

SERIES 800/810



Switching Output Options Available:

- 2 switching outputs
- 1 switching output and 1 analog output (4...20 mA or 0...10 V)
- 2 switching outputs and 1 analog output (4...20 mA)

The NOSHOK 800 Series Electronic Indicating Pressure Switch/Transmitter provides continuous pressure monitoring and allows the programming of the set points without applying pressure. The set points, contact functions (normally open / normally closed), reset points, contact types (npn / prnp) and switching function (hysteresis / gate) are simple to adjust via the two buttons.

By the use of proven ceramic or thin film sensors, this pressure switch features a high level of repeatability and durability. The turnable display and the optional turnable process connection allow ease of installation and wiring.

SPECIFICATIONS

Pressure Ranges	Standard gauge ranges from -14.5 psig to 30 psig through 0 psig to 9999 psig
Pressure Sensor	Thick film ceramic strain gage for ranges through -15 psig to 1450 psig Sputtered thin film strain gage for all higher pressure ranges
Proof Pressure	2 times Full Scale for ranges Vacuum through 0 psig to 1450 psig. 1.75 times Full scale for ranges 0 psig to 1500 psig through 0 psig to 10000 psig
Burst Pressure	2.5 times Full Scale for ranges Vacuum through 0 psig to 1450 psig. 4 times Full scale for ranges 0 psig to 1500 psig through 0 psig to 10000 psig.
Wetted Materials	Stainless Steel with ceramic sensor and viton seal on ranges through 0 psig to 1450 psig (other sealing materials available upon request) Stainless Steel only for higher pressure ranges.
Housing Material	800-Stainless Steel, 810-Black Anodized Aluminum
Power Supply	12 - 30 Vdc unregulated
Signal Output	4 to 20 mA or 0 to 10 Vdc; programmable and freely adjustable
Switch Points	Individually adjustable via external control keys
Number	1 or 2 (PNP or NPN)
Function	NO/NC; windows - and hysteresis function freely adjustable
Switching rating	0.5 A max
Response time	<10 ms
Accuracy	<1% Full Scale
Display	7-Segment-LED, red 4-digit, height 0.3
Adjustment	Programmable on the display
Switch Point	0.5 to 100% of Full Scale
Hysteresis	0.5 to 99% of Full Scale
Current Consumption	<50 mA (without load)
Accuracy	<0.5% Full Scale (Best Fit Straight Line) ±1 Digit
Hysteresis	<0.2% Full Scale (<0.3 with pressure range <0 psi - 230 psi)
Repeatability	<0.2% Full Scale
Stability	<0.2% Full Scale (<0.3 with pressure range <0 psi - 230 psi)
Temperature Limits 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 Storage	-4°F to 158°F (-20°C to 70°C) -22°F to 176°F (-30°C to 80°C)
Compensated Temp Range	32°F to 176°F (0°C to 80°C)
Thermal Zero Effect	± 0.07% Full Scale/°F
Thermal Span Effect	± 0.07% Full Scale/°F
CE compliance	89/336EWG interference emission and immunity see EN 61 326 97/23/EG Pressure equipment directive, Appendix 1
Vibration	> 10 g according to IEC 60068-2-6
Shock	> 50 g according to IEC 60068-2-27
Electrical Protection	Protected against reverse polarity, overvoltage and short circuit
Environmental Protection	NEMA 4 Per IEC 60529/EN 60529
Durability	>10 million Full Scale Cycles
Weight	Approx 0.62 lbs

FEATURES

- Pressure Ranges from -14.5 psig to 9999 psig
- 330° Rotatable Display-Head
- Integrated Password Protection
- Simple 2-Key Programming
- Four-Digit LED-Display
- Scaleable Analog Output
- Fast Response Time

OPTIONAL FEATURES

- 330° Rotatable Pressure Connection
- Minimum/Maximum Value Memory
- Output Dampening up to 2,000 msec
- Switching Time Delay

APPLICATIONS

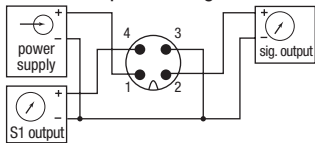
- Hydraulic and Pneumatic Systems
- Molding and Extruding Equipment
- Stamping and Forming Presses
- Pumps and Compressors
- HVAC
- Power Generation
- Transportation Equipment
- Marine

ORDERING INFORMATION					
SERIES 800/810					
SWITCH FUNCTION	1 2 N.O. or 2 N.C. (PNP or NPN)	2 1 N.O. or 1 N.C. (PNP or NPN) with 4 mA to 20 mA Analog Output			
	3 1 N.O. or 1 N.C. (PNP or NPN) with 0 Vdc to 10 Vdc Analog Output	4 2 N.O. or 1 N.C. (PNP or NPN) with 4 mA to 20 mA Analog Output			
PROCESS CONNECTIONS	2 1/4" NPT male	5 1/4" NPT female	8 1/2" NPT male	10 G 1/4 B male	
	11 G1/2B male	19 G1/4B female	45 7/16-20 UNF SAE #4 (Non-Adjustable)		
SWITCH ADJUSTMENT RANGE (MAXIMUM WORK PRESSURE)	-14.5 psig to 30 psig	14.5/30	0 psig to 145 psig	145	0 psig to 3750 psig
	-14.5 psig to 75 psig	14.5/75	0 psig to 300 psig	300	0 psig to 6000 psig
	-14.5 psig to 145 psig	14.5/145	0 psig to 750 psig	750	0 psig to 9000 psig
	0 psig to 30 psig	30	0 psig to 1450 psig	1450	
	0 psig to 75 psig	75	0 psig to 2400 psig	2400	
ELECTRICAL CONNECTIONS	2 M12 x 1 (4-Pin)		3 M12 x 1 (5-Pin), 2 switch and analog output		
OPTIONS	ORF Threaded Orifice	RB Rotatable Base	EH Enhanced Software ¹		

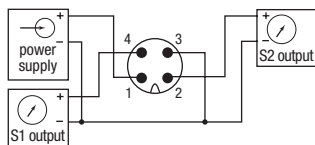
¹Includes Minimum/Maximum Value Memory, Output Dampening, Switching Time Delay

Wiring Diagrams

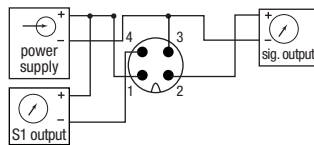
**1 switching output (M12 x 1)
with 4mA to 20 mA Signal
p-switching**



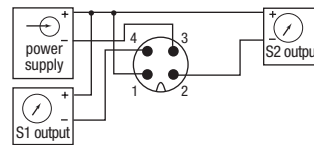
**2 switching output (M12 x 1)
p-switching**



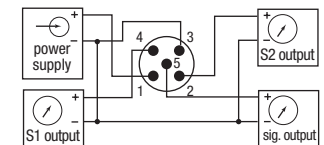
**1 switching output (M12 x 1)
with 4mA to 20 mA Signal
n-switching**



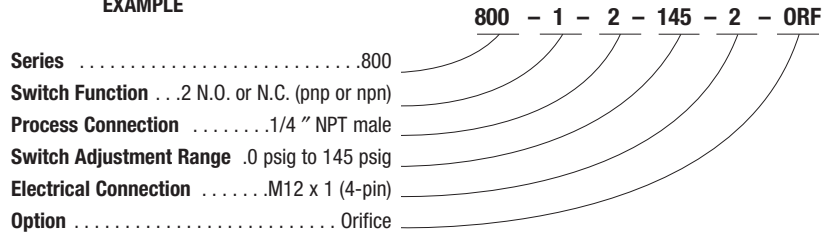
**2 switching output (M12 x 1)
n-switching**



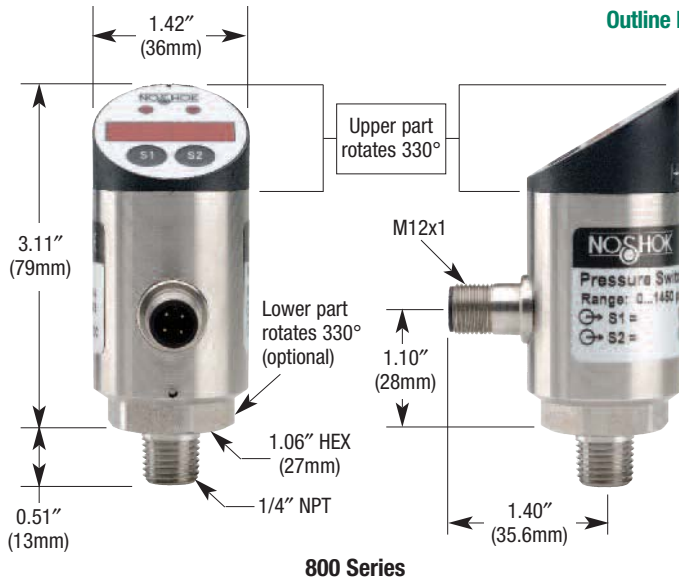
**2 switching output (M12 x 1)
with 4mA to 20 mA Signal
p-switching**



EXAMPLE



Outline Dimensions



**810 Series
Black anodized
Aluminum Housing**