Current Output Pressure Transmitters

100 SERIES

- Highly repeatable, shock resistant transmitters with excellent long-term stability
- Standard ranges from vacuum to 15,000 psi; Standard absolute ranges from 15 psia to 300 psia
- Accuracy up to ±0.25% full scale (BFSL)
- Compact size, affordable price
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Welded stainless steel pressure chamber
- High alternating load resistance
- High overpressure protection
- Compatible with NOSHOK Smart System Indicators
- CE compliant to suppress RFI, EMI and ESD, combined with reverse polarity and over-voltage protection to ensure reliable performance in the most demanding applications
- Final calibration tests prior to shipment ensures 100% “out of the box” reliability

FEATURES

- Accuracy up to ±0.25% full scale (BFSL)
- Welded stainless steel pressure chamber
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Compact size
- High alternating load resistance
- High overpressure protection
- CE compliant to suppress RFI, EMI and ESD
- Compatible with NOSHOK Smart System Indicators

APPLICATIONS

- Hydraulic and pneumatic systems
- Injection molding machines
- Railroad engine controls
- HVAC systems
- Stamping and forming presses
- Refrigeration controls
- Industrial machinery and machine tools
- Pumps and compressors

SPECIFICATIONS

Output signal	4 mA to 20 mA, 2-wire
Pressure ranges	Standard gauge ranges from vacuum to 15,000 psi; standard absolute ranges from 15 psia to 300 psia
Proof pressure	3 times full scale for ranges 0 psi to 5 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 to 15,000 psi range
Burst pressure	3.8 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 to 15,000 psi range
Accuracy	±0.5% full scale (BFSL); optional ±0.25% full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Repeatability	≤ ±0.05% full scale
Hysteresis	≤ ±0.1% full scale
Stability	≤ ±0.2% full scale for 1 year, non-accumulating
Response time	≤ 1 ms (between 10% and 90% full scale)
Power supply*	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire)
Load limitations	≤ (Vpower supply -10)/.020 Amp
Wetted materials	316 stainless steel for vacuum through 300 psi; 17-4PH stainless steel sensing diaphragm and 316 stainless steel process connection for higher ranges
Housing material	316 stainless steel
Adjustment	≤ ±10% full scale for zero and span
Pressure cycle limit	150 Hz
Durability	> 100,000,000 full scale cycles
Temperature ranges	Compensated 32 °F to 176 °F (0 °C to 80 °C) Effect ±0.017% full scale/ °F for zero and span Ambient -40 °F to 185 °F (-40 °C to 85 °C) Media -22 °F to 212 °F (-30 °C to 100 °C) Storage -40 °F to 212 °F (-40 °C to 100 °C)
Environmental rating	IP65, NEMA 4X according to EN 60529/IEC 529
Electromagnetic rating	CE compliant to EMC norm EN 61326:1997/A1:1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	1000 g’s per IEC 770
Vibration	30 g’s per IEC 770
Non-linearity	≤ ±0.25% BFSL; optional ±0.125% BFSL
Weight	Approximately 3.5 oz.

* Unregulated power supplies

ORDERING INFORMATION

SERIES	**100**										
PRESSURE RANGES	**30vac**	-30 inHg to 0 psig	**5**	0 psig to 5 psig	**200**	0 psig to 200 psig	**3000**	0 psig to 3,000 psig	**15A**	0 psia to 15 psia
	30/15	-30 inHg to 15 psig	**10**	0 psig to 10 psig	**300**	0 psig to 300 psig	**4000**	0 psig to 4,000 psig	**30A**	0 psia to 30 psia
	30/30	-30 inHg to 30 psig	**15**	0 psig to 15 psig	**500**	0 psig to 500 psig	**5000**	0 psig to 5,000 psig	**60A**	0 psia to 60 psia
	30/45	-30 inHg to 45 psig	**25**	0 psig to 25 psig	**600**	0 psig to 600 psig	**6000**	0 psig to 6,000 psig	**100A**	0 psia to 100 psia
	30/100	-30 inHg to 100 psig	**30**	0 psig to 30 psig	**750**	0 psig to 750 psig	**7500**	0 psig to 7,500 psig	**150A**	0 psia to 150 psia
	30/150	-30 inHg to 150 psig	**60**	0 psig to 60 psig	**1000**	0 psig to 1,000 psig	**10000**	0 psig to 10,000 psig	**200A**	0 psia to 200 psia
	30/200	-30 inHg to 200 psig	**100**	0 psig to 100 psig	**1500**	0 psig to 1,500 psig	**15000**	0 psig to 15,000 psig	**300A**	0 psia to 300 psia
	30/300	-30 inHg to 300 psig	**150**	0 psig to 150 psig	**2000**	0 psig to 2,000 psig				
				psig = gauge pressure		psia = absolute pressure		Other ranges available on special request		
ACCURACY	**1**	±0.5% full scale (BFSL)			**2**	±0.25% full scale (BFSL)				
OUTPUT SIGNAL	**1**	4 mA to 20 mA, 2-wire								
PROCESS CONNECTIONS	**1**	1/8″ NPT Male	**3**	SAE J1926-3:7/16-20 Adjustable			**9**	SAE J1926-1:7/16-20		
	2	1/4″ NPT Male	**4**	1/8″ NPT Female			**10**	G1/4 Male		
ELECTRICAL CONNECTIONS	**1**	36″ cable (connected to option 7)			**6**	1/2″ NPT conduit (with 36″ cable)			**25**	M12 x 1 (4-pin)
	2	4-pin Bendix			**7**	Mini-Hirschmann (DIN EN 175301-803 Form C)			**36**	Integral cable 36″
	3	6-pin Bendix								
OPTION	**ORF**	Threaded orifice								

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

EXAMPLE

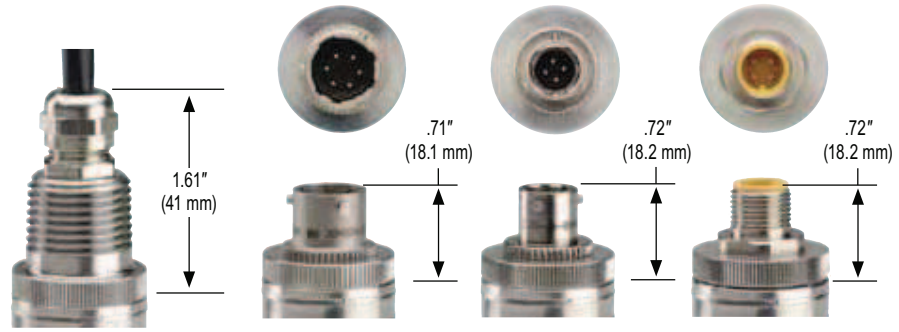
100 – 500 – 1 – 1 – 2 – 7 – ORF

Series 100
Pressure range ..... 0 psig to 500 psig
Accuracy ..... ±0.50% full scale
Output signal ..... 4 mA to 20 mA
Process connection ..... 1/4″ NPT Male
Electrical connection ..... Mini-Hirschmann
Option ..... Threaded orifice

Load Limitations
4 mA to 20 mA output

Vmin	=	10V + (.020 x RL)
RL	=	Loop resistance (Ω) RL = RS + RW
RS	=	Sensor resistance (Ω)
RW		Wire resistance (Ω)

Outline Dimensions



1/2″ NPT conduit with 36″ jacketed cable | *** 6 pin Bendix** | *** 4 pin Bendix** | *** M12 x 1 (4-pin)**

Mini-Hirschmann

WIRING				
Wire	**Bendix 4-pin or 6-pin**	**Mini-Hirschmann**	**Cable**	**M12 x 1**
+ Supply	pin A	pin 1	Red	pin 1
+ Output	pin B	pin 2	Black	pin 3

* Note: Mate supplied separately or customer supplied.