

KB210170

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)	75 °C
Ambient temperature (MIN)	-25 °C
Degree of protection (IP)	IP65
Housing coating	Nickel-plated
Housing design	Cuboid
Housing material	Brass
Mechanical mounting condition for sensor	Flush
Pressure-proof	No
Sensor height	43 mm
Sensor length	12 mm
Sensor width	20 mm

ELECTRICAL DATA

Cascadable	No
Max. output current	200 mA
No-load current	20 mA
Rated control supply voltage U_s at DC (MAX)	30 V
Rated control supply voltage U_s at DC (MIN)	10 V
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	30 V
Supply voltage (MIN)	10 V
Switching distance	5 mm
Switching frequency	50 Hz
Type of electrical connection	Connector M8
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	1.5 V
Voltage type	DC
With LED display	Yes

ELECTRICAL DATA

With monitoring function of downstream devices

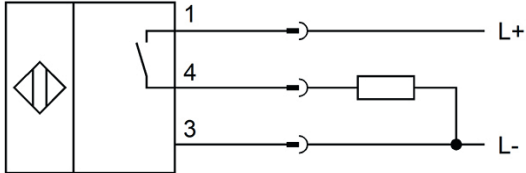
No

OTHER DATA

Level detection

Yes

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.