

# GENERAL PURPOSE CONTROLS WITH CHOICE OF DUAL OR TRIPLE SWITCHES

**30 inHg Vacuum to 3000 psi**

## PSW-850 Series



- ✓ **2- or 3-Switch Outputs—  
Can be Separated Up to  
100% of Range**
- ✓ **Adjustable Pressure  
Ranges**
- ✓ **NEMA 1 Enclosure**

The PSW-850 is a simple, economical control for processes that require multiple switching capabilities. Dual or triple switch controls provide multi-outputs in applications such as alarm and shutdown, pre-alarm and alarm, high/low limit, and level staging functions.

Triple-switch models have been used for liquid level control. In this application, 3 pressure settings correspond to “pumping out” elevations in a sump pump.

### SPECIFICATIONS

**Approvals:** UL, CE compliant

**Storage Temperature:** -54 to 71°C  
(-67 to 158°F)

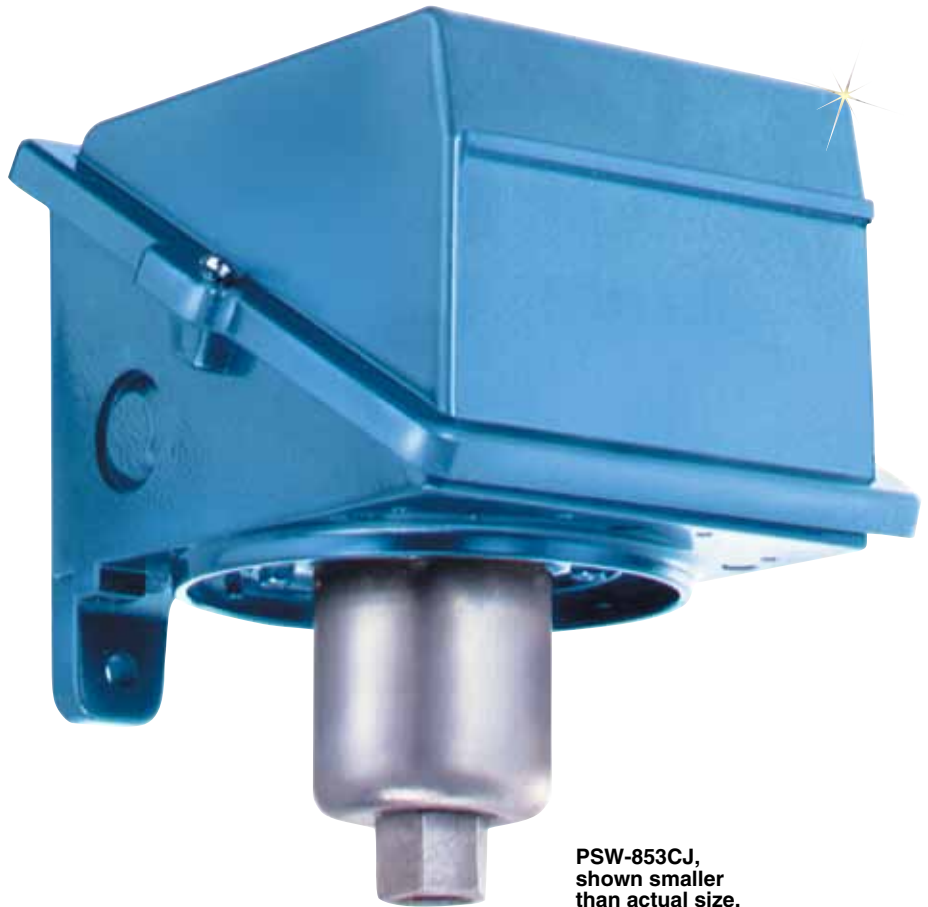
**Ambient Temperature:** -40 to 70°C  
(-40 to 160°F), except model  
PSW-852A: -40 to 70°C (0 to 160°F);  
setpoint typically shifts less than 1%  
of range for a 30°C (54°F) ambient  
temperature change

**Setpoint Repeatability:** ±2% of  
adjustable range, except model  
PSW-852E: ±3% of adjustable range

**Shock:** Setpoint repeats after 15 g,  
10 ms duration

**Vibration:** Setpoint repeats after  
2.5 g, 5 to 500 Hz

**Enclosure:** Die-cast aluminum, epoxy  
powder coated, gasketed, captive  
cover screws



PSW-853CJ,  
shown smaller  
than actual size.

**See switch  
accessories online  
for audible alarms  
and relay modules.**

**Enclosure Dimensions:**  
102 H x 125 W x 140 mm D  
(4 x 4.9 x 5.5"); 210 mm (8.25")  
maximum height with pressure port

**Enclosure Classification:** Complies  
with NEMA 1 requirements

**Switch Output:** 2 or 3 SPDT;  
switches can be separated up to  
100%, except models PSW-852A  
and PSW-852B: 30%; switches  
can be wired “normally open” or  
“normally closed”

**Electrical Rating:** 15 A  
125/250/480 Vac resistive

**Weight:** Approx. 1.4 to 3.4 kg  
(3 to 7.5 lb) (varies with model)

**Electrical Connection:** Three 22 mm  
(7/8") diameter knockouts

**Pressure Connection:** ¼ FNPT  
except model PSW-852A: ½ FNPT

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## To Order

| MODEL NO.                                                                                                                   | RANGE                        |                   | DEADBAND<br>STANDARD UNITS    | PROOF<br>PRESSURE | SWITCH       |
|-----------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-------------------------------|-------------------|--------------|
|                                                                                                                             | STANDARD                     | METRIC            |                               |                   |              |
| DUAL SETPOINTS, FIXED DEADBAND, BUNA-N DIAPHRAGM, O-RING, ½ FNPT ALUMINUM PRESSURE CONNECTION                               |                              |                   |                               |                   |              |
| PSW-852AA                                                                                                                   | -300 to 0 inH <sub>2</sub> O | -747 to 0 mbar    | 0.2 to 8 inH <sub>2</sub> O   | 100 psi           | (2)15 A SPDT |
| PSW-852AB                                                                                                                   | -10 to 10 inH <sub>2</sub> O | -25 to 25 mbar    | 0.1 to 0.6 inH <sub>2</sub> O | 100 psi           | (2)15 A SPDT |
| PSW-852AC                                                                                                                   | -50 to 50 inH <sub>2</sub> O | -125 to 125 mbar  | 0.1 to 3 inH <sub>2</sub> O   | 100 psi           | (2)15 A SPDT |
| PSW-852AD                                                                                                                   | 0.5 to 5 inH <sub>2</sub> O  | 1.25 to 12.5 mbar | 0.1 to 0.3 inH <sub>2</sub> O | 100 psi           | (2)15 A SPDT |
| PSW-852AE                                                                                                                   | 2.5 to 50 inH <sub>2</sub> O | 6 to 125 mbar     | 0.1 to 0.8 inH <sub>2</sub> O | 100 psi           | (2)15 A SPDT |
| PSW-852AF                                                                                                                   | 10 to 250 inH <sub>2</sub> O | 25 to 622 mbar    | 0.1 to 8 inH <sub>2</sub> O   | 100 psi           | (2)15 A SPDT |
| DUAL SETPOINTS, FIXED DEADBAND, 316 SS DIAPHRAGM, FKM O-RING, ¼ FNPT 316L SS PRESSURE CONNECTION                            |                              |                   |                               |                   |              |
| PSW-852BI                                                                                                                   | 0 to 20 psi                  | 0 to 1.4 bar      | 0.2 to 4 psi                  | 225 psi           | (2)15 A SPDT |
| PSW-852BK                                                                                                                   | 0 to 50 psi                  | 0 to 3.4 bar      | 0.7 to 6 psi                  | 225 psi           | (2)15 A SPDT |
| PSW-852BL                                                                                                                   | 0 to 100 psi                 | 0 to 6.9 bar      | 1 to 7 psi                    | 225 psi           | (2)15 A SPDT |
| DUAL SETPOINTS, FIXED DEADBAND, SEALED BRASS BELLOWS, ¼ FNPT NICKEL-PLATED BRASS PRESSURE CONNECTION                        |                              |                   |                               |                   |              |
| PSW-852CH                                                                                                                   | 30 inHg vac to 20 psi        | -1 to 1.4 bar     | 0.4 to 2.4 inHg               | 25 psi            | (2)15 A SPDT |
| PSW-852CG                                                                                                                   | 0 to 80 inH <sub>2</sub> O   | 0 to 200 mbar     | 4 to 12 inH <sub>2</sub> O    | 5 psi             | (2)15 A SPDT |
| PSW-852CJ                                                                                                                   | 0 to 30 psi                  | 0 to 2 bar        | 0.2 to 1.2 psi                | 40 psi            | (2)15 A SPDT |
| PSW-852CL                                                                                                                   | 0 to 100 psi                 | 0 to 6.9 bar      | 0.4 to 1.6 psi                | 125 psi           | (2)15 A SPDT |
| PSW-852CM                                                                                                                   | 0 to 200 psi                 | 0 to 13.7 bar     | 0.6 to 4 psi                  | 200 psi           | (2)15 A SPDT |
| DUAL SETPOINTS, FIXED DEADBAND, WELDED 316L SS BELLOWS, ¼ FNPT PRESSURE CONNECTION                                          |                              |                   |                               |                   |              |
| PSW-852DN                                                                                                                   | 0 to 500 psi                 | 0 to 34.5 bar     | 6 to 18 psi                   | 575 psi           | (2)15 A SPDT |
| DUAL SETPOINTS, FIXED DEADBAND, 303 SS PISTON, BUNA-N O-RING, ¼ FNPT 303 SS PRESSURE CONNECTION                             |                              |                   |                               |                   |              |
| PSW-852EO                                                                                                                   | 100 to 1000 psi              | 7 to 69 bar       | 60 to 300 psi                 | 10,000 psi        | (2)15 A SPDT |
| PSW-852EP                                                                                                                   | 200 to 3000 psi              | 13.8 to 206 bar   | 80 to 500 psi                 | 10,000 psi        | (2)15 A SPDT |
| DUAL SETPOINTS, REFERENCE ADJUSTMENT, FIXED DEADBAND, SEALED BRASS BELLOWS, ¼ FNPT NICKEL-PLATED BRASS PRESSURE CONNECTION  |                              |                   |                               |                   |              |
| PSW-855CH                                                                                                                   | 30 inHg vac. to 20 psi       | -1 to 1.4 bar     | 0.4 to 2.4 inHg               | 25 psi            | (2)15 A SPDT |
| PSW-855CJ                                                                                                                   | 0 to 30 psi                  | 0 to 2 bar        | 0.2 to 1.2 psi                | 40 psi            | (2)15 A SPDT |
| PSW-855CL                                                                                                                   | 0 to 100 psi                 | 0 to 6.9 bar      | 0.4 to 1.6 psi                | 125 psi           | (2)15 A SPDT |
| PSW-855CM                                                                                                                   | 0 to 200 psi                 | 0 to 13.7 bar     | 0.6 to 4 psi                  | 200 psi           | (2)15 A SPDT |
| DUAL SETPOINTS, REFERENCE ADJUSTMENT, FIXED DEADBAND, WELDED 316L SS BELLOWS, ¼ FNPT 316L SS PRESSURE CONNECTION            |                              |                   |                               |                   |              |
| PSW-855DN                                                                                                                   | 0 to 500 psi                 | 0 to 34 bar       | 6 to 18 psi                   | 575 psi           | (2)15 A SPDT |
| THREE SETPOINTS, FIXED DEADBAND, SEALED BRASS BELLOWS, ¼ FNPT NICKEL-PLATED BRASS PRESSURE CONNECTION                       |                              |                   |                               |                   |              |
| PSW-853CH                                                                                                                   | 30 inHg vac. to 20 psi       | -1 to 1.4 bar     | 0.4 to 2.4 inHg               | 25 psi            | (3)15 A SPDT |
| PSW-853CJ                                                                                                                   | 0 to 30 psi                  | 0 to 2 bar        | 0.2 to 1.2 psi                | 40 psi            | (3)15 A SPDT |
| PSW-853CL                                                                                                                   | 0 to 100 psi                 | 0 to 6.9 bar      | 0.4 to 1.6 psi                | 125 psi           | (3)15 A SPDT |
| PSW-853CM                                                                                                                   | 0 to 200 psi                 | 0 to 13.7 bar     | 0.6 to 4 psi                  | 200 psi           | (3)15 A SPDT |
| THREE SETPOINTS, FIXED DEADBAND, WELDED 316L SS BELLOWS, ¼ FNPT 316L SS PRESSURE CONNECTION                                 |                              |                   |                               |                   |              |
| PSW-853DN                                                                                                                   | 0 to 500 psi                 | 0 to 34.5 bar     | 6 to 8 psi                    | 575 psi           | (3)15 A SPDT |
| THREE SETPOINTS, REFERENCE ADJUSTMENT, FIXED DEADBAND, SEALED BRASS BELLOWS, ¼ FNPT NICKEL-PLATED BRASS PRESSURE CONNECTION |                              |                   |                               |                   |              |
| PSW-856CH                                                                                                                   | 30 inHg vac to 20 psi        | -1 to 1.4 bar     | 0.4 to 2.4 inHg               | 25 psi            | (3)15 A SPDT |
| PSW-856CJ                                                                                                                   | 0 to 30 psi                  | 0 to 2 bar        | 0.2 to 1.2 psi                | 40 psi            | (3)15 A SPDT |
| PSW-856CL                                                                                                                   | 0 to 100 psi                 | 0 to 6.9 bar      | 0.4 to 1.6 psi                | 125 psi           | (3)15 A SPDT |
| PSW-856CM                                                                                                                   | 0 to 200 psi                 | 0 to 13.7 bar     | 0.6 to 4 psi                  | 200 psi           | (3)15 A SPDT |
| THREE SETPOINTS, FIXED DEADBAND, WELDED 316L SS BELLOWS, ¼ FNPT 316L SS PRESSURE CONNECTION                                 |                              |                   |                               |                   |              |
| PSW-856DN                                                                                                                   | 0 to 500 psi                 | 0 to 34.5 bar     | 6 to 8 psi                    | 575 psi           | (3)15 A SPDT |

Comes complete with operator's manual.

Ordering Example: PSW-856CJ, control switch with 3 setpoints, reference dial, sealed brass bellows, 1/4 FNPT fitting and range of 0 to 30 psi.