

### Series L4

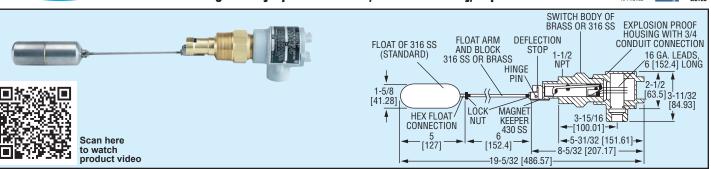
# FLOTECT. Float Switch







## Magnetically Operated Switch, Leak Proof Body, Explosion-Proof



Rugged and reliable the Series L4 Flotect® Level switch operates automatically to indicate tank level. Perfect for starting or stopping pumps, opening or closing valves, or actuate level alarm signals. A unique magnetically actuated switching design gives superior performance. There are no bellows, springs, or seals to fail. Instead, the free-swinging float attracts a magnet within the solid metal switch body, actuating a snap switch by means of a simple lever arm. Float arm hinge design limits the arm angle to prevent vertical hangup.

#### **FEATURES**

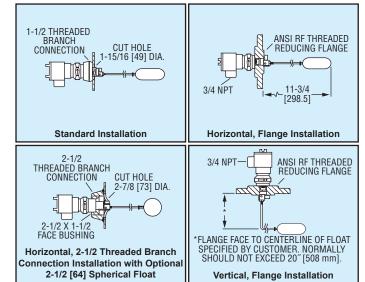
- · Leak proof body machined from bar stock
- · Choice of floats dependent on maximum pressure and specific gravity
- Weatherproof, designed to meet NEMA 4 (IP56)
- · Explosion-proof (listings included in specifications)
- Installs directly and easily into tank with a thredolet or flange (see application drawings)
- Electrical assembly can be easily replaced without removing the unit from the installation so that the process does not have to be shut down
- · Horizontal installation or optional top mount vertical installation

#### **APPLICATIONS**

- · Direct pump control for maintaining level
- · Automatic tank dump operations
- Control levels or provide alarms in sumps, scrubber systems, hydro-pneumatic tanks, low pressure boilers, and various waste water/sewage treatment processes

Model	Description
L4	Brass body, side wall mounting
L4-NH**	Brass body, side wall mounting, no housing
L4-SS	316SS* body, sidewall mounting
L4-SS-NH**	316SS* body, sidewall mounting, no housing

#### Application Drawings For Flotect® Float Switches



<sup>\*316</sup>SS body and float with 430SS magnet keeper (wetted part).

#### SPECIFICATIONS

Service: Liquids compatible with wetted materials.

Wetted Materials: Float and Rod: 316 SS; Body: Brass or 316 SS standard;

Magnet Keeper: 430 SS standard, 316 SS or nickel optional.

**Temperature Limits:** 4 to 275°F (-20 to 135°C) standard, MT high temperature option 400°F (205°C) [MT option not UL, CSA, ATEX or IECEX]. ATEX and IECEx options: Ambient temperature -4 to 163°F (-20 to 73°C); Process temperature -4 to 163°F (-20 to 73°C).

Pressure Limit: Brass body 1000 psig (69 bar), 316 SS body 2000 psig (138 bar). Standard float rated 100 psig (6.9 bar). For other floats, see options.

**Enclosure Rating:** Weatherproof and Explosion-proof. \*\*Listed with UL and CSA for Class I, Groups C and D; Class II, Groups E, F, and G.

ATEX **( €** 0344 🐼 II 2 G Ex d IIB T6 Gb -20°C≤Tamb≤73°C.

-20°C≤Process Temp≤73°C.

EC-Type Certificate No.: KEMA 03 ATEX 2383.

ATEX Standards: EN60079-0: 2009; EN60079-1: 2007.

IECEx Certified: For Ex d IIB T6 Gb -20°C≤Tamb≤73°C. -20°C≤Process

IECEx Certificate of Conformity: IECEx DEK 11.0071.

IECEx Standards: IEC 60079-0: 2007; IEC 60079-1: 2007.

Switch Type: SPDT snap switch standard, DPDT snap switch optional.

Electrical Rating: UL, FM, ATEX and IECEx models: 10A @ 125/250 VAC (V~).

CSA models: 5A @ 125/250 VAC (V~); 5A res., 3A ind. @ 30 VDC (V-;;). MV option: 1A @ 125 VAC (V~); 1A res., .5A ind. @ 30 VDC (V-;;). MT option: 5A @ 125/250 VAC (V~). [MT and MV option not UL, CSA, FM, ATEX or IECEX].

**Electrical Connections:** UL and CSA models: 16 AWG, 6" (152 mm) long. ATEX and IECEx unit: terminal block.

**Process Connection:** 1-1/2" male NPT standard, 2-1/2" male NPT standard optional floats.

**Mounting Orientation:** Horizontal installation standard, optional vertical top mount.

Weight: 4 lb 9 oz (2.07 kg).

Dead Band: 3/4" (19 mm) for standard float.

Specific Gravity: 0.7 minimum with standard float. For other floats see model

chart.

Agency Approvals: ATEX, CE, CSA, FM, IECEx, UL\*\*.

**OPTIONS FOR L4 SWITCHES ABOVE** — Add suffixes to model numbers **DPDT contacts**, add suffix **-D** 

Gold Plated Contacts option for dry circuits, add suffix -MV

(see electrical rating in specifications, no listings or approvals)

High Temperature option rated 400°F (204°C), add suffix -MT

(see electrical rating in specifications, no listings or approvals)

Time Delay Relay option with 2 SPDT contacts, adjustable from 0-1 to 0-31 minutes

add suffix **-TRI** (increasing flow) or

-TRD (decreasing flow) (no listings or approvals)

\*316 SS Magnet Keeper option to replace standard 430 SS, add suffix -316

ATEX compliant construction, add suffix -AT

IECEx certified construction, add suffix -IEC

**Top Mounted** option for vertical flange installation [distance from flange face to centerline of float to be specified, 20" (508 mm) max], add suffix **-TOP** 

Optional Floats (all 2-1/2" spherical):

304 SS rated 50 psig (3.5 bar) and 0.5 min. s.g., add suffix **-50** 

316 SS rated 150 psig (10.3 bar) and 0.7 min. s.g., add suffix **-150** 

304 SS rated 300 psig (20.7 bar) and 0.7 min. s.g., add suffix **-300** 

Consult factory for price and availability of fittings for L4 installation. Threaded Branch Connection, bushings, and flanges are available in a variety of sizes and materials.

<sup>\*\*</sup>No Housing Option (-NH) has no approvals.