

KB120120

Capacitive sensors • Norm switching distance

sensor capacitive, M12x1 60long, Flush, Sn: 0-6, 10-35V DC, PNP NO, Connector M12 3pin, IP67, V2A, 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	Connector M12
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
Number of pins	3
Switching distance	0 - 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

Design	Cylinder, screw-thread
Thread length	40 mm
Thread pitch	1 mm
Length	60 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PTFE)
Housing material	Stainless steel (V2A)
Thread dimension	M12
Ambient temperature	-25 - 70 °C

Other features

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

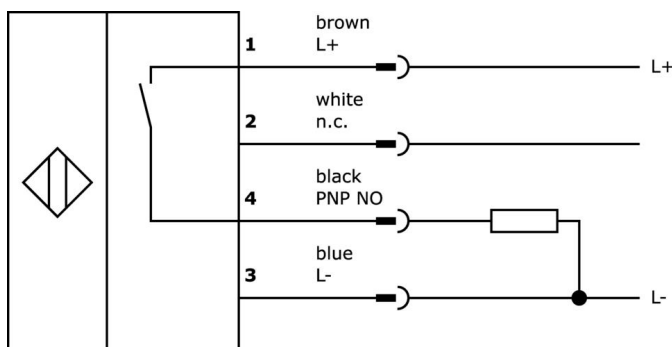
Classification

ETIM 8	EC002715 Capacitive proximity switch
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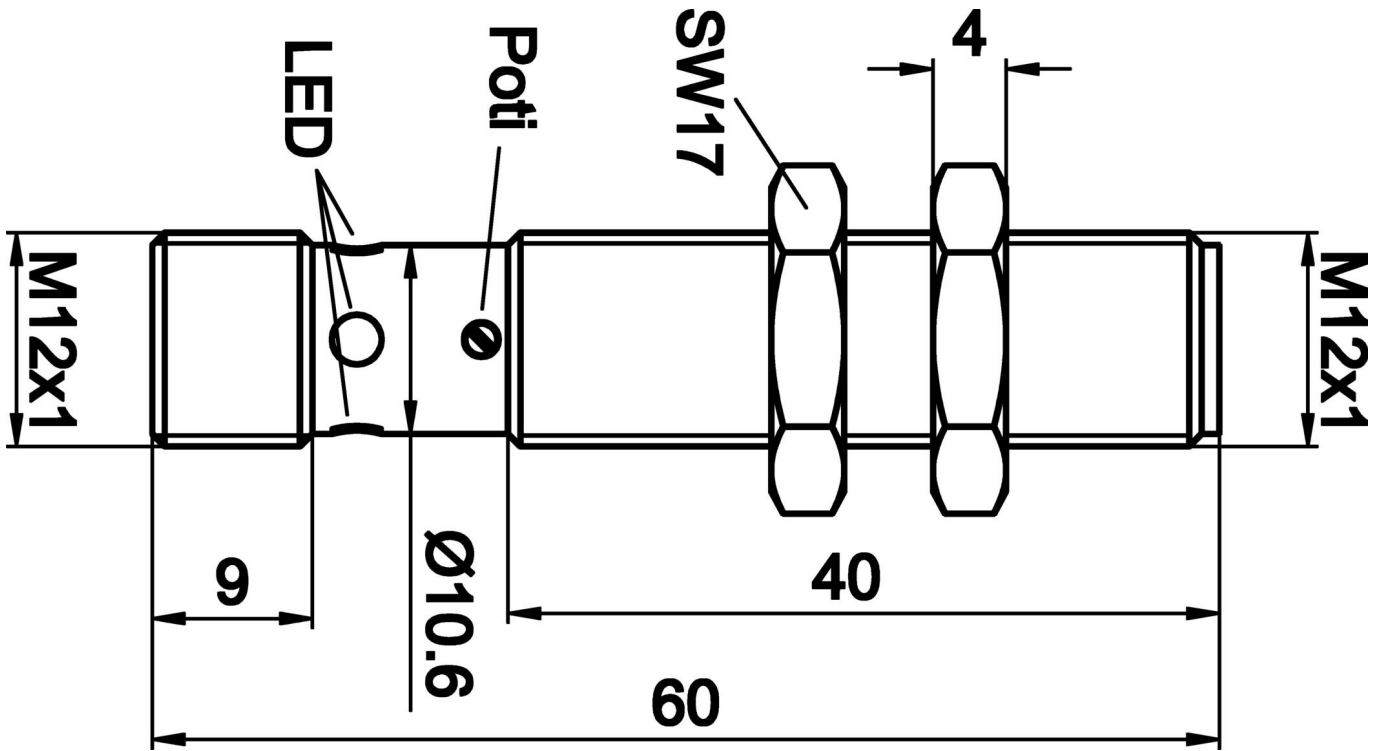
More

IPF Product Group	240 capacitive sensors
packaging dimensions	120 x 100 x 17 mm
gross weight	40 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection




Dimensional drawing



Extract accessories program


VK030F21

 Connection cable, 0.3m, M12 socket 4-pin angular, M12 connector 4-pin straight, 4x0.34mm², 240V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free


VK030F25

 Connection cable, 0.3m, M12 socket 4-pin straight, M12 connector 4-pin straight, 4x0.34mm², PUR (polyurethane), 240V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free


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


VK200321

 Connection cable, 2m, M12 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free


VK200325

 Connection cable, 2m, M12 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 250V, -40-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free


VK200221

 Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silic...

VK200225

 Connection cable, 2m, M12 Female (socket) 3pin Straight, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Sili...

VK003021

 Cable socket, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

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

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.