Model K8 Thin Film Pressure Transducer

ASHCROFT®

The Ashcroft trade name has been synonymous with pressure for over 150 years. Since 1987, the Transducer Operation of Dresser Instrument Division has been manufacturing quality industrial pressure transducers serving a multitude of markets. Whatever your application, we have the technology to provide either standard or customized designs to fit your requirements.

Each pressure transducer is 100% tested and calibrated in our ISO-9001 certified facility in Milford, Connecticut. The commitment of our engineering staff, direct sales force and distribution network ensure that the service and application expertise you need to maintain safety and performance in your application is always available when and where you need it.

The people of Dresser Instrument Division are here to provide the best quality products and service best suited to our customer's needs.

The Ashcroft K8 pressure transducer's thin film technology's small size and stainless steel construction make it an excellent choice for many OEM applications.

- ***HVAC***
- ***Machine tool***
- ***Hydraulic***
- ***Compressor***
- ***Hand tools***
- ***Control valves***
- ***Off-road vehicles***

ISO 9001
REGISTERED FIRM

DRESSER INSTRUMENT
TRANSDUCER OPERATIONS

BULLETIN PT-8

Model K8 Pressure Transducer

ASHCROFT®

PERFORMANCE CHARACTERISTICS

Accuracy Class (F.S.): 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: 10^8 cycles 20/80%F.S. with negligible performance loss
Response Time: Less than 5m sec

ENVIRONMENTAL CHARACTERISTICS

Temperature Limits:

Storage	–65/+250°F
Operating	–40/+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)
⅛ NPT male or female
¼ NPT male or female
$^{7}/_{16}$-20 SAE male
¼ VCR male or female
¼ AMINCO (female) required for pressures over 10,000 psi.
Other connections available
Enclosure: NEMA 4X, (NEMA 1 only if <500 psig and electrical termination is Bendix® or Hirschmann®).
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.

Bendix® is registered trademark of Amphenol Corp.

Hirschmann® is registered trademark of Richard Hirschmann of America Inc.

Dimensions

FIG. 1

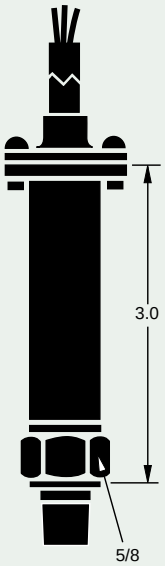


FIG. 2

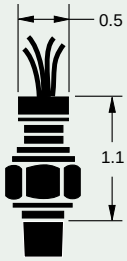
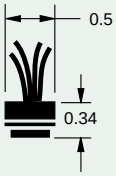


FIG. 3



DRESSER INSTRUMENT

38 WELLINGTON ROAD
MILFORD, CT 06460
(203) 783-6650 Customer Service
(203) 783-6659 FAX
www.dresser.com/instruments

How To Order

K 8 — **Type Configuration** (K8)

[ ] **Accuracy**
(3) 0.50% ±0.014%/°F
(5) 0.50% ±0.028%/°F
(7) 1.0% ±0.040%/°F

[ ][ ][ ] **Pressure Connection**
(000) None
(MO1) ⅛ NPT-M
(FO1) ⅛ NPT-F
(MO2) ¼ NPT-M
(FO2) ¼ NPT-F
(MEK) $^{7}/_{16}$-20 SAE male
(FO9) $^{7}/_{16}$-18 UNF
(TO1) ¼ COMP. FIT
(MV2) ¼ VCR-M
(FV2) ¼ VCR-M

M V — **Sensitivity** (MV) mV/V

[ ][ ] **Electrical Termination**
(F1) 4˝ Leads
(F2) 36˝ Cable, Shielded, PVC Sheathing

[ ][ ][ ][ ][ ][ ] # — **Pressure Range**
(100) 100 psi
(20,000) 20,000 psi

X [ ][ ] — **X-Variations**
See Dwg. 64A234