



SERIES 600

HEAVY DUTY OEM PRESSURE TRANSDUCERS

NOSHOK Series 600 Pressure Transducers combine high accuracy heavy duty thin film and piezoresistive sensor technology with automated production techniques to offer a durable, affordable OEM pressure transducer.

The high overpressure capability of these transducers and all stainless steel construction ensure their long term reliability in a broad range of applications. Reliability is also enhanced by the high levels of RFI, EMI and ESD protection built into series 600 pressure transducers.

Available in a variety of electrical and process configurations and fully compatible with the 1800, 1900 and 2000 Series Smart Systems Digital Indicators, Series 600 pressure transducers are the ideal choices for heavy duty, high volume applications.

A final electrical output and calibration inspection is performed on all NOSHOK transducers prior to shipment to ensure 100% “out of the box” reliability.

FEATURES

- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- Excellent overpressure protection
- High accuracy & long term stability
- Ranges from 15 psig to 15000 psig
- Standard 1/4" NPT male process connection
- Corrosion resistant stainless steel construction
- CE compliant
- Current & voltage output signals
- Hirschmann or cable electrical connections
- Compatible with NOSHOK 1800, 1900 and 2000 Series Indicators

APPLICATIONS

- Hydraulic and pneumatic systems
- Industrial machinery and machine tools
- Injection molding machines
- Stamping and forming presses
- Pumps and compressors
- Laboratory and test equipment
- Railroad equipment
- HVAC systems
- Medical
- Refrigeration equipment
- Marine
- Power generation
- Construction
- Petrochemical
- Water management

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire, 1 Vdc to 5 Vdc, 3-wire; 1 Vdc to 6 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire
Pressure ranges	Standard gauge ranges from vacuum to 15000 psig; Standard absolute ranges from 15 psia to 150 psia
Proof pressure	3 times Full Scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 1.75 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10000 psi 1.5 times Full Scale for 0 psi to 15000 psi range
Burst pressure	4 times Full Scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 2.6 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10000 psi 3 times Full Scale for 0 psi to 15000 psi range
Accuracy	± 0.5 % Full Scale (Best fit straight line) (Includes the combined effects of linearity, hysteresis and repeatability)
Repeatability	≤ ± 0.2 % Full Scale
Hysteresis	≤ ± 0.1 % Full Scale
Stability	≤ ± 0.5 % Full Scale for 1 year, non accumulating
Power supply	10 Vdc to 30 Vdc, unregulated 14 Vdc to 30 Vdc for 0 Vdc to 10 Vdc output, unregulated
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 1 Vdc to 5 Vdc, 3-wire
Wetted materials	316 stainless steel for vacuum through 300 psi; 17-4PH stainless steel sensing diaphragm and 316 stainless steel pressure connection for higher ranges
Housing materials	316 stainless steel
Temperature ranges	Compensated 32 °F to 175 °F/0 °C to 80 °C Effect ± 0.02 %/°F for zero and span Storage - 40 °F to 212 °F/-40 °C to 100 °C Medium - 22 °F to 212 °F/-30 °C to 100 °C Ambient - 22 °F to 175 °F/-30 °C to 80 °C
Response time	≤ 5 ms (between 10 % to 90 % Full Scale)
Pressure cycle limit	150 Hz
Durability	> 100,000,000 full scale cycles
Environmental protection	NEMA 4X, IP65 (IEC 529)
Electromagnetic rating	CE compliant to EMC norm EN61326: 1997/A1: 1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, overvoltage and short circuit protection
Shock	Less than ± 0.05 % Full Scale effect for 600 g's @ 20 ms on any axis
Vibration	Less than ± 0.01 % Full Scale effect for 15 g's @ 15 Hz to 2000 Hz on any axis
Weight	Approximately 3.5 oz.



Also available with our 1800 Series Attachable Loop Indicator. See page 44 for more information.

ORDERING INFORMATION										
SERIES 600										
PRESSURE RANGES	-30 inHg to 0 psig	30V	0 psig to 150 psig	150	0 psig to 750 psig	750	0 psig to 5000 psig	5000	0 psia to 15 psia	15A
	0 psig to 15 psig	15	0 psig to 200 psig	200	0 psig to 1000 psig	1000	0 psig to 6000 psig	6000	0 psia to 30 psia	30A
	0 psig to 30 psig	30	0 psig to 300 psig	300	0 psig to 1500 psig	1500	0 psig to 7500 psig	7500	0 psia to 60 psia	60A
	0 psig to 60 psig	60	0 psig to 500 psig	500	0 psig to 2000 psig	2000	0 psig to 10000 psig	10000	0 psia to 100 psia	100A
	0 psig to 100 psig	100	0 psig to 600 psig	600	0 psig to 3000 psig	3000	0 psig to 15000 psig	15000	0 psia to 150 psia	150A
psig = Gauge Pressure psia= Absolute Pressure Other ranges available on special request										
ACCURACY	1 ± 0.5 % Full Scale (Best fit straight line)									
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire		3 1 Vdc to 5 Vdc, 3-wire		4 1 Vdc to 6 Vdc, 3-wire		5 0 Vdc to 10 Vdc, 3-wire			
PROCESS CONNECTIONS	1 1/8 " NPT male*		2 1/4 " NPT male		*Not available on pressure ranges less than 60 psi					
ELECTRICAL CONNECTIONS	1 36 " cable (connected to option 8)		8 Hirschmann (DIN EN 175301-803 Form A)							
	14 Hirschmann type with 1/2 " NPT female conduit connection					36 36 " Integral Cable				
OPTIONS	ORF SS Threaded Orifice									

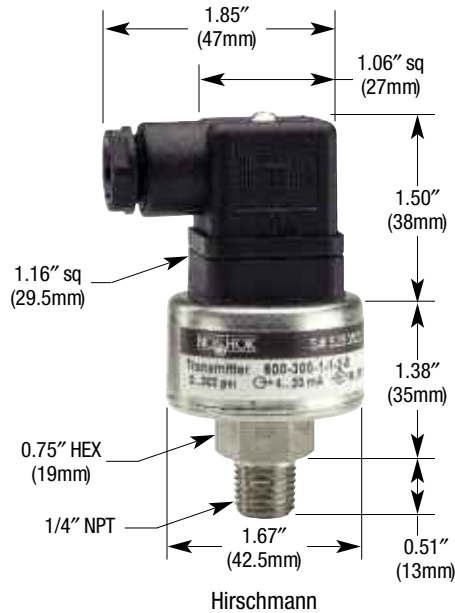
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE

Series600
 Pressure Range1000 psig
 Accuracy± 0.5 %
 Output Signal4 mA to 20 mA, 2-Wire
 Process Connection1/4 " NPT Male
 Electrical ConnectionHirschmann
 OptionOrifice

600 - 1000 - 1 - 1 - 2 - 8 - ORF

Outline Dimensions



2-WIRE WIRING

Wiring	Cable	Hirschmann
+ Supply	Brown (or Red)	1
+ Output	Green (or Black)	2

3-WIRE WIRING

Wiring	Cable	Hirschmann
+ Supply	Brown (or Red)	1
Common	Green (or Black)	2
+ Output	White	3