

KB12A164
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	-25 °C ... 70 °C
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	PA/PPO
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Flush
Number of wires	4
Pressure-proof	No
Sensor length	50 mm
Thread pitch	1 mm
Thread size, metric	12
Wire cross section	0.14 mm ²

ELECTRICAL DATA

Cascadable	No
Max. output current	250 mA
No-load current	15 mA
Residual ripple	5 %
Suitable for safety functions	No
Supply voltage	10 V ... 35 V
Switching distance	5 mm
Switching frequency	300 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

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!