



High Accuracy Pressure Transmitters

Valueline™

Affordable accuracy

- ▶ Choice of ±0.25 or ±0.1% FS BFSL static accuracy

316 SS construction

- ▶ Ensures compatibility with most aggressive media

User-specified pressure range / output

- ▶ Simplifies retrofits, ensures compatibility

Proven piezoresistive sensor design

- ▶ Guarantees reliability in hostile environments



The Valueline by Keller America is a mid-priced, high accuracy pressure transmitter. It is based upon the proven Keller media-isolated, piezoresistive sensor. Combined with this sensor are Keller's state-of-the-art digital signal conditioning electronics, resulting in very good static accuracy as well as low thermal errors over the compensated temperature range of -10 – 80°C. Keller America's guaranteed lightning protection makes this transmitter ideal for installation in areas prone to chronic damage due to transients caused by lightning.

Please consult the comparison chart below to determine if the Valueline series is the best solution for your specific application. Data sheets for Econoline, Preciseline, and other products are available upon request or by visiting our website, www.kelleramerica.com.

Product Comparison	Econoline™	Valueline™	Preciseline™
Accuracy	Static (25°C): ±1 or ±0.5% FS TC-Zero: ±0.03% FS / °C TC-Sens: ±0.03% / °C	Static (25°C): ±0.25 or ±0.1% FS TC-Zero: ±0.01% FS / °C TC-Sens: ±0.01% / °C	±0.2 or ±0.1% FS T.E.B.*
Custom Pressure Ranges	No	Yes	Yes
Lowest Pressure Range	15 PSI	2 PSI	2 PSI
Highest Pressure Range	10,000 PSI	15,000 PSI	15,000 PSI
Field Rangeability	No	No	Yes
Analog Output	0.5 – 4.5 VDC 4 – 20 mA	0 – 5 VDC, 0 – 10 VDC 4 – 20 mA	0 – 5 VDC, 0 – 10 VDC 4 – 20 mA
Digital Output	N/A	N/A	RS485
Wetted Materials	316L SS, Fluorocarbon	316L SS, Fluorocarbon	316L SS, Fluorocarbon
Process Connection	¼" NPT male	¼" NPT male	¼" NPT male
Electrical Termination	Cable, mini-DIN	Cable, DIN43650, MIL-C-26482	Cable, DIN43650, MIL-C-26482
Relative cost	Lowest	Midrange	Highest

*TEB = Total Error Band; All errors combined, including non-linearity, hysteresis, non-repeatability, and thermal errors for range -10 – 80 °C.

Addition of Option-009 or internal only protection (standard on all 4-20mA pressure transmitters) increases the minimum-required supply voltage, on account of internal resistance of the surge protectors. In addition, cable resistance* adds to the supply requirement. In order to insure proper system operation, calculate the minimum required supply voltage (at the source) as follows:

For two-part (internal+external) system (recommended):
 MINIMUM SUPPLY VOLTAGE = 10.75 + 0.025 (CABLE LENGTH x 0.07) VDC

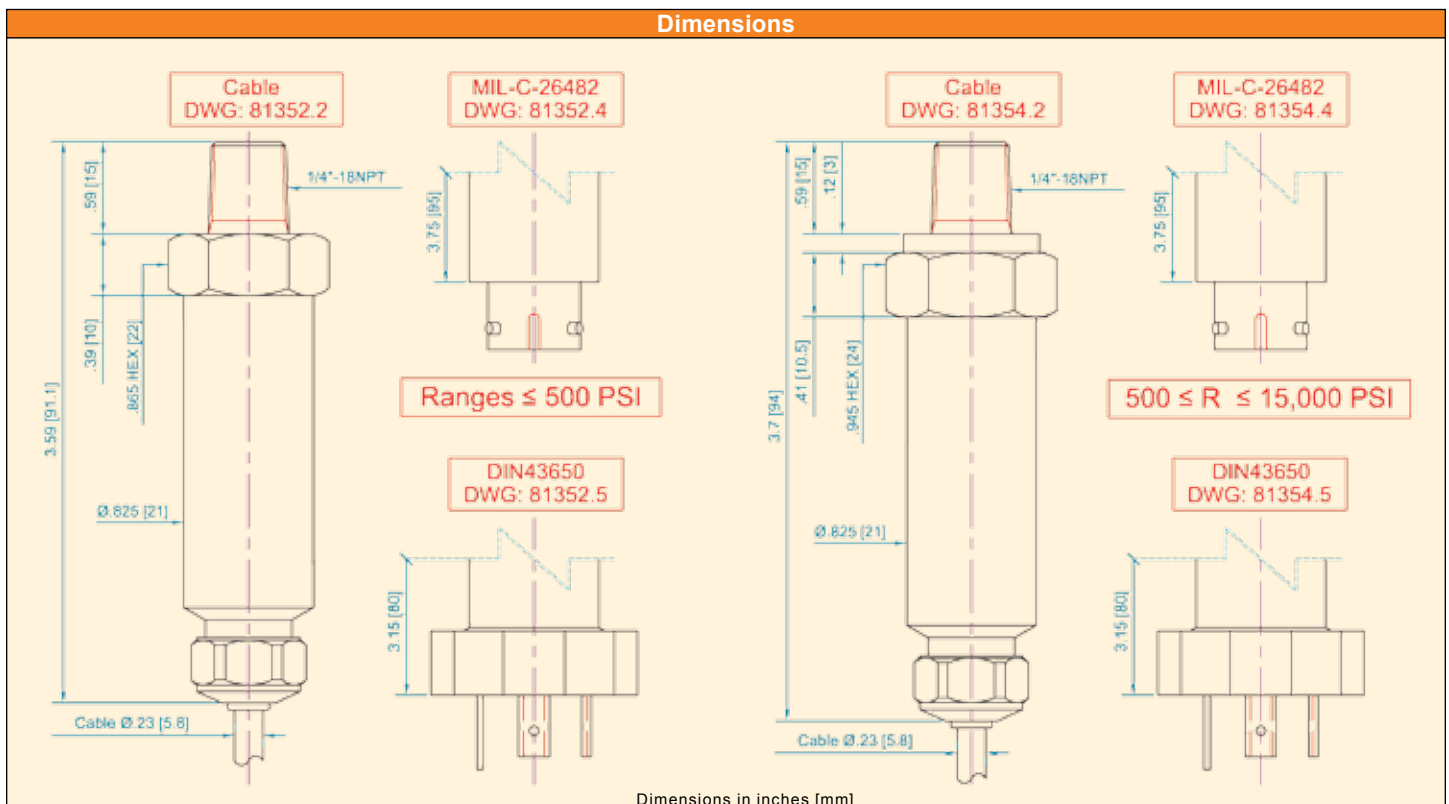
For internal only protector (standard with 4-20mA output):
 MINIMUM SUPPLY VOLTAGE = 9.65 + 0.025 (CABLE LENGTH x 0.07) VDC

*Cable resistance = ~70Ω / 1000ft

Valueline



Specifications						
Pressure units	PSIG	PSIA	PSIS ₁	Static Accuracy (25°)	Standard: ±0.25% F.S. BFSL Optional: ±0.1% F.S. BFSL	
Pressure Range (user specified)₂	Infinite from 0–2 thru 0–500	Infinite from 0–2 thru 0–500	Infinite from 0–500 thru 0–15,000	Compensated temp. range	-10 – 80°C	
Zero Point	Note 2	Note 1	Note 1	Operating temp. range	-40 – 120°C	
Proof Pressure	Varies by range, from 10X for 1PSI to 1.1X for 15,000 PSI.				TC-Zero point	± .001% F.S. / °C
Supply₇	VDC	8 – 28	13 – 28	TC-Sensitivity	± .001% / °C	
Output	2 wire analog	4 – 20 mA ₈		Wetted materials	316L SS, Fluorocarbon	
	3 wire analog	0 – 5 VDC	0 – 10 VDC	Environmental protection	IP68 w/ Cable, IP65 w/ DIN43650 or MIL-C-26482	
Electrical Connection	Standard: 5ft Hytrel-jacketed shielded cable or DIN43650 connector ₃			CE-Conformity	EN50081-1, EN50082-2	
	Optional: MIL-C-26482 connector ₄			Shock	20g (11ms)	
				Vibration	20g (5 – 2KHz, max. amp. ±3mm) per IEC68-2-6	



Note: Dimensions & specifications are subject to change without notice. For the most accurate and up to date information on all products please visit our website.

Wiring Configuration			
Configuration	Pin 1 / White	Pin 2 / Red	Pin 3 / Black
2 Wire (mA)	OUT / GND		+Vcc
3 Wire (VDC)	GND	+OUT	+Vcc

- Notes:**
1. PSIG = Gage; Zero-point referenced to local atmospheric pressure.
PSIA = Absolute; Zero-point set at hard vacuum.
PSIS = Sealed Gage; Zero-point set at 1 bar absolute (14.504 PSIA).
 2. Zero-point can be suppressed or elevated for special applications.
 3. Mating connector supplied at no extra cost.
 4. At extra cost, includes mating connector.
 5. Lightning protection only available in units with cable & 4-20mA output.
 6. The drain / shield is connected to the transmitter housing. For lightning protection to function properly (4-20mA only) the shield wire must be connected to a good earth ground!
 7. Nominal values may be higher depending upon cable length.
Cable resistance = ~70Ω / 1000ft.
 8. Consult reverse side for minimum supply voltage guidelines.

Options & Accessories	▶ Option-009 Lightning/Surge Protection	▶ Bellows Assembly	Ask Us For Details!
	▶ Drying Tube Assembly (Desiccant)	▶ Conduit Fitting	