DEVAR Inc.

SUBMERSIBLE PRESSURE TRANSDUCER SERIES 2500

- 0.25% STATIC ACCURACY & REPEATABILITY
- WELDED 316 SS or TITANIUM
- OPEN FACE CERAMIC DIAPHRAGM
- USER-SPECIFIED PRESSURE RANGES AVAILABLE
- 100% COMPUTER-TESTED, CALIBRATED AND SERIALIZED
- UNIQUE CABLE SEAL SYSTEM
- FULLY TEMPERATURE COMPENSATED



- * Well Monitoring
- * Slug Tests
- * Pump Control
- * Ground Water Monitoring
- * Soil Remediation
- * Oceanographic Research
- * Lift Stations
- * Surface Water Mounting

GENERAL DESCRIPTION

The 2500 Series submersible pressure transducers are designed to operate under the exacting conditions encountered in liquid level measurement and control. They provide dependable, and highly accurate pressure or level measurements under the most adverse of operating conditions.

These Transducers are 2-wire, loop powered devices with 4 to 20 mA outputs. They can be used in a wide variety of applications with input spans ranging from 100 psig down to 10 inches of water.

They are especially well suited for use in wastewater and lift-station, pumping applications. The open face, ceramic sensing element provides a rugged, flush, design which avoids the clogging and sludge build up

that frequently causes other designs to fail. The transducer is encased in an all-welded, corrosion resistant, 316 stainless steel housing. Titanium housings are also available for use in highly corrosive chemical environments. The standard polyurethane, vented cable is molded into the transducer housing, providing the highest integrity, waterproof assembly available, well proven in thousands of installations worldwide. Rugged FEP cable can be provided as an alternative material for extremely harsh environments.

Also provided with each transducer is a traceable calibration card, specifying the calibration range and providing the actual data recorded during testing.

SPECIFICATIONS

PERFORMANCE

Standard Ranges: 5, 10, 15, 30, 50, 100 PSIG

(Custom ranges to 10 inches H₂O)

Accuracy: ±0.25 % FSO BFSL

Thermal Error1: $\pm 1.5 \%$ FSO for ranges ≥ 5 psi

±2 % FSO for ranges < 5 psi

Overpressure: $X10 \text{ for ranges} \leq 20 \text{ psi}$

X4 for ranges > 20 psi

Resolution: Continuous

ENVIRONMENTAL

Comp. temp. range: 30° to 85°F (-2° to 30°C)
Operating temp. range: -10° to 175°F (-20° to 80°C)

ELECTRICAL

Excitation: 10 to 35 VDC

Output range: 4 to 20 mA max. (2-wire)

Max output load:

BULLETIN: 2500 Rev. A

Resistance in Ohms = (supply voltage - 10) ÷ (0.02)

PHYSICAL

Weight: 7.6 oz. (excluding cable)
Cable: Shielded, 0.3 ±0.02 in. Dia.

Polyurethane jacket (standard)

FEP jacket (optional)

{Fluorinated Ethylene Propylene}

200 lb. pull strength 22 AWG conductors nylon vent tube

Vent tube desiccant canister

WETTED MATERIALS:

316 Stainless steel (or Titanium)

AL203 Ceramic

Viton

Polyurethane

(Optional FEP and Epoxy)

ORDERING INFORMATION

MODELS:

2501 Stainless Steel Body

2502 Titanium Body

OPTIONS:

-MP11 Moisture Protection

-CH10 Cable Hanger

-25PF 1/4 inch NPT Process Fitting -5CM 1/2 inch NPT Conduit Mount

-PNC Ported Nose Cap

-FEP FEP Cable For Harsh Environment
-NS Narrow spans from under 5 psig to 10

inches of water

STOCK PART NUMBERS:

2501-005-025 0/5 psi, 25' POLYURETHANE CABLE 2501-010-035 0/10 psi, 35' POLYURETHANE CABLE 2501-015-045 0/15 psi, 45' POLYURETHANE CABLE

PART NUMBER CONFIGURATION			
MODEL	PRESSURE RANGE ²	CABLE LENGTH	OPTIONS

Notes:

- Maximum output change over compensated temperature range
- When specifying input range include engineering units, Minimum input range = 10 inches WC, Maximum input range = 100PSI

