

URCK

Industrial Automation

CAPACITIVE SENSORS

SERIES BC, BCF, BCC



Sense it! Connect it! Bus it! Solve it!

CAPACITIVE SENSORS - APPLICATION SAFETY R

BC series - The standard

Capacitive sensors work on the principles of non-contact, isolated and wear-free detection. Both electrically conductive and non-conductive materials are detected reliably. Capacitive sensors can thus be applied in systems where the inductive principle fails.

Typical applications are distance and position measurement, bending strength, thickness, level control, eccentricity, concentricity, deformation, wear and vibrations.

- Non-contact detection of metal and non-metal targets
- Large switching distances (adjustable)
- Short-circuit and reverse polarity protection
- Connection types: Connector, cable connection, terminal chamber
- Plastic, metal or Dyflor housings
- EMC protection (highly EMC immune)

• ESD protection (immune to electrostatic discharge)

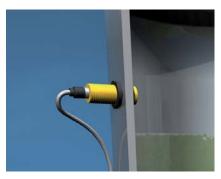
• Wetting compensation

 Switching status displayed via LED

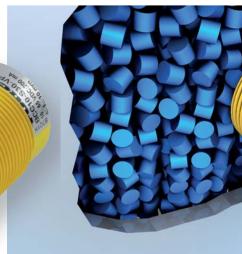
 Degree of protection up to IP67













Excellent EMC immunity

Thanks to special protective measures, the sensors are highly EMC safe, even when exposed to increased electromagnetic interference (industrial environments).



IGHT FROM THE START

BCF series - The problem solver

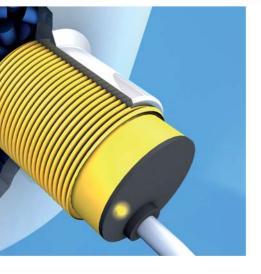
In difficult applications conventional sensors don't provide sufficient detection reliability. In particular, conductive coatings that cover large surfaces may lead to detection problems or even to complete failure.

Such difficulties belong to the past, thanks to the BCF sensors because they combine innovative switching technology with optimized electrode and compensation features.

• Suited for highly viscous media

 Improved EMC safety (in connection with high frequency technology)





Plastic is most commonly provided in form of pallets for transport and storage purposes. Sensors are installed in pipes, silos and inspection windows to monitor the filling level.

From the perspective of sensor technology, such applications are a challenge, because electrostatic charge may destroy the sensor or poor permittivity may reduce switching distances.

Moreover, mounting in metal flanges inhibits unrestrained detection and thus error-free operation of the electronics.

Any kind of parasitics evolving from level control of plastic pallets, can be blank off by BCC sensors. They are highly EMC safe and ESD immune.

Predamping is effectively prevented with a laterally mounted shield and an integrated processing unit. The user can thus exploid the full measuring range.

- Detection of smallest pallets
- Unchanged switching distance, even when mounted in a metal pipe
- High EMC safety and almost completely ESD immune

Automatic wetting compensation

Interferences caused by wetting or dewing are automatically blanked off.



Maximum use of minimum space

High quality components mounted in a compact and stable housing open up unimaginable new installation and detection possibilities.





Industrial Automation

Performance

Features/Capabilities	ВС	BCF	ВСС
Large switching distances	••	•	•
Adjustment via potentiometer	••	••	••
Large product range	••	•	•
Shielding against conductive media on sensor surface	٠	••	•
Conductive media (on large-surfaces / highly viscous)	-	••	·
Non-conductive media			••
Unchanged switching distance despite mounting in metal pipes (plastic devices)	1	•	••
EMC safe - even when applied together with high frequency technology	1	••	37 "sales"
Almost completely ESD immune	•	••((
Degree of protection up to IP67	••	••	•••

CAPACITIVE SENSORS

BC, BCF AND BCC

- n/a
- standard
- • strengths



For detailed information please see our catalog Capacitive Sensors (D101683)



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