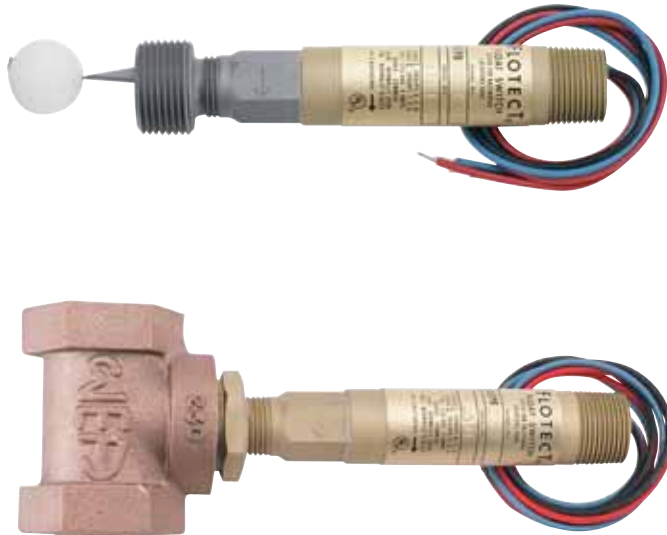


Specifications - Installation and Operating Instructions

**Explosion-Proof; UL and CSA Listed -
Class I, Groups *A, B, C, & D
Class II, Groups E, F & G
Directive 94/9/EC (ATEX) Compliant for
II 2 G EEx d IIC T6 Process Temp \leq 75°C CE**
*(Group A, stainless steel body only)



SPECIFICATIONS

Service: Liquids compatible with wetted materials.

Wetted Materials:

Float: Solid polypropylene or 304 SS.

Lower Body: Brass or 303 SS.

Magnet: Ceramic.

External Float Chamber (Tee): Matches lower body choice of brass or 303 SS.

Other: Lever Arm, Spring, Pin, etc.: 301 SS.

Temperature Limit: -4 to 220°F (-20 to 105°C) Standard, MT high temperature option 400°F (205°C)(MT not UL, CSA or ATEX). ATEX compliant AT option ambient temperature -4 to 167°F (-20 to 75°C) process temperature: -4 to 220°F (-20 to 105°C).

Pressure Limits: See next page.

Enclosure Rating: Weatherproof and Explosion-proof. Listed with UL and CSA for Class I, Groups A, B, C and D; Class II, Groups E, F, and G. (Group A on stainless steel body models only). CE 0344 II 2 G EEx d IIC T6 Process Temp \leq 75°C.

EC-Type Certificate No.: KEMA 04ATEX2128

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

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

Electrical Connections: UL models: 18 AWG, 18" (460 mm) long. ATEX/CSA models: terminal block.

Upper Body: Brass or 303 SS.

Conduit Connection: 3/4" male NPT standard, 3/4" female NPT on junction box models.

Process Connection: 1" male NPT on models without external float chamber, 1" female NPT on models with external float chamber.

Mounting Orientation: Horizontal with index arrow pointing down.

Weight: Approximately 1 lb (.5 kg) without external float chamber, 1.75 lb (.8 kg) with external float chamber.

Specific Gravity: See next page.

Example	L6	EP	B	B	S	3	B	MT	L6EPB-B-S-3-B-MT level switch; brass upper housing, brass lower housing, brass tee with Polypropylene spherical float, SPDT snap switch, and high temperature option
Series	L6								Series L6 level switch
Construction		EP							Explosion proof and weatherproof
Upper Body Material			B						Brass 303 Stainless Steel
Lower Body Material				B					Brass 303 Stainless Steel
Circuit (Switch) Type					S				SPDT DPDT
Line Size						3 4 5 6			1" NPT 1-1/4" NPT (No tee models only) 1-1/2" NPT (No tee models only) 2" NPT
Tee and Float Options							O A B C H L S		No Tee, Solid Polypropylene Spherical Float* No Tee, 304 SS Cylindrical Float Brass Tee, Solid Polypropylene Spherical Float* No Tee, 304 SS Spherical Float Brass Tee, 304 SS Spherical Float 303 SS Tee, 304 SS Spherical Float 303 SS Tee, Solid Polypropylene Spherical Float*
Switch Options								MV MT	Gold Contacts on snap switch for dry circuits (see specifications for ratings) High Temperature switch rated 400°F (205°C) (see specifications for ratings)*
Options								AT CSA GL ID JCT TBC TOP	ATEX approved construction (with JCT option standard) CSA approved construction (with JCT option standard)* Ground Lead* Customer Information on standard nameplate Weatherproof and explosion-proof junction box* Terminal Block Connector* Top Mounted (No tee models only)*

* Options that do not have ATEX

Attention: Units without the "AT" suffix are not Directive 94/9/EC (ATEX) compliant. These units are not intended for use in potentially hazardous atmospheres in the EU. These units may be CE marked for other Directives of the EU.

MAXIMUM PRESSURE CHART

Model Number	Float	Minimum Sp. Gr.	Pressure Rating psig (bar)
L6EPB-B-S-3-A	Cylindrical SS	0.5	200 (13.8)
L6EPB-B-S-3-B	Polypropylene	0.9	250 (17.2)
L6EPB-B-S-3-C	Round SS	0.7	350 (24.1)
L6EPB-B-S-3-H	Round SS	0.7	250 (17.2)
L6EPB-B-S-3-O	Polypropylene	0.9	1000 (69.0)
L6EPB-S-S-3-A	Cylindrical SS	0.5	200 (13.8)
L6EPB-S-S-3-C	Round SS	0.7	350 (24.1)
L6EPB-S-S-3-L	Round SS	0.7	350 (24.1)
L6EPB-S-S-3-O	Polypropylene	0.9	2000 (138)
L6EPB-S-S-3-S	Polypropylene	0.9	2000 (138)

INSTALLATION

Unpack switch and remove any packing material found inside lower housing or float chamber.

Switch must be installed with body in a horizontal plane and arrow on side pointing down.

If switch has an external float chamber (tee), connect it to vertical sections of 1" NPT pipe installed outside vessel walls at appropriate levels. If unit has no external float chamber, it must be mounted in a 1" NPT half coupling welded to the vessel wall. The coupling must extend through the wall.

Inspect and clean wetted parts at regular intervals.

ELECTRICAL CONNECTIONS

Connect wire leads in accordance with local electrical codes and switch action required. N.O. contacts will close and N.C. contacts will open when liquid level causes float to rise. They will return to "normal" condition on decreasing liquid level. Black = common, Blue = N.O. and Red = N.C.

For units supplied with both internal and external grounds the ground screw inside the housing must be used to ground the control. The external ground screw is for supplementary bonding when allowed or required by local code. Some CSA listed models are furnished with a separate green ground wire. Such units must be equipped with a junction box, not supplied but available on special order.

EC-Type Certificate Installation Instructions:

Cable Connection

The cable entry device shall be certified in type of explosion protection flameproof enclosure "d", suitable for conditions of use and correctly installed. For ambient temperatures over 70°C, cable and cable glands suitable for at least 90°C shall be used.

Conduit Connection

An EEx d certified sealing device such as a conduit seal with setting compound shall be provided immediately to the entrance of the valve housing. For ambient temperatures over 70°C, the wiring and setting compound in the conduit seal shall be suitable for at least 90°C.

WETTED MATERIALS CHART

Model	Brass	Bronze	Ceramic	Polypropylene	301SS	303SS	304SS
B-S-3-A	X		X		X		X
B-S-3-B	X	X	X	X	X		
B-S-3-C	X		X		X		X
B-S-3-H	X	X	X		X		X
B-S-3-O	X	X	X	X	X		
S-S-3-A			X	X	X		X
S-S-3-C			X		X	X	X
S-S-3-L			X		X	X	X
S-S-3-O			X	X	X	X	
S-S-3-S			X	X	X	X	

Note: ATEX units only: The temperature class is determined by the maximum ambient and or process temperature. Units are intended to be used in ambient of $-20^{\circ}\text{C} \leq T_{\text{amb}} \leq 75^{\circ}\text{C}$. Units may be used in process temperatures up to 105°C providing the enclosure and switch body temperatures do not exceed 75°C . The standard Temperature Class is T6 Process Temp $\leq 75^{\circ}\text{C}$.

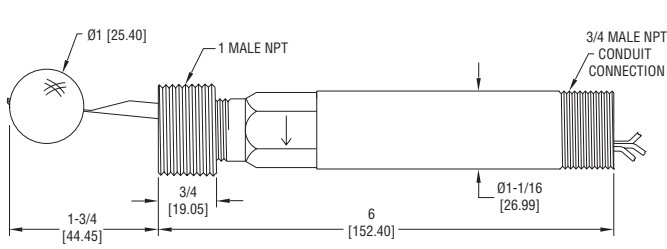
All wiring, conduit and enclosures must meet applicable codes for hazardous areas. Conduits and enclosures must be properly sealed. For outdoor or other locations where temperatures vary widely, precautions should be taken to prevent condensation inside switch or enclosure. Electrical components must be kept dry at all times.

CAUTION: To prevent ignition of hazardous atmospheres, disconnect the device from the supply circuit before opening. Keep assembly tightly closed when in use.

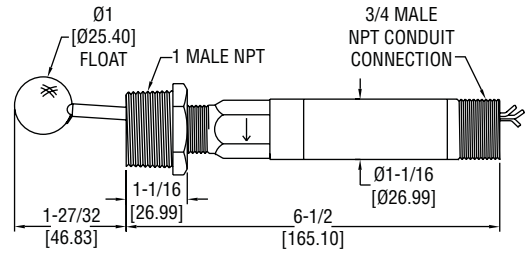
MAINTENANCE

Inspect and clean wetted parts at regular intervals. The cover should be in place at all times to protect, the internal components from dirt, dust and weather and to maintain hazardous location ratings. Disconnect device from the supply circuit before opening to prevent ignition of hazardous atmosphere.

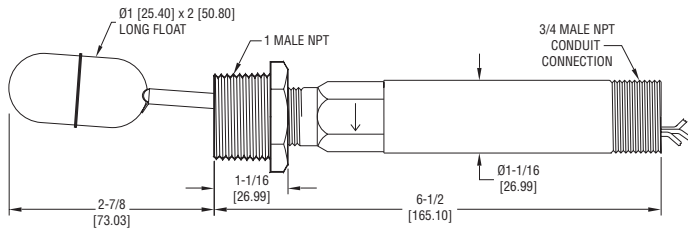
MODEL L-6 FLOAT SWITCH — DIMENSION DRAWINGS



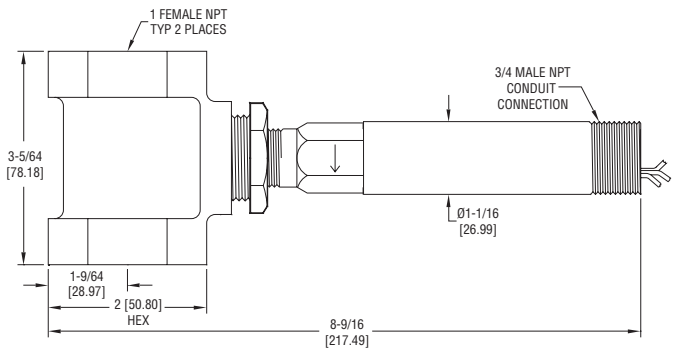
Polypropylene Float



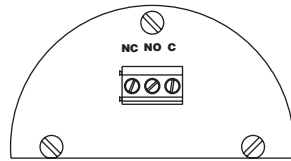
Round Stainless Steel Float



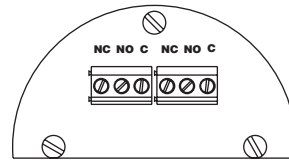
Cylindrical Stainless Steel Float



With External Chamber (Tee)

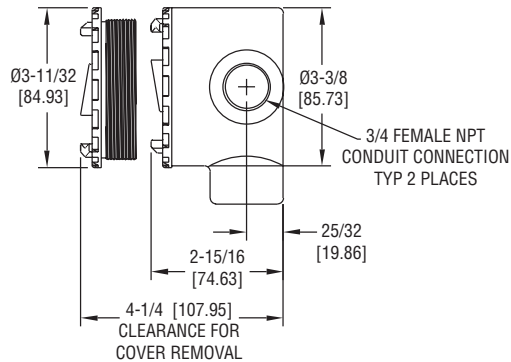
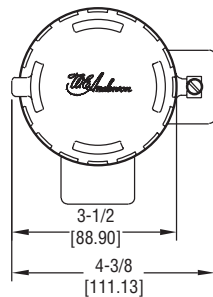


SPDT



DPDT

Terminal Connections CSA, ATEX Enclosures



CSA, ATEX Conduit Enclosure