



Series  
F7-MS

# 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.

**Float Dimensions**

**F1**:  $\text{Ø } 1\text{-}1/4$  [31.75],  $1\text{-}3/4$  [44.45]

**F2**:  $1\text{-}13/16$  [46.02],  $\text{Ø } 1\text{-}7/8$  [47.62]

**F3**:  $2\text{-}3/32$  [53.16],  $\text{Ø } 2\text{-}1/16$  [52.37]

**Mounting Dimensions**

**Type 1**: 1/2 NPT

**Type 2**: 1/2 NPT, 1.000 SQ [25.40], 1-1/4 NPT

**Type 3**: 1/2 NPT, 1-1/4 SQ [31.75], 2 NPT

**Type 4, 5**: 1/2 NPT, 1 [25.40]

6 HOLES  $\text{Ø } 3/4$  [19.05] EQUALLY SPACED ON A 6.000 B.C. [152.4]

$\text{Ø } 7\text{-}1/2$  [190.5]

**Customize level switches** to meet application requirements. Switches can be configured with up to six different control points and stem lengths up to 140 inches (3.56 m). Stems and floats are available in 316 SS or brass.

Models are built to your specifications

## 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  $\pm 30^\circ$ .

Example	F7-MS	B	1	5	F3	1	J	F7-MSB1-5F31-04.00-07.00-11.00-15.00-20.00-24.00-J
<b>Construction</b>	F7-MS							Multi-station level, 1 to 6 switch points
<b>Stem &amp; Connection Material</b>		B						Brass with Beryllium copper stops 316SS with SS ARMCO PH-15-7MO stops
<b>Connection Type</b>		S	1					1/2" NPT (Float F2, F3 only) 1-1/4" NPT (Float F1 only) 2" NPT 3" 150# Flange Carbon Steel (Conn. material S only, float F2, F3 only) [Max. pres. 150 psi (10.3 bar)] 3" 150# Flange 316SS (Conn. material S only, float F2, F3 only) [Max. pres. 150 psi (10.3 bar)]
<b>Switch Points</b>				#				Put 1 to 6 for the number of switch points desired
<b>Float Type</b>					F1 F2 F3			Buna-N, min. s.g. 0.75, 150 psi (10.3 bar) max. pres. Buna-N, min. s.g. 0.55, 150 psi (10.3 bar) max. pres. 316SS, min. s.g. 0.75, 750 psi (51.7 bar) [units >72": 300 psi (20.7) bar] max. pres.
<b>Switch Type</b>						1 2 3		SPST, .17A @ 120 VAC, .08A @ 240 VAC, .13A @ 120 VDC, .06A @ 240 VDC SPST, .8A @ 120 VAC, .4A @ 240 VAC SPDT, .17A @ 120 VAC, .08A @ 240 VAC, .13A @ 120 VDC, .06A @ 240 VDC NO switch is standard. For NC place an "*" after the corresponding set point distance in the model number.
<b>Set Point Distance</b>	L6 L5 L4 L3 L2 L1					00.00 00.00 00.00 00.00 00.00 00.00		In inches referenced from bottom of connection.  Repeat for each switch point with dashes in between. No numbers needed beyond the number of switches specified. In inches for example 12.25 would be 12.25" from the bottom of the process connection.
<b>Overall Length</b>	L0					00.00		Minimum length is L1+D. Maximum length with Connection Type 1: 36" (91.4 cm), Type 2: 60" (152.4 cm), and Types 3, 4, 5: 140" (355.6 cm).
<b>Options</b>							J	Junction box for wire leads, NEMA 4 (Not available with Connection Type 1)