

# 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
- 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 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.

CE compliant with pressure equipment directive 2014/68/EU.

ANSI/ISA-12.27.01, Approved single seal.

### SPECIFICATIONS

<b>Output signals</b>	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc, 3-wire
<b>Pressure ranges</b>	Vacuum through 0 psi to 15,000 psi Absolute from 0 psia to 15 psia through 0 psia to 100 psia
<b>Accuracy</b>	±0.25% full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
<b>Stability</b>	≤±0.2% full scale for 1 year, non-accumulating
<b>Response time</b>	≤1 ms (between 10% and 90% full scale)
<b>Service life</b>	>100,000,000 load cycles
<b>Temperature ranges</b>	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)
<b>Power requirement*</b>	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)
<b>Load limitations</b>	≤ (VPower-10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 1 Vdc to 5 Vdc, 3-wire
<b>Proof pressure</b>	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
<b>Burst pressure</b>	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
<b>Measuring element</b>	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)
<b>Connection</b>	316 Stainless Steel
<b>Housing material</b>	316 Stainless Steel
<b>Environmental rating</b>	IP67
<b>Electromagnetic rating</b>	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
<b>Electrical protection</b>	Reverse polarity, over-voltage and short circuit protected
<b>Shock</b>	1,000 g's according to IEC 60068-2-27
<b>Vibration</b>	20 g's according to IEC 60068-2-6
<b>Weight</b>	Approximately 12 oz.

\* Unregulated

ORDERING INFORMATION				
<b>SERIES</b>	<b>621</b> Stainless Steel threaded connection	<b>622</b> 316 Stainless Steel flush diaphragm	<b>622H</b> Hastelloy C flush diaphragm	
<b>PRESSURE RANGES</b>	<b>30vac</b> -30 inHg to 0 psig	<b>5</b> 0 psig to 5 psig	<b>300</b> 0 psig to 300 psig	<b>6000</b> 0 psig to 6,000 psig
	<b>30/30</b> -30 inHg to 30 psig	<b>10</b> 0 psig to 10 psig	<b>500</b> 0 psig to 500 psig	<b>8000</b> 0 psig to 8,000 psig
	<b>30/60</b> -30 inHg to 60 psig	<b>15</b> 0 psig to 15 psig	<b>1000</b> 0 psig to 1,000 psig	<b>10000</b> 0 psig to 10,000 psig
	<b>30/100</b> -30 inHg to 100 psig	<b>30</b> 0 psig to 30 psig	<b>1500</b> 0 psig to 1,500 psig	<b>15000</b> 0 psig to 15,000 psig
	<b>30/160</b> -30 inHg to 160 psig	<b>60</b> 0 psig to 60 psig	<b>2000</b> 0 psig to 2,000 psig	<b>15A</b> 0 psia to 15 psia
	<b>30/200</b> -30 inHg to 200 psig	<b>100</b> 0 psig to 100 psig	<b>3000</b> 0 psig to 3,000 psig	<b>100A</b> 0 psia to 100 psia
	<b>30/300</b> -30 inHg to 300 psig	<b>200</b> 0 psig to 200 psig	<b>5000</b> 0 psig to 5,000 psig	
	psig = gauge pressure    psia = absolute pressure    Other ranges available on request		<b>Note:</b> 622 Series is available for pressure ranges up to 0 psig to 8,000 psig	
<b>ACCURACY</b>	<b>1</b> ±0.25% full scale (BFSL)			
<b>OUTPUT SIGNALS</b>	<b>1</b> 4 mA to 20 mA, 2-wire	<b>3</b> 1 Vdc to 5 Vdc, 3-wire, low power	<b>31</b> 0.5 Vdc to 4.5 Vdc 3-wire, low power	
	<b>2</b> 0 Vdc to 5 Vdc, 3-wire	<b>5</b> 0 Vdc to 10 Vdc, 3-wire		
<b>PROCESS CONNECTIONS</b>	<b>2</b> 1/4" NPT male	<b>11</b> G 1/2 B *		
	<b>8</b> 1/2" NPT male	<b>13</b> G 1 B (622 Series only, <30 psig)		
<b>ELECTRICAL CONNECTIONS</b>	<b>6</b> 1/2" NPT male conduit with 6' integral cable		<b>37</b> 1/2" NPT male conduit with 6' flying leads with epoxy seal	
<b>OPTIONS</b>	<b>ST8</b> Threaded Orifice (621 Series only)	<b>20</b> 20' Cable/lead (attached to electrical connection 6 or 37)	<b>30</b> 30' Cable/lead (attached to electrical connection 6 or 37)	

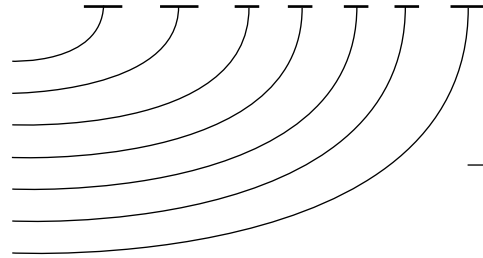
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

\* 621 series G1/2B, 622 Series G 1/2 B Flush (≥30 psig).

### EXAMPLE

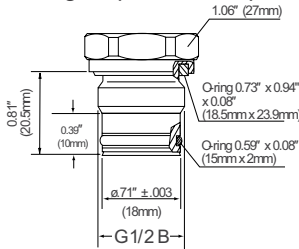
Series ..... 621 Series  
 Pressure range ..... 0 psig to 500 psig  
 Accuracy ..... ±0.25% full scale (BFSL)  
 Output signal ..... 4 mA to 20 mA, 2-wire  
 Process connection ..... 1/2" NPT Male  
 Electrical connection ..... 1/2" NPT Male conduit with 6' integral cable  
 Option ..... Threaded Orifice

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

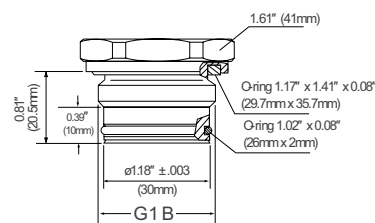


### Front flush process connections

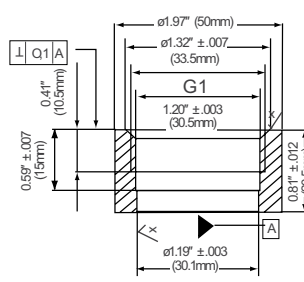
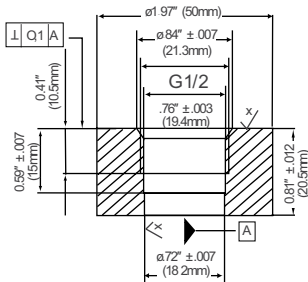
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



### Flush corresponding port weld-on adapters



### 2-WIRE WIRING

V+	Red
V-	Black
Ground	Gray

### 3-WIRE WIRING

V+	Red
Common	Black
Output	Brown
Ground	Gray