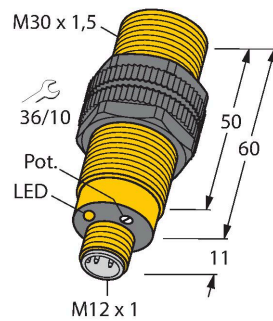


BCC10-S30-VP4X-H1141

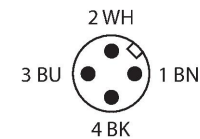
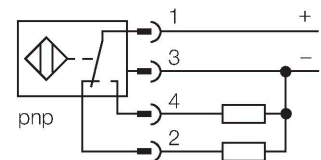
Capacitive Sensor – For the Detection of Dry Pellets



Features

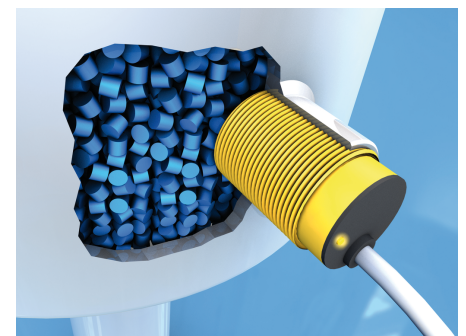
- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Especially for dry pellets and the plastics industry
- EMC and ESD resistant
- DC 4-wire, 10...65 VDC
- Complementary contact, PNP output
- M12 × 1 connector

Wiring diagram



Functional principle

Level monitoring of pellets is usually done with sensors mounted in pipes, silos or on inspection windows. The new TURCK sensor series features excellent EMC and ESD properties. Mounting in metal flanges induces lateral predamping which disturbs normal sensor. This effect is neutralized with a laterally mounted shield and an integrated processing unit. A constant switching distance is thus achieved.



Technical data

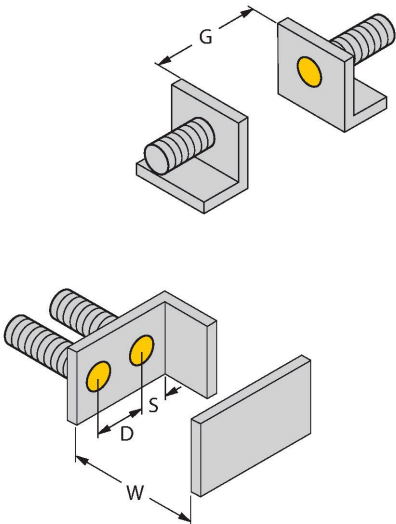
Type	BCC10-S30-VP4X-H1141
ID	2503043
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	$\leq (0.72 \times S_n)$ mm
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_B	65 VDC
Ripple U_{ss}	≤ 10 % U_{Bmax}
DC rated operating current I_o	≤ 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	4-wire, Complementary contact, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	≤ 1.8 V
Wire break/reverse polarity protection	yes/Complete
Tests/approvals	
Approvals	UL
UL registration number	E210608
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	60 mm

Technical data

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
MTTF	1080 years acc. to SN 29500 (Ed. 99) 40 °C
Switching state	LED, Yellow

Mounting instructions

Product features



The diagrams illustrate the mounting dimensions of the sensor housing. The top diagram shows the distance G between the mounting holes. The bottom diagram shows the distance D between the active area, distance S between the mounting holes, and distance W between the mounting holes. The diameter of the active area is labeled B.

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

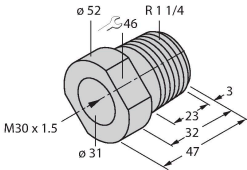
The given minimum distances have been checked against the standard switching distance.
Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.

Accessories

MAP-M30

6950013

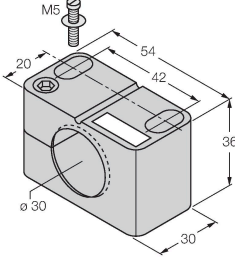
Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)



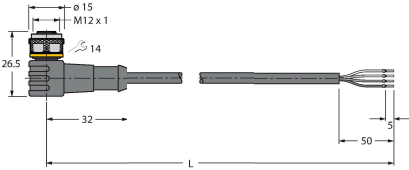
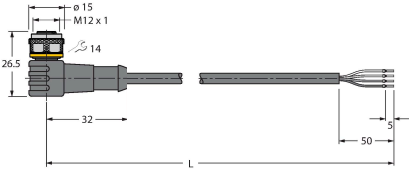
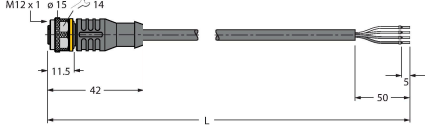
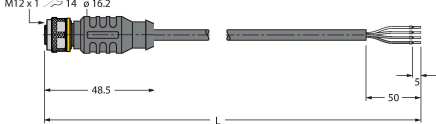
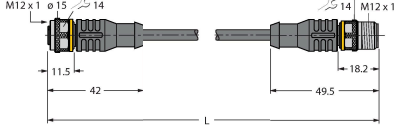
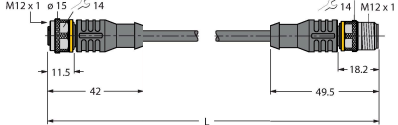
BST-30B

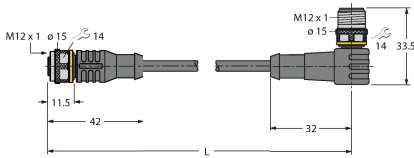
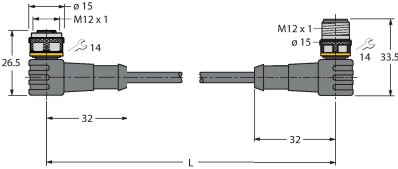
6947216

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



Accessories

Dimension drawing	Type	ID	
	RKC4.4T-2/TXL	6625503	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TXL	6625515	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2/TEL	6625025	Connection cable, M12 female connector, angled, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2/TEL	6625013	Connection cable, M12 female connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-P7X2-10/TXL	6626184	Connection cable, M12 female connector, straight, 4-pin, LED, cable length: 10 m, jacket material: PUR, black; cULus approval
	RKC4.4T-2-RSC4.4T/TEL	6625208	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, straight, 4-pin, cable length: 2 m, jacket material: PVC, black; cULus approval
	RKC4.4T-2-RSC4.4T/TXL	6625608	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, straight, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval

Dimension drawing	Type	ID	
	RKC4.4T-2-WSC4.4T/TXL	6625624	Extension cable, M12 female connector, straight, 4-pin to M12 male connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval
	WKC4.4T-2-WSC4.4T/TXL	6625656	Extension cable, M12 female connector, angled, 4-pin to M12 male connector, angled, 4-pin; cable length: 2 m, jacket material: PUR, black; cULus approval