



SERIES 621/622

HAZARDOUS LOCATION PRESSURE TRANSMITTERS

The NOSHOK Series 621 and 622 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 stainless steel and Elgiloy welded with no internal O-rings, gaskets or seals.

These transmitters are available with a wide variety of pressure ranges 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 a standard threaded connection as well as a flush diaphragm configuration and are Factory Mutual approved. All models incorporate significant levels of RFI, EMI and ESD protection.

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; .5 Vdc to 4.5 Vdc, 3-wire
Accuracy	±0.25 % Full Scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Hysteresis	≤ ±0.1 % Full Scale
Repeatability	≤ ±0.05 % Full Scale
Stability	≤ ±0.2 % Full Scale for 1 year, non-accumulating
Pressure ranges	Standard ranges from vacuum to 15000 psi
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	3.8 times Full Scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 4 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
Power supply	10 Vdc to 30 Vdc unregulated, for 4 mA to 20 mA output, 6 Vdc to 30 Vdc for 1 Vdc to 5 Vdc low power and .5 Vdc to 4.5 Vdc low power (≤ 2 mA for Power Supply ≤ 12 Vdc) output, unregulated
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 5 Vdc, 3-wire
Zero/Span offset	≤ 0.5 % Full Scale
Response time	≤ 1 ms (between 10 % and 90 % Full Scale)
Durability	>100,000,000 Full Scale cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Zero effect is ±0.011 % Full Scale/°F Span effect is ±0.011 % Full Scale/°F Ambient -22 °F to 212 °F (-30 °C to 100 °C); -46 °F to 220 °F optional Media -25 °F to 212 °F (-32 °C to 100 °C); -46 °F to 220 °F optional Storage -40 °F to 212 °F (-40 °C to 100 °C)
Wetted materials	Model 621 is 316 stainless steel for ranges up through 0 psi to 300 psi, 316 stainless steel with Elgiloy ranges 0 psig to 500 psig and higher; Model 622 is 316 stainless steel with BUNA N O-ring; (Viton® O-ring optional)
Housing material	316 stainless steel
Environmental rating	NEMA 4x (IP67)
Electromagnetic rating	RFI, EMI and ESD protection
Electrical rating	Reverse polarity, over-voltage and short circuit protected
Shock	1000 g's according to IEC 770 for mechanical shock
Vibration	20 g's according to IEC 770 under resonance conditions
Hazardous approvals	Factory mutual and CSA approved Explosion-proof with entity approve for: Class I, Division 1, Groups A, B, C and D Dust Ignition-proof with entity approval for class II/III, Division 1, Groups E, F and G Maximum electrical ratings 30V, 20 mA ANSI/ISA-12.27.01-2003, Approved single seal
Weight	Approximately 12 oz.

FEATURES

- Accuracy to ±0.25 % Full Scale (BFSL)
- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- Welded 316 stainless steel, and Elgiloy
- 1/2" NPT conduit connection
- NACE MR0175/ISO 15156 compliant
- ANSI/ISA-12.27.01-2003 Approved single seal
- Low power voltage outputs available

APPLICATIONS

- Hydraulic and pneumatic systems
- Pumps and compressors
- Test equipment and systems
- HVAC systems
- Power generation
- Water and wastewater
- Refrigeration equipment
- Laboratory and test equipment
- Chemical/Petrochemical
- Marine
- Pipeline gas compressors
- Oil field
- Offshore

