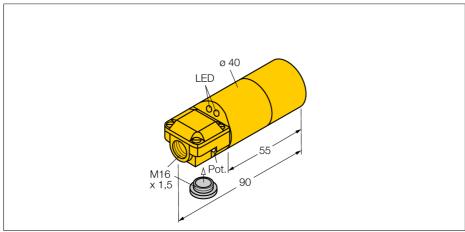
Capacitive sensor BC20-K40SR-FZ3X2

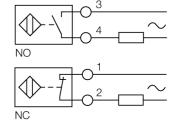




Type code	BC20-K40SR-FZ3X2	
ldent no.	23103	
Rated operating distance Sn	20 mm	
Rated operating distance Sn	30 mm, non-flush mounting	
Assured sensing range	≤ (0.72 x Sn) mm	
Hysteresis	220 %	
Temperaturdrift	type ≤ ± 20 %	
Repeatability	≤ 2 % of full scale	
Ambient temperature	-25+70 °C	
Operating voltage	20250 VAC	
AC rated operational current	≤ 500 mA	
Frequency	≥ 50≤ 60 Hz	
Smallest operating current I _m	≤ 5 mA	
Residual current	≤ 1.7 mA	
Switching frequency	0.02 kHz	
Rated insulation voltage	≤ 1.5 kV	
Output function	2-wire, connection programmable, 2-wire	
Voltage drop at I _e	≤ 7 V	
Design	smooth barrel, 40 mm	
Dimensions	90 mm	
Housing material	Plastic, ABS	
Material active face	Plastic, ABS	
Connection	Terminal chamber	
Clamping ability	≤ 2.5 mm²	
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	
Operating voltage	LED green	
Switching state	• yellow	

- 2 cable entries (axial, radial)
- Smooth barrel, Ø 40 mm
- Plastic, ABS
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- Programmable connection (NC/NO)
- Terminal chamber

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.

Included in scope of supply

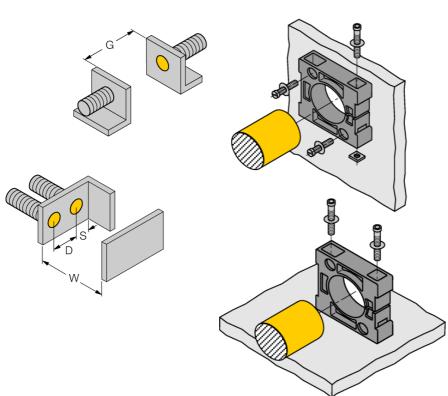
BS40, cable gland, blanking plug

TURCK

Capacitive sensor BC20-K40SR-FZ3X2



Mounting instructions / Description	minimum distances	
Distance D	40 mm	
Distance W	60 mm	
Distance S	60 mm	
Distance G	120 mm	
Diameter of the active area B	Ø 40 mm	



The given minimum distances have been checked in compliance with the standard switching distance. Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

Capacitive sensor BC20-K40SR-FZ3X2



Accessories

Type code	Ident no.	Description	Dimension drawing
MAP-K40	6950014	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	0 60 550 R 1 1/2 0 40,5 8 23 37 52,5
BS 40	69466	Fixing clamp; material mounting block: PBT	16 3 47.5 65 50 MS x 50 DIN 912