

Datasheet

Intelligent Temperature Sensor ST200

Introduction

ST200 works with thermocouple or thermistor. 2-wire connection. Wide range measuring range, compact design make it widely used in various applications.



Characteristics

Compact design

Measuring range -328...2372°F / -200...1300°C

High repeatability, high accuracy

Self temperature compensation

Good for harsh applications like vibration, humidity

Thermocouple, thermistor, 4...20mA output

HART communication

Applications

Oil / water measurement

Water supply system

Hydraulic / Pneumatic system

Cooling system

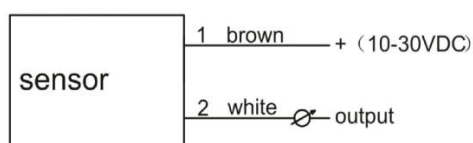
HVAC system

Specifications

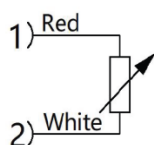
Measuring range	-328...2372°F / -200...1300°C
Sensor	Thermistor: PT100
	Thermocouple type: E, K, S
Accuracy	0.5% of F.S.
Resolution	0.1K
Output	Thermistor
	Thermocouple
	4...20mA
	4...20mA with HART
Temperature effect	0.1K / 10K
Display	LED
Operating voltage	24VDC
Load resistance	4...20mA: 500Ω @24VDC
Wiring protection	Reverse polarity, Over-voltage
Ambient temperature	-13...176°F / -25...80°C
Protection class	IP65
Housing material	Zinc alloy
Wetted parts material	SS 304, SS 316L, GH3030
Electrical connection	2-wire

Wiring

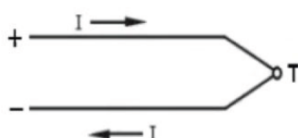
2 switching output



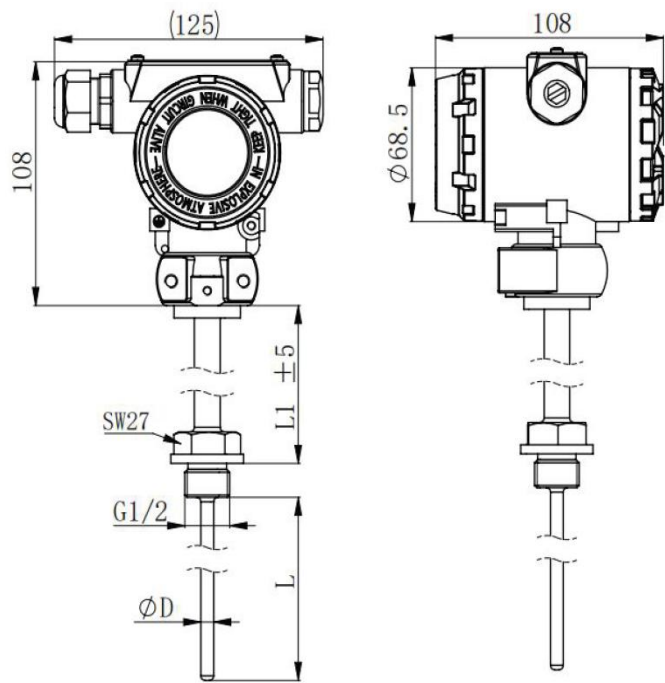
Thermistor



Thermocouple



Dimensions in mm



D: Probe diameter
L: Probe length
L1: Neck length
Customization available

Order Code

Example: ST200-T1AAL100D6G12

1. Model

ST200 Intelligent Temperature Sensor

2. Measuring range

T1	-328...1112°F (-200...600°C) Termistor PT100
T2	32...1382°F (0...750°C) Thermocouple type E
T3	32...1472°F (0...800°C) Thermocouple type K
T4	32...1832°F (0...1000°C) Thermocouple type K
T5	32...2012°F (0...1100°C) Thermocouple type K
T6	32...2192°F (0...1200°C) Thermocouple type K
T7	32...2372°F (0...1300°C) Thermocouple type S

3. Output

A	4...20mA
H	4...20mA with HART
R	Thermistor
C	Thermocouple

4. Probe material

A	SS304 stainless steel (Up to 1832°F / 1000°C)
B	SS316L (Up to 1832°F / 1000°C)
C	GH3030 (Up to 2372°F / 1300°C)

6. Probe length

L100	100 mm
L200	200 mm
L300	300 mm
L500	500 mm
Sxxx	Customization (Unit of xxx is mm)

5. Probe diameter

D6	Ø6
D8	Ø8
D10	Ø10
D12	Ø12
D16	Ø16

6. Process connection

G12	G1/2" male thread
N12	NPT1/2" male thread
FA	2" ANSI flange (class 150)
FU	DN50 flange (EN 1092-1)
S	Customization