

DEPTH & LEVEL TRANSMITTER - HIGH ACCURACY VERSALINE VL5000 SERIES

The PMC VersaLine VL5000 Series submersible transmitters are designed for depth and level measurements of ground, surface, waste, and sea water. Suitable for small size bore holes, wells, dams, irrigation, sewage lift stations, rivers and oceanography. The VL5000 has been specifically developed for long term monitoring in wells and other applications where high performance is important. Accuracies of better than 0.05% are available.

The Titanium housing provides immunity to virtually all environments, especially including brackish or sea water, or other chemicals unsuitable for stainless steel. The Polyurethane vented molded cable is attached to the transmitter providing the highest integrity waterproof assembly, proven in thousands of installations worldwide. Kevlar is used to avoid cable elongation with a breaking point in excess of 200lbs.

A feature of the VL5000 Series is full scale ranges as low as 20" WC. The sensing technology features a highly stable Piezoresistive element manufactured from micro- machined silicon and supported by more than 20 years' experience in depth and level applications. Reliability is enhanced by an anti-shock nose cone designed to protect against water hammer.

With a choice of voltage or 4-20 mA configurations, small physical size and a wide range of pressures, the VL5000 Series will satisfy most applications.

TECHNICAL SPECIFICATIONS

| | |
|--|---|
| Full Scale Ranges (Zero Based) | 0-20, 30, 50" WC 0-1, 5, 10, 15, 30, 50, 100, 150, 300 psig, and 500, 1000 psig 0-50, 100, 150, 200, 300 psia <i>Other ranges or engineering units can be specified</i> |
| Accuracy | ±0.05% FS (BSL) standard (±0.1% FS, and ±0.25% FS available) ±0.05% not available on ranges below 7.5 psi <i>Non-linearity, hysteresis, repeatability & zero/span setting</i> |
| Long Term Stability | 0.1% FS/yr for pressure ranges above 30 psi. Prorated for lower ranges. Under standard conditions. |
| Overpressure (Proof Pressure) | Full scale ranges up to 15 psi - 45 psi Full scale ranges 15 psi to 1000 psi - >3 x FS |
| Operating Temperature Range | 30° to +255°F (-2° to 125°C) - non freezing |
| Compensated Temperature Range | 30° to 115°F (-2° to 45°C) |
| Temperature Effects (TEB) | ±0.2% TEB for ranges >7.5 psi for 30° to 115° F compensated ±0.5% TEB for ranges < 7.5 psi for 30° to 115° F compensated |
| Electrical (either) | 2-wire, 4-20mA, 9-33 VDC power 3-wire, 0-5 VDC standard (0-10VDC option, 12-30VDC power) |
| Intrinsically Safe Approvals | For FM/FMC Class I, II, and III Div. 1 Groups A-G <i>Please refer to VL2000, VL3000 and VL4000</i> |
| Cable – up to 5000ft in single length | Polyurethane molded, vented cable with Kevlar |
| Housing | 316L Stainless Steel or Titanium with 5-year corrosion warranty |
| Weight (excluding cable) | 5oz (excluding cable) |

PMC Engineering adopts a continuous development program which sometimes necessitates specification changes without notice

Process Measure Control

Features

- <±0.05% accuracy
- 0-5VDC or 4-20mA
- Lightning Protection
- 0-20"WC to 0-1000psi
- 1" diameter Titanium
five year warranty
- C E

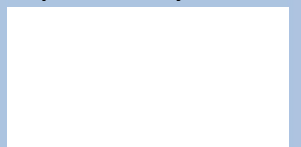
Applications

- Vessel Levelling
- Dry Docks
- Waste Water Lagoon
- Ballast Tanks
- Surface Water

Contact

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Represented by:



Your depth and level specialists for Ground, Surface, Sea and Waste Water

PMC Configurator

VL x x x x

| | | |
|---------------------------------|---|---|
| Model Construction | 0.95" diameter Depth | 5 |
| Housing Material | 316L Stainless Steel | 1 |
| | Titanium - 5 year warranty | 2 |
| Electrical Connection | Polyurethane molded cable | 1 |
| | Cable length must be specified at the time of ordering. | |
| Electrical Configuration | Volts, specify 0-5 standard or 0-10 (option) | 2 |
| | 4-20 mA | 3 |

Example Ordering Format: VL5113 - 10psig - 0.05% - 40' cable

RELATED PRODUCTS

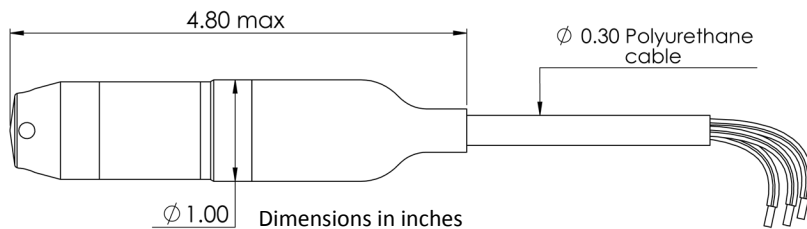
In addition to this product PMC specializes in offering a wide range of submersible sensors for depth and level applications. For example the Versaline **VL4000** and **MTM3000** offer similar performance with 3/4" and 3/8" diameter housings respectively suitable for deeper or smaller well installations. The **VL2000** provides an open face construction avoiding clogging or sludge build up in wastewater and similar applications. PMC manufactures a wide range of other level transmitters including flush designs for use in water and wastewater management, food and beverage, pulp and paper, and pharmaceutical applications. Please refer to appropriate data sheets.

FOR ZERO MAINTENANCE



In order to reduce on site maintenance PMC has developed the MP 11 Moisture Protection Reference Volume. For vented gauge transmitters this provides a total isolation to the atmosphere by using a custom bladder while maintaining the high performance of the transmitter. This changes volume with Barometric pressure. Totally maintenance free. Please specify MP 11.

MECHANICAL DETAILS



ELECTRICAL DETAILS

| Configuration | +V Supply | 0V Supply | + V Output | - V Output | Ground |
|----------------|-----------|-----------|------------|------------|--------|
| 4-20mA | Red | Black | | | Green |
| 0-5VDC/0-10VDC | Red | Black | Yellow | Black | Green |

Process Measure Control

Sensors for

- Pressure
- Level
- Vacuum
- Humidity
- Temperature
- Force
- Position

Accessories

PMC offers a range of Accessories and variants for depth and level transmitters. Reference separate data sheet.

- Termination Enclosure
- Cable Hanger
- Moisture Protection
- Calibration Adaptor
- Sink Weights
- Level Meters

PMC is

- Engineering Driven
- Confidential
- Experienced
- Responsive
- Dynamic
- Friendly

Your depth and level specialists for Ground, Surface, Sea and Waste Water