

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
- 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 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.

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	IP67/NEMA 4x
Electromagnetic rating	Built to suppress 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



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

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
	30/30	-30 inHg to 30 psig	60	0 psig to 60 psig
	30/60	-30 inHg to 60 psig	100	0 psig to 100 psig
	30/100	-30 inHg to 100 psig	200	0 psig to 200 psig
	15	0 psig to 15 psig	300	0 psig to 300 psig
		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)	31	0.5 Vdc to 4.5 Vdc, 3-wire, low power
OUTPUT SIGNALS	1	4 mA to 20 mA, 2-wire	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).

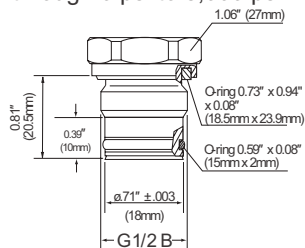
EXAMPLE

Series623 Series
 Pressure range0 psig to 500 psig
 Accuracy±0.25% full scale (BFSL)
 Output signal4 mA to 20 mA, 2-wire
 Process connection1/2" NPT Male
 Electrical connection1/2" NPT Male conduit with 6' integral cable
 Option Threaded Orifice

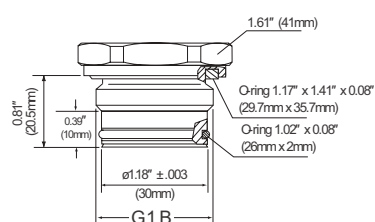
623 - 500 - 1 - 1 - 8 - 6 - ST8

Front flush process connections

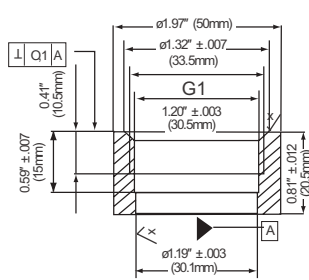
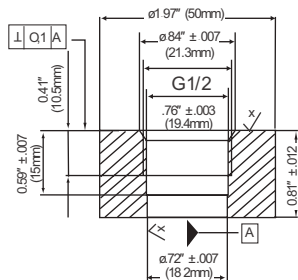
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi



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