

## KB120100

### Capacitive sensors • Norm switching distance

sensor capacitive, M12x1 50long, Flush, Sn: 6, 10-35V DC, PNP NO, Cable 2m PVC, IP67, Stainless steel 1.4305, LED, Manual adjustment

including Nut, Screwdriver



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.

#### Electrical features

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	250 mA
Setting procedure	Potentiometer
Relative hysteresis	15 %
Correction factor (glass)	0.6
Correction factor (wood)	0.6
Correction factor (PVC)	0.5
Correction factor (oil)	0.5
Short-circuit protection	Yes
No-load current	15 mA
Switching distance	6 mm
Switching frequency	500 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35 V
Output functions	Switching point

**Mechanical features**

Number of cores	3
Design	Cylinder, screw-thread
Thread length	37 mm
Thread pitch	1 mm
Cable length	2 m
Length	50 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PTFE)
Housing material	Stainless steel 1.4305
Material of cable sheath	Plastic (PVC)
Thread dimension	M12
Ambient temperature	-25 - 70 °C

**Other features**

Reference medium / object	Material with permittivity $\epsilon_r=81$
ardTE00_Anwendungen	Niveauabfrage

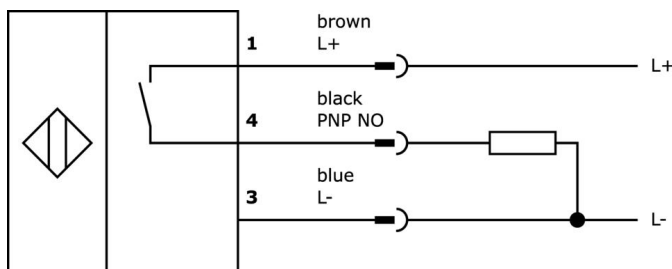
**Classification**

ETIM 8	EC002715 Capacitive proximity switch
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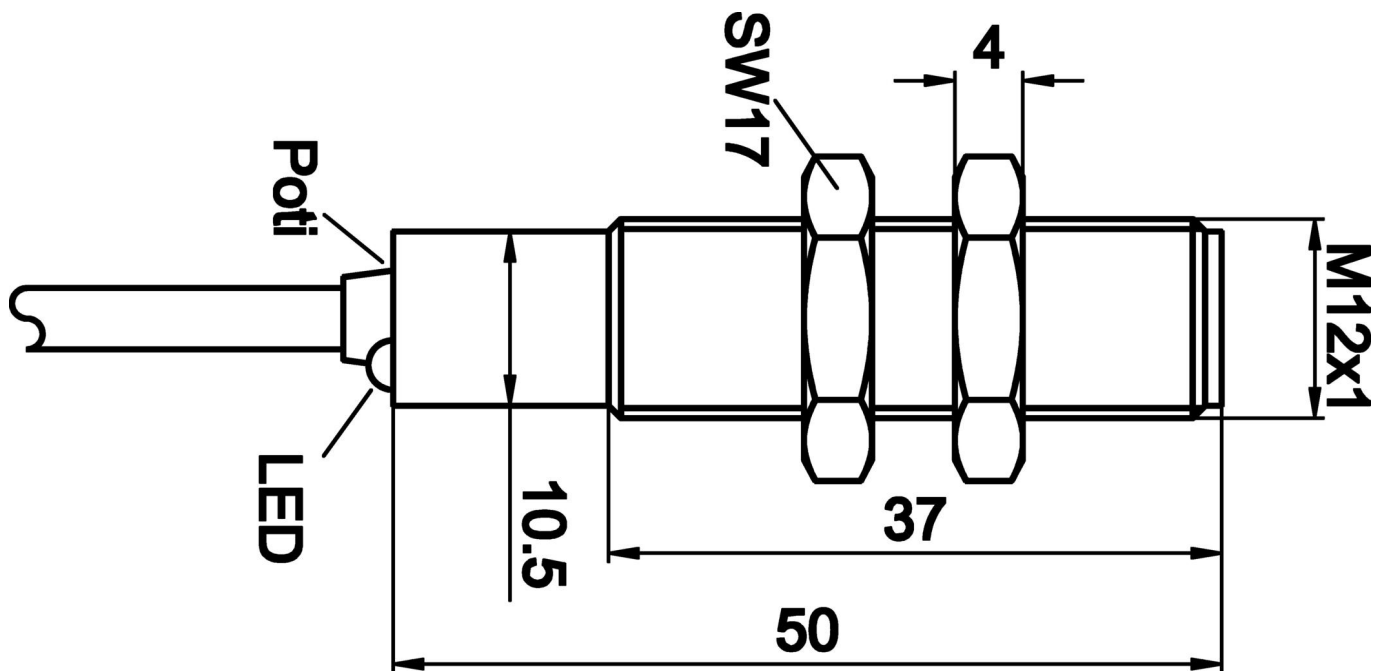
**More**

IPF Product Group	240 capacitive sensors
packaging dimensions	190 x 125 x 25 mm
gross weight	80 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**AY000162**



Accessories, magnetic, Ø43mm, neodymium-iron-boron, inside thread M5, rubber

**AY000159**



accessories sensor, Mounting pipe, Ø12mm 200long, Aluminum Anodised

**VK003076**



Cable connector, Angular, Suitable for self-assembly, Soldering connection, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

**VK003078**



Cable connector, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

**AY000115**



accessories sensor, Fixture kit, Metal, ball joint

**AY000070**



Tool, Flat-tip screwdriver, 1.6x0.4mm, Grip design 1-component

**AY000154**



Tool, Screwdriver set, Internal hexagon 0.7mm, Internal hexagon 0.9mm, Internal hexagon 1.3mm, Internal hexagon 1.5mm, Internal hexagon 2mm, Slot 1.5mm, Slot 2mm, Slot 2.5mm, Chromium steel

**AY000141**



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

**VL250100**



Logic module, 49x80x26mm, AND, 4fold, 10-35V DC, sensor side Clamp, control side Clamp, IP40, Plastic

You can find further accessories on our homepage



**Installation**

Mounting / installation may only be carried out by a qualified electrician!



**Disposal**

WEEE number according to § 6 para. 3 ElektroG: 40951076

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**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.