



YE, YH, YO

Valve Position Indicators (Limit Switches)



The YE, YH, & YO Series offers one of the most versatile platforms for adapting to a variety of valve systems. The explosion/flame proof design is CSA/FM approved and ATEX certified for use in hazardous environments. With the epoxy coated anodized aluminum enclosure it may be used in corrosive heavy wash down areas as well.

In North America, FM and CSA have certified the YE & YH Series for use without seal fittings in all hazardous areas. By passing special pressure piling tests, the enclosure was certified for this elite distinction. Now, a time-consuming procedure can be safely eliminated in Division 1 areas.

The YE, YH, & YO Series design offers two conduit entries with extra wire terminations on the terminal block. By terminating solenoid valves in the switch enclosure, significant savings are realized by eliminating a junction box, wiring, conduit materials, and labor.

MATERIALS OF CONSTRUCTION

Housing:

Epoxy-coated anodized marine grade aluminum or stainless steel

Clear Cover:

Lexan® polycarbonate

Aluminum Cover:

Epoxy-coated anodized marine grade aluminum

Elastomer Seals:

Buna-N (EPDM as special order)

Drive Shaft:

Stainless steel

Drive Bushing:

Bronze, oil impregnated

Fasteners:

Stainless Steel

FEATURES

[see page 2 for features](#)

MODELS AND APPROVALS

YE

(2x) SPDT Gold Contact Mechanical Switches with Epoxy Coated Aluminum Cover

- CSA/FM approved
- XP Class I Div 1, Groups B/C/D, T5
- Non Incendive Class I/II/III, Div 2, Groups A/B/C/D/E/F/G, T5

YH

(2x) N.O. Solid State Proximity Switches with Epoxy Coated Aluminum Cover

- CSA/FM approved
- XP Class I Div 1, Groups B/C/D, T5
- Non Incendive Class I/II/III, Div 2, Groups A/B/C/D/E/F/G, T5

YO

(2x) N.O. Solid State Proximity Switches with Clear Lexan® Cover

- CSA/FM approved
- Non Incendive Class I/II/III, Div 2, Groups A/B/C/D/E/F/G, T5

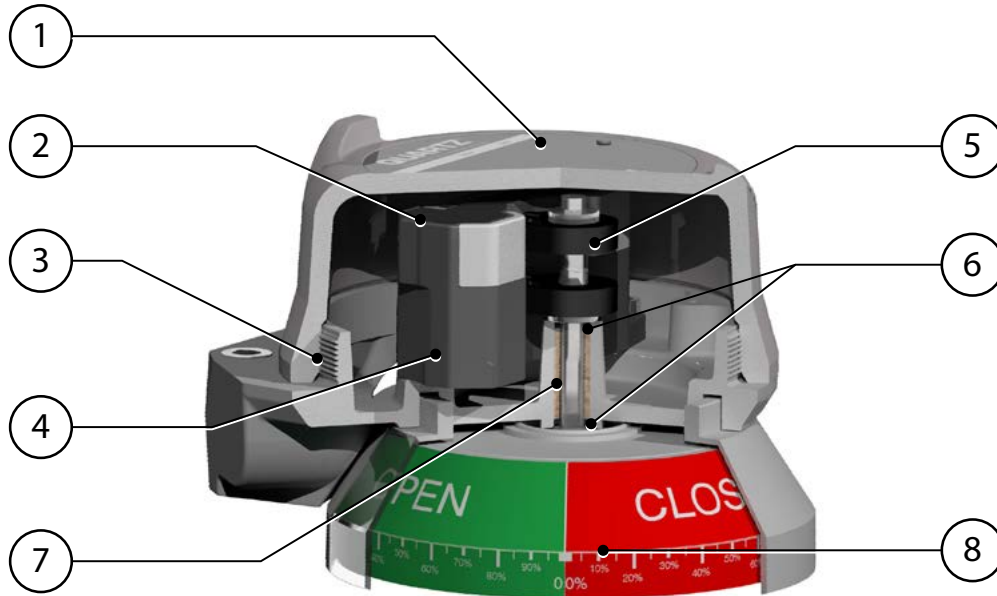


YE, YH, YO



Valve Position Indicators (Limit Switches)

FEATURES



1. Enclosures optimized for environment

Available in three configuration styles suitable for use in various process environment areas.

2. Faster wiring

Pre-wired and labeled terminal strip enables quick, convenient attachment of field wires.

3. Rapid enclosure access

Screw-on cover allows quick enclosure access, saving you valuable maintenance and set-up time. The cover provides a vapor tight seal while still allowing quick and easy access to internal components.

4. Wide variety of switching & communication

Switching options include dual module solid state proximity switches, and gold contact mechanical switches. A continuous feedback signal output is available in a 4-20 mA position transmitter.

5. Quick set cams are easy to adjust

Touch and tune switch settings allow you to make adjustments in seconds without the use of tools.

6. Dual shaft o-ring seals eliminate corrosion

Top (inner) and bottom (outer) shaft o-rings seal the drive bushing, protecting it from any external corrosives and any contaminants that may have entered the enclosure during installation or field service.

7. Special drive bushing assures long cycle life

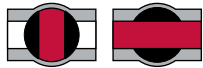
The oil impregnated bronze bushing maintains smooth operation and eliminates the potential for shaft seizure due to actuator shaft eccentricity.

8. Bold space saving visual indication

Visual indicator offers excellent viewability without sacrificing accessibility or adding to space requirements. Indicators are also available with continuous percentage or three-way indication.

VISUAL INDICATOR CONES

“I” Ball Drilling
Plan “A”



Pos. 1 Pos. 2



“L” Ball Drilling
Plan “A”



Pos. 1 Pos. 2



“T” Ball Drilling
Plan “D”



Pos. 1 Pos. 2



Plan “E”



Pos. 1 Pos. 2



Plan “F”



Pos. 1 Pos. 2



Plan “G”



Pos. 1 Pos. 2



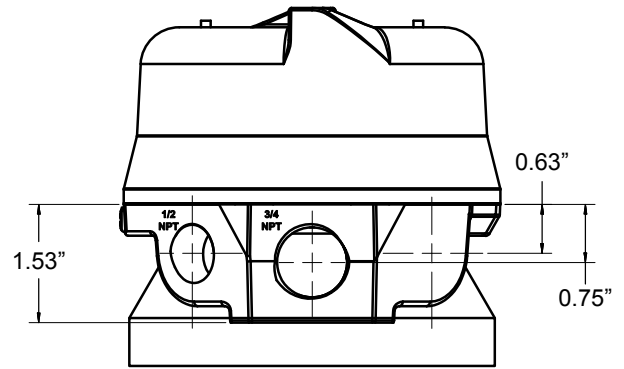
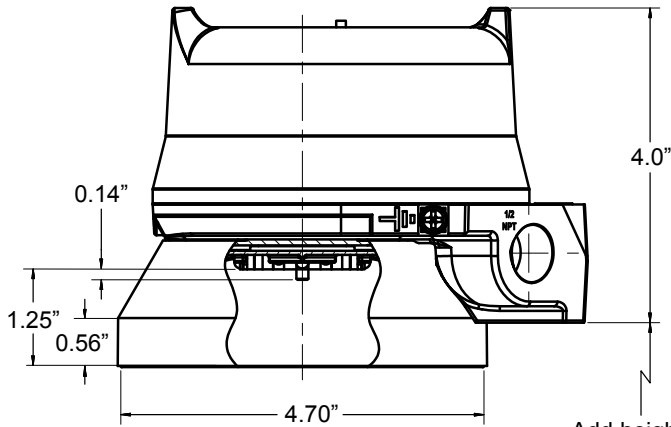


YE, YH, YO

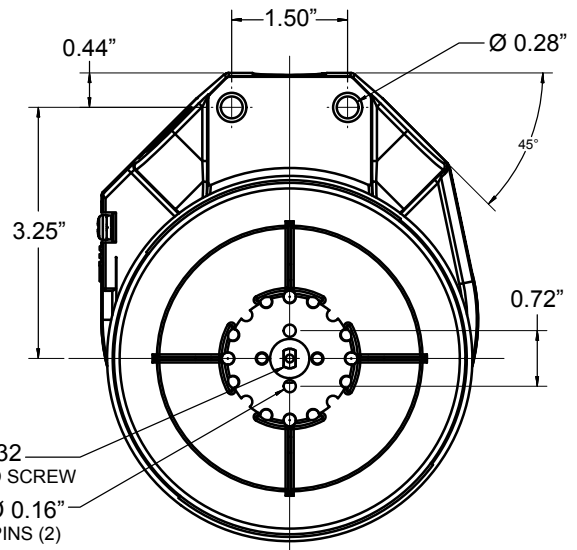


Valve Position Indicators (Limit Switches)

DIMENSIONS (in inches)



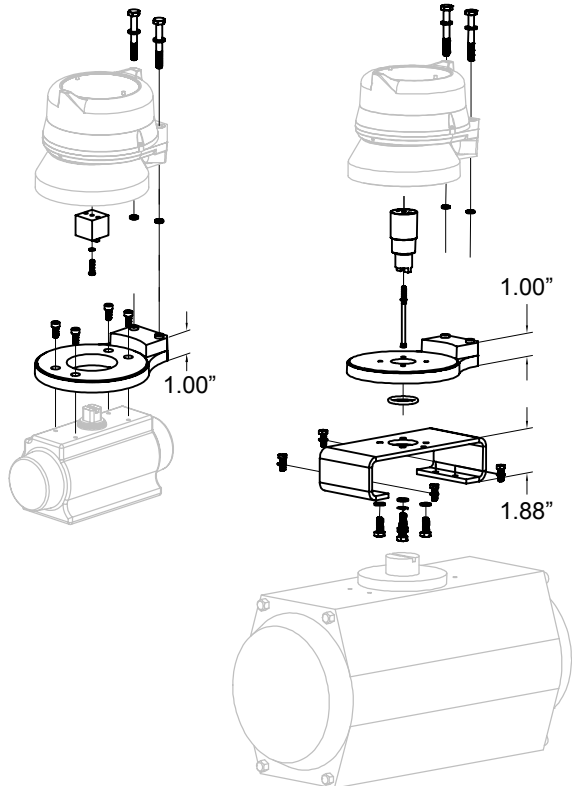
Add height of
Mounting Kit
(see below)



Mounting Kits

ST960106
(NAMUR size 1 actuators)

ST960110
(NAMUR size 2 actuators)



Other Mounting kits are available for Larger NAMUR sizes and Non-NAMUR actuators. Call factory



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SWITCH DETAILS

YE

Gold Contact SPDT Mechanical Switches

Low cost single-pole double-throw mechanical switches with gold contacts are recommended for 24 VDC computer input applications when cycle life does not exceed 100,000 operations. Silver contacts are available by special order for use in 125 VAC applications.



SPECIFICATIONS

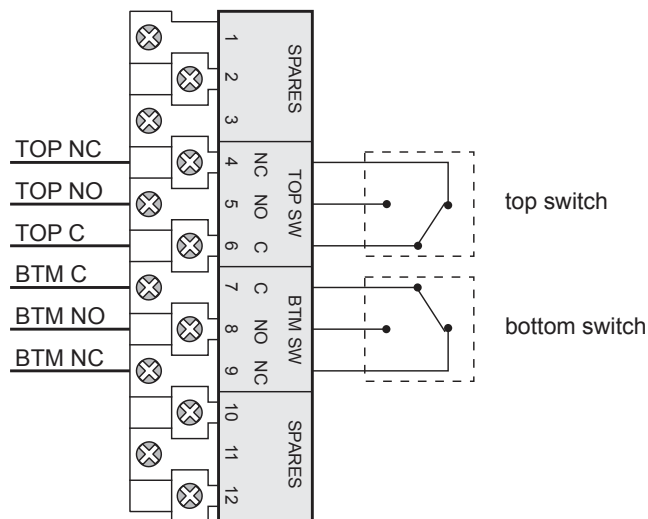
Electrical Ratings:

- 1.0 amp @ 125 VAC
- 0.5 amp @ 30VDC

Operating Life:

100,000 cycles

WIRING DIAGRAM



YH & YO

Solid State Proximity Switches

Two solid state sensors are sealed in for the ultimate in reliability and convenience.

YH & YO models have a five year warranty!



SPECIFICATIONS

Operation:

Normally Open (standard) or Normally Closed (contact factory)

Electrical Ratings:

- 1.0 amp @ 125 VAC
- 0.5 amp @ 30VDC

Maximum Inrush Current:

- 1.0 amp @ 125 VAC/DC

Maximum Continuous Current:

- 0.1 amp @ 125 VAC/DC

Minimum On Current:

- 0.5 mA

Operating Life:

Unlimited

Maximum Leakage Current:

- 0.25 mA (AC)
- 0.15 mA (DC)

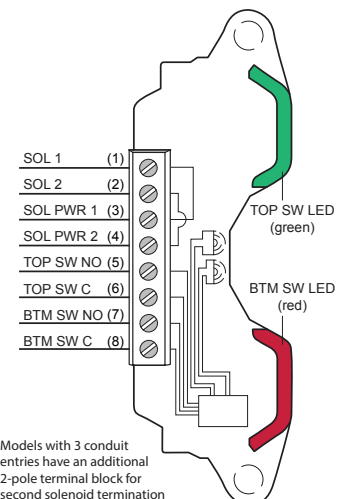
Voltage Range:

- 20-250 VAC
- 8-250 VDC

Maximum Voltage Drop:

- 6.5 volts @ 10 mA
- 7.2 volts @ 100 mA

WIRING DIAGRAM



Models with 3 conduit entries have an additional 2-pole terminal block for second solenoid termination

WARNING

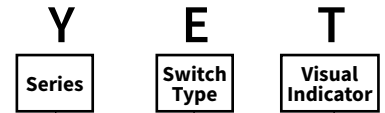
Failure to use a series load resistor when bench testing sensors with a power supply will result in permanent damage to the unit.



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ORDERING INFORMATION



Series: _____

Y = Explosion Proof Valve Position Monitoring Switches

Switch Type: _____

E = 2x SPDT Gold Contact Mechanical Switches (Normally Open) with an aluminum cover

H = 2x Solid State Proximity Sensors (Normally Open) with an aluminum cover

O = 2x Solid State Proximity Sensors (Normally Open) with clear acrylic cover to view indication LEDs

Indicator Cone: _____

(omit) = 2-way quarter-turn valve [Red = CLOSED, Green = OPEN, plus continuous % of 90°]

L = 3-way quarter-turn valve with "L" ball drilling [graphic arrows and port letters A, B, & C to depict flow plan]

T = 3-way quarter-turn valve with "T" ball drilling [graphic arrows and port letters A, B, & C to depict flow plan]

MOUNTING KITS

Mounting Kits for installing YE, YH, and YO Series Valve Monitoring Switches on NAMUR actuators

For C, F, & P series actuators

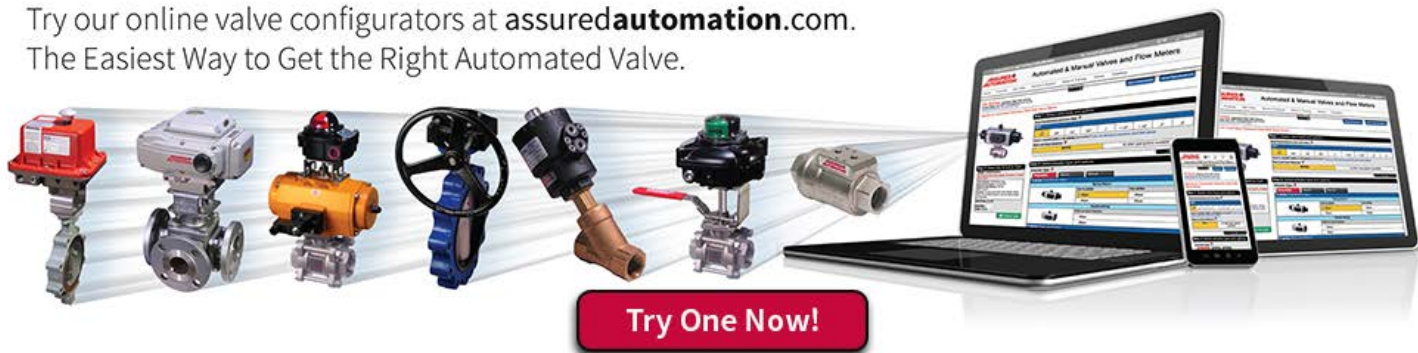


ST960106 = NAMUR pattern size 1

ST960110 = NAMUR pattern size 2

ST960115 = NAMUR pattern size 3

Try our online valve configurators at assuredautomation.com.
The Easiest Way to Get the Right Automated Valve.



Try One Now!