

# 625/626 SERIES



- Designed for applications that require pressure measurement in hazardous locations
- Accuracy to  $\pm 0.125\%$  full scale (BFSL)
- Wide variety of pressure ranges available
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Available with a standard threaded connection as well as a flush diaphragm configuration
- Welded 316 stainless steel with no internal o-rings, gaskets or seals - optional Hastelloy C4 on flush diaphragm model
- Entity approved for use with all approved zener barriers where required
- CE compliant to suppress RFI, EMI, and ESD
- ANSI/ISA-12.27.01-2003 approved single seal
- Factory Mutual & Canadian Standards Association approved

## SPECIFICATIONS

<b>Output signal</b>	4 mA to 20 mA, 2-wire
<b>Accuracy</b>	$\pm 0.25\%$ full scale (BFSL); optional $\pm 0.125\%$ full scale (BFSL) (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
<b>Hysteresis</b>	$\leq \pm 0.1\%$ full scale
<b>Repeatability</b>	$\leq \pm 0.05\%$ full scale
<b>Stability</b>	$\leq \pm 0.2\%$ full scale for 1 year, non-accumulating
<b>Pressure ranges</b>	Standard ranges from vacuum to 60,000 psi
<b>Proof pressure</b>	3.5 times full scale for ranges 0 psi to 5 psi through 0 psi to 200 psi 2 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 1.2 times full scale for ranges 0 psi to 25,000 psi and 0 psi to 60,000 psi
<b>Burst pressure</b>	4 times full scale for ranges 0 psi to 5 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 range 2 times full scale for ranges 0 psi to 25,000 psi and 0 psi to 60,000 psi
<b>Power supply*</b>	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)
<b>Load limitations</b>	$\leq (V_{Power}-10)/0.020$ Amp
<b>Response time</b>	$\leq 1$ ms (between 10% and 90% full scale)
<b>Durability</b>	$> 100,000,000$ full scale cycles
<b>Adjustment</b>	$\pm 10\%$ full scale for zero and span
<b>Temperature ranges</b>	Compensated 32 °F to 176 °F (0 °C to 80 °C); Zero effect is $\pm 0.011\%$ full scale/ °F Span effect is $\pm 0.011\%$ full scale/ °F; Ambient -4 °F to 176 °F (-20 °C to 80 °C) Media -4 °F to 185 °F (-20 °C to 85 °C); Storage -22 °F to 221 °F (-30 °C to 105 °C)
<b>Wetted materials</b>	Series 625 is 316 stainless steel for ranges up through 0 psi to 300 psi, 316 stainless steel with 17-4PH stainless steel diaphragm for ranges 0 psi to 300 psi and higher: Series 626 is 316 stainless steel with NBR o-ring; Hastelloy® C4 optional; FKM o-ring optional
<b>Housing material</b>	316 stainless steel
<b>Environmental rating</b>	IP65 to IP67 depending upon electrical connection
<b>Electromagnetic rating</b>	2004/108/EEC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations)
<b>Electrical protection</b>	Reverse polarity, over-voltage and short circuit protected
<b>Shock</b>	1,000 g's according to IEC770 for mechanical shock
<b>Vibration</b>	20 g's according to IEC770 under resonance conditions
<b>Hazardous approvals</b>	Factory Mutual and Canadian Standards Association approved as indicated ANSI/ISA-12.27.01-2003, Approved single seal
<b>Weight</b>	Approximately 7 oz.

## FEATURES

- Accuracy to  $\pm 0.125\%$  full scale (BFSL)
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Welded 316 stainless steel, optional Hastelloy C4 on flush diaphragm model
- 1/2" NPT conduit connection
- Entity approved for use with all approved zener barriers where required
- ANSI/ISA-12.27.01-2003 Approved single seal

## APPLICATIONS

- Hydraulic and pneumatic systems
- Pumps and compressors
- Test equipment and systems
- HVAC systems
- Power generation
- Water and wastewater
- Refrigeration equipment
- Laboratory and test equipment
- Chemical/Petrochemical
- Marine
- Pipeline gas compressors
- Oil field
- Offshore

## NOSHOK Model 625 and 626 transmitters are approved for use in hazardous location applications as follows:

Intrinsically Safe, entity approval for Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; and Class I, Zone 0 Aex ia IIC  
Dust Ignition-proof for Class II and III, Division 2, Groups F and G  
Non-incendive for Class I, Division 2, Groups A, B, C and D

\* Unregulated power supplies

#### ORDERING INFORMATION

SERIES	625	Stainless steel threaded connection	626S	316 Stainless steel flush diaphragm	626H	Hastelloy flush diaphragm				
PRESSURE RANGES	50 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 50 inH <sub>2</sub> O	2	0 psig to 2 psig	200	0 psig to 200 psig	6000	0 psig to 6,000 psig	15A	0 psia to 15 psia
	100 inH <sub>2</sub> O	0 inH <sub>2</sub> O to 100 inH <sub>2</sub> O	3	0 psig to 3 psig	300	0 psig to 300 psig	7500	0 psig to 7,500 psig	30A	0 psia to 30 psia
	30vac	-30 inHg to 0 psig	5	0 psig to 5 psig	500	0 psig to 500 psig	8000	0 psig to 8,000 psig	60A	0 psia to 60 psia
	30/15	-30 inHg to 15 psig	10	0 psig to 10 psig	750	0 psig to 750 psig	10000	0 psig to 10,000 psig	100A	0 psia to 100 psia
	30/30	-30 inHg to 30 psig	15	0 psig to 15 psig	1000	0 psig to 1,000 psig	15000	0 psig to 15,000 psig	150A	0 psia to 150 psia
	30/60	-30 inHg to 60 psig	30	0 psig to 30 psig	1500	0 psig to 1,500 psig	25000	0 psig to 25,000 psig	200A	0 psia to 200 psia
	30/100	-30 inHg to 100 psig	60	0 psig to 60 psig	2000	0 psig to 2,000 psig	40000	0 psig to 40,000 psig	300A	0 psia to 300 psia
	30/150	-30 inHg to 150 psig	100	0 psig to 100 psig	3000	0 psig to 3,000 psig	60000	0 psig to 60,000 psig		
	30/200	-30 inHg to 200 psig	150	0 psig to 150 psig	5000	0 psig to 5,000 psig				
		psig = gauge pressure    psia = absolute pressure    Other ranges available on special request <b>NOTE:</b> Series 626 is available for pressure ranges up to 0 psig to 8000 psig								
ACCURACY	1 ±0.25% full scale (BFSL)			2 ±0.125% full scale (BFSL)						
OUTPUT SIGNAL	1 4 mA to 20 mA, 2-wire									
PROCESS CONNECTIONS	2 1/4" NPT Male			11 G1/2B Male flush (series 626 only) (pressure ranges 0 psig to 30 psig and higher)						
	6 9/16" -18 UNF 2B high pressure cone*			13 G1B Male flush (series 626 only) (pressure ranges less than 0 psig to 30 psig)						
	8 1/2" NPT Male			45 SAE J1926-3:7/16-20						
ELECTRICAL CONNECTIONS	1 36" cable (connected to option 8)			14 Hirschmann connector 1/2" NPT conduit - IP65						
	3 6-pin Bendix - IP65			25 M12x1 (4-pin) IP67						
	8 Hirschmann (DIN EN 175301-803 Form A)			36 Integral cable 36" - IP67						
OPTION	ORF Threaded Orifice (Series 625 only)									

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

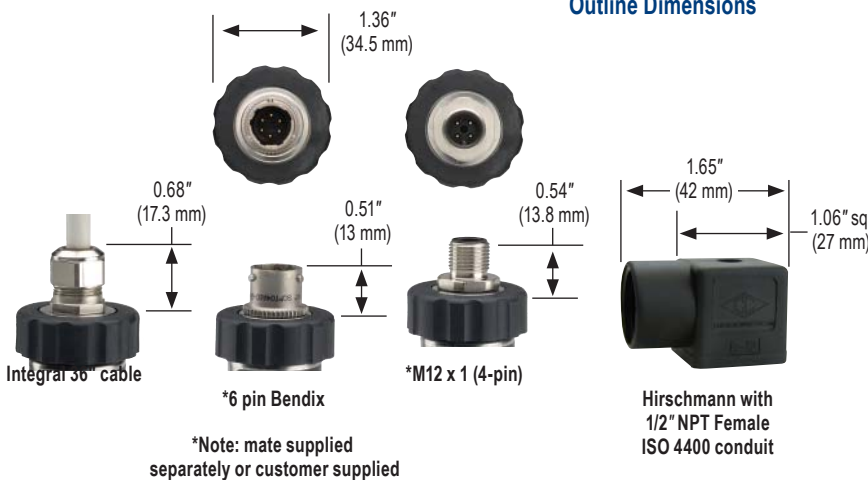
\* No charge on ranges of 25,000 psig to 60,000 psig. Equivalent to F250 Parker Autoclave.

#### EXAMPLE

625 - 500 - 1 - 1 - 8 - 8 - ORF

Series ..... 625  
 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 ..... Hirschmann  
 Option ..... Threaded orifice

#### Outline Dimensions



\*Note: mate supplied separately or customer supplied

#### 2-WIRE WIRING

	Hirschmann	Cable	M12	Bendix
+ Supply	1	Red/Brown	1	A
+ Output	2	Black/Green	3	B

**NOTE**  
 See 621/622 Series for G1/2B and G1B front flush process connection dimensions pg. 29

