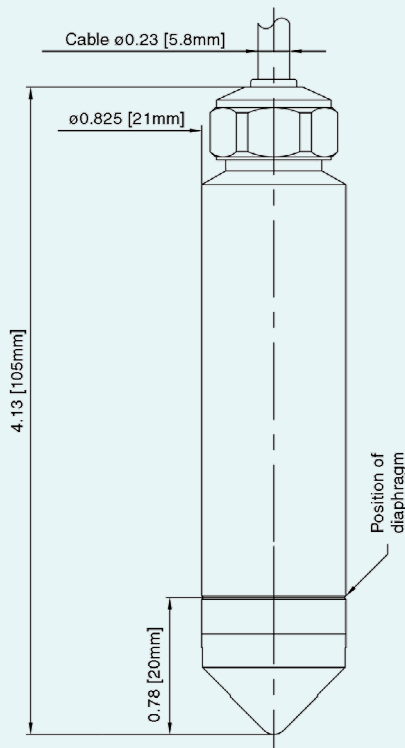


Levelgage

General purpose submersible level transmitter

Features:

- UL / cUL listed Class 1 Div 1 hazardous location approved
- NSF/ANSI 61 and 372 certified construction for use in drinking water applications
- Excellent 0.25% FS static accuracy, 1% Total Error Band (TEB)
- 4...20mA models include guaranteed lightning protection at no additional cost
- Standard 316L stainless steel construction, optional titanium₈
- 2-year warranty covers defects in materials and workmanship
- Industry standard analog outputs simplify interface to controls, data collection, and telemetry systems
- 2021 IIJA Build America, Buy America-compliant configurations available
- Standard 3-day lead time



Output	White	Black	Red
4-20 mA - IS Approved	N/A	OUT/GND	+Vcc
4-20 mA - Non-IS approved (without lightning protection)	OUT/GND	+Vcc	N/A
0-5, 0-10 VDC	GND	+VCC	+OUT

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	22"	4"	3"
Schedule 80	22"	6"	4"



Levelgag^e - SPECIFICATIONS

Pressure Ranges _{1,2}	
Relative	Infinite between 0...3 and 0...900 ft W.C.
Absolute	Infinite between 0...2 and 0...11 bar (0...29 to 0...160 PSIA)

1. The Levelgag^e 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.

Outputs	
Current	4-20 mA - IS-approved
	4-20 mA - Non-IS (with or without lightning protection)
Voltage ³	0-5 VDC
	0-10 VDC

3. Other voltage output options available on request.

Accuracy ₄					
	Standard	Option 1	Option 2 ₅	Option 3 ₅	Unit
Static	0.25%	0.25%	0.1%	0.05%	FS
Total Error Band	1%	0.5%	0.25%	0.1%	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: $TEB_{IR} = (BR/IR) \times TEB_{BR}$

5. Optional accuracies 2 and 3 apply only to 4-20 mA - IS-Approved versions. For non-IS or digital high accuracy needs, please refer the KELLER Acculevel.

Electrical			
	Supply ₆	Current	Load resistance
4-20mA - IS-approved (includes lightning protection)	11...30 VDC	3.2-22 mA	<(Supply-11V)/0.022A
4-20 mA w/o lightning protection	8...32 VDC	3.2-22 mA	<(Supply-8V)/0.022A
0-5VDC	8...32 VDC	< 8 mA	>5k ohm
0-10VDC	13...32 VDC	< 8 mA	>5k ohm
Start-up time	250 ms		

6. 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

Levelgag^e - SPECIFICATIONS

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

7. NSF/ANSI 61 and 372 approval applies to both 316L stainless steel & titanium construction with PE & EPDM cable sealing option, which is standard on this instrument unless otherwise specified.

Environmental	
Protection Rating	IP68
Operating Temp.	-10...60° C
Compensated Temp.	-10...80° C
Wetted Materials	316 L Stainless Steel, optional titanium ₈ Polyamide
Cable & Sealing	PE & EPDM for water / wastewater Hytrel & Viton for hydrocarbons Tefzel & Viton or EPDM as required for chemical interaction

8. Titanium construction available only on IS-approved Levelgag^e transmitters with optional accuracies 2 and 3.

Optional Accessories



1/2" NPT Conduit Fitting



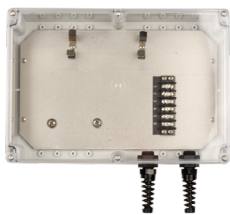
Drying Tube Assembly



Bellows Assembly



Cable Hanger



Termination Enclosure



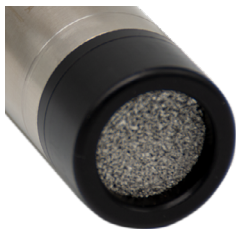
Stabilizing Weight



Process Meter



Open-faced Nose Cap



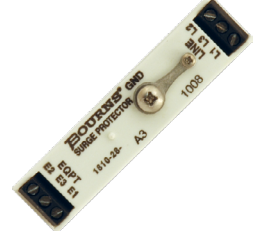
Piezometer Nose Cap



Sour Gas Trap



Pressure Test Adapter



Signal Line Surge Protector