

# OSYEXP and PIBVEXP Explosion Proof Supervisory Switch



## Models Available

OSYEXP  
PIBVEXP



## Product Overview

**Designed and approved to operate in hazardous locations**

**NEMA 1, 7 and 9 enclosure rating**

**Compact, rugged housing**

**Ample wiring space**

**Captivated cover screws**

**Single conduit entrance**

**System Sensor's OSYEXP and PIBVEXP explosion proof supervisory switches are designed to handle extreme conditions. These units are ideal for installation in hazardous locations classified as follows:**

Class I, Groups C, D, Division 1 & 2  
Class II, Groups E, F, G, Division 1 & 2

**Intended Use.** The OSYEXP is intended for use with outside screw and yoke type valves, while the PIBVEXP monitors the open position of post indicator and butterfly type valves.

**Robust Construction.** The OSYEXP and PIBVEXP switches consist of a compact and rugged NEMA 1, 7 and 9 rated enclosure. The enclosure operates across a wide temperature range, from -40°F to 160°F.

**Simplified Operation.** The OSYEXP and PIBVEXP covers are secured with four captivated screws to prevent screw misplacement while cover is removed. A single tapped conduit entrance and ample wiring space provide quick and easy electrical connection.

## Engineering Specifications

Model shall be a OSYEXP or PIBVEXP as manufactured by System Sensor. The OSYEXP and PIBVEXP shall be installed on each valve as designated on the drawings and/or 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 valve flag has moved no more than one-fifth of the distance from its normal position. The mechanism shall be contained in a NEMA 1, 7 and 9 rated metal enclosure, which shall provide a side entrance for 1/2" conduit and incorporate a 1/2" NPT nipple for attachment to the valve body. A grounding provision shall be provided. The switch assembly shall include one SPDT (Form C) switch with a rated capacity of 15 A, 125/250/480 VAC; 1/8 hp, 125 VAC; 1/4 hp, 250 VAC; 1/2 A, 125 VAC; 1/4 A, 250 VDC. The cover shall contain captivated screws. The OSY-EXP's and PIBV-EXP's switch shall be Underwriters Laboratories listed for indoor use and CSA certified.

### Standard Specifications

#### Hazardous Locations Classifications

Class I, Groups C, D  
Class II, Groups E, F, G

#### Pressure Connection:

1/2" NPT male brass fitting

#### Contact Ratings

One SPDT (Form C) switch:

15 A, 125/250/480 VAC

1/8 hp, 125 VAC

1/4 hp, 250 VAC

1/2 A, 125 VAC

1/4 A, 250 VDC

#### Actuating Lever Extension Length for OSY-EXP (max.)

2" from nipple

#### Overall Dimensions Installed

OSYEXP  
7"L x 3.125"D x 4.875"H

PIBVEXP  
3.75"L x 3.25"D x 4.5"H

#### Conduit Entrances

One tapped opening for 1/2" conduit

#### Operating Temperature Rang

-40°F to 160°F (-40°C to 71°C)

#### Enclosure Rating

NEMA 1, 7 and 9 – suitable for indoor applications

#### Shipping Weight

OSYEXP 1.25 lbs.

PIBVEXP 1.75 lbs.

#### Service Use

Automatic Sprinkler: NFPA-13

One or two family dwelling: NFPA-13D

Residential occupancy up to four stories: NFPA-13R

National Fire Alarm Code: NFPA-72

#### Warranty

3 years

### Ordering Information

Model Number	Description
OSYEXP	Explosion proof OS&Y Supervisory Switch
PIBVEXP	Explosion proof PIBV Supervisory Switch

### System Sensor Sales and Service

#### System Sensor Headquarters

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#### System Sensor Canada

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#### System Sensor Europe

Ph: 44.1403.891920  
Fx: 44.1403.891921

#### System Sensor in China

Ph: 86.29.524.6253  
Fx: 86.29.524.6259

#### System Sensor in Singapore

Ph: 65.6273.2230  
Fx: 65.6273.2610

#### System Sensor – Far East

Ph: 85.22.191.9003  
Fx: 85.22.736.6580

#### System Sensor – Australia

Ph: 613.54.281.142  
Fx: 613.54.281.172

#### System Sensor – India

Ph: 91.124.237.1770 x.2700  
Fx: 91.124.237.3118

#### System Sensor – Russia

Ph: 70.95.937.7982  
Fx: 70.95.937.7983