

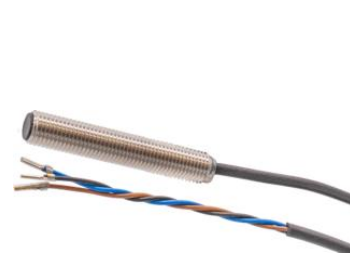
## KB080500

### Capacitive sensors • Increased switching distance

Sensor capacitive, M8x1 49long, flush, Sn: 0.1-3, 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 - 3 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 <sup>2</sup>
Design	Cylinder, screw-thread
Thread length	47 mm
Thread pitch	1 mm
Cable length	2 m
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
Material of cable sheath	Kunststoff (TPU)
Thread dimension	M8
Ambient temperature	-20 - 70 °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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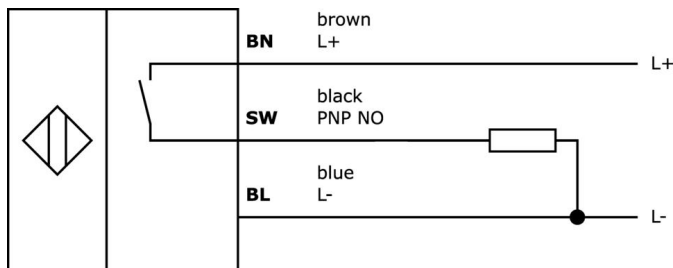
**Classification**

ETIM 8
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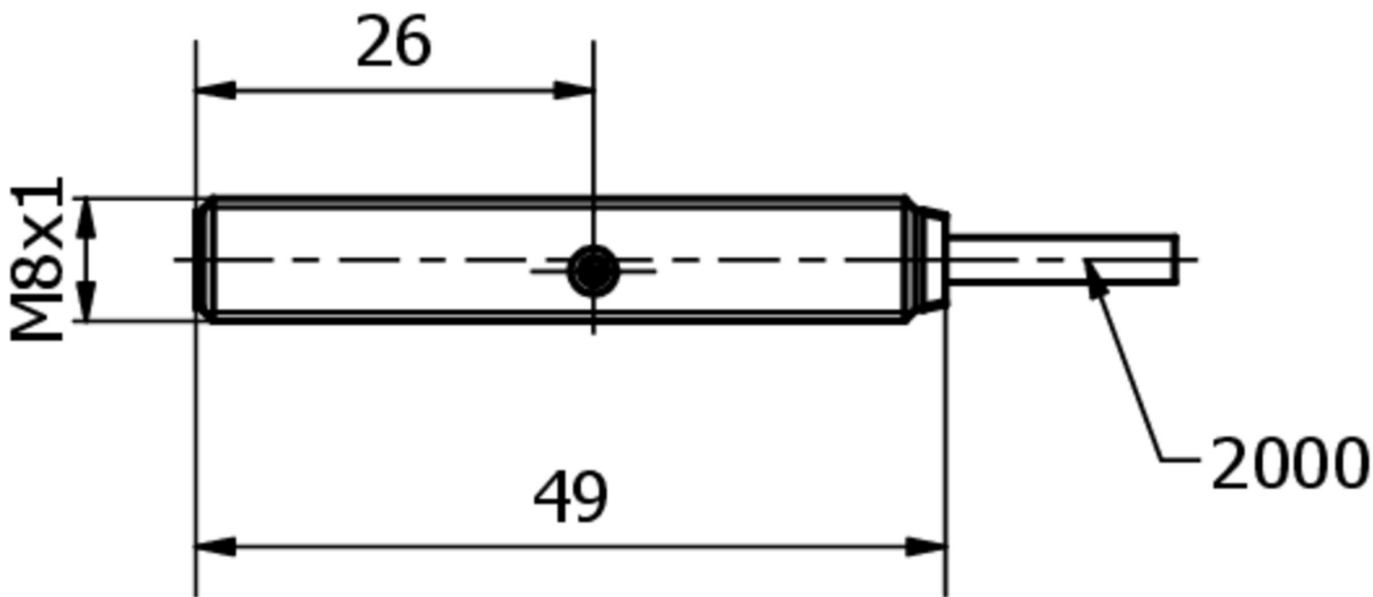
**More**

IPF Product Group	240 capacitive sensors
packaging dimensions	260 x 240 x 10 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

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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.