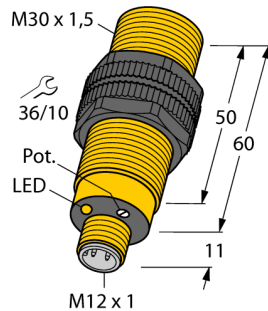


Capacitive sensor for the detection of dry pellets BCC10-S30-AP4X-H1141

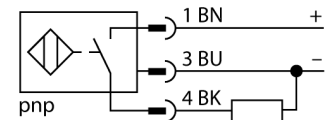
TURCK
works

Industrial
Automation



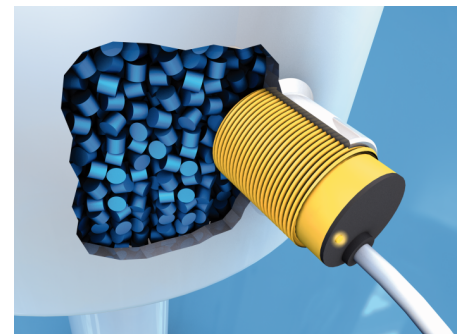
- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Especially for dry pellets and the plastics industry
- EMC and ESD resistant
- DC 3-wire, 10...65 VDC
- NO contact, PNP output
- M12 x 1 male connector

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.

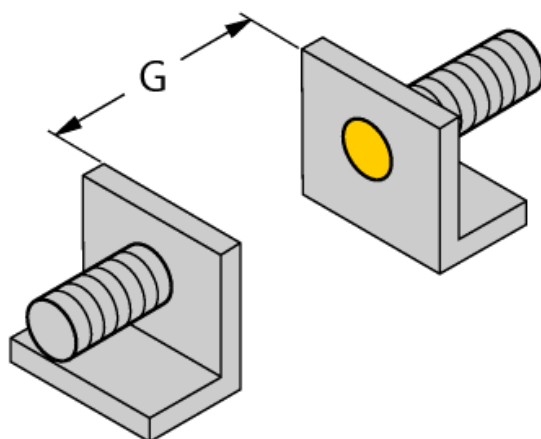


Type designation	BCC10-S30-AP4X-H1141
Ident-No.	2503038
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	≤ (0.72 × S _n) mm
Hysteresis	2...20 %
Temperature drift	type 20 %
Repeat accuracy	≤ 2 % of full scale
Ambient temperature	-25...+70 °C
Operating voltage	10...65 VDC
Residual ripple	≤ 10 % U _{ss}
DC rated operational current	≤ 200 mA
No-load current I ₀	≤ 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 ₀	≤ 1.8 V
Wire breakage/Reverse polarity protection	yes/ Complete
Design	Threaded barrel, M30 × 1.5
Dimensions	60 mm
Housing material	Plastic, PA12-GF30, PEI
Active area material	Plastic, PA12-GF30, yellow
Admissible pressure on front cap	≤ 3 bar
Max. tightening torque housing nut	5 Nm
Electrical connection	Connectors, 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
Packaging unit	1
Switching state	LED, Yellow

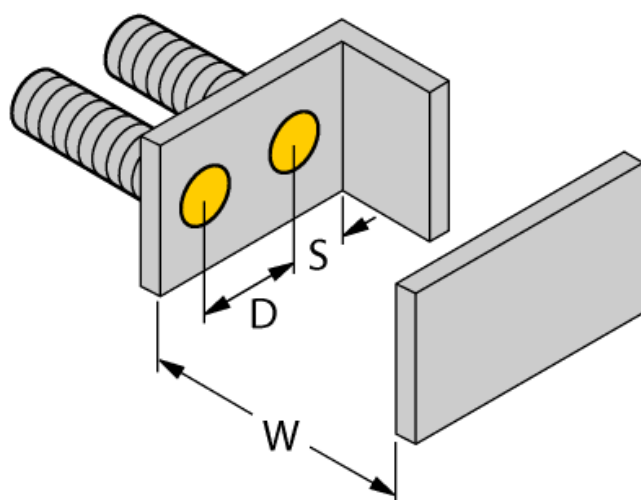
Capacitive sensor for the detection of dry pellets BCC10-S30-AP4X-H1141

Mounting instructions/Description	minimum distances
Distance D	60 mm
Distance W	30 mm
Distance S	45 mm
Distance G	60 mm

Diameter active area B	Ø 30 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.

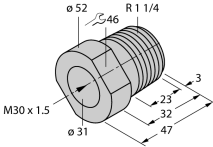
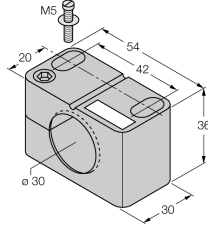


**Capacitive sensor
for the detection of dry pellets
BCC10-S30-AP4X-H1141**

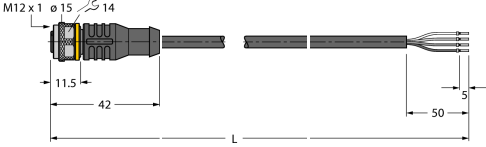
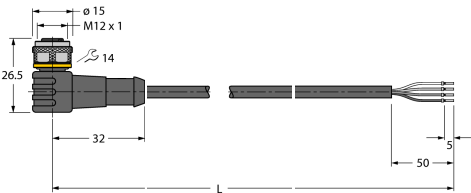
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Accessories

Type code	Ident-No.	Description	
MAP-M30	6950013	Mounting adapter; material: Polypropylene; sensor replacement with filled container possible (adapter remains in container during sensor replacement)	
BST-30B	6947216	Fixing clamp for threaded barrel devices, with dead-stop; material: PA6	

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 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	

Capacitive sensor
for the detection of dry pellets
BCC10-S30-AP4X-H1141



Wiring accessories

Type code	Ident-No.	Description	
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	