

# Electronic Indicating Transmitter/Switch



## 800/810 SERIES

- Compound and standard switch adjustment ranges through 0 psig to 10,000 psig
- Stainless steel wetted parts
- Current and voltage outputs available
- 3 switching output options available:
  - 2 switching outputs
  - 1 switching output and 1 analog output (4 mA to 20 mA or 0 Vdc to 10 Vdc)
  - 2 switching outputs and 1 analog output (4 mA to 20 mA)
- CE compliant to suppress RFI, EMI and ESD

### APPLICATIONS

- Hydraulics & pneumatics
- Power generation
- Pumps & compressors
- Stamping & forming presses
- Water & wastewater

#### 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

Switching parameters	Individually adjustable via external control keys
Number	1 or 2 (PNP or NPN)
Function	N.O./N.C.; windows - and hysteresis function freely adjustable
Contact rating	0.5 A max
Response time	<10 ms
Non-repeatability	<1% full scale
Pressure ranges	-14.5 psig to 30 psig through 0 psig to 9,999 psig
Switch adjustment	Programmable on the display
Switch point	1.0 to 100% of full scale
Hysteresis	0 to 99% of full scale
Transmitter parameters	
Output signal	4 mA to 20 mA or 0 Vdc to 10 Vdc; programmable and freely adjustable
Accuracy	< 0.5% full scale (BFSL) ±1 digit
Hysteresis	< 0.2% full scale (< 0.3 with pressure range < 0 psi - 230 psi)
Adjustment	20% to 100% depending on adjustment range
Durability	> 10,000,000 full scale cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero ± 0.07% full scale/ °F Span ± 0.07% full scale/ °F Media -4 °F to 176 °F (-20 °C to 85 °C) (Thin film sensor) -4 °F to 176 °F (-20 °C to 85 °C) (Ceramic sensor) Ambient -4 °F to 158 °F (-20 °C to 70 °C) Storage -22 °F to 176 °F (-30 °C to 80 °C)
Power requirement*	12 Vdc to 30 Vdc
Current consumption	< 50 mA (without load)
Proof pressure	2 times full scale for ranges vacuum through 0 psig to 1,450 psig 1.75 times full scale for ranges 0 psig to 1,500 psig through 0 psig to 10,000 psig
Burst pressure	2.5 times full scale for ranges vacuum through 0 psig to 1,450 psig. 1.75 times full scale for ranges 0 psig to 1,500 psig through 0 psig 10,000 psig
Measuring element	Stainless steel with ceramic sensor and FKM seal on ranges through 0 psig to 750 psig (other sealing materials available upon request). Stainless steel for higher pressure ranges
Housing material	800-stainless steel, 810-black anodized aluminum
Connection	316 stainless steel
Environmental rating	IP65
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical protection	Protected against reverse polarity, over-voltage and short circuit
Shock	> 50 g's according to IEC 60068-2-27
Vibration	> 10 g's according to IEC 60068-2-6
Weight	Approx 0.62 lb

\* Unregulated

ORDERING INFORMATION						
SERIES	800	Stainless steel housing	810	Black anodized aluminum housing		
SWITCH FUNCTIONS	1	2 N.O. or N.C. (PNP or NPN)	3	1 N.O. or 1 N.C. (PNP or NPN) with 0 Vdc to 10 Vdc analog output		
	2	1 N.O. or 1 N.C. (PNP or NPN) with 4 mA to 20 mA analog output	4	2 N.O. or 2 N.C. (NPN) with 4 mA to 20 mA analog output*		
PROCESS CONNECTIONS	2	1/4" NPT male	10	G 1/4 B male		
	5	1/4" NPT female	11	G 1/2 B male		
	8	1/2" NPT male	19	G 1/4 B female		
			45	SAE J1926-3:7/16-20		
ADJUSTABLE RANGES (Max. working pressure)	14.5/30	-14.5 psig to 30 psig	145	0 psig to 145 psig	3750	0 psig to 3,750 psig
	14.5/75	-14.5 psig to 75 psig	300	0 psig to 300 psig	6000	0 psig to 6,000 psig
	14.5/145	-14.5 psig to 145 psig	750	0 psig to 750 psig	9000	0 psig to 9,000 psig
	30	0 psig to 30 psig	1450	0 psig to 1,450 psig	10000	0 psig to 10,000 psig
	75	0 psig to 75 psig	2400	0 psig to 2,400 psig		
ELECTRICAL CONNECTIONS	2	M12 x 1 (4-pin)	3	M12 x 1 (5-pin), 2 switch and analog output		
OPTIONS	ST8	Threaded Orifice	RB	Rotatable Base	EH	Enhanced Software**
					PC	Protective Cover (IP67)

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

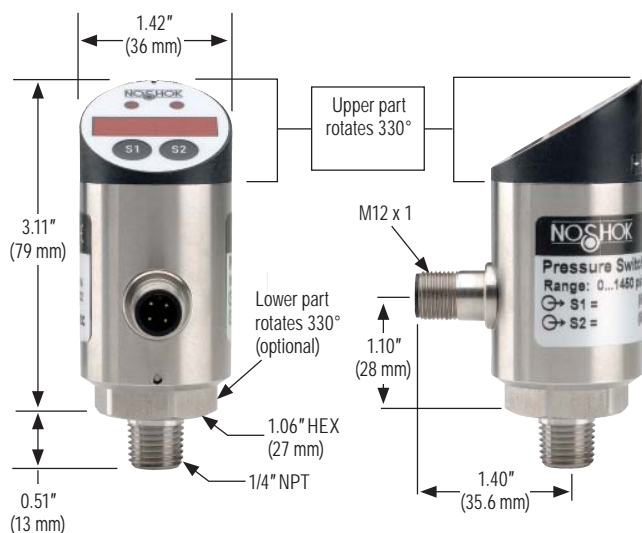
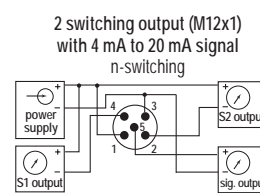
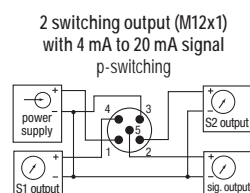
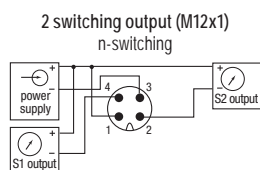
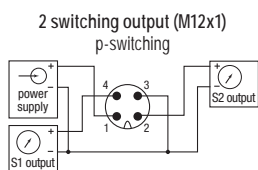
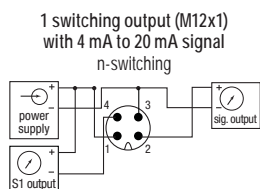
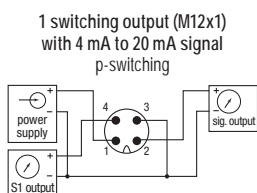
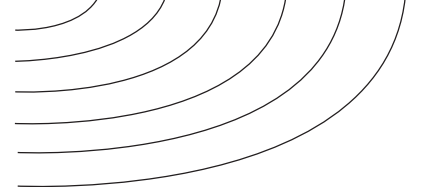
\* Available only with a M12 x 1 (5-pin) connector. Rotatable base is not available on this option.

\*\* Includes minimum/maximum value memory, output dampening, switching time delay

### EXAMPLE

800 - 1 - 2 - 145 - 2 - ST8

Series ..... 800 Series  
 Switch function..... 2 N.O. or N.C. (PNP or NPN)  
 Process connection ..... 1/4" NPT Male  
 Adjustable range ..... 0 psig to 145 psig  
 Electrical connection ..... M12 x 1 (4-pin)  
 Option..... Threaded Orifice



800 Series - Stainless Steel Housing



810 Series - Black Anodized Aluminum Housing