## **FLOAT SWITCH**

# **NON-MERCURY, 316 SS**



# **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.



Contegra Inc.

## MODEL FS 90

## **Specifications**

#### Float construction:

Stainless Steel 316,  $5^1/2''$  Dia., 20 gauge with either a polished stainless steel or a non-stick coating (i.e. Laminex<sup>TM</sup>).

#### 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:

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).

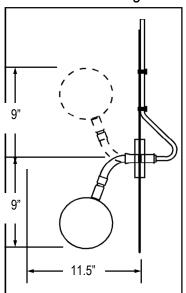
**Buoyancy:** ~2-1/2# net

#### **Contact Rating:**

- 120 VAC/150 VDC Max.,
- 1.0 DC/AC Amps Max.
- Non-Inductive: 25 W. Max.
- Inductive: 12 W. Max.

Note: Diode Bypass Inductive DC Circuits

### **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

### **Engineering Specifications**

The level sensing device shall be a  $5^1/2^{\circ\prime\prime}$  diameter, stainless steel 316 float switch. The switch shall be mercury free.

The switch shall be SPDT, rated 1A Max, 120 VAC/150VDC Max., 25 Watts Maximum Non-Inductive or 12 W Max Inductive and 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.

The float switch shall be a Contegra Model FS 90 and shall have a 3 year warranty.

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

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



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