



# Microlevel

MICRO-BORE SUBMERSIBLE LEVEL TRANSMITTER

## DESCRIPTION

The Microlevel by Keller America is the smallest diameter, media isolated submersible level transmitter in its class. At only 0.63", it is specifically designed for applications that demand small size and high performance.

The Microlevel combines proven piezoresistive silicon sensor technology with Keller's state-of-the-art signal conditioning circuitry to provide outstanding  $\pm 0.25\%$  FS standard ( $\pm 0.1\%$  optional) Total Error Band (TEB) accuracy over a wide compensated temperature range.

The ability of the Microlevel to achieve this performance day after day, over a wide range of operating conditions, makes it the ideal solution for ground water level measurement and environmental monitoring applications.

For more information on the Microlevel, or any other Keller product, please contact Keller America, or view the entire Keller catalog at [www.kelleramerica.com/pdf-library/](http://www.kelleramerica.com/pdf-library/).

## FEATURES

Class-leading 0.63" outside diameter

Built-in surge protection protects the transmitter from fast-rising transients

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

316L stainless steel construction

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.

Standard 3 day lead time at no additional charge



**KELLER AMERICA INC**

351 BELL KING ROAD · NEWPORT NEWS, VA 23606 · TOLL FREE 877-253-5537 · PHONE (757) 596-6680 · FAX (757) 596-6659

EMAIL SALES@KELLERAMERICA.COM · WEBSITE WWW.KELLERAMERICA.COM



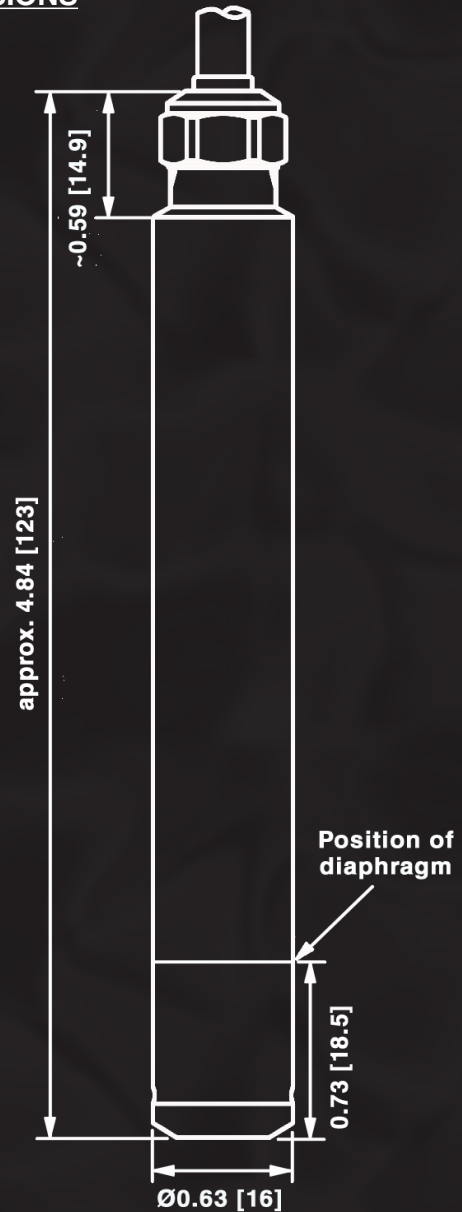
# Microlevel

## MICRO-BORE SUBMERSIBLE LEVEL TRANSMITTER

### SPECIFICATIONS

Available ranges <sub>1,2</sub>	
Relative	Infinite from 0..3 to 0..900ft W.C.
Accuracy, TEB <sub>3</sub>	Standard 0.25% FS TEB Optional 0.1% FS TEB
Compensated Temp. Range	0..50° C
Output	4..20mA + RS485
Resolution	0.002% FS
Supply	10..30 VDC <sub>5</sub>
Load Resistance	<(Supply-10V)/0.02A
Wetted Materials	316L stainless steel Polyamide Fluorocarbon
Environmental Protection	IP68
Cable	Polyethylene for general purpose Hytrel for hydrocarbons Tefzel for chemical interaction
Optional Accessories	Drying Tube Aneroid Bellows Termination Enclosure Cable Hanger Digital Display / Process Controller RS485 converter cable External surge protector
Specifications and dimensions are subject to change without notice	

### DIMENSIONS



### WIRING

Output	White	Black	Red	Blue	Yellow
2-wire (mA)	OUT / GND	+Vcc	N/A	RS485A	RS485B
Braided shield wire connected to transmitter housing <sub>6</sub>					

### NOTES

- The Microlevel 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/in<sup>2</sup>(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.
- 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!
- In addition to 10V minimum supply, cable resistance (~70Ω / 1000ft) adds to the supply requirement. For addition of external surge protection (recommended):  
MINIMUM SUPPLY VOLTAGE = 11.25 + 0.025 (CABLE LENGTH x 0.07) VDC