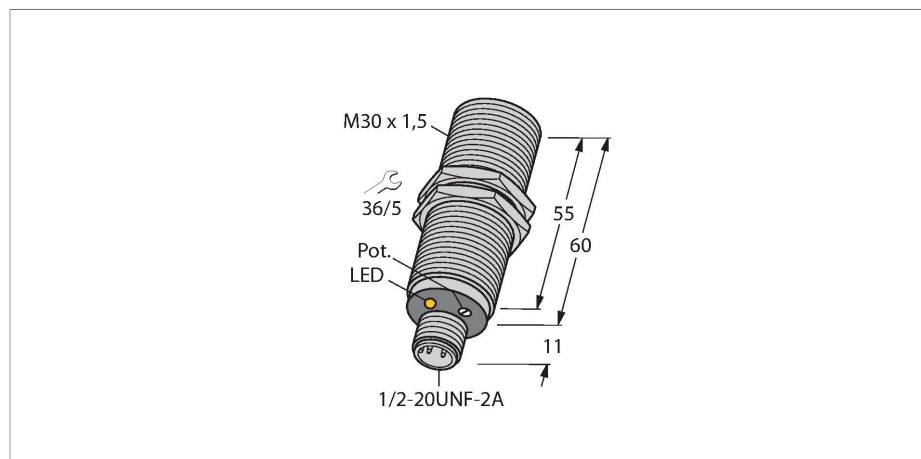


# BC10-M30K-RZ3X-B3131

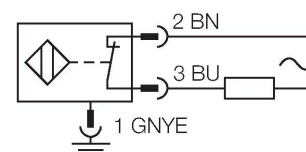
## Capacitive Sensor



### Features

- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NC contact
- 1/2" connector

### Wiring diagram



### Technical data

Type	BC10-M30K-RZ3X-B3131
ID	2503023
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	2...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	20...250 VAC
AC rated operational current	≤ 500 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1...2.0 MHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, NC contact, 2-wire
Voltage drop at I <sub>o</sub>	≤ 7 V
<b>Mechanical data</b>	
Design	Threaded barrel, M30 × 1.5
Dimensions	60 mm

### Functional principle

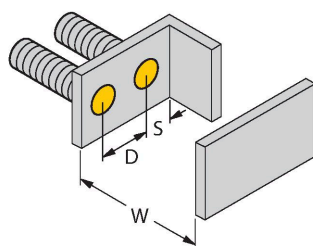
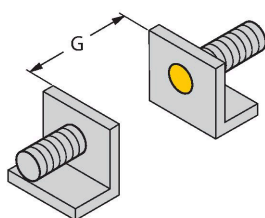
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

## Technical data

Housing material	Metal, CuZn, Chrome-plated
Active area material	yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	25 Nm
Electrical connection	Connector, 1/2"
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

## Mounting instructions

### Product features



Distance D	60 mm
------------	-------

Distance W	30 mm
------------	-------

Distance S	45 mm
------------	-------

Distance G	60 mm
------------	-------

Diameter active area B	Ø 30 mm
------------------------	---------

The given minimum distances have been checked against the standard switching distance.  
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.