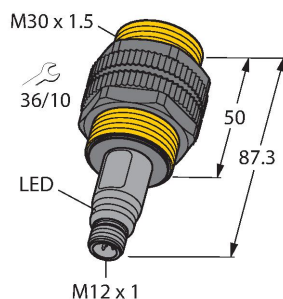


BCT10-S30-UN6X2-H1151

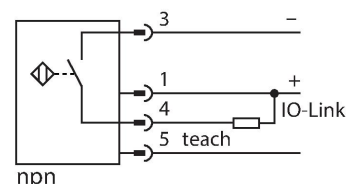
Capacitive Sensor



Features

- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Teach-in and configuration via pin 5 and IO-Link

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

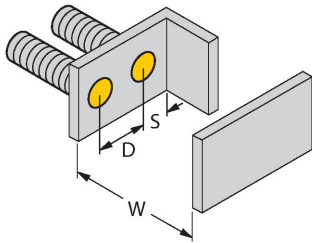
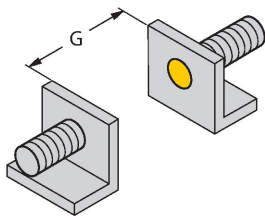
Type	BCT10-S30-UN6X2-H1151
Ident. no.	2101800
Remark to product	For remote teaching via pin 5 please use 5-wire cable (e.g. RKC4.5T.../WKC4.5T...)
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	$\leq (0.72 \times S_n)$
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage	10...30 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.01 kHz
Isolation test voltage	≤ 0.5 kV
Communication protocol	IO-Link
Output function	3-wire, NO/NC, NPN
Short-circuit protection	yes / Cyclic
Voltage drop at I_o	≤ 2.4 V

Technical data

Wire breakage/Reverse polarity protection	yes / Complete
Approvals	UL
IO-Link	
IO-Link specification	Specified acc. to version 1.1
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Transmission rate	COM 2/38.4 kbps
Process data width	16 bit
Measured value information	12 bit
Frame type	2.2
Accuracy	± 0.5 % of full scale BSL
Included in the SIDI GSDML	Yes
Mechanical data	
Design	Threaded barrel, M30 × 1.5
Dimensions	87.3 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque of housing nut	5 Nm
Electrical connection	Connector, M12 × 1
Vibration resistance	55 Hz (1 mm)
Shock resistance	30 g (11 ms)
Protection class	IP67 / IP69K
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Product features



Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm
Diameter active area B	Ø 30 mm

The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.