidity sensors feature a compact, rod-style design with a Pt100 1/3 DIN temperature element and a plug-in connector.
- They measure temperature and relative humidity—individually or simultaneously—with high precision in air and other non-aggressive gases.
- The delivery includes the coupling plug.
- The temperature measurement is made by a Pt100-resistor (1/3 DIN).
- The relative humidity is measured by a capacitive sensing element and the value will be placed at the output as analog output as well.

Specifications

Temperature / Humidity Sensor Galltec KPC Active

General Information

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Measurement

Measurement Principle **Temperature Sensor:** Pt100 1/3 DIN acc. DIN EN 60751
Humidity Sensor: Pt100 1/3 DIN acc. DIN EN 60751

Measurement Range **Temperature Sensor:** -30 ... +70 °C
Humidity Sensor: 0 ... 100% RH

Slope (Data Logger Meteo-40) **Temperature Sensor:** 100
Humidity Sensor: 100

Offset (Data Logger Meteo-40) **Temperature Sensor:** -30
Humidity Sensor: 0

Accuracy

Accuracy **Temperature Sensor:** ± 0.2 K (-27 ... +80 °C)
Humidity Sensor: $\pm 2\%$ RH (5 ... 95% RH @ 10 ... 40 °C)

Additional Error **Temperature Sensor:** ± 0.007 K/K (<10 °C, >40 °C)
Humidity Sensor: < 0.1 %/K (<10 °C, >40 °C)

Operating Range

Ambient Temperature -40 ... +80 °C

Minimum Air Speed (across sensor) ≥ 0.5 m/s

Electrical Data

Output Signal 0 ... 1 V

Operating Supply 6 ... 30 VDC

Current Consumption @ 12 V DC 2 mA

General

Connection 7-pol plug for shielded cable

Dimensions 155 x Ø 20 mm

Weight approx. 0.1 kg

Protection Sensor IP 30

Protection Electronic IP 65

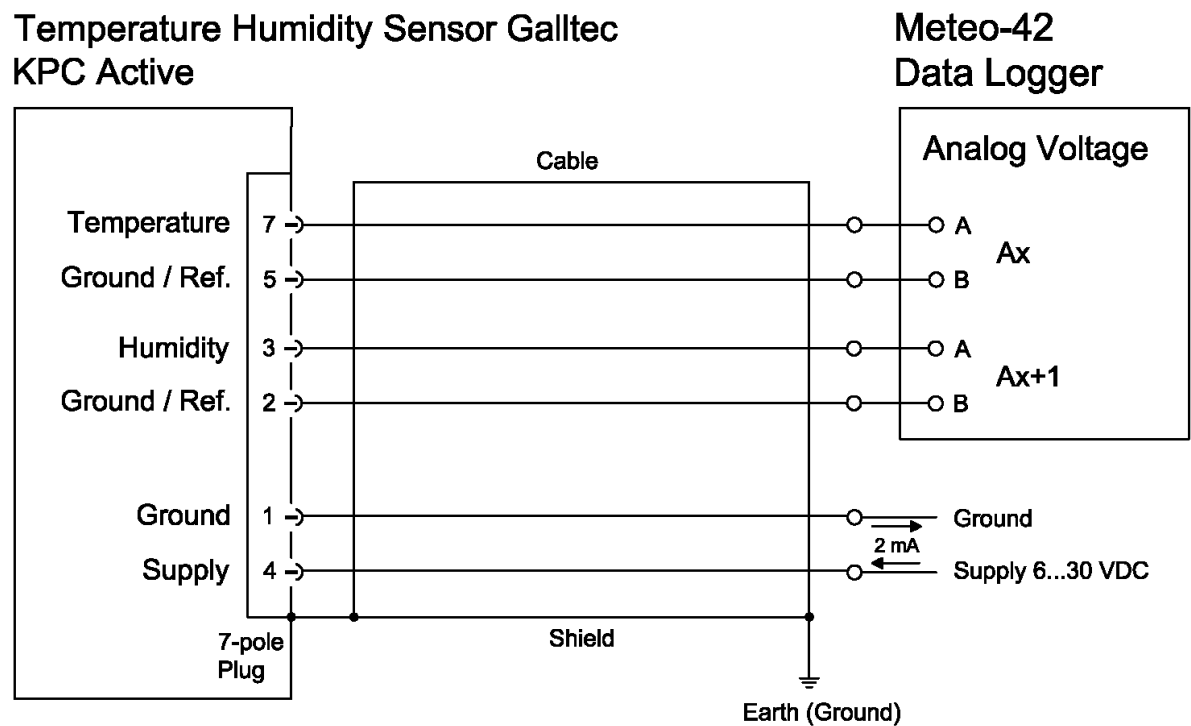
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Protection Coupling	IP 67
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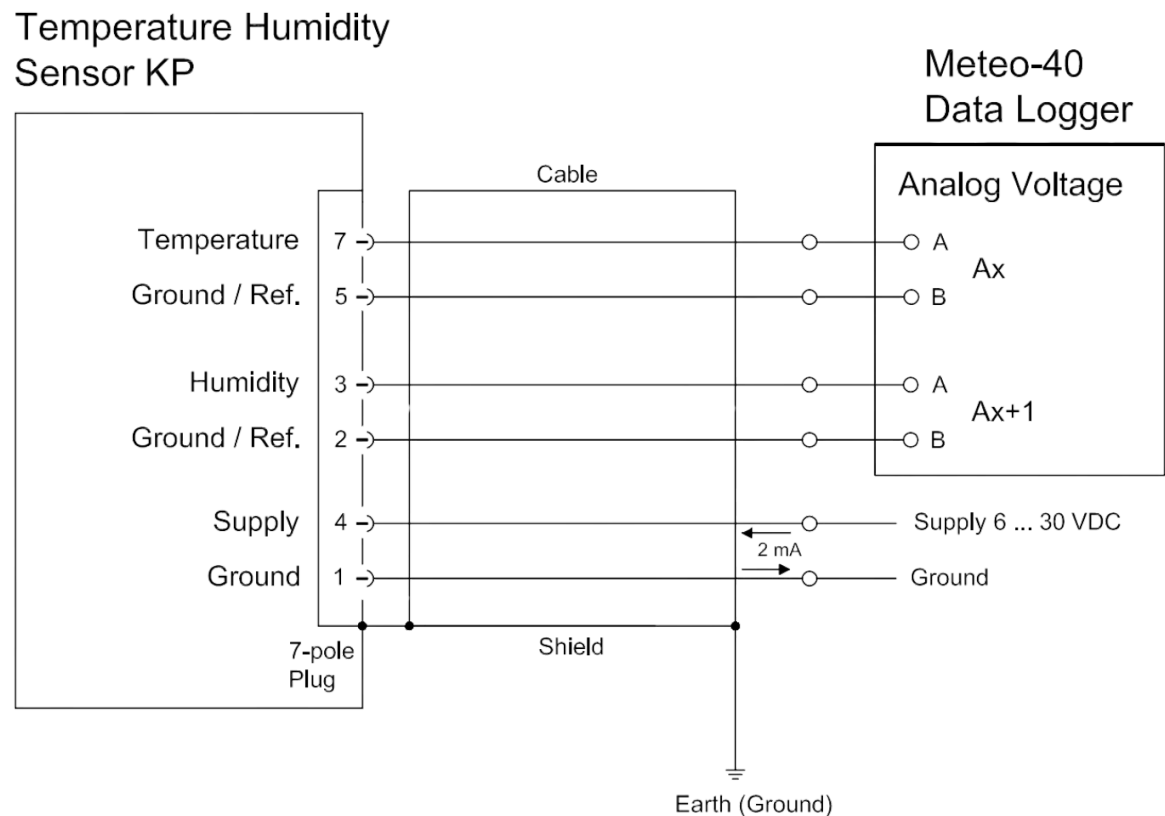
Manufacturer	Galltec
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Sensor connection diagram

Sensor connection diagram to Ammonit Meteo-42 data logger



Sensor connection diagram to Ammonit Meteo-40 data logger



Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Analog Voltage	Supply Sensor
Temperature Output Voltage	7	white	Ax	
Ground	5	blue	Bx	
Humidity Output Voltage	3	brown	Ax+1	
Ground	2	pink	Bx+1	
Supply	4	red		9 ... 30 VDC*
Ground	1	black		Main Ground

*Supply voltage for usage with Meteo-40 data loggers

Cable type: LiYCY 4 x 0.25 mm²

Connect the shield logger-sided to Ground (GND)

Accessories

- Calibration Air Temperature / Humidity Sensor

Documents

EN_TD_Pt100-ToleranceClasses