



621/622 SERIES

- Designed for applications that require pressure measurement in hazardous locations
- Accuracy to $\pm 0.25\%$ full scale (BFSL)
- Wide variety of pressure ranges available
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Available with a standard threaded connection as well as a flush diaphragm configuration
- 1/2" NPT conduit connection
- Welded 316 stainless steel, and Elgiloy construction with no internal o-rings, gaskets or seals Low power voltage outputs available
- Incorporate significant levels of RFI, EMI, and ESD protection
- CE compliant to suppress RFI, EMI, and ESD
- ANSI/ISA-12.27.01-2003 approved single seal
- Factory Mutual & Canadian Standards Association approved
- NACE MR0175/ISO 15156 compliant

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	$\pm 0.25\%$ full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Hysteresis	$\leq \pm 0.1\%$ full scale
Repeatability	$\leq \pm 0.05\%$ full scale
Stability	$\leq \pm 0.2\%$ full scale for 1 year, non-accumulating
Pressure ranges	Standard ranges from vacuum to 15,000 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 10,000 psi 1.5 times full scale for 0 psi to 15,000 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 10,000 psi 3 times full scale for 0 psi to 15,000 psi range
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 6 Vdc to 30 Vdc (0.5 Vdc to 4.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
Load limitations	$\leq (V_{Power}-10)/0.020$ Amp for 4 mA to 20 mA $\geq 10,000 \Omega$ for 1 Vdc to 5 Vdc, 3-wire
Zero/Span offset	$\leq 0.5\%$ 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 $\pm 0.011\%$ full scale/ °F Span effect is $\pm 0.011\%$ 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 NBR o-ring; (FKM o-ring optional)
Housing material	316 stainless steel
Environmental rating	NEMA 4x (IP67)
Electromagnetic rating	2004/108/EEC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations)
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	1,000 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 $\pm 0.25\%$ 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

* Unregulated power supplies

ORDERING INFORMATION						
SERIES	621	Stainless steel threaded connection	622S	316 Stainless steel flush diaphragm	622H	Hastelloy C flush diaphragm
PRESSURE RANGES	30vac	-30 inHg to 0 psig	15	0 psig to 15 psig	500	0 psig to 500 psig
	30/30	-30 inHg to 30 psig	30	0 psig to 30 psig	1000	0 psig to 1,000 psig
	30/60	-30 inHg to 60 psig	60	0 psig to 60 psig	1500	0 psig to 1,500 psig
	30/100	-30 inHg to 100 psig	100	0 psig to 100 psig	2000	0 psig to 2,000 psig
	30/200	-30 inHg to 200 psig	200	0 psig to 200 psig	3000	0 psig to 3,000 psig
			300	0 psig to 300 psig	5000	0 psig to 5,000 psig
		psig = gauge pressure psia = absolute pressure Other ranges available on special request				
		NOTE: Series 622 is available for pressure ranges up to 0 psig to 8,000 psig				
ACCURACY	1	±0.25% full scale (BFSL)				
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	3	1 Vdc to 5 Vdc, 3-wire, low power	31	0.5 Vdc to 4.5 Vdc 3-wire, low power
	2	0 Vdc to 5 Vdc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire		
PROCESS CONNECTIONS	2	1/4" NPT male	11	G1/2B male flush (model 622 only) (pressure ranges 0 psi to 30 psi and higher)	13	G1B male flush (model 622 only) (pressure ranges less than 0 psi to 30 psi)
	8	1/2" NPT male				
ELECTRICAL CONNECTIONS	6	1/2" NPT male conduit with 6' integral cable			37	1/2" NPT Male conduit with 6' flying leads with epoxy seal
OPTIONS	ORF	Threaded Orifice (model 621 only)	20	20' cable/lead (attached to options 6 or 37)	30	30' cable/lead (attached to options 6 or 37)

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

EXAMPLE

Series 621
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale
 Output signal 4 mA to 20 mA
 Process connection 1/2" NPT Male
 Electrical connection Integral cable
 Option Threaded orifice

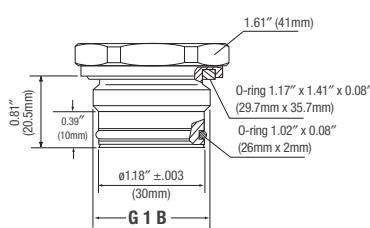
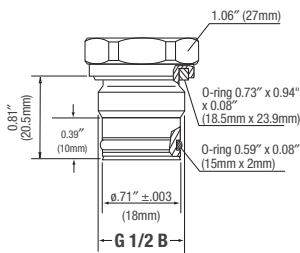
621 - 500 - 1 - 1 - 8 - 6 - ORF

Outline Dimensions

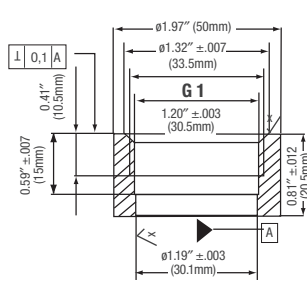
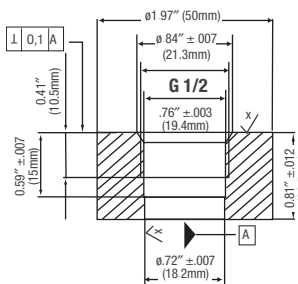
Front flush process connections

For ranges 0 psi to 30 psi and higher

For ranges less than 0 psi to 30 psi



Flush corresponding port weld-on adapters



2-WIRE WIRING

+ Supply	Red
+ Output	Black

3-WIRE WIRING

+ Supply	Red
Common	Black
+ Output	Brown