

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

TS-OSY

Supervisory Switch

The supervisory tamper switch is intended for use in fire service systems. The switch indicates the open or closed position of the OS&Y gate valve. Designed for indoor or outdoor application.

Features

- Factory installed and tested to eliminate lengthy field instruction and opportunity for error
- Industry-standard switch to meet all traditional specifications and code requirements
- Operation calibrated at factory to eliminate field calibration
- Rigid mounting connection to gate valve without brackets that can bend, loosen, or deflect from position

Method of Operation

The supervisory tamper switch consists of two SPDT switches. The switch sends an electrical signal to a local fire alarm control panel indicating a tampered condition of the attached OS&Y gate valve wheel when turned 20 percent toward the closed direction, or a maximum of four (4) revolutions.

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.

⚠ CAUTION

Before wiring the supervisory switch in a fire protection system, 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 the 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.



TS-OSY

NOTICE

This part is for use only on the OSY-TS model of a valve assembly. Tampering and replacement with non-factory components may adversely affect the safe use of the system.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Specification

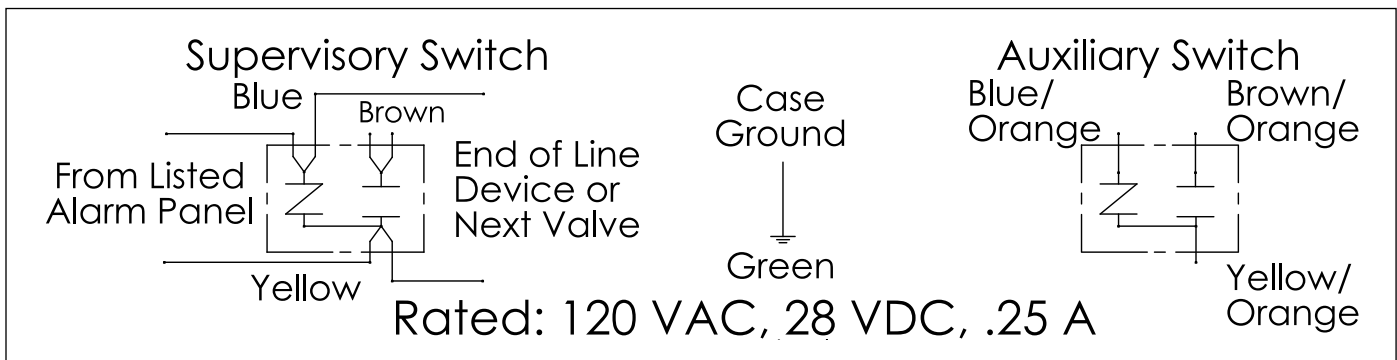
UL Certified, Safety Signaling (Control No. 3L38) supervisory switches shall be furnished and installed on OS&Y type valves that can be used to isolate the flow of water to any portion of the fire sprinkler system, where indicated on the drawings and plans and as required by applicable codes and standards. The supervisory switch shall be NEMA 4X and 6P rated and suitable for use indoors or outdoors. The supervisory switch shall be listed and labeled as defined in NFPA 70 by a qualified testing agency and marked for intended location and application. It shall comply with NFPA and NFPA 13R. The switch shall be factory-installed and calibrated to the valve by the valve manufacturer. The switch contacts shall be rated at 120 VAC, 28 VDC, .25A. The supervisory switch shall be Watts TS-OSY.

Materials

Gray and ductile iron castings

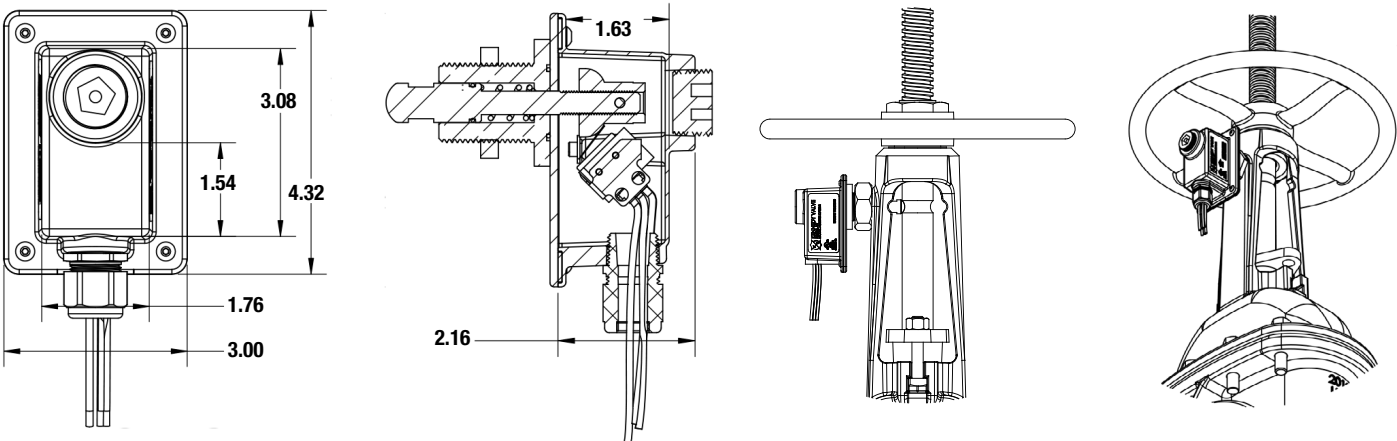
Wiring Schematic

This diagram presents the proper wiring of the supervisory tamper switch to a fire alarm control panel.



Dimensions

These illustrations show the dimensions of the tamper switch and the positioning of the switch on an OS&Y gate valve.



Weight

2.4 lb

Approvals



CERTIFIED

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.
- Switch functions are checked at the factory. Checking the switch after field installation is strongly advised. Check continuity with the valve fully open. Switch functions activate within two (2) turns from open.