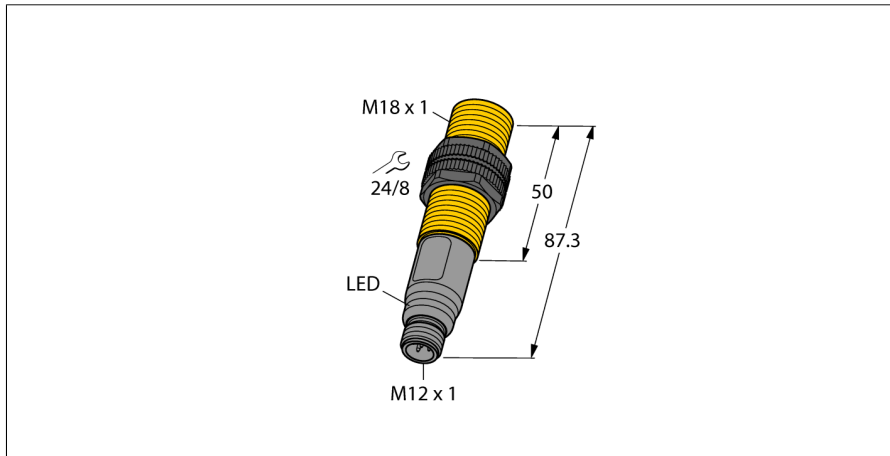


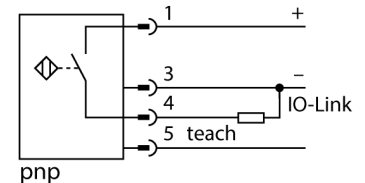
# Capacitive sensor

## BCT5-S18-UP6X2-H1151



- M18 × 1 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.

<b>Type designation</b>	BCT5-S18-UP6X2-H1151
Ident-No.	2101300
<b>Remark to product</b>	For remote teaching via pin 5 please use 5-wire cable (e.g. RKC4.5T.../WKC4.5T...)
<b>Rated switching distance Sn</b>	7.5 mm
Mounting conditions	Flush
Secured operating distance	≤ (0.72 × Sn) mm
Repeat accuracy	≤ 2 % of full scale
Temperature drift	type 20 %
Hysteresis	2...20 %
Ambient temperature	-25...+70 °C
<b>Operating voltage</b>	10...30 VDC
Residual ripple	≤ 10 % U <sub>s</sub>
DC rated operational current	≤ 200 mA
No-load current I <sub>0</sub>	≤ 15 mA
Residual current	≤ 0.1 mA
Isolation test voltage	≤ 0.5 kV
Short-circuit protection	yes/ Cyclic
Voltage drop at I <sub>0</sub>	≤ 2.4 V
Wire breakage/Reverse polarity protection	yes/ Complete
Output function	3-wire, NO/NC programmable, PNP
Switching frequency	0.01 kHz
<b>Approvals</b>	UL
<b>IO-Link</b>	
IO-Link Specification	Specified acc. to version 1.1
Programming	FDT/DTM
Transmission physics	corresponds to 3-wire physics (PHY2)
Process data width	16 bit
Measured value information	12 bit
Frame type	2.2
Genauigkeit	± 0.5 % of final value BSL
<b>Design</b>	
Dimensions	Threaded barrel, M18 × 1 87.3 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
End cap	Plastic, PA
Admissible pressure on front cap	≤ 6 bar
Max. tightening torque housing nut	2 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
Packaging unit	1

Capacitive sensor  
BCT5-S18-UP6X2-H1151



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Switching state

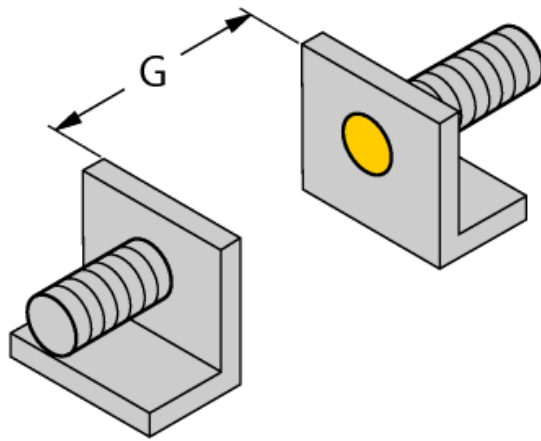
LED, Yellow

**Capacitive sensor**  
**BCT5-S18-UP6X2-H1151**

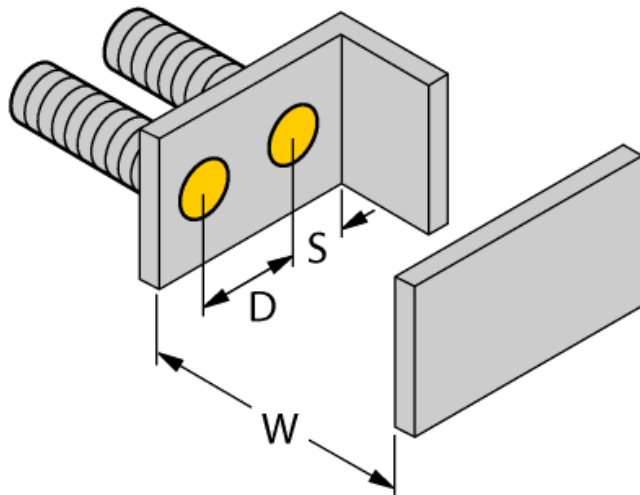
Mounting instructions/Description	minimum distances
Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm

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<b>Diameter active area B</b>	Ø 18 mm
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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.



**Capacitive sensor**  
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**Accessories**

Type code	Ident-No.	Description	
BS-18	69471	Mounting bracket for threaded barrel devices; material: PA66-GF	
BSN 18	69472	Fixing clamp; material: PA66-GF	
BST-18B	6947214	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	
MAP-M18	6950012	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	

**Wiring accessories**

Type code	Ident-No.	Description	
RKC4.4T-2/TXL	6625503	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	

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**Wiring accessories**

Type code	Ident-No.	Description	
WKC4.4T-2/TXL	6625515	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	
WKC4.4T-2/TEL	6625025	Connection cable, female M12, angled, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see <a href="http://www.turck.com">www.turck.com</a>	

**Function accessories**

Type code	Ident-No.	Description	
TX1-Q20L60	6967114	Teach adapter for inductive encoders, linear position, angle, ultrasonic and capacitive sensors	
TBEN-S2-4IOL	6814024	Compact multiprotocol I/O module, 4 IO-Link Master 1.1 Class A, 4 universal PNP digital channels 0.5 A	