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 *TRIPLESHIELD*™ 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

CB32CLN20QUAX

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

Type Selection

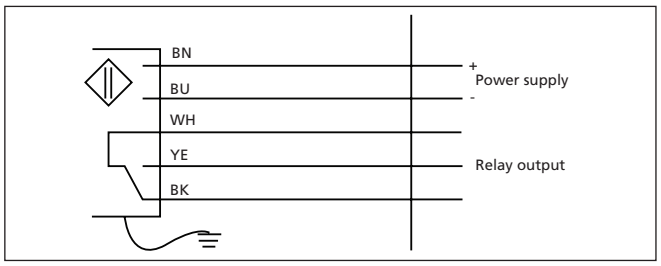
Supply voltage	Cable length	Ordering no. With ON delay	Ordering no. With OFF delay	Ordering no. Without time delay
120 VAC	2 m	**CB32CLN20SUAX**	**CB32CLN20SVAX**	**CB32CLN20STAX**
230 VAC	2 m	**CB32CLN20RUAX**	**CB32CLN20RVAX**	**CB32CLN20RTAX**
24 VAC/DC	2 m	**CB32CLN20QUAX**	**CB32CLN20QVAX**	**CB32CLN20QTAX**
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

Rated operational voltage	
24 VAC/DC	20-28 VAC/DC, 0-63 Hz
115 VAC	100-135 VAC, 57-63 Hz
230 VAC	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	SPDT
@24 VAC/DC	DC1: 5 ADCAVG
@115 VAC	AC1: 5 AACrms
@230 VAC	AC15: 2 AACrms
Indication for output ON	LED, yellow
Time delay	
UAX- & VAX- versions	1 s - 10 min

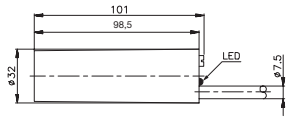
Environment	
Degree of protection	IP 67
Operating temperature	-20° to +40°C (-4° to +104°F)
Storage temperature	-40° to +85°C (-40° to +185°F)
Housing material	
Front	PBT Valox
Backpart	TPE Santoprene
Body	PBT - Conductive
Cable	PVC, 2 m / 5 m / 10 m
Weight	270 g
Approvals	ATEX zone 20, dust Ⓔx II 1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

Wiring Diagram

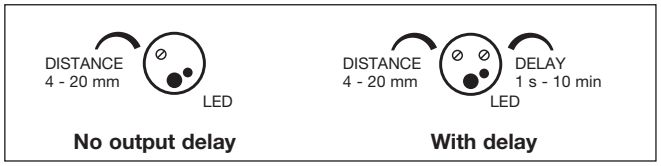


Dimensions

CB32



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.

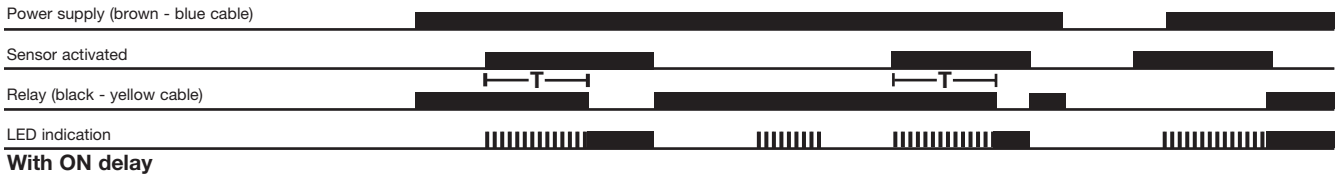
CB32 with ON-delay output:
When the sensor is not activated, the relay operates (connection between black and yellow wires) and the LED is OFF. When the sensor is activated, the time measurement starts and the LED flashes. After expiration of the set time, the relay releases and the LED goes ON. The 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.

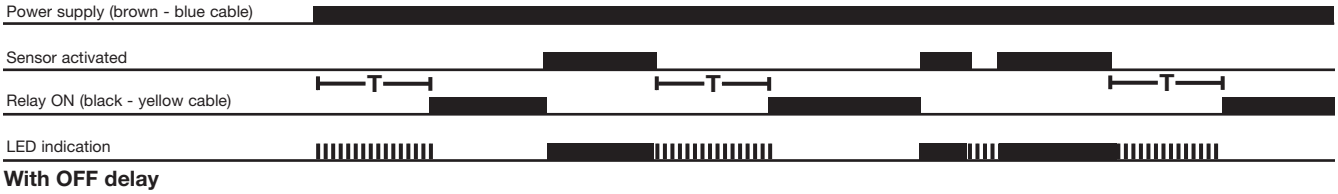
Operation Diagrams



No output delay



With ON delay



With OFF delay

Delivery Contents

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