



Non-fouling Lift Station Level Transmitter

LevelRat™



- ▶ **Lift Stations**
 - ▶ **Wastewater**
- ▶ **Tanks**
 - ▶ **Slurries**
- ▶ **Landfills**
 - ▶ **Leachate**



Specifically designed for extended service in sewage lift station environments, the LevelRat™ by Keller America features a relatively wide sensing diaphragm yet small overall size. Unlike similar, competing models which feature a fragile Teflon®-coated rubber diaphragm, the LevelRat incorporates a monolithic diaphragm formed from Kynar®, which combines the non-stick quality of Teflon with superior toughness and abrasion resistance.

Perfectly suited for pump control applications, the LevelRat is compatible with any standard 2-wire, 4-20 mA current loop that supplies a minimum of 8 but no more than 30 VDC⁴ to the transmitter. The LevelRat is typically suspended into the liquid by a standard Hytrel®-jacketed cable that is both self-supporting and vented. Optional ½" NPT male conduit fitting adapts the LevelRat to those applications where hard-mounting by rigid conduit is preferred. Keller America's standard guaranteed lightning protection makes this transmitter ideal for installation in areas prone to chronic damage due to transients caused by lightning.

The LevelRat, built with custom level range and cable length, is typically shipped in 3 business days or less, as are all of our US-made pressure and level transmitters. They include our Levelgage/Acculevel/Microlevel submersible level transmitters and Valueline/Preciseline pump pressure and elevated storage tank level transmitters. Whatever the pressure or level measurement requirement, a solution can be found within the Keller product lineup. Call toll-free 877-253-5537 to discuss your requirements with one of our experienced sales engineers.



Levelgage /
Acculevel

Please visit
www.kelleramerica.com
for our full product line!

Valueline /
Preciseline



Addition of Option-009 or internal only protection (standard on all 4-20mA pressure transmitters) increases the minimum-required supply voltage, on account of internal resistance of the surge protectors. In addition, cable resistance² 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 (CABLE LENGTH x 0.07) VDC

For internal only protector (standard with 4-20mA output):
MINIMUM SUPPLY VOLTAGE = 9.65 + 0.025 (CABLE LENGTH x 0.07) VDC

²Cable resistance = ~70Ω / 1000ft

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LevelRat



Specifications	
Level range (user specified) _{1,2}	Infinite between 0 – 5 thru 0 – 100 ft. WC
Accuracy, TEB ₃	±1%FS
Compensated Temperature Range	-10 – 80°C
Operating Temperature Range	-10 – 80°C
Supply ₄	VDC
	8 – 28 VDC 13 – 28 VDC
Output	2 wire 4 – 20 mA ₅
	3 wire 0 – 5 VDC 0 – 10 VDC
Load Resistance (Ω)	mA: < (Supply - 8V) / 0.02A VDC: > 4KΩ
Wetted Materials	316L S.S., Kynar®, Fluorocarbon
Cable ₆	Hytrel®-jacketed, vented & shielded with drain (Optional Tefzel® or Polyethylene jackets)
Environmental Protection	IP68

Notes

1. The LevelRat 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.

2. 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.

3. 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.

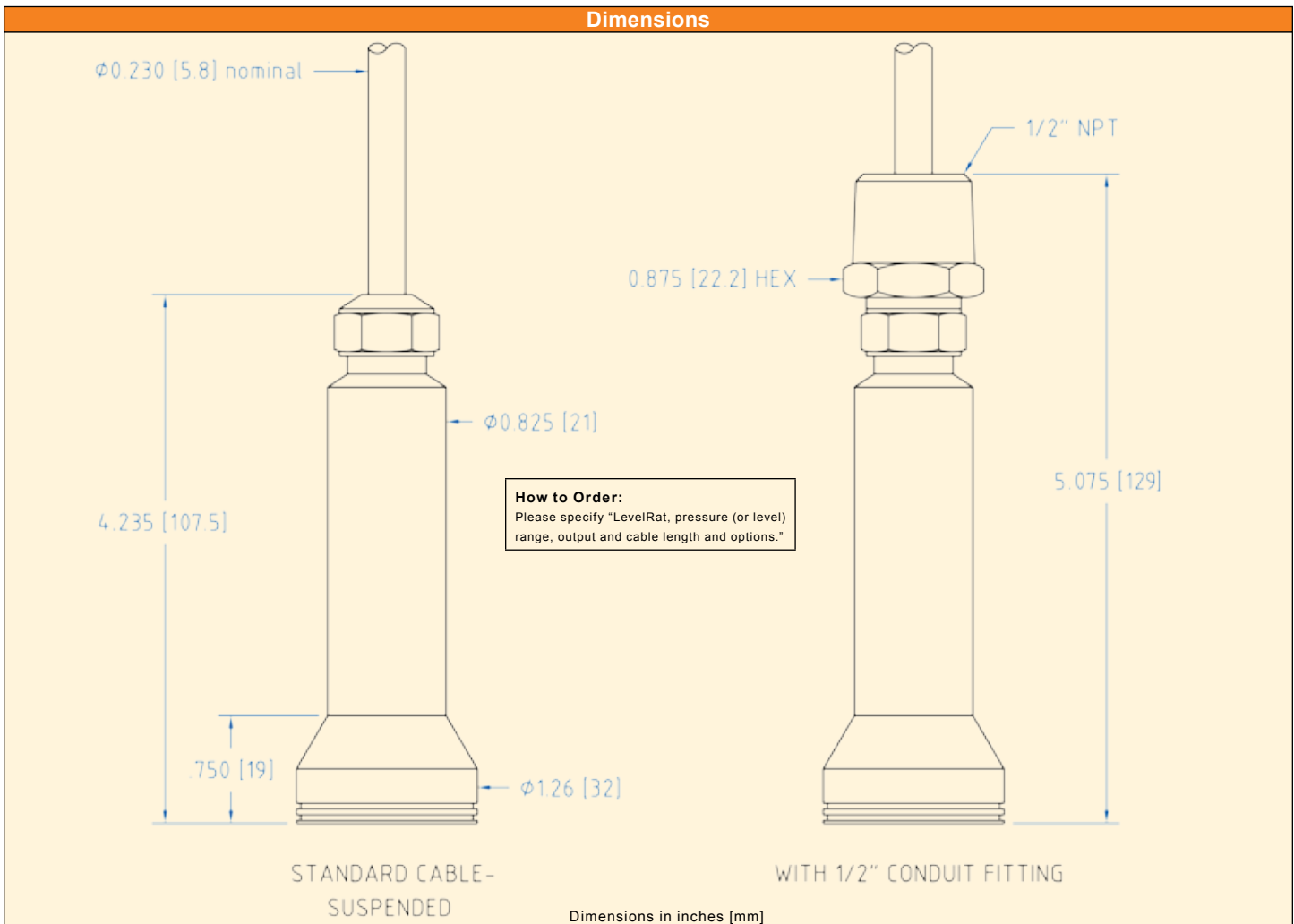
4. Nominal values may be higher depending upon cable length. Cable resistance = ~70Ω / 1000ft. Consult reverse side for minimum supply voltage guidelines.

5. 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!

Wiring Configuration			
Configuration	White	Red	Black
2 Wire (mA)	OUT / GND	N / A	+Vcc
3 Wire (VDC)	GND	+OUT	+Vcc

Braided shield wire connected to transmitter housing

Dimensions



Note: Dimensions & specifications are subject to change without notice. For the most accurate and up to date information on all products please visit our website.

Options & Accessories			
► Drying Tube Assembly (Desiccant)	► Bellows Assembly	► Conduit Fitting	► Stabilizing Weight
			► Termination Enclosure