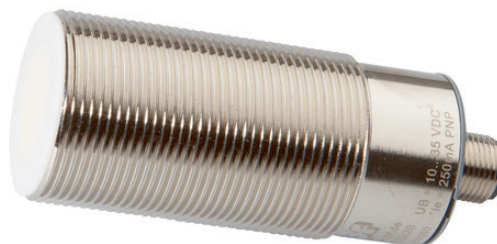


KB320420

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	-25 °C ... 70 °C
Degree of protection (IP)	IP67
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Mechanical mounting condition for sensor	Flush
Sensor length	82 mm
Thread length	52 mm
Thread pitch	1.5 mm
Thread size, metric	32

ELECTRICAL DATA

Correction factor (glass)	0.6
Correction factor (oil)	0.5
Correction factor (PVC)	0.5
Correction factor (wood)	0.6
Hysteresis	15 %
Max. output current	250 mA
Max. output current at safe output	250 mA
No-load current	15 mA
Number of pins	4
Number of semiconductor outputs with signaling function	2
Number of switching outputs	2
Rated control supply voltage U_s at DC	10 V ... 35 V
Residual ripple	10 %
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Supply voltage	10 V ... 35 V
Switching distance	20 mm

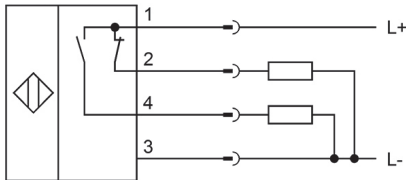
ELECTRICAL DATA

Switching distance	0.5 mm ... 30 mm
Switching frequency	200 Hz
Type of electrical connection	M12-connector
Type of switching function	Normally closed contact/normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	Yes

OTHER DATA

Level detection	Yes
-----------------	-----

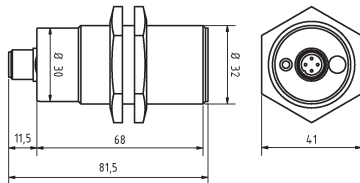
CONNECTION



Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)

Functions: 1 = L+, 2 = PNP NC, 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!

