

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 $\pm 0.25\%$ 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

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	$\pm 0.5\%$ full scale (BFSL); optional $\pm 0.25\%$ full scale (BFSL); (Includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
Repeatability	$\leq \pm 0.05\%$ full scale
Hysteresis	$\leq \pm 0.1\%$ full scale
Stability	$\leq \pm 0.2\%$ 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	$\leq (V_{\text{power supply}} - 10) / 0.020$ 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	$\leq \pm 10\%$ 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 $\pm 0.017\%$ 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	$\leq \pm 0.25\%$ BFSL; optional $\pm 0.125\%$ BFSL
Weight	Approximately 3.5 oz.

FEATURES

- Accuracy up to $\pm 0.25\%$ 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

* 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				
ACCURACIES	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								

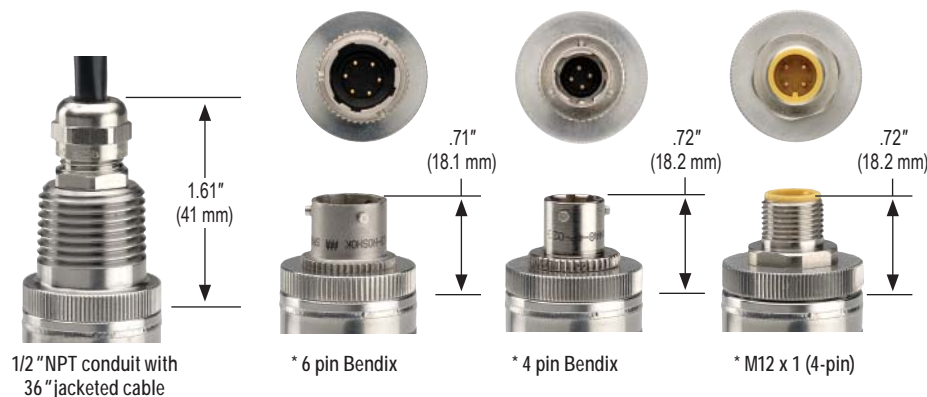
Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

EXAMPLE

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



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.