Proximity Sensors Capacitive Thermoplastic Polyester Types CB32, ATEX

- **Capacitive level sensor for solid, fluid or granulated substances**
- **Approved according to ATEX directive 94/9/EC 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 85º 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)**
- **Housing material**
- **Housing length**
- **Detection principle**
- **Rated operating dist. (mm)**
- **Supply type**
- **Output type**
- **Approval**

Type Selection

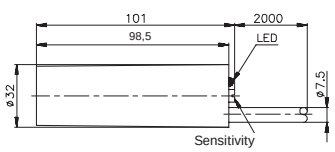
Supply voltage	Ordering no. With ON delay	Ordering no. With OFF delay	Ordering no. Without time delay
120 VAC	**CB32CLN20SUAX**	**CB32CLN20SVAX**	**CB32CLN20STAX**
230 VAC	**CB32CLN20RUAX**	**CB32CLN20RVAX**	**CB32CLN20RTAX**
24 VAC/DC	**CB32CLN20QUAX**	**CB32CLN20QVAX**	**CB32CLN20QTAX**

Specifications

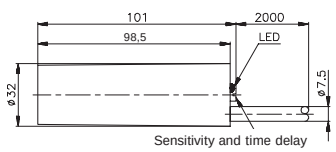
Rated operational voltage	
120	120 VAC, 47-63 Hz
230	230 VAC, 47-63 Hz
924	24 VAC/DC, 47-63 Hz (VAC)
Consumption	Max. 1,5 W
Sensing distance	4-20 mm, adjustable
Hysteresis	3 to 20% of sensing dist.
Operating frequency	5 Hz
Output	Relay SPDT, 2 A/240 VAC
Indication for output ON	LED, yellow
Time delay	
VC11/12RT	1 s - 10 m
Environment	
Degree of protection	IP 67
Operating temperature	-20º to +70ºC (-4º to +158ºF)
Storage temperature	-40º to +85ºC (-40º to +185ºF)

Housing material	
Front	PBT Valox
Backpart	TPE Santoprene
Body	PBT - Conductive
Cable	PVC, 2 m
Weight	270 g
Approvals	ATEX zone 20, dust Ex II 1 D T85°C IP67
CE-marking	Yes
***TRIPLESHIELD*™ protection-EMC**	
IEC 1000-4-2/EN 61000-4-2	8 kV
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}

Dimensions



CB32 without time delay



CB32 with time delay

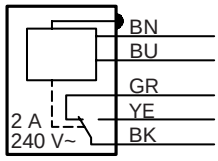
Mode of Operation

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.

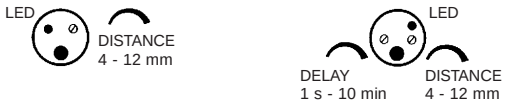
CB32 with ON-delay output:
When the sensor is not activated, the relay operates (connection between black and yellow wires) and the LED is OFF. When the sensor is activated, the time measurement starts and the LED flashes. After expiration of the set time, the relay releases and the LED goes ON. The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

Wiring Diagram



Adjustment

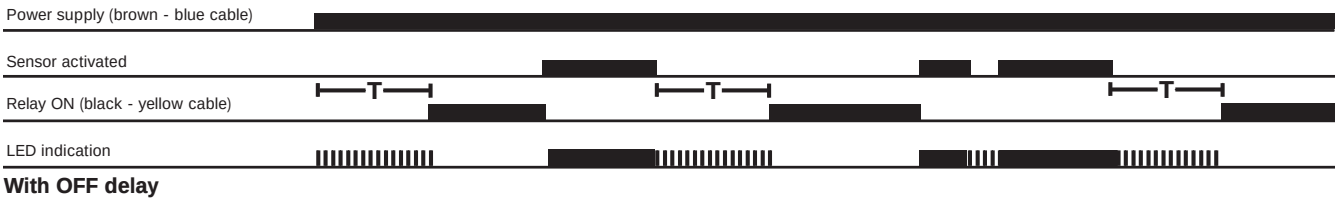


No output delay **With delay**

Operation Diagrams

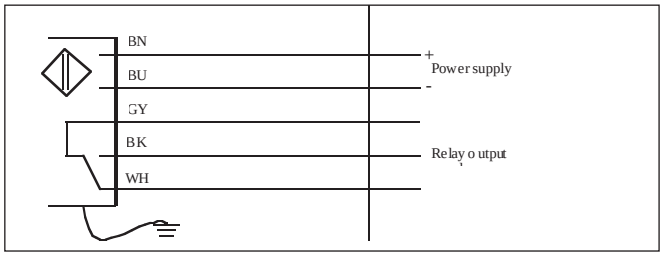
No output delay

With ON delay



With OFF delay

Wiring Diagram



Delivery Contents

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

Specifications are subject to change without notice (07.06.05)