

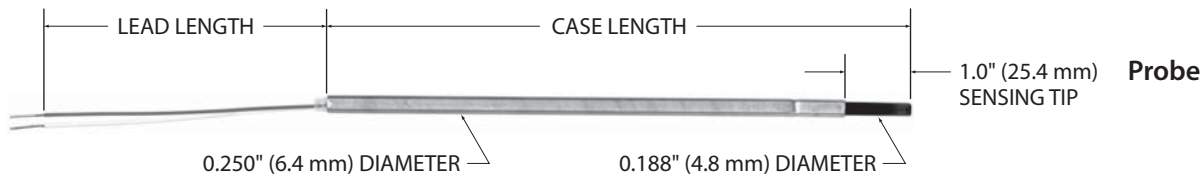
Elements & Probes

Overview

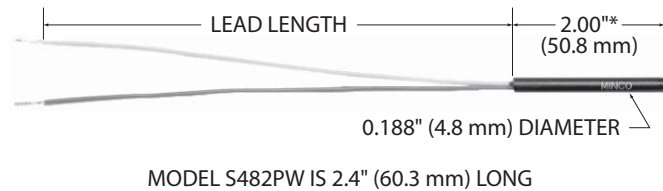
These models feature fast-responding RTD or thermistor elements in aluminum cases (except stainless steel on S482PW) with PTFE insulated leadwires. They can be assembled into probes or used separately as all-purpose sensors.

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 Section 3 for thermowell options.

See Section 4 for optional 4 to 20 mA temperature transmitters.



Element



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 $\Omega / \Omega / ^\circ\text{C}$	Elements	Probes
RTDs			
Platinum 100 $\Omega \pm 0.1\%$ at 0°C	0.00391	S402PB	411PB
Platinum 100 $\Omega \pm 0.1\%$ at 0°C (Meets EN60751, Class B)	0.00385	S458PD	S460PD
Platinum 1000 $\Omega \pm 0.1\%$ at 0°C	0.00385	S459PF	S461PF
Platinum 1000 $\Omega \pm 0.1\%$ at 0°C	0.00375	S482PW	S485PW
Nickel-iron 1000 $\Omega \pm 0.12\%$ at 70°F	0.00527	S400FB	S409FB
Nickel-iron 2000 $\Omega \pm 0.12\%$ at 70°F	0.00527	S401FC	S410FC
HW 3000 Ω at -30.2°C	0.00262	S100057PX	S100837PX
Thermistors	R_{25}/R_{125}		
Thermistor 2,252 $\Omega \pm 1\%$ at 25°C	29.2	TS438TA	TS440TA
Thermistor 10,000 $\Omega \pm 1\%$ at 25°C	23.5	TS439TB	TS441TB

Specification and order options:

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
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) <i>Contact for other transmitter options.</i>
A	Temperature Range Code: A = 20°F to 120°F (-6.7°C to 48.9°C) <i>Contact for complete list of available temp. codes.</i>
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 1°C Total System Accuracy <i>Contact for other calibration options.</i>
TT111A1 = Sample part number addition	



STOCKED PARTS AVAILABLE

Specifications subject to change