

Non-Incendive Pressure Transmitters



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

Output signals	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
Pressure ranges	Vacuum through 0 psig to 15,000 psig Absolute 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 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)
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 range
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	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
Connection	316 Stainless Steel
Housing material	316 Stainless Steel
Environmental rating	IP65 to IP67 dependent upon electrical connection
Electromagnetic rating	CE compliant to EMC norm EN 61326:2014/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protected
Shock	1000 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	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 ±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		
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.

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

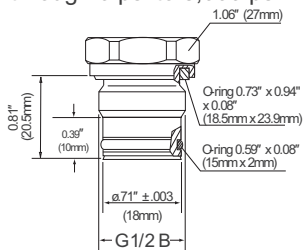
EXAMPLE

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

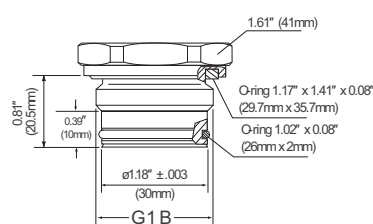
623 - 500 - 1 - 1 - 8 - 6 - ST8

Front flush process connections

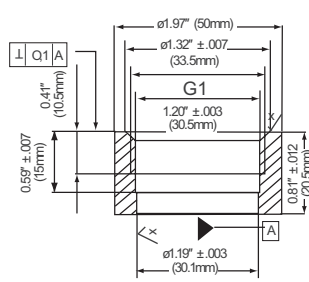
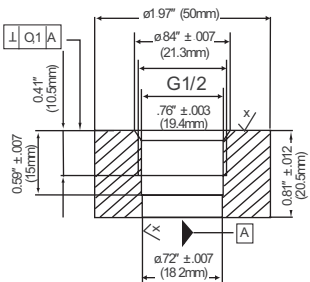
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



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