

Product Features

- Compact design, ideal for OEM applications
- Various process fittings available
- Probe lengths to 96"
- 1/4" or 1/2" resolution
- All stainless steel wetted parts
- Aluminum, stainless, polypropylene enclosures available; general purpose or explosion proof
- Continuous analog level measurement
- Analog output via head mounted hockey puck transmitter or remotely mounted DIN Rail transmitter
- Undisturbed by foaming
- Vapor insensitive
- Liquid interface detection

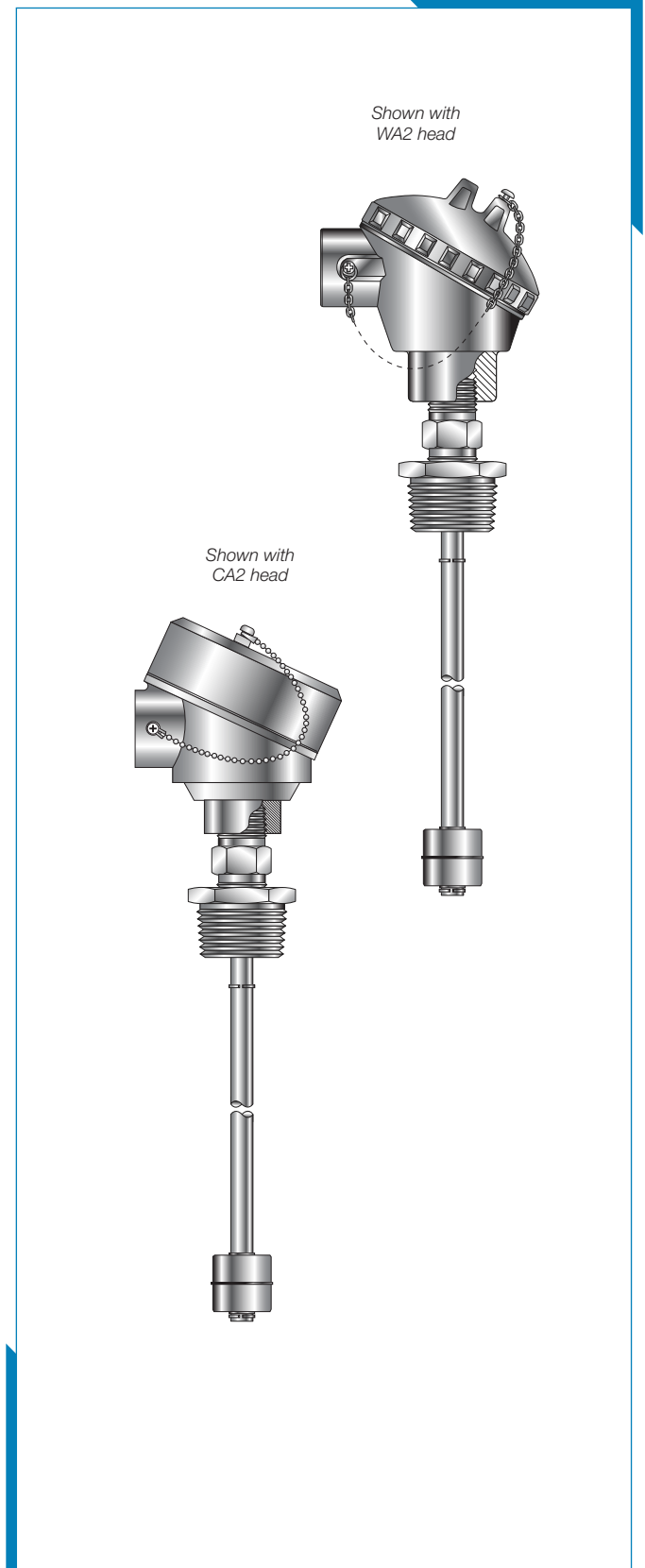
Description

The LFT01 is a reed-chain type float level transducer suitable for level measurement in vessels of up to 96 inches in height. Of high quality construction, all wetted parts are stainless 316; other materials are available upon request.

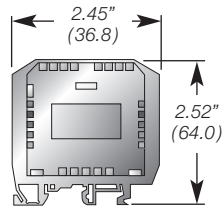
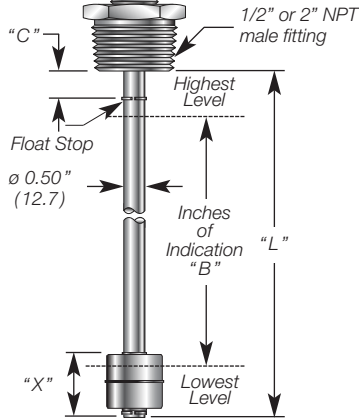
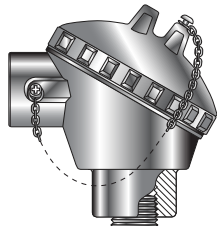
Each transducer comes standard with an enclosure, head-mounted hockey-puck or remote mounted DIN rail transmitter, float and a fitting/probe. Reliable operation and simple design makes the LFT01 an excellent choice for many level sensing applications.

Application / Process Notes

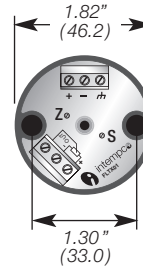
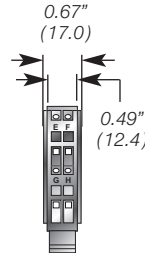
- Ideal for level measurement where installation space is limited or tanks are compact
- Water based liquids
- Acids compatible with Stainless 316
- Hydraulic and other clean oil applications
- Chemical holding tanks with clean liquids
- Measurement of liquid levels in mobile equipment
- Machinery, Energy, Naval, Industrial, Automation
- Not recommended where liquids are dirty or sticky



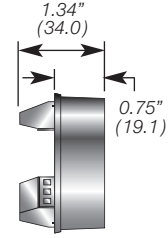
Dimensions



**DIN Rail type,
remote transmitter**



**Hockey puck type,
transmitter**



Float Factor - X

Float P/N	X
BA	2.36" (60)
CA	2.32" (59)

To Determine Dimensions

- L:** Overall Length
- B:** Inches of indication
- C:** Distance from bottom of mounting to float stop

Calculating Length

To find Overall Length "L"
when Inches of Indication "B" is known:
 $L = B + C^* + X$

To find Maximum Inches of Indication "B"
when Overall Length "L" is known:
 $B = L - C^* - X$

* C dimension is determined by customer. Floats are field-removable.

Technical Specifications

Sensor Specifications

Sensing Technology :	Reed Switch chain type
Measuring Range :	From 12 to 96 inches (304 to 2438 mm)
Resolution :	± 0.50inch (13 mm) standard ± 0.25inch (6.5 mm) optional
Applicable Floats :	See Float Types - BA, CA,
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 :	Stainless 316 std.
Float :	See Float Types
Fitting :	Stainless 316 std.
Process Connection Size :	1/2" or 2" NPT male
Enclosures :	See Head Types - WAx, POx, AHx, CAx, CSx, EXx, ADx, XDx
Transmitter Type	Hockey puck or DIN Rail,
Hockey Puck :	Zinc die cast enamel coated, NEMA 1/IP40
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 4/IP65 or NEMA 4X/IP66 depending on enclosure selection

Output Data, 2-wire

Output Signals :	4-20 mA 2-wire
Maximum Loop Resistance :	$R_{max} = [V_{supply} - 9VDC] / 20mA$
Accuracy :	≤ ±3.0% FS max. ≤ ±1.5% FS typ.
Open Circuit Detection :	Over-scale limit (27.0mA) or Under-scale limit (2.2mA)
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 :	≤ ±3.0% FS max. ≤ ±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 :	≤ 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 10

LFT01 - - - - - - - - - **N** - -

BOX 1 CODE	Electronic Module
HA	4-20 mA, 2-wire output Hockey-puck type, installed
HD	1-5 VDC, 3-wire output Hockey-puck type, installed
HE	0-5 VDC, 3-wire output Hockey-puck type, installed
HF	0-10 VDC, 3-wire output Hockey-puck type, installed
DA	4-20 mA, 2-wire output DIN Rail type, remote
DD	1-5 VDC, 3-wire output DIN Rail type, remote
DE	0-5 VDC, 3-wire output DIN Rail type, remote
DF	0-10 VDC, 3-wire output DIN Rail type, remote
RA	0-5 KΩ, 3-wire output
RB	0-10 KΩ, 3-wire output
RC	0-20 KΩ, 3-wire output
Rx	0-xx KΩ, 3-wire output, Specify

Other outputs available. Consult factory.

BOX 2 CODE	Resolution
A	± 0.50 inch (12.7 mm) resolution
B	± 0.25 inch (6.4 mm) resolution

BOX 3 CODE	Enclosure
00	No head, supplied with 36" single Teflon leads
WA*	Aluminum die cast screw cover, meets NEMA 4/IP65 requirements
PO3	White polypropylene screw cover, meets NEMA 4X/IP65 requirements
AH2	Aluminum die cast flip cover, meets NEMA 4/IP65 requirements
CA*	Aluminum cast screw cover, epoxy coated, NEMA 4X/IP66
CS*	Cast stainless steel 316 screw cover, meets NEMA 4X/IP66 requirements
EX*	Cast aluminum, Explosion Proof, CSA, FM Approval Class I, Div. 1, Gps. B,C& D Class II, Div. 1, Gps. E, F&G, Type 4x
CX*	Cast stainless steel, Explosion Proof, CSA, FM Approval Class I, Div. 1, Gps. B,C& D Class II, Div. 1, Gps. E, F&G, Type 4x
AD*	Cast aluminum, Explosion Proof, CSA, FM Approval Class I, Div. 1, Gps. B,C& D Class II, Div. 1, Gps. E, F&G, Type 4x
XD*	Cast aluminum, Explosion Proof, CSA, FM Approval Class I, Div. 1, Gps. B,C& D Class II, Div. 1, Gps. E, F&G, Type 4x

*2 = 1/2" NPT Conduit *3 = 3/4" NPT Conduit

BOX 4 CODE	Certificates of Compliance
X	None, for non-hazardous areas

BOX 5 CODE	Float Style
BA	SS316, ø2.10" x 2.10" L, SG=0.49
CA	SS316, ø2.06" x 2.06" L, SG=0.60

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

BOX 6 CODE	Fitting Type & Size
EN	1/2" NPT male*
KN	2" NPT male

*Float must be removed prior to installation.

BOX 7 CODE	Fitting Material
S	Stainless steel 316/316L

BOX 8 CODE	Probe Type
HA	Tube ø.500" x .062" wall, SS316L

BOX 9 CODE	Float Stop Distance "C"
N__	In 0.1" increments Ex.: N20 = 2.0" long

BOX 10 CODE	Probe Length "L"
---	In 0.1" increments (from 6" to 36") Ex.: 165 = 16.5" long

Float Types

Float Dimensions				
Part Number	BA	CA		
Float Material	Stainless steel 316	Stainless steel 316		
Float SG/Min. Liquid SG	0.49/0.75	0.60/0.85		
Operating Pressure, Max.	300 psi (21 bar)	750 psi (51 bar)		
Operating Temp. Max.	150°C (302°F)	150°C (302°F)		