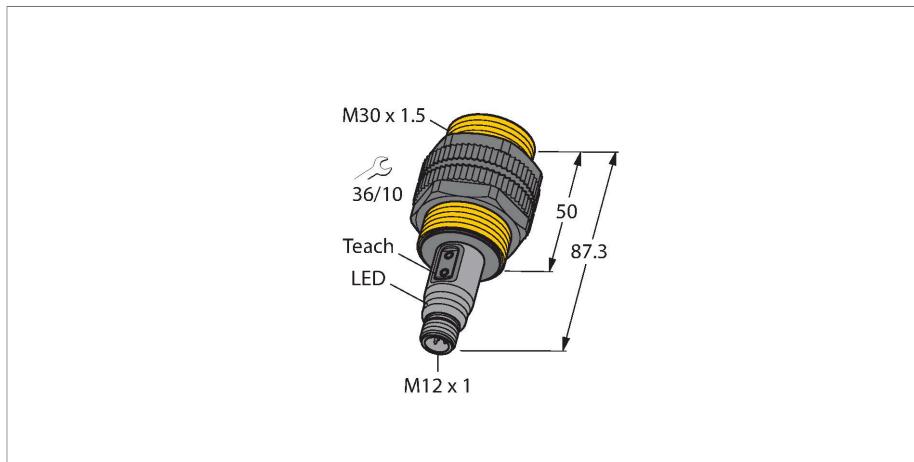


BCT10-S30-UN6X2T-H1151

Capacitive Sensor



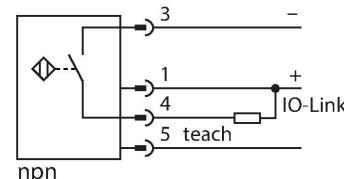
Technical data

Type	BCT10-S30-UN6X2T-H1151
ID	2101600
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	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2 \text{ % of full scale}$
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	18...30 VDC
	In IO-Link mode
Ripple U_{ss}	$\leq 10 \text{ % } U_{B\max}$
DC rated operating current I_e	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
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

Features

- M30 x 1.5 threaded barrel
- Plastic, PA12-GF30
- Teach-in and configuration via buttons on the device, pin 5 and IO-Link

Wiring diagram



Functional principle

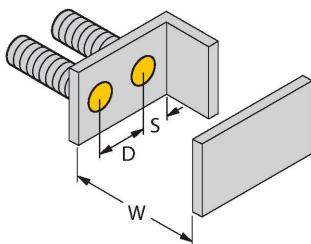
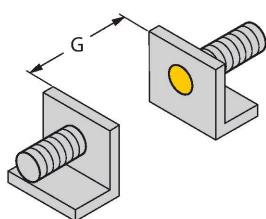
Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as non-conductive metal objects.

Technical data

Short-circuit protection	yes/Cyclic
Voltage drop at I_e	≤ 2.4 V
Wire break/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 x 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	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	\varnothing 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.