



SERIES 800

HIGH PERFORMANCE PLATINUM RESISTANCE TEMPERATURE TRANSMITTERS

The NOSHOK Series 800 temperature transmitter provides an unbeatable level of performance at an economical price. Using the proven reliability and stability of 100 ohm platinum resistance technology, this transmitter offers a broad array of choices for the OEM and user alike.

A rigorous test and inspection process is performed on all NOSHOK temperature transmitters prior to shipment to further ensure 100% “out of the box” reliability.

FEATURES

- Proven platinum 100 ohm 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 42 for more information.



Optional USB programmable output

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 1000 °F
Accuracy	Class B per EN 60751 (IEC 751)
Measuring Element	$\pm[0.30 + 0.005 \cdot t]$ °C
Output	$\pm 0.5\%$ Full Scale
Sensor protection	Burnout protected from 3.3 mA to 23 mA
Power supply	10 Vdc to 30 Vdc for 4 mA to 20 mA, 0 Vdc to 5 Vdc, unregulated, 1 Vdc to 5 Vdc 12 Vdc to 30 Vdc for 0 Vdc to 10 Vdc, unregulated
Load limitations	$\leq (V_{Power} - 10)/0.020$ Amp for 4 mA to 20 mA output $\leq 5,000 \Omega$ for 1 Vdc to 5 Vdc output $\leq 10,000 \Omega$ for 0 Vdc to 10 Vdc output $\leq 4,500 \Omega$ 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.

ORDERING INFORMATION								
SERIES 800								
TEMPERATURE RANGES	-40/120°F	-40/120	0/200°F	0/200	0/300°F	0/300	0/750°F	0/750
	25/125°F	25/125	20/240°F	20/240	50/300°F	50/300	0/1000°F	0/1000
	0/140°F	0/140	0/250°F	0/250	50/500°F	50/500		
Other ranges available on special request								
ACCURACY	1 Class B + (±0.5 % BFSL)							
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	2 0 Vdc to 5 Vdc, 3-wire	3 1 Vdc to 5 Vdc, 3-wire	5 0 Vdc to 10 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				
	48 1/2 " NPT male w/Adjustable Compression Fitting							
ELECTRICAL CONNECTIONS	1 36 " cable (connected to option 8)		8 Hirschmann (DIN EN 175301-803 Form A)		14 Hirschmann connection w/ISO 4400 1/2 " NPT conduit			
STEM LENGTH	025 2.5 inch		060 6 inch		120 12 inch			
	040 4 inch		090 9 inch					
STEM DIAMETER	3 Tapered from 6mm - 3mm tip		6 6 mm		8 8 mm			

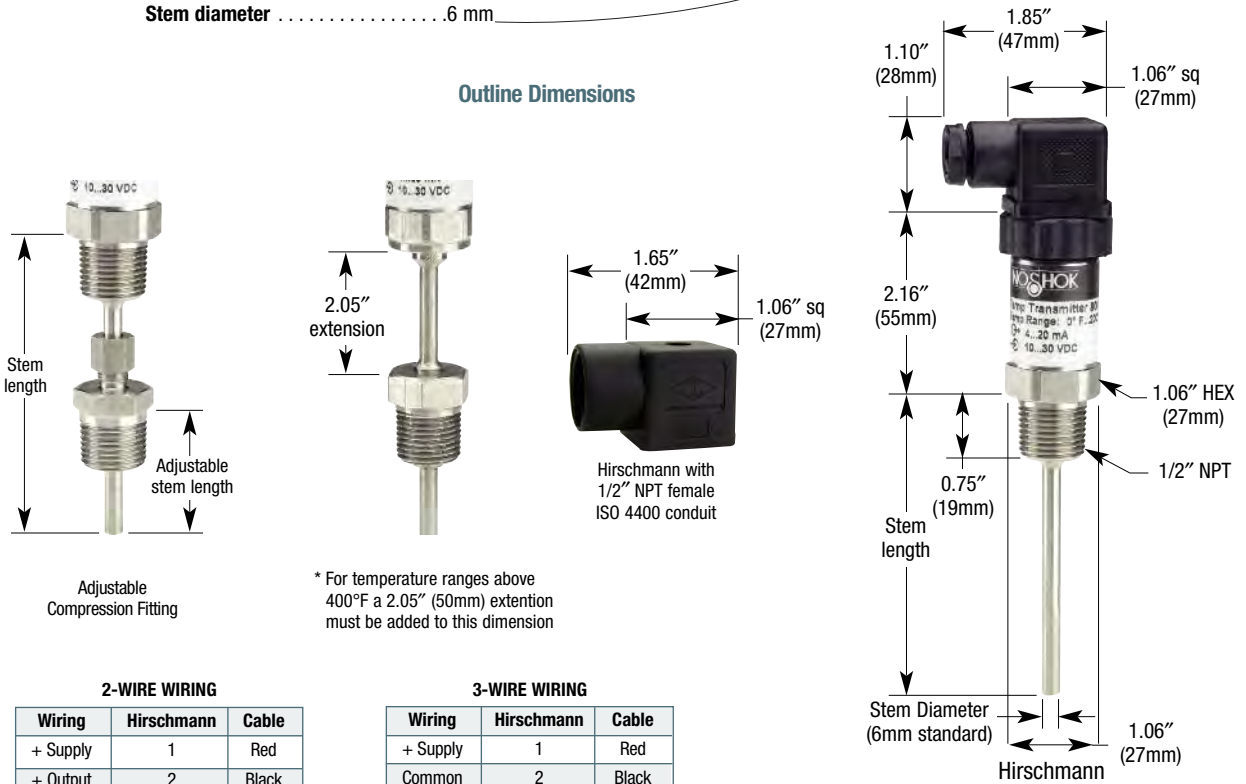
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE

- Series 800
- Temperature Range 50 °F to 300 °F
- Accuracy ±0.25% BFSL
- Output Signal 4 mA to 20 mA
- Process Connection 1/2 " NPT male
- Electrical Connection Hirschmann
- Stem length 4 inch
- Stem diameter 6 mm

800-50/300-1-1-8-8-040-6

Outline Dimensions



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