

# DEPTH/LEVEL TRANSMITTER—SLIM-LINE VERSALINE VL4500 SERIES

**The PMC VersaLine VL4500 Series submersible transmitters** feature an all Titanium welded housing providing immunity to virtually all environments. They 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 VersaLine series of submersible pressure/level transmitters are designed for long term installations with reliabilities for more than 20 years. The transmitters are feature rich in design to achieve this and the major details are highlighted on the reverse side of this datasheet.

With a choice of millivolt or 4-20 mA configurations, small physical size and a wide range of pressures, the VL4500 Series will satisfy most applications.

The VersaLine **VL3000** and **MTM3000** offer similar performance while contained within 1" and 3/8" diameter housings respectively. The **VL2000** provides an open face construction avoiding clogging or sludge build up in wastewater and similar applications.

#### **TECHNICAL SPECIFICATIONS**

Full Scale Ranges (Zero Based)	0-30, 50" WC 0-1, 5, 10, 15, 30, 50, 100, 150, 300, 500 psig 0-50, 100, 150, 200, 300 psia		
Accuracy	±0.1% FS (BSL) or ±0.25% FS (BSL) Combined non-linearity, hysteresis & repeatability		
Overpressure	Full scale ranges up to 20 psi - >10X Full scale ranges above 20psi up to 150 psi - >4X Full scale ranges above 150 psi - >2X		
Operating Temperature Range	-5° to +175°F (-20° to +80°C) - non freezing		
Compensated Temperature Range	30° to 85°F (-2° to +30°C)		
Temperature Effects (Compensated)	High accuracy (±0.1%) ±0.3% TEB for ranges 5 psi and above ±1.0% TEB for ranges below 5 psi Standard accuracy (±0.25%) ±1.5% TEB for ranges 5 psi and above ±2.0% TEB for ranges below 5 psi		
Electrical (either)	4-wire bridge: supply voltage: 1-15VDC Output: from 5mv/V to 10mv/V, ratiometric with supply. <i>Contact factory for exact output of each range</i> . Input Impedance: >10k ohm, Bridge: 3k ohm typical 2-wire, 4-20mA, 10-35 VDC power		
Intrinsically Safe Approvals	For FM/FMC Class I, II, and III Div. 1 Groups A-G Please refer to VL2000, VL3000 and VL4000		
Cable – up to 5000ft in single length	Polyurethane molded, vented with Kevlar, 4 conductors		
Housing	Titanium with 5-year corrosion warranty For 316L Stainless Steel Contact the factory.		
Weight (excluding cable)	VL45x1 - 4.5 oz. VL45x3 – 6.5oz		

Process Measure Control

#### **Features**

- mV or 4-20mA output
- 0.1% accuracy
- 0-30" WC to 0-500psi
- 0.725" dia. Titanium five year warranty
- Molded cable

### • C ∈ Applications

- 1" dia. Bore Holes
- Water Level
- Waste Water
- Oceanography
- Ground Water

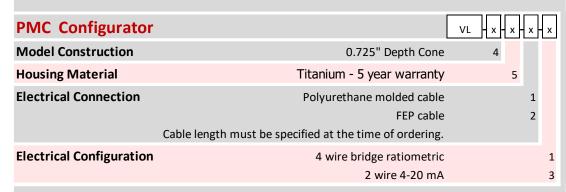
#### Contact

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**Represented by:** 

PMC-STS, Inc. adopts a continuous development program which sometimes necessitates specification changes without notice .

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



#### Example Ordering format: VL 4513 - 300'WC - 0.1% - 350' cable

#### VERSALINE FEATURES

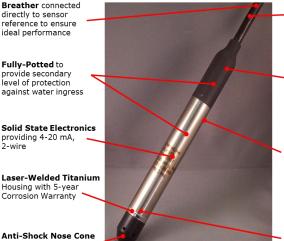
directly to sensor reference to ensure ideal performance

Fully-Potted to provide secondary level of protection against water ingress

Solid State Electronics providing 4-20 mA, 2-wire

Laser-Welded Titanium Housing with 5-year Corrosion Warranty

Anti-Shock Nose Cone to avoid damage from water hammer



Injection-Molded Cable Seal eliminates

water ingress

with Kevlar® strain

retention

**Custom Vented Cable** 

0.725 inch diameter for installation into small diameter hore holes

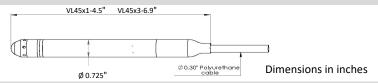
Piezoresistive Technology provides High Accuracy and good Long Term Stability

#### 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 total isolation from the atmosphere by using a custom bladder, while maintaining the high performance of the transmitter. Totally maintenance free. Please specify MP 11.

#### **MECHANICAL DETAILS**



#### **ELECTRICAL DETAILS**

Configuration	+V Supply	OV Supply	+V Output	-V Output	Ground (case)
4-20mA	Red	Black			Green
Millivolt	Red	Black	Yellow	Green	Drain wire

# 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