

## Exclusive K8 Features

- Wide range of pressure connections available
- Miniature size and light weight
- 0.5% and 1.0% accuracy
- 45-20,000 psi pressure ranges
- Superior long-term stability and repeatability
- Millivolt output

## Model K8 Pressure Transducer

The Ashcroft K8 Series continues to expand and offer OEM flexibility while maintaining proven life, reliability and performance characteristics.



**ISO 9001**  
REGISTERED FIRM

**DRESSER**  
Measurement

BULLETIN PT-8

## PERFORMANCE CHARACTERISTICS

<b>Accuracy Class (F.S.):</b>	0.5%	1.0%
Nonlinearity		
Terminal Point*	±0.4%	±0.7%
B.F.S.L.	±0.25%	±0.4%
Hysteresis	±0.15%	±0.2%
Nonrepeatability	±0.05%	±0.07%
Interchangeability	±0.5%	±1.0%

\*Includes hysteresis

### Standard Ranges (PSI):

0/45*	0/500	0/7,500*
0/60*	0/750	0/10,000*
0/100	0/1,000	0/15,000*
0/150	0/2,000	0/20,000*
0/200	0/3,000	
0/300	0/5,000	

\*1% Accuracy ranges only

Consult factory for nonstandard ranges

**Stability:** ±0.5% F.S./Year

**Durability:** 10<sup>8</sup> cycles 20/80% F.S. with negligible performance loss

**Response Time:** Less than 5m sec

## ENVIRONMENTAL CHARACTERISTICS

### Temperature Limits:

Storage	-65/+250°F
Operating	-20/+250°F
Compensated	-20/+180°F

### Thermal Coefficients (68°F ref.):

Accuracy	Zero and Span
(-3) 0.5%	±0.014% F.S./°F
(-5) 0.5%	±0.028% F.S./°F
(-7) 1.0%	±0.040% F.S./°F

**Humidity:** No performance effect at 95% relative humidity-noncondensing

## FUNCTIONAL CHARACTERISTICS

### Overpressure (F.S.):

	Proof	Burst
0/45-0/2000	200%	800%
0/3000-0/5000	150%	300%
0/7500-0/20,000	120%	150%

**Vibration Sweep:** Less than ±0.1% F.S. effect for 0-2000 Hz at 20 g's in any axis

**Shock:** Less than ±0.05% F.S. effect for 100 g's, 20 msec shock in any axis

**Position Effect:** Less than 0.01% F.S.

## ELECTRICAL SPECIFICATIONS

**Sensitivity to Pressure:** Output signal sensitivity varies from 6-18mV/V at full scale, output proportional to supply voltage.

**Excitation:** 3-10 Vdc

**Zero Offset:** ±3mV/Vdc

**Bridge Resistance:** 3500 ohms (nominal)

**Noise:** Less than 0.02% F.S.

**Circuit to Case Insulation Resistance:** 100 M ohms @ 50 Vdc

## PHYSICAL CHARACTERISTICS

### Standard Process Connections:

**(316 stainless steel)**

1/8 NPT male or female

1/4 NPT male or female

7/16-20 SAE male

1/4 VCR male or female

1/4 AMINCO (female) required for pressures over 10,000 psi.

Other connections available

**Enclosure:** NEMA 1, (NEMA 4X with F2 cable assembly).

**Case:** 300 series stainless steel

**Cable:** 4" polyethylene coated, 30AWG or UL approved 36" shielded vented cable (24AWG).

**Diaphragm:** 17-4 PH stainless steel

**Weight:** 2 oz. (approx. without cable)

**Calibration report is standard with 0.5% and optional with 1% accuracy units. Consult factory for pricing, availability and required minimums for non-standard product.**

## Dimensions

FIG. 1

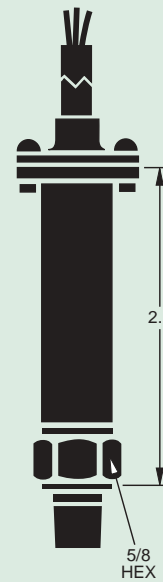


FIG. 2

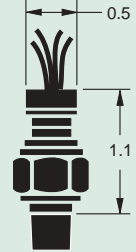
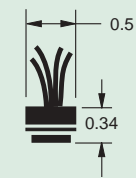


FIG. 3



DRESSER INSTRUMENT  
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## How To Order

<b>K 8</b>	<b>Accuracy</b> (3) 0.50% ±0.014%/°F (5) 0.50% ±0.028%/°F (7) 1.0% ±0.040%/°F	<b>Pressure Connection</b> (00) None (MO1) 1/8 NPT-M (FO1) 1/8 NPT-F (MO2) 1/4 NPT-M (FO2) 1/4 NPT-F (MEK) 7/16-20 SAE male (FO9) 7/16-18 UNF (TO1) 1/4 COMP. FIT (MV2) 1/4 VCR-M (FV2) 1/4 VCR-M	<b>M V</b>	<b>Electrical Termination</b> (F1) 4" Leads (F2) 36" Cable, Shielded, PVC Sheathing (Fig. 1)	<b>Pressure Range</b> (100) 100 psi (20,000) 20,000 psi (See above)	<b>X</b>	<b>X-Variations</b> See Dwg. 64A234
Type Configuration (K8)							