



Acculevel

HIGH ACCURACY SUBMERSIBLE LEVEL TRANSMITTER

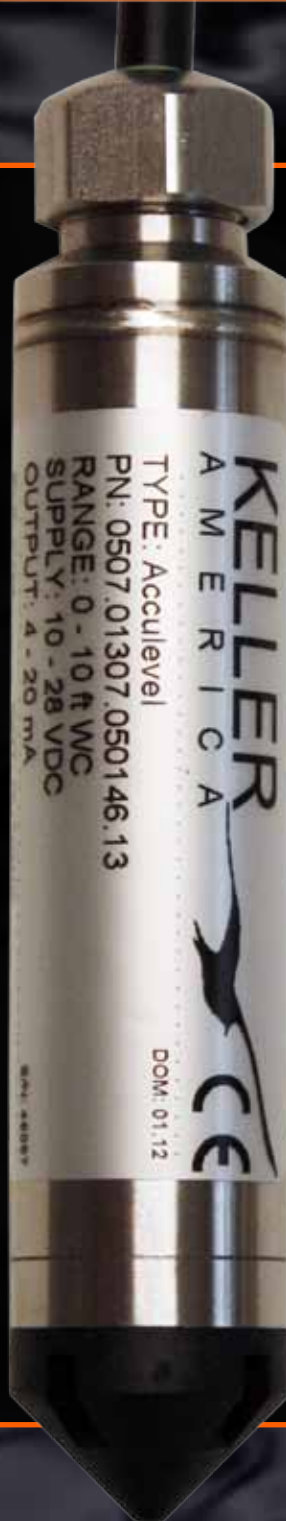
DESCRIPTION

The Acculevel by Keller America provides standard features that far exceed those of comparably priced transmitters, including standard $\pm 0.25\%$ FS or optional $\pm 0.1\%$ Total Error Band (TEB) accuracy.

The ability of the Acculevel to provide this level of sustained performance over a wide range of operating conditions, makes it ideally suited to environmental monitoring applications such as surface water, streams, and reservoirs.

Keller America's guaranteed lightning protection makes this transmitter ideal for installation in areas prone to chronic damage due to transients caused by lightning.

For more information on the Acculevel, or any other Keller product, please contact Keller America, or view the entire Keller catalog at www.kellera-america.com/pdf-library/.



FEATURES

4...20mA models include guaranteed lightning protection at no additional cost.

16-bit internal digital error correction for cost-effective low Total Error Band (TEB)

316L SS flush-diaphragm sensor standard - Optional titanium for severe applications.

2-year warranty covers defects in materials and workmanship.

User-rangeable analog output ensures compatibility as requirements change.

RS485 modified-MODBUS compatible allows up to 128 transmitters on a single bus.

Standard dual (analog & RS485) outputs simplify interface to controls, data collection, and telemetry systems.

Built in the U.S.A. - ARRA Section 1605 Compliant.

KELLER AMERICA INC

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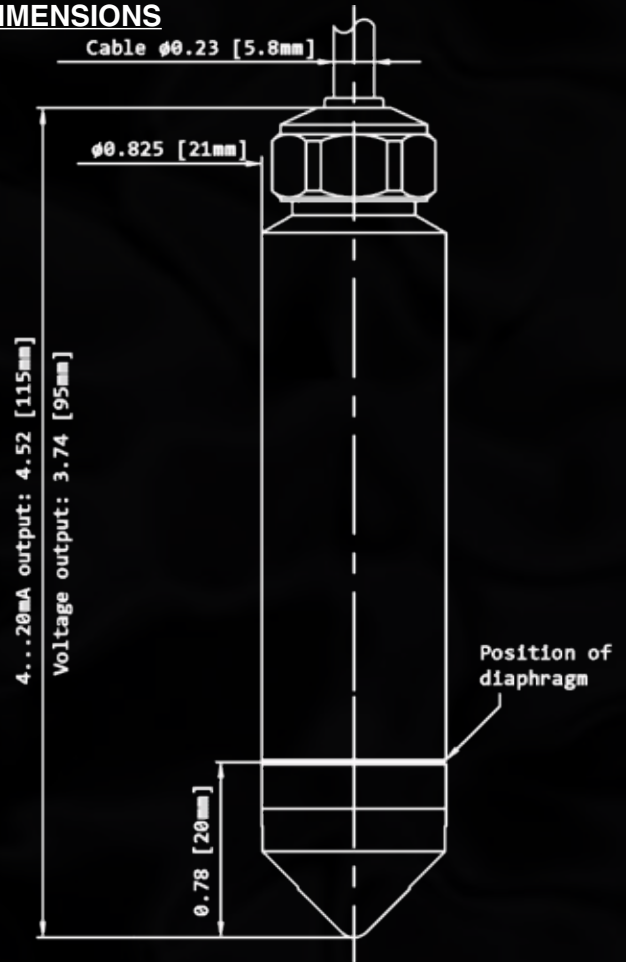
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SPECIFICATIONS

Available ranges ^{1,2}	
Relative	Infinite from 0..3 to 0..900ft W.C.
Absolute	Infinite from 0..29.008 to 0..159.544 PSIA ₂
Accuracy, TEB ₃	Standard 0.25% FS TEB Optional 0.1% FS TEB
Compensated Temperature Range	-10..80° C
Output	4..20mA + RS485 0..5VDC, 0..10VDC + RS485
Resolution	0.002% FS
Supply	
Voltage Output	13..28VDC ₄
Current Output	8..28VDC ₆
Load Resistance	
Current	<(Supply-8V)/0.02A
Voltage	>4k ohm
Wetted Materials	Standard 316L S.S. Optional Titanium Polyamide Flourocarbon
Environmental Protecton	IP68
Cable	Standard Hytrel Optional Polyethylene Optional Tefzel
Optional Accessories	Drying Tube Aneroid Bellows 1/2"NPT Conduit Fitting Stabilizing Weight Termination Enclosure Open-face nose cap

Specifications are subject to change without notice.

DIMENSIONS



WIRING DIAGRAM

Output	White	Black	Red	Blue	Yellow
2-wire (mA)	OUT / GND	+Vcc	N/A	RS485A	RS485B
3-wire (VDC)	GND	+VCC	+OUT	RS485A	RS485B

Braided shield wire connected to transmitter housing₅

NOTES

- The Acculevel can be provided with custom calibration at no extra cost for fluids other than water, provided the specific gravity is given at the time the order is placed.
- Level 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.
- TEB: Total Error Band; Includes the combined effects of non-linearity, hysteresis and non-repeatability as well as thermal dependencies, over the compensated temperature range.
- Nominal values may be higher depending upon cable length. Cable resistance = $\sim 70\Omega / 1000\text{ft}$. Consult reverse side for minimum supply voltage guidelines.
- 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!
- Internal lightning protection increases the minimum-required supply voltage, due to internal resistance of the surge protectors. In addition, cable resistance ($\sim 70\Omega / 1000\text{ft}$) 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 = $10.75 + 0.025 (\text{CABLE LENGTH} \times 0.07)$ VDC
For internal only protector (standard with 4-20mA output): MINIMUM SUPPLY VOLTAGE = $9.65 + 0.025 (\text{CABLE LENGTH} \times 0.07)$ VDC