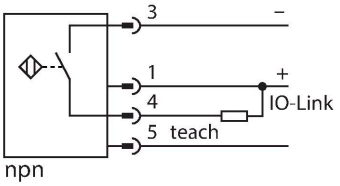
BCT10-S30-UN6X2-H1151
Capacitive Sensor

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

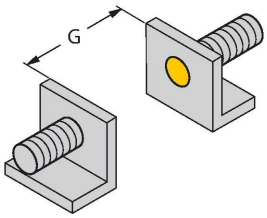
Type	BCT10-S30-UN6X2-H1151
ID	2101800
Remark to product	For remote teaching via pin 5 please use 5-wire cable (e.g. RKC4.5T…/ WKC4.5T…)
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	15 mm
Secured operating distance	≤ (0.72 × Sn)
Hysteresis	1…20 %
Temperature drift	Typical 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
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
Communication protocol	IO-Link
Output function	3-wire, NO/NC, NPN
Short-circuit protection	yes / Cyclic

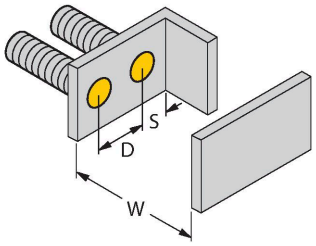
Technical data

Voltage drop at I_e	≤ 2.4 V
Wire breakage/Reverse polarity protection	yes / Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608
IO-Link	
IO-Link specification	V 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
Included in the SIDI GSDML	Yes
Mechanical data	
Design	Threaded barrel, M30 x 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
Power-on indication	Green
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.