

KB080570

Capacitive sensors • Increased switching distance

Sensor capacitive, M8x1 49long, flush, Sn: 0.1-3, 10-30V DC, PNP NO, M8 plug connector 3-pin, IP67, V2A, LED, manual setting

including Nut

- / Robust stainl. steel housing**
- / PBT front cap**
- / Push-pull switching output**
- / M8 plug connection**



Large switching distance Sensitivity adjustment via potentiometer

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

Number of switching outputs	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M8
Type of switching output	Push-pull
Rated switching current	50 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
No-load current	10 mA
Number of pins	3
Relative repeat accuracy	2 %
Residual ripple	10 %
Switching distance	0,1 - 3 mm
Switching frequency	100 Hz
Voltage drop	0.5 V
Operating voltage (DC)	10 - 30 V
Output functions	Switching point
ardSOCA_ElektrischerAnschluss	M8 3-pin plug connector
ardSOCA_Betriebsspannung	10-30VDC
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Design	Cylinder, screw-thread
Thread length	37.5 mm
Thread pitch	1 mm
Length	49 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PBT)
Housing material	Stainless steel 1.4404
Thread dimension	M8
Ambient temperature	-20 - 70 °C
ardSOCA_Abmessungen	M8x1, 49mm long

Other features

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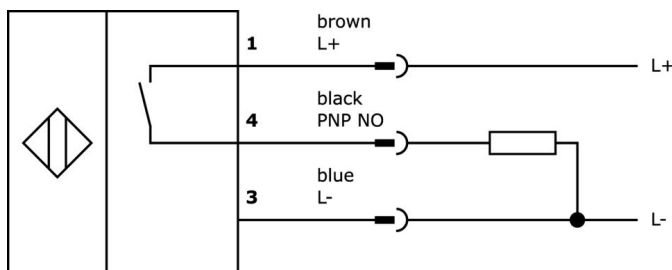
Classification

ETIM 8

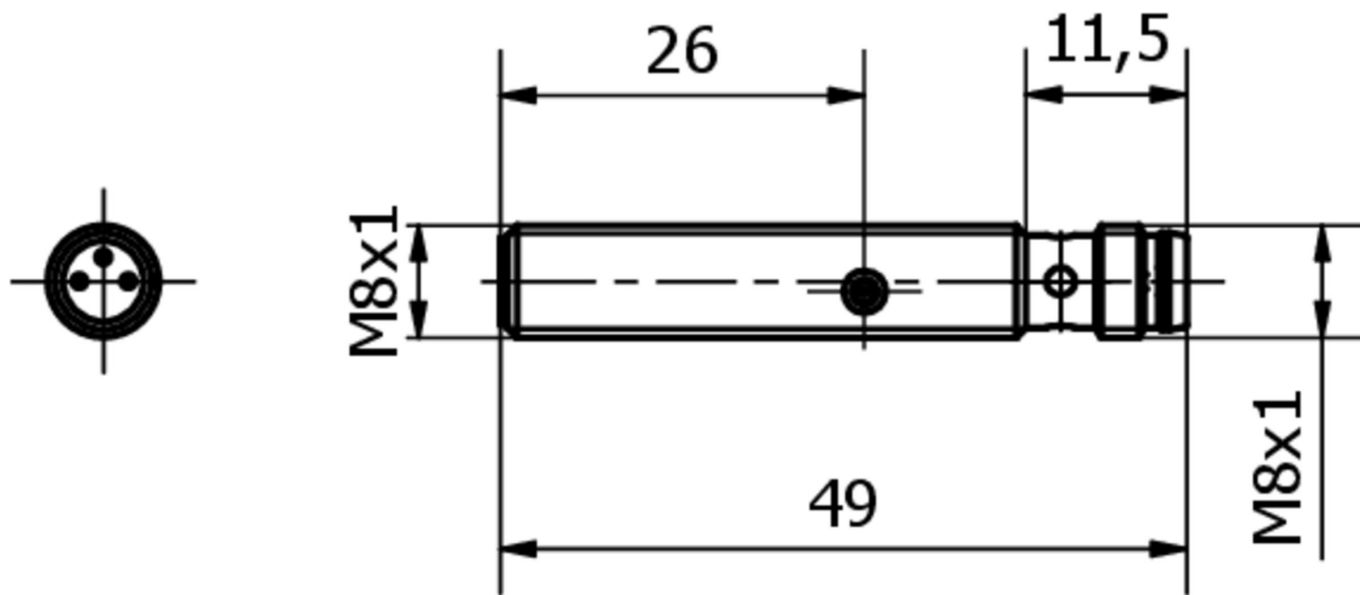
More

IPF Product Group	240 capacitive sensors
packaging dimensions	260 x 240 x 10 mm
gross weight	22 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF (40°C)	565 year(s)

Connection



Dimensional drawing



Extract accessories program

AY000205

Tool, slotted screwdriver, 1.0x0.3mm, handle design 1-component

VK200071

Connection cable, 2m, M8 socket 3-pin angular, free cable end, 3x0.34mm², PUR (polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK200075

Connection cable, 2m, M8 socket 3-pin straight, free cable end, 3x0.34mm², PUR (polyurethane), Ø4.3mm, 60V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

AY000162



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

AY000159

Accessories sensor, mounting tube, Ø12mm 200long, aluminum anodized/anodized

VK030F80

Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F84

Connection cable, 0.3m, M8 socket 3-pin straight, M12 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F72

Connection cable, 0.3m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK060F72

Connection cable, 0.6m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 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.