

KA120120

Capacitive sensors • Increased switching distance

Sensor capacitive, M12x1 60long, flush, Sn: 6mm, 10-30V DC, PNP NO, M12 plug-in connector 3-pin, IP67, nickel-plated brass, LED, manual setting

including Nut, Screwdriver



Capacitive proximity switches are contactless sensors. They detect metallic and non-metallic objects, regardless of whether they are moving or not. The achievable switching distance of the devices depends on the object material, its dimensions and the response sensitivity set via a potentiometer. The vibration-resistant sensors can be approached laterally or from the front. Capacitive proximity switches are used for presence detection (e.g. seal detection), positioning (e.g. PET bottles), counting (e.g. plastic lids), level detection (e.g. lubricants) or distance measurement (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	200 mA
Setting procedure	Potentiometer
Correction factor (glass)	0.6
Correction factor (wood)	0.6
Correction factor (PVC)	0.5
Correction factor (oil)	0.5
No-load current	9 mA
Number of pins	3
Switching distance	6 mm
Switching frequency	100 Hz
Voltage drop	2 V
Operating voltage (DC)	10 - 30 V
Output functions	Switching point
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Design	Cylinder, screw-thread
Thread length	37 mm
Thread pitch	1 mm
Length	60 mm
Maximum tightening torque	15 Nm
Mechanical mounting condition for sensor	flush
Surface	nickel-plated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PBT)
Housing material	Brass
Thread dimension	M12
Ambient temperature	-20 - 70 °C

Other features

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

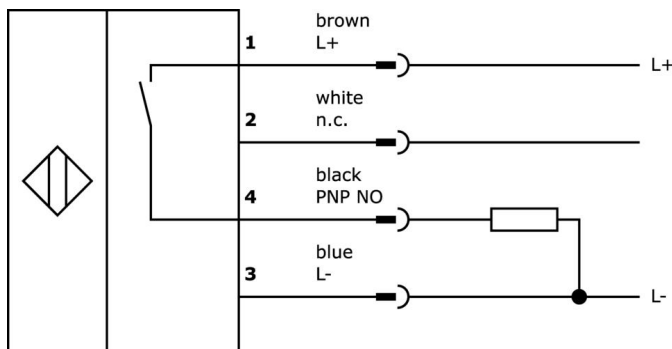
Classification

ETIM 8

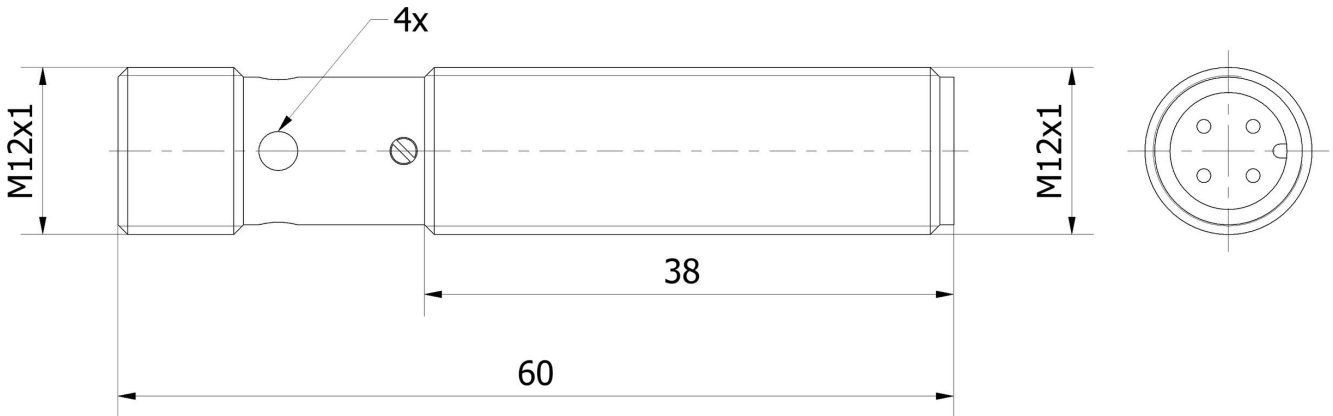
More

IPF Product Group	240 capacitive sensors
packaging dimensions	120 x 100 x 13 mm
gross weight	30 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

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

AY000115



accessories sensor, Fixture kit, Metal, ball joint

AY000162



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

VY000004



DC power supply, sensor tester, 120x26x72mm, 18V, 0.04A, Spring clamp connection 4pin, IP20, Plastic

NG530002



DC power supply, single-phase, 99x114x22mm, 24V, 0.1A, Number of relay outputs 2, 100-264V AC 50Hz, 100-264V AC 60Hz, Screw connection, IP20, Plastic, Stabilized, Output voltage, pulsed

VK200021



Connection cable, 2m, M12 socket 3-pin angular, free cable end, 3x0.34mm², PUR (polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK200025



Connection cable, 2m, M12 socket 3-pin straight, free cable end, 3x0.34mm², PUR (polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK200221



Connection cable, 2m, M12 socket 3-pin angular, free cable end, 3x0.34mm², PUR (polyurethane), Ø4.3mm, -30-90°C, IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

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.