

OSY2 Supervisory Switch



Models Available

OSY2	OS&Y Supervisory Switch
OSY2A	OS&Y Supervisory Switch (ULC/Canadian)

Replacement Parts

OSYRK	Replacement Hardware Kit
546-7000	Cover Tamper Switch Kit
S07-66-XX	Tamper Screws for Cover
WFDW	Cover Wrench
HEXW	Replacement Hex Wrench



Product Overview

NEMA 3R rated enclosure

User-friendly mounting bracket fits newer valve yokes

Single side conduit entry does not require right angle fittings

Adjustable length actuator eliminates the need for cutting the shaft

Accommodates up to 12 AWG wire

Three position switch monitors vandal and valve close signals

Two SPDT contacts are enclosed in a durable terminal block for added strength

100% synchronization activates both alarm panel and local bell simultaneously

System Sensor's OSY2 is used to monitor the open position of an Outside Screw and Yoke (OS&Y) type gate valve.

Robust Construction. The OSY2 consists of a rugged housing, intended for indoor and outdoor use. When installed with the actuator in the vertical position, the OSY2 is NEMA 3R rated per UL.

Application Flexibility. The OSY2 features a user-friendly mounting bracket and adjustable shaft to permit mounting to most OS&Y valves, ranging in size from 1" to 12". Its right angle design and wide bracket span provides maximum clearance for valve components, to accommodate troublesome valves. Removing the OSY2's gate valve bracket allows the unit to monitor side-bracket style pressure reducing valves.

Simplified Operation. Installation is made easier with the OSY2's single side conduit entrance. By providing a direct conduit pathway to the electrical source, right angle fittings are not required. Installation is further simplified by the OSY2's adjustable length actuator, which eliminates the need for cutting the shaft.

Reliable Performance. The OSY2 is equipped with tamper resistant cover screws to prevent unauthorized entry. Inside, two sets of SPDT (Form C) synchronized switches are enclosed in a durable terminal block to assure reliable performance.



Engineering Specifications

Model shall be model number OSY2 supervisory switch as manufactured by System Sensor. OSY2 shall be installed on each valve as designated on the drawings and/or as specified herein. Switches shall be mounted so as not to interfere with the normal operation of the valve and shall be adjusted to operate within two revolutions of the valve control or when the stem has moved no more than one-fifth of the distance from its normal position. The mechanism shall be contained in a weatherproof die cast metal housing, which shall provide a side entrance for 1/2" conduit and incorporate the necessary facilities for attachment to the valve. A grounding provision is provided. The switch assembly shall include two switches each with a rated capacity of 10 Amp @ 125/250VAC and 2.5 Amp @ 24VDC. The cover shall contain tamper-resistant screws for which a security wrench will be provided with each switch. The OSY2 shall be Underwriters Laboratories listed for indoor or outdoor use. The OSY2 shall be Factory Mutual, CSFM, and MEA approved.

Standard Specifications

Contact Ratings

Two sets of SPDT (Form C)
10.0 A @ 125/250V AC
2.5 @ 6/12/24V DC

Overall Switch Dimensions

5³/₄"H x 3¹/₂"W x 3¹/₄"D
(14.6cm x 8.9cm x 8.2cm)

Bracket Span

2¹/₄"H x 6³/₄"W x 1"D
(5.7cm x 17.1cm x 2.5cm)

Maximum Stem Extension

2⁵/₈" (6.7 cm)

Shipping Weight

2.8 lbs. (1.3 kg)

Conduit Entrances

One single side open for 1/2" conduit

Operating Temperature Range

32°F to 120°F (0°C to 49°C)
Note: The OSY2 will operate from -40°F to 120°F (-40°C to 49°C); however UL does not test control valve supervisory switches below 32°F (0°C).

Enclosure Rating

UL indoor/outdoor
NEMA 3R when mounted with the actuator vertical

Cover Tamper Switch

Standard with ULC model
Optional for UL model, part no. 546-7000

Service Use

Automatic Sprinkler: NFPA 13
One or Two Family Dwelling: NFPA 13D
Residential Occupancies up to 4 stories: NFPA 13R
National Fire Alarm code: NFPA 72

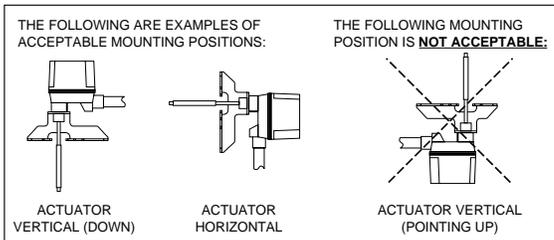
Warranty

3 years

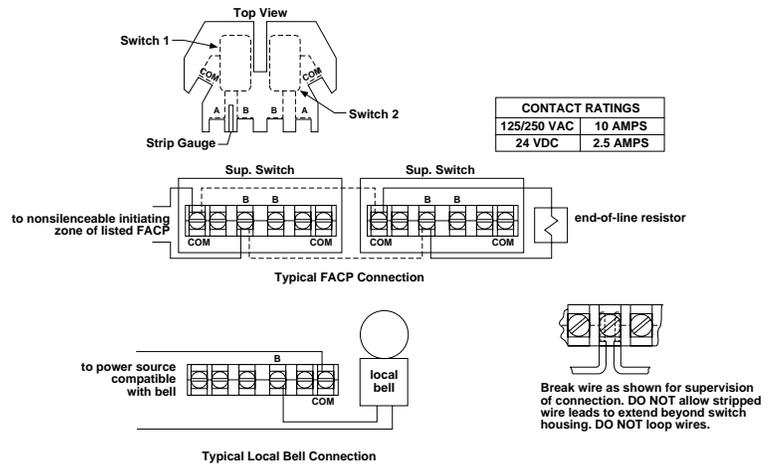
U.S. Patent Nos.

5,478,038; 5,213,205

OSY2 Mounting



Electrical Connections for OSY2



Ordering Information

Model Number	Description
OSY2	Outside Screw and Yoke valve supervisory switch
OSY2A	Outside Screw and Yoke valve supervisory switch (ULC model)

Part Number	Description
OSYRK	Replacement hardware kit (wrenches, screw pack and J-hooks)
546-7000	Cover tamper switch kit
S07-66-XX	Tamper screws for cover
WFDW	Replacement tamper proof wrench for cover
HEXW	Replacement hex wrench

System Sensor Sales and Service

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