# **Proximity Sensors Capacitive** Thermoplastic Polyester Types CB32, ATEX



**CB32CLN20QUAX** 



- · Capacitive level sensor for solid, fluid or granulated substances
- Approved according to ATEX directive 2014/34/U for • operation in potential explosive dusty atmospheres
- Classified as equipment for use in atmospheres with continuous presence of explosive dust with an ignition temperature above 85° C
- Adjustable sensing distance: 4-20 mm
- With or without adjustable time delay
- Featuring TRIPLESHIELD<sup>™</sup> Sensor Protection •
  - Protection: Transients and reverse polarity
- 5 years of warranty

## **Product Description**

ATEX approved Capacitive sensor in thermoplastic polyester for mounting in PG 36 screw gland. Available with adjustable sensing distance and with/without built-in time delay (ON or OFF delay). The relay output ensures that the load can be driven directly. Excellent for use in the agriculture area (detection of grains, fluids etc.).

## **Ordering Key**

Capacitive proximity switch Housing diameter (mm) Housimaterial Housing length **Detection principle** Rated operating dist. (mm) Supply type Output type Approval

## **Type Selection**

Supply voltage	Cable	Ordering no.	Ordering no.	Ordering no.
	length	With ON delay	With OFF delay	Without time delay
120 VAC	2 m	CB32CLN20SUAX	CB32CLN20SVAX	CB32CLN20STAX
230 VAC	2 m	CB32CLN20RUAX	CB32CLN20RVAX	CB32CLN20RTAX
24 VAC/DC	2 m	CB32CLN20QUAX	CB32CLN20QVAX	CB32CLN20QTAX
120 VAC	5 m	CB32CLN20SUAX5M	CB32CLN20SVAX5M	CB32CLN20STAX5M
230 VAC	5 m	CB32CLN20RUAX5M	CB32CLN20RVAX5M	CB32CLN20RTAX5M
24 VAC/DC	5 m	CB32CLN20QUAX5M	CB32CLN20QVAX5M	CB32CLN20QTAX5M
120 VAC	10 m	CB32CLN20SUAX10M	CB32CLN20SVAX10M	CB32CLN20STAX10M
230 VAC	10 m	CB32CLN20RUAX10M	CB32CLN20RVAX10M	CB32CLN20RTAX10M
24 VAC/DC	10 m	CB32CLN20QUAX10M	CB32CLN20QVAX10M	CB32CLN20QTAX10M

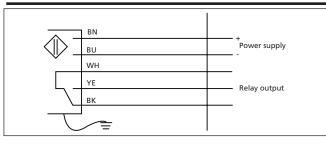
#### **Specifications**

Rated operational voltage 24 VAC/DC 115 VAC 230 VAC	20-28 VAC/DC, 0-63 Hz 100-135 VAC, 57-63 Hz 195-255 VAC, 47-53 Hz		
Consumption	Max. 1,5 W		
Sensing distance	4-20 mm, adjustable		
Hysteresis	3 to 20% of sensing dist.		
Operating frequency	5 Hz		
Relay output @24 VAC/DC @115 VAC @230 VAC	SPDT DC1: 5 ADCAVG AC1: 5 AACrms AC15: 2 AACrms		
Indication for output ON	LED, yellow		
Time delay UAX- & VAX- versions	1 s - 10 min		

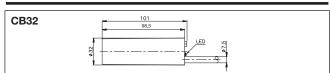
<b>Environment</b> Degree of protection Operating temperature Storage temperature	IP 67 -20° to +40°C (-4° to +104°F) -40° to +85°C (-40° to +185°F)		
<b>Housing material</b> Front Backpart Body	PBT Valox TPE Santoprene PBT - Conductive		
Cable	PVC, 2 m / 5 m / 10 m		
Weight	270 g		
Approvals	ATEX zone 20, dust $\langle \widehat{\epsilon}_{\chi} \rangle$ II 1 D Ex ta IIIC T85°C Da		
CE-marking	Yes		
<b>TRIPLESHIELD™</b> protection-EMC IEC 1000-4-3/EN 61000-4-3 IEC 1000-4-4/EN 61000-4-4 IEC 1000-4-6/EN 61000-4-6	2 kV		



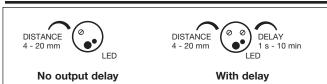
#### Wiring Diagram



## Dimensions



## Adjustment



# Mode of Operation

**CB32 with no delay output:** The relay operates (connection between black and yellow wires) and remains ON until the sensor is activated. After activation of the sensor, the relay releases and the LED goes ON.

# CB32 with ON-delay output:

When the sensor is not activated, the relay operates (connection between black and yellow wires) and the LED is OFF. When the sensor is activated, the time measurement starts and the LED flashes. After expiration of the set time, the relay releases and the LED

goes ON. The relay remains released until the sensor is deactivated.

# CB32 with OFF-delay output:

The time measurement starts and the LED flashes when power supply is applied to the sensor. When the set time has expired, the relay operates (connection between black and yellow wires) and the LED goes OFF. When the sensor is activated, the relay releases and the LED goes ON. As soon as the sensor is deactivated, the measurement of the set time starts.

# **Operation Diagrams**

Power supply (brown - blue cable)			
Sensor activated			
LED indication			
Relay ON			
No output delay			
Power supply (brown - blue cable)			
Sensor activated			
Relay (black - yellow cable)			
LED indication With ON delay		1111111	
Power supply (brown - blue cable)			
Sensor activated			
Relay ON (black - yellow cable)			
LED indication With OFF delay			

## **Delivery Contents**

- Capacitive switch: CB32
- Screwdriver
- Packaging: Plastic bag
- User manual