



# TSURUMI PUMP™

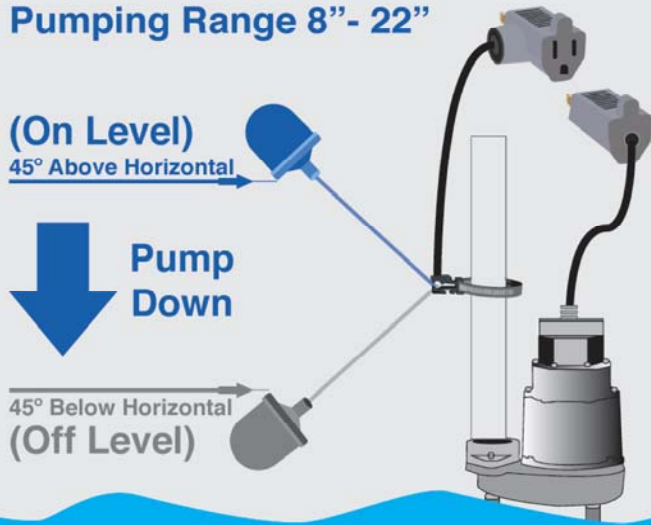
Pumping Range 8" - 22"

(On Level)

45° Above Horizontal



45° Below Horizontal  
(Off Level)



## Normally Open 120VAC Piggyback - Wide Angle Part Number: TS-302

Cord Length: 30 Feet (9.14 m)

Primary Voltage: 120VAC

Connection Type: NEMA 5-15P

Amperage: 15 Amps

(Includes Stainless Steel Pipe Clamp)



## Pump Switch - 15 Amp

NOTE: Connect directly to pump only.

**WARNING: Do not connect to alarms, motor contactors or control panels.**



# Pump Switch Wide Angle



15 Amp Models

## Operation, Maintenance and Installation Manual

### Safety Guidelines



Before proceeding with the installation or operation of the product, make sure to read all instructions thoroughly, as well as complying with all federal, state and local codes, regulations and practices. The product must be installed by qualified personnel familiar with all applicable local electrical and mechanical codes. Refer to the National Electric Code (NFPA 70). Failure to properly install and test this product can result in personal injury or equipment malfunction.

1. DISCONNECT ALL ELECTRICAL SERVICE BEFORE WORKING ON OR HANDLING THE PRODUCT.
2. DO NOT USE WITH FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES.
3. END USER TO PROVIDE OVERCURRENT PROTECTION RATED AT 240VAC MINIMUM, 15 AMPS MAXIMUM

### Specifications

Electrical:	15 Amp, 120/230VAC (bare lead), 120VAC or 230VAC (piggyback plug; voltage depends on model)
Cable Type:	SJOOW, flexible, 14 gauge, 2-conductor, water resistant (UL, CSA)
Connection Type:	120VAC Piggyback Plug, NEMA 5-15 or 230VAC, NEMA 6-15 (straight blade)
Float Housing:	High impact PVC, 3.25" diameter x 4.55" length
Maximum Temperature:	140° F
Switch Configuration:	Single Pole, Single Throw
Switching Differential:	90 degrees total

NOTE: Check to make sure the right float switch is being used for the application.

**Normally Open** - Contacts are open while hanging down and will close on a rising liquid level. Typically used for empty tank applications.

**Normally Closed** - Contacts are closed while hanging down and will open on a rising liquid level. Typically used for fill tank applications.

### Installation

1. Determine desired cable tether length (Fig. 1).
2. Mount the float cable attachment at desired location (Fig. 2) and adjust the tether length to achieve the correct pumping range. Test the system by filling/emptying tank and cycling the system to achieve actual desired pumping range (figure 1 used only as a guide).
3. The float cable attachment should be tightened to prevent slipping and maintain accurate pumping range.
4. Electrical outlet must NOT be located in pump chamber. Electrical outlet voltage, piggyback plug voltage, and pump voltage must match.

**Piggyback models:** insert pump switch piggyback plug into outlet, then plug the pump power cable into the piggyback plug of the pump switch. Check the system by allowing to cycle to ensure proper operation.

Note: The power receptacle and pump switch plug are straight blade NEMA 5-15/6-15 (type depends on voltage/model). Both receptacle and switch voltage with matching blade type are required.

(Fig. 1)

CAUTION: USE ONLY AS A GUIDE, MINIMUM TETHER LENGTH IS 4"												
Tether Length (inches)	4"	5"	6"	7"	8"	9"	10"	11"	12"	16"	17"	18"
Pumping Range (inches)	8"	9"	10"	11"	12"	13"	14"	15"	16"	20"	21"	22"
Actual Ranges May Vary - Reference Only - Testing Must Be Performed for Actual Ranges												

(Fig. 2)

