

KBRC0103

Capacitive sensors • Increased switching distance

Sensor capacitive, Ø30mm 14long, flush, Sn: 15, 10-35V DC, 1x PNP NO, cable 2m PVC, IP68, polyamide PA, LED, teach-in

including Magnet



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	PNP
Rated switching current	200 mA
Setting procedure	Teach-In
No-load current	15 mA
Residual ripple	10 %
Switching distance	15 mm
Switching frequency	2 Hz
Voltage drop	2 V
Operating voltage (DC)	10 - 35 V
Output functions	Switching point
ardTEEL_Schutzfunktionen	Short circuit protection Reverse polarity protection

Mechanical features

Number of cores	3
Conductor cross-section	0.14 mm ²
Design	Cylinder plain
Diameter	30 mm
Height	14 mm
Cable length	2 m
Length	14 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP68
Active area material of sensor	Plastic (PA)
Housing material	Polyamide PA
Material of cable sheath	Plastic (PVC)
Ambient temperature	-25 - 70 °C
Line diameter	3.8 mm

Other features

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

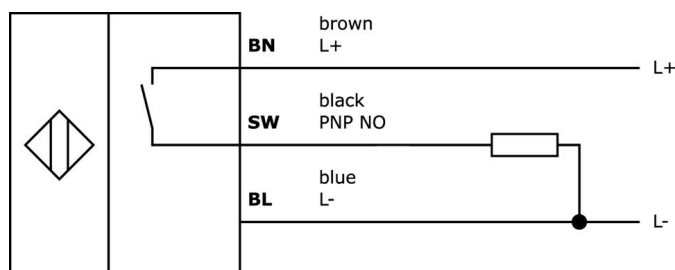
Classification

ETIM 8

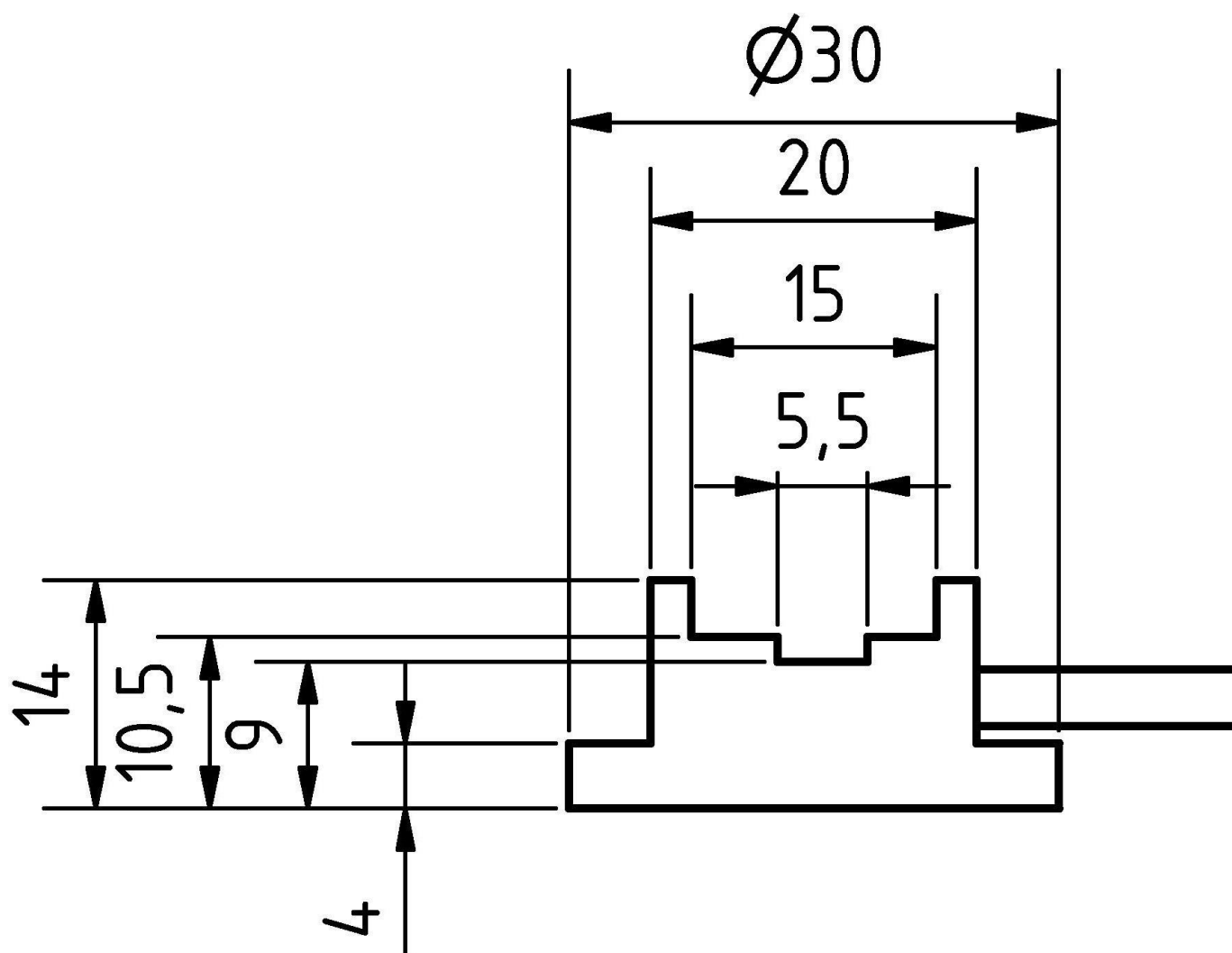
More

IPF Product Group	240 capacitive sensors
packaging dimensions	123 x 77 x 25 mm
gross weight	66 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

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

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

VY000004



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

AY000141



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, good

VK003076



Cable connector, Angular, Suitable for self-assembly, Soldering connection, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

VK003078



Cable connector, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

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.