

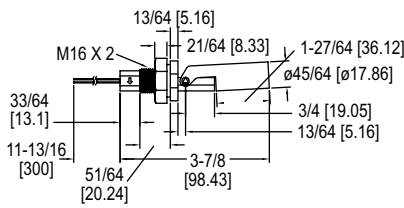
LEVEL SWITCHES - HORIZONTAL/SPECIALTY

Low Cost, Hermetically Sealed Contacts

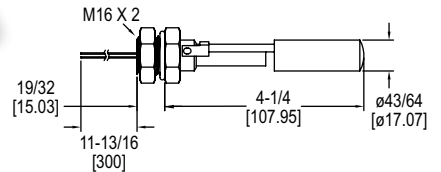
HORIZONTAL



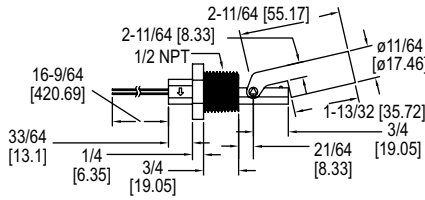
F6-HPS-11



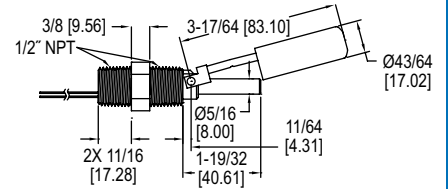
F6-MHS



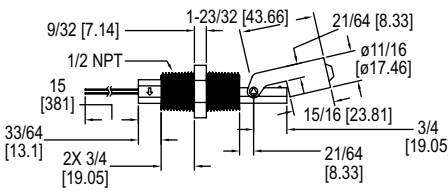
F6-HPS-21



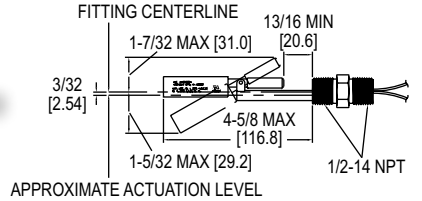
F6-MHS2



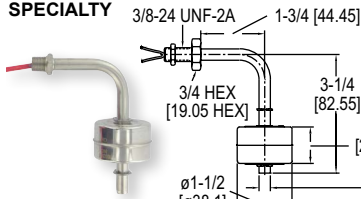
F6-HPS-31



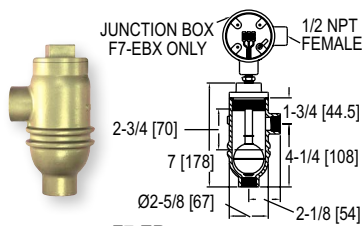
F7-HSS



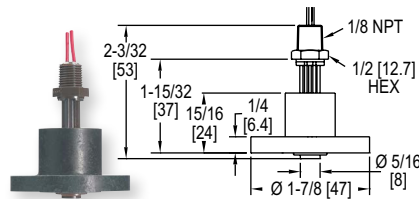
SPECIALTY



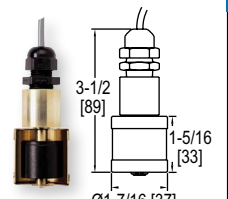
F7-SS6



F7-EB



F7-LL



F7-WBB

The Series F6 & F7 Horizontal and Specialty Level Switches are designed to mount through the walls of tanks or other vessels and unique applications to provide point level indication.

FEATURES/BENEFITS

- Hermetically sealed reed switches are actuated by magnets permanently bonded inside the float arm and can be easily adapted to open or close a circuit on rising or falling levels

APPLICATIONS

- Water level monitoring
- Oil level control
- Chemical level indication
- Sumps
- Stand pipes
- Tank level control

MODEL CHART

Model	Applications	Material Float/Stem	Temperature Limits	Pressure Limits	Min. S.G.	Electrical Rating	Wire Leads	Mtg	Weight oz (g)
F6-HPS-11	Water, oils, chemicals	Polypropylene/polypropylene	176°F (80°C)	116 psig (8 bar)	0.60	20 VA: 0.08 A @ 240 VAC	20 AWG, 11.8" (30 cm)	M16 x 2	1.23 (38)
F6-HPS-21	Water, oils, chemicals	Polypropylene/polypropylene	176°F (80°C)	116 psig (8 bar)	0.60	20 VA: 0.08 A @ 240 VAC	20 AWG, 11.8" (30 cm)	1/2" NPT	1.23 (38)
F6-HPS-31	Water, oils, chemicals	Polypropylene/polypropylene	176°F (80°C)	116 psig (8 bar)	0.60	20 VA: 0.08 A @ 240 VAC	20 AWG, 11.8" (30 cm)	1/2" NPT	1.41 (40)
F6-MHS	Corrosives	304 SS/304 SS	257°F (125°C)	218 psig (15 bar)	0.85	20 VA: 0.08 A @ 240 VAC	22 AWG, 11.8" (30 cm)	M16 x 2	3.35 (95)
F6-MHS2	Water, oils, chemicals	304 SS/304 SS	257°F (125°C)	363 psig (25 bar)	0.85	70 VA: 0.7 A @ 250 VAC	22 AWG, 11.8" (30 cm)	1/2" NPT	4.8 (136)
F7-HSS†	High temp/pressure, corrosive, expl.	316 SS/316 SS	392°F (200°C)	300 psig (20.7 bar)	0.60	30 VA: 0.14 A @ 220 VAC	22 AWG, 24" (61 cm)	1/2" NPT (int/ext)	3 (94)
Model	Style/Applications	Material Float/Stem	Temperature Limits	Pressure Limits	Min. S.G.	Electrical Rating	Wire Leads	Mtg	Weight oz (g)
F7-SS6	Bent stem/liquids with metal particles	316 SS/316 SS	300°F (149°C)	100 psig (7 bar)	0.70	20 VA: 0.08 A @ 220 VAC N.O. operation	22 AWG, 24" (61 cm)	3/8"-24" UNF-2A	2 (58)
F7-SS6B	Bent stem/liquids with metal particles	316 SS/316 SS	300°F (149°C)	100 psig (7 bar)	0.70	20 VA: 0.08 A @ 220 VAC N.C. operation	22 AWG, 24" (61 cm)	3/8"-24" UNF-2A	2 (58)
F7-EB‡**	Non-intrusive bottle type/ Outside tank mounting	Brass/316 SS (Brass housing)	300°F (149°C)	500 psig (34 bar)	0.75	20 VA: 0.08 A @ 240 VAC	18 AWG, 24" (61 cm)	3/4" NPT female	5 lb 5 oz (2.4 kg)
F7-LL	Vertical/detect levels as low as 5/8"	Polysulfone/ Buna-N	180°F (82°C)	50 psig (3 bar)	-	20 VA: 0.08 A @ 240 VAC	22 AWG, 72" (182 cm)	1/8" NPT male	2 (58)
F7-WBB	25' cable, slosh shield/ Sumps, stand pipes	Brass/Buna-N	180°F (82°C)	150 psig (10 bar)	0.45	20 VA: 0.08 A @ 240 VAC	22 AWG, 25' (7.6 m)	-	10.8 (310)

† F7-HSS is rated explosion-proof for Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III.

‡ Explosion proof model available with DPDT switch. Example: F7-EBX

** Model available with normally closed switch. Example: F7-EBNC

LEVEL SWITCHES - VERTICAL

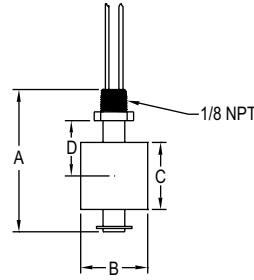
Low Cost, Reliable and Compact, Hermetically Sealed Contacts



F7-SB



F7-ST713



DIMENSIONS - IN (MM)				
Model	(A) Stem Length	(B) Float Diameter	(C) Float Height	(D) Actuation from Hex [Ⓞ]
F7-SB	2.75 (70)	1.38 (35)	1.13 (29)	1.2 (31)
F7-SS2	2.06 (52)	1.0 (25)	1.0 (25)	0.73 (19)
F6-SS	2.17 (55)	1.11 (28)	1.11 (28)	—
F7-MPP	1.63 (41)	0.63 (16)	0.63 (16)	0.47 (12)
F7-PP	2.18 (55)	1.18 (30)	1.0 (25)	0.69 (18)
F7-BT	2.18 (55)	1.18 (30)	1.0 (25)	0.69 (18)
F7-C11	2.06 (52)	1.0 (25)	1.0 (25)	0.56 (14)
F7-PVC	3.44 (87)	1.5 (38)	1.81 (46)	0.75 (19)
F7-T1	3.47 (88)	2.13 (54)	1.94 (49)	0.92 (22)
F7-ST713	3.38 (86)	2.06 (52)	2.06 (52)	1.09 (28)
F7-ST714	3.38 (86)	2.06 (52)	2.06 (52)	1.09 (28)

[Ⓞ]Distance between hex and liquid (S.G. = 1.0) level at actuation point will vary with specific gravity changes.

The Series F6 & F7 Vertical Level Switches are designed to be mounted at the maximum or minimum level point to provide level indication and control. Models are shipped with normally open switch contacts which close as the float rises toward the mounting threads.

FEATURES/BENEFITS

- Combine low cost and reliability with fast, simple installation
- Hermetically sealed reed switches are actuated by magnets permanently bonded inside the float and can be easily adapted to open or close a circuit on rising or falling levels
- Easily reverse switch action by removing the float, rotating it end-for-end and replacing it on the stem
- Vertical models mount internally, oriented within 30° of vertical, or select optional fittings for external mounting
- Switch ratings are suitable for many solid state control systems and monitors or alarms
- Simple relay interfaces can be used for higher current applications

APPLICATIONS

- Water level monitoring
- Oil level control
- Chemical level indication
- Sumps
- Stand pipes
- Tank level control
- High viscosity liquids

ACCESSORIES - FOR EXTERNAL MOUNTING OF VERTICAL MODELS

Model	Description
A-347	1/8" x 1-1/4" NPT carbon steel adapter
A-347-SS	1/8" x 1-1/4" NPT 316 SS adapter
A-348	1/8" x 1-1/2" NPT carbon steel adapter

MODEL CHART									
Model	Applications	Material Float/Stem	Temperature Limits	Pressure Limits	Min. S.G.	Electrical Rating	Wire Leads	Mtg NPT (M)	Weight oz (g)
F7-SB*	General purpose	Buna-N & epoxy/ 316 SS	220°F (105°C)	150 psig (10 bar)	0.60	25 VA: 1 A @ 220 VAC	22 AWG 18" (45 cm)	1/8"	2 (58)
F7-SS2*	High temp/pressure, corrosives	316 SS (CYC)/ 316 SS	300°F (149°C)	450 psig (31 bar)	0.75	25 VA: 1 A @ 200 VAC	22 AWG 18" (45 cm)	1/8"	1.2 (34)
F6-SS	Corrosives	316 SS/316 SS	257°F (125°C)	218 psig (15 bar)	0.65	20 VA: 0.08 A @ 240 VAC	20 AWG 11.8" (30 cm)	1/8"	1.59 (45)
F7-MPP**	Broad chemical compatibility	Polypropylene/ polypropylene	180°F (82°C)	100 psig (6.89 bar)	0.90	10 VA: 0.1 A @ 100 VAC	22 AWG 24" (61 cm)	1/8"	0.8 (23)
F7-MPP-NO**	Broad chemical compatibility	Polypropylene/ polypropylene	176°F (80°C)	100 psig (6.89 bar)	0.90	50 VA: 0.2 A @ 240 VAC	22 AWG 24" (61 cm)	1/8"	0.8 (23)
F7-PP*	Broad chemical compatibility	Polypropylene & epoxy/polypropylene	220°F (105°C)	100 psig (6.89 bar)	0.60	30 VA: 0.14 A @ 220 VAC	22 AWG 24" (61 cm)	1/8"	0.8 (23)
F7-BT*	Oils & fuels	Buna-N & epoxy/ PBT***	220°F (105°C)	150 psig (10 bar)	0.45	30 VA: 0.14 A @ 220 VAC	22 AWG 24" (61 cm)	1/8"	0.7 (20)
F7-C11	General purpose	Buna-N/brass	180°F (82°C)	150 psig (10 bar)	0.45	20 VA: 0.08 A @ 240 VAC	22 AWG 24" (61 cm)	1/8"	1.5 (43)
F7-PVC	Chemical & plating	CPVC/CPVC	180°F (82°C)	15 psig (1 bar)	0.85	20 VA: 0.08 A @ 240 VAC	22 AWG 24" (61 cm)	1/4"	5 (140)
F7-T1	Viscous, sticky or corrosive liquids	PTFE/TFE	300°F (149°C)	30 psig (2 bar)	0.80	20 VA: 0.08 A @ 240 VAC	22 AWG 24" (61 cm)	1/4"	6 (170)
F7-ST713	Oils, water & chemicals	316 SS/316 SS	300°F (149°C)	750 psig (52 bar)	0.80	20 VA: 0.08 A @ 240 VAC	22 AWG 24" (61 cm)	1/4"	6 (170)

*UL listed **F7-MPP is normally closed/F7-MPP-NO is normally open ***PBT-Polybutylene terephthalate