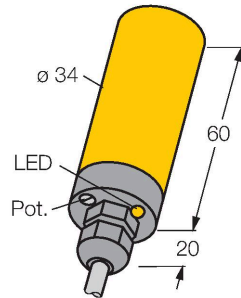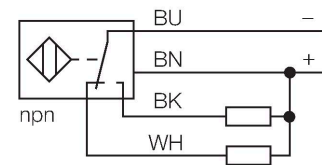# BC15-K34-VN4X
Capacitive Sensor

Features

- Smooth barrel, Ø 34mm
- Plastic, PBT-GF30-V0
- 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.
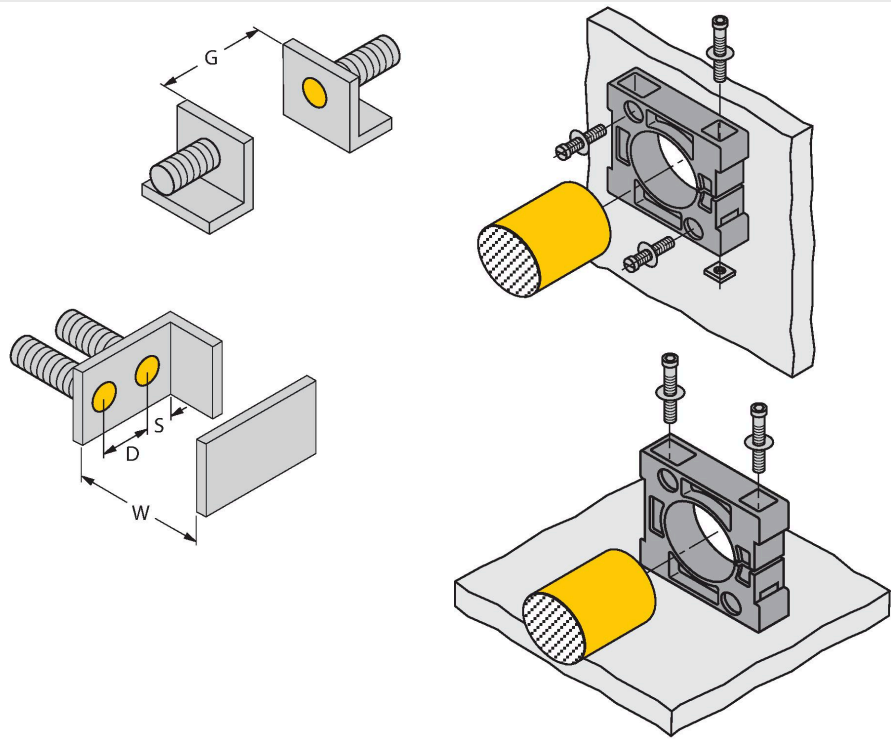
Technical data

Type	BC15-K34-VN4X
ID	2502127
Rated switching distance (flush)	15 mm
Rated switching distance (non-flush)	22.5 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	1…20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25…+70 °C
Electrical data	
Operating voltage	10…65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Oscillation frequency	According to EN 60947-5-2, 8.2.6.2 Table 9: 0.1…2.0 MHz
Isolation test voltage	≤ 0.5 kV
Output function	4-wire, Complementary contact, NPN
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete

Technical data

Tests/approvals	
Approvals	UL
UL registration number	E210608

Mechanical data	
Design	Smooth barrel, 34 mm
Dimensions	80 mm
Housing material	Plastic, PBT-GF30-V0
Active area material	PBT-GF30-V0, yellow
Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	4 x 0.34 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
Power-on indication	Green
Switching state	LED, Yellow
Included in delivery	BS34.1, 2 M5 screws, cable gland, blanking plugs

Mounting instructions

Distance D	68 mm
Distance W	45 mm
Distance S	51 mm
Distance G	90 mm
Diameter active area B	Ø 34 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.