ProSense® GPLT/NFLT Series Submersible Level Transmitters

Part No. GPLT-005-L30

Part No. NFLT-005-L30

Submersible Level Transmitters

The ProSense GPLT and NFLT series hydrostatic submersible level transmitters provide continuous liquid level measurement by sensing the hydrostatic pressure produced by the height of liquid above the sensor and providing a 4-20 mA output signal compatible with PLCs, panel meters, data loggers, and other electronic equipment.

The ProSense GPLT series is a general-purpose continuous level sensing solution for water applications offering a slim housing diameter, several sensing ranges and cable lengths, integral lightning protection, and ratings for hazardous locations.

The ProSense NFLT is a non-fouling design continuous level sensing solution for waste-water applications featuring an extremely rugged Kynar sensing membrane with superior abrasion and puncture resistance that eliminates the need for large bulky shields for protection against floating particles and small objects. For added membrane protection in extreme applications or when extra stabilizing weight is needed, a user installed shield is available as an accessory. Several sensing ranges and cable lengths, integral lightning protection, ratings for hazardous locations, and a 0.5% Total Error Band accuracy are standard.

Available ProSense submersible level transmitter accessories include a desiccant drying tube, bellows, stabilizing weight, terminating enclosure, and protective spacer/shield for the NFLT series.

GPLT Series Features

- Ideal for general purpose water applications
- Six full scale ranges from 11.5 to 115.5 feet of water
- 4-20 mA output signal
- 1% Total Error Band accuracy
- Rugged 316L stainless steel construction
- Slim 0.825 inch diameter housing
- Polyethylene jacketed shielded cable with atmospheric vent tube
- Integral lightning protection
- Hazardous location ratings

NFLT Series Features

- Non-fouling design for waste-water applications
- Five full scale ranges from 11.5 to 69.2 feet of water
- 4-20 mA output signal
- 0.5% Total Error Band accuracy
- Rugged abrasion and puncture resistant Kynar sensing membrane with 316L stainless steel construction
- Slim 1.26 inch diameter housing without protective shield
- Polyethylene jacketed shielded cable with atmospheric vent tube
- Integral lightning protection
- Hazardous location ratings

2 YEAR WARRANTY

CE c UL us

GPLT/NFLT Series Submersible Level Transmitters

Model	Range	Cable Length*	Diaphragm	Price	Weight (lbs)	Drawing Link
GPLT-005-L30	0–5 psig (11.5 ftWC)	30ft (9.1 m)	316 Stainless steel diaphragm with polyamide protective cap	$062#3:	1.10	PDF
GPLT-010-L40	0–10 psig (23.1 ftWC)	40ft (12.2 m)		$062#4:	1.35	PDF
GPLT-015-L60	0–15 psig (34.6 ftWC)	60ft (18.3 m)		$062#5:	1.90	PDF
GPLT-020-L60	0–20 psig (46.1 ftWC)			$062#6:	1.90	PDF
GPLT-030-L100	0–30 psig (69.2 ftWC)	100ft (30.5 m)		$062#7:	2.95	PDF
GPLT-050-L140	0–50 psig (115.5 ftWC)	140ft (42.7 m)		$062#8:	4.00	PDF
NFLT-005-L30	0–5 psig (11.5 ftWC)	30ft (9.1 m)	Non-fouling Kynar® membrane	$062#9:	1.25	PDF
NFLT-010-L40	0–10 psig (23.1 ftWC)	40ft (12.2 m)		$062#b:	1.55	PDF
NFLT-015-L60	0–15 psig (34.6 ftWC)	60ft (18.3 m)		$062#c:	2.05	PDF
NFLT-020-L60	0–20 psig (46.1 ftWC)			$062#d:	2.05	PDF
NFLT-030-L100	0–30 psig (69.2 ftWC)	100ft (30.5 m)		$062#e:	3.15	PDF

** It is required that any excess cable length be accommodated in a service loop and that the cable NOT be shortened as this will void the warranty. If longer transmitter cable is needed, terminate the sensor in an LTACC-5 junction box and run standard non-vented instrumentation cable between the junction box and the measuring electronics.*

See our website www.AutomationDirect.com for complete Engineering drawings.

ProSense® GPLT/NFLT Series Submersible Level Transmitters

GPLT/NFLT Series Submersible Level Transmitter Technical Specifications	
Total Error Band Accuracy[1]	GPLT: ±1% FS (full scale) NFLT: ±0.5% FS (full scale)
Wetted Materials	GPLT: 316L SS; Polyamide, PE (Polyethylene), EPDM (ethylene propylene diene terpolymer) NFLT: 316L SS; PVDF (polyvinylidene fluoride), PE (Polyethylene), EPDM (ethylene propylene diene terpolymer)
Compensated Temp. Range	-10 to 80°C [14 to 176°F]
Operating Temp. Range	-10 to 60°C [14 to 140°F]
Protection Rating	IP 68
Supply[2]	11–30 VDC
Input Current	3.2–22 mA
Output	4–20 mA
Load Resistance (Ω)	< (Supply-11V) / 0.022A
Mounting	Vertical
Circuit Protection	Polarity, surge/shorted output
Cable Jacket Material	PE (Polyethylene) & EPDM (ethylene propylene diene terpolymer)
Number of Conductors	2 + Drain
Conductor Size	26AWG
Certifications / Agency Approvals	cULus for Use in Hazardous Locations (E537209), CE

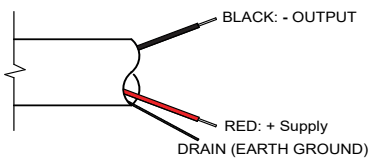
[1] TEB: Total Error Band; Includes the combined effects of non-linearity, hysteresis and non-repeatability as well as thermal dependencies, over the compensated temperature range.

[2] Nominal values may be higher depending upon cable length. Cable loop resistance (~76Ω / 1000ft) adds to the supply requirement. In order to ensure proper system operation, calculate the minimum required supply voltage (at the source) as follows:
MINIMUM SUPPLY VOLTAGE = 11 + 0.022 (CABLE LENGTH x 0.076) VDC

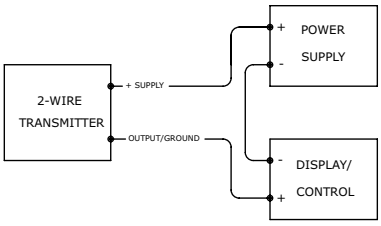
Wiring

4-20mA - IS Approved

Transmitters approved for use in hazardous areas



2-Wire Current Loop



For additional information see the ProSense Submersible Level Transmitter Quick Start Guide by scanning or clicking on the QR code.

ProSense® Submersible Level Transmitter Accessories

Part No. LTACC-1

Part No. LTACC-2

Part No. LTACC-3

Part No. LTACC-4

Part No. LTACC-5

Submersible Level Transmitter Accessories				
Model	**Description**	**Price**	**Weight (lbs)**	**Drawing Link**
LTACC-1	ProSense protective spacer, for use with ProSense NFLT submersible level transmitters.	$062#a:	1.50	PDF
LTACC-2	ProSense drying tube, for use with submersible level transmitters.	$;62#f:	0.15	PDF
LTACC-3	ProSense bellows, for use with submersible level transmitters.	$62#g:	0.20	PDF
LTACC-4	ProSense stabilizing weight, for use with AchieVe and ProSense submersible level transmitters.	$62#h:	0.85	PDF
LTACC-5	ProSense termination enclosure, for use with submersible level transmitters.	$-062#i:	2.90	PDF

Note: Stabilizing weight LTACC-4 also aids in corrosion resistance by acting as a sacrificial anode.
See our website www.AutomationDirect.com for complete Engineering drawings.