

LTA and LTB Level Transducers



- **Submersible Level Transducer**
- **Municipal, Industrial and Environmental Applications**
- **±0.25% FSO Static Accuracy**
- **One Year Warranty**



Optional

DESCRIPTION

Measurement Specialties LT Level Transducers are submersible hydrostatic level transducers specifically designed to meet the rigorous environments encountered in liquid level measurement and control.

These sensors utilize a highly accurate pressure sensor assembly specifically designed for hostile fluids. The assembly is integrated with supporting electronics in a durable waterproof housing constructed of 316 stainless steel. The attached electrical polyurethane cable is custom manufactured and attached with an over-molding process that prevents moisture intrusion for reliable long product life.

The LTA features a 1.0" body with a ported nose cap design that protects the stainless steel diaphragm from damage.

The LTB features a wide mouth non-fouling protective cage that protects the 2.75" TFM® PTFE flexible diaphragm.

FEATURES

- Welded 316 Stainless Steel Housing
- Polyurethane Cable
- 4 – 20 mA Output
- Pre-calibrated Pressure Ranges
- Custom Cable Lengths up to 999 feet
- Sealed and Vented Pressure Reference

APPLICATIONS

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

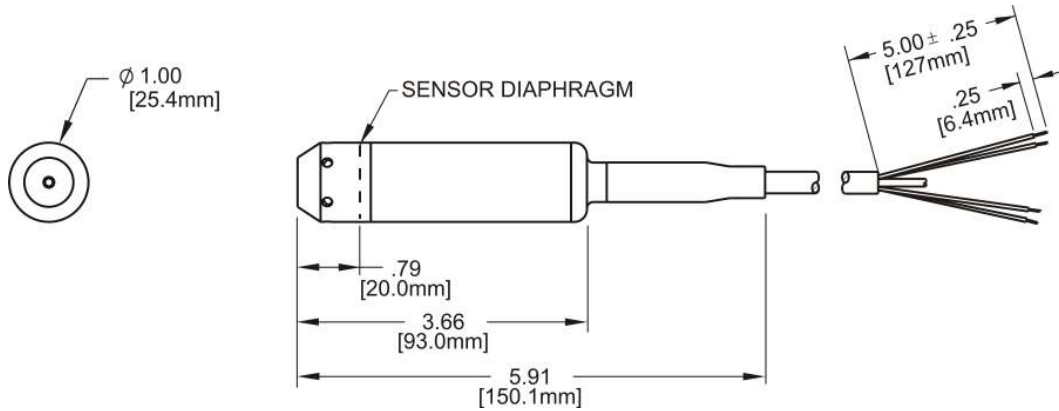
LTA and LTB Level Transducers

SPECIFICATIONS

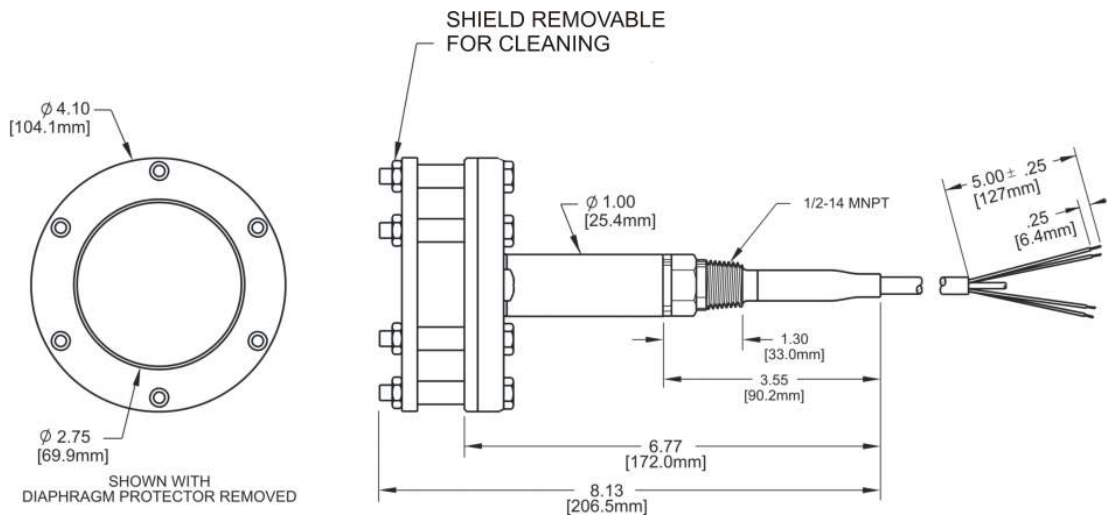
Parameter	Comment	
LEVEL RANGES		
Full Scale Level Ranges	0 – 5 PSI (11.5 ft H ₂ O) 0 – 15 PSI (34.6 ft H ₂ O) 0 – 30 PSI (69.2 ft H ₂ O) 0 – 50 PSI (115.4 ft H ₂ O)	Vented and Sealed Gage Reference
Proof Pressure	1.5 x FS	
Burst Pressure	2.0 x FS	
STATIC PERFORMANCE		
Static Accuracy (combined effects of non-linearity, hysteresis and repeatability, best fit straight line method)	±0.25% FSO	BFSL method
Resolution	+0.0001% FS	
ENVIRONMENTAL		
Wetted Materials	316 SS; Delrin [®] ; Teflon [®] PTFE; polyurethane and Viton [®]	Delrin [®] , Teflon [®] and Viton [®] are registered trademarks of DuPont.
Compensated Temp Range	0 to 50°C	
Thermal Error (maximum allowable deviation from the Best Fit Straight Line due to a change in temperature)	±0.10% FSO/°C	worst case for level ranges > 23' (7m) H ₂ O prorated for level ranges ≤23' (7m) H ₂ O
Operating Temp Range	-20 to 60 °C	when attached to polyurethane cable
Protection Rating	IP 68, NEMA 6P	
ELECTRICAL		
Excitation	9-28V	
Input Current	20 mA max	
Output	4-20mA	
Zero Offset	±0.25 mA	
Output Impedance	See loop diagram	
Insulation Resistance	100 mega ohm at 50 VDC	
Circuit Protection	Polarity, surge/shorted output	
CERTIFICATIONS		
	CE compliant	EN 61326-1:2001 and 61326-2-3:2006
	Optional UL, CUL and FM	Class I, II, III, Div 1, Groups A,B,C,D,E,F&G
	WEEE/RoHS	Waste from Electrical and Electronic Equipment (WEEE) and Restrictions on the use of Hazardous Substances (RoHS)
PHYSICAL		
Approximate Weight	0.44 lbs (198 g) LTA transducer 5.00 lbs (2268g) LTB transducer 0.05 lbs/ft (79 g/m) cable	
Cable Jacket Material	Polyurethane	
Cable Pull Strength	200 lbs (90 kg)	
Cable Number of Conductors	2	
Cable Conductor Size	22 AWG	
Cable Seal	Molded Polyurethane	

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DIMENSIONS



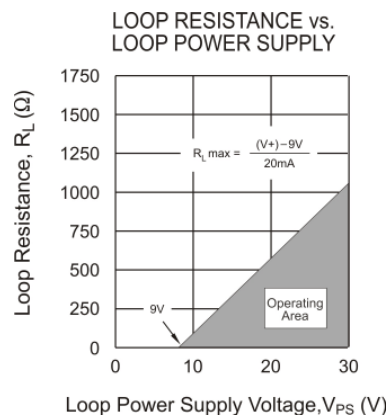
LTA - DELRIN PORTED NOSE CAP



LTB - CAGE NOSE

ELECTRICAL TERMINATION / LOOP RESISTANCE

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



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ORDERING INFORMATION

Transducer																			
L	T	Submersible Level Transducer																	
↓	↓	PRESSURE PORT																	
		A	Nosecap																
		B	Cage																
		↓	OUTPUT																
		8	4-20 mA																
		↓	CABLE TYPE																
		A	Polyurethane																
		↓	ACCURACY																
		B	±0.25% FS																
		↓	INTRINSIC SAFETY APPROVALS																
		B	UL, FM & CUL																
		D	None																
		↓	LABEL																
		A	U / M = PSI																
		↓	MATERIAL																
		S	Stainless Steel																
		↓	ELECTRICAL CONNECTION																
		A	Overmolded																
		↓	PRESSURE RANGE																
		0	x	x	Four ranges available: 005, 015, 030, 050														
		↓	↓	↓															
		↓	UNITS																
		P	PSI																
		↓	PRESSURE REFERENCE																
		G	Gauge																
		S	Sealed Gauge																
		↓	CABLE LENGTH (FT)																
		x	x	x	Cable length in feet														
		↓	↓	↓															
L	T		8	A	B		A	S	A	0		P							

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