### Sense Float Level Tilt Switches

Float Level Tilt Switch Specifications											
Part No.	Price	Float Material	Sealed Weight Housing Material	Finat Shane	Temperature Range	Pressure	Float Specific Gravity	Electrical Ratings*	Cable	Approvals	Weight
FLS-HT-100	\$39.50	EPDM Rubber	Polypropylene (PP)	Rectangle	32°F to 158°F [0°C to 70°C]	14.5 psig [1bar] Max submerged depth 65 feet [20 meters]	0.9 to 1.3	SPDT 16A 250VAC, 60Hz 1/2 HP, 250VAC, 60Hz 10A, 24VDC	3-conductor 18AWG PVC jacket 22.9 ft [7 meter]	I (:⊨	3.5

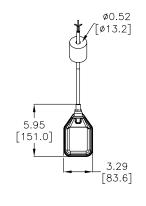
### **Dimensions**

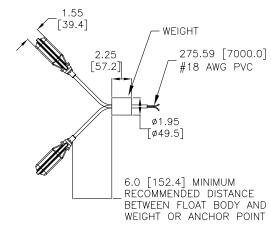


Brown

Wiring

### inches [mm]

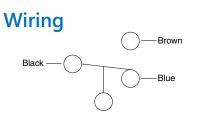




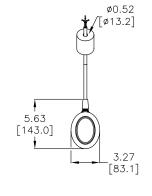
Float Level Tilt Switch Specifications											
Part No.	Price	Float Material	Sealed Weight Housing Material	Float Shape	Temperature Range	Pressure	Float Specific Gravity	Electrical Ratings*	Cable	Approvals	Weight
FLS-HT-200	\$41.50	EPDM Rubber	Polypropylene (PP)	Oval	32°F to 158°F (0°C to 70°C)	14.5 psig [1bar] Max submerged depth 65 feet [20 meters]	0.7 to 1.3	SPDT 16A 250VAC, 60Hz 1/2 HP, 250VAC, 60Hz 10A, 24VDC	3-conductor 18AWG PVC jacket 22.9 ft [7 meter]	I (:⊨	3.5

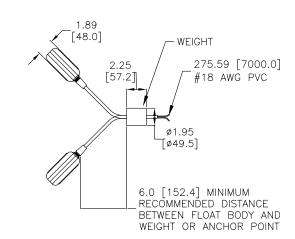
### **Dimensions**





### inches [mm]





## **Properties** Float Level Tilt Switches





#### Float Level Tilt Switches

Float level tilt switches provide inexpensive, efficient and highly reliable level detection in open vessels, sumps and ponds.

The molded rubber float has an integral three-conductor cable and operates on a mercury-free micro-switch device that is located inside the float on an antivibration mount.

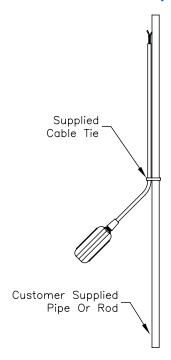
The rubber float is constructed of ethylene propylene diene (EPDM), a synthetic rubber with rigid and durable characteristics for long service life and resistance to heat, oxidation, ozone and aging due to weather. EPDM has good electrical resistivity, as well as resistance to solvents such as water, acids, alkalies, phosphate esters and many ketones and alcohols.

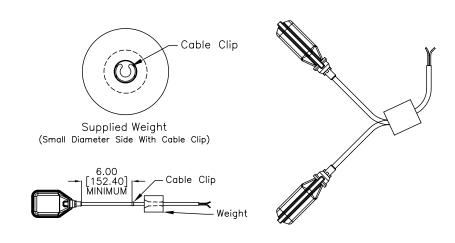
The basic operating principle is that as the fluid level rises, the float will rise, causing the microswitch to tilt and generate a signal that can be used to start or stop a pump, open or close a valve or actuate indicator alarms as required. Float travel is in an approximately  $\pm$  45° arc from its nominal position.

#### **Features**

- Low cost
- · Easy installation
- Versatile application
- · Mercury-free SPDT 16 amp switch
- 7 meter (22.9 foot) PVC jacketed cable

### **Installation Example**





Float Travel is proportional to distance between float body and weight or anchor point.

Example 1: 6 inches between float body and weight will require 12 inches total float travel for proper opertaion of switch.

Example 2: 18 inches between float body and weight will require 36 inches total float travel to proper operation of switch.

Switch point is approximately  $\pm$  45 deg from horizontal at tethered or weighted point on cable.

www.automationdirect.com Level Sensors tULS-103

# **Properties** Float Level Switches

		Agency Ap	provals		
Part Number	cURus (E320431)	URus Class I, Group A,B,C,D / Class II, Group E, F, G / Class III (E366154)	CSA (2679134)	CSA Class I, Group A,B,C,D / Class II, Group E, F, G / Class III (2685021)	CE
FLS-VS-100	<b>✓</b>				<b>✓</b>
<u>FLS-VS-200</u>					✓
FLS-VS-300	<b>✓</b>				<b>✓</b>
FLS-VS-400	<b>✓</b>				<b>✓</b>
FLS-VS-500					<b>✓</b>
FLS-VD-100					<b>✓</b>
FLS-VD-200					<b>✓</b>
FLS-VD-300					✓
FLS-VD-400					<b>✓</b>
FLS-VD-500					<b>✓</b>
FLS-VD-600					<b>✓</b>
FLS-VM-100	<b>✓</b>		<b>✓</b>		<b>✓</b>
FLS-VM-200	<b>✓</b>		~		<b>~</b>
FLS-VM-300	<b>✓</b>		<b>V</b>		<b>~</b>
FLS-VM-400	<b>✓</b>		<b>~</b>		<b>~</b>
FLS-VM-500	· /				·
FLS-VM-600	·				·
FLS-VM-700	<b>~</b>				<u> </u>
FLS-VM-800	<b>~</b>				
FLS-VL-010	<b>~</b>		<b>~</b>		<del></del>
FLS-VL-020	<b>*</b>		<b>*</b>		<del>-</del>
FLS-VL-030	<b>~</b>		<b>*</b>		
	<b>V</b>		<b>V</b>		<b>✓</b>
FLS-VL-040			-		
FLS-VL-100	<b>V</b>		<b>V</b>		
FLS-VL-200	<b>~</b>		<b>~</b>		<b>✓</b>
FLS-VL-300	<b>V</b>		<b>~</b>		<u> </u>
FLS-VL-400		<b>✓</b>		<b>✓</b>	
FLS-VL-600					<b>✓</b>
FLS-VL-700	<b>~</b>		<b>✓</b>		
FLS-VL-900					
FLS-HS-100	<b>V</b>		<b>✓</b>		<u> </u>
FLS-HS-200	<b>✓</b>		<b>✓</b>		<b>~</b>
FLS-HS-300					<b>✓</b>
<u>FLS-HM-100</u>	<b>~</b>		<b>~</b>		<b>~</b>
FLS-HM-200	<b>✓</b>	✓	<b>~</b>	✓	<b>✓</b>
FLS-HM-300	<b>✓</b>				✓
FLS-HM-400	✓	✓	<b>✓</b>		<b>✓</b>
<u>FLS-HM-500</u>	✓				<b>✓</b>
FLS-HM-600	<b>✓</b>				<b>✓</b>
FLS-HM-700	<b>✓</b>				<b>✓</b>
FLS-HL-010					<b>✓</b>
FLS-HL-200	<b>✓</b>				<b>✓</b>
FLS-HL-300					<b>✓</b>
FLS-HL-400					<b>✓</b>
FLS-BM-100					<b>✓</b>
FLS-BM-300	<b>✓</b>		<b>✓</b>		<b>✓</b>
FLS-BL-100					<b>✓</b>
FLS-VK-200	<b>✓</b>				<b>~</b>
FLS-VK-300	<b>✓</b>				<b>✓</b>
FLS-HT-100					<b>✓</b>
FLS-HT-200					<b>✓</b>
		I			