

Voltage Output Pressure Transducers

200 SERIES



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

- Highly repeatable, shock resistant transducers 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 signals	0 Vdc to 5 Vdc, 3-wire; 0 Vdc to 10 Vdc, 3-wire; 1 Vdc to 5 Vdc, 3-wire; 1 Vdc to 6 Vdc, 3-wire; 1 Vdc to 11 Vdc, 3-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 psi 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 psi 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 per year, non-accumulating
Response time	≤ 1 ms (between 10% and 90% full scale)
Power supply*	10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 5 Vdc, 3-wire) 10 Vdc to 30 Vdc (1 Vdc to 6 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire) 14 Vdc to 30 Vdc (1 Vdc to 11 Vdc, 3-wire)
Load limitations	$\geq 5,000$ for 0 Vdc to 5 Vdc, 1 Vdc to 5 Vdc, and 1 Vdc to 6 Vdc outputs; $\geq 10,000$ for 0 Vdc to 10 Vdc and 1 Vdc to 11 Vdc outputs. Current consumption 8 mA
Wetted materials	316 stainless steel for vacuum through 300 psi; 17-4PH stainless steel sensing diaphragm and 316 stainless steel pressure connection for higher ranges
Housing material	316 stainless steel
Adjustment	$\pm 10\%$ 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 EN61326: 1997/A1: 1998 RFI, EMI and ESD protection
Electrical protection	Reverse polarity, over-voltage and short circuit protection
Shock	1,000 g's per IEC 770
Vibration	30 g's per IEC 770
Weight	Approximately 3.5 oz.

ORDERING INFORMATION															
SERIES	200														
PRESSURE RANGES	30vac	-30 inHg to 0 psig	30/300	-30 inHg to 300 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	5	0 psig to 5 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	10	0 psig to 10 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	15	0 psig to 15 psig	600	0 psig to 600 psig	6000	0 psig to 6,000 psig	100A	0 psia to 100 psia					
	30/60	-30 inHg to 60 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					
	30/100	-30 inHg to 100 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					
	30/150	-30 inHg to 150 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					
	30/200	-30 inHg to 200 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 SIGNALS	2	0 Vdc to 5 Vdc, 3-wire		3	1 Vdc to 5 Vdc, 3-wire		4	1 Vdc to 6 Vdc, 3-wire		5	0 Vdc to 10 Vdc, 3-wire		6	1 Vdc to 11 Vdc, 3-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 CONNECTION	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	18" integral cable			
	3	6-pin Bendix													
	NOTE: 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc outputs are also available in 4-wire configurations for use with other electrical systems.														
OPTIONS	ORF	Threaded Orifice													

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

EXAMPLE

Series 200
 Pressure range 0 psig to 500 psig
 Accuracy ±0.50% full scale
 Output signal 0 Vdc to 5 Vdc
 Process connection 1/4" NPT Male
 Electrical connection Mini-Hirschmann
 Option Threaded orifice

200 - 500 - 1 - 2 - 2 - 7 - ORF

Outline Dimensions

