# Hazardous Location Pressure Transmitters Explosion-Proof





## **APPLICATIONS**

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

#### NOSHOK 621 and 622 Sereis transmitters are Factory Mutual and Canadian Standards Association approved for use in hazardous location applications as follows:

Explosion-proof with entity approve 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 97/23EC. ANSI/ISA-12.27.01-2003, Approved single seal.

# 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
- · Factory Mutual and Canadian Standards Association approved
- · CE compliant to suppress RFI, EMI and ESD
- NACE MR0175/ISO 15156 compliant
- NSI/ISA-12.27.01-2003 approved single seal

SPECIFICATIONS							
Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc, 3-wire						
Pressure ranges	Vacuum through 0 psi to 15,000 psi						
Tressure runges	Absolute from 0 psia to 15 psia 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)						
Pressure cycle limit	150 Hz						
Durability	>100,000,000 full scale cycles						
Temperature ranges	Compensated Zero effect Span effect	32 °F to 176 °F (0 °C to 80 °C) ±0.011% full scale/ °F ±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)					
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						
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	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)						
Connection	316 stainless steel						
Housing material	316 stainless steel						
Environmental rating	IP67						
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection						
Electrical protection	Reverse polarity, o	ver-voltage and short circuit protected					
Shock	1,000 g's according to IEC 60068-2-27						
Vibration	20 g's according to IEC 60068-2-6						
Weight	Approximately 12 oz.						

621/622 SERIES ORDERING INFORMATION

DIMENSIONS

ORDERING INFORMATION									
SERIES	621	Stainless ste threaded cor		622	316 Stainless steel flush diaphragm	622H	Hastelloy C flush diaphragm		
PRESSURE	30vac	-30 inHg to (	) psig	15	0 psig to 15 psig	500	0 psig to 500 psig	6000	0 psig to 6,000 psig
RANGES	30/30	-30 inHg to 3	30 psig	30	0 psig to 30 psig	1000	0 psig to 1,000 psig	8000	0 psig to 8,000 psig
	30/60	-30 inHg to 6	60 psig	60	0 psig to 60 psig	1500	0 psig to 1,500 psig	10000	0 psig to 10,000 psig
	30/100	-30 inHg to 1	100 psig	100	0 psig to 100 psig	2000	0 psig to 2,000 psig	15000	0 psig to 15,000 psig
	30/200	-30 inHg to 2	200 psig	200	0 psig to 200 psig	3000	0 psig to 3,000 psig	15A	0 psia to 15 psia
				300	0 psig to 300 psig	5000	0 psig to 5,000 psig	100A	0 psia to 100 psia
	psig = gau	ige pressure	psia = absolute pre	essure Othe	er ranges available on request	Note: 6	22 Series is available for	pressure ranges up t	o 0 psig to 8,000 psig
ACCURACY	1	±0.25% full s	scale (BFSL)						
OUTPUT SIGNALS	1	4 mA to 20 n	nA, 2-wire	3	1 Vdc to 5 Vdc, 3-wire, low	w power 31	0.5 Vdc to 4.5 Vdc 3-	wire, low power	
	2	0 Vdc to 5 Vd	dc, 3-wire	5	0 Vdc to 10 Vdc, 3-wire				
PROCESS CONNECTIONS	2	1/4" NPT ma	ile	11	G1/2B male flush (622 Se	eries only) (press	ure ranges 0 psi to 30	psi through 0 psi to	o 8,000 psi)
	8	1/2" NPT ma	ale	13	G1B male flush (622 Serie	es only) (pressur	e ranges 0 psi to 30 ps	i and below)	
ELECTRICAL CONNECTIONS	6	1/2" NPT ma	ale conduit with 6' in	ntegral cable		37	1/2" NPT male condu	it with 6' flying lead	ls with epoxy seal
OPTIONS	ST8	Threaded Or (621 Series		20	20' Cable/lead (attached to electrical connection 6 or 37)	30	30' Cable/lead (attached to electrica connection 6 or 37)	I	

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

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EXAMPLE	621	- <u>500</u> - <u>1</u> - <u>1</u> - <u>8</u> - <u>6</u>	- <u>ST8</u>	
Series Pressure range Accuracy Output signal Process connection	0 psig to 500 psig ±0.25% full scale (BFSL) 4 mA to 20 mA, 2-wire 1/2" NPT Male conduit with 6' integral cable			0.61" (15.5 mm) 1.42" (36 mm) 0.75"
Front flush proce	ess connections			(19 mm)
For ranges 0 psi to 30 psi through 0 psi to 8,000 psi	For ranges 0 to 30 psi and below	1/2" NP		
Cring 0.73" x 0.94" x 0.06" (18.5mm x 23.9mm) - G1/2 B-	Cring 1.17" x1.41" x0.00" (29.7mm x35.7mm) Oring 1.02" x0.06" (20mm x2mm) Gamma 20mm (20mm x2mm) Gamma 20mm	1.06" HE e <sup>r</sup> (27 mm		2.56" (65 mm)
Rush corresponding po	rt weld-on adapters	1.06" HE (27 mm 1/2" NP1		
$\begin{array}{c} & & \\ \hline 1 & 01 & A \\ & & \\ & $	1  Q1  A 1  Q1  A 1  G1  A 1  G1  A 1  G1  A $1 \text{ G1} \text{ G1} \text{ G2} \pm .007$ $1 \text{ G3} \pm .007$ 1		1.06" 27 mm)	→ 0.75" (19 mm)
(19.4mm) X	(30.5mm)	2-WIRE WIRING	3-WIRE	WIRING
0.557 ± 007 (15mm) 0.577 ± 002 (20.5mm)	0.85 ± 007 (150 ± 0.012 0.087 ± 0.012 0.087 ± 0.012	+ Supply Red	+ Supply	Red
		+ Output Black	Common	Black
<× ▲ A a.72″±.007	x g1.19" ±.003	Ground Gray	+ Output	Brown
← (18 2mm) →	←(00.1111)		Ground	Gray