

# NOSHOK Series 100 Pressure Transmitter

Two-wire, 4-20mA, Vacuum To 15,000 PSIG & PSIA

## DESCRIPTION

The 100 series current output pressure transmitters were designed to provide a previously unequalled level of performance, utilizing Piezo Resistive or Thin film sensor technology dependent on pressure range. 100 Series Transducers are highly accurate, shock resistant and extremely stable over a long period of time. EMC, electromagnetic compatibility, to IEC 1000 has been engineered in as a standard feature along with reverse polarity, overvoltage, and short circuit protection.

Advanced manufacturing techniques combined with technologically advanced standard features allow NOSHOK to offer a level of performance previously found only on transducers costing hundreds of dollars more.

A final electrical output and calibration inspection is performed on all NOSHOK Transducers and Transmitters after final assembly and prior to shipment to insure 100% "out of the box" reliability.

## SPECIFICATIONS

OUTPUT SIGNAL: 4-20 mA, 2 wire

PRESSURE RANGES: Vacuum and compound through 0 - 15000 PSI; gauge and absolute

PROOF PRESSURE: 0-5, 0-10, 0-7500 through 0-15000 PSI: 1.5 times range; 0-15 PSI through 0-6000 PSI: 5 times range

BURST PRESSURE: 0-5, 0-10, 0-7500 through 0-15000 PSI: 2 times range; 0-15 PSI through 0-6000 PSI: 5 times range

ACCURACY: (BSFL or RSS) (includes repeatability, hysteresis and linearity) 0.5% full scale standard 0.25% full scale optional

WETTED MATERIALS: 316 stainless steel for vacuum through 300 psi; 17-4PH stainless steel sensing diaphragm and 316 stainless steel process connection for higher ranges

HOUSING MATERIAL: 316 Stainless Steel

REPEATABILITY: 0.05% full scale

HYSTERISIS: 0.1% full scale

STABILITY: 0.2% full scale per year

INPUT EXCITATION: 12-30 VDC unregulated

TEMPERATURE RANGES COMPENSATED: 32 to 175 °F (0 to 80 °C)

EFFECT: 0.02%/°F

STORAGE: -40 to 212 °F (-40 to 100 °C)

MEDIUM: -22 to 212 °F (-30 to 100 °C)

AMBIENT: -40 to 185 °F (-40 to 85 °C)

RESPONSE TIME: Less than 1 ms (between 10-90% full scale)

PRESSURE CYCLE LIMIT: 150Hz

OPERATING LIFE: 100 million cycles

ADJUSTMENT: 10% full scale of zero and span

ENVIRONMENTAL PROTECTION: NEMA 4x, DIN IP65 (IEC 529)

ELECTROMAGNETIC CAPABILITY: per IEC 1000 4-2 - ESD Level 2

4-3 - Fields (RFI) Level 2, 4-4 - Burst Level 3, 4-5 - Surge Level 2

ELECTRICAL PROTECTION: Reverse polarity, overvoltage and short circuit protection

SHOCK: Less than 0.05% full scale effect or 1000g's @ 20 ms on any axis

VIBRATION Less than 0.05% full scale effect for 30g's @ 5-2000 Hz on any axis

## TO ORDER: 100-A-B-1-C-D

Example: 100-10-1-1-3-7

A=Range

0-30" HgVAC	30V	30/200PSIG	30/20	0-60PSIG	60	0-600PSIG	600	0-5000PSIG	5000	0-15PSIA	15A
30"/15PSIG	30/15	30"/300PSIG	30/300	0-100PSIG	100	0-750PSIG	750	0-6000PSIG	6000	0-30PSIA	30A
30"/30PSIG	30/30	0-5PSIG	5	0-150PSIG	150	0-1000PSIG	1000	0-7500PSIG	7500	0-60PSIA	60A
30"/60PSIG	30/60	0-10PSIG	10	0-200PSIG	200	0-1500PSIG	1500	0-10000PSIG	10000	0-100PSIA	100A
30"/100PSIG	30/100	0-15PSIG	15	0-300PSIG	300	0-2000PSIG	2000	0-15000PSIG	15000	0-150PSIA	150A
30"/150PSIG	30/150	0-30PSIG	30	0-500PSIG	500	0-3000PSIG	3000			0-200PSIA	200A
										0-300PSIA	300A

B=Accuracy

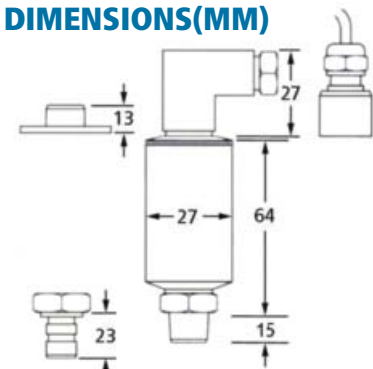
1 ±0.5% 2 ±0.25%

C=Process Connection

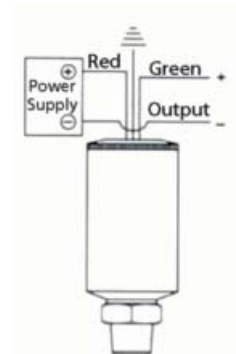
2 1/4" NPT Male 3 7/16"-20 UNF  
OTHER CONNECTIONS ON REQUEST



## DIMENSIONS(MM)



## WIRING



D=Electrical Connection

- 1 36" Cable (connected to option 7)
- 2 4 Pin Bendix
- 3 6 Pin Bendix
- 6 1/2" NPT Conduit (w/36" cable)
- 7 Mini-Hirschmann (w/mating connector)