

Data Sheet

K2 Pressure Transducer

FEATURES

- All SS wetted parts
- Broad selection of pressure ranges, pressure conditions and electrical terminations
- Pressure ranges vacuum through 20,000 psi
- Choice of 1.0% or 0.5% (OPT.) accuracy
- NEMA 4X rated enclosure

TYPICAL USES

- Hydraulic
- Machine Tool
- Test and Measurement
- All General Purpose Industrial Process Applications

PERFORMANCE SPECIFICATIONS

Reference Temperature:	68°F (20°C)
Accuracy Class (% Span):	±0.5% or ±1.00% of span Terminal Point Method: Includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors
Best Fit Straight Line (BFSL):	± 0.25%, ± 0.40% of span
Durability:	>10 million cycles
Stability:	±0.5% span/year
Interchangeability:	±0.5%, ±1.0%

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:	Storage: -65°F to 250°F (-54°C to 121°C) Operating: -20°F to 180°F (-28°C to 82°C) Compensated: -20°F to 160°F (-28°C to 71°C)
Thermal Coefficients: (ref. 68°F (20°C))	Accuracy: 0.5% 1% ZERO ±0.028% ±0.04% SPAN ±0.028% ±0.04%
Humidity Effects:	No performance effect at 95% relative humidity-noncondensing

FUNCTIONAL SPECIFICATIONS

Response Time:	<5ms
Pressure Ranges:	Vacuum to 20,000 psi
Shock Effect:	<±0.05% F.S. effect for 100g's, 20ms shock in any axis
Vibration Effect:	<±0.1% F.S. effect for 0-2,000Hz at 20g's in any axis
Position Effect:	<±0.01% F.S.
Overpressure:	Proof: Burst: ≤2,000 psi 2 X Range 8 X Range ≥3,000 to ≤5,000 psi 1.5 X Range 3 X Range ≥7,500 to ≤20,000 psi 1.2 X Range 1.5 X Range



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KEY BENEFITS

- Field proven and versatile
- Eliminates signal instability and drift
- Offered with millivolt output
- Superior long-term stability and repeatability

ELECTRICAL SPECIFICATIONS

Output Signal:	2mV/V, 3mV/V, 10mV/V, 20mV/V
Power Requirements:	Regulated: 5-10 Vdc Voltage Output: <3 mA
Circuit Protection:	Reverse polarity and miss-wire protected

Insulation Resistance (Circuit Case):	100 MΩ @ 100 Vdc
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PHYSICAL SPECIFICATIONS

Environmental Rating:	NEMA 4X (NEMA 1 only 500 psig if electrical termination is Bendix® (Ashcroft part codes B4 & B6))
Weight:	2 oz. (approx. w/o cable)
Cable:	36" PVC, shielded, vented, UL approved (24 AWG)
Process Connection:	1/8" NPT Male or Female 1/4" NPT Male or Female 7/16" SAE-J-514 Male 9/16"-18 AMINCO Female (pressures over 10,000 psi)

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WETTED MATERIAL	
Diaphragm	Process Connection
17-4PH SS	304 SS

NON-WETTED
Case Material
304 SS

OPTIONAL FEATURES	
Calibration:	Non-standard, Shunt calibration
Thermal Coefficients:	Accuracy: 0.5% ZERO ±0.014% SPAN ±0.014%

ORDERING CODE	Example:	K2	7	M02	10	F2	100#	XCL
Model								
K2 - Pressure sensor		K2						
Accuracy/Tem. Effects								
7 - 1.00%/±0.040%/ °F			7					
5 - 0.50%/±0.028%/ °F								
3 - 0.50%/±0.014%/ °F								
Pressure Connection Size								
M01 - 1/8 NPT Male				M02				
M02 - 1/4 NPT Male								
F02 - 1/4 NPT Female								
M04 - 1/2 NPT Male								
MEK - 7/16-20 SAE Male								
F09 - 9/16-18 Female Aminco®								
Output Signal								
02 - 2mV/V								
03 - 3mV/V								
10 - 10mV/V					10			
20 - 20mV/V								
Electrical Termination								
F2 - 3' shielded cable Integral Cable (Pigtail)						F2		
HM - Hirschmann® G series connector (miniature type) w/o mating connection								
B4 - 4-Pin Bendix® style w/o mating connection								
B6 - 6-Pin Bendix® style w/o mating connection								
B8 - Environmentally sealed/moisture proof 4-Pin Bendix® style w/o mating connection								
B9 - Environmentally sealed/moisture proof 6-Pin Bendix® style w/o mating connection								
C1 - 3' shielded cable 1/2 NPT Male conduit shielded cable								
Standard Pressure Ranges								
15# - 15 psi								
30# - 30 psi								
60# - 60 psi								
100# - 100 psi							100#	
150# - 150 psi								
200# - 200 psi								
300# - 300 psi								
500# - 500 psi								
750# - 750 psi								
1000# - 1,000 psi								
2000# - 2,000 psi								
3000# - 3,000 psi								
5000# - 5,000 psi								
7500# - 7,500 psi								
10000# - 10,000 psi								
15000# - 15,000 psi								
20000# - 20,000 psi								
0# & vac - 0-vac								
15# & vac - vac-15 psi								
30# & vac - vac-30 psi								
45# & vac - vac-45 psi								
60# & vac - vac-60 psi								
100# & vac - vac-100 psi								
Option (if including an option(s) must include an "X")								X_
CL - Non-standard calibration								CL

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DIMENSIONS are identified in inches and [millimeters]

For reference only, consult Ashcroft for specific dimensional drawings.

