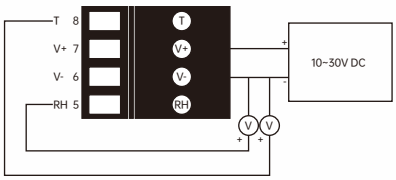
The selection is detailed on page 3

DBP10

Temperature And Humidity Transmitter

Working principle

Temperature and humidity transmitter is a temperature and humidity integrated probe as a temperature measurement element, the temperature and humidity signals are collected, after voltage regulation filter, operation amplification and other circuit processing, converted into a linear relationship with temperature and humidity current signal or voltage signal output, can also be directly through the main control chip 485 interface output.



Product description

Designed for measuring the relative humidity and temperature of the air ducts of HVAC systems. The humidity sensor outputs an active signal, and the temperature sensor output can be an active or passive signal.
Temperature and humidity transmitter is the most commonly used sensor in production and life, which is widely used in meteorology, national defense, scientific research, posts and telecommunications, chemical industry, environmental protection, medicine, hotels, food and other materials storage, HVAC and other fields to measure and control temperature and humidity in the air.

Functional characteristics

The power supply and output have over-voltage and reverse protection functions, with a higher protection level up to IP65
Using high-precision sensor and main control, with good long-term stability and anti-interference ability, a variety of installation and output modes
Optional shell design lightweight and beautiful, using LCD backlight temperature and humidity dual display

Product application

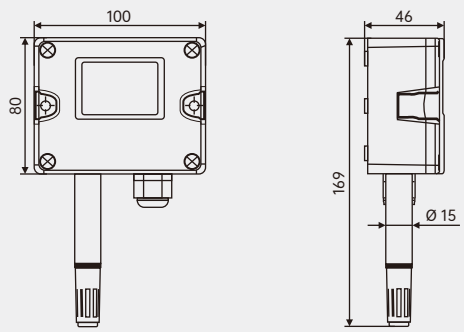
Pharmaceutical industry, electronics industry
Air conditioning box, subway ventilation system
Commercial buildings, laboratories, meteorology

Technical parameter

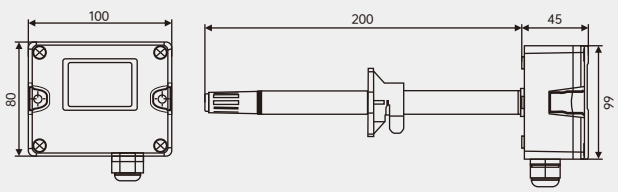
Relative humidity	
Sensor	Digital
Range	10%~95%
Exportation	Output:RS485/Modbus，0~10VDC，4~20mA selectable
Precision	±3%@25℃&20~80%RH
Response time	≤10s（25℃，Slow flow air)
Temperature	
Sensor	For digital or thermal resistors, see selection table
Range	0~50℃，-20~60℃ Etc.
Exportation	4~20mA，0~10VDC，RS485/Modbus selectable
Thermal resistance	See selection table and thermal resistance index table
Precision	Digital sensor: ±0.3℃@5~60℃ Thermal resistance: typical ±0.2~0.4℃@25℃, see the selection table
Power source	Voltage type /485 type 15~35VDC,/24VAC±20% Current type 18.5~35VDC (RL=500Ω) /8.5~35VDC (RL=0Ω)
Output load	≤500Ω（Current mode），≥2KΩ（Voltage mode)
Reveal	Optional LCD display with unit display and backlight (4~20mA without backlight)
Housing material	PC housing, PC probe and polymer filter (optional stainless steel probe and stainless steel sintered filter)
Working environment	-20~60℃，5%~95%RH（noncondensing)
Class of protection	IP65

Size mm

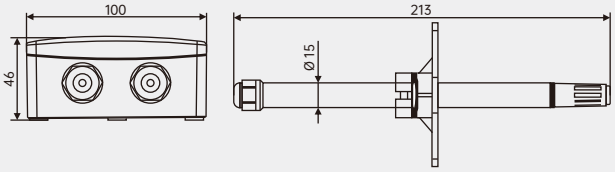
Wall-mounted type



Air duct type



Fractal type



DBP10-Selection composition

Selection example DBP10 A G L O B N

1.Installation type	A	Wall-mounted type				
	B	Air duct type				
	C	Fractal type				
2.Precision class	G	±2%RH(0.3℃)				
	H	±3%RH(0.3℃)				
3.Humidity output	K	0~10VDC(three-wire)				
	L	4~20mA(second-line)				
	M	RS485/Modbus				
4.Temperature output	N	0~10VDC(three-wire)				
	O	4~20mA(second-line)				
	P	RS485/Modbus				
	Q	PT1000,±0.2℃@0℃				
	R	PT100,±0.2℃@0℃				
	S	NTC20K,±0.4℃@25℃				
	X	Ni1000,±0.4℃@25℃				
	U	NTC10K-II,±0.4℃@25℃				
	V	NTC10K-III,±0.4℃@25℃				
	W	NTC10K-A,±0.4℃@25℃				
5.Temperature range	A	There is no				
	B	0~50℃				
	C	-20~60℃				
	T( )	Other ranges				
6.Reveal	L	LCD reveal				
	N	There is no				

Instructions:

It indicates that the DBT10 temperature and humidity transmitter is wall-mounted, the accuracy is ±2%RH, the humidity output is 4-20mA, the temperature output is 4-20mA, and the temperature measuring range is 0~50℃. No display is displayed.

Product Certification

Compliance and approval; Rodeweig temperature transmitters meet key standards and certifications for process measurement technology Thus guaranteeing the highest reliability in such Settings;

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