

## KB060170

### 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

Active area material of sensor	PTFE
Ambient temperature (MAX)	70 °C
Ambient temperature (MIN)	-10 °C
Degree of protection (IP)	IP65
Housing design	Cylinder plain
Housing material	Stainless steel V2A
Mechanical mounting condition for sensor	Flush
Pressure-proof	No
Sensor diameter	6.5 mm
Sensor length	54 mm

#### ELECTRICAL DATA

Cascadable	No
Hysteresis	15 %
Max. output current	50 mA
Rated control supply voltage $U_s$ at DC (MAX)	30 V
Rated control supply voltage $U_s$ at DC (MIN)	11 V
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	30 V
Supply voltage (MIN)	11 V
Switching distance	1.5 mm
Switching distance (MAX)	1.5 mm
Switching distance (MIN)	0.1 mm
Switching frequency	100 Hz
Type of electrical connection	Connector M8
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage type	DC
With LED display	Yes

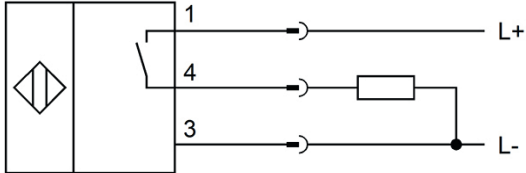
## ELECTRICAL DATA

With monitoring function of downstream devices No

## OTHER DATA

Level detection	Yes
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## CONNECTION



**Colors:** 1 = BN (brown), 3 = BU (blue), 4 = BK (black)

**Functions:** 1 = L+, 3 = L-, 4 = PNP 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!

Never use these devices in applications where the safety of a person depends on their functionality.