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# FLOAT SWITCH

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## NON-MERCURY, 316 SS

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### MODEL FS 90

#### FEATURES

- 316 Stainless Steel float ball and hardware
- 5<sup>1</sup>/<sub>2</sub>" diameter float for exceptional buoyancy
- Mercury free switch
  - Long-life mechanical rating
  - Differential action
  - Form C contact
- Fixed level, cable or pipe suspension mounting

CONTEGRA's FS 90 is a rugged, reliable raw sewage or sludge wet well point-level sensing device. It is also applicable as a process sump or water reservoir sensor where its simplicity of operation, quality, and ruggedness provide years of reliable service.

Two simple mounting methods are available: cable or pipe. Cable suspension provides simplicity of installation and adjustment of the pump on/off and alarm setpoints as shown in the figure at the right. Alternatively, as shown above, the floats can be mounted on a pipe within the sump.

The switch has a 8" differential. The switch activates when the process level rises 4" above the fixed mounting position and deactivates when the level decreases to 4" below the fixed mounting position.



# MODEL FS 90

## Specifications

### Float construction:

Stainless Steel 316, 5 1/2" Dia., 20 gauge with a polished (i.e. non-stick) stainless steel coating.

### Cable:

16 gauge, 4 cond., SEOW. Rated "continuous service" for flexibility and longevity.

### Switch: SPDT snap switch

#### Certifications:

UL recognized, CSA certified

#### Mechanical life:

10 million operations

#### Connections (Dn Position):

White = Common

Black = Normally Open (NO)

Red = Normally Closed (NC)

Green = Ground

### Operating levels:

#### "On" setpoint:

4" above the fixed mounting level (nominal).

#### "Off" setpoint:

4" below the fixed mounting level (nominal).

### Buoyancy: ~2-1/2# net

### Contact Rating:

- 120 VAC/VDC Max.,
- 1 Amp / 25 Watts Max. Resistive/Non-Inductive

## Engineering Specifications

The level sensing device shall be a 5 1/2" diameter, stainless steel 316 float switch. The switch shall be mercury free.

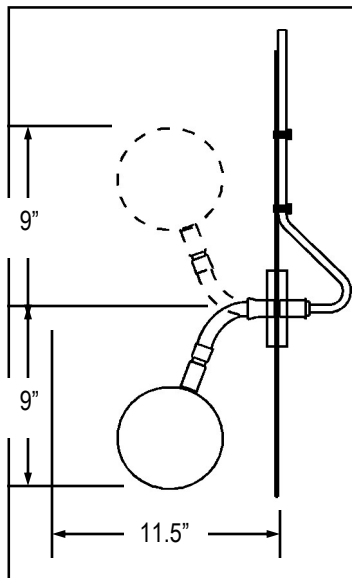
The switch shall be SPDT, rated 1 Amp/25 Watts Max, 120 VAC/VDC Max., Resistive, with a mechanical life of 10 million operations.

The float cable shall be rated "continuous service" for high flexibility.

The float switch(es) shall be mounted as shown on the plan drawings. All mounting hardware shall be Type 316 stainless steel. The signal cable shall incorporate strain relief jacketing between the float ball and the point of flexation (i.e. the cord grip tube).

The Model FS 90 float switch shall be furnished in quantities, cable lengths, and with accessories as shown in the plan drawings.

### Dimension Drawing



### Recommended Weight for Cable Mtd Floats:

- 1 or 2 floats - 10# weight
- 3 or 4 floats - 15# Min Wgt
- 5 floats - 18# Min Wgt

### Ordering Information (see example below\*\*)

Model	Feet of cable	Mounting Hardware	Accessories:
FS 90	XXX	X	FS-SC-XX = Float Switch Suspension Cable ... with "XX" ft of suspension cable
	20 ft. minimum	C = Cable Mtg clip	FS-Wgt15 or FS-Wgt18 = Weights for cable kit
	10 foot increments	P = Pipe Mtg Clip	FS-PBkt = Pipe wall mounting bracket

\*\* A typical model number is FS 90-30-C which specifies a FS 90 with 30 feet of signal cable.



Contegra Inc.  
14033 Commerce Ave NE  
Suite 300-405  
Prior Lake, MN 55372  
Phone: (651)905-0900  
Fax: (651)454-4665  
www.Contegra.com

Represented by: