

## Specifications

GB

<b>Rated operating dist. (S<sub>n</sub>)</b> CB32CLN20	2 to 20 mm factory set at 12 mm
<b>Sensitivity Adj. multiturn</b>	Pot. meter
<b>Effective operation dist. (S<sub>e</sub>)</b>	0.9 x S <sub>n</sub> ≤ S <sub>e</sub> ≤ 1.1 x S <sub>n</sub>
<b>Usable operation dist. (S<sub>u</sub>)</b>	0.8 x S <sub>n</sub> ≤ S <sub>u</sub> ≤ 1.2 x S <sub>n</sub>
<b>Repeat accuracy (R)</b>	≤ 5%
<b>Hysteresis (H)</b>	4 to 20% of sensing distance
<b>Rated operational volt. (U<sub>B</sub>)</b>	20 to 250 VAC (ripple incl.)
<b>Ripple</b>	≤ 10%
<b>Rated operational current (I<sub>B</sub>)</b> Continuous Short-time	I <sub>B</sub> ≤ 500 mA < 2.5 A (max. 20 ms)
<b>Min. load current</b>	10 mA
<b>Voltage drop (U<sub>d</sub>)</b>	≤ 10 VAC (at loads 20 mA)
<b>Protection</b>	Transients
<b>Power ON delay</b>	≤ 100 ms
<b>Frequency of operating cycles (f)</b>	10 Hz
<b>Delay on operate (t<sub>d</sub>)</b>	30 sec
<b>Indication for output ON</b>	LED, yellow
<b>Environment</b> Degree of protection	IP 67 (Nema 1, 3, 4, 6, 13)
<b>Temperature</b> Operating temperature Storage temperature	-20° to +70°C (-4° to +158°F) -40° to +85°C (-40° to +185°F)
<b>Housing material</b> Body Front	PBT PBT
<b>Connection</b> Cable	Black, 2 m, 2 x 1.5 mm <sup>2</sup> , Ø8 Oil proof PVC
<b>Weight</b> Cable version	270 g
<b>Approvals</b> AX versions only	UL, CSA ATEX zone 22 dust* Ex II 3 DX T75°C IP67
<b>CE-marking</b>	Yes

- \* The cable must not be exposed to a pulling force.
- Sensor housing must be protected against mechanical shock

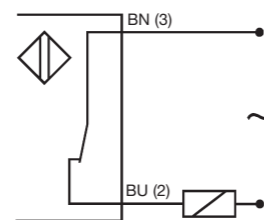
## Adjustment Guide

The environments in which capacitive sensors are installed can often be unstable regarding temperature, humidity, object distance and industrial (noise) interference. Because of this, Carlo Gavazzi offers as standard features in all TRIPLESIELD™ capacitive sensors a user-friendly sensitivity adjustment instead of having a fixed sensing range, extended sensing range to accommodate mechanically demanding areas, temperature stability to ensure minimum need for adjusting sensitivity if temperature varies and high immunity to electro-magnetic interference (EMI).

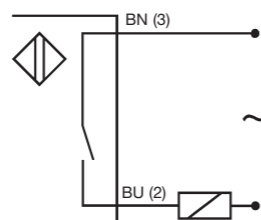
**Note:**  
Sensors are factory set(default) to maximum rated sensing range.

## Wiring Diagrams

Schaltbilder / Schémas de Câblage / Diagramas de Conexiones / Collegamenti Elettrici / Forbindelsesdiagrammer



CB32CLN20TC(FT)

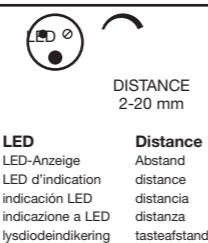


CB32CLN20TO(FT)

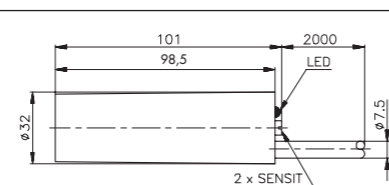
BU = Blue, Blau, Bleu, Azul, Blu, Blå

BN = Brown, Braun Marron, Marrón, Marrone, Brun

## Adjustment / Einstellung / Réglage / Ajuste / Regolazione / Justering



## Dimensions / Abmessungen / Dimensions / Dimensiones / Dimensioni / Dimensioner



## Installation Hints

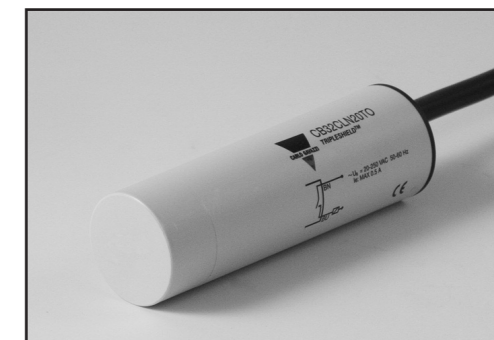
Installationshinweise / Conseils d'Installation / Normas de Instalación / Consigli per l'Installazione / Installationsråd og -vink

<i>To avoid interference from inductive voltage/ current peaks, separate the prox. switch power cables from any other power cables, e.g. motor, contactor or solenoid cables</i>	<b>Relief of cable strain</b> The cable should not be pulled	<b>Protection of the sensing face</b> A proximity switch should not serve as mechanical stop	<b>Switch mounted on mobile carrier</b> Any repetitive flexing of the cable should be avoided
<i>Um Störungen durch induktive Spannungs-/Stromspitzen zu vermeiden, Kabel der Näherungsschalter getrennt von anderen stromführenden Kabeln halten</i>	<b>Schutz vor Überdehnung des Kabels</b> Nicht am Kabel ziehen	<b>Schutz der Sensorfläche des Schalters</b> Näherungsschalter nicht als mechanischen Anschlag verwenden	<b>Mobiler Näherungsschalter</b> Wiederholtes Biegen des Kabels vermeiden
<i>Pour éviter les interférences issues des pics de tension et/ou des courants inductifs, veiller à toujours faire cheminer séparément les câbles d'alimentation des détecteurs de proximité et les câbles d'alimentation des moteurs, contacts ou solénoïdes</i>	<b>Tension des câbles</b> Eviter toute contrainte en traction du câble	<b>Protection de la face de détection du détecteur</b> Ne jamais utiliser un détecteur de proximité en tant que butée mécanique	<b>Détecteur monté sur support mobile</b> Eviter toute répétition de courbure dans le cheminement du câble
<i>Para evitar interferencias de tensión inductiva/ picos de intensidad se deben separar los cables del sensor del resto de los cables de alimentación tales como cables de motor, contactores o solenoides</i>	<b>Alivio de la tensión del cable</b> No se debe tirar del cable	<b>Protección de la cara de detección</b> Un sensor de proximidad nunca debe funcionar como tope mecánico	<b>Conector montado sobre portadora móvil</b> Evitar doblar el cable repetidas veces
<i>Al fine di evitare interferenze di tipo elettrico, separare i cavi di alimentazione del sensore di prossimità dai cavi di potenza</i>	<b>Posizione del cavo</b> Il cavo non deve essere teso	<b>Protezione della parte sensibile del sensore</b> I sensori di prossimità non devono essere usati per bloccaggi meccanici	<b>Sensore installato su pedana mobile</b> Evitare qualsiasi flessione ripetuta del cavo
<i>For at undgå støjindflydelse fra induktive strøm-/spændingspidsjer skal aftasterkablet adskilles fra andre kraftkabler, f.eks. fra motorer, transformatorer og magnetventiler</i>	<b>Aflastning af kabel</b> Der bør ikke trækkes i kablet	<b>Beskyttelse af følerens tasteflade</b> En aftaster bør ikke anvendes som mekanisk stop	<b>Aftaster monteret på bevægeligt underlag</b> Gentagne bøjninger af kablet bør undgås

## Capacitive Sensor with or without Timer Function

Kapazitiver Abtaster mit oder ohne Zeitfunktion / Détecteur capacitif avec ou sans minuterie/ Sensor capacitivo con o sin temporizador / Sensore capacitivo con o senza temporizzatore/ Kapacitiv føler med eller uden timer

## CB32CLN20Txxx



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Gerätehersteller mit dem ISO 9001/EN 29 001  
Zertifikat

Une société qualifiée selon ISO 9001  
Empresa que cumple con ISO 9001  
Certificato in conformità con l'ISO 9001  
Kvalificeret i overensstemmelse med ISO 9001

MAN CB32CLN20Txxx MUL rev.12-05.2009

