

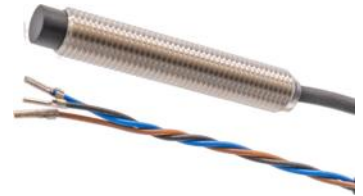
KN080500

Capacitive sensors • Increased switching distance

Sensor capacitive, M8x1 49long, non-flush, Sn: 0.1-4, 10-30V DC, PNP NO, cable tail 2m
TPU, IP67, V2A, LED, manual setting

including Nut

- / Robust stainl. steel housing**
- / PBT front cap**
- / Push-pull switching output**
- / Cable 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	Cable
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
Relative repeat accuracy	2 %
Residual ripple	10 %
Switching distance	0,1 - 4 mm
Switching frequency	100 Hz
Voltage drop	0.5 V
Operating voltage (DC)	10 - 30 V
Output functions	Switching point
ardSOCA_ElektrischerAnschluss	Cable tail 3-core 2m
ardSOCA_Betriebsspannung	10-30VDC
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Number of cores	3
Conductor cross-section	0.14 mm ²
Design	Cylinder, screw-thread
Thread length	43 mm
Thread pitch	1 mm
Cable length	2 m
Length	49 mm
Mechanical mounting condition for sensor	non-flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PBT)
Housing material	Stainless steel 1.4404
Material of cable sheath	Kunststoff (TPU)
Thread dimension	M8
Ambient temperature	-20 - 85 °C
ardSOCA_Abmessungen	M8x1, 49mm long
Line diameter	2.9 mm

Other features

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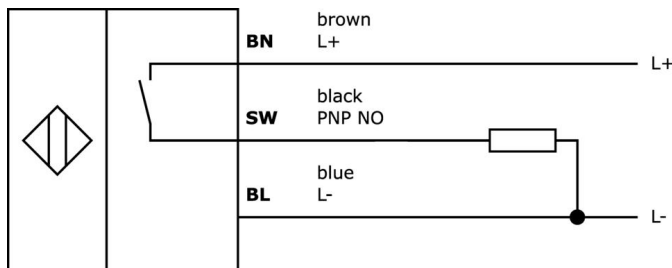
Classification

ETIM 8

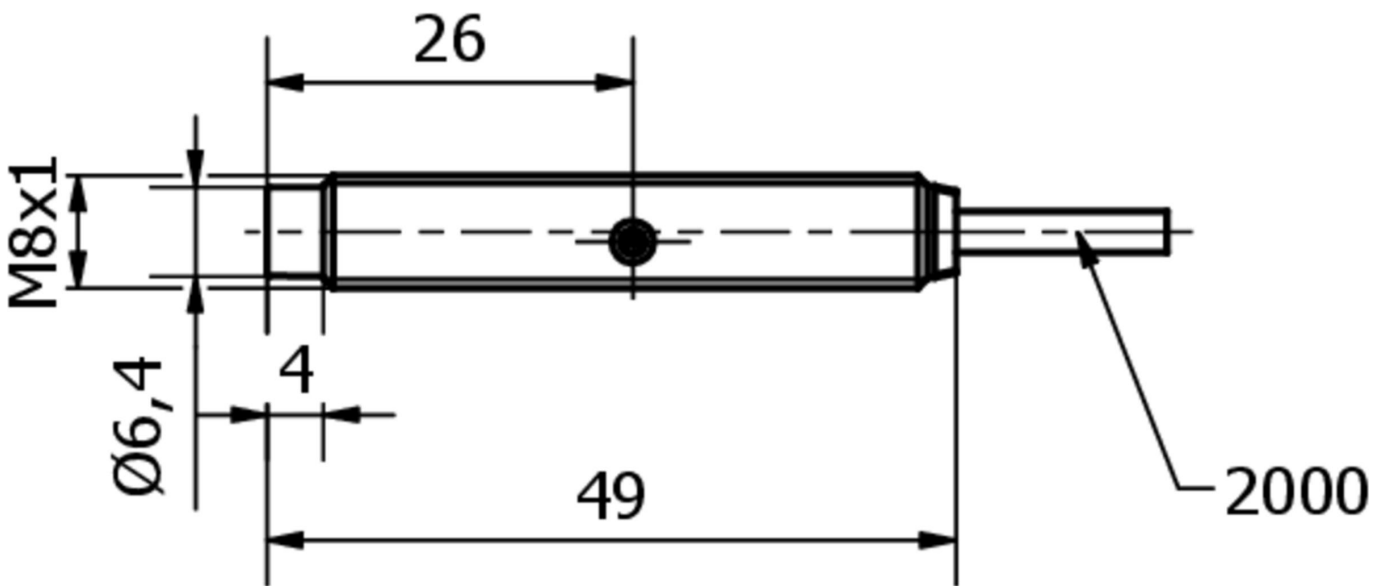
More

IPF Product Group	240 capacitive sensors
packaging dimensions	250 x 240 x 20 mm
gross weight	46 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

AY000115

accessories sensor, Fixture kit, Metal, ball joint



AY000162

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



VY850001



Inverter/signal-inversion/turn-off delay, 85x65x18mm, 0.01-10s, 12-30V DC, 1x NC/NO, Clamp 8pin, IP40, Plastic, Plug-in jumpers

VY850002



Inverter/signal-inversion/turn-off delay, 85x65x18mm, 0.01-10s, 12-30V DC, 1x NC/NO, Clamp 8pin, IP40, Plastic, Plug-in jumpers

VK003079



Cable connector, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Male (connector) 4pin, IP67, Brass

VK003179



Cable connector, Straight, Suitable for self-assembly, Screw connection, Ø3.5-5mm, 4A, 30V, -40-85°C, M8 Male (connector) 4pin, IP67, Brass

VK003026



Cable connector, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Male (connector) 4pin, IP67, PBT

VK003028



Cable connector, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Male (connector) 4pin, 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.