



## 623/624 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 approved single seal

### APPLICATIONS

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

**NOSHOK 623 and 624 Series transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:**

Non-Incendive for: Class I, Division 2, Groups A, B, C and D.I.P.; Class II, Division 1, Groups E, F and G Maximum ratings 30 Vdc, 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 low power, 3-wire; 0.5 Vdc to 4.5 Vdc low power, 3-wire
<b>Pressure ranges</b>	Vacuum through 0 psig to 15,000 psig Absolute 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 is ±0.011% full scale/ °F within compensated range Span effect is ±0.011% full scale/ °F within compensated range Media -40 °F to 212 °F (-40 to 100 °C) Ambient -22 °F to 176 °F (-30 °C to 80 °C) Storage -22 °F to 212 °F (-30 °C to 100 °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, 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 range
<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>	623 Series is 316 Stainless Steel for ranges up through 0 psi to 300 psi, 316 Stainless Steel and Elgiloy for ranges 0 psig to 500 psig and higher; 624 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>	IP65 to IP67 dependent upon electrical connection
<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>	1000 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>623</b> Stainless Steel threaded connection			<b>624</b> 316 Stainless Steel flush diaphragm *	
<b>PRESSURE RANGES</b>	<b>30vac</b> -30 inHg to 0 psig	<b>30</b> 0 psig to 30 psig	<b>500</b> 0 psig to 500 psig	<b>6000</b> 0 psig to 6,000 psig	
	<b>30/30</b> -30 inHg to 30 psig	<b>60</b> 0 psig to 60 psig	<b>1000</b> 0 psig to 1,000 psig	<b>8000</b> 0 psig to 8,000 psig	
	<b>30/60</b> -30 inHg to 60 psig	<b>100</b> 0 psig to 100 psig	<b>1500</b> 0 psig to 1,500 psig	<b>10000</b> 0 psig to 10,000 psig	
	<b>30/100</b> -30 inHg to 100 psig	<b>200</b> 0 psig to 200 psig	<b>2000</b> 0 psig to 2,000 psig	<b>15000</b> 0 psig to 15,000 psig	
	<b>15</b> 0 psig to 15 psig	<b>300</b> 0 psig to 300 psig	<b>3000</b> 0 psig to 3,000 psig	<b>15A</b> 0 psia to 15 psia	
	psig = gauge pressure    psia = absolute pressure    Other ranges available on request		<b>5000</b> 0 psig to 5,000 psig	<b>100A</b> 0 psia to 100 psia	<b>Note:</b> 624 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>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 (624 Series only, <30 psig)			
<b>ELECTRICAL CONNECTION</b>	<b>6</b> 1/2" NPT male conduit with 6' integral cable				
<b>OPTION</b>	<b>ST8</b> Threaded Orifice (623 Series only)				

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

\* Hastelloy flush diaphragm available upon request.  
 \*\* 624 Series only, G 1/2 B Flush (≥ 30 psig).

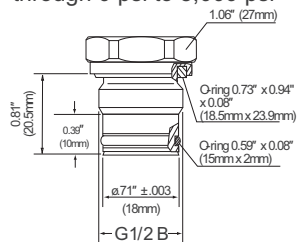
### EXAMPLE

Series .....623 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

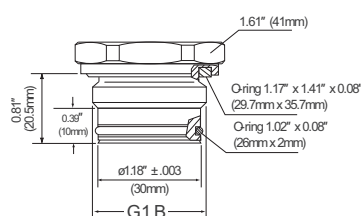
623 - 500 - 1 - 1 - 8 - 6 - ST8

### Front flush process connections

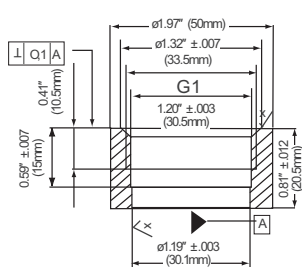
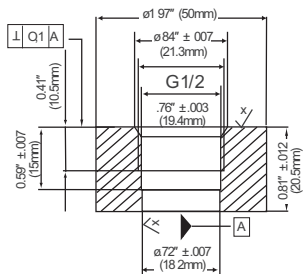
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



For ranges 0 to 30 psi and below



### Flush corresponding port weld-on adapters



### 2-WIRE WIRING

V+	Brown
V-	Green

### 3-WIRE WIRING

V+	Brown
Common	Green
Output	White