

Wastewater

Piggyback Mechanical Float Switch



Applications

- This Remote Float Switch, is a direct-acting, in-line control system for automatically controlling wastewater, effluent and sewage pumps. This pump switch is not designed to be directly wired to relays or motor contacts (the relay or motor contacts may experience chattering). A double float pump switch will operate more efficiently in these installations.

Features

- RFSN-6, RFSN-9 and RFSN-10 cover any manual pump up through 1/2 hp (115 V) or 1 hp (230 V)
- RFSN-16 covers any manual pump up through 3/4 hp (115 V) and 2 hp (230 V)
- RFSN-20 covers any manual pump up through 1-1/2 hp (115 V) and 3 hp (230 V)
- Heavy duty contacts
- Totally self-contained pump switch — no control panel required
- Suitable for use in water and sewage applications
- Epoxy sealed switch and cord conductors
- Small enough to operate when space is limited
- Adjustable pumping range
- Not sensitive to rotation or turbulence
- Piggyback plug (where applicable) allows manual operation

Construction

- Non-corrosive PVC plastic float
- Flexible 16 gauge (12 gauge on RFSN-20), 2 conductor, UL/CSA SJOW neoprene, water-resistant cord

LittleGIANT®

Engineering Data

Item Number	Cord Length	115 V, 60 Hz, Single Phase			208 V, 60 Hz, Single Phase			230 V, 60 Hz, Single Phase			Max. Temp(°F)
		Max HP	Max Run Amps	Max Starting Amps	Max HP	Max Run Amps	Max Starting Amps	Max HP	Max Run Amps	Max Starting Amps	
599118 *	10'	1/2	13	85	1	13	85	1	13	85	140
599117 *	15'	1/2	13	85	1	13	85	1	13	85	140
599128 +	15'	1/2	13	85	1	13	85	1	13	85	140
599210 *	20'	1/2	13	85	1	13	85	1	13	85	140
599211 *	20'	3/4	15	85	2	15	85	2	15	85	140
599318 ^	20'	1-1/2	20	120	3	20	120	3	20	120	120
599321 ^	30'	1-1/2	20	120	3	20	120	3	20	120	120

*: comes with a 120 V piggyback plug; ratings for 208 V and 230 V apply if plug is removed
 +: comes with a 230 V piggyback plug; ratings for 120 V and 208 V apply if plug is removed
 ^: comes with stripped leads (no plug)

General Installation Instructions

WARNING: Turn off power source before installing or adjusting this device. Failure to turn off power could result in serious or fatal electrical shock.

1. Attach switch cord using the cable tie provided to any convenient rigid surface about 2" below the desired turn on level. Do not tighten cable tie until turn on and turn off levels are established.
2. Figure "A" shows an example of turn on and turn off levels. Increasing cord length between float and tie point increases on-off differential. Decreasing cord length between float and tie off decreases on-off differential. Do not tether switch less than 3.5" from pipe.
3. Tighten cable securely after turn on and turn off levels are established.
4. Testing: Without water in sump, plug pump cord into switch in-line plug. Plug switch into outlet. Lift float and watch for pump to operate. Do not run pump dry for more than 5 seconds.
5. Do not leave excess pump or switch cords inside sump as they may tangle float.

NOTE: To prevent pump damage, do not set switch turn off level below 2" above the base of the pump.

WARNING - 230 V INSTALLATIONS: In a 230 V pump installation, one side of the line going to the pump is always "hot". This condition exists regardless of whether the float switch is "on" or "off". To avoid hazards when installing or servicing, install a double-pole disconnect switch near pump installation.

DIFFERENTIAL PUMPING CAPABILITIES (approximate measurements, in inches – see Figure A)

Pumping Range (Dim "A")	7	10	16	22
Tether Length (Dim "B")	3.5	6	10	14

Figure B — Piggyback Plug Installation

Manual pump operation possible by plugging pump directly into outlet.

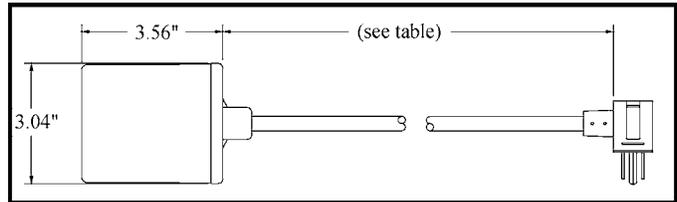
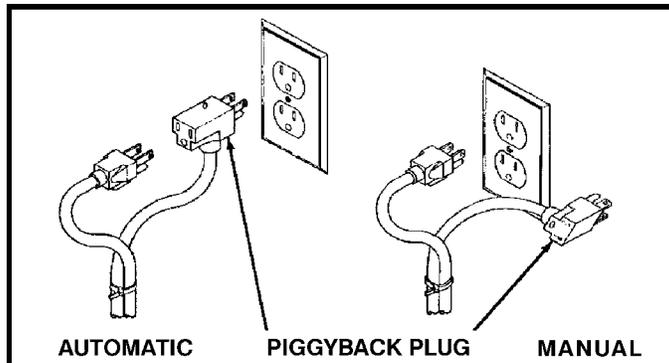


Figure A — Typical Installation

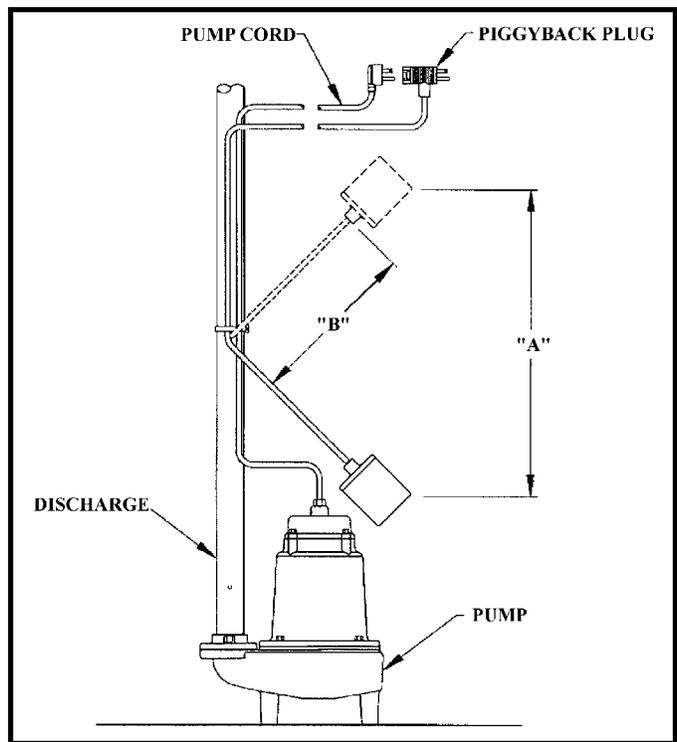
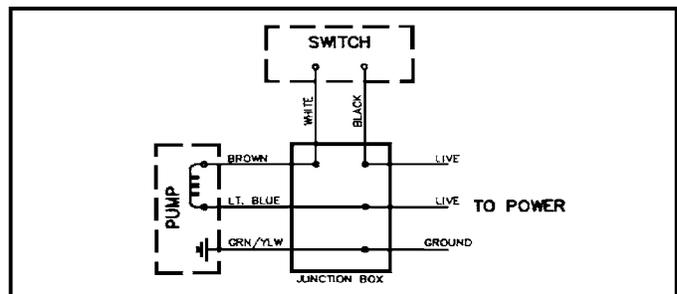


Figure C — Direct Wire Installation



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