

NOSHOK Series 615 Pressure Transmitter

High Accuracy, Vacuum To 120,000 PSIG & 300 PSIA

DESCRIPTION

NOSHOK Series 615 Pressure Transducers are designed for heavy duty applications requiring high accuracy and durability. Utilizing diffused semiconductor or sputtered Thin Film technology, these transducers are stable, accurate, shock resistant, and extremely durable.

The durability is coupled with the mechanical integrity of the case, process connection, and wetted parts constructed of corrosion resistant stainless steel.

Available in a wide variety of electrical and process configurations, the Series 615 Pressure Transducers are the choice for heavy duty 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.



SPECIFICATIONS

Output signals:

4mA to 20mA, 2-wire; 1 Vdc to 5Vdc, 1 Vdc to 6Vdc, 1 Vdc to 11 Vdc, 3-wire; 0Vdc to 5Vdc and 0 Vdc to 10 Vdc, 3-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 4-wire

Pressure ranges: Standard gauge ranges from vacuum to 120,000 psig; Standard absolute ranges from 15 psia to 300 psia

Proof pressure: 3 times Full Scale for ranges 0 psi to 2psi through 0 psi to 200 psi

1.75 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi

1.5 times Full Scale for 0 psi to 15,000 psi range

1.2 times Full Scale for ranges 0 psi to 20,000 psi through 0 psi to 120,000 psi

Burst pressure: 3.8 times Full Scale for ranges 0 psi to 2 psi through 0 psi to 200 psi

4 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10,000 psi

3 times Full Scale for 0 psi to 15,000 psi range

1.5 times Full Scale for ranges 0 psi to 20,000 psi through 0 psi to 120,000 psi

Accuracy: $\pm 0.25\%$ Full Scale (best fit straight line); Includes the combined effects of linearity, hysteresis and repeatability; $\pm 0.125\%$ Full Scale (optional)

Repeatability: $\leq \pm 0.05\%$ Full Scale

Hysteresis: $\leq \pm 0.1\%$ Full Scale

Stability: $\leq \pm 0.2\%$ Full Scale for 1 year, nonaccumulating

Power supply: 10Vdc to 30 Vdc for current output, unregulated; 14 Vdc to 30 Vdc for voltage output, unregulated

Load limitations: $\leq (V_{Power} - 10) / 0.020$ Amp for 4mA to 20mA

$\geq 10,000$ Ohms for 0 Vdc to 10Vdc, 3-wire

$\geq 5,000$ Ohms for 0 Vdc to 5Vdc, 3-wire

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

FEATURES

- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- High accuracy and long term stability
- Ranges from vacuum to 120,000 psi
- Corrosion resistant stainless steel construction
- Span and zero adjustments

Hydraulic & Pneumatic Systems

Industrial Machinery

Pumps & Compressors

HVAC

Water Management

Laboratory & Test

Medical Equipment

Railroad Equipment

Marine

Power Generation

Housing materials: 316 stainless steel

Temperature ranges: Compensated 32 °F to 175 °F / 0 °C to 80 °C

Effect: $\pm 0.01\%$ / °F for zero and span

Storage: -40 °F to 212 °F / -40 °C to 100 °C

Media: -20 °F to 212 °F / -30 °C to 100 °C

Ambient: -15 °F to 175 °F / -10 °C to 80 °C

Response time: Less than 1ms

(between 10% and 90% Full Scale)

Durability: >100,000,000 Full Scale cycles

Adjustment: $\pm 10\%$ Full Scale for zero and span

Environmental protection: NEMA4X, IP65 (IEC529)

Electromagnetic rating: CE compliant to EMC norm EN61326:1997/A1:1998 RFI, EMI and ESD protection

Electrical protection: Reverse polarity over voltage and short circuit protection

Shock: Less than $\pm 0.05\%$ Full Scale effect or 1000 g's @ 20 ms on any axis

Vibration: Less than $\pm 0.01\%$ Full Scale effect for 15 g's @ 0 Hz to 2000 Hz on any axis

Weight: Approximately 7.2oz.

DIMENSIONS INCHES (MM)



WIRING

2-Wire Wiring				
	Hirschmann	Cable	M12	Bendix
+ Supply	1	Red	1	A
+ Output	2	Black	3	B

3-Wire Wiring				
	Hirschmann	Cable	M12	Bendix
+ Supply	1	Red	1	A
Common	2	Black	3	B
+ Output	3	White	4	C

TO ORDER: 615-A-B-C-D-E
Example: 615-2-1-1-2-8

A= Range											
Range Code	Range	Range Code	Range	Range Code	Range	Range Code	Range	Range Code	Range	Range Code	Range
30V	-30 in. Hg to 0 PSIG	2	0 to 2 PSIG	150	0 to 150 PSIG	3000	0 to 3,000 PSIG	30000	0 to 30,000 PSIG	15A	0 to 15 PSIA
30/15	-30 in. Hg to 15 PSIG	3	0 to 3 PSIG	200	0 to 200 PSIG	4000	0 to 4,000 PSIG	40000	0 to 40,000 PSIG	30A	0 to 30 PSIA
30/30	-30 in. Hg to 30 PSIG	5	0 to 5 PSIG	300	0 to 300 PSIG	5000	0 to 5,000 PSIG	50000	0 to 50,000 PSIG	60A	0 to 60 PSIA
30/60	-30 in. Hg to 60 PSIG	10	0 to 10 PSIG	500	0 to 500 PSIG	6000	0 to 6,000 PSIG	60000	0 to 60,000 PSIG	100A	0 to 100 PSIA
30/100	-30 in. Hg to 100 PSIG	15	0 to 15 PSIG	600	0 to 600 PSIG	7500	0 to 7,500 PSIG	75000	0 to 75,000 PSIG	150A	0 to 150 PSIA
30/150	-30 in. Hg to 150 PSIG	30	0 to 30 PSIG	750	0 to 750 PSIG	10000	0 to 10,000 PSIG	85000	0 to 85,000 PSIG	200A	0 to 200 PSIA
30/200	-30 in. Hg to 200 PSIG	60	0 to 60 PSIG	1000	0 to 1000 PSIG	15000	0 to 15,000 PSIG	100000	0 to 100,000 PSI	300A	0 to 300 PSIA
30/300	-30 in. Hg to 300 PSIG	100	0 to 100 PSIG	2000	0 to 2000 PSIG	20000	0 to 20,000 PSIG	120000	0 to 120,000 PSIG		

B= Accuracy

1 ±0.5% 2 ±0.25%

C= Output Signals

1 4mA to 20mA, 2-wire 4 1 to 6 Vdc, 3-wire*
2 0 to 5Vdc, 3-wire 5 0 to 10 Vdc, 3-wire
3 1 to 5Vdc, 3-wire 6 1 to 11 Vdc, 3-wire*
*Ranges up to 0 psig to 60000 psig

D= Process Connection

2 1/4" NPT Male 8 1/2" NPT Male
6 9/16"-18 aminco (Std on 30000 to 120000 psig)

E= Electrical Connection

1 36" cable (connected to option 8) 8 Hirschmann (DIN EN175301-803 Form A) 25 M12x14-pin
3 6-pin Bendix 14 Hirschmann type with 1/2" NPT female conduit 36 Integral 36" Cable
6 1/2" NPT conduit w/36" cable