



## 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



**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](http://www.P65Warnings.ca.gov)

ORDERING INFORMATION							
SERIES	623 Stainless Steel threaded connection			624 316 Stainless Steel flush diaphragm *			
PRESSURE RANGES	30vac -30 inHg to 0 psig	30	0 psig to 30 psig	500	0 psig to 500 psig	6000	0 psig to 6,000 psig
	30/30 -30 inHg to 30 psig	60	0 psig to 60 psig	1000	0 psig to 1,000 psig	8000	0 psig to 8,000 psig
	30/60 -30 inHg to 60 psig	100	0 psig to 100 psig	1500	0 psig to 1,500 psig	10000	0 psig to 10,000 psig
	30/100 -30 inHg to 100 psig	200	0 psig to 200 psig	2000	0 psig to 2,000 psig	15000	0 psig to 15,000 psig
	15 0 psig to 15 psig	300	0 psig to 300 psig	3000	0 psig to 3,000 psig	15A	0 psia to 15 psia
				5000	0 psig to 5,000 psig	100A	0 psia to 100 psia
	psig = gauge pressure psia = absolute pressure		Other ranges available on request	Note: 624 Series is available for pressure ranges up to 0 psig to 8,000 psig			
ACCURACY	1 $\pm 0.25\%$ 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				
PROCESS CONNECTIONS	2 1/4" NPT male	11 G 1/2 B **					
	8 1/2" NPT male	13 G 1 B (624 Series only, <30 psig)					
ELECTRICAL CONNECTION	6 1/2" NPT male conduit with 6' integral cable						
OPTION	ST8 Threaded Orifice (623 Series only)						

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

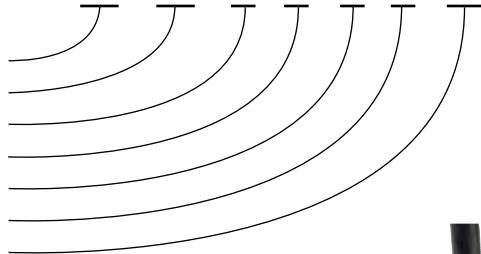
\* Hastelloy flush diaphragm available upon request.

\*\* 623 series G1/2B, 624 Series G 1/2 B Flush (<30 psig).

## EXAMPLE

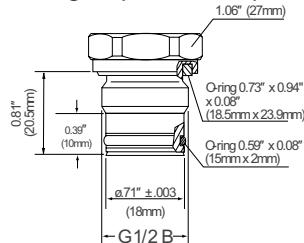
Series ..... 623 Series  
 Pressure range ..... 0 psig to 500 psig  
 Accuracy .....  $\pm 0.25\%$  full scale (BFSL)  
 Output signal ..... 4 mA to 20 mA, 2-wire  
 Process connection ..... 1/2" NPT Male  
 Electrical connection ..... 1/2" NPT Male conduit with 6' integral cable  
 Option ..... Threaded Orifice

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

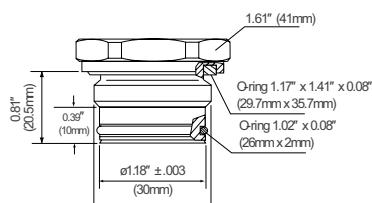


### Front flush process connections

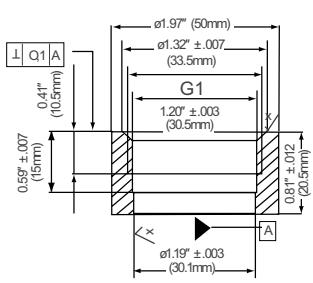
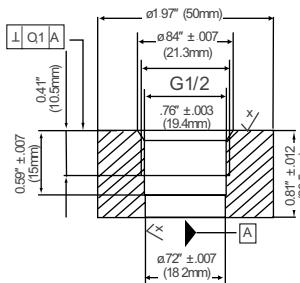
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



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