

# HyVision and SafeVision

Valve Position Monitoring



- *Kwik Set switch position setting*
- *High visibility visual indication*
- *Eliminates additional Junction Boxes*
- *Suitable for bus communication*
- *Corrosion Resistant*

**HYTORK** 

  
**EMERSON**<sup>™</sup>  
Process Management

# HyVision and SafeVision Engineered Valve Position Monitoring integrated with your actuator

## Rugged & Corrosion Resistant

To meet the challenges of today's process environments, both enclosures are manufactured from state-of-the-art materials that provide superior strength and maximum resistance to attack from corrosives.

## Visual Indication

HYTORK's visual indication (Patent No. GB 2 229 2548) is the largest, most easily seen indicator available. Protected by the virtually unbreakable polycarbonate cover, accurate position indication can be viewed from almost any angle.

## Switches

Both enclosures accept a large choice of switch designs, including hermetically sealed reed switches, V3 micro switches, proximity sensors, plus other control accessories. Up to four switches and other feedback devices can be installed. *The right choice for your application.*

## Easy Switch Position Setting

Both enclosures feature Kwik Set Cam adjustment for easy, precision position indication and calibration.



- **Micro switch,**  
**Proximity Sensor, Reed switch,**  
**and Pneumatic switch options**
- **High visibility visual indication**
- **Flow path monitoring for multiport valves**
- **Eliminates additional Junction Boxes**
- **Kwik Set switch position setting**
- **Suitable for bus communication**
- **Corrosion Resistant**

## Superior Sealing

"O" ring seals are used to provide reliable protection against the ingress of solids and liquids.

## A Multiple Use Junction Box

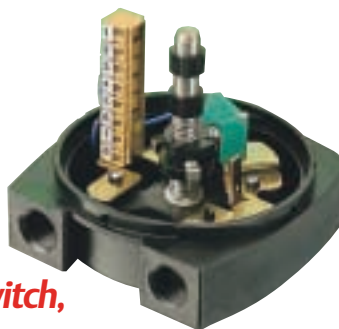
Both enclosures are available with multiple conduit entries and multiple internal terminal wiring strips. Efficient use of the housings eliminates the need for separate electrical junction boxes. Solenoid valves, limit switches and other feedback devices can all be wired in this one single enclosure. *A real cost and time saver.*

## VDI/VDE Accessory Mounting

All HYTORK enclosures meet the VDI/VDE international accessory mounting standards for ease of assembly and application. An universal VDI/VDE accessory mounting platform is available.

## Bus Communication

Both enclosures are suitable for bus communication technologies (AS-interface, Profibus DP and PA).



## HyVision

*A rugged, corrosion resistant enclosure for environments that require a weatherproof IP66 rating. The base is manufactured from composite resin and the indicator cover from high impact polycarbonate. Available with up to 3 conduit entries and switch wiring for up to 16 terminals. HYVision Zone 2 (EEx N IIC T6) utilises specially rated components and is certified to CENELEC Zone 2 Specifications.*



## SafeVision

*A rugged, explosion proof enclosure, designed to meet CENELEC EN 50 018 Code EExd requirements. A two part epoxy coating provides a corrosion resistant exterior to the aluminium housing. Also available in COMMANDO bonded coating for more aggressive environments. The indicator cover is manufactured from high impact polycarbonate. Also available without visual indication. Available with up to 4 conduit entries and switch wiring for up to 20 terminals. The unique split shaft design allows the cover and visual indicator to be removed as a complete unit within the smallest possible space.*

# Specifications

## General Specifications

### Temperature Range:

Standard: -40°C to 100°C (-40°F - 212°F)

### Visual Indicator Options:

0° to 90°

0° to 180°

Many Flow Path Monitoring Options.  
Alternative Colours and Languages  
available on request.



### Standard Electrical Thread Forms:

Standard: M20

Optional: M25

1/2" & 3/4" NPT Threads

PG13.5 European

### Compatible Switch Options:

Standard: 2 x V3 SPDT

Mechanical Micro Switches

Optional: 1 - 4 Switches

- Proximity Sensors

- DPDT Switches

- Reed Switches

- Pneumatic Switches

### Mechanical Switches

#### Electrical Ratings (Resistive Loads)

SPDT		
AMPs	VAC	VDC
15	125	-
15	250	-
0.5	-	125
0.25	-	250

DPDT	
AMPs	VAC
10	125
10	250
-	-
-	-

## Hazardous area selection guide

Area Classification	CENELEC Coding	Protection Method
Zone 0	EExia IIC T6	<b>Intrinsic Safety</b> HyVision or SafeVision with certified proximity sensors
Zone 1	EExd IIB T6	<b>Explosion Proof</b> SafeVision DEMCO certified 98D-124162
Zone 2	EExn (N) IIC T6	<b>Non-incendive</b> HyVision Zone 2 certified Ex 94Y4004
Ingress protection	IP67 IP66	SafeVision HyVision

*Impact tested and certified*

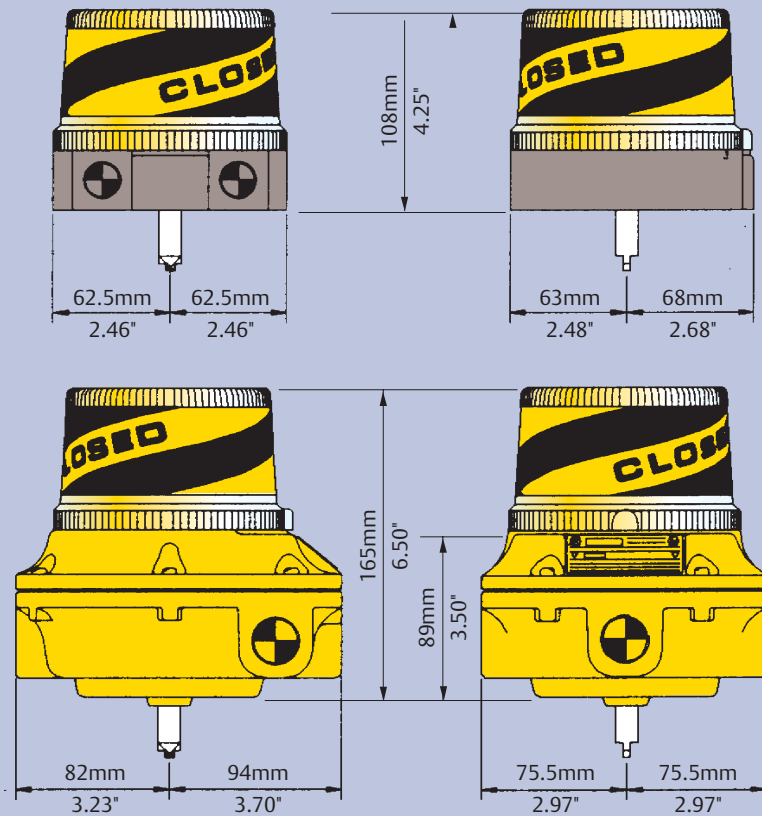


## Specifications Bus components

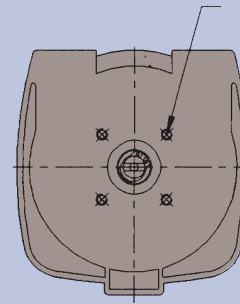


Specification	HyVision Profibus® DP	HyVision Profibus® PA	HyVision ASI
<b>Fieldbus Card:</b> I/O Input Output Operating temperature	2 for position indication 2 for one or two solenoids -25° to +80°C -13° to +176°F	2 for position indication 2 for one or two solenoids -25° to +80°C -13° to +176°F	2 for position indication 1 for the solenoid valve -25° to +80°C -13° to +176°F
Power supply Max. current Isolation	24VDC 252mA Galvanic	By the bus system 16mA (inc. solenoid) -/-	By the bus system 100mA -/-
<b>Solenoid:</b> Type Supply	Single or dual coil 24 VDC, 2.6 W max.	Single or dual coil solenoid with piezotronic component	Single coil 24 VDC, 2.6 W max.

## Dimensions

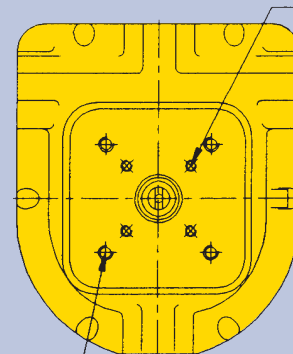


## Mounting Details



**Metric**  
4 holes  
M6 x12mm  
deep equi-spaced  
on a 50mm PCD

**Imperial**  
4 holes  
1/4"-20UNCx 5/8"  
deep equi-spaced  
on a 1.968" PCD



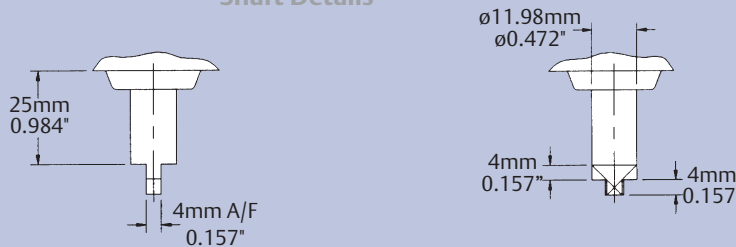
**Metric**  
4 holes  
M6 x12mm  
deep equi-spaced  
on a 50mm PCD

**Imperial**  
4 holes  
1/4"-20UNCx 5/8"  
deep equi-spaced  
on a 1.968" PCD

**Metric**  
4 holes  
M8 x10mm  
deep on a 2.25"  
(57.15mm) square

**Imperial**  
4 holes  
3/8"-18UNCx 3/8"  
deep on a  
2.25" square

## Shaft Details



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