



800 SERIES

- Proven 100 Ω platinum resistance sensor provides reliability, stability and unbeatable performance
- Economical price
- Standard temperature ranges from -40 °F to 120 °F through 50 °F to 400 °F
- Wide variety of temperature ranges and connections
- Quick response time
- 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

APPLICATIONS

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



Also available with our 1800 Series attachable loop indicator. See www.noshok.com for details.

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 400 °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 requirement*	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
Max. operating pressure	6 mm: 725 psi 8 mm: 1,500 psi
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



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.

ORDERING INFORMATION						
SERIES	800					
TEMPERATURE RANGES	-40/120	-40 °F to 120 °F	0/200	0 °F to 200 °F	25/125	20 °F to 240 °F
	0/100	0 °F to 100 °F	0/250	0 °F to 250 °F	50/300	50 °F to 300 °F
	0/140	0 °F to 140 °F	20/240	20 °F to 240 °F	50/400	50 °F to 400 °F
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		
	2	0 Vdc to 5 Vdc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire		
PROCESS CONNECTIONS	2	1/4" NPT Male	48			1/2" NPT Male w/adjustable compression fitting
	8	1/2" NPT Male				
ELECTRICAL CONNECTIONS	1	36" cable (connected to option 8)	14			Hirschmann connection w/ISO 4400 1/2" NPT conduit
	8	Hirschmann (DIN EN 175301-803 Form A)	25			M12 x 1 (4-pin)
STEM LENGTHS	025	2.5"	060	6"	120	12"
	040	4"	090	9"		
					120	12"
STEM DIAMETERS	6	6 mm	8	8 mm		

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

EXAMPLE

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

Series800

Temperature range50 °F to 300 °F

Accuracy±0.5% BFSL

Output signal4 mA to 20 mA, 2-wire

Process connection1/2" NPT Male

Electrical connectionHirschmann

Stem length4"

Stem diameter6 mm

800 Series Platinum Resistance Temperature Transmitter

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