

NOSHOK**Series 625 Intrinsically Safe Pressure Transmitter***Hazardous Environment Approved, Vacuum To 120,000 PSIG & 300 PSIA***DESCRIPTION**

The NOSHOK Series 625 and 626 pressure transmitters combine the reliability and long life of diffused semiconductor and sputtered thin film strain gage sensors with safe electronics for outstanding performance and value. These transmitters were designed for applications that require pressure measurement in hazardous environments. All wetted parts are made of welded stainless steel with no internal O-rings, gaskets or seals.

These transmitters are available with a wide variety of pressure connections, ranges and electrical connections to suit most applications. All units undergo extensive testing during the manufacturing process to ensure that the highest performance is achieved in the demanding environments found in today's applications. The transmitters are available with standard threaded connections and are Factory Mutual and Canadian Standards Association approved. All models incorporate significant levels of RFI, EMI and ESD protection.

**SPECIFICATIONS**

Output signals:

4mA to 20mA, 2-wire

Pressure ranges: Standard gauge ranges from vacuum to 600,000 psig

Proof pressure: 3 times Full Scale for ranges 0 psi to 5 psi through 0 psi to 200 psi

2 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 25,000 psi and 0 psi to 60,000 psi

Burst pressure: 3.8 times Full Scale for ranges 0 psi to 5 psi through 0 psi to 200 psi

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

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

2 times Full Scale for ranges 0 psi to 25,000 psi through 0 psi to 60,000 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 unregulated; Minimum voltage across transmitter connections is 10 Vdc

Load limitations: $\leq (V_{Power} - 10) / 0.020$ Amp

Wetted materials: 316 stainless steel for ranges up through 0 psi to 300 psi, 316 stainless steel with 17-4PH stainless steel diaphragm for ranges 0 psi to 300 psi and higher;

Housing materials: 316 stainless steel

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 Rating: IP65 to IP67 depending upon electrical connection

Electromagnetic rating: Meets EMC norm

EN61326: 1997/A1 1998 RFI, EMI and ESD protected

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

Oil Field

Railroad Equipment

Marine

Power Generation

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

Zero Effect: $\pm 0.011\%$ / °F

Span Effect: $\pm 0.011\%$ / °F

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

Media: -25 °F to 212 °F / -32 °C to 100 °C; -58 °F to 220 °F optional

Ambient: -22 °F to 212 °F / -30 °C to 100 °C; -58 °F to 220 °F optional

Electrical protection: Reverse polarity over voltage and short circuit protection

Shock: 1000 g's according to IEC770 for mechanical shock

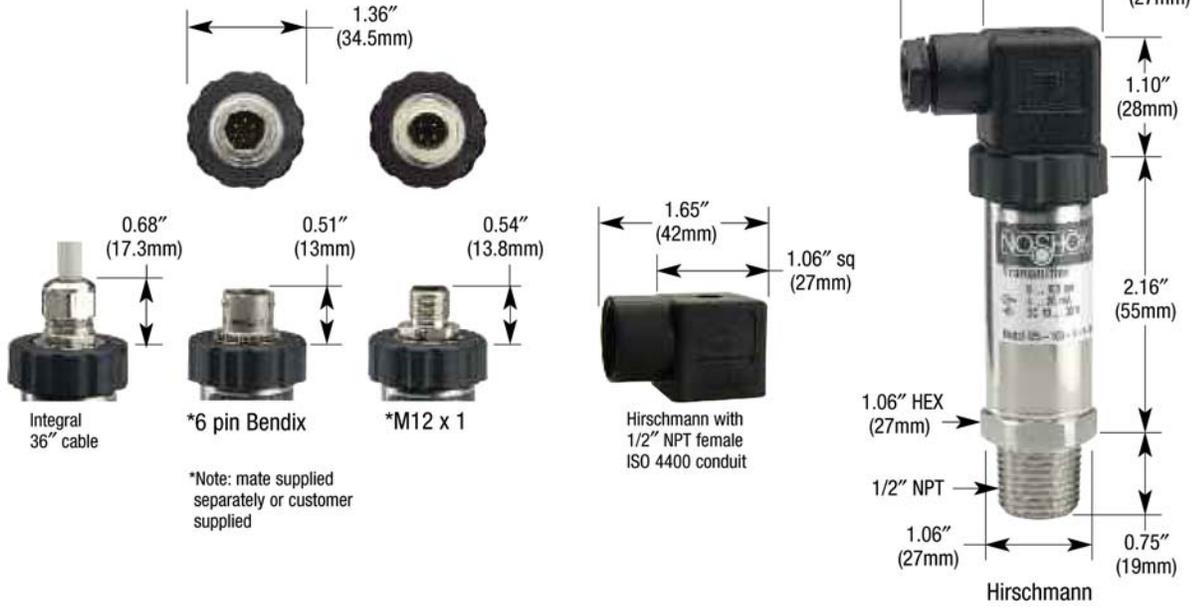
Vibration: 20 g's according to IEC770 under resonance conditions

Hazardous approvals: Factory Mutual and Canadian Standards Association approved as indicated ANSI/ISA-12.27.01-2003, Approved single seal

Intrinsically Safe, entity approval for Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; and Class I, Zone 0 Aex ia IIC Dust Ignition-proof for Class II and III, Division 1, Groups E, F and G Non-incendive for Class I, Division 2, Groups A, B, C and D FMRC 3600, 3610, 3611, 3810 (including supplement #1), ISA-S12.0.01, IEC60529 (including amendment #1)

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

TO ORDER: 625-A-B-C-D-E
 Example: 625-200-1-1-2-8

A= Range									
Range Code	Range	Range Code	Range	Range Code	Range	Range Code	Range	Range Code	Range
50IN	0 to 50 inH ₂ O	2	0 to 2 PSIG	200	0 to 200 PSIG	5000	0 to 5,000 PSIG	15A	0 to 15 PSIA
100IN	0 to 100 inH ₂ O	3	0 to 3 PSIG	300	0 to 300 PSIG	8000	0 to 8,000 PSIG	30A	0 to 30 PSIA
30V	-30 in. Hg to 0 PSIG	5	0 to 5 PSIG	500	0 to 500 PSIG	10000	0 to 10,000 PSIG	60A	0 to 60 PSIA
30/30	-30 in. Hg to 30 PSIG	15	0 to 15 PSIG	750	0 to 750 PSIG	15000	0 to 15,000 PSIG	100A	0 to 100 PSIA
30/60	-30 in. Hg to 60 PSIG	30	0 to 30 PSIG	1000	0 to 1000 PSIG	25000	0 to 25,000 PSIG	150A	0 to 150 PSIA
30/100	-30 in. Hg to 100 PSIG	50	0 to 50 PSIG	1500	0 to 1500 PSIG	40000	0 to 40,000 PSIG	200A	0 to 200 PSIA
30/150	-30 in. Hg to 150 PSIG	100	0 to 100 PSIG	2000	0 to 2000 PSIG	60000	0 to 60,000 PSIG	300A	0 to 300 PSIA
30/200	-30 in. Hg to 200 PSIG	150	0 to 150 PSIG	3000	0 to 3,000 PSIG				

B= Accuracy

1 ±0.5% 2 ±0.25%

C= Output Signals

1 4mA to 20mA, 2-wire

D= Process Connection

2 1/4" NPT Male
 3 7/16"-20 UNF SAE #4 male
 8 1/2" NPT Male

E= Electrical Connection

1 36" cable (connected to option 8) 25 M12x14-pin
 3 6-pin bendix- IP65 36 Integral 36" Cable
 8 Hirschmann (DIN EN175301-803 FormA)
 14 Hirschmann type with 1/2" NPT female conduit