

SERIES 600



FEATURES

- Measuring ranges from 5 PSI through 15,000 PSI including vacuum, compound and absolute.
- Corrosion resistant 316 SS welded construction
- Single or Dual switch setpoint functions
- N.O. or N.C. switching functions
- Positive or negative switching capability
- Programmable, tamperproof setpoints
- High overpressure protection
- Highly resistant to mechanical shock and vibration

APPLICATIONS

- Hydraulic and pneumatic systems
- Industrial machinery and machine tools
- Molding and extruding equipment
- Stamping and forming presses
- Pumps and compressors
- Laboratory and test equipment
- HVAC
- Refrigeration
- Medical
- Water management
- Petrochemical
- Power generation
- Construction equipment
- Transportation equipment
- Marine

The NOSHOK Smart Switch is truly a “State of the Art” pressure switch. Its design is based upon our proven sputtered thin film and diffused semiconductor pressure transmitters for unparalleled accuracy, stability, overpressure protection and service life. Switching is accomplished digitally by means of an internal signal conditioner which means there are never any mechanical contacts to wear out. They are available with either one or two switch functions of either PNP (positive) output or NPN (negative) output in either N.O. (normally open) or N.C. (normally closed) configurations.

Because the adjustments are made digitally; set points and hysteresis are fully adjustable and completely tamperproof.

Programming can be done at the factory or in the field by means of a PC running Windows and using the NOSHOK Smart Switch software and programming hardware.

All wetted areas are 316 SS and are welded with no o-rings, gaskets or seals to leak or fail.

Available pressure ranges are from 0-5 PSIG through 15,000 PSIG including vacuum, compound and absolute ranges.

They also process the highest EMC capabilities along with the highest mechanical shock and vibration resistance available anywhere.

When only the best will do, the NOSHOK Smart Switch is the only choice.

SPECIFICATIONS

Pressure Ranges	0-5 PSI through 0-15,000 PSI including vacuum, compound and absolute	
Proof Pressure	≤ 200 PSI: 3.5x , 300-10,000 PSI: 2x , above 10,000 PSI: 1.5x	
Process Connection	1/4 " NPT standard; 1/2 " NPT optional	
Wetted Parts	316 SS	
Case	304 SS	
Switching Functions	1 or 2 N.O. or N.C. p-or n-switching	
Adjustment	Switching point	0...100% of F.S.
	Hysteresis	1...99% of F.S.
	Dampening	0...500ms
Accuracy	≤ 1% of F.S. (limit point setting) ≤ 0.5% of F.S. (BFSL)	
Repeatability	≤ 0.25% of F.S.	
Stability per Year	≤ ± 0.2% of F.S. in rated conditions	
Power Supply	10...30 VDC, unregulated (>12 VDC for programming mode) Increase time when switching on the supply 50 V/sec.	
Switching Power	1 channel p-switching	4 ADC (max. 30 VDC)
	n-switching	0.3 ADC (max. 30 VDC)
	2 channel p-switching	2 ADC (max. 30 VDC)
	n-switching	0.3 ADC (max. 30 VDC)
Response Time	p-switching	≤ 6 ms
	n-switching	≤ 10 ms
Temperature Compens. Range	32°-175°F/0-80°C	
Temperature Influence	± 0.02% full scale/°F for zero and span	
Temperature Ranges	Storage -40° to 212°F/-40° to 100°C Medium -22° to 212°F/-30° to 100°C Ambient -5° to 175°F/-20° to 80°C	
Electrical Connection	5 pin M12x1, connector	
Environmental Protection	Nema 6, 6P: IP 67 (IEC 529)	
Electromagnetic Capability per IEC 1000 (EN 50081, EN 50082)	ESD Level 2 Fields (RFI) Level 2 Burst Level 3 Surge Level 2 CE Compliant	
Electrical Protection Types	Reverse polarity, overvoltage and short-circuit protection	
Weight	Approximately 0.5 lbs	

ORDERING INFORMATION										
SERIES 600										
SWITCH FUNCTION	1	1 N.O. or N.C. Switch-pnp				3	1 N.O. or N.C. Switch-npn			
	2	2 N.O. or N.C. Switch-pnp				4	2 N.O. or N.C. Switch-npn			
PROCESS CONNECTIONS	2 1/4" NPT Male				8 1/2" NPT Male					
PRESSURE RANGES	0 inHg to 30" vac	30V	30 inHg to 300 psig	30/300	0 psig to 100 psig	100	0 psig to 2000 psig	2000	0 psig to 15 psia	15A
	30 inHg to 15 psig	30/15	30 inHg to 400 psig	40/400	0 psig to 150 psig	150	0 psig to 3000 psig	3000	0 psig to 30 psia	30A
	30 inHg to 30 psig	30/30	0 psig to 5 psig	5	0 psig to 200 psig	200	0 psig to 5000 psig	5000	0 psig to 60 psia	60A
	30 inHg to 60 psig	30/60	0 psig to 10 psig	10	0 psig to 300 psig	300	0 psig to 7500 psig	7500	0 psig to 100 psia	100A
	30 inHg to 100 psig	30/100	0 psig to 15 psig	15	0 psig to 500 psig	500	0 psig to 10000 psig	10000	0 psig to 150 psia	150A
	30 inHg to 150 psig	30/150	0 psig to 30 psig	30	0 psig to 750 psig	750	0 psig to 15000 psig	15000	0 psig to 200 psia	200A
	30 inHg to 200 psig	30/200	0 psig to 60 psig	60	0 psig to 1000 psig	1000			0 psig to 300 psia	300A
PSIG = Gauge Pressure PSIA = Absolute Pressure Other ranges available on special request										
ELECTRICAL CONNECTIONS	3	5 pin M12x1 connector								
OPTIONS	ORF	SS THREADED ORIFICE			note: M12 mating connectors & cordsets are available as separate options. Please refer to price list for details.					

EXAMPLE

Series600
 Switch Function1 N.O. or N.C. Switch npn
 Process Connection1/2" NPT male
 Switch Adjustment Range ...0 psig to 150 psig
 Electrical Connection .5 pin M12 x 1 connection

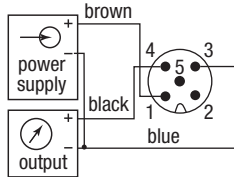
600 - 3 - 8 - 150 - 3

Additional Ordering Information
 Switch Set Point(s) (please specify)
 Set Point Hysteresis (please specify as a % F.S.)

Outline Dimensions

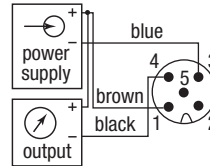


1 switching output
p-switching

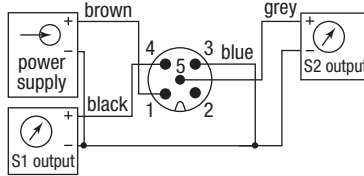


Wiring Diagrams

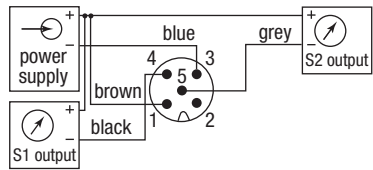
n-switching



2 switching outputs
p-switching

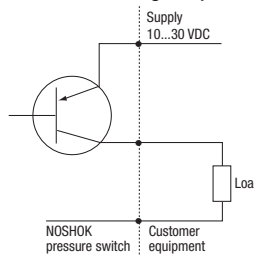


n-switching

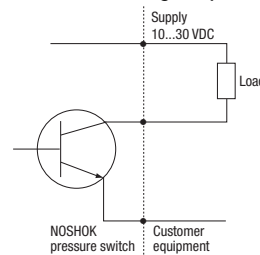


Switching Output Schematic

P-switching output



N-switching output



Connection table for 5 PIN M12x1 connector

Function	Connector M12x1
Power supply: +	1 brown
Power supply: -	3 blue
Switching output: S1	4 black
Switching output: S2	5 grey