

Depth and Level Pressure Transmitter

WT4500 Series



- 0-100 mV or 4-20 mA output
- 0.1% & 0.25% accuracy
- Ranges 30"WC-300 psi
- 0.725" dia. welded Titanium
- Molded polyurethane cable
- 5 year corrosion warranty

The WT4500 Series submersible transmitters are specifically designed for depth and level measurements of ground, surface, waste, and sea water. Typical applications are small size bore holes, wells, dams, irrigation, sewage lift stations, rivers and oceanography. The Titanium housing provides immunity to virtually all environments, especially including brackish or sea water, or other chemicals unsuitable for stainless steel. The standard polyurethane vented cable is molded to the transmitter providing the highest integrity waterproof assembly, well proven in thousands of installations worldwide. Kevlar is used to avoid cable elongation when longer lengths up to 5000 feet are required for deep wells. FEP cable is available as an alternate for harsh environments. A feature of the WT4500 Series is full scale ranges as low as 30" WC.

The sensing technology features a highly stable Piezoresistive element manufactured from micro- machined silicon and supported by more than 20 years experiance in depth and level applications. The sensing element is isolated from the media by a titanium diaphragm, thus providing the best possible reliability for long term installations. Reliability is further enhanced by the anti-shock nose cone which has been specifically designed to protect against water hammer and other external hazards.

With a choice of millivolt (low power) or current (4-20 mA) configurations, small physical size and a wide range of pressures, the VL4500 series will satisfy most applications for water level monitoring and control, oceanographic applications and much more.

Other PMC Products provide smaller size (3/8" dia), clog free (for raw sewege), Intrinsic safety approvals (for hazardous environments) and many other features and conf gurations. Please refer to appropriate data sheets.

An extensive range of accessories is available including Sink Weights, Cable Hangers, and a unique method of avoiding water ingress through the breather tube for vented gauge transmitters. Also offered are Calibration Adaptors, Lightning Protection, and Cable Termination Boxes.

Please see separate data sheet VLA 702 detailing these items.

STANDARD SPECIFICATIONS

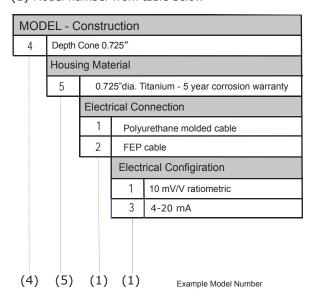
ORDERING INFORMATION

WT4500 Series

Depth & Level 0.725" diameter

When ordering please specify the following:

(1) Model number from table below



- (2) Range, including engineering units
- (3) Accuracy
- (4) Cable Length

Example Ordering Format: WT4511-300'WC-0.1%-350'

OPTIONS

- HART Communication Protocol
- 1-5 volts, RS485 and Rangeable
- PMC offers an extensive range of accessories and variants for depth and level transmitters. (Refer to datasheet VLA 702)

Please contact the factory for further information.

Table:

VL45x1 - Y = 3.9" (99mm) max. VL45x3 - Y = 6.8" (175mm) max.

Represented By:

WHEL-TECH INC. 2 FOREST DRIVE CATONSVILLE, MD 21228 410-744-5308

■ Full Scale Ranges (Zero Based)

0-30, 50"WC

0-1, 5, 10, 15, 30, 50, 100, 150, 200, 300 psig 0-50, 100, 150, 200, 300 psia

Other ranges and pressure units can be specifed

Accuracy

 $\pm 0.1\%$ FS (BSL) or $\pm 0.25\%$ FS (BSL) Combined non-linearity, hysteresis & repeatability

Overpressure

Full scale ranges up to 20 psi - 10X Above 20 to 150 psi-4X Above 150 psi-2X

Operating Temperature Range

-10° to +175° F (-20° to +80° C)

■ 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%)

 $\pm 1.5\%$ TEB for ranges 5 psi and above

±2.0% TEB for ranges below 5 psi

■ Electrical (either)

4-wire, 10 mV/V, 1-12 Vdc power 2-wire, 4-20 mA, 10-35 Vdc power

■ Intrinsically Safe Approval

See WT2000, WT3000 and WT4000

Cable

Polyurethane molded vented with Kevlar, 4 conductors Contact factory for FEP cable

Housing

Titanium

Note: 5-year corrosion warranty included for Titanium housing.

■ Weight (Excluding cable)

WT45x1 - 4.5 oz. WT45x3 - 6.5 oz.

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





Cable

0.3 in. (7.6mm)

Nominal

Length

(see table)

.725 in. (18.4 mm)