

# Proximity Sensors Capacitive Thermoplastic Polyester Types CB32, ATEX



- 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 **TRIPLESIELD™** Sensor Protection
- Protection: Transients and reverse polarity
- 5 years of warranty

## Product Description

ATEX approved Capacitive sensor in thermoplastic polyester for mounting in AMB-M40AX mounting bracket. 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

**CB32CLN20QUAX**

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

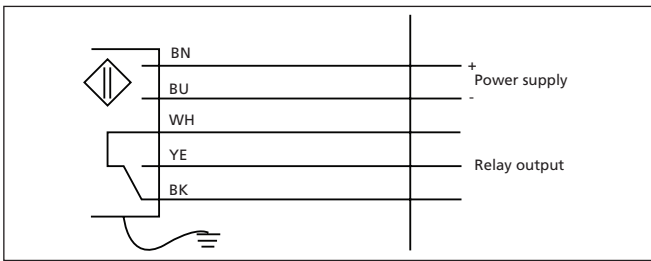
## Type Selection

Supply voltage	Cable length	Ordering no. With ON delay	Ordering no. With OFF delay	Ordering no. 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

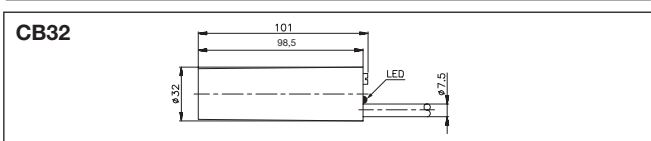
## Specifications

<b>Rated operational voltage</b> 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	<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>Consumption</b>	Max. 1,5 W	<b>Housing material</b> Front Backpart Body	PBT Valox TPE Santoprene PBT - Conductive
<b>Sensing distance</b>	4-20 mm, adjustable	<b>Cable</b>	PVC, 2 m / 5 m / 10 m
<b>Hysteresis</b>	3 to 20% of sensing dist.	<b>Weight</b>	270 g
<b>Operating frequency</b>	5 Hz	<b>Approvals</b>	ATEX zone 20, dust II 1 D Ex ta IIIC T85°C Da
<b>Relay output</b> @24 VAC/DC @115 VAC @230 VAC	SPDT DC1: 5 ADCAVG AC1: 5 AACrms AC15: 2 AACrms	<b>CE-marking</b>	Yes
<b>Indication for output ON</b>	LED, yellow	<b>TRIPLESIELD™ protection-EMC</b> IEC 1000-4-3/EN 61000-4-3 IEC 1000-4-4/EN 61000-4-4 IEC 1000-4-6/EN 61000-4-6	> 10 V/m 2 kV > 10 V <sub>rms</sub>
<b>Time delay</b> UAX- & VAX- versions	1 s - 10 min		

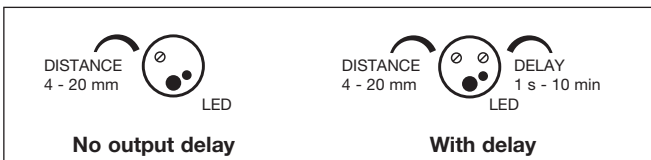
## Wiring Diagram



## Dimensions



## Adjustment



## Operation Diagrams



### No output delay

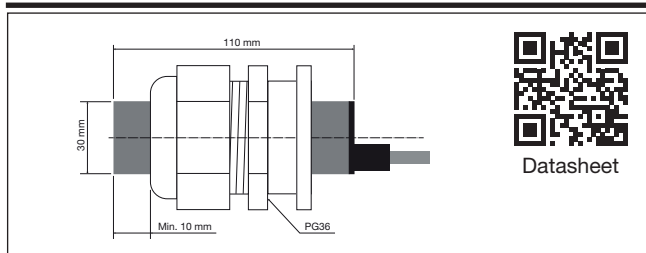


### With ON delay



### With OFF delay

## AMB-M40AX mounting



## 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.

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.

### 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

## Delivery Contents

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