FEATURES

- A wide operating temperature range: -50 °C to 150°C

- 12.7mm probe diameter

- Weatherproof IP67 rated wall mounting Pt100 for accurate outdoor air temperature sensing

- Perforated stainless steel probe

RS PRO 4 wire PT100 Sensor, -50°C min +150°C max, 75mm Probe Length x 12.7mm Probe Diameter

RS Stock No.: 236-4283

RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

From the great value brand RS PRO, comes a range of high quality and great value PT100 PRT (Platinum resistance thermometer) housings. Manufactured to industry standards, these high-temperature PRT housings are an excellent solution for temperature measurement.

General Specifications

Sensor Type	PT100
Probe Material	Stainless Steel
Number Of Wires	4
Accuracy	Class B
Response Time	1s
Calibrated service type	Basic measurement accuracy includes the effects of calibration
Communication Protocol	RS 236-4283
Construction	Housing – Painted Die-Cast Aluminium
Vibration Resistant	Yes
Transmitter Housing Material	Painted Die-Cast Aluminium Housing
Applications	These PRT housings have a variety of application use such as; Heating, Air conditioning, Stoves and grills, Food processing, Energy

Electrical Specifications

Ice point resistance	100Ω
Fundamental interval (0°C to 100°C	38.5Ω (nominal)
Self-heating	<0.5°C/mW
Stability	±0.05%
Measuring current	1mA

Platinum Resistance Temperature Sensors

Mechanical Specifications

Patch dimensions	L80 x W74 x H54mm
Probe Length	75mm
Probe Diameter	12.7
Termination Type	Cable Gland
Process Connection	Wall
Cable Entry Size	M20
Sheath	Stainless steel

Transmitter Specifications

Input	
Minimum span	25°C
Lead Resistance effect	0.002 °C / Ohm
Measurement Accuracy	0.2°C ± 0.05% of Reading
Thermal Drift	Thermal Drift 0.0025 % / °C
Excitation current	Excitation current <200 uA
Maximum lead Resistance	20 Ohms per leg

Output	
Output Type	2 wire (4 to 20) mA current loop
Output range	4.0 to 20.0mA
Output Connection	Screw Terminal
Maximum output	21.5mA
Minimum output	<3.9 mA
Accuracy	(mA output /2000) or 5 uA (Whichever is the greater)
Loop Voltage effect	0.2 uA / V
Thermal drift	1 uA / °C
Maximum output load	[(Vsupply-10)/21]K Ohms

Operation Environment Specifications

Minimum Temperature Sensed	-50°C
Maximum Temperature Sensed	150°C
storage temperature	-50 to +90°C
humidity range	(10 to 90) % RH non condensing

Protection Category

IP Rating	IP67

Approvals

Compliance/Certifications	IEC751

Sensor type	No. of elements	Pt100 connection	4-20mA output	Allied Code	RS Order code
Pt100	Single	4 wire	No	70641758	236-4283
Pt100	Duplex	2 x 4 wire	No	70644358	455-4208
Pt100	Single	3 wire	Yes (2 wire)	70644359	455-4214

WIRING CONNECTIONS