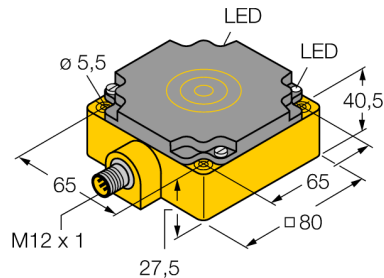


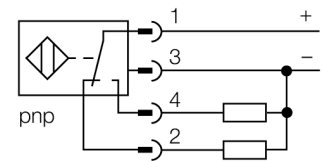
Capacitive Sensor

NC50-CP80-VP4X2-H1141



- Rectangular, height 40.5 mm
- Active face on top
- Plastic, PBT-GF30-VO
- Fine adjustment via potentiometer
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP output
- M12 × 1 connector

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.

Type	NC50-CP80-VP4X2-H1141
ID	2580400
Rated switching distance (non-flush)	50 mm
Secured operating distance	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Ripple U_{ss}	$\leq 10 \% U_{\text{Bmax}}$
DC rated operating current I_{e}	$\leq 200 \text{ mA}$
No-load current I_{o}	$\leq 20 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Switching frequency	0.07 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, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_{e}	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608
Mechanical data	
Design	Rectangular, CP80
Dimensions	80 x 80 x 40.5 mm
Housing material	Plastic, PBT-GF30-VO
Electrical connection	Connector, M12 × 1
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, Yellow

Accessories

Type code	Ident-No.		Dimension drawing
SMBDX80DIN	3077161	Mounting panel for DIN rail, suited for CP80, DX80, K80, Q80, operating temperature: -20...90 °C	