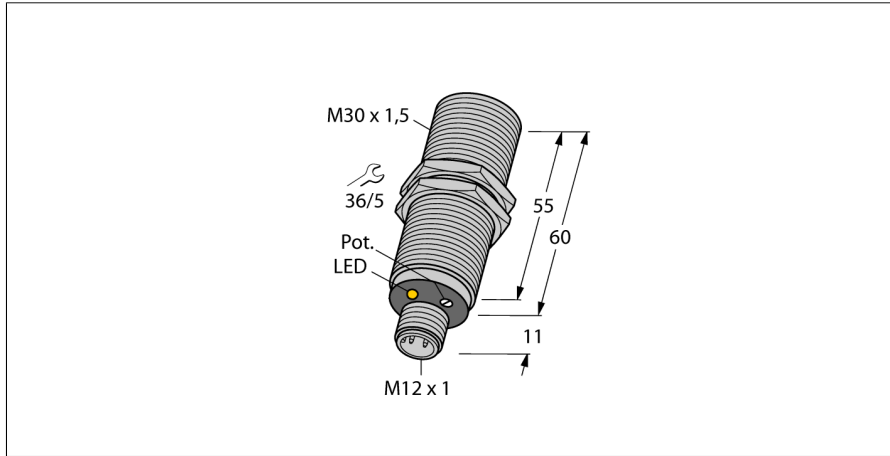
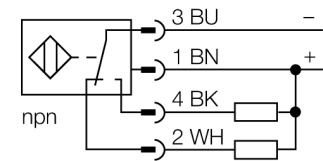


# Capacitive sensor BC10-M30K-VN4X-H1141



- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Complementary contact, NPN output
- M12 x 1 male connector

### Wiring Diagram



### Functional principle

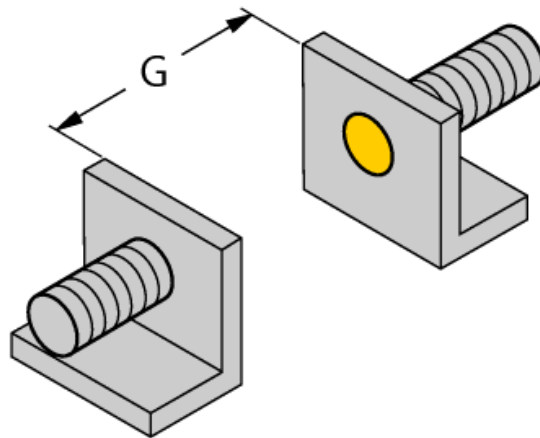
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

<b>Type designation</b>	BC10-M30K-VN4X-H1141
Ident-No.	2503033
<b>Rated switching distance (flush)</b>	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × 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>	10...65 VDC
Residual ripple	≤ 10 % U <sub>is</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Isolation test voltage	≤ 0.5 kV
Output function	4-wire, Complementary contact, NPN
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>0</sub>	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
<b>Approvals</b>	UL
<b>Design</b>	Threaded barrel, M30 × 1.5
Dimensions	60 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Connector, M12 × 1
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

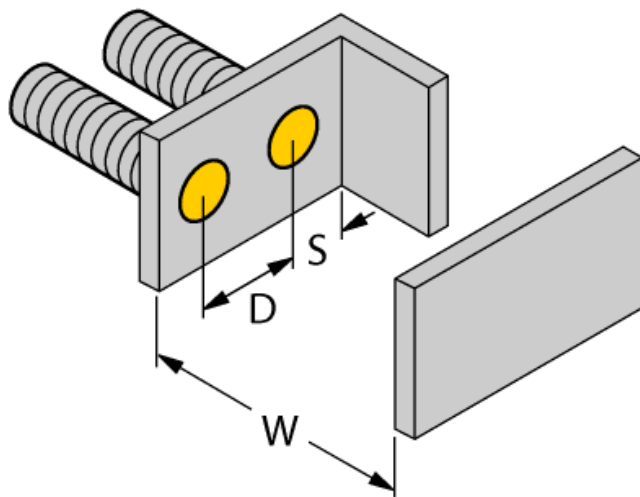
# Capacitive sensor BC10-M30K-VN4X-H1141

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-M30K-VN4X-H1141**



**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	

**Wiring accessories**

Type code	Ident-No.	Description	
RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	

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**Capacitive sensor**  
**BC10-M30K-VN4X-H1141**



**Wiring accessories**

Type code	Ident-No.	Description	
RKC4.4T-P7X2-10/TXL	6626184	Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	A technical drawing of the connection cable. It shows a female M12 connector on the left, angled at 90 degrees. The drawing includes several dimension lines: a vertical dimension of 14 mm for the connector height, a diameter of 16.2 mm for the connector body, a horizontal dimension of 48.5 mm for the connector length, a horizontal dimension of 50 mm for the cable length from the connector to the end of the sheath, and a total length dimension labeled 'L'. The cable has four conductors at the end, with a 5 mm distance between the conductors.