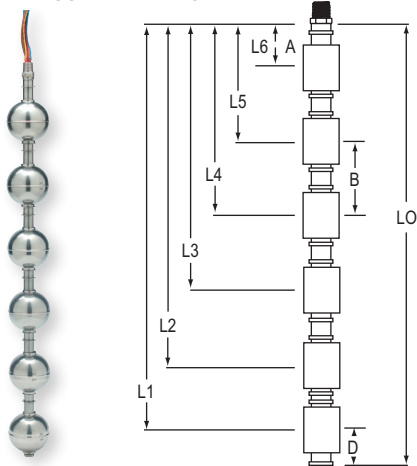
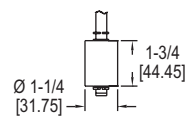


# MULTI-STATION LEVEL SWITCH

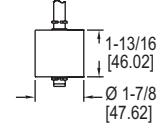
Customize To Fit Application, Up to Six 316 SS or Buna-N Floats



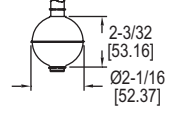
| ACTUATION LEVELS  |               |               |
|---|---------------|---------------|
| A   | B             | D             |
| 1-1/2" (38.10 mm)   | 3" (76.20 mm) | 2" (50.80 mm) |
| Each switching point requires one float.                      |               |               |
| A=Minimum distance from actuation point to bottom of mounting |               |               |
| B=Minimum distance between actuation levels                   |               |               |
| D=Minimum distance from end of unit to lowest actuation point |               |               |



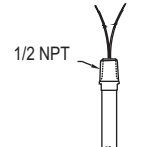
F1 float dimensions



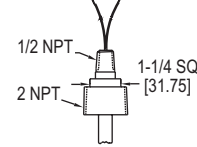
F2 float dimensions



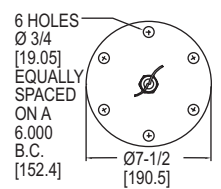
F3 float dimensions



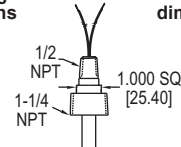
Type 1 mounting dimensions



Type 3 mounting dimensions



Type 4, 5 mounting dimensions



Type 2 mounting dimensions

The Series F7-MS Multi-Station Level Switch provides a customized level switch to meet application requirements. Switches can be configured with up to six different control points and stem lengths up to 140" (3.56 m). Stems and floats are available in 316 SS or brass, SPST or SPDT switches, and choice of mountings.

**FEATURES/BENEFITS**

- Customized level indication quickly and affordably
- Rugged construction with multiple options yielding exceptional versatility
- Capable of supporting larger, more buoyant floats
- Durable construction asserts long reliability in contaminated or turbulent media

**APPLICATIONS**

- Water level monitoring
- Oil level control
- Tank level control
- Diesel level monitoring

**SPECIFICATIONS**

**Service:** Compatible liquids.  
**Wetted Materials:** Stem, connection, and float.  
**Temperature Limits:** Buna-N floats: 180°F (82.2°C) in water, -40 to 230°F (-40 to 110°C) in oil; SS floats: -40 to 300°F (-40 to 148.9°C).  
**Wire Leads:** 24" (61 cm) free leads; #22 AWG, TFE jacketed, and #18 AWG polymeric.  
**Mounting Orientation:** Vertical ±30°.

**MODEL CHART**

| Example                      | F7-MS | B | 1 | -5 | F3 | 1 | -04.00 | -07.00 | -11.00 | -15.00 | -20.00 | -24.00 | J     | F7-MSB1-5F31-04.00-07.00-11.00-15.00-20.00-24.00-J   |
|------------------------------|-------|---|---|----|----|---|--------|--------|--------|--------|--------|--------|-------|--|
| Construction                 | F7-MS |   |   |    |    |   |        |        |        |        |        |        |       | Multi-station level, 1 to 6 switch points  |
| Stem and Connection Material |       | B |   |    |    |   |        |        |        |        |        |        |       | Brass with beryllium copper stops<br>316 SS with SS ARMCO PH-15-7MO stops  |
| Connection Type              |       |   | 1 |    |    |   |        |        |        |        |        |        |       | 1/2" NPT (float F2, F3 only)<br>1-1/4" NPT (float F1 only)<br>2" NPT<br>3" 150# flange carbon steel (conn. material S only, float F2, F3 only)<br>Max. pressure: 150 psi (10.3 bar)<br>3" 150# flange 316 SS (conn. material S only, float F2, F3 only)<br>Max. pressure: 150 psi (10.3 bar) |
| Switch Points                |       |   |   | #  |    |   |        |        |        |        |        |        |       | Put 1 to 6 for the number of switch points desired   |
| Float Type                   |       |   |   |    | F1 |   |        |        |        |        |        |        |       | <b>Material</b><br>Buna-N 0.75 150 psi (10.3 bar)<br>Buna-N 0.55 150 psi (10.3 bar)<br>316 SS 0.75 750 psi (51.7 bar); Units >72": 300 psi (20.7 bar)  |
| Switch Type*                 |       |   |   |    |    | 1 |        |        |        |        |        |        |       | SPST, .17 A @ 120 VAC, .08 A @ 240 VAC, .13 A @ 120 VDC, .06 A @ 240 VDC<br>SPST, .8 A @ 120 VAC, .4 A @ 240 VAC<br>SPDT, .17 A @ 120 VAC, .08 A @ 240 VAC, .13 A @ 120 VDC, .06 A @ 240 VDC   |
| Set Point Distance, L6†      |       |   |   |    |    |   | 00.00  |        |        |        |        |        |       | In inches referenced from bottom of process connection   |
| Set Point Distance, L5†      |       |   |   |    |    |   |        | 00.00  |        |        |        |        |       | In inches referenced from bottom of process connection   |
| Set Point Distance, L4†      |       |   |   |    |    |   |        |        | 00.00  |        |        |        |       | In inches referenced from bottom of process connection   |
| Set Point Distance, L3†      |       |   |   |    |    |   |        |        |        | 00.00  |        |        |       | In inches referenced from bottom of process connection   |
| Set Point Distance, L2†      |       |   |   |    |    |   |        |        |        |        | 00.00  |        |       | In inches referenced from bottom of process connection   |
| Set Point Distance, L1†      |       |   |   |    |    |   |        |        |        |        |        | 00.00  |       | In inches referenced from bottom of process connection   |
| Overall Length, L0           |       |   |   |    |    |   |        |        |        |        |        |        | 00.00 | Min. length is L1+D; Max. length with connection type 1: 36" (91.4 cm), type 2: 60" (152.4 cm) and types 3, 4, 5: 140" (355.6 cm)  |
| Options                      |       |   |   |    |    |   |        |        |        |        |        |        | J     | J Junction box for wire leads, NEMA 4 (not available with connection type 1)   |

\*NO switch is standard. For NC place an "N" after the corresponding set point distance in the model number.

†No numbers needed beyond the number of switches specified.

Note: Models are built to your specifications