



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 2630. 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.



Tether Float
3BY74



Tether Float
3BY81



Tether Float
4ZZF3



Tether Float
6PNV7



Vertical Float
10A169

Nominal Voltage	Cord Length	Amps	On Point	Off Point	Minimum Tether Length	Maximum Tether Length	Max. Liquid Temp.	Float Material*	Brand	Item No.	
Tether Float Switches											
Piggyback, Normally Closed											
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 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ24	
	10 ft	13 A	—	—	—	—	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 1/2 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 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ26	
	20 ft	13 A	—	—	—	—	140 °F	ABS	Dayton	3BY80	
	20 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ30	
220V AC	30 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 1/2 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	
	15 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ33	
	20 ft	13 A	—	—	—	—	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	
	Piggyback, Normally Open										
	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	45D30
10 ft		13 A	45° Above Horizontal	45° Below Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JY91	
10 ft		15 A	45° Above Horizontal	45° Below Horizontal	3 1/2 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 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JY92	
15 ft		15 A	45° Above Horizontal	45° Below Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JY96	
20 ft		13 A	14 in Above Base	6 in Above Base	—	—	120 °F	PVC	Little Giant	44Z119	
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	6PNU7	
20 ft		13 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	200 °F	PP	SJE-Rhombus	45D33	
20 ft		13 A	45° Above Horizontal	45° Below Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JY93	
20 ft		13 A	—	—	—	—	186 °F	ABS	Dayton	3BY81	
20 ft		15 A	45° Above Horizontal	45° Below Horizontal	3 in	18 in	140 °F	ABS	Dayton	6PNU9	
20 ft		15 A	45° Above Horizontal	45° Below Horizontal	3 1/2 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	45D36	
30 ft		13 A	45° Above Horizontal	45° Below Horizontal	3 1/2 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	
30 ft		15 A	45° Above Horizontal	45° Below Horizontal	3 1/2 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	45D31	
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	45D34	
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	
Wire Leads, Normally Closed											
110V AC, 220V AC		10 ft	5 A	1 1/2 in Below Horizontal	1 1/2 in Above Horizontal	3 1/2 in	3 1/2 in	140 °F	PP	SJE-Rhombus	45JZ48
		10 ft	5 A	1 1/2 in Below Horizontal	1 1/2 in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ49
	10 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ40	
	10 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ44	
	15 ft	5 A	1 1/2 in Below Horizontal	1 1/2 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 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ45	
	20 ft	5 A	1 1/2 in Below Horizontal	1 1/2 in Above Horizontal	3 1/2 in	3 1/2 in	140 °F	PP	SJE-Rhombus	45JZ53	
	20 ft	5 A	1 1/2 in Below Horizontal	1 1/2 in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ52	
	20 ft	13 A	45° Below Horizontal	45° Above Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ42	
	20 ft	15 A	45° Below Horizontal	45° Above Horizontal	3 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ46	
	30 ft	5 A	1 1/2 in Below Horizontal	1 1/2 in Above Horizontal	3 in	20 in	140 °F	PP	SJE-Rhombus	45JZ55	
	30 ft	5 A	1 1/2 in Below Horizontal	1 1/2 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 1/2 in	24 in	140 °F	PVC	SJE-Rhombus	45JZ47	

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