

TURCK

Your Global Automation Partner

Capacitive Sensors BC/UC Series



Increased flexibility, cost savings & enhanced diagnostics with IO-Link

Turck's new generation capacitive sensors offer increased flexibility, cost savings, and enhanced digital integration, allowing users to detect difficult media like powders, granules and sticky liquids with extended sensing distances.

With the new BC/UC series, Turck now has a new family of capacitive sensors that meet the increasing demands for flexibility, cost efficiency and digital integration. The sensors offer IP67 protection and cost benefits for users, particularly in high-volume applications. The digital potentiometer has an RGB LED offers technical benefits, combining the tried-and-tested switching point adjustment using a screwdriver with direct visual feedback on the switching point.

The sensors come in diameters of 18 and 30 mm in metal or plastic housings. Versions are available that can be used for both flush and non-flush installation – with just one device type. The integration of IO-Link and Turck's Automation Suite (TAS) enables simple parameterization, diagnostics and commissioning. The TAS "Teach Monitor" enables sensors to be easily set up using different teach methods (e.g. Dynamic Teach) and parameters can be transferred to other devices – ideal for series applications.

Other enhancements include extended switching distances up to 25 mm, and a laser-engraved housing with QR code for fast identification and setup.

Your benefits

- Easy parameterization and access to a wide range of sensor data
- Fast and convenient teaching of setpoints / improved visibility of operating states
- Maximum flexibility with both flush and non-flush mounting in a single sensor
- IO-Link integration provides full process transparency and remote diagnostics
- High IP67 rating for industrial environments

Technical Data

General data

Operating Voltage	10...30 VDC in SIO mode 18...30 in IO-Link mode
DC Rated Operating Current	≤200 mA
Switching Frequency	≤0.1kHz
Voltage Drop	≤1.0 V
Hysteresis	1...15%
IO-Link Specification	V1.1
Transmission Rate	COM 3
Process Data Width	32 bit
Measured Process Data	12 bit
Ambient Temperature	-25...+70 °C
Protection Class	IP67

Part number selection

ID Number	Part Number	Range	Size	Output	Electrical Connection	Special
100050168	UC15-S18-IOL	15 mm	18mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	2 m cable w/ flying leads	Configured via potentiometer or IO-Link
100050169	UC15-S18-IOL-H1141	15 mm	18 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	M12 connection	Configured via potentiometer or IO-Link
100050170	UC25-S30-IOL	25 mm	30 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	2 m cable w/ flying leads	Configured via potentiometer or IO-Link
100050171	UC25-S30-IOL-H1141	25 mm	30 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	M12 connection	Configured via potentiometer or IO-Link
100050172	BC8-M18-IOL	8 mm	18 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	2 m cable w/ flying leads	Configured via potentiometer or IO-Link
100050174	BC8-M30-IOL-H1141	8 mm	18 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	M12 connection	Configured via potentiometer or IO-Link
100050173	BC15-M18-IOL	15 mm	30 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	2 m cable w/ flying leads	Configured via potentiometer or IO-Link
100050175	BC15-M30-IOL-H1141	15 mm	30 mm Barrel	IO-Link and 2 x PNP/NPN NO/NC Switching Outputs	M12 connection	Configured via potentiometer or IO-Link

Over 30 subsidiaries and
60 representatives worldwide!