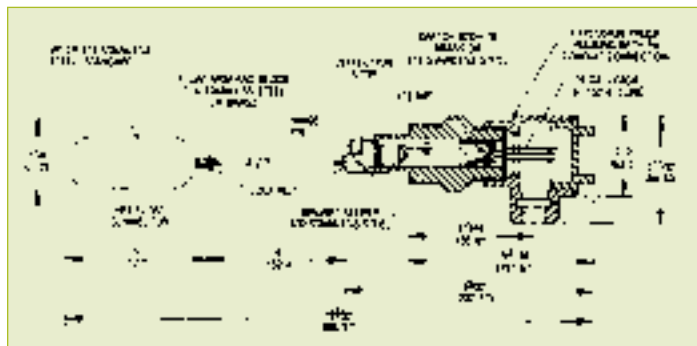


Liquid Level Switches

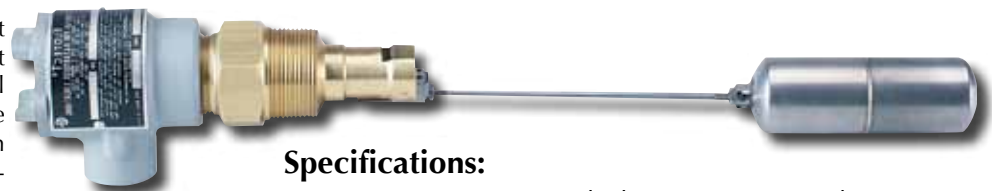
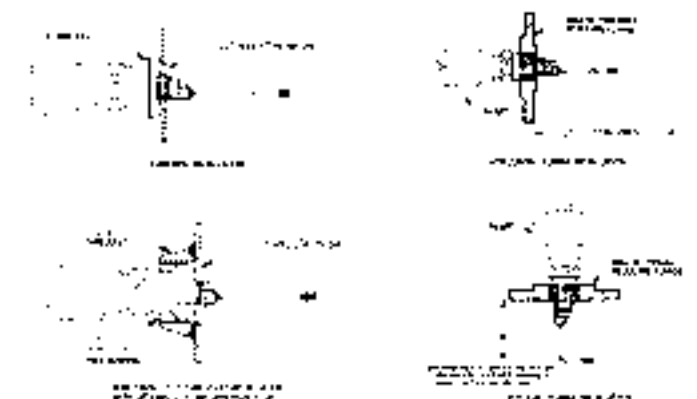
Compact and reliable, the **Model L4** Float Switch uses the time tested **Model V4** Flotect Switch body to provide dependable liquid level control to start or stop pumps, open or close valves, or actuate alarm signals. Installed in thousands of tanks and processing plants around the world, this unique magnetically actuated switching design gives superior performance. There are no bellows, springs or seals to fail. Installed through a 1 1/2" thredolet welded to the tank, the unit is easily field installed or replaced. The electrical assembly may be quickly replaced without removing the switch from the tank. Float arm hinge design limits the arm angle to prevent vertical hangup. Float is 316 stainless steel for service with compatible corrosive fluids. For use in fluids with specific gravity down to 0.7.

Simplicity of design and a leak proof switch body, machined from bar stock for pressures to 2000 psig (140 kg/cm²), it eliminates the possibility of process fluids entering the switch compartment. The threaded conduit enclosure permits easy inspection or replacement of electrical assembly without shutting down the system, or removing electrical conduit. Power must be disconnected. The unit fits directly into the tank with a thredolet or flange for easy installation. All units are explosion-proof and listed with U.L. and C.S.A. for Class I, Groups C and D, Class II, Groups E,F and G or are flame-proof to CENELEC EExd IIB T6.



Applications:

The **L4** Float Switch maintains predetermined liquid levels in tanks through direct pump control. Also used to control sump levels, scrubber system liquid levels and automatic tank dump operations. Controls levels or provides alarms for hydro-pneumatic tanks, low pressure boilers and various waste water sewage treatment processes. With a special L-shaped float arm, it can be mounted vertically in tank top for tank overflow or alarm.



Specifications:

- Temperature Limits:** Standard: 275°F (135°C). High temp. MT option (not U.L. C.S.A. or CENELEC): 400°F (205°C) max.
- Operating Pressure:** Body: 1000 psig (70 kg/cm²); Float: 100 psig (7 kg/cm²). See Float data below for other pressures.
- Electrical Rating:** U.L. & CENELEC: 10A @ 125/250 VAC; C.S.A.: 5A @ 125/250 VAC, 5A resistive, 3A inductive @ 30 VDC. Optional ratings (not U.L., C.S.A. or CENELEC); *MT option:* gold contacts for dry circuits. Rated 1A @ 125 VAC, 1A resistive, 1/2A inductive @ 30 VDC. *MT option:* 400°F (205°C) 5A @ 125/250 VAC
- Wiring:** U.L./C.S.A. unit: 16 gauge copper wire, 6" (152 mm) long, mechanically and solder bonded to switch. CENELEC unit: Terminal board.
- Switch Body:** One piece milled & bored Brass or 316SS
- Float:** 316SS, 1-5/8" x 5" (41 x 127 mm), std. 100 psig (7 kg/cm²) min. Sp. Gr. 0.7. Trim includes 430SS and silver solder.
- Optional Floats:** 316SS 150 psig (10 kg/cm²) min. Sp. Gr. 0.7. 304SS 300 psig (21 kg/cm²) min. Sp.Gr. 0.7. 304SS 50 psig (3.5 kg/cm²) min. Sp. Gr. 0.5. Optional floats, 2-1/2" O.D. (64 mm) spherical.
- Piping Connection:** 1-1/2" NPT std. for mounting in 1-1/2" thredolet. 2-1/2" NPT required for optional floats. Thredolet fittings available.
- Protection:** NEMA-4 watertight (IP56) standard
- Installation:** Horizontal installation standard. Vertical installation available.
- Options:** All 316SS wetted parts. Teflon coated wetted parts. Floats for light fluids, high pressure, and corrosive service. DPDT circuit.
- Weight:** 4 lb. 9 oz. (2.07 kg)
- Standard Deadband:** 5/8" (16 mm)

Model L4 FLOTECT Level Switches

Model No. L4: Brass, side wall mounting \$543

Model No. L4-SS: 316SS*, side wall mounting \$767

Model No. L4-TOP: Brass, vertical (top mount) \$554

Model No. L4SS-TOP: 316SS vertical (top mount) \$778

* 316SS Body, Float (L4) with 430SS magnet keeper (wetted part).

For optional 316SS magnet keeper, specify, "with all 316SS wetted parts".

OPTIONS: Add suffixes to model numbers

D: DPDT contacts \$53

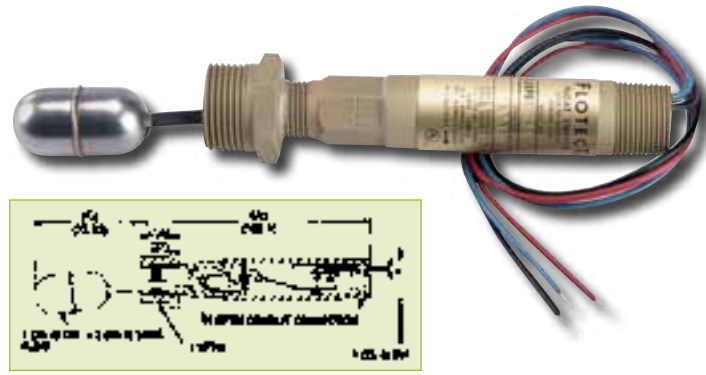
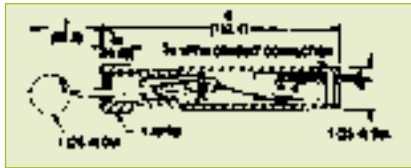
MT: High temperature (400°F/205°C) \$54
(Not U.L., C.S.A. or CENELEC listed)

Time Delay Relay - 2 SPDT contacts \$709

TRI: Increases flow **TRD:** Decreases flow (no listing or approvals)

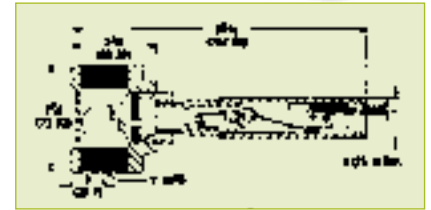
AT: ATEX approved construction \$118

Liquid Level Switches



The compact **Flotect Model L6** Level Switch is designed and built for years of trouble-free service in a wide variety of process liquid level applications. Machined from brass or stainless steel bar stock, the body is leak proof, eliminating the possibility of the process media entering the switch housing. The float level pivoted within the body moves when the process liquid displaces the solid polypropylene or stainless steel float. A magnet on the opposite end of the float level controls a second magnet on the switch actuating lever located in the switch housing. Maintenance is easy since the electrical assembly can be removed for inspection or replacement without removing the entire switch. The stainless steel float lever arm and the polypropylene or stainless steel float are compatible with most process fluids.

The **Flotect Model L6** is sensitive to level changes of less than 1/2" (12 mm) and is U.L./C.S.A. listed for explosion-proof service - **Class I, Groups A, B, C & D and Class II, Groups E, F & G**. C.S.A. model furnished with optional junction box.



Specifications:

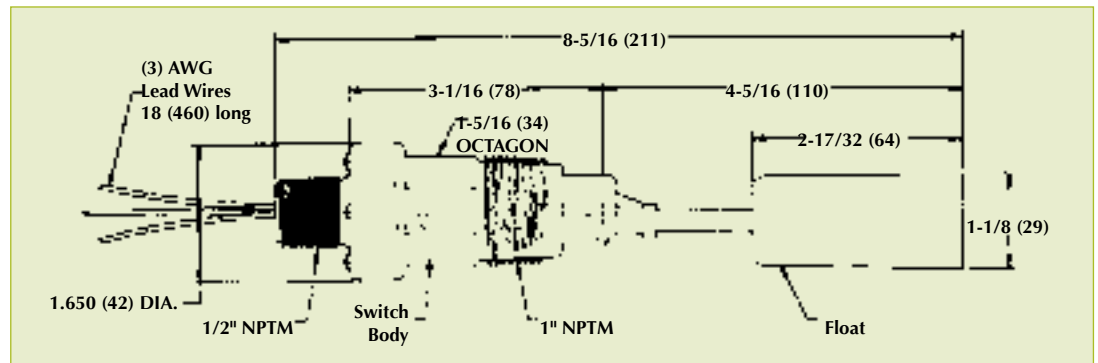
Temperature Limits:	220°F (105°C) max.
Operating Pressure:	Polypropylene float: to 2000 psig (140 kg/cm ²); 304SS float: to 350 psig (25 kg/cm ²)
Min. Specific Gravity:	Polypropylene float: 0.9 sp. gr.; Spherical SS float: 0.7 sp. gr.; Cylindrical SS float: 0.5 sp. gr.
Electrical Rating:	U.L.: 5A @ 125/250 VAC; C.S.A. & CENELEC: 5A @ 125/250 VAC, 5A resistive, 3A inductive @ 30 VDC; MV option: (gold contacts for dry circuits), 0.1A @ 125 VAC; MT option: (temp. to 400°F/205°C), 5A @ 125/250 VAC (not UL or CSA listed)
Wiring Connections:	18" (460 mm) leads, 18 gauge
Switch Body:	Brass 3/4" NPT conduit connection. For SS switch housing change model number to L6EPS
Wetted Materials:	<i>Style B-S-3-0</i> , Brass, 301SS, polypropylene, ceramic. <i>Style B-S-3-A, B-S-3-C</i> , Brass, 301SS, 304SS, ceramic. <i>Style S-S-3-0</i> ; 303SS, 301SS, polypropylene, ceramic. <i>Style S-S-3-A, S-S-3-C</i> , 303SS, 301SS, 304SS, ceramic.
Piping Connection:	1" NPT
Installation:	Horizontal w/ index arrow pointing down
Weight:	4 lb. 9 oz. (2.07 kg)

Model	Body	Installation	Float Material	Pressure Rating PSI (KG/CM ²)	Min. Sp. Gr.	Price
L6EPB-B-S-3-O	Brass	Side wall mounting	Solid polypropylene	1000 (70)	0.9	\$236
L6EPB-B-S-3-A	Brass	Side wall mounting	Stainless steel - cylindrical	200 (14)	0.5	\$272
L6EPB-B-S-3-C	Brass	Side wall mounting	Stainless steel - spherical	350 (25)	0.7	\$289
L6EPB-B-S-3-B	Brass	External float chamber	Solid polypropylene	250 (18)	0.9	\$294
L6EPB-B-S-3-H	Brass	External float chamber	Stainless steel - spherical	250 (18)	0.7	\$333
L6EPB-S-S-3-O	Stainless steel	Side wall mounting	Solid polypropylene	2000 (140)	0.9	\$302
L6EPB-S-S-3-A	Stainless steel	Side wall mounting	Stainless steel - cylindrical	200 (14)	0.5	\$347
L6EPB-S-S-3-C	Stainless steel	Side wall mounting	Stainless steel - spherical	350 (25)	0.7	\$360
L6EPB-S-S-3-S	Stainless steel	External float chamber	Solid polypropylene	2000 (140)	0.9	\$437
L6EPB-S-S-3-L	Stainless steel	External float chamber	Stainless steel - spherical	350 (25)	0.7	\$475

* For C.S.A. listed switch (includes junction box), add suffix **CSA** to model no.
For CENELEC certified switch (includes junction box), add suffix **CN** to model no. (with stainless floats only).
For DPDT switch, change seventh character in model to **D**.
MT option. High temperature (400°F/205°C) construction available on all models with stainless steel floats.
MV option. Gold contact for dry circuits. Rated 0.1A @ 125 VAC.

Liquid Level Switches

Low cost, leak proof body, excellent chemical resistance.



The **Model L8 Flotect Liquid Level Switch** features a leak proof body and float constructed from tough, durable polyphenylene sulfide (equivalent to Ryton®) which has excellent chemical resistance. Because the liquid level snap switch is magnetically actuated, there is no direct mechanical linkage to leak or fail, assuring longer life and decreased maintenance costs. This inexpensive unit is ideal for liquid level alarm, indication or control. Installation is quick and easy - simply install in a horizontal position with the index arrow pointing down.

The **L8 Flotect** liquid level control is UL recognized as an industrial control per UL standard 508, suitable for mounting in a protected environment. This lightweight switch can be used in numerous chemical process, industrial systems and similar applications where process conditions are compatible with polyphenylene sulfide, ceramic 8 and 316 stainless steel. This liquid level switch provides accurate setpoint control of liquids with specific gravities as low as 0.6. This compact and reliable control is designed to handle temperatures up to 212°F (100°C) and pressures up to 150 psig (10.3 bar).

Applications:

The **Model L8 Flotect** liquid level switch is ideal for predetermined liquid levels in tanks through pump control or solenoid valve control. It provides excellent liquid level alarm or indication when combined with the **Series AN14** Indicating Annunciator.

- Environmental control
- Waste water
- Scrubber systems
- Holding tanks
- Cooling
- Chemical/Petroleum processing
- Plating and washing tanks
- Sewage treatment
- Car washes
- Remediation systems

Specifications:

- Temperature Limit: 212°F (100°C)
- Pressure Limit: 150 psig (10.3 bar)
- Process Connection: 1" NPTM
- Switch Type: SPDT snap acting
- Electrical Ratings: 1.5A @ 125/250 VAC. 5A resistive, 3A inductive @ 30 VDC. MV Option (gold contacts for dry circuits). 1A @ 125 VAC. 1A resistive, 0.5A inductive @ 30 VDC
- Wire Leads: 22 AWG x 18" (460 mm) long
- Overall Length: 8.312" (21 cm)
- Switch Body & Float: Polyphenylene sulfide (PPS)
- Wetted Materials: Polyphenylene sulfide (PPS), ceramic 8 magnet, 316 SS pin and spring
- Installation: Install horizontally with index arrow pointing down
- Min. Specific Gravity: 0.6
- Weight: 5 oz (142 g)

Model	Description	Price
L8	Liquid Level Switch	\$109
L8-MV	Liquid Level Switch w/Gold Contacts	\$142

Liquid Level Switches



Model	Float	Stem	Max. Temp.	Max. Press.	Min. Sp. Gr.	Approx. Deadband	Price
F7-SB	BUNA-N & Epoxy	316SS	220°F 105°C	150 PSIG 10 Bar	0.60	1/16" 2mm	\$69
F7-SS2	316SS (CYL)	316SS	300°F 149°C	450 PSIG 31 Bar	0.75	1/16" 2mm	\$69
F7-PP	PP* & Epoxy	PP*	220°F 105°C	100 PSIG 6.89 Bar	0.60	1/8" 4mm	\$24
F7-BT	BUNA-N & Epoxy	PBT**	220°F 105°C	150 PSIG 10 Bar	0.45	1/8" 4mm	\$22
F7-MPP	PP* & Epoxy	PP*	150°F 66°C	100 PSIG 6.89 Bar	0.80	1/16" 2mm	\$34

* Polypropylene ** Polybutylene Terephthalate

Optional Fittings (for exterior mounting)

Model	Description	Price
A-347	1/8" x 1 1/4" NPT C.S. Adapter	\$49
A-347-SS	1/8" x 1 1/4" NPT 316SS Adapter	\$132
A-348	1/8" x 1 1/2" NPT C.S. Adapter	\$58
A-348-SS	1/8" x 1 1/2" NPT 316SS Adapter	\$147

Hermetically sealed reed switch contacts are actuated by magnets bonded inside the float. Contacts are shipped normally open. They will close as the float moves toward the stem mounting threads. This action can be easily reversed in the field for normally closed operation by simply reversing the orientation of the float on the stem. Change from normally open (N.O.) to normally closed (N.C.) contacts in 10 seconds or less by reversing the float! Switch contact ratings are suitable for direct connection to most solid state control systems and alarm/ monitoring devices. Simple relay interfaces can be employed for higher current control applications. The various float and stem material options make the **F7 Series** suitable for use in many liquids having specific gravities as low as 0.45. The switch mounts easily at the top, bottom or intermediate levels in tanks and vessels. Mounts directly in a 1/8" NPT fitting for interior mounting. Where exterior mounting or access is required, special adapters are available as options (see chart). To mount at intermediate levels, combine fittings shown with any length of pipe.

Applications:

- The **F7-SB** is an ideal general purpose switch.
- The **F7-SS2** is designed for high temperature, high pressure or corrosive conditions at a 0.75 minimum specific gravity.
- The **F7-PP** is recommended for highly acidic conditions.
- The **F7-BT** is an economical choice for lubricating and hydraulic oils, gasoline, diesel fuel and many solvents.
- The **F7-MPP** is designed for use in highly acidic environments or food/beverage applications.

Specifications:

Electrical Rating: **F7-SB/SS2:** AC: 25VA, 1.0A, 200V; DC: 10W, 1.0A, 200V
F7-PP/BT: AC: 30W, 0.14A, 220V; DC: 0.28A, 24V, 0.07A, 120V

Mounting Connection: 1/8" NPTM
 Mounting Position: Do not exceed 30° from vertical
 Wire Leads: 22 AWG 18" (46cm); 24" (61cm) **F7-MPP**
 Magnet: **F7-SS2:** Ceramic; **Others:** Alnico

Liquid Level Switch

Hermetically sealed **Model F7-K** Level Switch is designed for use in corrosive environments of food beverage applications. The switch is constructed of Kynar and rated for temperatures up to 180°F (82°C) and pressures up to 100 psig (6.89 bar). **Model F7-K** is sealed with potting compound to ensure worry-free operation in moisture laden environments. The switch is submersible to NEMA 6 (IP67) rating and approved by the National Sanitation Foundation. Quickly install the switch for normally open or normally closed operation by reversing the float. The **Model F7-K** mounts vertically inside a tank or vessel with a 1/8" NPTM connection.



Specifications:

Electrical Rating: 50 Watts: 0.25A @150VAC; 0.4A @ 120 VAC; 0.25A @ 200 VDC; 1.5A @ 24VDC
 Temperature Range: -40 to 180°F (-40 to 82°C)
 Max. Pressure: 100 psig (6.89 bar)
 Min. Specific Gravity: 1.00
 Float/Stem Material: Kynar
 Deadband: Approx. 1/8" (4mm)
 Magnet: Alnico
 Mounting Connection: 1/8" NPT(M), vertical mount
 Wire Leads: 22 AWG x 24" (61cm), PVC
 Weight: 1.5 oz (43 g)

Model	Description	Price
F7-K	Level Switch	\$52

Liquid Level Switches

NEW!



Features:

- Measures liquid at a single point providing an output for high or low level alarm, overflow prevention or pump protection
- Uses ultrasonic wave propagation between the transducer gap to sense the presence or absence of a liquid
- 0.5 second delay
- Repeatability of less than 0.08" (2mm)
- Can be mounted within 15° of horizontal with no additional calibration required

Specifications:

Service: Compatible liquids (non-cating, low viscosity)

Wetted Materials: 316L stainless steel

Pressure Limits: 250 psig (17.24 bar)

Temperature Limits: -20 to 176°F (-29 to 80°C)

Repeatability: ≤0.08" (2mm)

Switch Type: SPST normally open dry relay, NPN transistor sink, or PNP transistor source

Electrical Rating: Relay: 1A @ 5-30 VDC, Source & Sink: 100mA

Electrical Connection: 12" (305mm) 5-conductor cable, 24 AWG wire

Leakage Current: Less than 50µA, sinking & sourcing

Power Supply: 5-30 VDC

Process Connection: 1/4" or 1/2" male NPT

Enclosure Rating: General purpose

Mounting Orientation: Within 15° of horizontal

Model	Description	Price
MULS-SN-A	Ultrasonic Level Switch, 1/4" NPT	\$427
MULS-SN-B	Ultrasonic Level Switch, 1/2" NPT	\$489

Liquid Level Switches

NEW!



Specifications:

Service: Compatible liquids

Wetted Materials: **F6-HPS-11, -21, -31:** Polypropylene float & stem; **F6-MHS:** 304SS float & stem; **F6-SS:** 316SS float & stem

Temperature Limits: **F6-HPS-11, -21, -31:** 14 to 176°F (-10 to 80°C); **F6-MHS, F6-SS:** -4 to 257°F (-20 to 125°C)

Pressure Limits: **F6-HPS-11, -21, -31:** 116 psi (8 bar); **F6-MHS, F6-SS:** 218 psi (15 bar)

Switch Type: SPST hermetically sealed reed switch, reversible for N.O. or N.C.

Electrical Rating: 20VA: 0.17A @ 120 VAC, 0.08A @ 240 VAC

Electrical Connection: 22 AWG, 11.81" (300mm) long

Process Connection: **F6-HPS-21, -31:** 1/2" NPT; **F6-HPS-11, F6-MHS:** M16*2; **F6-SS:** 1/8" NPT

Mounting Orientation: **F6-HPS, F6-MHS:** Horizontal w/ index arrow pointing up or down; **F6-SS:** Vertical ±20°

Specific Gravity: **F6-HPS-11, -21, -31:** 0.6; **F6-MHS:** 0.85; **F6-SS:** 0.65

Weight: **F6-HPS-11, -21:** 1.23 oz (38g); **F6-HPS-31:** 1.413 oz (40g); **F6-MHS:** 3.35 oz (95g); **F6-SS:** 1.59 oz (45g)

Features:

- Simple, inexpensive control of the liquid level within a tank
- 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
- **Models F6-MHS, F6-HPS-11, FS-66** are internally mounted and are secured to the wall of the tank or vessel from the inside
- **Model F6-HPS-21** is mounted for the outside (externally)
- **Model F6-HPS-31** can be installed by mounting either internally or externally

Model	Description	Price
F6-HPS-11	Level Switch, Internal Horizontal Mount	\$37
F6-HPS-21	Level Switch, External Horizontal Mount	\$37
F6-HPS-31	Level Switch, Int./Ext. Horizontal Mount	\$37
F6-MHS	Level Switch, Internal Horizontal Mount	\$81
F6-SS	Level Switch, Internal Vertical Mount	\$74

Liquid Level Switches



Control the level of liquids in filling or draining reservoirs and tanks with the **Series CFS**. The mercury-free switch is designed with an inverter microswitch housed in a polypropylene cover. The unit includes a counterweight to adjust the stop and start levels of pump up/pump down application.

Specifications:

Service:	Compatible liquids
Wetted Materials:	Polypropylene housing, PVC cable
Temp. Limits:	140°F (60°C)
Pressure Limits:	60 psi (4 bar)
Enclosure Rating:	NEMA 4 (IP68)
Switch Type:	SPST
Electrical Rating:	10A @ 250 VAC, resistive
Mounting:	Vertical
Weight:	CFS-2: 1.4 lb (0.62 kg); CFS-10: 3.3 lb (1.48 kg)

Model	Description	Price
CFS-2	Cable Float Level Switch, 6.5' (2m) length	\$50
CFS-10	Cable Float Level Switch, 32.8' (10m) length	\$94

Liquid Level Switches



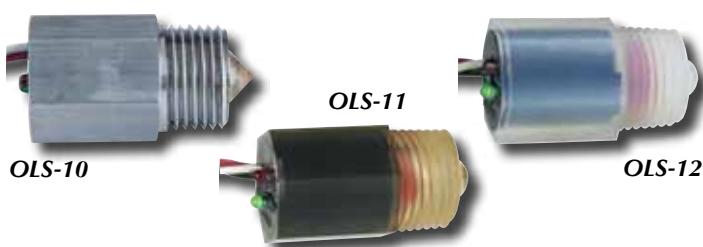
Series FSW Free-Floating Level Switch is a dual level switch designed for filling and draining tanks, wells, and reservoirs. The shape and interior balance weight ensure impurities and dirt will not adhere to the surface, making it ideal for sewage and waste water applications. The mercury-free switch is designed with an inverter microswitch housed in a polypropylene cover.

Specifications:

Service:	Compatible liquids, slurries
Wetted Materials:	Polypropylene housing, EPDM gland, PVC cable
Temp. Limits:	140°F (60°C)
Pressure Limits:	60 psi (4 bar)
Enclosure Rating:	NEMA 4 (IP68)
Switch Type:	SPST
Electrical Rating:	10A @ 250 VAC, resistive
Mounting:	Vertical
Weight:	FSW-6: 2.6 lb (1.2 kg); FSW-15: 3.8 lb (1.75 kg); FSW-30: 6.8 lb (3.1 kg)

Model	Description	Price
FSW-6	Free-Floating Level Switch, 19.5' (6m) length	\$176
FSW-15	Free-Floating Level Switch, 49' (15m) length	\$231
FSW-30	Free-Floating Level Switch, 98' (30m) length	\$328

Liquid Level Switches



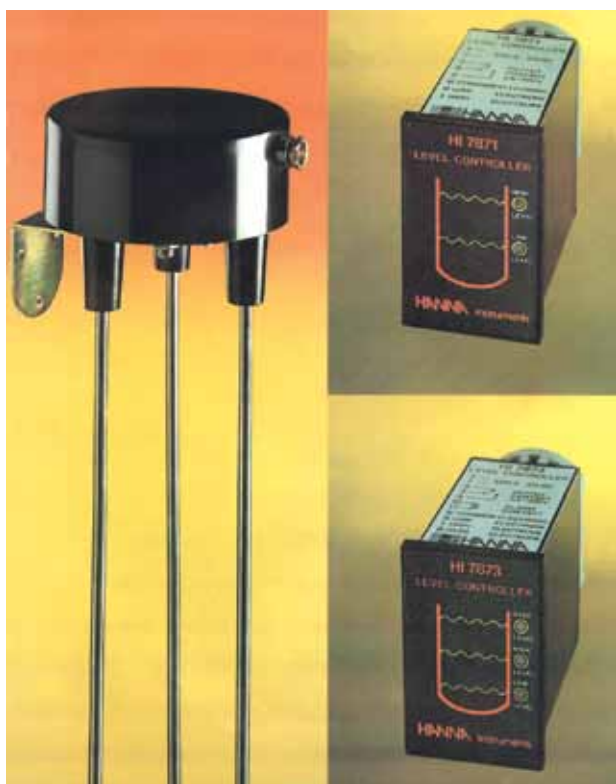
Low cost, rugged optical level switch provides rapid response while employing no moving parts for stable process control. The bright red and green LED's indicate the presence or absence of liquid for true, local indication. Three optional materials, 316 stainless steel, polysulfone and Teflon® provide application flexibility. Compact switch can be quickly mounted horizontally or vertically for each installation.

Specifications:

Max. Pressure: 200 psig (13.8 bar)
 Max. Process Temp.: 200°F (93.3°C)
 Process Connection: 1/2" NPTM
 Repeatability: ±0.02" (0.5 mm)
 Power Supply: 10-28 VDC
 Output Signal: NPN open collector, Vout(max) = 40 VDC, Isink (max) = 100 mA
 Current Consumption: 35 mA DC max
 Weight: 2.5 oz (.07 kg)

Model	Description	Price
OLS-10	Optical Level Switch, 316SS/Polysulfone	\$134
OLS-11	Optical Level Switch, Polysulfone	\$90
OLS-12	Optical Level Switch, Teflon®	\$165

Liquid Level Control Systems



These liquid level monitoring and control systems are designed for long life even in harsh environments. Stainless steel probes of various lengths are immersed in the liquid being monitored. One probe (ground sensor) emits a low-level 12V signal into the liquid; the remaining probes act as level sensors. As the liquid contacts each sensor, a circuit is completed, lighting the corresponding LED on the controller display panel. Pumps or valves can then be activated by means of an SPDT relay (2A at 220 VAC).

A complete system requires:

- 1) A controller, with or without alarm
- 2) A sensor holder
- 3) One or more packages of sensor probes

CONTROLLERS

Choose from controllers with or without "over-level" alarms. All controllers have an SPDT relay for use with pumps or valves, and LEDs indicate low level and high level. You can mount all models in a panel cut-out or on a wall, or attach them to a 35 mm DIN rail. **Model HI7873** senses water level at some point above the high level and features an additional LED to indicate excessive level. It also has an additional relay (2A at 220 VAC maximum load) to control an optional external alarm.

SENSOR HOLDER

This unit is basically a black box with 4 threaded openings for the connection of the probes which are used as level sensors. Each transmitter contains a completely resonated amplifier circuit and a 2-wire terminal board. Connections from controller to terminal strip are made from the top of the housing using standard copper wire (not included). Includes mounting bracket that attaches to top or wall of tank.

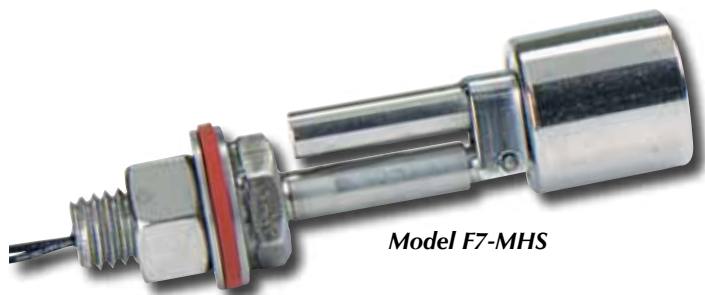
SENSOR PROBES

These sensor probes have threaded ends and are made of 316 stainless steel; measure 50 mm in length. Join probes for use in deeper tanks. Cut probes to form shorter sensors as needed. Probes are sold in packs of five -- use one for low level, one for high level, and one for the ground sensor. Models with alarms require a fourth sensor for overflow measurement. The ground sensor has to be the longest and is connected to the COM port.

Model	HI7871	HI7873
Output	1 x 2A/220V relay for up to 10,000,000 closures	2 x 2A/220V relays for up to 10,000,000 closures
Level Indicator	High & Low	High, Low & Over
Sensor Probes	Needs 3	Needs 4
Power Supply	110/115V, 50/60Hz	
Transmission	300m max.	
Connection	11-pin connector	
Temperature Limits	0 - 50°C (32 - 122°F)	
Dimensions	78 x 49 x 87 mm HWD	
Weight	130 g	

Model	Description	Price
HI7871/115	Controller w/o Alarm	\$119
HI7873/115	Controller w/ "Over-level" Alarm	\$133
HI7874	Sensor Holder	\$124
HI731324	Sensor Probes, 500 mm long (Pkg. of 5)	\$95

Liquid Level Switches



Model F7-MHS

Series F7 Horizontal Mount Level Switches are designed to mount through the walls of tanks and other vessels. Internally mounted models **F7-MHS** and **F7-SS5** are secured to the wall of the tank or vessel from the inside while model **F7-HPS-2** is mounted from the outside (externally). Model **F7-HSS** can be installed internally or externally.

Applications:

- The **F7-HPS-2** is suitable for gasoline, kerosene or solvents.
- The **F7-HSS** is designed for high temperatures or corrosives.
- The **F7-MHS** is designed to limited space applications with high temperatures or corrosives.
- The **F7-SS5** is ideal for heavy-bodied liquids such as glue or fluids containing metal particles
- **F7-HPS-2** float & stem material: Polysulfone
- **F7-HPS, F7-MHS & F7-SS5B** float & stem material: 316SS

Specifications:

Electrical Rating: AC/DC: 15VA, 220V, 1.0A max. (**F7-HPS-2**); 30 watts: 0.14A @220VAC, 0.28A @ 110VAC, 0.07A @ 120VDC, 0.28A @ 24VDC (**F7-HSS, -MHS, -SS5**)

Mounting Connection: 1/2" male NPT (**F7-HPS-2, -HSS**), 1/2-13 bulkhead (**F7-MHS, -SS5**)

Wire Leads: 22 AWG x 39" (1m) (**F7-HPS-2**); 22 AWG x 24" (61cm) (**F7-HSS, -MHS, -SS5**)

Magnet: Alnico (**F7-HPS-2, -SS5**), Ceramic (**F7-HSS, -MHS**)

Weight: 2 oz (57g) (**F7-HPS-2, -MHS, -SS5**), 3 oz (94g) (**F7-HSS**) **F7-HSS** is rated explosion-proof for Class I, Groups A, B, C, D; Class II, Groups E, F, G; Class III

Model	Max. Pressure	Min. S.G.	Approx. Deadband	Price
F7-HPS-21	150 psig, 10 bar	0.85	3/16", 5mm	\$67
F7-HSS	300 psig, 20.7 bar	0.60	1/8", 4mm	\$308
F7-MHS	100 psig, 6.89 bar	0.70	3/16", 5mm	\$190
F7-SS5B	50 psig, 3.4 bar	0.60	3/16", 5mm	\$193

Dry Bulk Monitors



The Mini-Bin provides reliable level sensing for dry bulk solids where mounting space is limited. This compact, side mount control reports high, intermediate, and low level conditions, eliminating overflows, choking, clogs or empty vessels. **Model DBLM** Mini-Bin operates by using a 1 rpm synchronous motor to rotate a four vane, plastic paddle. When material surrounds paddle and impedes rotation, the motor is de-energized and triggers a SPDT snap switch. Mount the Mini-Bin with optional 1-1/4" to 3/4" reducer to replace standard size units.



Specifications:

Motor: 110 VAC, 50/60 Hz, 220 VAC optional

Power Consumption: 1.5 Watts

Switch: SPDT snap switch.

Electrical Rating: 3 A @ 250 VAC.

Mounting: 3/4" NPT(M), optional flange and 1-1/4" to 3/4" reducer

Temperature Range: -4 to 140°F (-20 to 60°C)

Wiring Connections: 18 AWG, 12" leads wrapped in conduit

Wetted Materials: Polycarbonate paddle, SS shaft, Teflon® washer

Housings: Polycarbonate, NEMA 1

Weight: 0.77 lbs. (350 g)

Model	Description	Price
DBLM3040	Dry Bulk Level Monitor, 110VAC	\$234
DBLM3140	Dry Bulk Level Monitor, 220VAC	\$234
F1/A	Flexible Mounting Flange, 8" x 1-1/4"NPT	\$104
A-335	1-1/4" to 3/4" Reducer	\$18