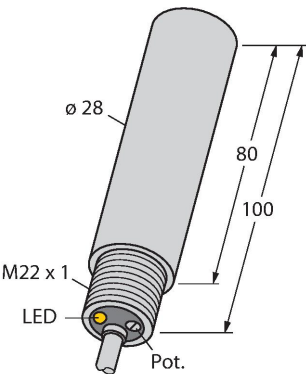


HC3-K28S-AP4X

Capacitive Sensor – Grip Sensor



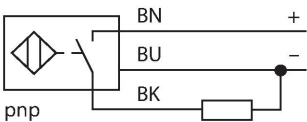
Technical data

Type	HC3-K28S-AP4X
ID	2601400
Rated switching distance (flush)	3 mm
Secured operating distance	≤ (0.72 × Sn) mm
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U _B	65 VDC
Ripple U _{ss}	≤ 10 % U _{Bmax}
DC rated operating current I _e	≤ 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	3-wire, NO contact, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I _e	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Mechanical data	
Design	Smooth barrel, 28 mm
Housing material	Plastic, PBT-GF30
Active area material	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

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
Switching state	Yellow

Mounting instructions

Product features	Diameter active area B	Ø 28 mm
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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.