

KS Pressure Transmitter

FEATURES

- 316L stainless steel electropolished wetted 1.5" & 2" tri-clamp diaphragms
- All welded construction
- Voltage and current outputs
- 30 psi to 1000 psi pressure ranges

TYPICAL USES

- Dairy and Food
- Pharmaceutical
- 3A Sanitary Application

PERFORMANCE SPECIFICATIONS

Reference Temperature:	68°F (20°C)
Accuracy Class (% Span):	±1.00% of span Terminal Point Method: Includes non-linearity, hysteresis, non-repeatability, zero offset and span setting errors
Best Fit Straight Line (BFSL):	±0.75% of span.
Durability:	>10 million cycles
Stability:	±0.5% span/year at reference conditions

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: 30°F to 130°F (-1°C to 54°C)
Thermal Coefficients: (ref. 68°F (20°C))	Accuracy: 1% ZERO ±0.04% SPAN ±0.04%
Humidity Effects:	No performance effect at 95% relative humidity-noncondensing

FUNCTIONAL SPECIFICATIONS

Response Time:	<5ms
Pressure Ranges:	30 to 1,000 psig, compound to 100 psig
Shock Effect:	<±0.05% F.S. effect for 100 g's, 20 ms shock in any axis
Vibration Effect:	<±0.1% F.S. effect for 0-2,000 Hz at 20 g's in any axis
Position Effect:	<±0.01% F.S.
Overpressure: ≤2,000 psi	Proof: 2 X Range Burst: 8 X Range

ELECTRICAL SPECIFICATIONS

Transmitter Output Signal:	4-20 mA (2 wire), 1-5 Vdc (3 wire), 1-6 Vdc (3 wire), 1-11 Vdc (3 wire)
Supply Current:	Less than 3 mA for voltage output



KS Transducer



KEY BENEFITS

- Combines proven thin film technology with diaphragm seal expertise
- Superior long-term stability and repeatability
- 12-20 Ra surface finish with 3A Rating to meet sanitary requirements

Power Requirements:	10-36 Vdc, unregulated
Circuit Protection:	Reverse polarity and miss-wire protected
Insulation Resistance (Circuit Case):	100 MΩ @ 50 Vdc

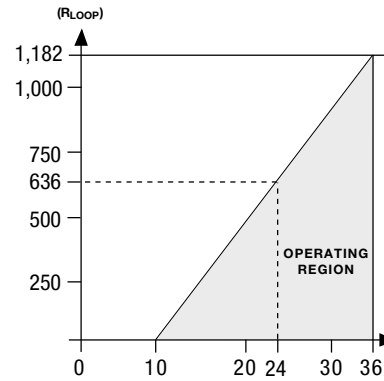
PHYSICAL SPECIFICATIONS

Environmental Rating:	NEMA 4X
Weight:	13.5 oz (approx. w/ cable)
Cable:	36" PVC, shielded, vented, UL approved
Process Connection:	1½", 2" Tri-Clamp®
Fill:	USP Grade 99.5% Glycerin fill

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WETTED MATERIAL	
Diaphragm	Process Connection
316L SS 12-20 RA finish	316L SS
NON-WETTED	
Housing	
304 SS	
OPTIONAL FEATURES	
Calibration:	Non-standard

LOAD LIMITATIONS 4-20 mA OUTPUT ONLY



$$V_{min} = 10V + (0.022A \times R_L)$$

$$R_L = R_S + R_W$$

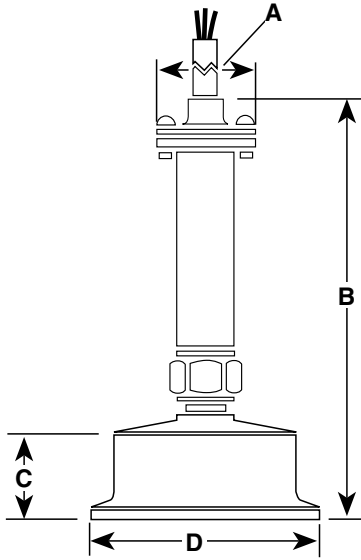
R_L = Loop Resistance (ohms)
 R_S = Sense Resistance (ohms)
 R_W = Wire Resistance (ohms)

ORDERING CODE	Example:	KS	7	S15	42	F2	100#	XCL
Model	KS - Sanitary Pressure Transmitter	KS						
Accuracy/Tem. Effects	7 - 1.00%/±0.040%/ °F		7					
Pressure Connection Size	S15 - 1½" sanitary connection			S15				
	S20 - 2" sanitary connection							
Output Signal	42 - 4-20 mA				42			
	15 - 1-5 Vdc							
	16 - 1-6 Vdc							
	11 - 1-11 Vdc							
Electrical Termination	F2 - 3' shielded cable Integral Cable (Pigtail)					F2		
	HM - W/o mating connection Hirschmann® G series connector (miniature type)							
	B4 - W/o mating connection 4-Pin Bendix® style							
	B6 - W/o mating connection 6-Pin Bendix® style							
	B8 - W/o mating connection environmental sealed/moisture proof 4-Pin Bendix® style							
	B9 - W/o mating connection environmental sealed/moisture proof 6-Pin Bendix® style							
	C1 - 3' shielded cable ½ NPT Male conduit shielded cable							
Standard Pressure Ranges	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							
	30#&VAC - vac/30 psi							
	60#&VAC - vac/60 psi							
	100#&VAC - vac/100 psi							
Option (if including an option(s) must include an "X")	CL - Non-standard calibration							X__ CL

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DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



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