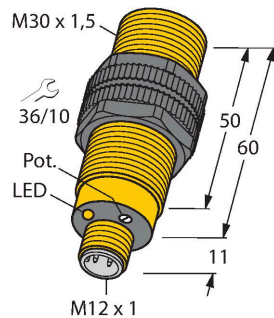


BCC10-S30-RP4X-H1143

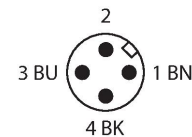
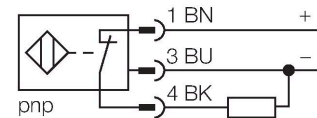
Capacitive Sensor – For the Detection of Dry Pellets



Features

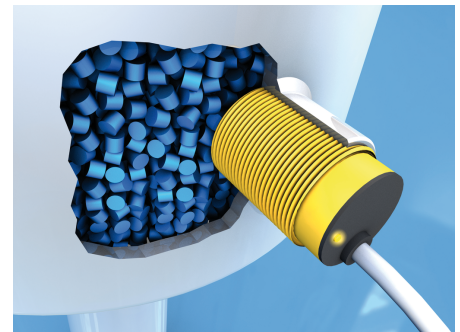
- M30 × 1.5 threaded barrel
- Plastic, PA12-GF30
- Fine adjustment via potentiometer
- Especially for dry pellets and the plastics industry
- EMC and ESD resistant
- DC 3-wire, 10...65 VDC
- NC contact, PNP output
- M12 × 1 connector

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

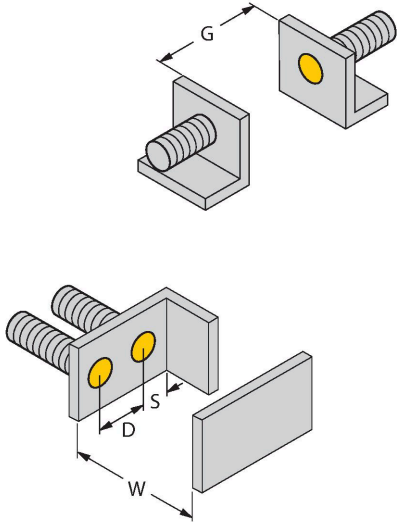
Type	BCC10-S30-RP4X-H1143
ID	1542562
Rated switching distance (flush)	10 mm
Rated switching distance (non-flush)	10 mm
Secured operating distance	$\leq (0.72 \times S_n) \text{ mm}$
Hysteresis	1...20 %
Temperature drift	Typical 20 %
Repeat accuracy	$\leq 2 \%$ of full scale
Ambient temperature	-25...+70 °C
Electrical data	
Operating voltage U_s	65 VDC
	10...30 VDC for use in China
Ripple U_{as}	$\leq 10 \%$ U_{Bmax}
DC rated operating current I_o	$\leq 200 \text{ mA}$
No-load current	$\leq 15 \text{ mA}$
Residual current	$\leq 0.1 \text{ mA}$
Switching frequency	0.1 kHz
Isolation test voltage	0.5 kV
Output function	3-wire, NC contact, PNP
Short-circuit protection	yes/Cyclic
Voltage drop at I_o	$\leq 1.8 \text{ V}$
Wire break/reverse polarity protection	yes/Complete

Technical data

Tests/approvals	
Approvals	UL
UL registration number	E210608
Mechanical data	
Design	Threaded barrel, M30 x 1.5
Dimensions	60 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 × 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	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.

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