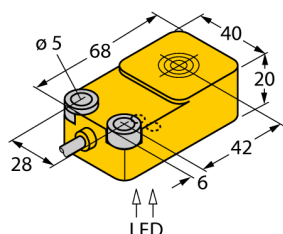


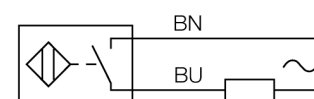
Capacitive Sensor

BC20-Q20-AZ3X2/S400



- Rectangular, height 20mm
- Active face on top
- Plastic, PBT-GF30-V0
- Fine adjustment via potentiometer
- AC 2-wire, 20...250 VAC
- NO contact
- Cable connection

Wiring Diagram



ID	2310005
Rated switching distance (flush)	20 mm
Rated switching distance (non-flush)	20 mm
Secured operating distance	$\leq (0.72 \times S_n)$ mm
Hysteresis	2...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C

Functional principle

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

Electrical data	
Operating voltage	20...250VAC
AC rated operational current	≤ 500 mA
Frequency	$\geq 50... \leq 60$ Hz
Smallest operating current I_{on}	≥ 5 mA
Residual current	≤ 1.7 mA
Switching frequency	0.02 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1... 2.0 MHz
Isolation test voltage	≤ 1.5 kV
Output function	2-wire, NO contact, 2-wire
Voltage drop at I_n	≤ 7 V

Tests/approvals	
Mechanical data	
Design	Rectangular, Q20
Dimensions	68 x 40 x 20 mm
Housing material	Plastic, PBT-GF30-V0
Electrical connection	Cable
Cable quality	Ø 5.2mm, LifYY, PVC, 2 m
Core cross-section	3 x 0.34 mm ² 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

Power-on indication	LED, Green
Switching state	LED, Red
Included in delivery	Mounting sleeve (MH-Q20), 2 pcs.

Accessories

Type code	Ident.-No.	Dimension drawing
MW-Q14/Q20	6945006	Mounting bracket for rectangular Q14 or Q20; material VA 1.4301

