



810 SERIES

- Proven PT1000 platinum resistance sensor provides reliability, stability and unbeatable performance
- Standard temperature ranges from -22 °F to 302 °F (-30 °C to 150°C)
- 4 mA to 20 mA transmitter included
- 316 Stainless Steel housing
- CE compliant to suppress RFI, EMI, and ESD
- RoHS compliant

APPLICATIONS

- Mobile hydraulics
- Automotive
- Heat exchangers
- HVAC
- Transportation
- Refrigeration controls

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Temperature ranges	Standard ranges from -22 °F to 302 °F (-30 °C to 150°C)
Accuracy	Measuring element PT1000 Class A
	Temperature sensor For °F: $\pm[1.8*(0.15 + 0.002 (t - 32) / 1.8)]$ For °C: $\pm(0.15 K + 0.002 t)$ per EN 60751
	Accuracy ^{1,2} ± 0.80 °F (+- 0.45 °C)
Failure signal	Sensor burnout ≥ 21.0 mA
	Sensor short circuit ≤ 3.6 mA
Power requirement*	10 Vdc to 30 Vdc
Environmental temperature affect	0.1% of span / 18 °F (10 °C)
Load limitations	$\leq (\text{Supply Voltage} - 10 \text{ Volts}) / 0.023 \text{ A}$
Wetted materials	316 Stainless Steel
Housing material	316 Stainless Steel
Ambient temperature	-40°F to 185 °F (-40°C to 85 °C)
Storage temperature	-40°F to 185 °F (-40°C to 85 °C)
Electromagnetic rating	CE compliant to EMC norm EN 61326 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Max. operating pressure	3,915 psi (270 bar) ³
Environmental protection	IP67

* Unregulated

¹ Maximum uncertainty calculated @ maximum span, maximum measurement temperature, and ambient temperature

² Maximum uncertainty includes Usensing element, Usensor measurement, Uoutput linearization

³ Pressure rating may vary based on the process medium, temperature and flow rate



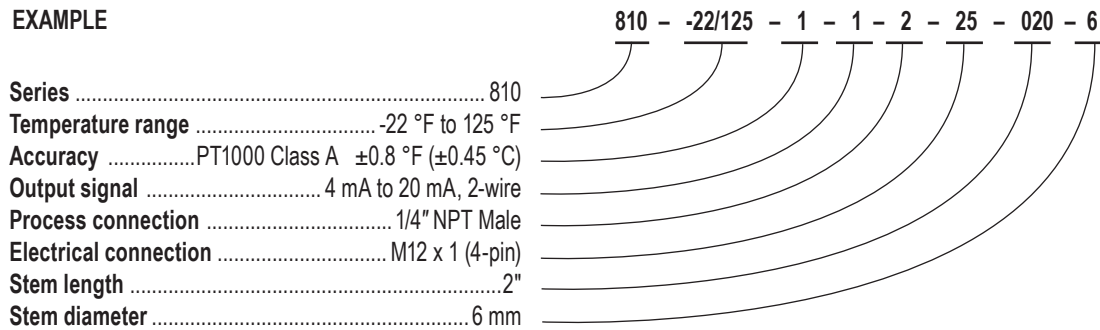
WARNING: This product can expose you to chemicals including Chromium (VI) and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Thermowells are recommended for pressure, corrosive fluids and high velocity applications, see pages 46-48.

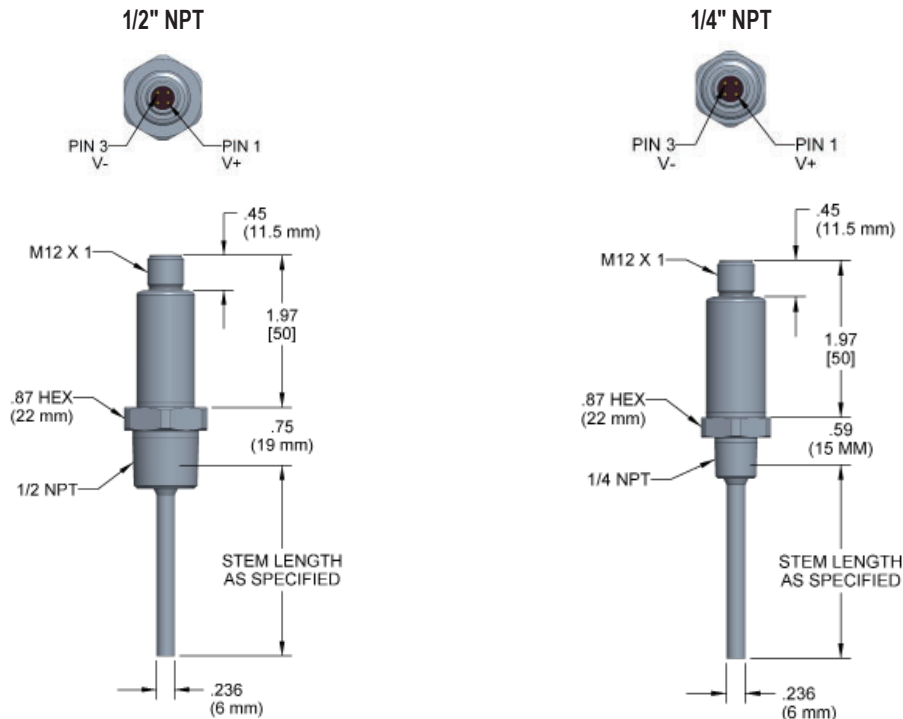
ORDERING INFORMATION			
SERIES	810		
TEMPERATURE RANGES	-22/125 -22 °F to 125 °F	-22/302 -22 °F to 302 °F	0/200 0 °F to 200 °F
	-22/250 -22 °F to 250 °F	0/100 0 °F to 100 °F	0/300 0 °F to 300 °F
	(L/H) Custom ranges available on request, specify low and high ranges (70 °F minimum span)		
ACCURACY	1 PT1000 Class A ±0.8 °F (±0.45 °C)		
OUTPUT SIGNAL	1 4 mA to 20 mA, 2-wire		
PROCESS CONNECTIONS	2 1/4" NPT Male	8 1/2" NPT Male	
ELECTRICAL CONNECTION	25 M12 x 1 (4-pin)		
STEM LENGTHS	010 1"	030 3"	080 8"
	020 2"	040 4"	120 12"
	025 2.5"	060 6"	140 14"
STEM DIAMETER	6 6 mm		

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



810 Series Compact Temperature Transmitter



810 Series	4 mA to 20 mA	
CONNECTION TYPE (CODE)	V+	V-
M12 x 1, 4-Pin (25)	1	3