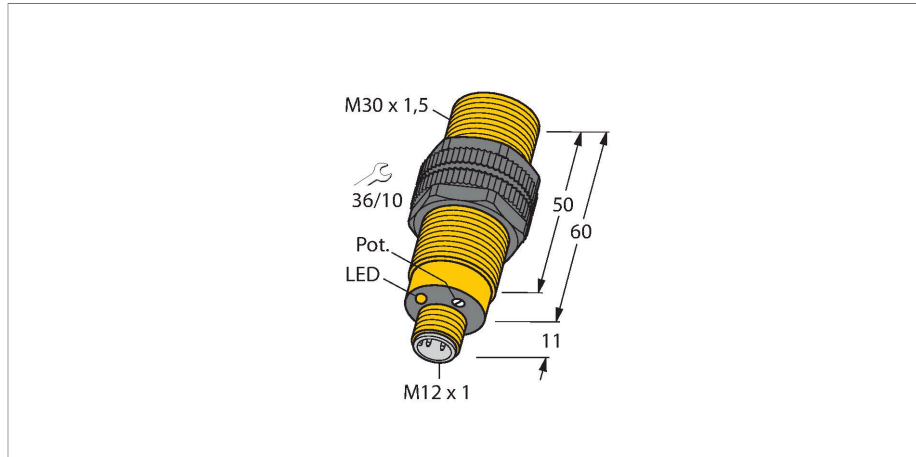


BCC10-S30-RP4X-H1143

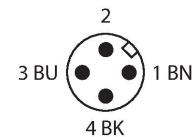
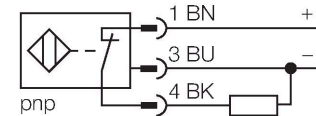
Capacitive Sensor – For the Detection of Dry Pellets



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

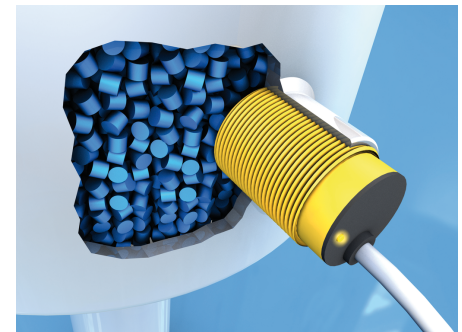


Technical data

| | |
|---|---|
| Type | BCC10-S30-RP4X-H1143 |
| ID | 1542562 |
| Rated switching distance (flush) | 10 mm |
| Rated switching distance (non-flush) | 10 mm |
| Secured operating distance | ≤ (0.72 × Sn) |
| Hysteresis | 1...20 % |
| Temperature drift | Typical 20 % |
| Repeat accuracy | ≤ 2 % of full scale |
| Ambient temperature | -25...+70 °C |
| Electrical data | |
| Operating voltage | 10...65 VDC 10...30 VDC for use in China |
| 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, NC contact, PNP |
| Short-circuit protection | yes / Cyclic |
| Voltage drop at I _o | ≤ 1.8 V |
| Wire breakage/Reverse polarity protection | yes / Complete |

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.

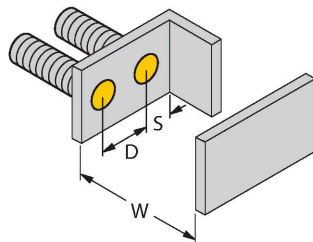
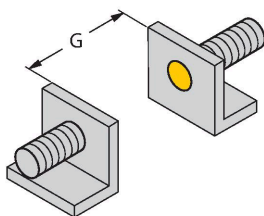


Technical data

| Tests/approvals | |
|---------------------------------------|--|
| 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 |
| Power-on indication | Green |
| 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.