

Active Air Temperature sensor Galltec "TP"

Compact sensor with fixed connected cable



Description

- The temperature humidity sensor series „xP“ are compact sensors in stick version with fixed connected cable.
- The relative humidity is measured by a capacitive sensing element and the value will be placed at the output as analogue signal.
- The temperature measurement is made by a P100-resistor (1/3 DIN).
- The signal is available as an analogue output as well.
- The sensors are obtainable as single temperature probe or as combined sensor for temperature and humidity measurement.

Specifications

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Type	Temperature Sensor	Humidity Sensor
Measurement principle	Pt100 1/3 DIN acc. DIN EN 60751	Capacitive
Measurement range	-30 ... +70 °C	0 ... 100% RH
Slope [Data Logger Meteo-40]	100	100
Offset [Data Logger Meteo-40]	-30	0
Accuracy		
Accuracy	± 0.2 K [-27 ... +80 °C]	± 2% RH [5 ... 95% RH @ 10 ... 40 °C]
Additional error	± 0.007 K/K [-10 °C, >40 °C]	< 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	0 ... 1 V
Operating supply	6 ... 30 VDC	
Power consumption	<1 mA	
General		
Connection	7-pol plug for shielded cable	
Dimensions	Sensor: 155 x Ø 20 mm Weather and radiation shield: see dimensional drawing	
Weight	Sensor: approx. 0.1 kg Weather and radiation shield: 1.01 kg	
Protection Sensor	IP 30	
Protection Electronic	IP 65	
Protection Coupling	IP 67	
Manufacturer	Galltec	

Sensor connection diagram

Sensor connection to Ammonit Meteo-40 data logger

TP (temperature only!) - Meteo-40
Order-No. S42100

Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Analog Voltage	Supply Sensor
Temperature Output Voltage	3	white	Ax	
Ground	2	blue	Bx	
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)

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