Digitron

HLX060

OEM Humidity / Temperature Transmitter with Voltage Output

HLX060 probes are the ideal solution for cost-effective, highly accurate and reliable measurement of relative humidity and temperature.

Excellent protection against external influences is ensured by the combination of completely encapsulated electronics and the long-term stable HCT01 sensor with proprietary protective coating. HLX060 is available with an integrated cable or a threaded connector, with wide temperature and supply voltage ranges and dual 0-1V, 0-5V or 0-10V analog outputs, for humidity and temperature.

HLX060

Typical Applications

stables, incubators, hatchers
green houses
humidifiers and dehumidifiers
monitoring of storage rooms
HVAC applications

Features

very small dimensions
excellent price/performance ratio
very good long term stability
easy installation
well protected against dust and dirt

Technical Data

Measuring values

Relative humidity

Sensor	HCT01-00D
Working range[1]	0...100% RH
Analogue output 0...100% RH	0-10V -1.0 mA < I_L < 1.0 mA
	0-5V -0.2 mA < I_L < 0.2 mA
	0-1V -0.1 mA < I_L < 0.1 mA
Accuracy at 24V DC, 20°C (68°F) and 0.2m/s (40 ft/min)	±2.5% RH

Temperature active

Sensor	Pt1000 DIN B
Analogue output -40...60°C (-40...140°F)	0-10V -1.0 mA < I_L < 1.0 mA
	0-5V -0.5 mA < I_L < 0.5 mA
	0-1V -0.1 mA < I_L < 0.1 mA
Accuracy at 24V DC, 20°C (68°F)	±0.3°C (±0.5°F)

Temperature passive (with 0-1V output and 8-pole connector only)

Output	resistive, 2-wire
Type of T-Sensor	refer to ordering guide

General

|	
Supply voltage	HT1: 3.6...30V DC
	HT2: 10...30V DC
	HT3: 15...30V DC
Current consumption	typ. 1.5 mA
Electrical connection	cable or M12 connector
Housing	polycarbonate / IP65
Sensor protection	membrane filter
Electromagnetic compatibility [2] (industrial environment)	EN61326-1 EN61326-2-3
Temperature ranges	working temperature: -40...+60°C (-40...140°F)
	storage temperature: -40...+60°C (-40...140°F)

CE

1) Refer to the working range of the humidity sensor!
2) Analogue output 0-1V is not protected against surge!

Dimensions in mm (inch)

connector version

99.5 (3.92)
11 (0.43)
Ø12 (0.47)
101.5 (4)
34 (1.34)
M12x1

cable version

106 (4.17)
34 (1.34)
Ø12 (0.47)
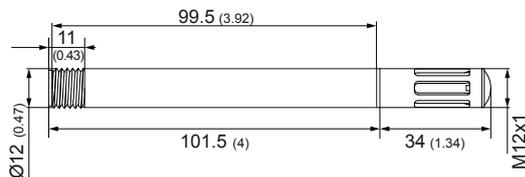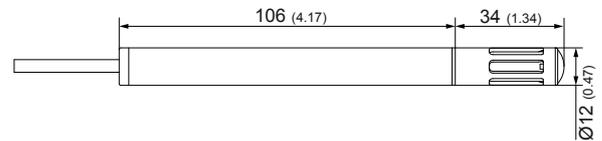
Connection Diagram

connector version

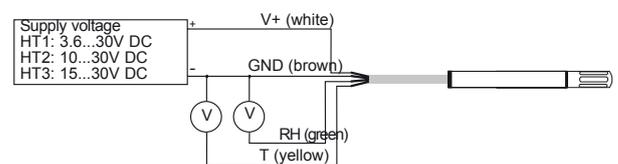**Connector 4-pole (M)**
1...V+
2...RH-out
3...GND
4...T-out

4○ ○3
1○ ○2

Supply voltage
HT1: 3.6...30V DC
HT2: 10...30V DC
HT3: 15...30V DC

Connector 8-pole (M)
1...T-passive
2...not connected
3...not connected
4...RH-out
5...T-out
6...GND
7...T-passive
8...V+

⑥ ⑤ ④
⑦ ⑧ ③
① ②

cable version

Supply voltage
HT1: 3.6...30V DC
HT2: 10...30V DC
HT3: 15...30V DC

+ V+ (white)
- GND (brown)
V V
RH (green)
T (yellow)

Ordering Guide

ANALOG OUTPUT	T-SENSOR PASSIVE (with 0-1V output and 8-pole connector only)	ELECTRICAL CONNECTION	CABLE LENGTH	FILTER
0 - 1V **(1)**	none **(x)**	connector 4-pole **(PM)**	0.5m (1.6ft) **(A)**	membrane filter **(B)**
0 - 5V **(2)**	Pt1000 DIN A **(C)**	connector 8-pole (forT-Sensor passive) **(PV)**	1.5m (4.9ft) **(C)**	
0 - 10V **(3)**	NTC 10k at 25°C **(E)**	cable **(PN)**	3m (9.8ft) **(E)**	
			with connector **(x)**	
EE060-HT				

Order Example

HLX060-HT2xPMxB

Output:	0-5V
T-Sensor passive:	none
El. Connection:	connector 4-pole
Cable length:	with connector
Filter:	membrane filter

EHLX060-HT1CPVxB

Output:	0-1V
T-Sensor passive:	Pt1000 DIN A
El. Connection:	connector 8-pole
Cable length:	with connector
Filter:	membrane filter

Accessories

Female connector 4pol. self assembly M12x1	HA010707
Female connector 8pol. self assembly M12x1	HA010704
Connection cable 4pol. M12x1 male-female, shielded, 2m (6.5ft)	HA010816
Connection cable 4pol. M12x1 male-female, shielded, 5m (16.4ft)	HA010817
Connection cable 4pol. M12x1 male-female, shielded, 10m (32.8ft)	HA010818
Connection cable 8pol. M12x1-female - free cable end, shielded, 3m (9.8ft)	HA010323
Connection cable 8pol. M12x1-female - free cable end, shielded, 5m (16.4ft)	HA010324
Connection cable 8pol. M12x1-female - free cable end, shielded, 10m (32.8ft)	HA010325
Plastic mounting flange for duct mounting	HA010202