

TLD SERIES Submersible PVC Level Pressure Sensor

The TLD Series modular two-piece all thermoplastic submersible probe is designed for quick change-outs. Replace sensor head - no need to change wiring. An easy solution for foam, vapor and condensate applications.

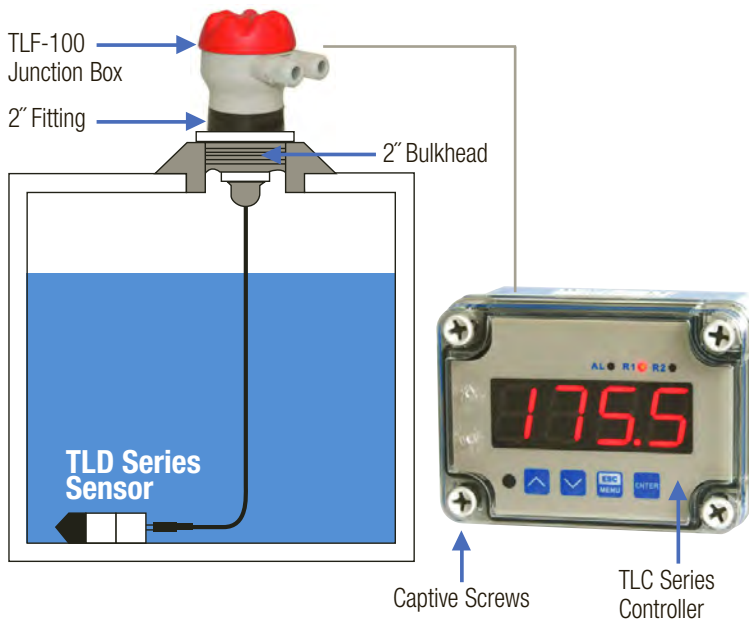
KEY FEATURES & BENEFITS

- Two-piece Modular Design
- Change Sensor Head without having to Rewire
- Excellent Chemical Resistance
- All PVC Rugged Design
- FEP Cable
- Highly Accurate > 0.25%
- Capable of Reading Tank/Sump Level 1.6 ft - 100 ft

APPLICATIONS

- Waste Water Treatment
- Chemical Dosing
- Leachate Collection
- Sodium Hypochlorite
- Corrosive Chemicals
- Foam, Soaps
- Fuming Chemicals - HCL, Nitric

TYPICAL INSTALLATION



TLD Series

SUBMERSIBLE PVC LEVEL PRESSURE SENSOR



INPUT PRESSURE RANGE

Nominal Pressure	psi	2.2	3.5	6.1	8.7	10.8	14.3	17.3	23.4	26.0	43.4
Level	ft	5.0	8.0	14	20	25	33	40	54	60	100

OUTPUT SIGNAL/SUPPLY

Standard | 2-wire: 4-20 mA / VS = 9-32 VDC

PERFORMANCE

Accuracy	Standard: IEC 60770 1 Option: $\pm 0.35\% \text{ FSO}$ $\pm 0.25\% \text{ FSO}$
Permissible Load	$R_{max} = [(V_S - V_S \text{ min}) / 0.02 \text{ A}] \Omega$
Influence Effects	Supply: 0.05% Full Scale/10V Load: 0.05% Full Scale/K Ω
Long-term Stability	$\pm 0.1\% \text{ Full Scale over one year}$
Turn-on Time	700 msec
Mean Response	<math>< 200 \text{ msec measuring rate } 5/\text{sec}</math>
Max. Response Time	380 msec

1 accuracy according to IEC 60770 – limit point adjustment (non-linearity, hysteresis, repeatability)

THERMAL EFFECTS (OFFSET AND SPAN)

Thermal Error	$\pm 0.1\% \text{ FSO} / 10 \text{ K}$ in compensated range 0-50°C
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PERMISSIBLE TEMPERATURES

Medium	5°F - 140°F (-10°C - 60°C)
Electronic/Environment	5°F - 140°F (-10°C - 60°C)
Storage	5°F - 140°F (-10°C - 60°C)

ELECTRICAL PROTECTION 2

Short-circuit Protection	Permanent
Reverse Polarity Protection	No Damage, but also no function
Electromagnetic Compatibility	Emission and immunity according to EN 61326

2 additional external overvoltage protection unit in terminal box KL 1 or KL 2 with atmospheric pressure reference available on request

ELECTRICAL CONNECTION

Cable with Sheath Material	FEP 5°F - 140°F (-10°C - 60°C) Black
Cable Protection	Standard: Without Cable Protection

3 cable with integrated air tube for atmospheric pressure reference

MATERIALS (MEDIA WETTED)

Housing	PVC
Seals	FKM (Standard)
Diaphragm	Standard: Ceramic Al_2O_3 96% Option: Ceramic Al_2O_3 99.9%

MISCELLANEOUS

Current Consumption	Max. 25 mA
Weight	Approx. 400 g (without cable)
Ingress Protection	IP 68
CE Conformity	EMC Directive: 2004/108/EC

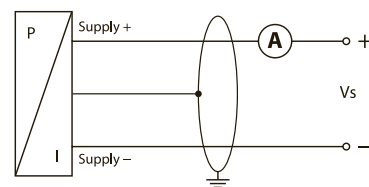
PIN CONFIGURATION

Electrical Connection	Binder Series 723 4 (5-pin)		Cable Colors (DIN 47100)
	2-Wire	3-Wire	
Supply +	3	3	White
Supply -	1	4	Brown
Signal + (only for 3-wire)	-	1	Green
Shield	5	5	Green / Yellow

4 in separated version

WIRING DIAGRAM

2-wire-system (current)



Connector



3-wire-system (voltage)

