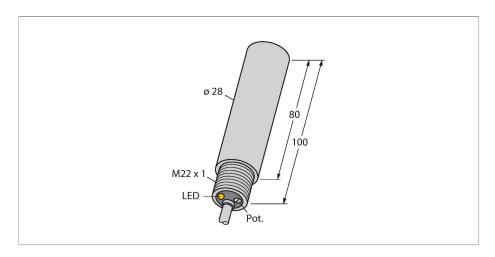
# HC3-K28S-AP4X Capacitive Sensor – Grip Sensor



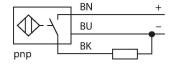
#### Technical data

Туре	HC3-K28S-AP4X	
ID	2601400	
Rated switching distance (flush)	3 mm	
Secured operating distance	≤ (0.72 × Sn)	
Hysteresis	120 %	
Temperature drift	Typical 20 %	
Repeat accuracy	≤ 2 % of full scale	
Ambient temperature	-25+70 °C	
Electrical data		
Operating voltage	65 VDC	
Residual ripple	≤ 10 % U <sub>ss</sub>	
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: 0.12.0 MHz	
Isolation test voltage	≤ 0.5 kV	
Output function	3-wire, NO contact, PNP	
Short-circuit protection	yes / Cyclic	
Voltage drop at I <sub>e</sub>	≤ 1.8 V	
Wire breakage/Reverse polarity protection	yes / Complete	
Tests/approvals		
Mechanical data		
Design	Smooth barrel, 28 mm	
Housing material	Plastic, PBT-GF30	

#### **Features**

- ■Smooth barrel, Ø 28 mm
- Plastic, PA12-GF30
- Capacitive grip sensor
- Active face, circumferential
- Dirt compensation on active face
- ■DC 3-wire, 10...65 VDC
- ■NO 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.





## Technical data

Active area material	PBT-GF30	
Electrical connection	Cable	
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m	
Core cross-section	3 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	Yellow	

# Mounting instructions

Product features		
	Diameter active area B	Ø 28 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.