

Installation Instructions

TS-OSY

Tamper Switch

Series C200, C300, LFC300

2½"–10"

Series 2000SS, 3000SS

2½"–12"

⚠ WARNING



Read this Manual **BEFORE** using this equipment. Failure to read and follow all safety and use information can result in death, serious personal injury, property damage, or damage to the equipment. Keep this Manual for future reference.



⚠ CAUTION

Before wiring supervisory switches in fire protection systems, refer to the following standards:

NFPA 13: Standard for the Installation of Sprinkler Systems

NFPA 25: Inspection, Testing, Maintenance of Water-based Fire Protection Systems

NFPA 70: National Electrical Code

NFPA 72: National Fire Alarm Code

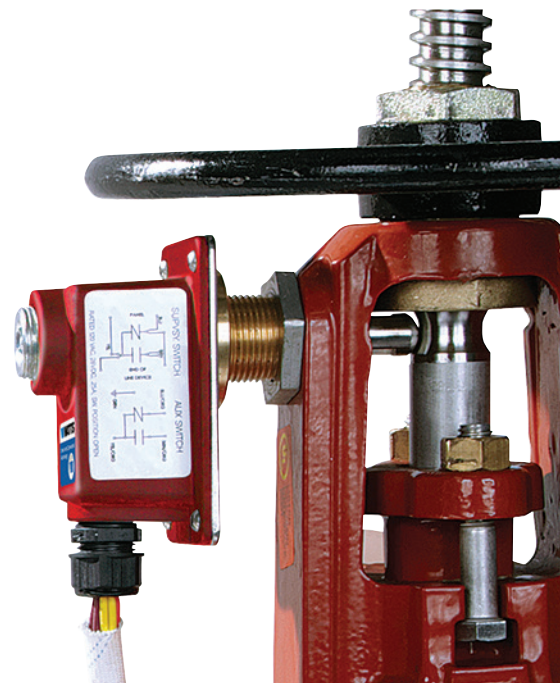
CSA C22.1 NO.1 Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations Section 32

CAN/ULC-S524, Standard for Installation of Fire Alarm Systems

⚠ WARNING

- Metallic conduit required by NEC for proper grounding conduit joint must be sealed with a conductive sealant.
- Install switch in accordance with National Electrical Code and/or local ordinances.
- Wiring methods shall be in accordance with CSA C22.1, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations, Section 32 and CAN/ULC-S524, Standard for Installation of Fire Alarm Systems Assure All Devices Are Properly Grounded.

Approvals



Integrated tamper switch on OSY gate valve with switch rod in valve stem groove

Tamper switches integrated on the OSY-TS model of a valve assembly add protection against fire.

The tamper switch assembly consists of two SPDT switches. The switch assembly is designed to send a signal when the valve is closed or when the cover is removed. When the valve is fully open, the switch is in the neutral position. Closing the valve causes the switch rod to come out of the valve stem groove, activating the signal. Removing the cover causes loss of contact with the switch rod, activating the signal.

NOTICE

Wire the tamper switch to a fire alarm control panel in accordance with the schematic diagram on page 2. Verify that the switch is operating as intended before commissioning the product. Proper operation must be assured. If adjustment is required to comply with NFPA standards and local ordinances, follow the field installation procedure, starting at step 7. Follow all steps of the field instructions when replacing or rotating the switch.

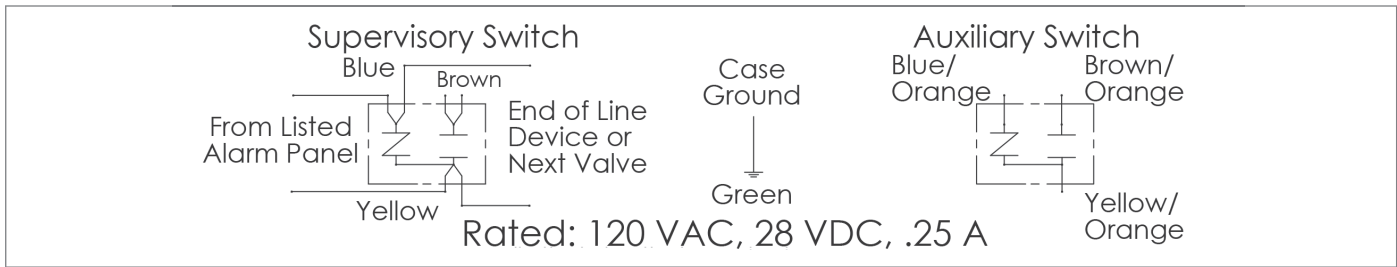
Tools Requirement

For field installation and rotation of the switch:

- ⅜" socket with extension
- ⅝" open end wrench
- 1¼" open end wrench

Wiring Notes

- Connection to power limited circuitry is required.
- The auxiliary switch is for supplemental use only and shall not be used for fire alarm signaling applications.
- Switches are checked at the factory. Checking the switches after field installation is strongly advised. Check continuity with the valve fully open. The switches activate within two (2) turns from open.



Field Service of Installed Switch

Field repair by anyone other than authorized (factory) personnel is not recommended. Consult factory before attempting any repairs. Tamper resistant tools are required. Limited internal parts are available.

All replacement parts must be obtained from the manufacturer to assure proper operation of the valve and to maintain agency approval of the device.

Field Installation of Switch

1. Close the valve.
2. Remove the wheel nut with an appropriate-sized open end wrench.
3. Remove the handwheel.
4. Screw the switch unit into the tapped hole until the bushing is flush with the inside of the yoke.
5. Tighten the nut against the yoke with an open end wrench to 50 ft-lb minimum.
6. Reinstall the handwheel.
7. Open the valve until the switch rod is halfway into the groove.
8. Remove the security plug.
9. Using a $\frac{9}{16}$ " socket with extension, loosen the adjustment nut until it depresses the switch tab; counteract rotation of the rod with a $\frac{9}{16}$ " open end wrench. Listen for two clicks.

At this point there should be continuity through the brown and yellow leads. The brown with orange stripe and yellow with orange stripe leads must have continuity as well.

10. Open the valve fully, so the rod is seated in the groove.
At this point the blue to yellow leads and blue/orange to yellow/orange leads must have continuity. If both switches are not in unison, further adjustments must be made.

NOTICE

The switch must meet this specific installation so that closing 20% of the valve or making a maximum of four (4) revolutions causes the switch to change status. Verify this after setting the limits.



Field Rotation of Switch

1. Loosen the nut against the yoke with a $1\frac{3}{4}$ " open-end wrench.
2. Rotate the switch to the desired position and tighten the nut.
3. Perform steps 7 to 10 in the preceding procedure to assure the switch operates properly.

Limited Warranty: Watts (the "Company") warrants each product to be free from defects in material and workmanship under normal usage for a period of one year from the date of original shipment. In the event of such defects within the warranty period, the Company will, at its option, replace or recondition the product without charge.

THE WARRANTY SET FORTH HEREIN IS GIVEN EXPRESSLY AND IS THE ONLY WARRANTY GIVEN BY THE COMPANY WITH RESPECT TO THE PRODUCT. THE COMPANY MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED. THE COMPANY HEREBY SPECIFICALLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

The remedy described in the first paragraph of this warranty shall constitute the sole and exclusive remedy for breach of warranty, and the Company shall not be responsible for any incidental, special or consequential damages, including without limitation, lost profits or the cost of repairing or replacing other property which is damaged if this product does not work properly, other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemical, or any other circumstances over which the Company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication, improper installation or improper maintenance or alteration of the product.

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