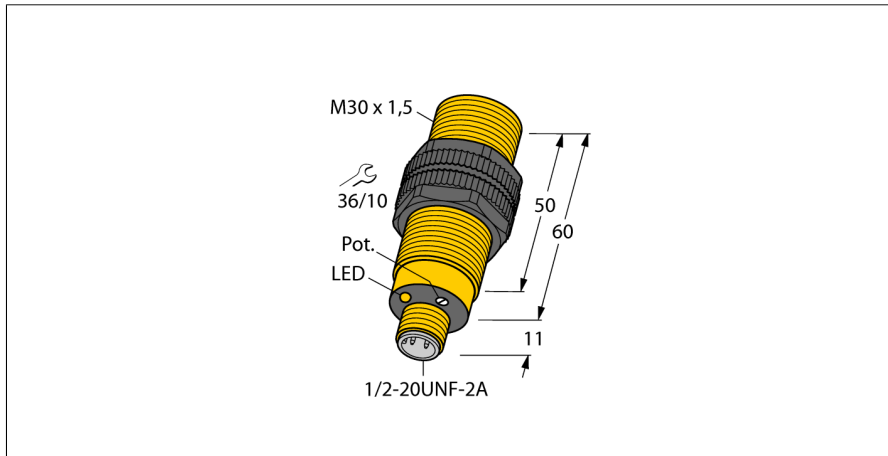
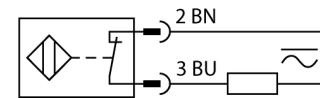


# Capacitive sensor BC10-S30-RDZ3X-B3131



- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- DC 2-wire, 20...320 VDC
- 1/2" connector

### Wiring Diagram



### Functional principle

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

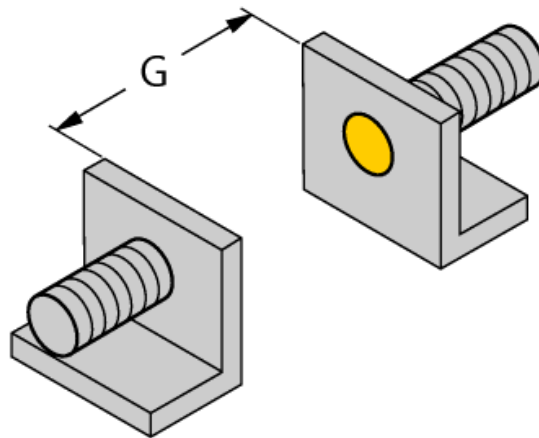
<b>Type designation</b>	BC10-S30-RDZ3X-B3131
Ident-No.	2310820
<b>Rated switching distance (flush)</b>	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 x S <sub>n</sub> ) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250VAC
Operating voltage	20...320 VDC
AC rated operational current	≤ 200 mA
DC rated operational current	≤ 200 mA
Frequency	≥ 50...≤ 60 Hz
Smallest operating current I <sub>m</sub>	≥ 3 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, 2-wire
Voltage drop at I <sub>s</sub>	≤ 7 V
<b>Design</b>	Threaded barrel, M30 × 1.5
Dimensions	60 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 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
Packaging unit	1
<b>Switching state</b>	LED, Yellow

**Capacitive sensor**  
**BC10-S30-RDZ3X-B3131**

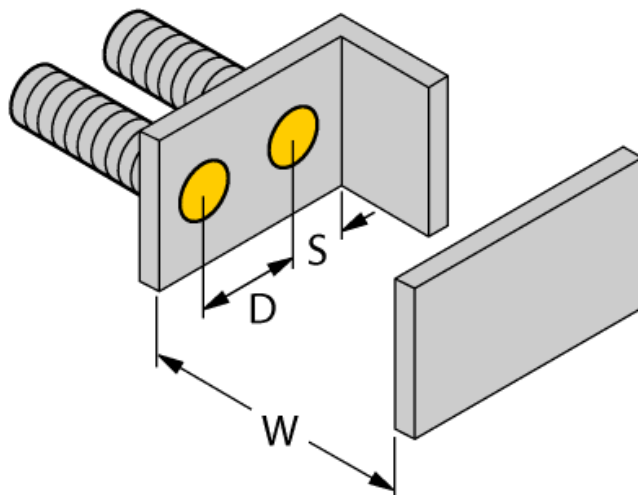
Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

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<b>Diameter active area B</b>	Ø 30 mm
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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.



**Capacitive sensor  
BC10-S30-RDZ3X-B3131**



**Accessories**

Type code	Ident-No.	Description	
MAP-M30	6950013	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	