

LTR Level Transducer

- Submersible Level Transducer
- Municipal and Industrial Applications
- Wide Mouth Non-fouling, Heavy-duty Protective Cage
- 2.75" PTFE Flexible Diaphragm

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

FEATURES

Standard

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

Optional

- Two Year Warranty
- Custom Pressure Ranges
- Intrinsically Safe
- Lightning Protection

APPLICATIONS

- Lift Station Monitoring
- Pump Control
- Slurry Tank Liquid Level
- Wastewater



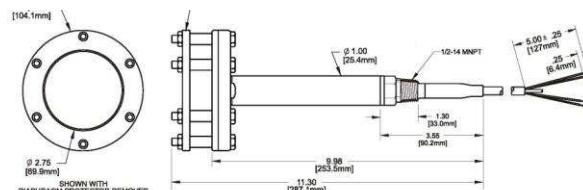
Standard Certifications:



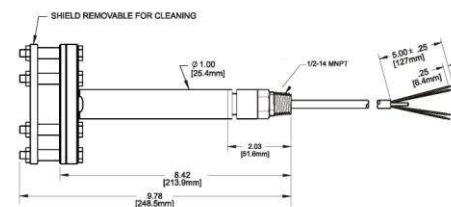
Optional Certifications:



dimensions



MODEL LT (THICK PLATE) - CAGE NOSE W/OVERMOLD CONDUIT CONNECTION



MODEL LT (THICK PLATE) - CAGE NOSE W/GLAND SEAL CONDUIT CONNECTION

standard pressure ranges

Pressure Range (PSI)	Feet H ₂ O
0-005	11.5 ft
0-010	23.1 ft
0-015	34.6 ft
0-030	69.2 ft
0-050	115.4 ft
Custom Ranges Available	

LTR Level Transducer

specifications

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; 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)	±0.10% 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 – VDC output 9-28V – mA output 15-28V – VDC output 10-28V – VDC output	0-5V, 0-2.5V, 0-4V 4-20 0-10V 1.5-7.5V
Input Current	20 mA max 3.5 mA max	for mA output for VDC output
Output	4-20mA, 0-5 VDC, 0-2.5VDC, 0-4VDC, 0-10VDC, 1.5-7.5VDC	for ranges < 5 ft (1.5m) H ₂ 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	3.5 lbs (1588 g) transducer 0.05 lbs/ft (79 g/m) cable
Cable Jacket Material	Polyurethane (standard) ETFE (optional)
Cable Pull Strength	200 lbs (90 kg)
Cable Number of Conductors	4
Cable Conductor Size	22 AWG
Cable Seal	Molded Polyurethane FKM Gland

TEMPERATURE OUTPUT OPTION (not intrinsically safety approved)

Temperature Range	-20 to 60°C	available for 4-20mA output versions only
Output Signal	4-20mA	

LIGHTNING PROTECTION (power supply needs to be limited to 150mA to 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

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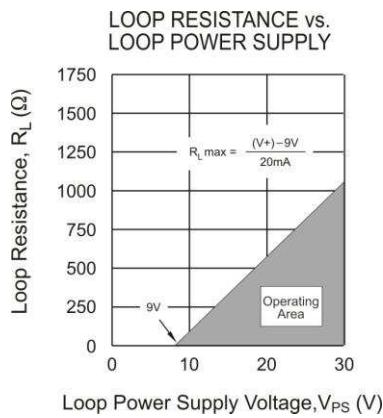
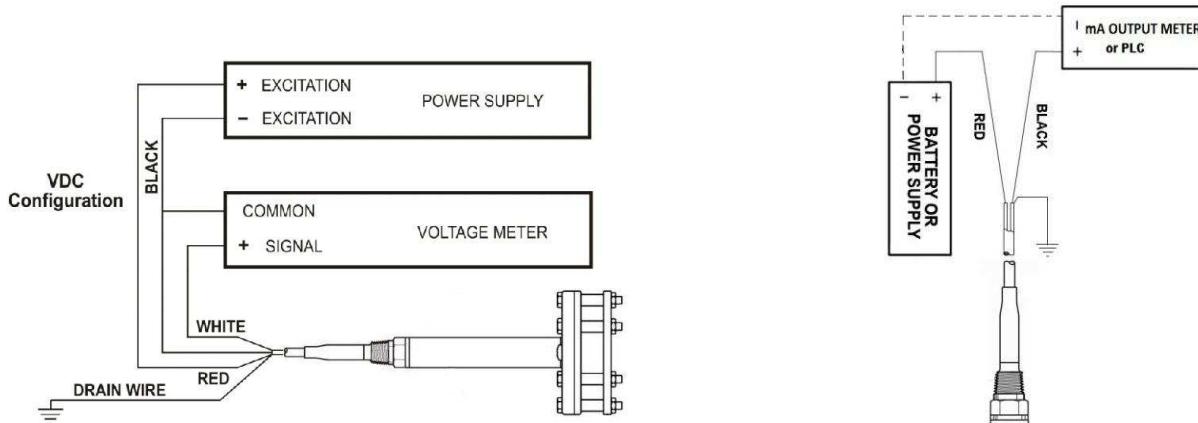
ordering info

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

¹ Contact Measurement Specialties if private labeling is required.

LTR Level Transducer

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

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