

KB12E108

CAPACITIVE SENSORS • SENSORS WITH ANALOG OUTPUT

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
Cable length	0.15 m
Degree of protection (IP)	IP67
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Flush
Number of wires	3
Pressure-proof	No
Sensor diameter	12 mm
Sensor length	65 mm
Thread length	53 mm
Thread pitch	1 mm
Thread size, metric	12
Wire cross section	0.14 mm ²

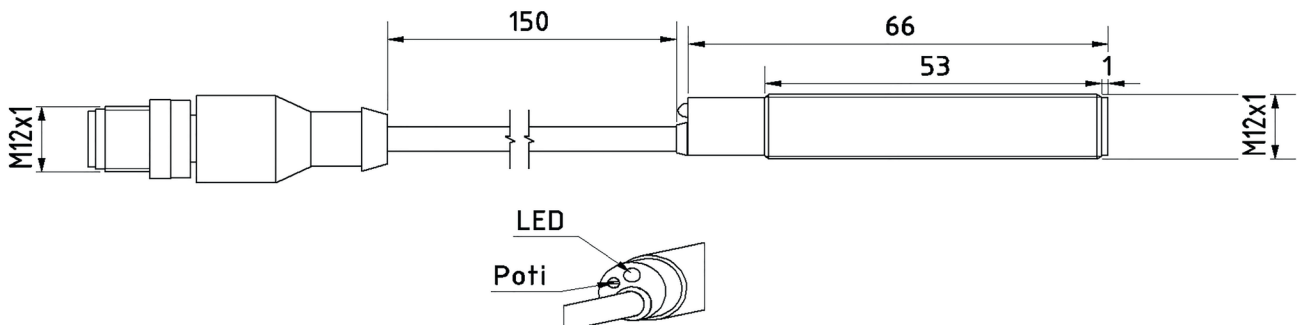
ELECTRICAL DATA

Cascadable	No
Distance measuring sensors	Yes
Max. output current	20 mA
Min. output current	4 mA
No-load current	40 mA
Number of pins	3
Rated control supply voltage U_s at DC	10 V ... 35 V
Residual ripple	5 %
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage	10 V ... 35 V

ELECTRICAL DATA

Switching distance	5 mm
Switching distance (MAX)	5 mm
Type of analog output	4 mA ... 20 mA
Type of electrical connection	Cable connector M12
Voltage type	DC
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!