

# LTA Level Transducer

- 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.

## FEATURES

### Standard

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

### Optional

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

## APPLICATIONS

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

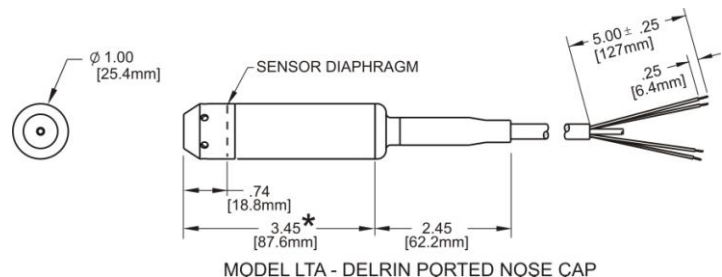
Standard Certifications:



Optional Certifications:



## dimensions



## standard pressure ranges for 0.25% accuracy

Pressure Range (PSI)	Feet H <sub>2</sub> O	Vented	Sealed	Absolute
0-001	2.3 ft	X	N/A	N/A
0-003	6.9 ft	X	N/A	N/A
0-005	11.5 ft	X	X	N/A
0-010	23.1 ft	X	X	N/A
0-015	34.6 ft	X	X	X
0-030	69.2 ft	X	X	X
0-050	115.4 ft	X	X	X
0-100	230.7 ft	X	X	X
0-300	692.2 ft	X	X	X
Custom Ranges also available				

# LTA Level Transducer

## STATIC PERFORMANCE

Static Accuracy (combined effects of non-linearity, hysteresis and repeatability, best fit straight line method)	Standard - 0.25% FSO Optional - 0.10% FSO	BFSL method For absolute/sealed reference min. range 0-15 PSI
Resolution	+0.0001% FS	

## ENVIRONMENTAL

Wetted Materials	316 SS or Titanium; POM; polyurethane or FKM	
Compensated Temp Range	0 to 50°C	
Thermal Error (maximum allowable deviation from the Best Fit Straight Line due to a change in temperature)	±0.1% FSO/°C	
Operating Temp Range	-20 to 60 °C	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
	10-28V – VDC output	1.5-7.5V
Input Current	20 mA max	for mA output
	3.5 mA max	for VDC output
Output	Standard - 4-20mA	
	Optional - 0-4 VDC, 0-5 VDC, 0-2.5 VDC, 0-10 VDC, 1.5-7.5 VDC	for ranges < 5 ft (1.5m) H <sub>2</sub> O, only 4-20mA output is available
Zero Offset	±0.25 mA for mA output	
	< 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 Electrical and Electronic Equipment (WEEE) and Restrictions on the use of Hazardous Substances (RoHS)
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 Number of Conductors	4	
Cable Conductor Size	22 AWG	
Cable Seal	Molded Polyurethane	for polyurethane cable
	FKM Gland	for ETFE cable
<b>LIGHTNING PROTECTION (power supply needs to be limited to 150mA to avoid lock up of the gas tube after a suppression event)</b>		
Life Expectancy	>1,000 Operations	
Peak Clamping Voltage	36 Volts	
Response Time	<10 nsecs	
Shunts	20,000 Amperes	

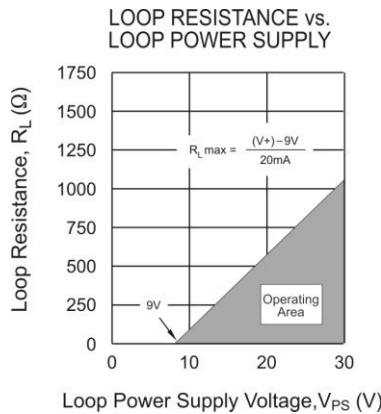
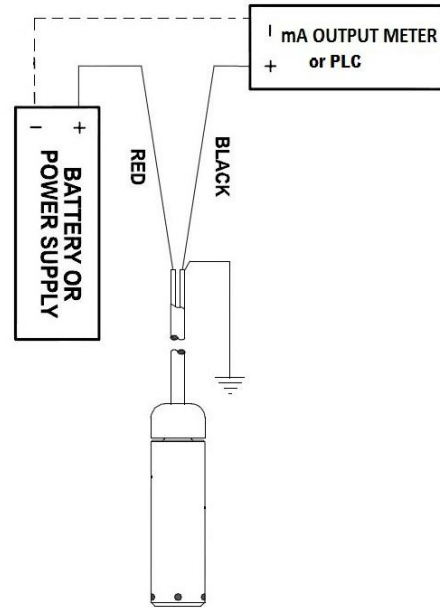
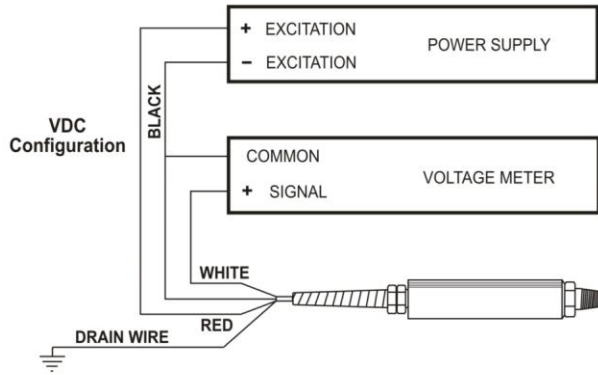
# LTA Level Transducer

TRANSDUCER													
L	T	Submersible Level Transducer											
↓	↓	<b>PRESSURE PORT</b>											
	A	Nose cap											
	↓	<b>OUTPUT</b>											
	8	4 – 20mA											
	1	0 – 2.5 VDC											
	2	0 – 4 VDC											
	3	0 – 5 VDC											
	4	0 – 10 VDC											
	5	1.5 – 7.5 VDC											
	G	4-20 mA w/Lightning Protection											
	A	0-2.5 VDC w/Lightning Protection											
	B	0-4 VDC w/Lightning Protection											
	C	0-5 VDC w/Lightning Protection											
	D	0-10 VDC w/Lightning Protection											
	E	1.5-7.5 VDC w/Lightning Protection											
	↓	<b>CABLE TYPE</b>											
	A	Polyurethane											
	B	ETFE											
	D	None											
	↓	<b>ACCURACY</b>											
	B	±0.25% FSO											
	R	±0.25% FSO with Cal Report											
	A	±0.10% FSO											
	S	±0.10% FSO with Cal Report											
	↓	<b>INTRINSIC SAFETY APPROVALS</b>											
	D	None											
	B	UL, FM & CUL											
	↓	<b>WARRANTY<sup>1</sup></b>											
	A	Standard one year Warranty											
	B	Custom Label one year Warranty											
	J	Extended two year Warranty											
	K	Custom Label two year Warranty											
	↓	<b>MATERIAL</b>											
	S	Stainless Steel											
	T	Titanium											
	↓	<b>ELECTRICAL CONNECTION</b>											
	A	Overmold											
	B	Gland Seal (ETFE jacketed cable)											
	D	Overmold w/ ½" – 14 NPT Conduit											
	F	Gland Seal w/ ½" – 14 NPT Conduit											
	↓	<b>PRESSURE RANGE</b>											
	x	x	x	Refer to chart page 1									
	↓	↓	↓	<b>UNITS</b>									
				P	PSI								
				↓	<b>PRESSURE REFERENCE</b>								
				A	Absolute								
				G	Vented Gage								
				S	Sealed Gage								
				↓	<b>CABLE LENGTH (FT)</b>								
		x	x	x	Cable length in feet								
		↓	↓	↓									
L	T	A								P			

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

# LTA Level Transducer

## electrical termination/loop resistance



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

### NORTH AMERICA

Measurement Specialties, Inc.  
1000 Lucas Way  
Hampton, VA 23666  
USA  
Tel: 1-757-766-1500  
Fax: 1-757-766-4297  
Toll Free: 1-800-745-8008  
Sales: [WL.sales@meas-spec.com](mailto:WL.sales@meas-spec.com)

### EUROPE

Measurement Specialties  
(Europe), Ltd.  
26 Rue des Dames  
78340 Les Clayes-sous-Bois, France  
Tel: +33 (0) 130 79 33 00  
Fax: +33 (0) 134 81 03 59  
Sales: [pfg.cs.emea@meas-spec.com](mailto:pfg.cs.emea@meas-spec.com)

### ASIA

Measurement Specialties  
(China), Ltd.  
No. 26 Langshan Road  
Shenzhen High-Tech Park (North)  
Nanshan District, Shenzhen 518057  
China  
Tel: +86 755 3330 5088  
Fax: +86 755 3330 5099  
Sales: [pfg.cs.asia@meas-spec.com](mailto:pfg.cs.asia@meas-spec.com)

The information in this sheet has been carefully reviewed and is believed to be accurate; however, no responsibility is assumed for inaccuracies. Furthermore, this information does not convey to the purchaser of such devices any license under the patent rights to the manufacturer. Measurement Specialties, Inc. reserves the right to make changes without further notice to any product herein. Measurement Specialties, Inc. makes no warranty, representation or guarantee regarding the suitability of its product for any particular purpose, nor does Measurement Specialties, Inc. assume any liability arising out of the application or use of any product or circuit and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Typical parameters can and do vary in different applications. All operating parameters must be validated for each customer application by customer's technical experts. Measurement Specialties, Inc. does not convey any license under its patent rights nor the rights of others.