

LT Series Pressure Transducer

- Non-Submersible Pressure Transducer
- Municipal, Industrial and Environmental Applications

LT 5 & 7 Pressure Transducers

are non-submersible hydrostatic pressure transducers specifically designed for demanding industrial applications where the primary criteria are reliability and economy.



FEATURES

Standard

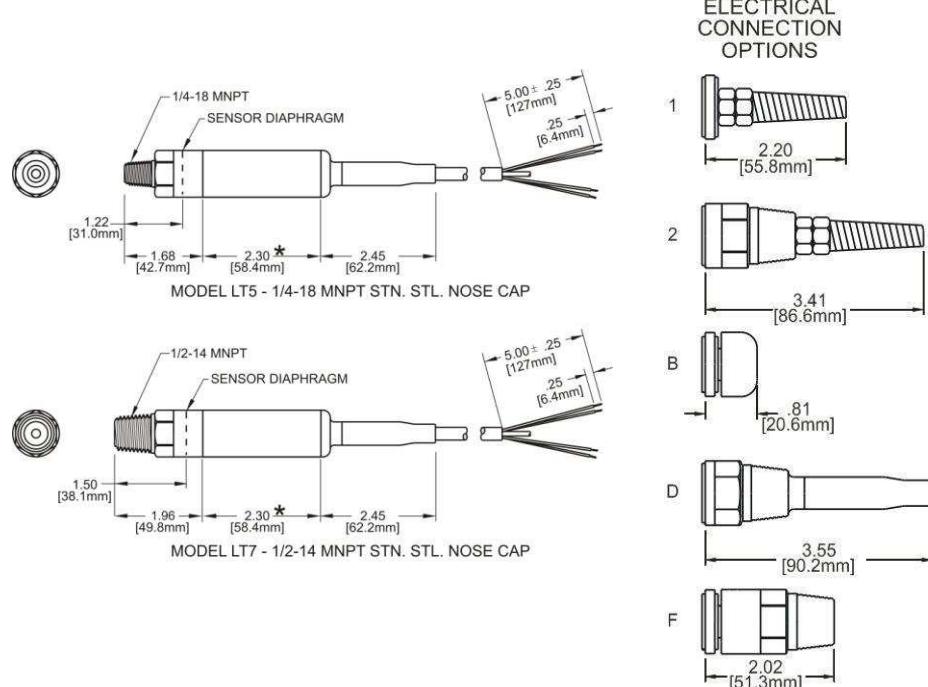
- 0.25% FSO Accuracy
- 316 Stainless Steel Body
- One Year Warranty
- Pre-calibrated Pressure Ranges

Optional

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



dimensions



APPLICATIONS

- Non-Submersible Tank Level
- Liquid Line Pressure
- Pump Control
- Construction Bypass Pumping
- Dewatering

LT Series Pressure Transducer

specifications

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	Only for Electrical Connection options "A" & "D" with Cable Type option "A"; or Electrical Connection options "B" & "F" with Cable Type option "B"

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	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 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)
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PHYSICAL

Approximate Weight	0.44 lbs (198 g) transducer 0.05 lbs/ft (79 g/m) cable	
Cable Jacket Material	PVC Jacket 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 FKM Gland	for polyurethane cable for ETFE cable

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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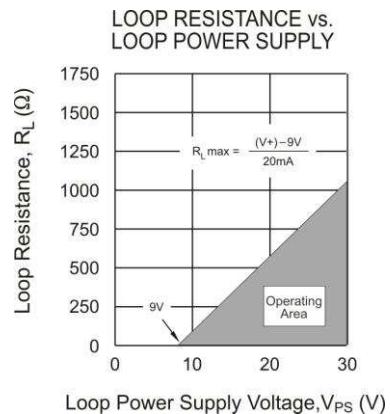
ordering info

TRANSDUCER				
L	T Submersible Level Transducer			
PRESSURE PORT				
5	1/4" - 18 Male NPT Fitting			
7	1/2" - 14 Male NPT Fitting			
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			
C	PVC jacket			
D	None			
ACCURACY				
B	±0.25% FSO			
R	±0.25% FSO with Cal Report			
A	±0.10% FSO			
S	±0.10% FSO with Cal Report			
INTRINSIC SAFETY APPROVALS				
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			
T	Titanium			
ELECTRICAL CONNECTION				
A	Overmold			
B	Gland Seal (ETFE jacketed cable)			
D	Overmold w/ 1/4" - 14 NPT Conduit			
F	Gland Seal w/ 1/2" - 14 NPT Conduit			
1	Strain-relieved cable with flying leads - standard			
2	1/2" - 14 NPT male conduit			
PRESSURE RANGE				
	x	x	x	Refer to chart page 4
	↓	↓	↓	
UNITS				
P	PSI			
PRESSURE REFERENCE				
A	Absolute			
G	Vented Gage			
S	Sealed Gage			
CABLE LENGTH (FT)				
x	x	x	Cable length in feet	
	↓	↓	↓	
L	T	D	P	

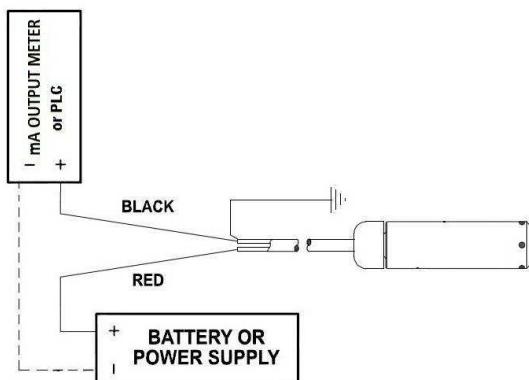
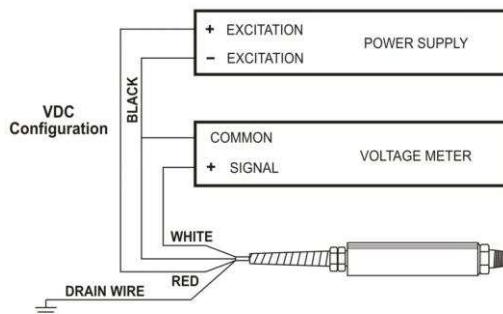
¹ Contact Measurement Specialties if private labeling is required.

LT Series Pressure 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



standard pressure ranges for 0.25% accuracy

Pressure Range	LT 5, 7 Vented	LT 5, 7 Sealed	LT 5, 7 Absolute
001	X	N/A	N/A
003	X	N/A	N/A
005	X	X	N/A
015	X	X	X
030	X	X	X
050	X	X	X
100	X	X	X
300	X	X	X
500	X	X	X
700	X	X	X
900	X	X	X

NOTE: Overmold option is limited to a maximum of 300 PSI. Minimum range for +/- 0.10% with sealed/absolute reference is 0-15 PSI

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