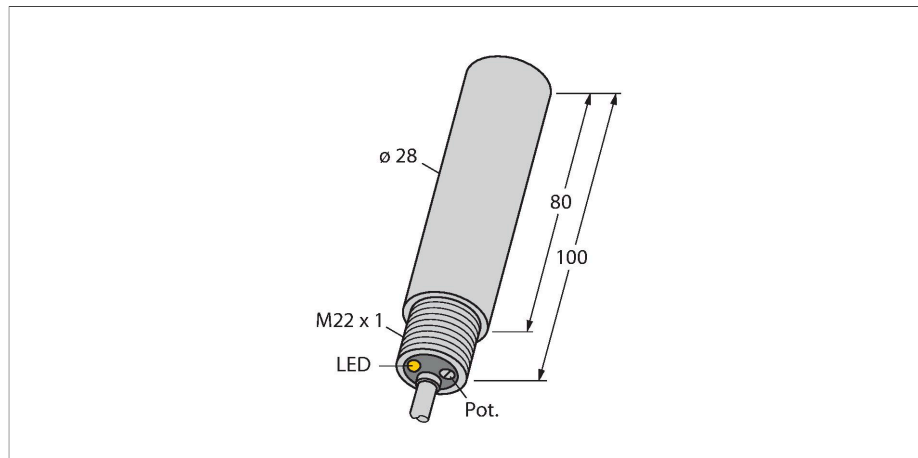


# HC3-K28S-AP4X

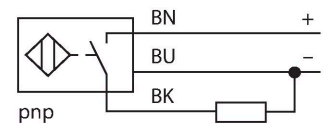
## Capacitive Sensor – Grip Sensor



### 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



### Technical data

Type	HC3-K28S-AP4X
ID	2601400
Rated switching distance (flush)	3 mm
Secured operating distance	$\leq (0.72 \times S_n)$
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2$ % of full scale
Ambient temperature	-25...+70 °C
<b>Electrical data</b>	
Operating voltage	10...65 VDC
Residual ripple	$\leq 10$ % $U_{ss}$
DC rated operational current	$\leq 200$ mA
No-load current	$\leq 15$ mA
Residual current	$\leq 0.1$ 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	$\leq 0.5$ kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes / Cyclic
Voltage drop at $I_o$	$\leq 1.8$ V
Wire breakage/Reverse polarity protection	yes / Complete
<b>Mechanical data</b>	
Design	Smooth barrel, 28 mm
Housing material	Plastic, PBT-GF30
Active area material	PBT-GF30

### 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

Electrical connection	Cable
Cable quality	Ø 5.2 mm, LifYY, PVC, 2 m
Core cross-section	3 x 0.34 mm <sup>2</sup>
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

## 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.