

Wastewater

# CentriPro

PUMP / CONTROL PANEL SWITCHES







CentriPro is a brand of ITT Corporation.

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Engineered for life

# **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 ¾ 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, ½ HP, 115/230 V
- Float Dimensions: 4.63" Long x 2.63" Diameter
- Nomenclature: see last page
- Available lengths: 20', 30' and 50' \*



# A2KM23WP3

## **Conery Mechanical Float Pack of 3**

#### **Features**

- Pack of three floats
- Narrow angle control for panel hookup
- 15' cord Type SJOOW 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)

<sup>\*</sup> No other lengths available in this Series.

# CentriPro

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              | MAXIMUM         | MAXIMUM       | CORD LENGTH | BARE  | PUMP   | CONTROL | (1)  | (2)  | MOUNTING |        |
|--------------------|-----------------|---------------|-------------|-------|--------|---------|------|------|----------|--------|
| NUMBER             | RUNNING AMPS    | STARTING AMPS | (FEET)      | LEADS | SWITCH | SWITCH  | N.0. | N.C. | STRAP    | WEIGHT |
| A2D13              | 13              | 85            | 10          | Х     | Х      | _       | Х    |      | Х        |        |
| A2D23U             | 13              | 85            | 15          | Х     | Х      | _       |      | Х    | Х        |        |
| A2D23W             | 13              | 85            | 15          | Х     | Х      | _       | Х    |      |          | Х      |
| A2D33              | 13              | 85            | 20          | Х     | Х      | _       | Х    |      | Х        |        |
| A2D33U             | 13              | 85            | 20          | Х     | Х      | _       |      | Х    | Х        |        |
| A2D33W             | 13              | 85            | 20          | Х     | Х      | _       | Х    |      |          | Х      |
| A2D53W             | 13              | 85            | 30          | Х     | Х      | _       | Х    |      |          | Х      |
| A2D63W             | 13              | 85            | 50          | Х     | Х      | _       | Х    |      |          | Х      |
| A2D83W             | 13              | 85            | 100         | Х     | Х      | _       | Х    |      |          | Х      |
| A2E23              | 15              | 85            | 15          | Х     | Х      | _       | Х    |      | Х        |        |
| A2E23U             | 15              | 85            | 15          | Х     | Х      | _       |      | Х    | Х        |        |
| A2E33              | 15              | 85            | 20          | Х     | Х      | _       | Х    |      | Х        |        |
| A2E53              | 15              | 85            | 30          | Х     | Х      | _       | Х    |      | Х        |        |
| A2E53U             | 15              | 85            | 30          | Х     | Х      | _       |      | Х    | Х        |        |
| A2E63              | 15              | 85            | 50          | Х     | Х      | _       | Х    |      | Х        |        |
| A2E63U             | 15              | 85            | 50          | Х     | Х      | _       |      | Х    | Х        |        |
| A2E73              | 15              | 85            | 75          | Х     | Х      | _       | Х    |      | Х        |        |
| A2E83              | 15              | 85            | 100         | Х     | Х      | _       | Х    |      | Х        |        |
| A2G33              | 20              | 120           | 20          | Х     | Х      | _       | Х    |      | Х        |        |
| A2G43              | 20              | 120           | 25          | Х     | Х      | _       | Х    |      | Х        |        |
| A2G53              | 20              | 120           | 30          | Х     | Х      | _       | Х    |      | Х        |        |
| A2G63              | 20              | 120           | 50          | Х     | Х      | _       | Х    |      | Х        |        |
| A2HT33             | 13              | 58            | 20          | Х     | Х      | Х       | Х    |      | Х        |        |
| A2HT53             | 13              | 58            | 30          | Х     | Х      | Х       | Х    |      | Х        |        |
| A2HT63             | 13              | 58            | 50          | Х     | Х      | Х       | Х    |      | Х        |        |
| A2N13              | 5               | N/A           | 10          | Х     | _      | Х       | Х    |      | Х        |        |
| A2N33              | 5               | N/A           | 20          | Х     | _      | Х       | Х    |      | Х        |        |
| A2N33U             | 5               | N/A           | 20          | Х     | _      | Х       |      | Х    | Х        |        |
| A2N93              | 5               | N/A           | 125         | Х     | _      | Х       | Х    |      | Х        |        |
| A2S23 <sup>①</sup> | 10              | N/A           | 15          | Х     | _      | Х       | Х    |      | Х        |        |
| A2S53 <sup>®</sup> | 10              | N/A           | 30          | Х     | _      | Х       | Х    |      | Х        |        |
| A2S63 <sup>®</sup> | 10              | N/A           | 50          | Х     | _      | Х       | Х    |      | Х        |        |
| A2X13              | See description | N/A           | 10          | Х     | _      | Х       | Х    |      | Х        |        |
| A2X33              | See description | N/A           | 20          | Х     | _      | Х       | Х    |      | Х        |        |
| A2X53              | See description | N/A           | 30          | Х     | _      | Х       | Х    |      | Х        |        |

N.O. (1) = PUMP DOWN

N.C.(2) = PUMPUP

 $<sup>\</sup>ensuremath{^{\tiny \scriptsize{\scriptsize{\scriptsize{0}}}}}$  Diaphragm switch with 6" differential.

# WIDE ANGLE 115 VOLT PIGGYBACK FLOAT SWITCHES TO DIRECTLY CONTROL PUMPS

| ORDER<br>NUMBER | MAXIMUM<br>AMPS | START<br>AMPS | 115 V<br>PLUG | CORD LENGTH<br>FEET | (1)<br>N.0. | (2)<br>N.C. | MOUNTING<br>STRAP |
|-----------------|-----------------|---------------|---------------|---------------------|-------------|-------------|-------------------|
| A2D11           | 13              | 85            | Х             | 10                  | Х           |             | Х                 |
| A2D31           | 13              | 85            | Х             | 20                  | Χ           |             | X                 |
| A2D51           | 13              | 85            | Х             | 30                  | Χ           |             | Χ                 |
| A2D61           | 13              | 85            | Х             | 50                  | Х           |             | Χ                 |
| A2E21           | 15              | 85            | Х             | 15                  | Χ           |             | Χ                 |
| A2E31           | 15              | 85            | Х             | 20                  | Χ           |             | Χ                 |
| A2E31U          | 15              | 85            | Χ             | 20                  |             | Х           | Χ                 |
| A2E51           | 15              | 85            | Х             | 30                  | Х           |             | Χ                 |
| A2E61           | 15              | 85            | Χ             | 50                  | Χ           |             | Χ                 |
| A2H11           | 13              | 60            | Х             | 10                  | Х           |             | Χ                 |
| A2H31           | 13              | 60            | Х             | 20                  | Х           |             | Χ                 |
| A2J11           | 15              | 85            | Х             | 10                  | Х           |             | Χ                 |
| A2J21           | 15              | 85            | Х             | 15                  | Χ           |             | Χ                 |
| A2J31           | 15              | 85            | Х             | 20                  | Х           |             | Χ                 |
| A2P01           | 13              | 78            | Х             | 10                  | Χ           |             | Χ                 |
| A2P21           | 13              | 78            | Х             | 15                  | Х           |             | Χ                 |
| A2P31           | 13              | 78            | Х             | 20                  | Х           |             | Χ                 |
| A2P51           | 13              | 78            | Х             | 30                  | Χ           |             | Χ                 |
| A2S21           | 13              | 60            | Х             | 15                  | Χ           |             | Χ                 |
| A2T31           | 13              | 78            | Х             | 20                  | Χ           |             | Χ                 |
| A2T51           | 13              | 78            | Х             | 30                  | Х           |             | Х                 |

# WIDE ANGLE 230 VOLT PIGGYBACK FLOAT SWITCHES TO DIRECTLY CONTROL PUMPS

| ORDER<br>NUMBER | MAXIMUM<br>AMPS | START<br>AMPS | 230 V<br>PLUG | CORD LENGTH<br>FEET | (1)<br>N.0. | (2)<br>N.C. | MOUNTING<br>STRAP |
|-----------------|-----------------|---------------|---------------|---------------------|-------------|-------------|-------------------|
| A2D12           | 13              | 85            | Х             | 10                  | Х           |             | Х                 |
| A2D32           | 13              | 85            | Х             | 20                  | Χ           |             | Х                 |
| A2E22           | 15              | 85            | Х             | 15                  | Х           |             | Х                 |
| A2E32           | 15              | 85            | Х             | 20                  | Χ           |             | Х                 |
| A2E32U          | 15              | 85            | Х             | 20                  |             | Х           | Х                 |
| A2E52           | 15              | 85            | Х             | 30                  | Χ           |             | Х                 |
| A2E62           | 15              | 85            | Х             | 50                  | Χ           |             | Х                 |
| A2H12           | 12              | 60            | Х             | 10                  | Χ           |             | Х                 |
| A2H32           | 12              | 60            | Х             | 20                  | Χ           |             | Х                 |
| A2J12           | 10              | 60            | Х             | 10                  | Χ           |             | Х                 |
| A2J22           | 10              | 60            | Х             | 15                  | Χ           |             | Х                 |
| A2S22           | 13              | 60            | Х             | 15                  | Χ           |             | Х                 |
| A2T32           | 13              | 78            | Х             | 20                  | Χ           |             | Х                 |
| A2T52           | 13              | 78            | Х             | 30                  | Χ           |             | X                 |

N.O. (1) = PUMP DOWN

N.C.(2) = PUMPUP

# **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 – SIE ③

P = MicroMaster® Plus – SJE ② R = MicroMaster® – SJE ②

S = C I Diaphragm Level Switch – MP T = Double Float® Master – SJE

X = MilliAmpMaster<sup>™</sup>

### 4th Character

1

 $= 10^{\circ}$ 

2 = 15' 1) 3 = 20'4  $= 25' \, \odot$ 5 = 30'6 = 50'7 = 75'Only available on select 8 100' =control switches. 9 = 125'

# 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'

 $6 = 50^{\circ}$ 

# **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

- ① Only available on existing models.
- 2 Discontinued models contained mercury.

### 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.



ITT

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<sup>\*</sup> No other lengths available in this Series.