



# DEPTH/LEVEL TRANSMITTER - RANGEABLE 4-20 mA VERSALINE VL5xx6 SERIES

The PMC VersaLine VL5xx6 Series is part of a comprehensive range of submersible transmitters for the 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 VL5xx6 provides a conventional 4-20 mA, 2-wire configuration, rangeable to 25% of the specified Full Scale. The polyurethane vented molded cable provides a high integrity waterproof assembly. Kevlar is used to avoid cable elongation with a breaking point in excess of 200lbs.

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.

Refer to Separate Data Sheet for the Rangeable RS485/pressure/temperature version of the VL5xx6.

## TECHNICAL SPECIFICATIONS

<b>Full Scale Ranges (Zero Based)</b>	Any range from 0 - 40" WC to 0 - 1000 psi FS gauge or absolute <i>Any ranges or engineering units can be specified</i>
<b>Accuracy</b>	$\leq \pm 0.1\%$ FS ( $\geq 7$ psi FS) $\leq \pm 0.25\%$ FS ( $< 7$ psi FS) <i>Combined linearity, hysteresis, repeatability &amp; zero/span setting</i>
<b>Long Term Stability</b>	0.1% FS/yr for pressure ranges above 30 psi. Prorated for ranges below 30 psi (under standard conditions).
<b>Overpressure (Proof Pressure)</b>	Full scale ranges up to 15 psi: 45 psi Full scale ranges 15 psi to 1000psi: $> 3 \times$ FS
<b>Operating Temperature Range</b>	25° to +125°F (-4° to 50°C)
<b>Compensated Temperature Range</b>	25° to +125°F (-4° to 50°C)
<b>Temperature Effects - Standard 25° to +125° F</b>	$\pm 1.5\%$ TEB for ranges $\geq 30$ psi $\pm 2\%$ TEB for ranges 7 - 30 psi <i>Ranges <math>&lt; 7</math> psi Thermal Characteristics are prorated</i>
<b>Total Error Band - Optional 25° to +125° F</b>	$\pm 0.15\%$ for ranges $\geq 7$ psi $\pm 0.3\%$ for ranges $< 7$ psi <i>Includes linearity, hysteresis, repeatability, thermal effects and zero/span set</i>
<b>Supply Voltage (2-wire)</b>	9-33 VDC power <i>Lightning Protection Option</i>
<b>Output at 4 mA and 20 mA</b>	Adjustable between -5% FS and 105% FS
<b>Span</b>	Adjustable between 25% FS and 110% FS
<b>Response Time</b>	Adjustable: 30 ms, 100 ms, 1 s, 10 s, (default 30 ms)
<b>Interface - Box and Software</b>	USB Converter 309-001 and software (101224) required for zero, span, response time, adjustments, and re-range. <i>One box needed for multiple transmitters</i>
<b>Intrinsically Safe Approvals</b>	For FM/FMC Class I, II, and III Div. 1 Groups A-G <i>Please refer to VL2000, VL3000 and VL4000</i>
<b>Cable – up to 5000ft in single length</b>	Polyurethane molded, vented cable with Kevlar
<b>Housing</b>	Titanium with 5-year corrosion warranty - standard <i>Stainless Steel option available (not available with FEP cable)</i>
<b>Weight (excluding cable)</b>	5oz (excluding cable)

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

## Process Measure Control

### Features

- $\leq \pm 0.1\%$  or  $\leq \pm 0.25\%$  FS
- Lightning Protection
- 0-40"WC to 0-1000psi
- 1" diameter Titanium  
*five year warranty*
- Rangeable 4-20 mA



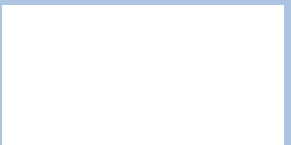
### Applications

- Tank Level
- Bore Holes
- Waste Water Plants
- Sewage Plants
- Surface Water

### Contact

PMC-STs, Inc.  
11 Old Sugar Hollow Rd  
Danbury, CT 06810 USA  
sales@pmc1.com  
Tel: 203-792-8686  
Fax: 203-743-2051  
www.pmc1.com

Represented by:



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

## PMC Configurator

VL x x x xx

<b>Model Construction</b>	0.95" diameter Depth	5
<b>Housing Material</b>	316L SS - option (unavailable with FEP cable)	1
	Titanium - 5 year warranty - standard	2
<b>Electrical Connection</b>	Polyurethane molded cable	1
	FEP cable (High Temp)	7
Cable length must be specified at the time of ordering.		
<b>Electrical Configuration</b>	Programmable 4-20 mA	6a
<b>Additional Information Required</b>	(1) Pressure Range including engineering units (2) Specify gauge or absolute (3) Active compensation (0.15% FS Total Error Band) <i>Standard compensation (1.5% FS) is default</i> (4) Lightning Protection Option if required (5) Converter 309-001 if required (6) 101224 Software if required	

**Example Ordering Format: VL5216 - 10psig - 40' cable**

## RELATED PRODUCTS AND RS485 PROTOCOL VERSION

Please refer to separate Data Sheet for details of the RS485/4-20 mA version of the VL5xx6. This also includes a temperature output.

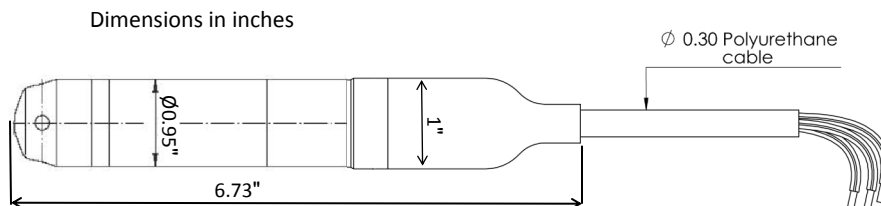
In addition PMC offers products such as the **VL4000** and **MTM3000** in 3/4" and Ø3/8" housing where space is at a premium. The **VL2000** provides an open face construction avoiding clogging or sludge build up in waste water and similar applications. Visit [www.pmc1.com](http://www.pmc1.com) for details.

## 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	0V Supply	+ V Output	- V Output	Ground
4-20mA	Red	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**