



ITT

BCPFS R7

Wastewater

CentriPro PUMP / CONTROL PANEL SWITCHES



CentriPro is a brand of ITT Corporation.

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Engineered for life

TERMS TO KNOW

Pump Switches are used to directly control the operation of a pump. They are normally wide-angle switches which means they operate over a range of approximately 70° to 90°. Pump switches are available with piggyback plugs and with bare leads. Some can also be used with control panels.

Control Switches are designed to only control pumps when used with a control or alarm panel. They cannot handle the high starting amps and running amperage of a pump, only signal or control amperage.

NO or Normally Open is a switch with contacts that are open in the hanging position. They are used to pump down or empty a tank.

NC or Normally Closed is a switch with contacts that are closed in the hanging position. They are used to pump up or fill a tank.

A2T SERIES

SJE Double Float® Master Pump Switch

Features

- Mechanically activated, wide-angle switch designed to control pumps up to 13 FLA, 78 LRA, 120 VAC or 240 VAC.
- This switch consists of two mechanical floats and a splice tube. The splice tube contains a holding relay which eliminates pump chatter in turbulent conditions.
- Includes standard mounting clamps and boxed packaging.
- **Cable attached to float housing:** flexible 16 gauge, 2 conductor (UL, CSA) SJOW, water-resistant (CPE).
- **Cable above splice:** flexible 14 gauge, 3 conductor (UL, CSA) SJTW, water-resistant, thermoplastic.
- **Floats:** 2.74" diameter x 4.83" long (7.0 x 12.3 cm) high impact, corrosion resistant, PP housing for use in sewage and non-potable water up to 140° F (60° C).
- Not sensitive to rotation or turbulence.
- Pumping range: 10" to 56".
- Available for pump up or pump down applications.
- For confined applications requiring an accurate pumping range.
- UL Recognized for use in non-potable water and sewage.
- CSA Certified.
- See chart for data and order numbers.



A2X SERIES

MilliAmpMaster™ Mechanical Float Switch

Features

- Mechanically activated, snap-action, sealed gold cross-point contacts are designed to activate low current control panels and alarms.
- Narrow angle Control for Low Voltage AC or DC applications.
- Operate with differential of 45° above or below horizontal.
- Electrical Load – low current non-arcing applications
 - 125 VAC – Max. Load .1 amps (Min. Load .16 milliamps)
 - 30 VDC – Max. Load .1 amps (Min. Load .16 milliamps)
 - 5 VDC - Minimum Load 1 milliamp
- UL Listed for use in non-potable water and sewage.
- CSA Certified
- Mounting clamp for attaching to discharge pipe is standard.
- Not sensitive to rotation.
- Maximum submergence or water depth, 30' (9 meters), 13 psi.
- Flexible 18 gauge, 2 conductor SJOW water resistant cable.
- Impact and corrosion resistant, polypropylene float housing for use in sewage and water up to 140 ° F.
- Use with Intrinsically Safe Barriers (as used with explosion-proof pumps), PLC's, solar applications and other low current control panel or alarm applications.
- Cable lengths of 10', 20' and 30'.
- Standard order numbers are for Normally Open (NO) switches.
- Normally Closed (NC) or Pump Down switches are available as a special order by adding a "U" suffix. **See Nomenclature on last page.**
- Float comes with blue cap for easy identification.



A2D SERIES

SJE PumpMaster® Pump Switch

Features

- Mechanically activated, heavy duty contacts, wide angle operation.
- Passed NSF standard 61 protocol by an approved Water Quality Association laboratory.
- Controls pumps up to 1/2 HP at 120 VAC and 1 HP at 230 VAC.
- Non-corrosive PVC housing for use in liquids up to 140° F (60° C).
- Not sensitive to rotation or turbulence.
- Pumping range: 7" to 36".
- 16 AWG, SJOW cord is available with or without piggyback plug.
- Available as pump up, pump down and SPDT models, see Nomenclature Chart.
- For potable water, water or sewage applications.
- UL Recognized for use in water and sewage.
- CSA Certified.
- See chart for amperage range and other data.



A2E SERIES

SJE PumpMaster Plus® Pump Switch

Features

- Controls pumps up to 3/4 HP at 120 VAC and 2 HP at 230 VAC.
- 14 AWG, SJOW cord is available with or without piggyback plug.
- *All other features are the same as A2D PumpMaster Series above.*

A2HT SERIES

High Temperature Float Switch

Features

- Temperature Rating: 221° F (105° C)
- Wide Angle Switch: contacts open @ 45° below horizontal and close at 45° above horizontal
- Float Material: PC/ABS (Polycarbonate ABS)
- Cord Material: Teflon coating
- Ratings: 13 Maximum Amps, 1/2 HP, 115/230 V
- Float Dimensions: 4.63" Long x 2.63" Diameter
- Nomenclature: see last page
- Available lengths: 20', 30' and 50' *

* No other lengths available in this Series.



A2KM23WP3

Conery Mechanical Float Pack of 3

Features

- Pack of three floats
- Narrow angle control for panel hookup
- 15' cord - Type SJ00W 16/2 have leads
- Float material: ABS material
- 5° contact closes
- Pump down operation

Ratings

- 10 Amp rating
- Mechanically activated
- Temperature Rating: Maximum temperature 190° F (88° C)

A2G SERIES

SJE AmpMaster® Pump Switch

Features

- Mechanically activated, heavy duty contacts, wide angle operation.
- Controls pumps up to 1½ HP at 115 VAC and 3 HP at 250 VAC.
- Non-corrosive PVC housing for use in liquids up to 140° F (60° C).
- Maximum pump running current of 20 amps.
- Not sensitive to rotation or turbulence.
- Pumping range: 9" to 24".
- 12 AWG, SJOW cord is available only with bare leads.
- Available for pump down applications only.
- UL Recognized for use in non-potable water and sewage.
- CSA Certified.
- See chart for amperage range and other data.



A2H SERIES

SJE VerticalMaster® Pump Switch

Features

- Mechanically activated vertical operation.
- Controls pumps up to ½ HP at 120 VAC and 1 HP at 230 VAC.
- Non-corrosive PVC housing for use in liquids up to 140° F (60° C).
- Overall Dimensions: 12" High, 5" Deep, 3" Wide.
- Not sensitive to rotation.
- Pumping range: .75" to 6.5".
- 16 AWG, SJOW cord is available with or without piggyback plug.
- Available for pump down applications only.
- For confined applications requiring an accurate pumping range.
- Stainless steel mounting bracket and hose clamp.
- UL Recognized for use in non-potable water and sewage.
- CSA Certified.
- See chart for amperage range and other data.



A2P SERIES

SJE MicroMaster® Plus

Features

- Mechanically activated, snap action contacts, wide angle.
- Pump down operation (optional pump up available)
- UL Recognized for use in non-potable water and sewage.
- CSA Certified.
- See chart for amperage range and other data.
- Controls pump up to 1 HP at 115 VAC and 1.5 HP at 230 VAC
- 16 AWG, SJOW cord
- Pumping range: 8" to 36"

A2J SERIES

SJE VerticalMaster® II Pump Switch

Features

- Mechanically activated vertical operation.
- Maximum running 10 amps.
- Non-corrosive PVC housing for use in liquids up to 140° F (60° C).
- Overall Dimensions: 12" High, 5" Deep, 3" Wide.
- Not sensitive to rotation.
- Pumping range: .75" to 6.5" (pump down only)
- 18 AWG, SJOW cord
- For confined applications requiring an accurate pumping range.
- Stainless steel mounting bracket and hose clamp.
- UL Recognized for use in non-potable water and sewage.
- CSA Certified.
- See chart for amperage range and other data.

A2N SERIES

SJE SignalMaster® Control Switch

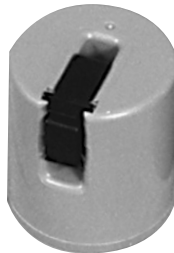
Features

- Mechanically activated, narrow angle, designed to activate pump control panels or alarms.
- Not designed for direct connection to pump.
- Passed NSF standard 61 protocol by an approved Water Quality Association laboratory.
- Non-corrosive PVC housing for use in liquids up to 140° F (60° C).
- Not sensitive to rotation.
- Control differential: 1.5" above or below horizontal.
- Available as NO (pump down), NC (pump up) or SPDT model, see Nomenclature page.
- For potable water, water or sewage applications.
- Supplied with a pipe clamp for mounting to pipe.
- UL Listed for use in water and sewage.
- CSA Certified.
- See chart for amperage range and other data.
- Normally open - comes with yellow cap for easy identification.
- Normally closed - comes with white cap for easy identification.
- Single pole double throw - comes with green cap for easy identification.



A2WT SJ ELECTRO WEIGHT

- Adjustable snap in design.
- Works with all float switches shown.
- PVC



A2S SERIES

CentriPro® Diaphragm Pump or Control Switch

Features

- Mechanical contacts.
- Cast iron housing and BUNA-N diaphragm.
- For use in liquids up to 104° F (40° C).
- Control differential: pump turns on at 18" and off at 12" submergence.
- 18/3 AWG, SJTW cord w/breather tube is available with or without piggyback plug.
- Available only as NO for pump down operation.
- For wastewater or sewage applications.
- Supplied with a mounting bracket for mounting to pump.
- See chart for amperage range and other data.



A2WTC CONERY WEIGHT

- Zinc plated cord weight
- Works with all float switches



PUMP SWITCHES (WIDE ANGLE) can be connected directly to a pump.

CONTROL SWITCHES (NARROW ANGLE) can only be used with control panels or alarm panels.

| ORDER NUMBER | MAXIMUM RUNNING AMPS | MAXIMUM STARTING AMPS | CORD LENGTH (FEET) | BARE LEADS | PUMP SWITCH | CONTROL SWITCH | (1) | (2) | MOUNTING | |
|--------------------|----------------------|-----------------------|--------------------|------------|-------------|----------------|------|------|----------|--------|
| | | | | | | | N.O. | N.C. | STRAP | WEIGHT |
| A2D13 | 13 | 85 | 10 | X | X | — | X | | X | |
| A2D23U | 13 | 85 | 15 | X | X | — | | X | X | |
| A2D23W | 13 | 85 | 15 | X | X | — | X | | | X |
| A2D33 | 13 | 85 | 20 | X | X | — | X | | X | |
| A2D33U | 13 | 85 | 20 | X | X | — | | X | X | |
| A2D33W | 13 | 85 | 20 | X | X | — | X | | | X |
| A2D53W | 13 | 85 | 30 | X | X | — | X | | | X |
| A2D63W | 13 | 85 | 50 | X | X | — | X | | | X |
| A2D83W | 13 | 85 | 100 | X | X | — | X | | | X |
| A2E23 | 15 | 85 | 15 | X | X | — | X | | X | |
| A2E23U | 15 | 85 | 15 | X | X | — | | X | X | |
| A2E33 | 15 | 85 | 20 | X | X | — | X | | X | |
| A2E53 | 15 | 85 | 30 | X | X | — | X | | X | |
| A2E53U | 15 | 85 | 30 | X | X | — | | X | X | |
| A2E63 | 15 | 85 | 50 | X | X | — | X | | X | |
| A2E63U | 15 | 85 | 50 | X | X | — | | X | X | |
| A2E73 | 15 | 85 | 75 | X | X | — | X | | X | |
| A2E83 | 15 | 85 | 100 | X | X | — | X | | X | |
| A2G33 | 20 | 120 | 20 | X | X | — | X | | X | |
| A2G43 | 20 | 120 | 25 | X | X | — | X | | X | |
| A2G53 | 20 | 120 | 30 | X | X | — | X | | X | |
| A2G63 | 20 | 120 | 50 | X | X | — | X | | X | |
| A2HT33 | 13 | 58 | 20 | X | X | X | X | | X | |
| A2HT53 | 13 | 58 | 30 | X | X | X | X | | X | |
| A2HT63 | 13 | 58 | 50 | X | X | X | X | | X | |
| A2N13 | 5 | N/A | 10 | X | — | X | X | | X | |
| A2N33 | 5 | N/A | 20 | X | — | X | X | | X | |
| A2N33U | 5 | N/A | 20 | X | — | X | | X | X | |
| A2N93 | 5 | N/A | 125 | X | — | X | X | | X | |
| A2S23 ^① | 10 | N/A | 15 | X | — | X | X | | X | |
| A2S53 ^① | 10 | N/A | 30 | X | — | X | X | | X | |
| A2S63 ^① | 10 | N/A | 50 | X | — | X | X | | X | |
| A2X13 | See description | N/A | 10 | X | — | X | X | | X | |
| A2X33 | See description | N/A | 20 | X | — | X | X | | X | |
| A2X53 | See description | N/A | 30 | X | — | X | X | | X | |

N.O. (1) = PUMP DOWN

N.C. (2) = PUMP UP

^① Diaphragm switch with 6" differential.

WIDE ANGLE 115 VOLT PIGGYBACK FLOAT SWITCHES TO DIRECTLY CONTROL PUMPS

| ORDER NUMBER | MAXIMUM AMPS | START AMPS | 115 V PLUG | CORD LENGTH FEET | (1) | (2) | MOUNTING STRAP |
|--------------|--------------|------------|------------|------------------|------|------|----------------|
| | | | | | N.O. | N.C. | |
| A2D11 | 13 | 85 | X | 10 | X | | X |
| A2D31 | 13 | 85 | X | 20 | X | | X |
| A2D51 | 13 | 85 | X | 30 | X | | X |
| A2D61 | 13 | 85 | X | 50 | X | | X |
| A2E21 | 15 | 85 | X | 15 | X | | X |
| A2E31 | 15 | 85 | X | 20 | X | | X |
| A2E31U | 15 | 85 | X | 20 | | X | X |
| A2E51 | 15 | 85 | X | 30 | X | | X |
| A2E61 | 15 | 85 | X | 50 | X | | X |
| A2H11 | 13 | 60 | X | 10 | X | | X |
| A2H31 | 13 | 60 | X | 20 | X | | X |
| A2J11 | 15 | 85 | X | 10 | X | | X |
| A2J21 | 15 | 85 | X | 15 | X | | X |
| A2J31 | 15 | 85 | X | 20 | X | | X |
| A2P01 | 13 | 78 | X | 10 | X | | X |
| A2P21 | 13 | 78 | X | 15 | X | | X |
| A2P31 | 13 | 78 | X | 20 | X | | X |
| A2P51 | 13 | 78 | X | 30 | X | | X |
| A2S21 | 13 | 60 | X | 15 | X | | X |
| A2T31 | 13 | 78 | X | 20 | X | | X |
| A2T51 | 13 | 78 | X | 30 | X | | X |

WIDE ANGLE 230 VOLT PIGGYBACK FLOAT SWITCHES TO DIRECTLY CONTROL PUMPS

| ORDER NUMBER | MAXIMUM AMPS | START AMPS | 230 V PLUG | CORD LENGTH FEET | (1) | (2) | MOUNTING STRAP |
|--------------|--------------|------------|------------|------------------|------|------|----------------|
| | | | | | N.O. | N.C. | |
| A2D12 | 13 | 85 | X | 10 | X | | X |
| A2D32 | 13 | 85 | X | 20 | X | | X |
| A2E22 | 15 | 85 | X | 15 | X | | X |
| A2E32 | 15 | 85 | X | 20 | X | | X |
| A2E32U | 15 | 85 | X | 20 | | X | X |
| A2E52 | 15 | 85 | X | 30 | X | | X |
| A2E62 | 15 | 85 | X | 50 | X | | X |
| A2H12 | 12 | 60 | X | 10 | X | | X |
| A2H32 | 12 | 60 | X | 20 | X | | X |
| A2J12 | 10 | 60 | X | 10 | X | | X |
| A2J22 | 10 | 60 | X | 15 | X | | X |
| A2S22 | 13 | 60 | X | 15 | X | | X |
| A2T32 | 13 | 78 | X | 20 | X | | X |
| A2T52 | 13 | 78 | X | 30 | X | | X |

N.O. (1) = PUMP DOWN

N.C. (2) = PUMP UP

NOMENCLATURE

1st and 2nd Characters

A2 = Float Switch

3rd Character

D = PumpMaster® – SJE
E = PumpMaster Plus® – SJE
G = AmpMaster® – SJE
H = VerticalMaster® – SJE
J = VerticalMaster® II – SJE ②
N = SignalMaster™ – SJE
P = MicroMaster® Plus – SJE ②
R = MicroMaster® – SJE ②
S = C I Diaphragm Level Switch – MP
T = Double Float® Master – SJE
X = MilliAmpMaster™

4th Character

1 = 10'
2 = 15' ①
3 = 20'
4 = 25' ①
5 = 30'
6 = 50'
7 = 75'
8 = 100'
9 = 125'

} Only available on select control switches.

5th Character

1 = 115 V piggyback
2 = 230 V piggyback
3 = Bare lead
4 = Single pole double throw (SPDT)

6th Character (optional)

U = Pump Up or Normally Closed (NC)
W = A2WT Cable Weight
B = Bulk Packed (internal only)

Characters 1-4

A2HT = High Temperature Float Switch
A2KM = Conery 3 pack

Character 5 *

Length (ft)
2 = 15' (Conery only)
3 = 20'
5 = 30'
6 = 50'

Character 6

1 = 115V Piggyback Plug
2 = 230V Piggyback Plug
3 = Bare Leads
4 = Single Pole Double Throw (SPDT)

Characters 7, 8, 9

PK3 = Pack of three

* No other lengths available in this Series.

① Only available on existing models.

② Discontinued models – contained mercury.



ITT

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Junior Super Single®, Super Single®, PumpMaster®, PumpMaster Plus®, AmpMaster®, MilliAmp-Master™, VerticalMaster®, VerticalMaster® II, Sensor Float®, Sensor Float® Mini, SignalMaster®, MicroMaster®, and MicroMaster® Plus are registered trademarks and tradenames of SJ Electro Systems, Inc. Double Float® Master is a registered trademark of SJE-Rhombus® Controls.

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