

Product Features

- All Teflon® wetted parts available
- Various process fittings available
- Probe lengths to 96"
- Standard resolution 1/2", 1/4" resolution available
- M12 Micro-male plug or extension cable available
- Continuous analog level measurement
- Analog output via remotely mounted DIN Rail transmitter
- Undisturbed by foaming
- Vapor insensitive
- Liquid interface detection

Description

The LFT42 are synthetic (non-metallic wetted parts) float level transducers suitable for level measurement in vessels of up to 96 inches in height. Floats are made from PTFE (Teflon®). Tubes are 316SS clad with PFA or PTFE (Teflon®). Flanges and fittings are available in Polyethylene (PE), polypropylene (PP), PVC and PTFE (Teflon®). The use of 2" NPT fitting or flange accomodates the diameter of the float and allows the units to be installed from the top of the vessel or mounting bracket, without removing the float.

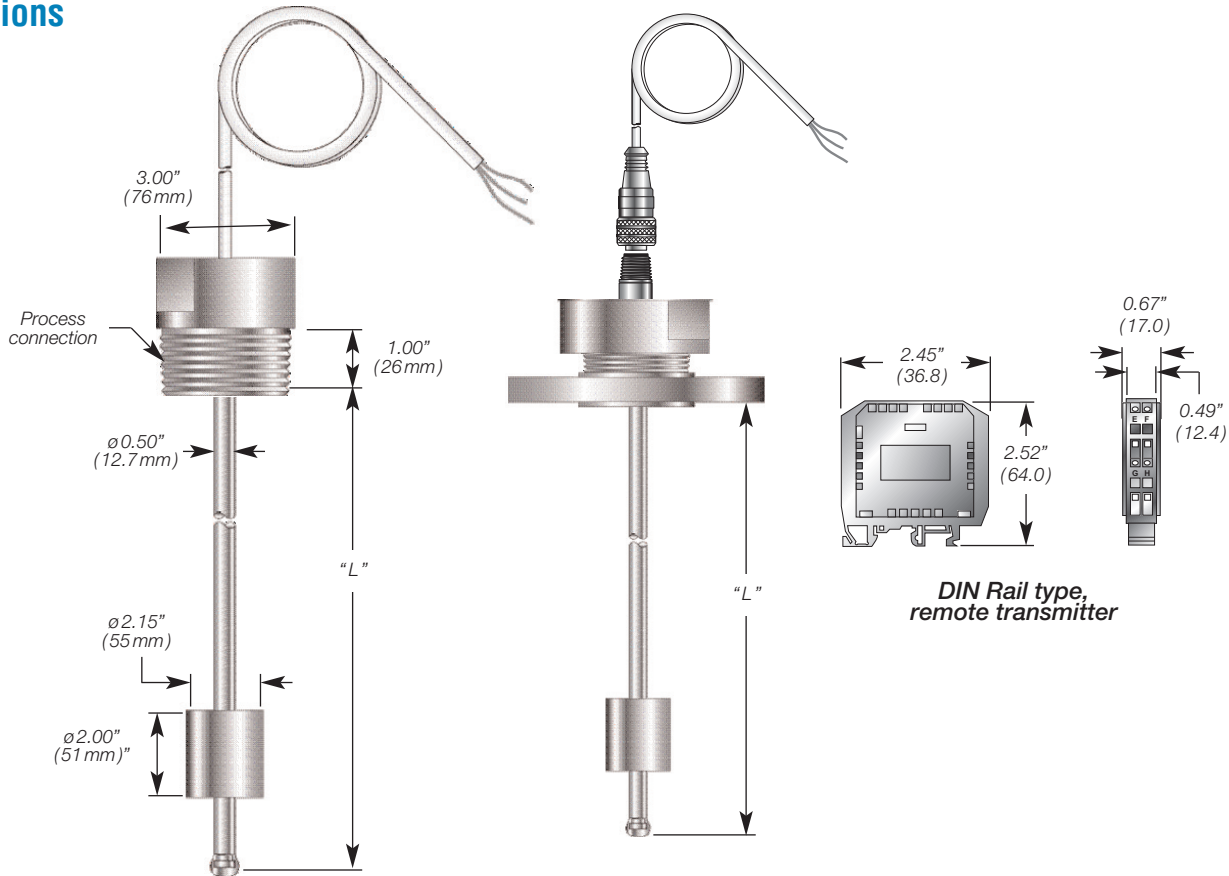
Each transducer comes standard with a remote mounted DIN rail transmitter, float and a fitting/probe. Reliable operation and simple design makes the LFT42 an excellent choice for many corrosive level sensing applications.

Application / Process Notes

- Ideal for level measurement where installation space is limited or tanks are compact
- Acids and water based liquids
- Very corrosive liquids
- Chemical holding tanks with clean liquids
- Measurement of liquid levels in mobile equipment
- Machinery, energy, naval, Industrial, automation
- Not recommended where liquids are dirty or sticky



Dimensions



Technical Specifications

Sensor Specifications

Sensing Technology :	Reed Switch chain type
Measuring Range :	From 12 to 96 inches (304 to 2438 mm)
Resolution :	0.50 inch (13 mm) standard 0.25 inch (6.5 mm) optional
Applicable Floats :	See Float Types - TK, PK
Dead Band :	Dependent on Float: See Float Types
Minimum Liquid SG :	Dependent on Float: See Float Types
Max. Pressure :	Dependent on Float: See Float Types
Media Temperature Range :	-20 to 120°C (-4 to 250°F)
Wetted Parts	
Stem :	PFA (std.) or PTFE (Teflon®) clad, PP (Polypropylene)
Float :	PTFE (Teflon®), PP (Polypropylene)
Fitting :	PE, PP, PVC or PTFE (Teflon®)
Flange :	PE, PP, PVC or PTFE (Teflon®)
Process Connection Size :	2" NPT male or 2", 2.5", 3", 4" ANSI flange
Electrical Connections :	Micro-DC M12 plug or various cable types, see Box2
Transmitter Type	
DIN Rail :	Polyamide, NEMA 1/IP40
Adjustments :	Via potentiometer, 20 turn

Environmental Specifications

Ambient Temperature Range :	-20 to 60°C (-4 to 140°F)
Storage Temperature Range :	-40 to 80°C (-40 to 176°F)
Media Temperature Range :	-20 to 120°C (-4 to 250°F)

Environmental Protection :	NEMA 4X/IP66
Output Data, 2-wire	
Output :	4-20 mA 2-wire
Maximum Loop Resistance :	$R_{max} = [V_{supply} - 9VDC] / 20mA$
Accuracy :	$\leq \pm 3.0\%$ FS max. $\leq \pm 1.5\%$ FS typ.
Open Circuit Detection :	Over-scale limit (27.0 mA) or Under-scale limit (2.2 mA)
Sensing Voltage & Current :	5 VDC max., 2.5 mA max.
Warmup :	30 sec.

Output Data, 3-wire

Output :	1-5 VDC, 0-5 VDC, 0-10 VDC, 3-wire
Accuracy :	$\leq \pm 3.0\%$ FS max. $\leq \pm 1.5\%$ FS typ.
Output Impedance :	>1 MΩ
Sensing Voltage & Current :	5 VDC max., 2.5 mA max.
Warmup :	30 sec.

Electrical Specifications

Supply Voltage :	12-32 VDC
Residual Ripple Supply Voltage :	$\leq 5\%$
Supply Voltage Protection :	Reverse polarity, excess voltage, override and short circuit protected
Supply Effect :	<0.02 %/V

Custom Builder

MODEL 1 2 3 4 5 6 7 8 9

LFT42 - - - - - - - - - -

BOX1 CODE	Electronic Module
DA	4-20 mA, 2-wire output DIN Rail type, remote
DD	1-5VDC, 3-wire output DIN Rail type, remote
DE	0-5VDC, 3-wire output DIN Rail type, remote
DF	0-10VDC, 3-wire output DIN Rail type, remote
RA	0-5 K Ω , 3-wire output
RB	0-10 K Ω , 3-wire output
RC	0-20 K Ω , 3-wire output
Rx	xx-yy K Ω , 3-wire output, Specify

Other outputs available. Consult factory.

BOX2 CODE	Resolution
A	\pm 0.50 inch (12.7 mm)
B	\pm 0.25 inch (6.4 mm)

BOX3 CODE	Extension Cable/Connector Type
MC	M12 Micro-Male Connector
PV	PVC Insulation, stranded cond. 90°C(195°F) max.
TF	Teflon® insulation, stranded cond. 200°C(392°F) max.
TA	Teflon® with SS armor, 200°C(356°F) max.
SL	Silicone Insulation, 180°C(356°F) max.
TS	Teflon® with SS overbraid, 200°C(392°F) max.

BOX4 CODE	Extension Cable Length "H" (MC Option)
00	None
A2	Straight, PVC, 6ft, (2 meters)
A5	Straight, PVC, 15ft, (5 meters)
B2	Right Angle, PVC, 6ft, (2 meters)
B5	Right Angle, PVC, (5 meters)

BOX4 CODE	Extension Cable Length "F" (Cable Option)
---	In Inches Ex.: 060 = 60" long

BOX4 CODE	Certificates of Compliance
X	None, for non-hazardous areas

BOX5 CODE	Float Style
TK	PTFE, ϕ 2.15" x 2.00" L, SG=0.63
PK	PP, ϕ 1.73" x 1.73" L, SG=0.49

Floats are field-removable.
Other floats available. Consult factory.

BOX6 CODE	Fitting Type & Size
KN	2" NPT male
F20	2" 150lb. ANSI flange
F25	2.5" 150lb. ANSI flange
F30	3" 150lb. ANSI flange
F40	4" 150lb. ANSI flange

BOX7 CODE	Fitting/Flange Material
PE	Polyethylene
PP	Polypropylene
PV	PVC
TF	PTFE (Teflon®)

BOX8 CODE	Probe Cladding Material
PF	PFA (Teflon®) std.
PT	PTFE (Teflon®)
PP	Polypropylene

BOX9 CODE	Float Stop Distance "C"
0	None

BOX10 CODE	Probe Length "L"
---	In 0.1" increments (from 6" to 36") Ex.: 165 = 16.5" long

Float Types

Float Dimensions		
Part Number	PK	TK
Float Material	Polypropylene	Teflon® PTFE
Float SG/Min. Liquid SG	0.49/0.75	0.63/0.870
Operating Pressure, Max.	44 psi (3 bar) @21°C	40 psig (2.7 bar) @21°C
Operating Temp. Max.	0 to 80°C (32 to 176°F)	-40 to 150°C (-40 to 302°F)