



SERIES 619/620

ATEX-APPROVED HAZARDOUS LOCATION PRESSURE TRANSMITTERS

NOSHOK Series 619 and 620 heavy-duty pressure transmitters feature a pressure-tight encapsulated design and are ATEX II 2 G Ex d IIC approved. Available in a wide variety of pressure ranges, they are ideal for use in volatile environments such as oil & gas, petrochemical and borehole applications.

These transmitters feature corrosion-resistant stainless steel construction, and a welded pressure connection and measuring cell for exceptional shock and vibration resistance. Their standard output signal is 4-20 mA, 2-wire, however other options are available with voltage outputs in a 3-wire system. The 619 Series transmitter features a 1/2" NPT standard connection, while the front flush 620 Series version eliminates extra space in which the measuring medium can crystallize or form residue.

NOSHOK 619 and 620 Series transmitters also provide significant levels of RFI, EMI and ESD protection.

SPECIFICATIONS

Output signals	4 mA to 20 mA, 2-wire; 1 Vdc to 5 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 4.5 Vdc low power, 3-wire
Accuracy	±0.25% Full Scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Hysteresis	≤±0.1% Full Scale
Repeatability	≤±0.05% Full Scale
Stability	≤±0.2% Full Scale for 1 year, non-accumulating
Pressure ranges	Standard gauge ranges from vacuum to 15000 psig Standard absolute ranges from 15 psia to 200 psia
Proof pressure	3.5 times Full Scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 2 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10000 psi 1.5 times Full Scale for 0 psi to 15000 psi
Burst pressure	5 times Full Scale for ranges 0 psi to 15 psi through 0 psi to 200 psi 3.5 times Full Scale for ranges 0 psi to 300 psi through 0 psi to 10000 psi 3 times Full Scale for 0 psi to 15000 psi
Power supply	10 Vdc to 30 Vdc unregulated for 4 mA to 20 mA output 6 Vdc to 30 Vdc unregulated for 1 Vdc to 5 Vdc output 14 Vdc to 30 Vdc unregulated for 0 Vdc to 10 Vdc output 5 Vdc to 30 Vdc unregulated for 0.5 Vdc to 4.5 Vdc output
Load limitations	≤(VPower-10)/0.020 Amp for 4 mA to 20 mA >10,000 Ω for 1 Vdc to 5 Vdc, 3-wire and 0 Vdc to 10 Vdc > 5,000 Ω for 0.5 Vdc to 4.5 Vdc
Response time	≤1 ms (between 10% and 90% Full Scale)
Durability	>100,000,000 Full Scale cycles
Temperature ranges	Compensated 32°F to 176°F (0°C to 80°C) Zero effect is ≤±0.011% Full Scale /°F Span effect is ≤±0.011% Full Scale /°F Ambient -40°F to 221°F (-40°C to 105°C) Media -40°F to 221°F (-40°C to 105°C) Storage -40°F to 221°F (-40°C to 105°C)
Wetted materials	Series 619 is 316 stainless steel for ranges up through 0 psi to 300 psi, 316 stainless steel with Elgiloy for ranges 0 psi to 500 psi and higher; Series 620 is 316 stainless steel with NBR o-ring; optional FPM or EPDM o-ring
Housing material	316 stainless steel
Environmental rating	NEMA 4x (IP 67 according to EN 60 529/IEC529)
Electromagnetic rating	89/336/EEC emissions (class B) and immunity according to EN 61326
Electrical rating	Reverse polarity, over voltage and short circuit protection
Shock	1000 g's according to IEC 60068-2-27
Vibration	20 g's according to IEC 60068-2-63
CE	Pressure equipment directive 97/23/EC Directive ATEX 94/9/EC
HF immunity	10 V/m
Burst	4 kV
Hazardous approval	Explosion proof protection type ATEX; EX d IIC T4-T6
Weight	Approximately 8 oz.

FEATURES

- ATEX approved II 2G Ex d IIC
- For dynamic and static measurements
- High accuracy and long term stability
- Excellent overload protection
- Wide variety of pressure ranges
- Corrosion-resistant stainless steel design
- Excellent repeatability

APPLICATIONS

- Gas pressure measurement
- Oil drilling platforms/pipelines
- Refineries/Petrochemical industry
- Borehole monitoring

ORDERING INFORMATION

SERIES 619	Stainless steel threaded connection	SERIES 620	316 stainless steel flush diaphragm
PRESSURE RANGES	-30 inHg to 0 psig -30 inHg to 30 psig -30 inHg to 60 psig -30 inHg to 100 psig 0 psig to 15 psig psig = Gauge Pressure NOTE: Series 620 is available for pressure ranges up to 0 psig to 8000 psig	30V 0 psig to 30 psig 30/30 0 psig to 60 psig 30/60 0 psig to 100 psig 30/100 0 psig to 200 psig 15 0 psig to 300 psig psia = Absolute Pressure Other ranges available on special request	30 0 psig to 500 psig 60 0 psig to 1000 psig 100 0 psig to 1500 psig 200 0 psig to 2000 psig 300 0 psig to 3000 psig 0 psig to 5000 psig 0 psig to 8000 psig 0 psig to 10000 psig 0 psig to 15000 psig 0 psia to 15 psia 0 psia to 100 psia 5000 8000 10000 15000 15A 100A
ACCURACY	1 ±0.25 % Full Scale (BFSL)	2 ±0.125 % Full Scale (BFSL)	
OUTPUT SIGNALS	1 4 mA to 20 mA, 2-wire	3 1 Vdc to 5 Vdc, 3-wire, Low Power	31 .5 Vdc to 4.5 Vdc 3-wire, Low Power
PROCESS CONNECTIONS	2 1/4" NPT Male 11 G1/2B Male flush (model 620 only) (pressure ranges 0 psi to 30 psi and higher)	8 1/2" NPT Male 13 G1B Male flush (model 620 only) (pressure ranges less than 0 psi to 30 psi)	
ELECTRICAL CONNECTIONS	6 1/2" NPT Male conduit with 6 foot integral cable		
OPTIONS	ORF Threaded Orifice (model 619 only)	15 15' cable/lead (attached to option 6)	

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

EXAMPLE

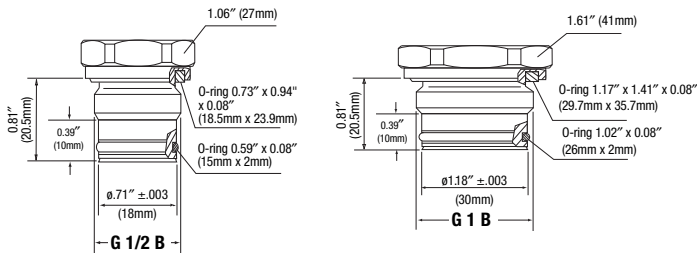
Series 619
 Pressure Range 0 psig to 500 psig
 Accuracy ±0.25 % Full Scale
 Output Signal 4 mA to 20 mA
 Process Connection 1/2" NPT Male
 Electrical Connection Integral cable
 Option Threaded orifice

619 - 500 - 1 - 1 - 8 - 6 - ORF

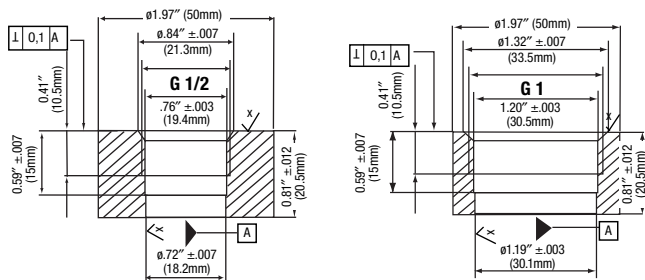
Outline Dimensions

Front flush process connections

For ranges 0 psi to 30 psi and higher For ranges less than 0 psi to 30 psi



Flush corresponding port weld-on adapters



2-WIRE WIRING

+ Supply	Red
+ Output	Black

3-WIRE WIRING

+ Supply	Red
Common	Black
+ Output	Brown