C KELLER

Valueline

High accuracy pressure transmitter

Features:

- \cdot UL / cUL certified intrinsically safe for instrallation in hazardous locations
- \cdot NSF/ANSI 61 and 372 certified construction for use in drinking water applications
- \cdot 0.1% static accuracy, 0.25% Total Error Band (TEB) accuracy
- \cdot 4...20mA models include guaranteed lightning protection at no additional cost
- \cdot Durable 316L stainless steel construction, optional titanium
- \cdot 2-year warranty covers defects in materials and workmanship
- \cdot Standard outputs simplify interface to controls, data collection, and telemetry systems
- \cdot Various electrical connections for easy integration into new and existing systems
- \cdot IP68-rated cabled versions suitable for submersion
- · 2021 IIJA Build America, Buy America-compliant configurations available
- · Standard 3-day lead time









Valueline - SPECIFICATIONS

Pressure Ranges _{1,2,3,4}			
Relative	Infinite between 02 and 0450 PSIG		
Absolute	Infinite between 02 and 0450 PSIA		
Sealed	Infinite between 0500 to 015,000 PSIS		
Proof pressure	Ranges ≤ 1500 PSI FS	3X FS	
	Ranges > 1500 ≤ 9000 PSI FS	2X FS	
	Ranges > 9000 ≤ 15,000 PSI FS 1.2X FS		

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. Intermediate ranges are realized by deranging the analog output from the next highest basic range: 1, 3, 10, and 30 bar (relative) 1, 3, 10, and 30 bar (absolute), and 100, 300, and 1000 bar (sealed). Pressure range may be specified in units of lb/in2(psi), inches WC or feet WC. KELLER America uses the International Standard conversion of 2.3067 feet WC/psi.

4. Maximum pressure for IS-approval is 2,000 psis

Accuracy ₅		
	Standard	Optional
Static	±0.1% FS	±0.05% FS
Total Error Band	±0.25% FS	±0.1% FS

5. Static accuracy includes the combined effects of non-linearity, hysteresis, and non-repeatability at room temperature (25°C). Total Error Band (TEB) includes the combined effects of non-linearity, hysteresis, and non-repeatability as well as thermal dependencies, over the compensated temperature range, expressed as a percentage of the basic range (BR).

The calculation for maximum TEB on intermediate ranges (IR) is: $TEB_{IR} = (BR/IR) \times TEB_{BR}$

Outputs		
Current	4-20 mA - IS-approved	
	4-20 mA Non-IS (with or without lightning protection)	
Voltage ₆ 0-5 VDC, 0-10 VDC		
6. Other voltage output options available on request.		

Connection				
Process	1/4"-18 NPT Male ₇			
Electrical	std. 10 ft. Cable ₈	DIN43650 ₉	mPm393 ₉	MIL-C 26482 ₁₀
Wiring:				
4-20 mA - IS-approved	RED: +Vcc BLACK: OUT/GND	Not Available	Not Available	Not Available
4-20 mA Non-IS (with or without lightning protection)	BLACK: +Vcc WHITE: OUT/GND	PIN 1: OUT/GND PIN 3: +Vcc PIN 4: CASE	PIN 1: OUT/GND PIN 3: +Vcc	PIN A: +Vcc PIN C: OUT/GND
Voltage	BLACK: +Vcc WHITE: GND RED: +OUT	PIN 1: OUT/GND PIN 2: +OUT PIN 3: +Vcc PIN 4: CASE	PIN 1: OUT/GND PIN 2: +OUT PIN 3: +Vcc	PIN A: +Vcc PIN B: +OUT PIN C: GND

7. Other process connections available on request. Consult the factory.

8. IS-approval appilies only to Valueline transmitters with cable

9. Mating connector supplied at no extra cost.

10. At extra cost, includes mating connector.





Valueline - SPECIFICATIONS

Electrical			
	Supply ₁₁	Current	Load resistance
4-20mA - IS-approved (includes lightning protection)	1130 VDC	3.2-22 mA	<(Supply-11V)/0.022A
4-20 mA - w/o lightning protection	832 VDC	3.2-22 mA	<(Supply-8V)/0.022A
0-5VDC	832 VDC	< 8 mA	>5k ohm
0-10VDC	1332 VDC	< 8 mA	>5k ohm
Start-up time	250 ms		

11. Nominal values may be higher depending upon cable length. Internal lightning protection increases the minimum-required supply voltage from 8VDC to 11VDC, due to internal resistance of the surge protectors. In addition, cable resistance (~76Ω / 1000ft) adds to the supply requirement. In order to insure proper system operation, calculate the minimum required supply voltage (at the source) as follows:

For internal only protector (standard with 4-20mA output): MINIMUM SUPPLY VOLTAGE = 11 + 0.022 (CABLE LENGTH x 0.076) VDC

For two-part (internal+external) system (recommended): MINIMUM SUPPLY VOLTAGE = 11.6 + 0.022 (CABLE LENGTH x 0.076) VDC

Environmental	
Protection Rating	
Cable	IP68
mPm393	IP65
DIN43650	IP65
MIL-C 26482	IP65
Operating Temp.	-1060° C (Cable) -30100° C (Connector)
Compensated Temp.	-1080° C
Wetted Materials	316 L Stainless Steel, optional titanium

Certifications		
4-20 mA IS-Approved	UL / cUL	Class I, Division 1, Groups A, B, C, and D Class II, Division 1, Groups E, F, and G Class III
All versions	CE	EN 61000-6-1 to 6-4 / EN 61326-1 / EN 61326-2-3
	Shock	20g (11ms)
	Vibration	20g (5-2KHz, max. amp ±3mm per IEC68-2-6)
	NSF / ANSI ₁₂	61, 372
12. NSF/ANSI 61 and 372 certification applies to PE & EPDM construction material option, which is standard on this instrument unless otherwise specified.		

Optional Accessories











Termination Enclosure



1/2" NPT Conduit Fitting

Drying Tube Assembly

Bellows Assembly

Process Meter

Signal Line Surge Protector

Edition 02/2024 Subject to alterations sales@kelleramerica.com

Find your local KELLER contact kelleramerica.com