



MEAS PRESSURE SERIES TRANSDUCERS LT5 & LT7

- ◆ 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.

Applications

- ◆ Non-Submersible Tank Level
- ◆ Liquid Line Pressure
- ◆ Pump Control
- ◆ 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

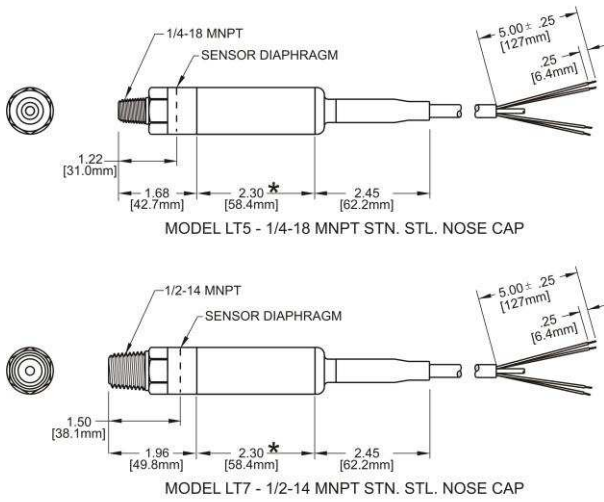
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Specifications

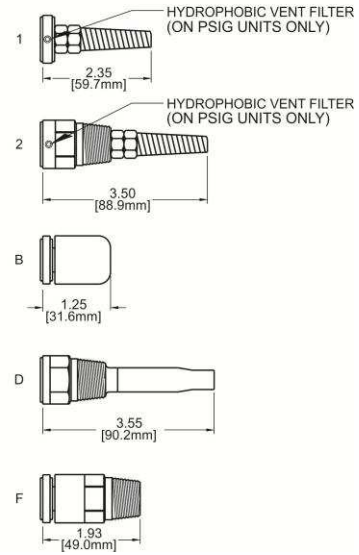
STATIC PERFORMANCE		
Static Accuracy (combined effects of non-linearity, hysteresis and repeatability, best fit straight line method)	Standard - 0.25% FSO Optional - 0.10% FSO	BFSL method For absolute/sealed reference min. range 0-15 PSI
Resolution	+0.0001% FS	
ENVIRONMENTAL		
Wetted Materials	316 SS or Titanium; FKM; Polyurethane or ETFE	
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 61326-1:2013 and 61326-2-3:2013 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	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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Dimensions

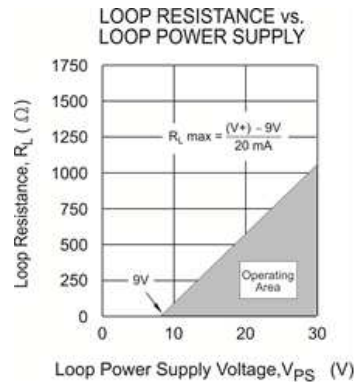


ELECTRICAL CONNECTION OPTIONS



Electrical Termination / Loop Resistance

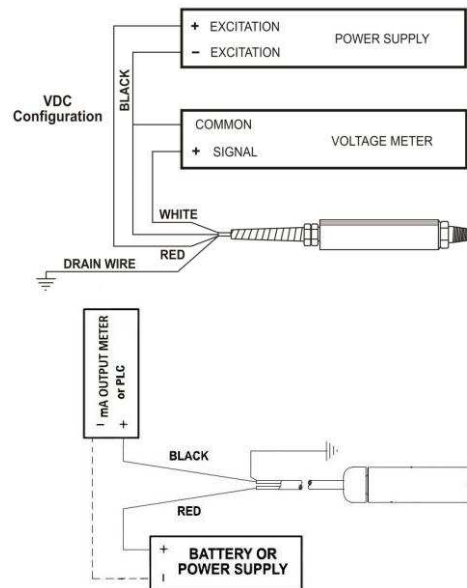
ELECTRICAL TERMINATION		
22AWG CONDUCTORS IN A SHIELDED CABLE WITH VENT TUBE		
4-20 mA	RED	+ EXCITATION
	BLACK	- EXCITATION
	RED	+ EXCITATION
0-5 VDC	BLACK	- EXCITATION
	WHITE	+ SIGNAL
ALL	DRAIN WIRE	SHIELD



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	N/A	X	X
700	N/A	X	X
900	N/A	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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Ordering Information

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							
		↓	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							
		B	UL, FM & CUL (Cable Type A, B, or C Only)							
		D	None							
		↓	WARRANTY¹							
		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 (Cable Type A Only)							
		B	Gland Seal (Cable Type "A" or "B" Only)							
		D	Overmold w/ 1/2" – 14 NPT Conduit (Cable Type A Only)							
		F	Gland Seal w/ 1/2" – 14 NPT Conduit (Cable Type "A" or "B" Only)							
		1	Strain-relieved cable with flying leads - standard (Cable Type C Only)							
		2	PVC conduit strain relief (Cable Type C Only)							
		↓	PRESSURE RANGE							
		x	x	x	Refer to chart page 4					
		↓	↓	↓	LABEL UNITS					
					P	PSI	M	mH2O	F	Ft. H2O
					↓	PRESSURE REFERENCE				
					A	Absolute				
					G	Vented Gage				
					S	Sealed Gage				
					↓	CABLE LENGTH (FT)				
			x	x	x	Cable length in feet				
			↓	↓	↓					

¹Contact Measurement Specialties if private labeling is required.

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