

## KB991146

### 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	-30 °C ... 70 °C
Ambient temperatures < -25°C	Yes
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Cylinder plain
Housing material	PTFE
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Flush
Number of wires	3
Pressure-proof	No
Sensor diameter	30 mm
Wire cross section	0.14 mm <sup>2</sup>

#### ELECTRICAL DATA

Cascadable	No
Hysteresis	15 %
Max. output current	300 mA
No-load current	10 mA
Rated control supply voltage $U_s$ at DC	10 V ... 35 V
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage	10 V ... 35 V
Switching distance	15 mm
Switching distance	2 mm ... 15 mm
Switching frequency	100 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage type	DC

## ELECTRICAL DATA

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!