

Elements and Probes

Fast-responding RTD or thermistor elements in cases

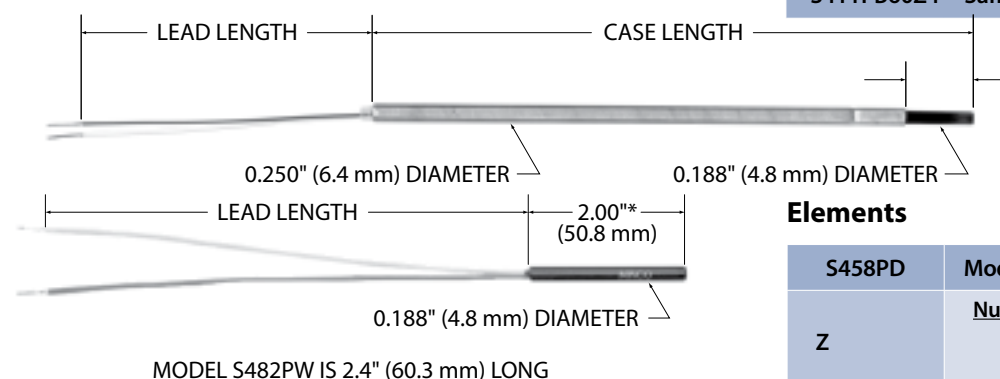
Overview

These models feature fast-responding RTD or thermistor elements in aluminum cases (except stainless steel on S482PW) with PTFE insulated leadwires. They can be assembled into probes or used separately as allpurpose sensors.

Probes consist of elements assembled into stainless steel extension tubes.

They are not suitable for direct fluid immersion but may be used with thermowells.

See page 40 for optional 4 to 20 mA temperature transmitters.



Specifications

Temperature range: -45.5 to 135°C (-50 to 275°F).

Leadwires: AWG 22, PTFE insulated. Standard lengths are 4", 12" and 18".

Moisture resistance: Meets MIL-STD-202, Method 104, Test Condition B.

Insulation resistance: 1000 megohms min. at 500 VDC, leads to case.

Model numbers

Element	TCR	Duct point sensors	Outside air sensors
RTDs			
Platinum 100Ω +/-0.1% at 0°C	0.00391	S402PB	S411PB
Platinum 100Ω +/-0.1% at 0°C (Meets EN60751, Class B)	0.00385	S458PD	S460PD
Platinum 1000Ω +/-0.1% at 0°C	0.00385	S459PF	S461PF
Platinum 1000Ω +/-0.1% at 0°C	0.00375	S482PW	S485PW
Nickel-iron 1000Ω +/-0.12% at 70°F	0.00527	S400FB	S409FB
Nickel-iron 2000Ω +/-0.12% at 70°F	0.00527	S401FC	S410FC
HW 3000Ω at -30.2°C	0.00262	S100057PX	S100837PX
Thermistors			
Thermistor 2,252Ω at +/-1% at 25°C	29.2	TS438TA	TS440TA
Thermistor 10,000Ω at +/-1% at 25°C	23.5	TS439TB	TS441TB

Probes

S411PB	Model number from table
60	Case length: Specify in 0.1" increments (Ex: 60 = 6.0 inches) Minimum length is 3"
Z	Number of leads: Y = 2 leads; Z = 3 leads (platinum only)
4	Lead length in inches: 4, 12, 18
S411PB60Z4 = Sample part number	

Elements

S458PD	Model number from table
Z	Number of leads: Y = 2 leads Z = 3 leads (platinum only)
4	Lead length in inches
S458PDZ4 = Sample part number	

To order with transmitter, add

TT111	Transmitter Models: TT111: Fixed Range (2 leads) TT211: Fixed Range (2 leads) TT321: Fixed Range (3 leads) Other transmitter options available.
A	Temperature Range Code: A = 20F to 120F (-6.7C to 48.9C)
1	Calibration: 1 = Nominal Calibration 2 = Match Calibrated, 0.75% Total System Accuracy 3 = Match Calibrated, 0.5% Total System Accuracy 4 = Match Calibrated, 0.2% or 1C Total System Accuracy
TT111A1 = Sample part number addition	