

# LEVEL MONITOR

## SUBMERSIBLE PRESSURE TRANSDUCER

### TYPICAL APPLICATION

For use with any of MPE's Station Controllers or other pump controllers that require a 4-20mA level input.

**MADE IN  
THE U.S.A.**

### DESCRIPTION

The Level Monitor provides a rugged and cost-effective means to measure liquid level for water and wastewater pumping applications.

When submersed in liquid, the Level Monitor converts the pressure exerted by the liquid into a 4-20mA analog signal that represents liquid level. The vent tube in the cable transmits atmospheric pressure down the cable to the reference side of pressure sensor, to correct for changes in atmospheric conditions.

A stainless steel diaphragm and silicone oil fill is provided to isolate and protect the pressure sensor from the liquid being measured.

The weight of the Level Monitor acts to reduce its movement when placed in a moving liquid. A Strength Cord in the cable provides ample support for its weight. In applications where strong currents are present, the 1/2" NPT fitting on top may be used to mount the Level Monitor in a fixed position. Also, the 3.75" diameter of the Level Monitor enclosure allows it to fit inside a Stilling Well made from a 4" PVC pipe.

A two stage surge suppressor circuit using both an MOV and TVS provide high voltage transient protection for the transducer circuitry.

The Transducer Vent Bellows (TVB1) is provided with the Level Monitor and is to be connected to the end of the vent tube to prevent moisture from entering the vent tube.

The Kellems Grip (K-Grip) is provided with the Level Monitor allowing a field installation of the cable that is kink free.

The Level Monitor may be ordered with various lengths of cable, and with one of three pressures ranges 5, 10, or 15 psi ( 11.5, 23.1, or 34.6 Feet).



### SPECIFICATIONS

Enclosure Material:	316 Stainless Steel
Enclosure Diameter:	3.75"
Cable Jacket Material:	Polyurethane
Cable Diameter:	0.270 inch
Wire Size:	20 AWG
Vent Tube Diameter:	0.060 inch
Operating Voltage:	13 - 29 VDC
Output Signal:	4 - 20 mA, two wire
Operating Temp:	+32 to +140 °F
Accuracy:	± 0.5 % full scale
Weight (with 40 feet cable):	6.0 lbs
Additional Cable Weight:	0.34 lbs per 10 Feet

### ORDERING INFORMATION

**Part Number: LM - A - B**

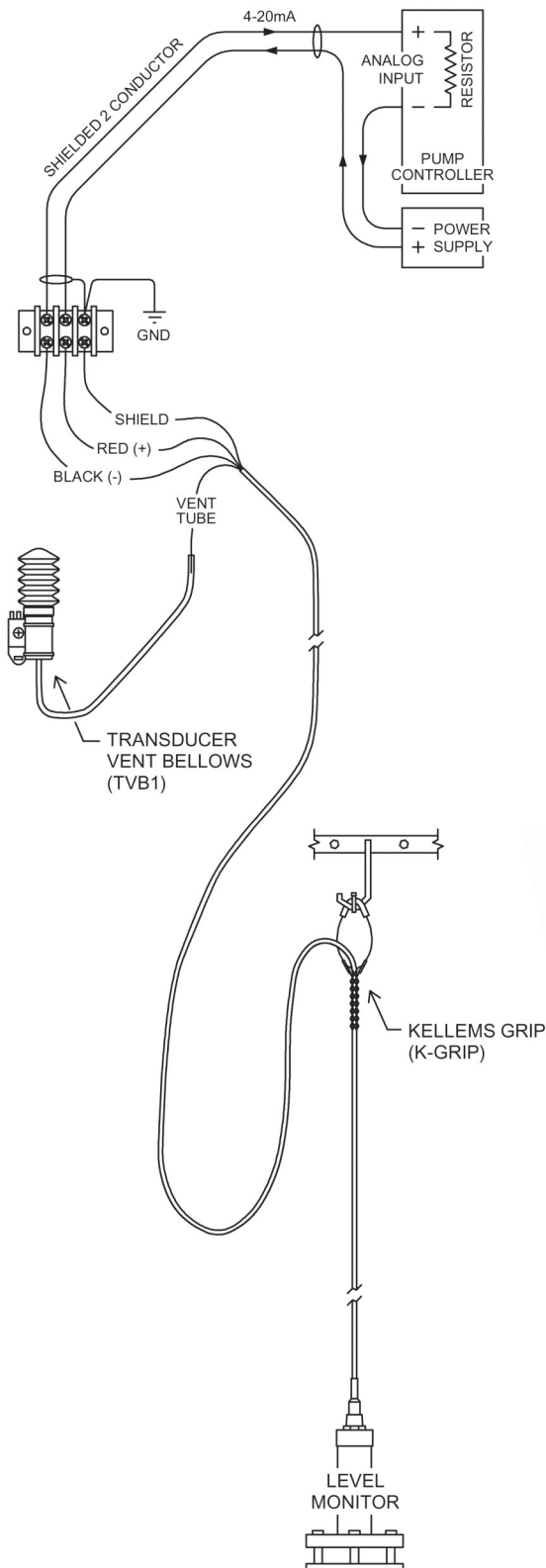
Pressure Range (psi): \_\_\_\_\_  
5, 10, or 15

Cable Length (feet): \_\_\_\_\_  
40 feet is standard for 5 & 10 psi range  
60 feet is standard for 15 psi range

Provided with Level Monitor:  
Transducer Vent Bellow (TVB1)  
Kellems Grip (K-GRIP)

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## CONNECTION DIAGRAM



### TRANSUCER VENT BELLOWS (TVB1)

Provided With Level Monitor



### KELLEMS GRIP (K-GRIP)

Provided With Level Monitor