



**SYSTEM  
SENSOR**®



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## PSP1A Plug-in Special Purpose Supervisory Switch

### Specifications

Dimensions:	12cm L x 7.5cm W x 5.6 cm D (4.73" L x 2.94" W x 2.21" D) With bracket – 21.5 cm L (8.5" L )
Weight:	.774kg (1.7 lbs.)
Enclosure Rating:	Cast-aluminum rain-tight outlet box, Indoor/Outdoor NEMA 3
Tamper Protection:	Cover tamper switch and tamper-proof cover screws
Operating Voltage:	6/12/24 volts AC/DC
Maximum Operating Current:	250 mA
Operating Temperature:	-20°C to 65°C (-4° F to 149° F)

### Important

#### **Please Read Carefully and Save**

This instruction manual contains important information about the installation and operation of this supervisory switch. This manual should be left with the owner/user of this equipment.

### General Information

The unit is intended for supervision of non-rising stem gate valves and other valves that cannot be monitored by conventional supervisory switches. Turning the valve wheel will pull the plug out of the jack and close a set of normally open contacts. A lockout will prevent reinsertion and require removal of the cover. Tamperproof screws are provided for the cover. Removal of cover, or cutting of cord or ground faults will cause an open circuit. The device should be wired to the trouble circuit of a fire alarm control panel.

### Installation

1. Choose a location near the valve (safe from flooding) and mount the bracket to the wall.
2. Rotate the box on the bracket until the plug faces the valve. The plug must also point downward. Tighten the locknut on the pivot.
3. Turn the valve to the full-open position. Insert the plug into the jack. Tightly loop the 8-ft. waterproof cable through the valve wheel and back into the box through the cable clamp. Close valve to check that plug pulls out and then turn valve back to full-open position. Cut the cord to the minimum length required to make the connections within the box.
4. For all exterior applications, use  $\frac{1}{2}$ " NPT, listed liquid-tight conduit connectors.
5. Wire the device as per the circuit diagrams shown (see Figures 2-5). Trim the unused black wire flush with the cable casing and cap the red wire of the cover tamper switch.
6. If a longer cable is required, use SJOW A 18-2, two conductor 18-gauge stranded rubber-jacketed cable.
7. Using the adhesive pad and wire tie provided, dress the wires away from the lock-out mechanism.
8. When installing the cover, make sure the O-rings are in place on the cover screws beneath the cover.

Figure 1. PSP1A:



**WARNING**

As stipulated by Factory Mutual and Underwriter's Laboratories, this unit is not intended or designed for ordinary usage. It is a special application device to be used for unusual conditions where no other approved or listed method of protection is available or practical, such as non-rising stem gate valves.

As this unit does not meet NFPA codes and standards (requiring restoration of the signal when the valve is positioned to normal), special attention should be given by the responsible parties to assure that the proper operation of this device is maintained. This device should only be restored to normal when the valve is in normal condition.

Figure 2. Single device Class B:

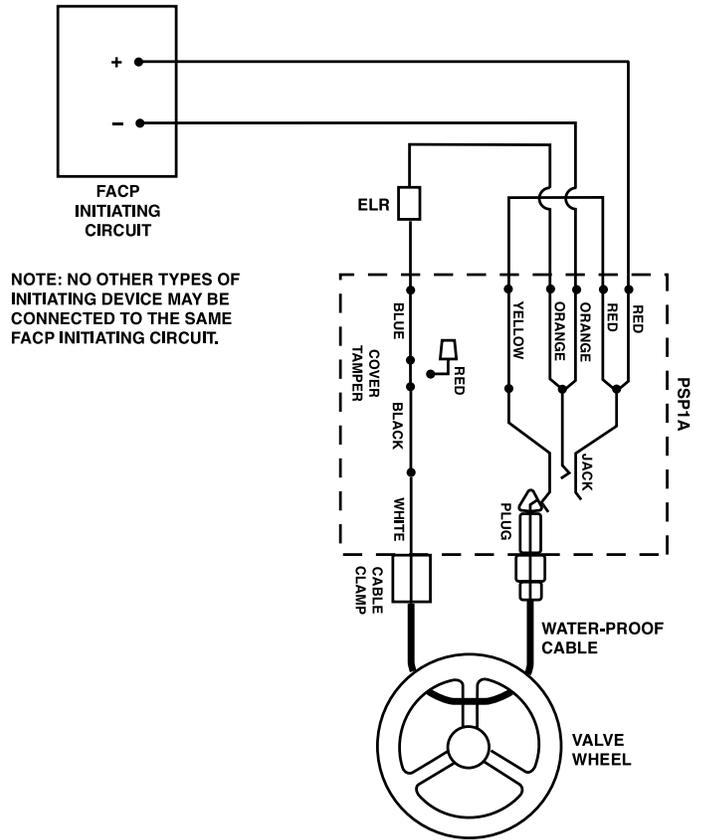


Figure 3. Multiple devices Class B:

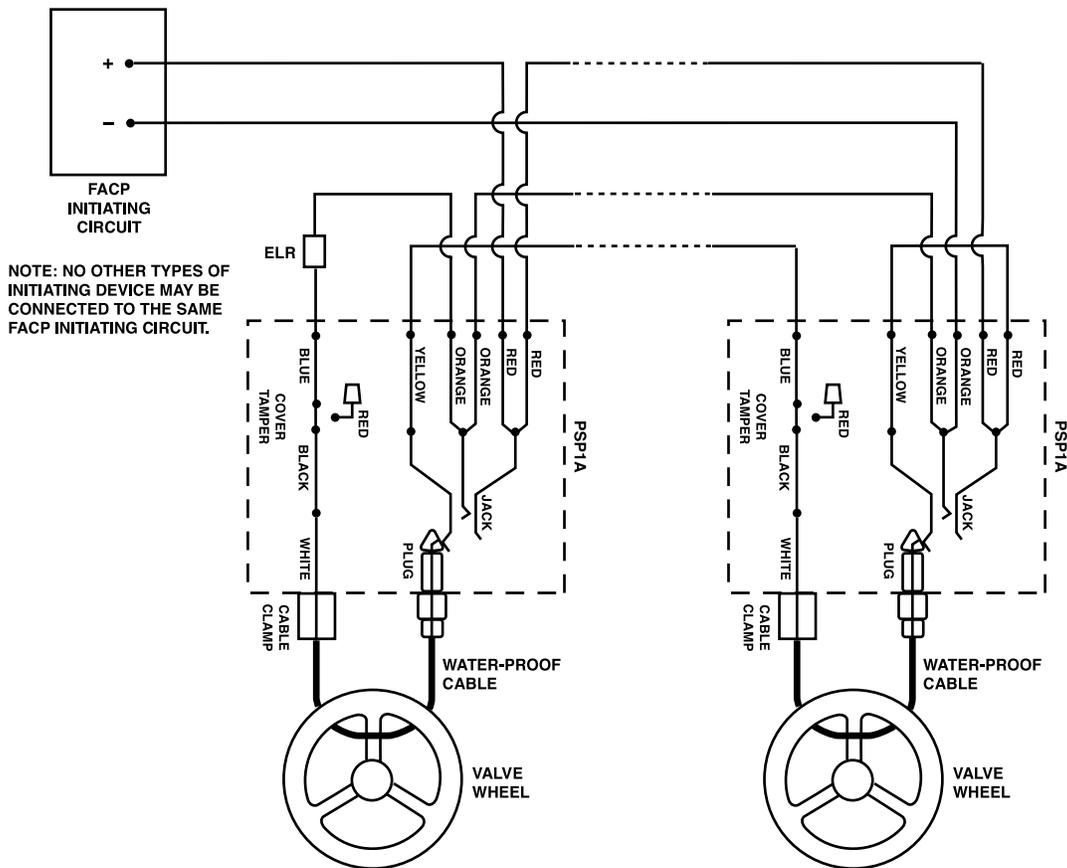


Figure 4. Single device Class A:

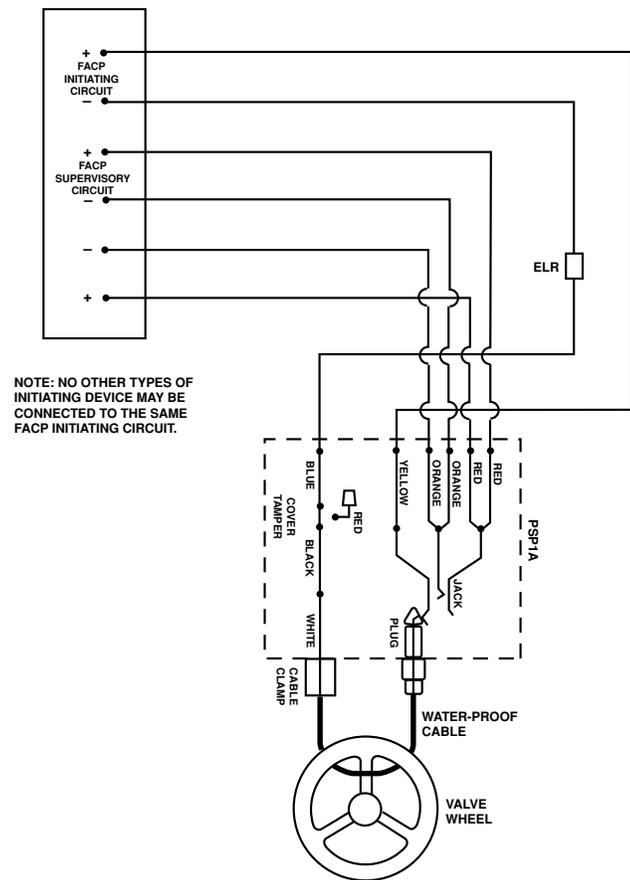
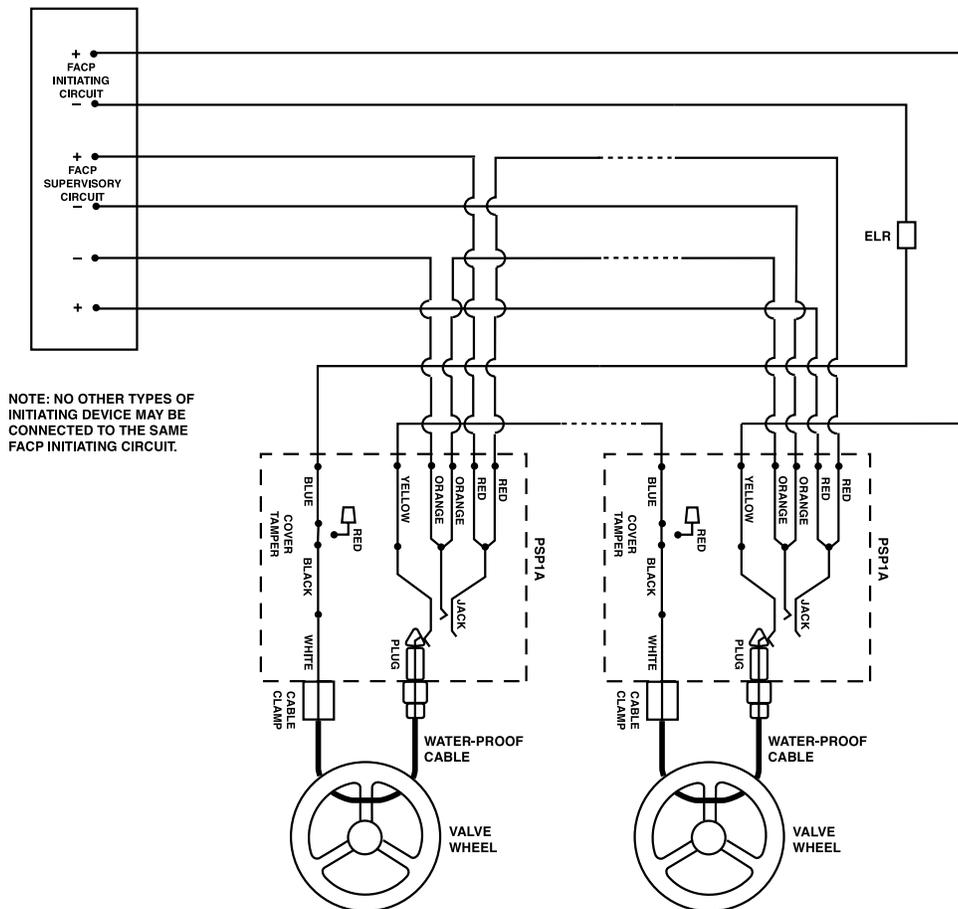


Figure 5. Multiple devices Class A:



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#### Three-Year Limited Warranty

System Sensor warrants its enclosed supervisory switch to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this supervisory switch. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the repair or replacement of any part of the supervisory switch which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor Canada (905-812-0767) for a Return Authorization number, send defective units postage prepaid to: System Sensor Canada, Customer Service Department, RA # \_\_\_\_\_, 6581 Kitimat Road, Unit #6, Mis-

sissauga, Ontario, Canada L5N 3T5. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to repair or replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from province to province .