

Voltage Output Pressure Transducers

200 SERIES



- 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 10000 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.

FEATURES

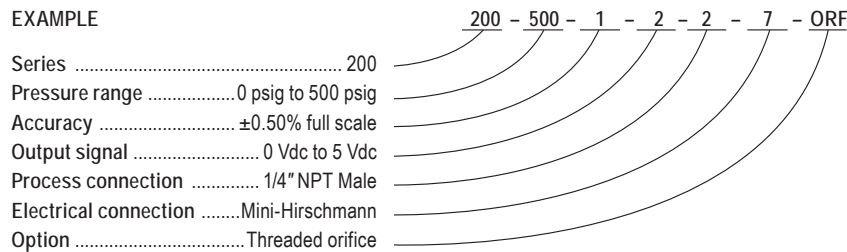
- Accuracy up to $\pm 0.25\%$ full scale (BFSL)
- Welded stainless steel pressure chamber
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Compact size
- High alternating load resistance
- High overpressure protection
- CE compliant to suppress RFI, EMI and ESD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

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.



Outline Dimensions

