



800 SERIES

- Proven 100 Ω platinum resistance sensor provides reliability, stability and unbeatable performance
- Economical price
- Standard temperature ranges from -40 °F to 1,000 °F
- Wide variety of temperature ranges and connections
- Quick response time
- Optional USB programmable output available
- 316 stainless steel housing
- Burnout protection from 3.3 mA to 23 mA
- Also available with our 1800 Series Attachable Loop Indicator
- CE compliant to suppress RFI, EMI, and ESD
- Final calibration tests prior to shipment ensures 100% “out of the box” reliability

SPECIFICATIONS

Output signals	4 mA to 20 mA 2-wire, 0 Vdc to 5 Vdc 3-wire 0 Vdc to 10 Vdc 3-wire, 1 Vdc to 5 Vdc 3-wire
Temperature ranges	Standard ranges from -40 °F to 1,000 °F
Accuracy	
Measuring element	Class B per EN 60751 (IEC 751)
Output	±[0.30 + 0.005* t] °C ±0.5% full scale
Sensor protection	Burnout protected from 3.3 mA to 23 mA
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	≤ (VPower -10)/0.020 Amp for 4 mA to 20 mA output ≤ 5,000 Ω for 1 Vdc to 5 Vdc output ≤ 10,000 Ω for 0 Vdc to 10 Vdc output ≤ 4,500 Ω for 0.5 Vdc to 4.5 Vdc output
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)
Environmental rating	IP65 according to EN 60529/IEC 529
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Weight	Approximately 4 oz.

* Unregulated power supplies

FEATURES

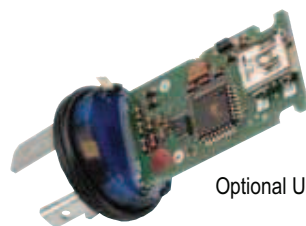
- Proven platinum 100 Ω sensor
- Maximum reliability
- Wide variety of temperature ranges and connections
- CE compliant
- Quick response time

APPLICATIONS

- Water systems
- Storage tanks
- Industrial machinery and machine tools
- HVAC systems
- Refrigeration systems



Also available with our 1800 Series Attachable Loop Indicator. See page 44 for more information.

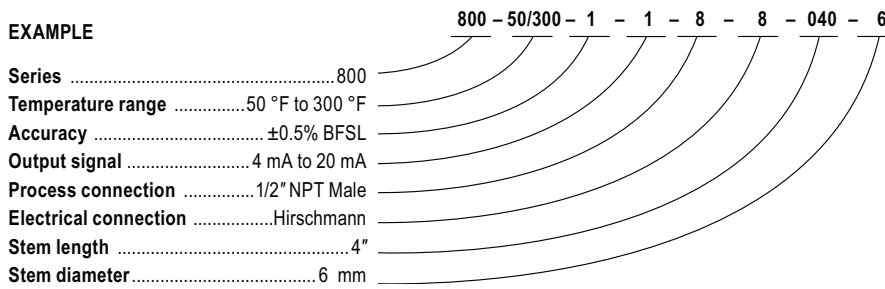


Optional USB programmable output

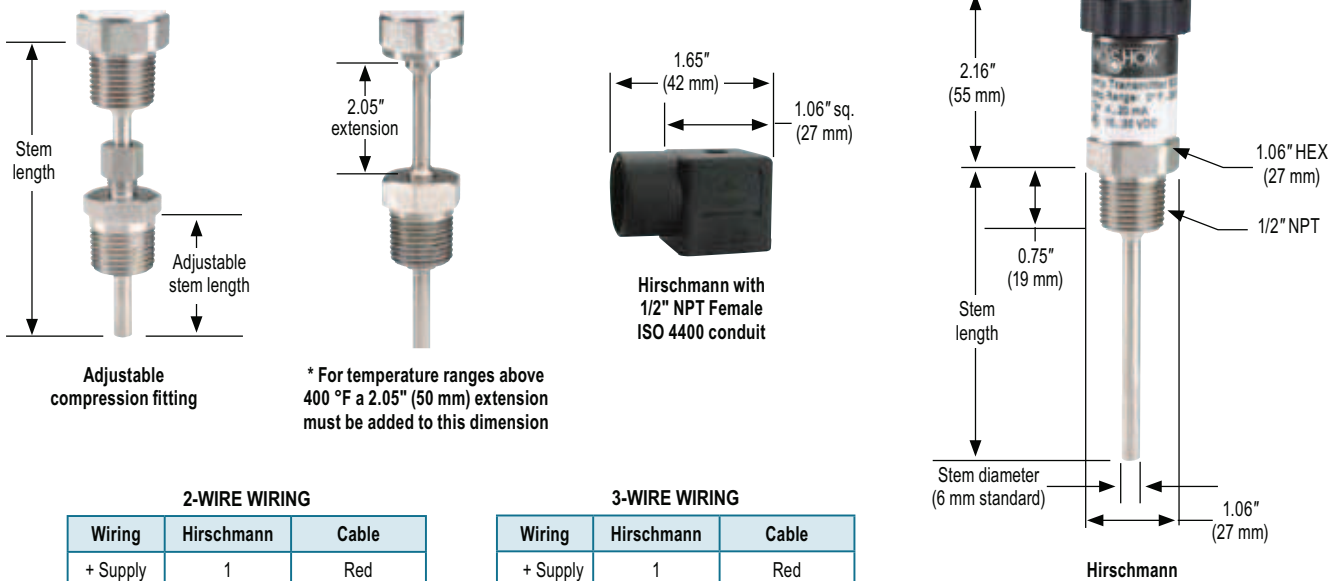
ORDERING INFORMATION							
SERIES	800						
TEMPERATURE RANGES	-40/120 25/125 0/140	-40/120 °F 25/125 °F 0/140 °F	0/200 20/240 0/250	0/200 °F 20/240 °F 0/250 °F	0/300 50/300 50/500	0/300 °F 50/300 °F 50/500 °F	
Other ranges available on special request							
ACCURACY	1 Class B + (±0.5% BFSL)						
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	3	1 Vdc to 5 Vdc, 3-wire	34	4 mA to 20 mA, 2-wire, USB programmable	
PROCESS CONNECTIONS	2	1/4" NPT Male	8	1/2" NPT Male			
ELECTRICAL CONNECTIONS	1	36" cable (connected to option 8)	14	Hirschmann connection w/ISO 4400 1/2" NPT conduit			
STEM LENGTH	025	2.5"	060	6"	120	12"	
STEM DIAMETER	040	4"	090	9"			
STEM DIAMETER	3	Tapered from 6 mm - 3 mm tip		6	6 mm	8	8 mm

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

EXAMPLE



Outline Dimensions



2-WIRE WIRING

Wiring	Hirschmann	Cable
+ Supply	1	Red
+ Output	2	Black

3-WIRE WIRING

Wiring	Hirschmann	Cable
+ Supply	1	Red
Common	2	Black
+ Output	3	White

Optional thermowells available in 316 SS, 304 SS and Brass.