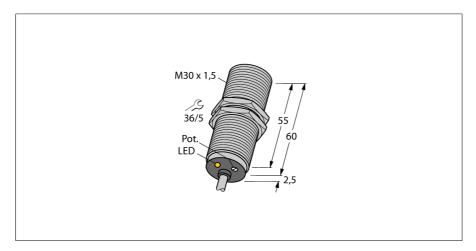
Capacitive sensor BC10-M30K-VN4X





Type designation	BC10-M30K-VN4X	
Ident-No.	2503024	
Rated switching distance (flush)	10 mm	
Rated switching distance (non-flush)	10 mm	
Secured operating distance	≤ (0.72 x Sn) mm	
Hysteresis	220 %	
Temperature drift	type 20 %	
Repeat accuracy	≤ 2 % of full scale	
Ambient temperature	-25+70 °C	
Operating voltage	1065 VDC	

Residual ripple $\leq 10 \% \text{ U}_{ss}$ No-load current $\leq 200 \text{ mA}$ Residual current $\leq 15 \text{ mA}$ Residual current $\leq 0.1 \text{ mA}$ Switching frequency $\leq 1.5 \text{ kV}$

Output function 4-wire, Complementary contact, NPN

 $\begin{tabular}{lll} Short-circuit protection & yes/ Cyclic \\ Voltage drop at I_{\epsilon} & \le 1.8 \ V \\ Wire breakage/Reverse polarity protection & yes/ Complete \\ \end{tabular}$

Approvals UL

Design Threaded barrel,M30 × 1.5

Dimensions 62.5 mm

Housing material Metal, CuZn, Chrome-plated Active area material Plastic, PA12-GF30, yellow

 $\begin{array}{lll} \mbox{Admissible pressure on front cap} & \leq 3 \mbox{ bar. tightening torque housing nut } & 25 \mbox{ Nm} \\ \mbox{Electrical connection} & \mbox{Cable} \end{array}$

Cable quality \emptyset 5.2mm, LifYY, PVC, 2 Cable cross section $4 \times 0.34 \text{ mm}^2$ Vibration resistance 55 Hz (1 mm) Shock resistance 30 g (11 ms)

Shock resistance 30 g (11 Protection class IP67

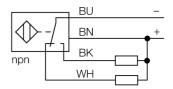
MTTF 1080 years acc. to SN 29500 (Ed. 99) 40 °C

Packaging unit

Switching state LED, Yellow

- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- DC 4-wire, 10-65 VDC
- Complementary contact, NPN output
- Cable connection

Wiring Diagram



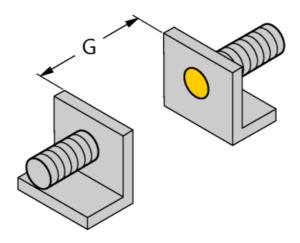
Functional principle

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

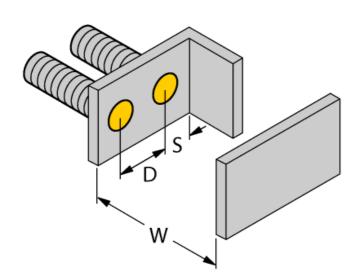
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Mounting instructions/Description	minimum distances	
Distance D	60 mm	
Distance W	30 mm	
Distance S	45 mm	
Distance G	60 mm	
Diameter active area B	Ø 30 mm	



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.



Capacitive sensor BC10-M30K-VN4X



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)	M30 x 1.5 0 31 47
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	M5 64 42 36 30 30