Model KS Sanitary Pressure Transmitter

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 KS sanitary pressure transmitter combines a proven thin film sensor technology and 3A standards for sanitary applications.

- ***Dairy***
- ***Food processing***
- ***Pharmaceutical***
- ***Biotech***

3®

ISO 9001
REGISTERED FIRM

DRESSER INSTRUMENT
TRANSDUCER OPERATIONS

BULLETIN PT-6

Model KS Pressure Transducer/Transmitter

ASHCROFT®

PERFORMANCE CHARACTERISTICS

Accuracy Class (F.S.): 1.0%

Nonlinearity	
Terminal Point*	±0.7%
B.F.S.L.	±0.4%
Hysteresis	±0.2%
Nonrepeatability	±0.07%

*Including hysteresis

Standard Ranges (psi):

0/30*†	0/300†	Vac/30†
0/60*†	0/500	Vac/60†
0/100†	0/750	Vac/100†
0/150†	0/1000	
0/200†		

Consult factory for non-standard ranges.

*T/C multiply by 1.5 times

†NEMA 4X only with F2 and C1 electrical connections.

Stability: ±1% F.S./year

Durability: 10^7 cycles 20/80% F.S. with negligible performance change

Response Time: Less than 5m sec.

ENVIRONMENTAL SPECIFICATIONS

Temperature Limits:

Storage	–65/+250°F
Operating	–20/+180°F
Compensated	+30/+130°F

Thermal Coefficients (68°F ref.):

Zero	±0.04% F.S./°F
Span	±0.04% F.S./°F

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

FUNCTIONAL SPECIFICATIONS

Overpressure (F.S.):

Proof	200%
Burst	800%

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 ms shock in any axis

Position Effect: Less than 0.1% F.S.

ELECTRICAL SPECIFICATIONS

Output Signal:	Supply Voltage:
4-20mA (2 wire)	10-36 Vdc
1-5 Vdc (3 wire)	10-36 Vdc
1-6 Vdc (3 wire)	10-36 Vdc
2mV/V ratiometric	5-10 Vdc regulated
3mV/V ratiometric	5-10 Vdc regulated
10mV/V ratiometric	5-10 Vdc regulated
20mV/V ratiometric	5-10 Vdc regulated

Reverse polarity protected

Supply Current: Less than 3mA for voltage output

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

PHYSICAL SPECIFICATIONS

Standard Process Connections:
(316L stainless steel)
Tri-Clamp® style 1½˝, 2˝.

Enclosure: NEMA 4X, (NEMA 1 only if <500 psig and electrical termination is Bendix® or Hirschmann®).

Case: 300 series stainless steel

Cable: No. 24 AWG, 36˝ PVC, shielded, vented, UL approved.

Diaphragm: 316L stainless steel electro-polished

Fill: USP grade 99.5% glycerin fill, contact factory for other fill fluids.

Weight: 13.5 oz. (approx. without cable)

Consult factory for pricing, availability and required minimums for non-standard products.

WARNING! Sensitive diaphragm! Do not touch! Remove protective-cap just before installation!

Bendix® is registered trademark of Amphenol Corp.

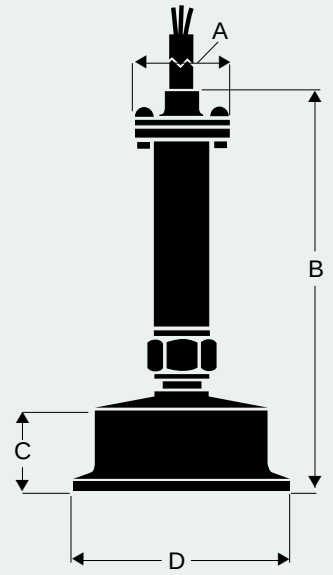
Hirschmann® is registered trademark of Richard Hirschmann of America Inc.

Tri-Clamp® is a registered trademark of Tri-Clover, Inc.

DRESSER INSTRUMENT

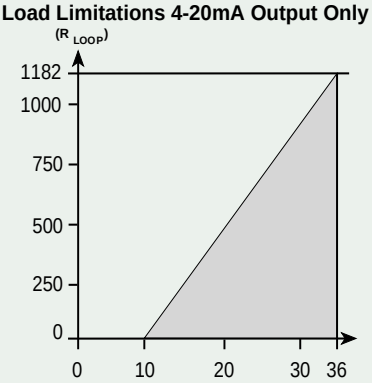
38 WELLINGTON ROAD
MILFORD, CT. 06460
(203) 783-6650 Customer Service
(203) 783-6659 FAX
www.dresser.com/instruments

Dimensions



MODEL	A	B	C	D
S15	0.8	4.7	0.9	2.0
S20	0.8	4.7	0.9	2.5

Load Limitations 4-20mA Output Only



V_{min} = 10V+ (.022A x R_L)

$R_L = R_S + R_W$

R_L = Loop Resistance (ohms)

R_S = Sense Resistance (ohms)

R_W = Wire Resistance (ohms)

How To Order

Type Configuration (KS)

Accuracy
(7) 1.0%, ±0.040%/°F

Sanitary Seal
(S15) 1½˝ Sanitary Connection
(S20) 2˝ Sanitary Connection

Output Signal
(42) 4-20mA
(16) 1-6 Vdc
(15) 1-5 Vdc
(02) 2mV/V
(03) 3mV/V
(10) 10mV/V
(20) 20mV/V

Electrical Termination
(F2) 36˝ Cable, Shielded, PVC Sheathing
(B6) Bendix 6-pin #PTO2A-10-6P*
(B9) WP Bendix 6-pin #PTO2H-10-6P*
(B4) Bendix 4-pin #PTO2A-8-4P*
(B8) WP Bendix 4-pin #PTO2H-8-4P*
(C1) ½ NPT-M Conduit and 36˝ Cable
(HM) Hirschmann Miniature

*Mating connector available as option

Pressure Range
(30) 30 psi
(60) 60 psi
(100) 100 psi
(150) 150 psi
(200) 200 psi
(300) 300 psi
(500) 500 psi
(750) 750 psi
(1000) 1000 psi
(Vac/30) Vac/30
(Vac/60) Vac/60
(Vac/100) Vac/100