Electronic Indicating Temperature Transmitter/Switch





850 SERIES

- Utilizes PT1000 technology for continuous temperature monitoring, electronic temperature switching, and transmission of analog output while providing local digital indication
- Allows for one or two switching outputs as well as optional current and voltage outputs
- Three buttons on top allow simple adjustment of the temperature set points, reset points, switching functions and the measuring range of the optional analog output
- 1/2" NPT Male standard connection
- A variety of stem lengths are available for maximum versatility; also available with adjustable insertion lengths via the sliding compression fitting
- Durable stainless steel housing and wetted parts
- · Display and electrical connection can be rotated independently
- RoHS compliant

SPECIFICATIONS					
Temperature ranges	Standard -4 °F to 176 °F (-20 °C to 80 °C) Optional -4 °F to 248 °F (-20 °C to 120 °C) Selectable display for °F or °C				
Temperature sensor	Platinum resistor (PT1000 2-wire, DIN EN 60751 Class A)				
Wetted materials	316Ti stainless steel				
Housing material	304 Stainless steel				
Max. operating pressure	2,000 psi (1/2" NPT Male fixed process connection); 725 psi (1/2" NPT Male sliding compression fitting process connection)				
Power requirement*	15 Vdc to 35 Vdc				
Signal output adjustment	Zero point: 0-25% of span Full scale: 75-100% of span				
Switch points Number Function Adjustment accuracy	Individually adjustable via external control keys 1 or 2 (PNP) N.O. / N.C.; windows-and hysteresis function freely adjustable ≤ 0.5% of span				
Switch rating	Max. 250 mA				
Electrical connection	M12 x 1 (4-pin), M12 x 1 (5-pin)				
Accuracy Analog signal Switching output Display Temperature sensor	≤ ±0.5% of span + temperature sensor error ≤ ±0.8% of span + temperature sensor error ≤ ±(0.8% of span + temperature sensor error) ±1 digit For °F: ±[1.8*(0.15 + 0.002 (t - 32) / 1.8)] For °C: ±(0.15 K + 0.002 I t I) per EN 60751				
Display	14 segment-LED, red 4-digit, height 0.35"				
Environmental protection	IP65 and IP67 (IEC 60529)				

^{*} Unregulated

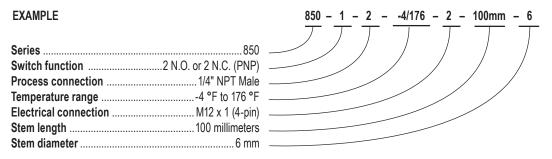
APPLICATIONS

- Mechanical engineering
- Heating and cooling circuits
- Air conditioning technology
- Plant construction
- Environmental technology

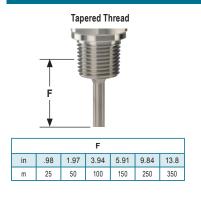
ORDERING INFORMATION								
SERIES	850							
SWITCH FUNCTIONS	1	2 N.O. or 2 N.C. switch (PNP*)	4	4 2 N.O. or 2 N.C. switch (PNP*) with 4 mA to 20 mA 3-wire analog output**				
	2	1 N.O. or 1 N.C. switch (PNP*) with 4 mA to 20 mA 3-wire analog output	5	5 2 N.O. or 2 N.C. switch (PNP*) with 0 Vdc to 10 Vdc 3-wire output)**				
	3	1 N.O. or 1 N.C. switch (PNP*) with 0 Vdc to 10 Vdc 3-wire output	5					
PROCESS CONNECTIONS	2	1/4" NPT Male	47	1/4" NPT Male sliding compression fitting				
	8	1/2" NPT Male	48	1/2" NPT Male sliding compression fitting				
TEMPERATURE RANGES	-4/176	-4 °F to 176 °F (-20 °C to 80 °C)	-4/248	-4 °F to 248 °F (-20 °C to 120 °C) †				
ELECTRICAL CONNECTION	2	M12 x 1 (4-pin)	3	M12 x 1 (5-pin, 2 switch and output)				
STEM LENGTHS	25mm	25 millimeters***	100mm	100 millimeters	250mm	250 millimeters		
	50mm	50 millimeters***	150mm	150 millimeters	350mm	350 millimeters		
STEM DIAMETERS	6	6 mm						

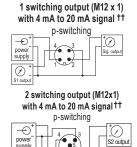
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

- * NPN available, consult factory
- ** Available only with M12 x 1 (5-pin) connector
- *** Not available with sliding compression fitting
- † Available only with sliding compression fitting process connection and stem lengths ≥100 mm



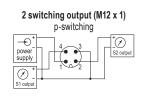






sig. output





†† Also applies to 0 Vdc to 10 Vdc output

Dimensions inches (mm) with circular connector M12 x 1 (4-pin and 5-pin)

