



# THS07

## Temp. & Humid. Transmitter for Probe Type



### Feature

- Compact design and easy to install
- An economical choice, high C/P ratio
- Industrial class sensor comes with high accuracy and long-term stability

### Application

- Monitoring for HVAC process / Air conditioning / Environmental ventilation control
- Environmental monitoring for building / Factory / Clean / Room / Laboratory
- Monitoring for storeroom / Crisper / Agriculture / Food industry
- Temperature and humidity measuring in machinery or equipment

## Specification

### Input

Signal connection	Capacitive Humidity Sensor & Pt100
Measuring range	0 ... 50°C ; 5 ... 95%RH
Recommended measuring range	15 ... 35°C ; 20 ... 80%RH

### Accuracy

Temp.	$\pm 0.3^{\circ}\text{C} + 0.002^{\circ}\text{C} \times t_{\text{actual}}$
Humidity ( at +25°C )	$\pm 3\%RH$ ( 30 ... 70%RH ) of F.S.
Humidity ( at +15 ... 35°C )	$\pm 5\%RH$ ( 20 ... 80%RH ) of F.S.

### Output

Output	Temp. : RTD ( Pt100 / NTC10K ) Humidity : 0 ... 10 V ; 4 ... 20 mA
Signal connection	3-wire : Temp. / Humidity : ( 0 ... 10 V ) 2-wire : Humidity : ( 4 ... 20 mA ) / 4-wire : Temp.
Temp. influence	0.2% RH/°C
Load resistance	0 ... 10 V ; $\geq 10\text{ K}\Omega$ ; 4 ... 20 mA : $RL < (+V-10) / 0.02 < 500\ \Omega$
Output calibration ( ZERO ) adjustment degree	10% of zero-point and full-range
Response time ( $\geq 1\text{m/s}$ )	< 20 s

### Environment

Medium	Air
Storage temperature	- 5 ... + 60°C
Max. flow speed	$\leq 15\text{ m/sec}$

### Electrical

Power supply	3-wire : 24 VDC $\pm 20\%$ ; 2-wire : 9 ... 28 VDC
Current consumption	3-wire : 0 ... 10 V : 8 mA ; 2-wire : 4 ... 20 mA : 21 mA
Electric connection	PVC Cable 0.32 mm <sup>2</sup> x 6C

### Installation

Installation	Flange
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### Protection

IP rating	IP24
Electric Protection	■ Polarity reversal protection ■ Over voltage ■ Short circuit

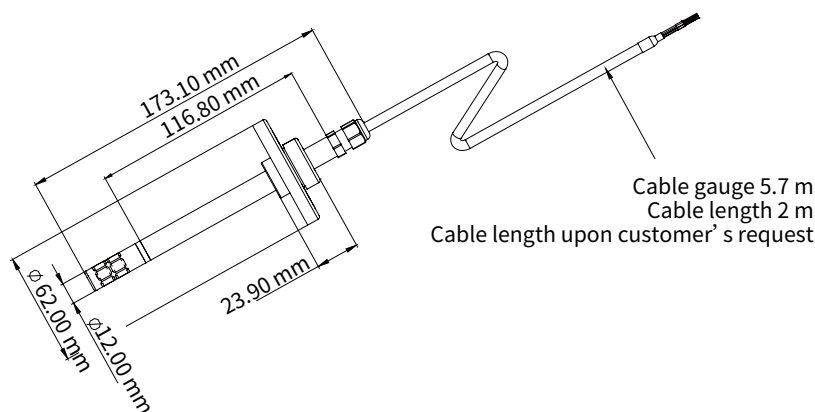
### Certification

Certification	Emission EN 61326-1:2013 CISPR11:2009+A1:2010 Group1 Class B
	Immunity EN 61326-1:2013 IEC 61000-4-2:2008 IEC 61000-4-3:2006+A1:2007+A2:2010 IEC 61000-4-8:2009

### Material

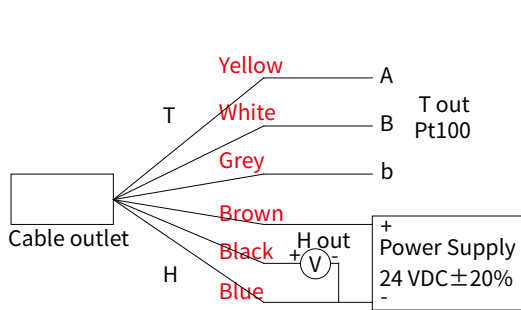
Housing	PC fire-proof class ( UL94V-2 )
Cable	PVC
Weight	17 g ( Without cable )

## Dimension

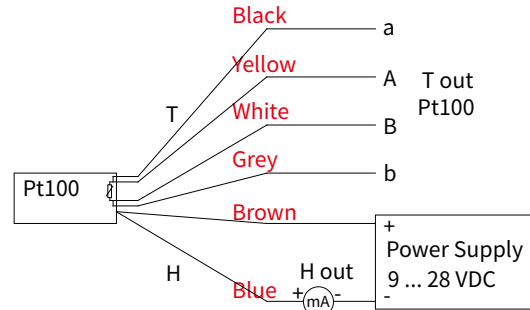


PVC Probe

## Diagram



(H)3-wire 0 ... 10 V & (T) 3-wire



(H)2-wire 4 ... 20 mA & (T) 4-wire

## Ordering Guide

Type	THS	07	-	A	J	1	-	P2	00	-	2
Installation	Probe type	07									
Function	Temperature / Humidity output		-	A							
Output	3-wire : RTD & 0 ... 10 V 4-wire : RTD & 2-wire : 4 ... 20 mA				J K						
Power supply	24 VDC ± 20% ( Output item J ) 9 ... 28 VDC ( Output item k )					1 2					
Temperature	PT 100 NTC10K						- -	P2 NT			
Humidity	0 ... 100%RH								00		
Option	2 m Cable									-	2

## Additional option (ILAC/TAF) Test report



Additional option: Calibration laboratory test report (TAF accreditation: 3032) complying with ISO/IEC 17025. TAF has mutual recognition arrangement with ILAC MRA

Project	Measurand level or range
Resistance thermometer	-40°C ... +300°C
Thermocouple thermometer	-20°C ... +300°C
Project	Measurand level or range
Hygrometer	3 basic points (25°C, 30%, 50%, 80%)
	Temperature: 0°C ... 70°C
	Humidity: 10% ... 95%