

KB20C450

CAPACITIVE SENSORS • NORM SWITCHING DISTANCE

Capacitive proximity switches are contact-free sensors. They detect metallic and non-metallic objects, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material, its dimensions and the response sensitivity, which is set via a potentiometer. The vibration-resistant sensors can be approached laterally or frontally. Capacitive proximity switches are used for presence detection (e.g. sealing detection), positioning (e.g. PET bottles), counting (e.g. plastic caps), level detection (e.g. lubricant) or distance measurements (e.g. thickness measurement) of solid and liquid materials.

MECHANICAL DATA

Ambient temperature (MAX)	100 °C
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Cylinder plain
Housing material	PTFE
Increased ambient temperatures > 80°C	Yes
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Flush
Pressure-proof	No
Sensor diameter	20 mm
Sensor length	70 mm
Teflon housing	Yes

ELECTRICAL DATA

Cascadable	No
Max. output current	250 mA
No-load current	15 mA
Number of switching outputs	2
Rated control supply voltage U_s at DC	10 V ... 35 V
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage	10 V ... 35 V
Switching distance	0.5 mm ... 10 mm
Switching frequency	300 Hz
Type of electrical connection	Cable
Type of switching function	Anticoincidence
Type of switching output	PNP
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

OTHER DATA

Level detection

Yes

DIMENSIONAL DRAWING**INSTALLATION**

Mounting / Installation may only be carried out by a qualified electrician!

DISPOSAL**SAFETY WARNINGS**

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!