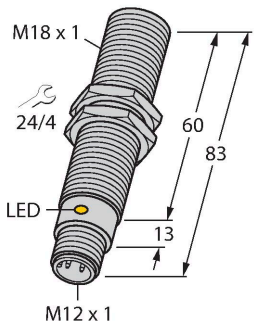
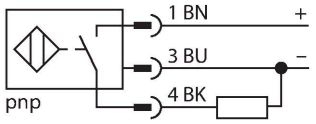
BC5-M18-AP4X-H1141/S250
Capacitive Sensor

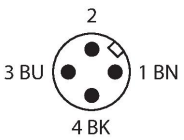


Features

- M18 × 1 threaded barrel
- Chrome-plated brass
- Fixed settings
- DC 3-wire, 10…65 VDC
- NO contact, PNP output
- M12 x 1 male connector

Wiring diagram





Technical data

Type	BC5-M18-AP4X-H1141/S250
Ident. no.	2504024
Rated switching distance (flush)	5 mm
Rated switching distance (non-flush)	5 mm
Secured operating distance	≤ (0.72 x Sn)
Hysteresis	2…20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25…+70 °C
Electrical data	
Operating voltage	10…65 VDC
Residual ripple	≤ 10 % U_{ss}
DC rated operational current	≤ 200 mA
No-load current	≤ 15 mA
Residual current	≤ 0.1 mA
Switching frequency	0.1 kHz
Isolation test voltage	≤ 0.5 kV
Output function	3-wire, NO contact, PNP
Short-circuit protection	yes / Cyclic
Voltage drop at I_e	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes / Complete
Approvals	UL

Functional principle

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

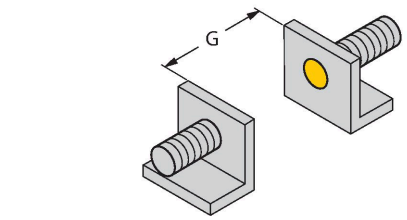
BC5-M18-AP4X-H1141/S250| 02/13/2020 16-11 | technical changes reserved

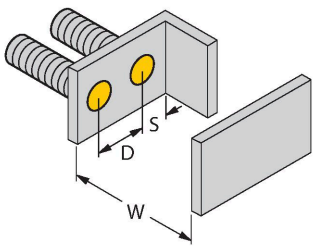
Technical data

Mechanical data	
Design	Threaded barrel, M18 × 1
Dimensions	83 mm
Housing material	Metal, CuZn, Chrome-plated
Active area material	Plastic, PBT-GF30-V0, yellow
Admissible pressure on front cap	≤ 4 bar
Max. tightening torque housing nut	25 Nm
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
Switching state	LED, Yellow

Mounting instructions

Product features



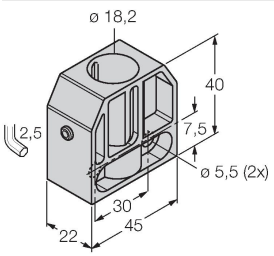


Distance D	36 mm
Distance W	15 mm
Distance S	27 mm
Distance G	30 mm
Diameter active area B	Ø 18 mm

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.

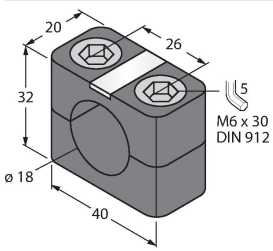
Accessories

BS 18 **69471**



Mounting clamp for threaded barrel sensors; material: PA66-GF

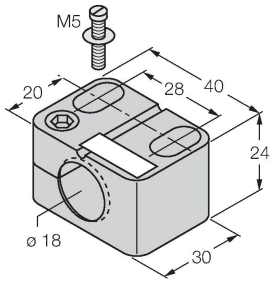
BSN 18 **69472**



Mounting clamp for threaded barrel sensors; material: PA66-GF

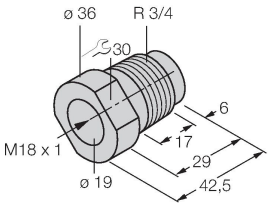
BC5-M18-AP4X-H1141/S250| 02/13/2020 16-11 | technical changes reserved

BST-18B **6947214**



Mounting clamp for threaded barrel sensors, with dead-stop; material: PA6

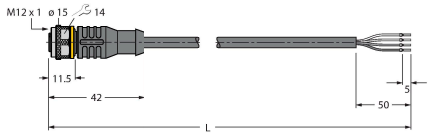
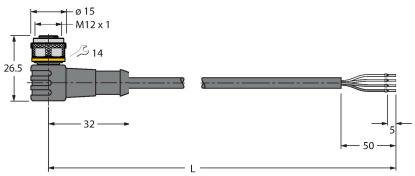
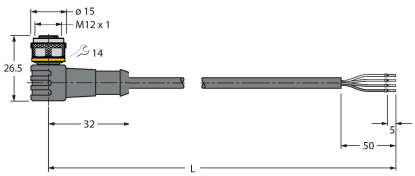
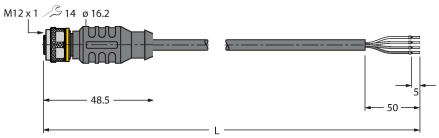
MAP-M18 **6950012**



Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)

Accessories

Wiring accessories

Dimension drawing	Type	Ident. no.	
	**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 www.turck.com
	**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 www.turck.com
	**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 www.turck.com
	**RKC4.4T-2/TEL**	**6625013**	Connection cable, female M12, straight, 4-pin, cable length: 2 m, sheath material: PVC, black; cULus approval; other cable lengths and qualities available, see www.turck.com
	**RKC4.4T-P7X2-10/TXL**	**6626184**	Connection cable, female M12, angled, 4-pin, cable length: 10m, sheath material: PUR, black; cULus approval; other cable lengths and qualities available, see www.turck.com

Accessories

BC5-M18-AP4X-H1141/S250| 02/13/2020 16-11 | technical changes reserved