

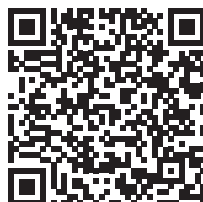
Miniature Liquid Level Sensors Series LF



The Series LF Miniature Liquid Level sensors are designed for reliable operation in small tanks and containers. Their rugged design and multiple configurations make them the perfect solution for OEM and large volume applications.

Series Features

- | | | |
|---|--|--|
| LFE <ul style="list-style-type: none">• APG's smallest vertical float switches• Four configurable options• Use in water or oil• Non-reversible switch operation• Standard pressure, temp range | LFP <ul style="list-style-type: none">• PVDF, polypropylene, 6-nylon, or Buna wetted-parts• Can use in water, oil, corrosive chemicals• Temp ranges up to 40°C, 80°C, 90°C, and 110°C• Ultra-low to standard pressure ranges• Field-reversible switch operation | LFS <ul style="list-style-type: none">• All stainless-steel construction• Specific gravity from 0.55 to 0.8• Temp ranges up from 80°C up to 200°C• Ultra-low to high pressure ranges• Field-reversible switch operation |
|---|--|--|



LFE Specifications and Options

Model Number: LFE - - - -
 A B C D

A. Stem Length

- 11** Small (45 mm / 1.77")
- 12** Large (55 mm / 2.17")

B. Float Material/Medium

- P** Polypropylene / Water (0.9 SG)
- R** Buna / Hydraulic or Lubricating Oil (0.7 SG)

C. Switch Capacity

- 0** 10 VA
- 1** 50 VA

D. Switch Operation

- A** Normally Closed
- B** Normally Open

Note: Not all configurations available. Please contact factory for individual model availability.

Physical

- Stem: Polypropylene
- Retainer: 316L SS
- Mounting: Vertical, 1/8" G (PF)

Electrical

- Life Expectancy: 10⁷ (# of actuations)
- Lead Wires: #22 AWG, 11.8 or 39.4 in. (300 or 1000 mm)
- Switch Capacity
 - 10 VA: 0.2 A max, 100 VAC/DC max, 0.1 A nominal
 - 50 VA: 0.5 A max, 300 VAC/DC max, 0.17 A nominal

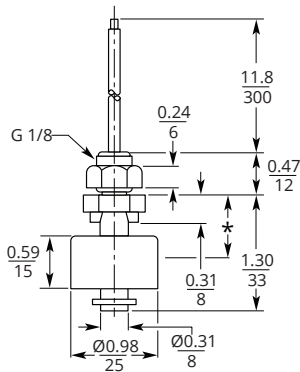
Performance

- Pressure Rating: 145 psi (10 bar)

Environmental

- Operating Temp: 14° - 194°F (-10° - 90°C)

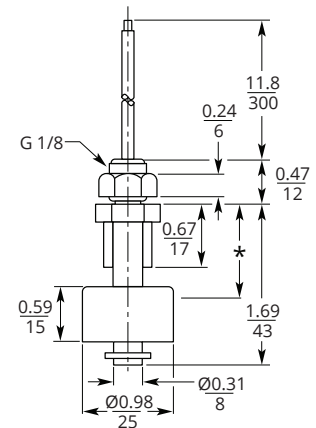
LFE-11P / LFE-11R



Activation Point (Dimension *)

Model	ON	OFF
LFE-11P_A	15 mm (Falling)	13.5 mm (Rising)
LFE-11R_A	18 mm (Falling)	16.5 mm (Rising)
LFE-12P_A	25 mm (Falling)	23.5 mm (Rising)
LFE-12R_A	28 mm (Falling)	26.5 mm (Rising)
LFE-11P_B	14 mm (Rising)	15.5 mm (Falling)
LFE-11R_B	17 mm (Rising)	18.5 mm (Falling)
LFE-12P_B	23 mm (Rising)	24.5 mm (Falling)
LFE-12R_B	26 mm (Rising)	27.5 mm (Falling)

LFE-12P / LFE-12R



LFP Specifications and Options

Series

LFP

Model

LFP-V-2F-300	LFP-V-2F-1000	LFP-V-2PG	LFP-V-2PN	LFP-11D
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Performance

Pressure Rating	28.4 psi (1.96 bar)	145 psi (10 bar)	58.0 psi (4 bar)
Minimum S.G.	0.85	0.9	0.7

Environmental

Operating Temp.	-4° to 175°F (-20° to 80°C)	14° to 14°F (-10° to 40°C)	14° to 194°F (-10° to 90°C)	-4° to 175°F (-20° to 80°C)
Liquids	Corrosive Chemicals		Water, Chemicals	

Electrical

Max Capacity	50 VA			
Max / Nominal Current	1 A carry max	0.5 A / 0.17 A	0.5 A / 0.21 A	
Max Voltage	240 VAC / 200 DC	300 VAC/DC	240 VAC/DC	
Life Expectancy	10 ⁷ (# of actuations)			
Lead Wires	#22 AWG, 11.8 in. (300 mm)	#22 AWG, 39.4 in. (1000 mm)	#22 AWG, 11.8 or 39.4 in. (300 or 1000 mm)	#22 AWG, 11.8 in. (300 mm)

Physical

Material			
Stem	PVDF		Polypropylene
Float	PVDF		Polypropylene
Retainer	PVDF		Polypropylene
Mounting			
Orientation	Vertical		
Type	1/8" G (PF)	1/8" NPT	1/8" G (PF)

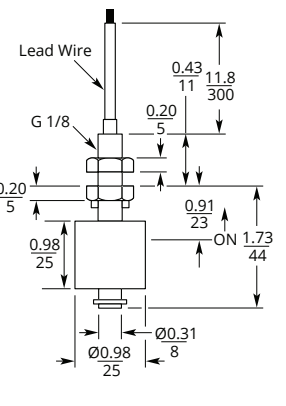
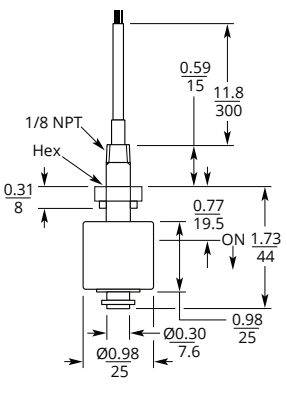
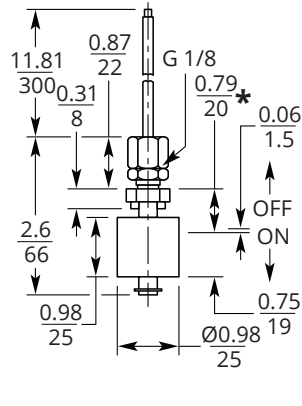
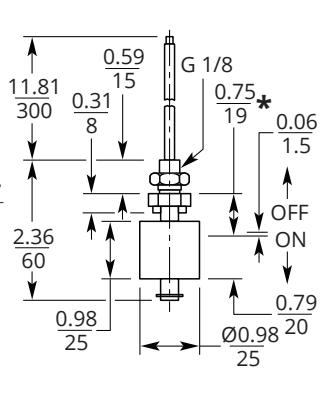
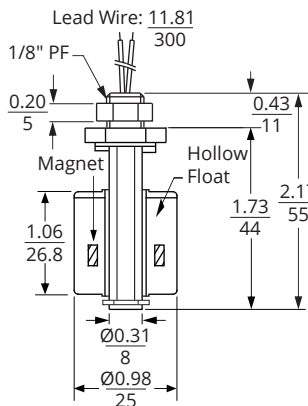
LFP-V-2F-300

LFP-V-2F-1000

LFP-V-2PG

LFP-V-2PN

LFP-11D



Notes:

- Reversing LFP-V-2F-1000 switch operation changes actuation distance from 19 mm to 16.5 mm.
- Reversing LFP-V-2PG switch operation changes actuation distance from 20 mm to 17 mm.



LFP Specifications and Options

Series

LFP

Model

LFP-V-2A

LFP-V-2B

LFP-VE-B1

LFP-H-3

Performance

Pressure Rating	145 psi (10 bar)		
Minimum S.G.	0.6		0.8

Environmental

Operating Temp.	14° to 194°F (-10° to 90°C)	14° to 176°F (-10° to 80°C)	14° to 194°F (-10° to 90°C)
Liquids	Water, Oil		Water (magnet exposed to media)

Electrical

Max Capacity	50 VA		
Max / Nominal Current	0.5 A / 0.17 A		
Max Voltage	300 VAC/DC		
Life Expectancy	10 ⁷ (# of actuations)		
Lead Wires	#22 AWG, 11.8 or 39.4 in. (300 or 1000 mm)	#22 AWG, 11.8 in. (300 mm)	#22 AWG, 11.8 or 39.4 in. (300 or 1000 mm)

Physical

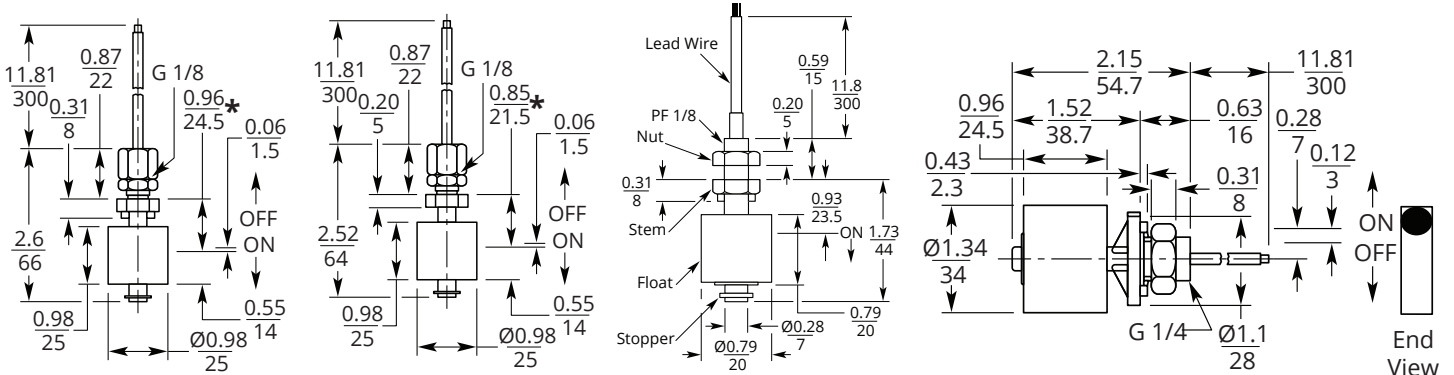
Material				
Stem	Polyacetal	Nickel-plated Brass	POM	Polypropylene
Float	Buna			Polypropylene
Retainer	316 SS		304 SS	Polypropylene
Mounting				
Orientation	Vertical			Horizontal
Type	1/8" G (PF)			1/4" G (PF)

LFP-V-2A

LFP-V-2B

LFP-VE-B1

LFP-H-3



Notes:

- Reversing LFP-V-2A switch operation changes actuation distance from 24.5 mm to 22.5 mm.
- Reversing LFP-V-2B switch operation changes actuation distance from 21.5 mm to 19.5 mm.

LFP-HE Specifications and Options

Model Number: LFP - HE -
 A B

A. Float, Stem, & Retainer Material/Medium

- P** Polypropylene / Water, Chemicals
- N** 6-nylon / Water, Non-caustic Chemicals

B. Mounting Type

- 1** 1/4" PF (G) (internal mount)
- 2** 1/2" NPT (external mount)

Physical

- Mounting Orientation:
Horizontal

Performance

- Pressure Rating:
7.25 psi (0.5 bar)
- Minimum Specific Gravity:
0.8

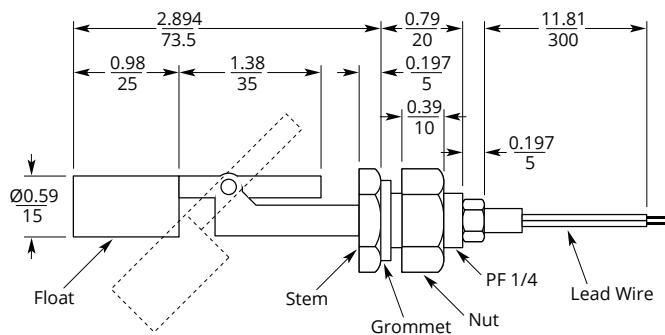
Electrical

- Life Expectancy: 10^7 (# of actuations)
- Lead Wires:
#22 AWG, 11.8 in. (300 mm)
- Switch Capacity
50 VA: 0.5 A max, 300 VAC/DC max, 0.17 A nominal

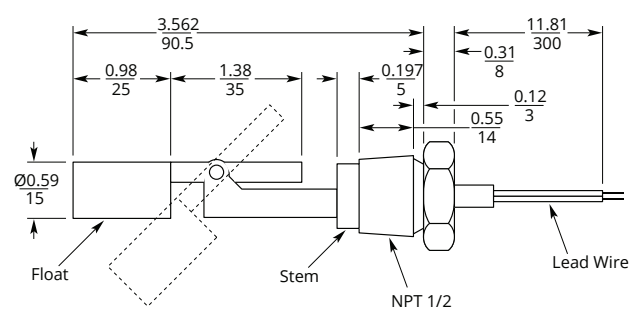
Environmental

- Operating Temp:
Polypropylene: 14° - 176°F (-10° - 80°C)
6-nylon: 14° - 230°F (-10° - 110°C)

LFP-HE-P1 / LFE-HE-N1



LFP-HE-P2 / LFE-HE-N2



LFS-V Specifications and Options

Series

LFS-V

Model

LFS-V-30	LFS-V-5G	LFS-V-5G-1000	LFS-V-5UN
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Performance

Pressure Rating	290 psi (20 bar)	142 psi (9.8 bar)	290 psi (20 bar)
Minimum S.G.	0.55	0.7	0.8

Environmental

Operating Temp.	14° to 248°F (-10° to 120°C)	4° to 175°F (-20° to 80°C)	14° to 212°F (-10° to 100°C)
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Liquids

Most liquids

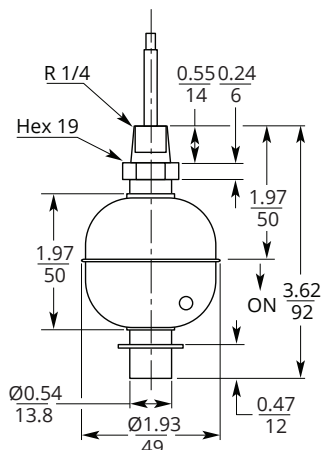
Electrical

Max Capacity	15 VA	50 VA		
Max / Nominal Current	1.0 A / 0.06 A	1 A carry max	0.5 A / 0.17 A	
Max Voltage	264 VAC	240 VAC / 200 VDC	300 VAC/DC	
Life Expectancy	10 ⁷ (# of actuations)			
Lead Wires	0.3 mm ² Silicon, 15.7 in. or 47.2 in. (400 or 1200 mm)	#22 AWG, 11.8 (300 mm)	#22 AWG, 39.4 in. (1000 mm)	#22 AWG, 11.8 or 39.4 in. (300 or 1000 mm)

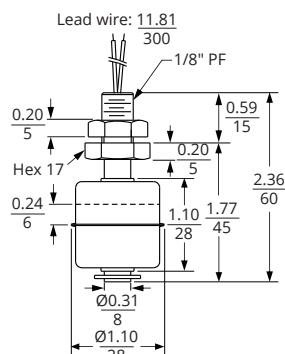
Physical

Material				
Stem	304 SS	316 SS		316SS
Float	316 SS		316L SS	
Retainer	304 SS	316 SS		
Mounting				
Orientation	Vertical			
Type	1/4" R	1/8" PF (G)		

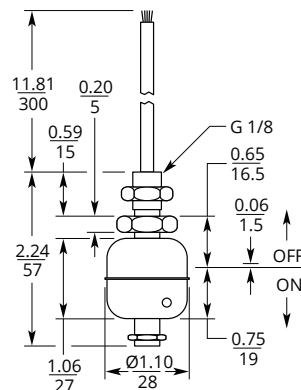
LFS-V-30



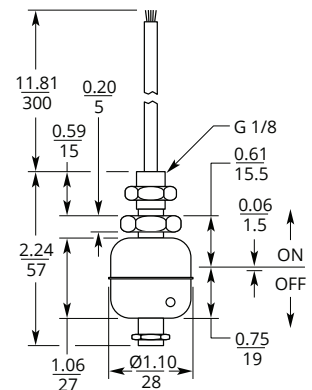
LFS-V-5G



LFS-V-5G-1000



LFS-V-5UN



LFS-VE Specifications and Options

Series

LFS-VE

Model

LFS-VE-S1

LFS-VE-S2

LFS-VE-S4

Performance

Pressure Rating 145 psi (10 bar)

Minimum S.G. 0.8 | 0.73

Environmental

Operating Temp. 14° to 248°F (-10° to 120°C) | 14° to 392°F (-10° to 200°C)

Liquids Most liquids

Electrical

Max Capacity 50 VA

Max / Nominal Current 0.5 A / 0.17 A

Max Voltage 300 VAC/DC

Life Expectancy 10^7 (# of actuations)

Lead Wires #22 AWG, 13.8 in. (350 mm) | #22 AWG, 92.5 in. (2350 mm)

Physical

Material

Stem 304 SS | 316SS

Float 304 SS | 316 SS

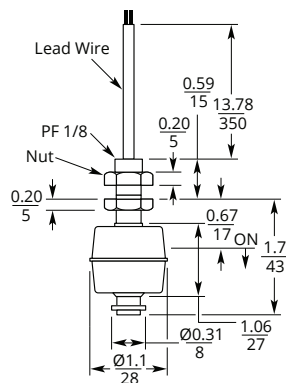
Retainer 304 SS | 316 SS

Mounting

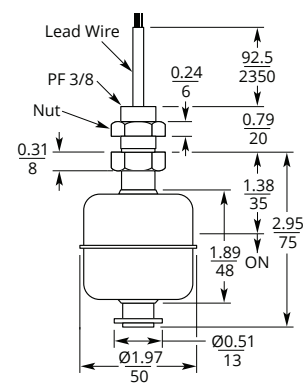
Orientation Vertical

Type 1/8" PF (G) | 3/8" PF (G)

LFS-VE-S1 & LFS-VE-S2



LFS-VE-S4



LFS Specifications and Options



Series

LFS

Model

LFS-H-10

LFS-H-25S/90

LFS-HE-S2

Performance

Pressure Rating	145 psi (10 bar)	290 psi (20bar)	72.5 psi (5 bar)
Minimum S.G.	0.6	0.8	

Environmental

Operating Temp.	14° to 248°F (-10° to 120°C)	14° to 212°F (-10° to 100°C)	14° to 248°F (-10° to 120°C)
Liquids		Most liquids	

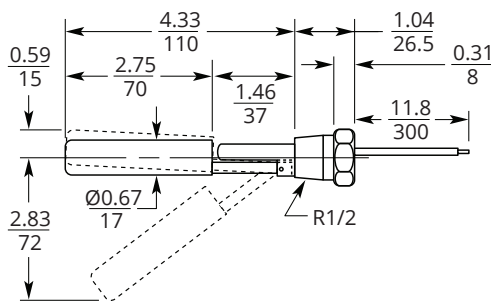
Electrical

Max Capacity	50 VA		
Max / Nominal Current	0.5 A / 0.17 A		
Max Voltage	300 VAC/DC		
Life Expectancy	10 ⁷ (# of actuations)		
Lead Wires	#22 AWG, 11.8 in. (300 mm)	#22 AWG, 19.7 in. (500 mm)	

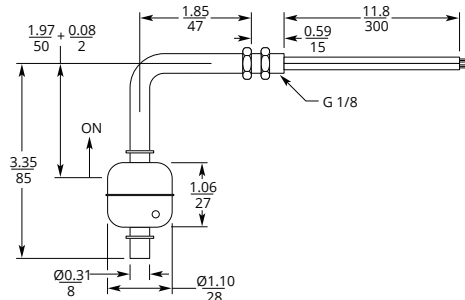
Physical

Material			
Stem	316 SS	304 SS	
Float	316L SS		304 SS
Retainer	316 SS	304 SS	
Mounting			
Placement - Orientation	External Horizontal	Internal Horizontal	External Horizontal
Float Orientation	Horizontal	Vertical	Horizontal
Type	1/2" R	1/8" PF (G)	1/2" NPT

LFS-H-10



LFS-H-25S/90



LFS-HE-S2

