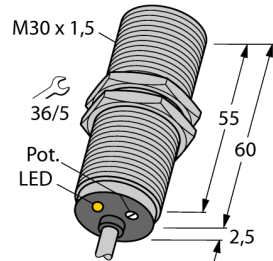


Capacitive sensor BC10-M30K-VP4X

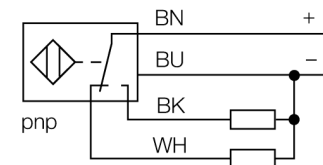
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Industrial
Automation



- M30 × 1.5 threaded barrel
- Chrome-plated brass
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP 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.

Type designation	BC10-M30K-VP4X
Ident no.	2503022
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × S _n) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Isolation test voltage	≤ 0.5 kV
Output function	4-wire, Complementary contact, PNP
Short-circuit protection	yes/ Cyclic
Voltage drop at I ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
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
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	25 Nm
Electrical connection	Cable
Cable quality	Ø 5.2, LifYY, PVC, 2m
Cable cross section	4 × 0.34 mm 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

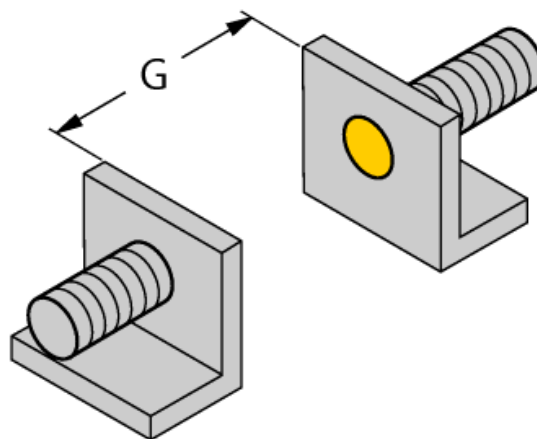
Capacitive sensor BC10-M30K-VP4X

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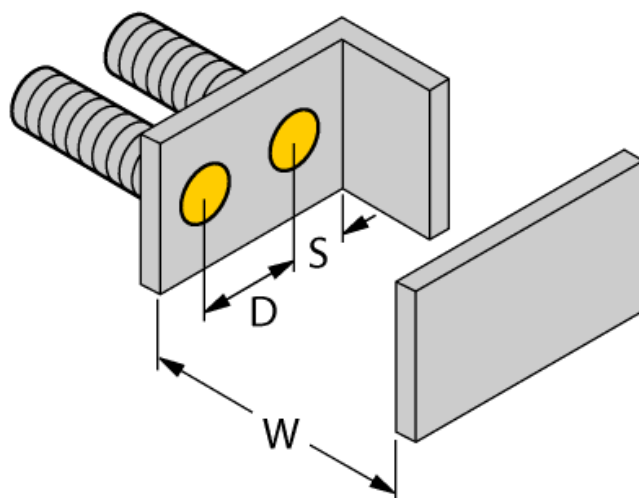
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Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter active area B	Ø 30 mm
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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-M30K-VP4X

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	