

Microlevel

Ø 0.63" submersible level transmitter

Features:

- · Certified to NSF/ANSI 61 and 372 standards for use in drinking water applications
- · Excellent 0.1% FS static accuracy, 0.25% Total Error Band (TEB)
- · 4...20mA models include guaranteed lightning protection at no additional cost
- · 316L stainless construction standard Optional titanium for severe applications
- · Class-leading 0.63" outside diameter
- · 2-year warranty covers defects in materials and workmanship
- · User-rangeable analog output ensures compatibility as requirements change
- · RS485 modified-MODBUS compatible interface allows up to 128 transmitters on a single bus
- · Standard dual (analog & RS485) outputs simplify interface to controls, data collection, and telemetry systems
- · 2021 IIJA Build America, Buy America-compliant configurations available
- · Standard 3-day lead time







		Γ
	approx. 5.33 [135.5]	
		~0.59 [14.9]
Ø0.63		
53 [16]		
	0.73 [18.5] Position of	Ø 0.230 [5.8]
	Position of diaphragm	-

Output	White	Black	Blue	Yellow
2-wire (mA)	OUT / GND	+Vcc	RS485A	RS485B

Colors refer to 26AWG PE-jacketed cable conductors.

Braided shield wire connected to transmitter housing. For lightning protection to function properly (4-20mA only) the shield wire must be connected to a good earth ground.

Min. pipe bend radius	1" IPS	1.5" IPS	2" IPS
Schedule 40	18"	5"	3"
Schedule 80	22"	6"	4"



Microlevel - SPECIFICATIONS

Pressure Ranges _{1,2}	
Relative	Infinite between 03 and 0900 ft W.C.

- 1. The Microlevel can be provided with custom calibration at no extra cost. For fluids other than water, the specific gravity must be given at the time the order is placed.
- 2. Intermediate ranges are realized by deranging the analog output from the next highest basic range: 1, 3, 10, and 30 bar (relative) 2, 4, and 11 bar (absolute). 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.

Output		
Current	420mA + RS485	
Resolution ₃	0.0005%	
3. Resolution applies to digital output only. Analog resolution is continuous and limited by the process meter and not the instrument.		

Accuracy ₄		
	Standard	
Static	±0.1% FS	
Total Error Band	±0.25% BR	

4. 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: $TEB_{IR} = (BR/IR) \times TEB_{RR}$

Electrical			
	Supply ₅	Current	Load resistance
4-20mA + RS485 ₆	1032 VDC	3.2-22 mA	<(Supply-11V)/0.022A
Start-up time	< 60 ms		

5. 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 loop 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

6. Disturbance of the analog interface occurs during communication via the digital interface. Simultaneous operation of the analog and digital interface is not recommended.

Certifications		
CE EN 61000-6-1 to 6-4 / EN 61326-1 / EN 61326-2-3		
NSF / ANSI ₇	61, 372	



Microlevel - SPECIFICATIONS

Environmental	
Protection Rating	IP68
Operating Temp.	-1060° C
Compensated Temp.	050° C
Wetted Materials	316 L Stainless Steel
	Titanium Optional
	Polyamide
Cable & Sealing	PE & EPDM for water / wastewater ₇
	Hytrel & Viton for hydrocarbons
	Tefzel & Viton or EPDM as required for chemical interaction
7. NSF/ANSI 61 and 372 appr	roval applies to both 316L stainless steel & titanium construction with PE & EPDM cable sealing option, which is standard on this instrument

Optional Accessories

unless otherwise specified.



Drying Tube Assembly



Interface Converter

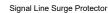


Bellows Assembly



Process Meter







Termination Enclosure



Pressure Test Adapter