

# BINSWITCH

TECHNOLOGY · INNOVATION · QUALITY · VALUE

## Binswitch Capacitive Proximity Sensor

### APPLICATION

Detects level or plug situations in bulk granular solids or liquids.

Can also be used for misalignment monitoring on a conveyor or elevator.

### METHOD OF OPERATION

The Binswitch Sensor detects level or plug situations for bulk granular solids or liquids in tanks, bins, or silos and can be used as a plug or choke detector in chutes, conveyors and elevator legs. Programmable features include time delay on material arriving or leaving, and failsafe relay settings for high and low levels. A two colour LED shows material present or absent and flashes red or green to show the time delay is operating. The programmable sensor operates on 12-240 VAC/DC and gives a changeover relay contact output. The polycarbonate housing is corrosion and abrasion resistant, dust-tight, and waterproof.

### FEATURES

- Universal Voltage
- Adjustable Sensitivity
- 25mm detection range
- Certified to ATEX & IECEx Class 2 Division 1 Groups E, F & G Approved
- IP65 Protection: Totally Sealed Construction

### PART NUMBERS/ACCESSORIES

- BS12V10AI 2-Wire Binswitch High Level Fail Safe
- BS15V10AI 5-Wire Binswitch High Level Fail Safe
- BS22V10AI 2-Wire Binswitch Low Level Fail Safe
- BS25V10AI 5-Wire Binswitch Low Level Fail Safe
- BAS2 Binswitch Abrasion Shield
- BTAS1 Teflon Abrasion Shield End Cap
- TMP Top Mounting Plate
- SMP Side Mounting Plate
- BMPA 1-1/4" NPT Mount Plate Adaptor
- BAS Polyurethane Abrasion Shield 1-1/4" NPT
- BMPG36 Gland Mount
- KIT CAPA Adjustable level from 0,65 to 2,05 meters



**BS12V10AI or BS22V10AI  
BS15V10AI or BS25V10AI**



**ATEX-Approved**  
Ex II 1D T100°C-IP 65-ZONE 20

**IECEx**



**CLASS 2 Div. 1**  
Groups E, F, & G



**BAS2 Abrasion Shield**



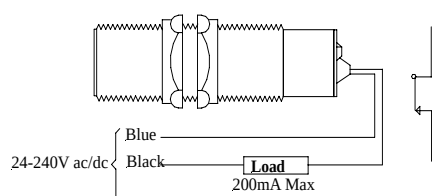
Please refer to instruction manual for correct installation.  
Information subject to change or correction. September 2011

## TECHNICAL SPECIFICATIONS

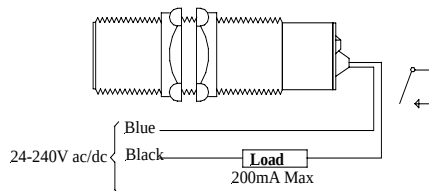
| Type                | BS12V10AI                                                                 | BS22V10AI     | BS15V10AI                                          | BS25V10AI     |
|---------------------|---------------------------------------------------------------------------|---------------|----------------------------------------------------|---------------|
| Power Supply        | 24-240 Vac/dc                                                             |               | 12-240 Vdc 24-240 Vac                              |               |
| Approvals           | ATEX EX II 1D T100°C (Zone 20) IECEx Zone 20 & CSA                        |               |                                                    |               |
| Contact             | Normally Closed                                                           | Normally Open | Normally Closed                                    | Normally Open |
| Max. Frequency      | 4 Hz                                                                      |               |                                                    |               |
| Protection          | IP 65                                                                     |               |                                                    |               |
| Sensitivity         | Detects up to 25 mm                                                       |               |                                                    |               |
| Volt drop           | 8 V max.                                                                  |               |                                                    |               |
| Cable               | 2 wires, 5m or 10m cable                                                  |               | 5 wires, 5m or 10m cable                           |               |
| Calibration         | Turn sensitivity adjustment screw; the silo must be empty for calibration |               |                                                    |               |
| Capacity            | 200 mA Max.                                                               |               | Changeover relay rated at 3A 240Vac. Non inductive |               |
| Ambiant Temperature | -15° to + 50°C                                                            |               |                                                    |               |

## CONNECTIONS

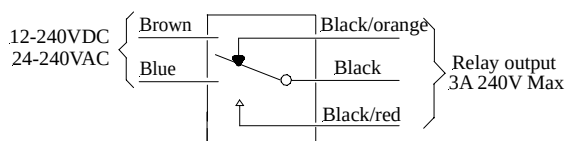
### BS12V10AI



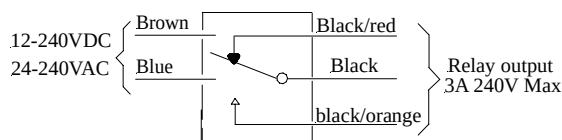
### BS22V10AI



### BS15V10AI



### BS25V10AI

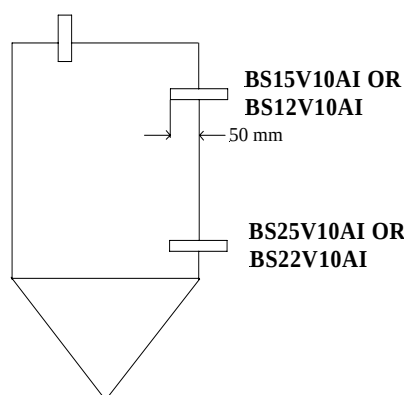


## KIT CAPA

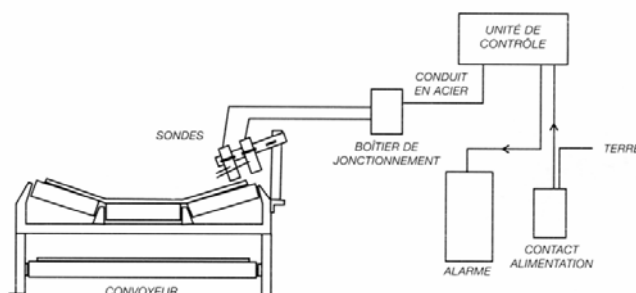


## Level or plug indicator

BS15V10AI OR  
BS12V10AI



## Alignment belt sensor



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