



## Sump and Sewage Float and Diaphragm Switches

- Normally Closed: pump up for filling applications
- Normally Open: pump down for dewatering applications

Piggyback switches connect directly to the pump. The pump's power cord is plugged into the switch to control electric power to the pump. Wire lead switches require control panels, see page 2512. All switches are mechanically operated, except 3BY79 is a mercury activated switch.

Note: Use only with liquids compatible with switch construction.

**Tether Float**—Activated by a float that is attached to the pump by a flexible tether that can be adjusted so the pump starts and stops automatically at preset levels. They require more space to operate compared to vertical float switches since the flexible tether moves in an arc as the water level rises and falls in the sump basin.

**Vertical Float**—Suitable for smaller-diameter sump basins since they use a float that moves a rod straight up and down to activate the switch. The switch starts and stops the pump automatically when the water reaches a preset level.

**Diaphragm**—Switches are activated by pressure within a diaphragm to start and stop pumps automatically when the water reaches a certain level. They have no moving parts, are compact so they take up little space, and require periodic cleaning since the diaphragm switch may get clogged with debris. Diaphragm switches connected to a tether are often adjustable so the pump will start and stop when the water reaches a desired level.

**Switch Accessories**—45JZ57 can mount up to 4 float cables. 45JZ58 seals off cables coming into an enclosure. 45JZ59 to 45JZ61 can mount a float cable to PVC pipe. 53CK41 includes external cable weight.

Nominal Voltage	Cord Length	Amps	On Point	Off Point	Minimum Tether Length	Maximum Tether Length	Max. Liquid Temp.	Float Material*	Brand	Item No.
<b>Tether Float Switches</b>										
<b>Piggyback, Normally Closed</b>										
110V AC	10 ft	10 A	45° Below Horizontal	45° Above Horizontal	3 in	18 in	140 °F	ABS	Dayton	3BY74
	10 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ24
	10 ft	13 A	—	—	3 in	18 in	140 °F	ABS	Dayton	3BY78
	10 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ28
	15 ft	10 A	45° Below Horizontal	45° Above Horizontal	3 in	18 in	140 °F	ABS	Dayton	3BY75
	15 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ25
	15 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ29
	20 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ26
	20 ft	13 A	—	—	3 in	18 in	140 °F	ABS	Dayton	3BY80
	20 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ30
	30 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ27
	30 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ31
220V AC	15 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ33
	20 ft	13 A	—	—	3 in	18 in	140 °F	ABS	Dayton	3BY85
	30 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ39
<b>Piggyback, Normally Open</b>										
110V AC	10 ft	12 A	—	—	—	—	104 °F	ABS	PHCC Pro Series	38G748
	10 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV6
	10 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNU4
	10 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45DV30
	10 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY91
	10 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY95
	15 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNU5
	15 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	3BY82
	15 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY92
	15 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY96
	15 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	Little Giant	44ZJ19
	20 ft	13 A	14 in Above Base	6 in Above Base	—	—	120 °F	PVC	Little Giant	44ZJ35
	20 ft	13 A	14 in Above Base	6 in Above Base	—	—	120 °F	PVC	Little Giant	44ZJ35
	20 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV7
	20 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45DV33
	20 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY93
	20 ft	13 A	—	—	3 in	18 in	186 °F	ABS	Dayton	3BY81
	20 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV9
	20 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY97
	30 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV1
	30 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	3BY83
	30 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45DV36
	30 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY94
	30 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	10A175
	30 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV3
220V AC	30 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JY98
	60 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV4
	10 ft	12 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45DV31
	10 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ04
	15 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	3BY84
	15 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNU6
	20 ft	12 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45DV34
	20 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNU8
	20 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV0
	20 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ06
	30 ft	13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV2
	30 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	10A176
	30 ft	15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNV5
<b>Wire Leads, Normally Closed</b>										
110V AC, 220V AC	10 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 ½ in	3 ½ in	140 °F	PP	SJE-Rhombus	45JZ48
	10 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ49
	10 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ40
	10 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ44
	15 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ50
	15 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ41
	15 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ45
	20 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 ½ in	3 ½ in	140 °F	PP	SJE-Rhombus	45JZ53
	20 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ52
	20 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ42
	20 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ46
	30 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ55
	30 ft	5 A	1 ½ in Below Horizontal	1 ½ in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ54
	30 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ43
	30 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 ½ in	24 in	140 °F	PVC	SJE-Rhombus	45JZ47

\* ABS = acrylonitrile butadiene styrene, PVC = polyvinyl chloride, PP = polypropylene.



Tether Float  
3BY74



Tether Float  
3BY81



Tether Float  
464P68



Tether Float  
6PNV7



Vertical Float  
10A169

CONTINUED