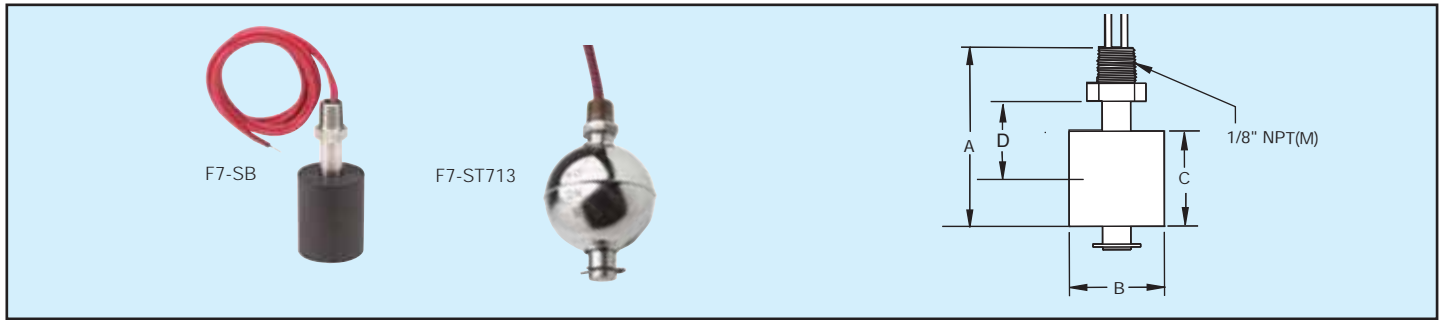




Series
F7

Level Switches - Vertical

Low Cost, Reliable and Compact, Hermetically Sealed Contacts



Series F7 compact level switches 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. Vertical mount models are shipped with normally open switch contacts which close as the float rises toward the mounting threads. 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.

DIMENSIONS in Inches [mm]

Model Number	(A) Stem Length	(B) Float Diameter	(C) Float Height	(D) Actuation from Hex ^①
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]
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-K	2.13 [54]	1.0 [25]	1.0 [25]	0.65 [17]
F7-C11	2.06 [52]	1.0 [25]	1.0 [25]	0.56 [14]
F7-C21	2.06 [24]	1.0 [25]	1.0 [25]	0.56 [14]
F7-BB	3.19 [81]	1.88 [48]	1.81 [46]	1.19 [30]
F7-PS	3.38 [86]	1.88 [48]	1.88 [48]	1.25 [32]
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]

MODELS

Model Number	Applications	Material Float/Stem	Temp. Limits	Press. Limits	Min. S.G.	Electrical Rating	Wire Leads	Mtg NPT(M)	Weight oz (g)
F7-SB	General purpose	Buna-N & Epoxy/ 316 SS	220F 105°C	150 psig 10 bar	0.60	25 VA: 1A @ 220VAC	22 AWG 18' [45 cm]	1/8"	2 (58)
F7-SS2	High temp/pressure, corrosives	316SS (CYC)/ 316 SS	300F 149°C	450 psig 31 bar	0.75	25 VA: 1A @ 200VAC	22 AWG, 18' [45 cm]	1/8"	1.2 (34)
F7-MPP**	Broad chemical compatibility	Polypropylene/ Polypropylene	180F 82°C	100 psig 6.89 bar	0.90	10 VA: 0.1A @ 100VAC	22 AWG, 24' [61 cm]	1/8"	0.8 (23)
F7-MPP-NO**	Broad chemical compatibility	Polypropylene/ Polypropylene	176F 80°C	100 psig 6.89 bar	0.90	50 VA: 0.2A @ 240VAC	22 AWG, 24' [61 cm]	1/8"	0.8 (23)
F7-PP	Broad chemical compatibility	Polypropylene & Epoxy/Polypropylene	220F 105°C	100 psig 6.89 bar	0.60	30 VA: 0.14A @ 220VAC	22 AWG, 24' [61 cm]	1/8"	0.8 (23)
F7-BT	Oils & Fuels	Buna-N & Epoxy/ PBT*	220F 105°C	150 psig 10 bar	0.45	30 VA: 0.14A @ 220VAC	22 AWG, 24' [61 cm]	1/8"	0.7 (20)
F7-K	Food/beverage, corrosives	PVDF/ PVDF	180F 82°C	100 psig 6.89 bar	1.00	50 VA: 0.25A @ 150VAC	22 AWG, 24' [61 cm]	1/8"	1.5 (43)
F7-C11	General purpose	Buna-N/ Brass	180F 82°C	150 psig 10 bar	0.45	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/8"	1.5 (43)
F7-C21	Oils & water, general purpose	Buna-N/ 316 SS	180F 82°C	150 psig 10 bar	0.45	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/8"	1.5 (43)
F7-BB	High viscosity liquids	Buna-N/ Brass	180F 82°C	150 psig 10 bar	0.55	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/4"	5 (140)
F7-PS	Water-based liquids, complies with FDA	Polysulfone/ Polysulfone†	225F 107°C	50 psig 3 bar	0.55	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/4"	4 (110)
F7-PVC	Chemical & plating	CPVC/ CPVC	180F 82°C	15 psig 1 bar	0.85	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/4"	5 (140)
F7-T1	Viscous, sticky or corrosive liquids	PTFE/ TFE	300F 149°C	30 psig 2 bar	0.80	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/4"	6 (170)
F7-ST713‡	Oils, water & chemicals	316 SS/ 316 SS	300F 149°C	750 psig 52 bar	0.80	20 VA: 0.08A @ 240VAC	22 AWG, 24' [61 cm]	1/4"	6 (170)

① Distance between hex and liquid (S.G. = 1.0) level at actuation point will vary with specific gravity changes.

*PBT - Polybutylene Terephthalate.

† Includes 316 SS clip.

‡ Spherical floats.

Note: F7-SB, F7-SS2 not CSA listed.

**F7-MPP is normally closed
F7-MPP-NO is normally open

Optional Fittings — For external mounting of vertical models

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
A-348-SS, 1/8" x 1 1/2" NPT 316 SS adapter