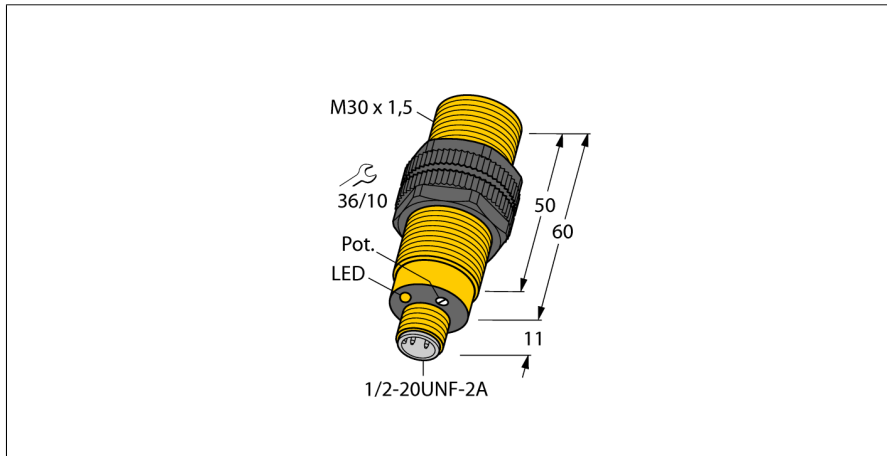


# Capacitive sensor BC10-S30-RDZ3X-B3131

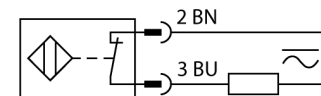
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- M30  $\leftarrow$  1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- DC 2-wire, 20...320 VDC
- 1/2" connector

### 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	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	$\leq 2$ % of full scale
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	20...250VAC
Operating voltage	20...320 VDC
AC rated operational current	$\leq 200$ mA
DC rated operational current	$\leq 200$ mA
Frequency	$\geq 50... \leq 60$ Hz
Smallest operating current $I_m$	$\geq 3$ mA
Residual current	$\leq 1.7$ mA
Switching frequency	0.02 kHz
Isolation test voltage	$\leq 1.5$ kV
Output function	2-wire, 2-wire
Voltage drop at $I_m$	$\leq 7$ V
<b>Design</b>	Threaded barrel, M30 $\leftarrow$ 1.5
Dimensions	60 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	$\leq 3$ 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
<b>Switching state</b>	LED yellow

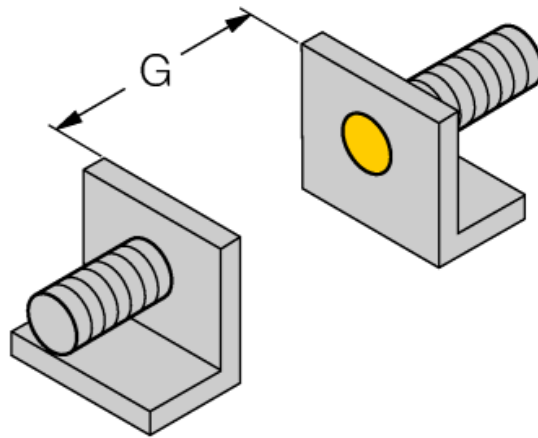
# Capacitive sensor BC10-S30-RDZ3X-B3131

**TURCK**

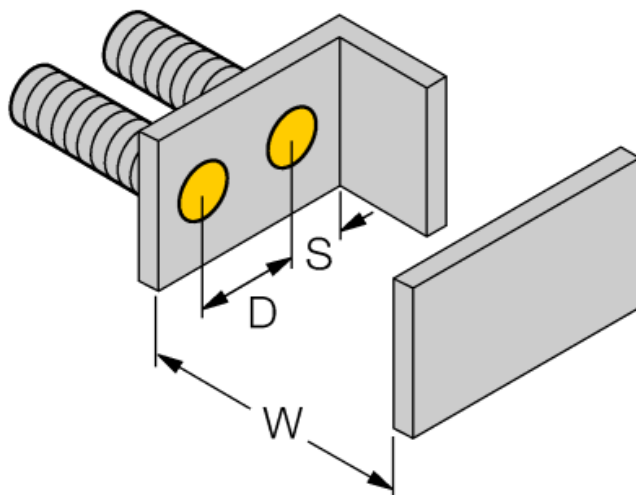
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Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter active area B                       $\varnothing$  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.

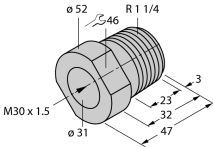


**Capacitive sensor  
BC10-S30-RDZ3X-B3131**

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**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	