Explosion-Proof

FM APPROVED

C SP US

NOSHOK



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
- NACE MR0175/ISO 15156 compliant
- ANSI/ISA-12.27.01 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 approved 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, 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 Zero effect Span effect	32 °F to 176 °F (0 °C to 80 °C) ±0.011% full scale/ °F ±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) 5 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	≤ (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/NEMA 4x	
Electromagnetic rating	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

⚠ **WARNING:** This product can expose you to chemicals including Lead and Nickel, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

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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	**5**	0 psig to 5 psig	**300**	0 psig to 300 psig	**6000** 0 psig to 6,000 psig
	30/30	-30 inHg to 30 psig	**10**	0 psig to 10 psig	**500**	0 psig to 500 psig	**8000** 0 psig to 8,000 psig
	30/60	-30 inHg to 60 psig	**15**	0 psig to 15 psig	**1000**	0 psig to 1,000 psig	**10000** 0 psig to 10,000 psig
	30/100	-30 inHg to 100 psig	**30**	0 psig to 30 psig	**1500**	0 psig to 1,500 psig	**15000** 0 psig to 15,000 psig
	30/160	-30 inHg to 160 psig	**60**	0 psig to 60 psig	**2000**	0 psig to 2,000 psig	**15A** 0 psia to 15 psia
	30/200	-30 inHg to 200 psig	**100**	0 psig to 100 psig	**3000**	0 psig to 3,000 psig	**100A** 0 psia to 100 psia
	30/300	-30 inHg to 300 psig	**200**	0 psig to 200 psig	**5000**	0 psig to 5,000 psig	
	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	**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**	G 1/2 B *			
	8	1/2″ NPT male	**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.

* 621 series G1/2B, 622 Series G ½ B Flush (≥30 psig).

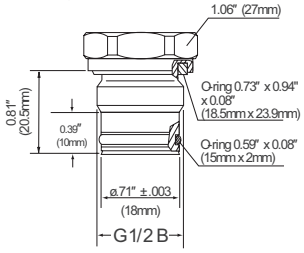
EXAMPLE

621 – 500 – 1 – 1 – 8 – 6 – ST8

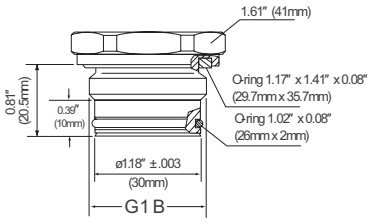
Series ..... 621 Series
Pressure range ..... 0 psig to 500 psig
Accuracy ..... ±0.25% full scale (BFSL)
Output signal ..... 4 mA to 20 mA, 2-wire
Process connection ..... 1/2" NPT Male
Electrical connection ..... 1/2" NPT Male conduit with 6' integral cable
Option ..... Threaded Orifice

Front flush process connections

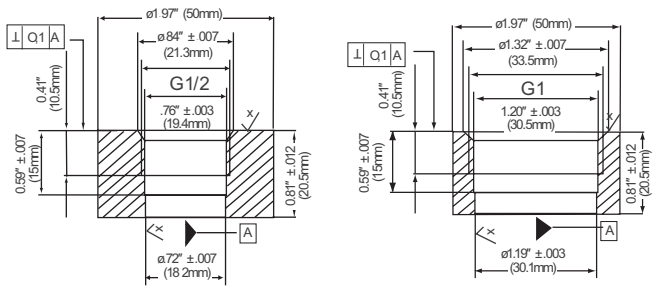
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



Flush corresponding port weld-on adapters





2-WIRE WIRING

V+	Red
V-	Black
Ground	Gray

3-WIRE WIRING

V+	Red
Common	Black
Output	Brown
Ground	Gray