



# MEAS LTA LEVEL TRANSDUCERS

- Submersible Level Transducer
- Municipal, Industrial and Environmental

The LTA Level Transducer is a submersible hydrostatic level transducer specifically designed to meet the rigorous environments encountered in liquid level measurements and control.

## **Applications**

- Lift Station Monitoring
- Pump Control
- Tank Liquid Level
- Landfill Leachate Monitoring
- Construction Bypass Pumping
- Dewatering

## Features

#### Standard

- 0.25% FSO Accuracy
- 316 Stainless Steel Body
- One Year Warranty
- Pre-calibrated Pressure Ranges

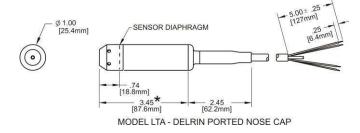
#### Optional

- 0.10% FSO Accuracy
- Titanium Body
- Two Year Warranty
- Custom Pressure Ranges
- Intrinsically Safe
- Lightning Protection

## Specifications

| STATIC PERFORMANCE  |                                    |   |
|---|------------------------------------|---|
| Static Accuracy   |                                    |   |
| (combined effects of non-linearity,<br>hysteresis and repeatability, best fit                                       | Standard - ±0.25% FSO              | BFSL method   |
| straight line method)   | Optional - ±0.10% FSO              | For absolute/sealed reference min. range 0-15 PSI   |
| Resolution  | +0.0001% FS                        |   |
| ENVIRONMENTAL   |                                    |   |
| Wetted Materials  | 316 SS or Titanium; POM; FKM;      |   |
|   | Polyurethane or ETFE               |   |
| Compensated Temp Range  | 0 to 50ºC                          |   |
| Thermal Error<br>(maximum allowable deviation from the<br>Best Fit Straight Line due to a change<br>in temperature) | ±0.1% FSO/ºC                       |   |
| Operating Temp Range  | -20 to 60 ºC                       | When attached to polyurethane cable   |
| Protection Rating   | IP 68, NEMA 6P                     |   |
|   |                                    |   |
| ELECTRICAL  |                                    |   |
| Excitation  | 9-28V – mA output                  | 4-20  |
|   | 9-28V – VDC output                 | 0-5V, 0-2.5V, 0-4V  |
|   | 15-28V – VDC output                | 0-10V   |
| have at Ourseast  | 10-28V – VDC output                | 1.5-7.5V  |
| Input Current   | 20 mA max                          | For mA output   |
| Output  | 3.5 mA max<br>Standard - 4-20mA    | For VDC output  |
| Output  | Optional - 0-4 VDC, 0-5 VDC, 0-2.5 | For ranges < 5 ft (1.5m) H₂O,<br>only 4-20mA output is available  |
|   | VDC, 0-10 VDC, 1.5-7.5 VDC         | only 4-2011A output is available  |
| Zero Offset   | ±0.25 mA for mA output             |   |
| 2010 011301   | < 0.25 VDC for VDC output          |   |
| Output Impedance  | See loop diagram for mA output     |   |
|   | 20 ohm for VDC output              |   |
| Insulation Resistance   | 100 mega ohm at 50 VDC             |   |
| Circuit Protection  | Polarity, surge/shorted output     |   |
| CERTIFICATIONS  |                                    |   |
|   | Standard - WEEE/RoHS, CE compliant | EN 61326-1:2001 and 61326-2-3:2006 Waste from<br>Electrical and Electronic Equipment (WEEE) and<br>Restrictions on the use of Hazardous Substances (RoHS) |
|   |                                    | × ,   |
| DUWOIO AL   | Optional - UL, CUL and FM          | Class I, II, III, Div. 1, Groups A,B,C,D,E,F&G  |
| PHYSICAL  |                                    |   |
| Approximate Weight  | 0.44 lbs. (198 g) transducer       |   |
|   | 0.05 lbs./ft. (79 g/m) cable       |   |
| Cable Jacket Material   | Standard - Polyurethane            |   |
|   | Optional - ETFE                    |   |
| Cable Pull Strength   | 200 lbs (90 kg)                    |   |
| Cable Pull Strength<br>Cable Number of Conductors   | 200 lbs. (90 kg)<br>4              |   |
| Cable Conductor Size  | 22 AWG                             |   |
| Cable Seal  | Molded Polyurethane                | For polyurethane cable  |
| 0000 000  |                                    | For ETFE cable  |
|   | FKM Gland                          |   |
|   |                                    | avoid lock up of the gas tube after a suppression event)  |
| Life Expectancy   | >1,000 Operations                  |   |
| Peak Clamping Voltage   | 36 Volts                           |   |
| Response Time   | <10 nsecs                          |   |
| Shunts  | 20,000 Amperes                     |   |

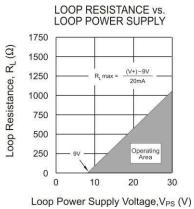
### Dimensions

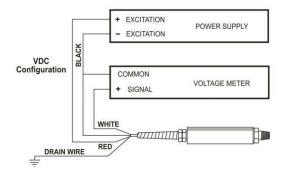


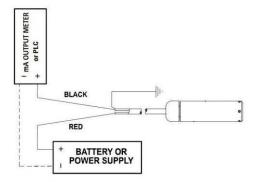
| STANDARD PRESSURE RANGES FOR 0.25% ACCURACY |                       |        |        |          |  |
|---|-----------------------|--------|--------|----------|--|
| Pressure<br>Range (PSI)                     | Feet H <sub>2</sub> O | Vented | Sealed | Absolute |  |
| 0-001                                       | 2.3 ft                | Х      | N/A    | N/A      |  |
| 0-003                                       | 6.9 ft                | Х      | N/A    | N/A      |  |
| 0-005                                       | 11.5 ft               | Х      | Х      | N/A      |  |
| 0-010                                       | 23.1 ft               | Х      | Х      | N/A      |  |
| 0-015                                       | 34.6 ft               | Х      | Х      | Х        |  |
| 0-030                                       | 69.2 ft               | Х      | Х      | Х        |  |
| 0-050                                       | 115.4 ft              | Х      | Х      | Х        |  |
| 0-100                                       | 230.7 ft              | Х      | Х      | Х        |  |
| 0-300                                       | 692.2 ft              | Х      | Х      | Х        |  |
| Custom (Whole Number) Ranges also available |                       |        |        |          |  |

## Electrical Termination/Loop Resistance

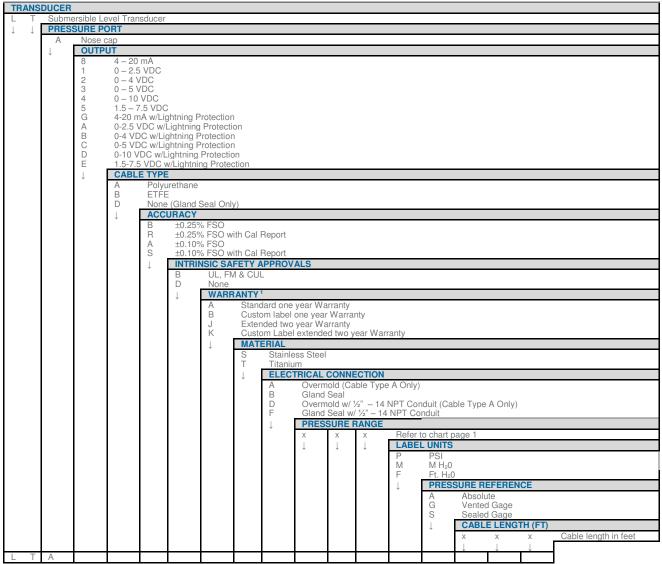
| ELECTRICAL TERMINATION                              |            |              |  |  |  |
|---|------------|--------------|--|--|--|
| 22AWG CONDUCTORS IN A SHIELDED CABLE WITH VENT TUBE |            |              |  |  |  |
| 4-20 mA   | RED        | + EXCITATION |  |  |  |
| -   | BLACK      | - EXCITATION |  |  |  |
| 0-5 VDC   | RED        | + EXCITATION |  |  |  |
|   | BLACK      | - EXCITATION |  |  |  |
|   | WHITE      | + SIGNAL     |  |  |  |
| ALL   | DRAIN WIRE | SHIELD       |  |  |  |







## **Ordering Information**



<sup>1</sup> Contact Measurement Specialties if private labeling is required.

#### **NORTH AMERICA**

Measurement Specialties, Inc., a TE Connectivity company 1000 Lucas Way Hampton, VA 23666 Tel : 1-757-766-1500 Fax : 1-757-766-4297 Toll Free: 1-800-745-8008 Email: WL.Sales@te.com

#### EUROPE

Measurement Specialties (Europe), Ltd., a TE Connectivity company 26 Rue des Dames 78340 Les Clayes-sous-Bois, France Tel : +33 (0) 130 79 33 00 Fax : +33 (0) 134 81 03 59 Email: customercare.lcsb@te.com

#### ASIA

Measurement Specialties (China), Ltd., a TE Connectivity company No. 26 Langshan Road Shenzhen High-Tech Park (North) Nanshan District, Shenzhen 518057 China Tel : +86 755 3330 5088 Fax : +86 755 3330 5099 Email: customercare.shzn@te.com

#### te.com/sensorsolutions

Measurement Specialties Inc., a TE Connectivity company.

Measurement Specialties (MEAS), American Sensor Technologies (AST), TE Connectivity, TE Connectivity (logo) and EVERY CONNECTION COUNTS are trademarks. All other logos, products and/or company names referred to herein might be trademarks of their respective owners.

The information given herein, including drawings, illustrations and schematics which are intended for illustration purposes only, is believed to be reliable. However, TE Connectivity makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. TE Connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

© 2016 TE Connectivity Ltd. family of companies All Rights Reserved.

