

Explosion-Proof



621/622 SERIES

- Vacuum and compound ranges through 0 psig to 15,000 psig; absolute ranges from 0 psia to 15 psia through 0 psia to 100 psia
- Current and voltage outputs available
- 316 stainless steel and Elgiloy wetted parts
- Factory Mutual and Canadian Standards Association approved
- CE compliant to suppress RFI, EMI and ESD
- NACE MR0175/ISO 15156 compliant
- NSI/ISA-12.27.01-2003 approved single seal

APPLICATIONS

- Chemical processing
- Gas pressure measurement
- Oil field & offshore
- Mining
- Well head measurement

NOSHOK 621 and 622 Series transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:
 Explosion-proof with entity approval 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.
 CE compliant with pressure equipment directive 97/23EC.
 ANSI/ISA-12.27.01-2003, Approved single seal.

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc, 3-wire	
Pressure ranges	Vacuum through 0 psi to 15,000 psi Absolute from 0 psia to 15 psia through 0 psia to 100 psia	
Accuracy	±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)	
Stability	≤±0.2% full scale for 1 year, non-accumulating	
Response time	≤1 ms (between 10% and 90% full scale)	
Service life	>100,000,000 load cycles	
Temperature ranges	Compensated	32 °F to 176 °F (0 °C to 80 °C)
	Zero effect	±0.011% full scale/ °F
	Span effect	±0.011% full scale/ °F
	Media	T6: -40 °F to 131 °F (-40 °C to 55 °C) T5: -40 °F to 158 °F (-40 °C to 70 °C) T4: -40 °F to 212 °F (-40 °C to 100 °C)
	Ambient	T6: -40 °F to 140 °F (-40 °C to 60 °C) T5: -40 °F to 167 °F (-40 °C to 75 °C) T4: -40 °F to 221 °F (-40 °C to 105 °C)
Storage	-40 °F to 221 °F (-40 °C to 105 °C)	
Power requirement*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)	
	6 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire, 0.5 Vdc to 4.5 Vdc, 3-wire)	
	14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)	
Load limitations	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 5 Vdc, 3-wire	
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	
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	
Measuring element	621 Series 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; 622 Series is 316 stainless steel with NBR o-ring; (FKM o-ring optional)	
Connection	316 stainless steel	
Housing material	316 stainless steel	
Environmental rating	IP67	
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection	
Electrical protection	Reverse polarity, over-voltage and short circuit protected	
Shock	1,000 g's according to IEC 60068-2-27	
Vibration	20 g's according to IEC 60068-2-6	
Weight	Approximately 12 oz.	

* Unregulated

ORDERING INFORMATION				
SERIES	621 Stainless steel threaded connection	622 316 Stainless steel flush diaphragm	622H Hastelloy C flush diaphragm	
PRESSURE RANGES	30vac -30 inHg to 0 psig 30/30 -30 inHg to 30 psig 30/60 -30 inHg to 60 psig 30/100 -30 inHg to 100 psig 30/160 -30 inHg to 160 psig 30/200 -30 inHg to 200 psig 30/300 -30 inHg to 300 psig	5 0 psig to 5 psig 10 0 psig to 10 psig 15 0 psig to 15 psig 30 0 psig to 30 psig 60 0 psig to 60 psig 100 0 psig to 100 psig 200 0 psig to 200 psig	300 0 psig to 300 psig 500 0 psig to 500 psig 1000 0 psig to 1,000 psig 1500 0 psig to 1,500 psig 2000 0 psig to 2,000 psig 3000 0 psig to 3,000 psig 5000 0 psig to 5,000 psig	6000 0 psig to 6,000 psig 8000 0 psig to 8,000 psig 10000 0 psig to 10,000 psig 15000 0 psig to 15,000 psig 15A 0 psia to 15 psia 100A 0 psia to 100 psia
	psig = gauge pressure psia = absolute pressure	Other ranges available on request	Note: 622 Series 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 2 0 Vdc to 5 Vdc, 3-wire	3 1 Vdc to 5 Vdc, 3-wire, low power 5 0 Vdc to 10 Vdc, 3-wire	31 0.5 Vdc to 4.5 Vdc 3-wire, low power	
PROCESS CONNECTIONS	2 1/4" NPT male 8 1/2" NPT male	11 G 1/2 B* 13 G 1 B (622 Series only, <30 psig)		
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	ST8 Threaded Orifice (621 Series only)	20 20' Cable/lead (attached to electrical connection 6 or 37)	30 30' Cable/lead (attached to electrical connection 6 or 37)	

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

* 622 Series only, G 1/2 B Flush (≥ 30 psig).

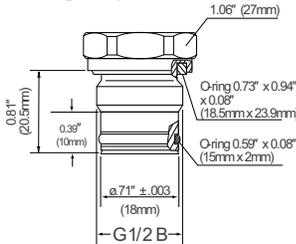
EXAMPLE

Series 621 Series
 Pressure range 0 psig to 500 psig
 Accuracy ±0.25% full scale (BFSL)
 Output signal 4 mA to 20 mA, 2-wire
 Process connection 1/2" NPT Male
 Electrical connection 1/2" NPT Male conduit with 6' integral cable
 Option Threaded Orifice

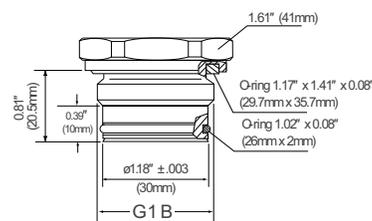
621 - 500 - 1 - 1 - 8 - 6 - ST8

Front flush process connections

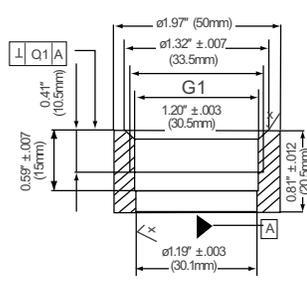
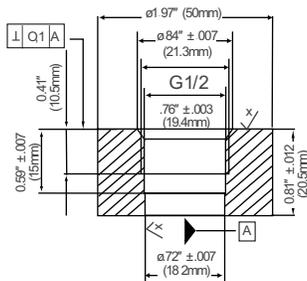
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



Flush corresponding port weld-on adapters



2-WIRE WIRING

+ Supply	Red
+ Output	Black
Ground	Gray

3-WIRE WIRING

+ Supply	Red
Common	Black
+ Output	Brown
Ground	Gray