

SERIES 755/756



FEATURES

- Accuracy to $\pm 0.05\%$ Full Scale (BFSL)
- Up to 20:1 span turn down
- Advanced diffused semiconductor and sputtered thin film sensor for maximum stability
- Built-in process temperature display
- Built-in selectable process digital filtering
- Welded 316 stainless steel pressure chamber
- 32 point process linearization
- Adjustable display for easy viewing
- 12 different measurement units
- CE compliant

APPLICATIONS

- Hydraulic and pneumatic systems
- Pumps and compressors
- Test equipment and systems
- Industrial machinery and machine tools
- HVAC systems
- Power generation
- Water and wastewater
- Refrigeration equipment
- Laboratory and test equipment
- Chemical/Petrochemical
- Marine

HIGH PERFORMANCE DIGITAL PRESSURE TRANSMITTERS

The NOSHOK Series 755 and 756 digital pressure transmitters combine the reliability and long life of diffused semiconductor and sputtered thin film strain gage sensors with digital electronics for outstanding performance and value. With up to 20:1 span turn down and -2.5 to 99% zero point adjustment there is maximum flexibility to meet the most unusual application requirements.

Additional features including 32 point process linearization, adjustable display orientation and integral process temperature measurement give the Series 755 and 756 an advantage over many other pressure transmitters.

The high contrast easily readable display provides the pressure value in digital bar graph representation, measurement tendency indication, maximum/minimum pressure, and temperature value. User programming includes menus to allow the setting of user language, engineering units, zero and span calibration points and digital filtering to dampen pressure fluctuations. All wetted parts are made of stainless steel, totally welded with no internal O-rings, gaskets or seals.

SPECIFICATIONS

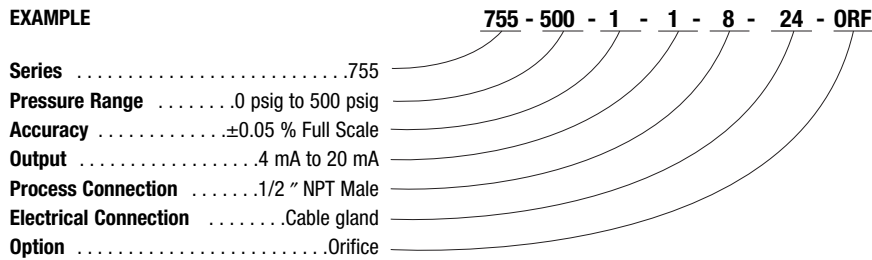
Output	4 mA to 20 mA, 2 wire
Accuracy	$\pm 0.05\%$ Full Scale (BFSL); $\pm 0.15\%$ Full Scale for 0 psig to 15000 psig range; (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Total accuracy	$\pm 0.05\%$ Full Scale (BFSL) including the effects of linearity, hysteresis, repeatability and thermal effects from 50 °F to 104 °F; $\pm 0.15\%$ Full Scale for 0 psig to 15000 psig
Hysteresis	$\leq \pm 0.04\%$ Full Scale
Repeatability	$\leq \pm 0.05\%$ Full Scale
Stability	$\leq \pm 0.1\%$ Full Scale for 1 year non-accumulating
Pressure ranges	Standard ranges from vacuum through 15000 psig
Proof pressure	5 times Full Scale for ranges 0 psi to 5 psi through 0 psi to 250 psi 2 times Full Scale for ranges 0 psi to 500 psi through 0 psi to 7500 psi 1.5 times Full Scale for 0 psi to 15000 psi range *Proof pressure is based on Full Scale range prior to turndown
Burst pressure	6 times Full Scale for ranges 0 psi to 5 psi through 0 psi to 250 psi 4 times Full Scale for ranges 0 psi to 500 psi through 0 psi to 7500 psi 3 times Full Scale for 0 psi to 15000 psi range *Burst pressure is based on Full Scale range prior to turndown
Power supply	10 Vdc to 30 Vdc, unregulated
Load limitations	$\leq (V_{Power} - 10)/0.020$ Amp
Zero adjustability	From -2.5 % Full Scale up to 99 % Full Scale
Span adjustability	20:1 turndown for ranges up through 0 psig to 15000 psig
Turn down effect on accuracy	Turn down up to 5:1, no effect on accuracy Turn down greater than 5:1, accuracy \times turndown/5
Response time	<10 milliseconds (between 10 % and 90 % Full Scale)
Durability	>100,000,000 Full Scale cycles
Digital filtering	User selectable from 0 sec. to 40 sec. for display and output signal
Temperature ranges	Compensated -4 °F to 176 °F (-20 °C to 80 °C) Zero effect is $\pm 0.01\%$ Full Scale/°F Span effect is $\pm 0.01\%$ Full Scale/°F Ambient -4 °F to 158 °F (-20 °C to 70 °C) Media -22 °F to 221 °F (-30 °C to 105 °C) Storage -31 °F to 176 °F (-35 °C to 80 °C)
Wetted materials	Model 755 is 316 stainless steel (ranges up through 0 psig to 250 psig) 316 stainless steel with 17-4PH stainless steel diaphragm (ranges 0 psig to 500 psig and higher); Model 756 is 316 stainless steel with buna N O-ring; Hastelloy® C4 optional; Viton O-ring optional
Housing material	Fiberglass reinforced PBT (polybutene terephthalate)
Environmental rating	IP65, NEMA 4X according to EN 60529/IEC529
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical rating	Reverse polarity, over-voltage and short circuit protection
Shock	100 g's according to IEC770 for mechanical shock
Vibration	5 g's according to IEC770 under resonance conditions
Weight	Approximately 24 oz.

ORDERING INFORMATION								
SERIES 755	Stainless steel threaded		756S	316 SS flush		756H	Hastelloy C4 flush	
PRESSURE RANGES	0 psig to 5 psig	5	0 psig to 250 psig	250	0 psig to 3000 psig	3000	0 psia to 5 psia	5A
	0 psig to 25 psig	25	0 psig to 500 psig	500	0 psig to 7500 psig	7500	0 psia to 25 psia	25A
	0 psig to 100 psig	100	0 psig to 1500 psig	1500	0 psig to 15000 psig	15000	0 psia to 100 psia	100A
	psig = Gauge Pressure		psia = Absolute Pressure					
ACCURACY	1 ±0.05 % Full Scale (BFSL)							
OUTPUT SIGNAL	1 4 mA to 20 mA, 2-wire							
PROCESS CONNECTION	2 1/4 " NPT Male			8 1/2 " NPT Male				
	11 G1/2B Male flush (model 756 only) (pressure ranges 0 psig to 100 psig and higher)			13 G1B Male flush (model 756 only) (pressure ranges less than 0 psig to 100 psig)				
ELECTRICAL CONNECTION	24 Cable gland M20x1.5 with internal terminal block, accepts cable diameter from .25 " to .5 "							
OPTION	ORF Threaded orifice (Model 755 Only)							

Specify actual calibration, otherwise transmitter will be set for full scale range

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

EXAMPLE



Outline Dimensions



Wiring Diagram

Wiring	Internal Junction Box
+ Supply	L+
+ Output	L-
Ground	⊖
Test Circuit	I

NOTE
See 621/622 Series
for G1/2B and G1B
Front Flush Process
Connection Dimensions
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