



850 SERIES

- Utilizes PT100 technology to provide continuous temperature monitoring, electronic temperature switching, and transmission of analog output of 4-20 mA while providing local digital indication
- Allows for one or two switching outputs as well as an optional analog output
- Two buttons on top allow simple adjustment of the temperature set points, reset points, switching functions and the measuring range of the optional analog output
- Wide measuring range (between -300 °F and 1,100 °F / -200 °C and 600 °C) covers the majority of temperature measuring and switching applications
- 1/2" NPT male standard connection, 1/4" NPT optional
- A variety of stem lengths are available for maximum versatility (also available with adjustable insertion lengths)
- A version with tapered stem is also available for rapid response times
- Durable stainless steel housing and wetted parts
- The housing and replaceable measuring insert are screwed together to allow the exchange of the measuring insert without opening the connection to the process

FEATURES

- Compact dimensions
- Simple handling
- Cost effective
- Service-friendly
- Customized solutions

APPLICATIONS

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

TEMPERATURE RANGES

- 50 °F to 400 °F
- 50 °F to 1,100 °F
- 50 °F to 750 °F
- 300 °F to 1,100 °F

Protective Cover Option

- Made of a thermoplastic polyurethane (TPU) material which is resistant to oil, grease and abrasion
- Protects the sensor while maintaining clear viewing and rotation of the display
- The elastic properties of the material allows set point programming without having to remove the cover
- Increases environmental protection to IP67 for indoor and outdoor use



SPECIFICATIONS

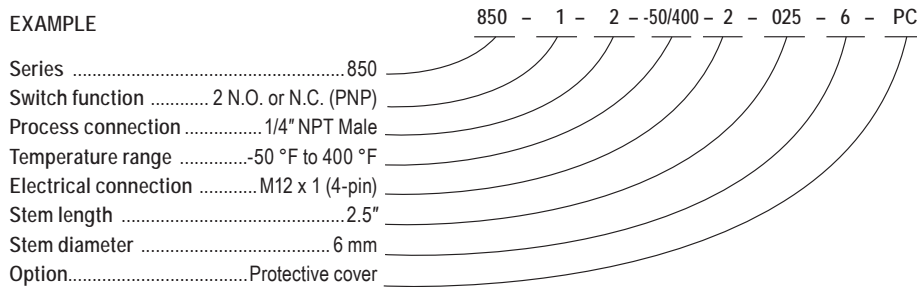
Temperature ranges	Standard ranges from -300 °F to 1,100 °F (-200 °C to 600 °C) Selectable display for °F or °C
Temperature sensor	Platinum resistor (PT100 2-wire, Class B)
Wetted materials	316Ti Stainless steel
Housing material	Stainless steel
Working pressure	6 mm Stem Diameter; 600 psi 8 mm Stem Diameter; 1,500 psi
Power supply*	12 Vdc to 30 Vdc, unregulated
Power consumption	≤ 50 mA, without load
Signal output	4 mA to 20 mA scaleable from 20-100% of range
Switch Points	Individually adjustable via external control keys
Number	1 or 2 (PNP)
Function	NO / NC; windows-and hysteresis function freely adjustable
Adjustment	Set point: 0.1° steps within temperature range Reset point: 0.1° steps from beginning temperature range until (set point -0.1°)
Switch rating	100 mA per switch
Electrical connection	M12 x 1 (4-pin)
Accuracy	Class B +0.1% of the temperature range
Display	7 Segment-LED, red 4-digit, height 0.3"
Temperature ranges	
Storage	-22 °F to 176 °F (-30 °C to 80 °C)
Ambient	-13 °F to 158 °F (-25 °C to 70 °C)
Influence	±0.006% of measuring range per °F
Environmental protection	NEMA 4; IP65 (IEC 529)
Weight	0.66 lb. depending on stem length

* Unregulated power supply

ORDERING INFORMATION			
SERIES	850		
SWITCH FUNCTIONS	1 2 N.O. or N.C. switch-PNP 2 1 N.O. or N.C. switch-PNP (with 4 mA to 20 mA analog output)		
PROCESS CONNECTIONS	2 1/4" NPT Male	8 1/2" NPT Male	
TEMPERATURE RANGES	-50/400 -50 °F to 400 °F	32/1100 32 °F to 1,100 °F	
	32/750 32 °F to 750 °F	-300/1100 -300 °F to 1,100 °F	
ELECTRICAL CONNECTION	2 M12 x 1 (4-pin)		
STEM LENGTHS	025 2.5"	060 6"	120 12"
	040 4"	090 9"	
STEM DIAMETERS	3 Tapered from 6 mm - 3 mm tip	6 6 mm	8 8 mm
OPTION	PC Protective Cover (IP67)		

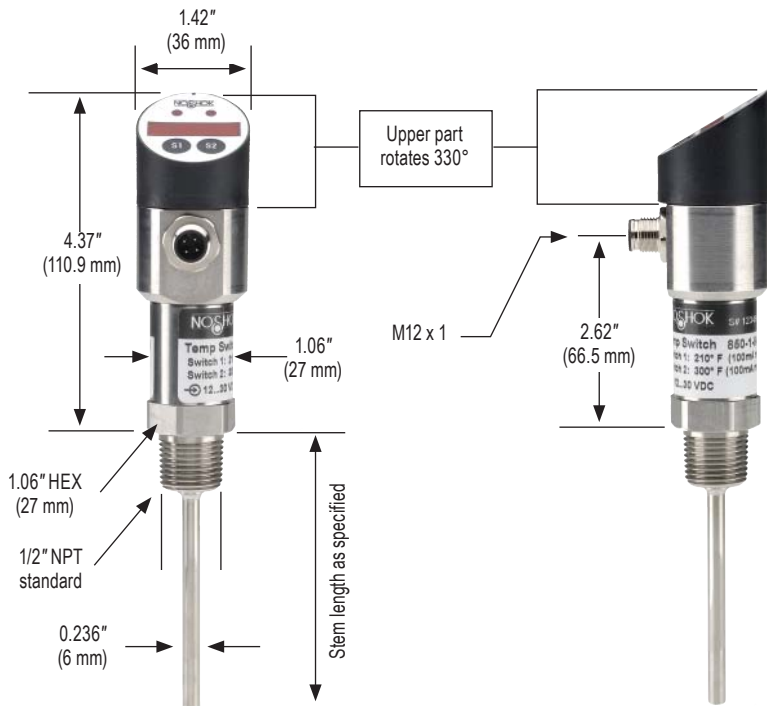
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE



Additional Ordering Information Switch Set Point(s) (please specify)

Outline Dimensions



Wiring Diagrams

