KB080100

Capacitive sensors ● Norm switching distance

sensor capacitive, M8x1 42long, Flush, Sn: 0.1-1.5, 11-30V DC, PNP NO, Cable 2m PVC, IP65, V2A, LED, Manual adjustment

including Nut, Screwdriver

Capacitive proximity switches are contact-free sensors. They detect metallic and non-metallic objects, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material, its dimensions and the response sensitivity, which is set via a potentiometer. The vibration-resistant sensors can be approached laterally or frontally. Capacitive proximity switches are used for presence detection (e.g. sealing detection), positioning (e.g. PET bottles), counting (e.g. plastic caps), level detection (e.g. lubricant) or distance measurements (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	Cable
Type of switching output	PNP
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
Short-circuit protection	Yes
No-load current	15 mA
Switching distance	0,1 - 1,5 mm
Switching frequency	100 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Operating voltage (DC)	11 - 30 V
Output functions	Switching point

Mechanical features

Number of cores	3
Design	Cylinder, screw-thread
Thread length	36 mm
Thread pitch	1 mm
Cable length	2 m
Length	42 mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP65
Active area material of sensor	Plastic (PTFE)
Housing material	Stainless steel (V2A)
Material of cable sheath	Plastic (PVC)
Thread dimension	M8
Ambient temperature	-10 - 70 °C
Line diameter	3 mm

Other features

Reference medium / object	Material with permittivity Ɛr=81
ardTE00_Anwendungen	Niveauabfrage

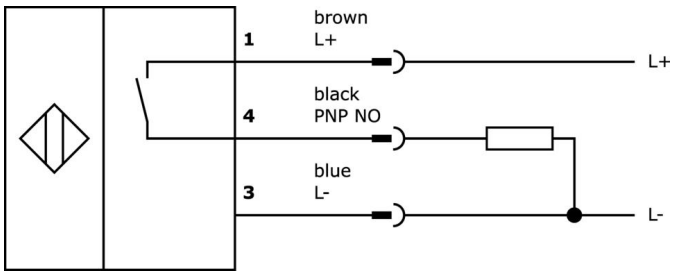
Classification

ETIM 8	EC002715 Capacitive proximity switch

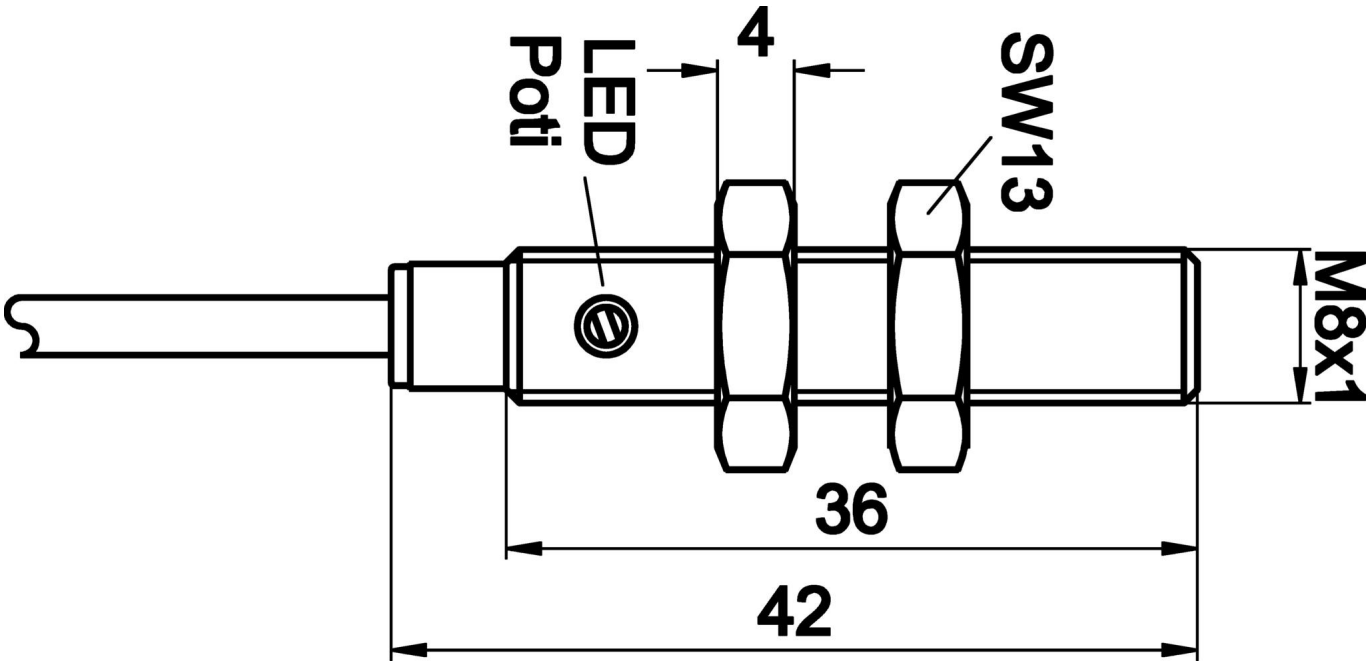
More

IPF Product Group	240 capacitive sensors
packaging dimensions	123 x 77 x 25 mm
gross weight	40 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

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

VK003076

Cable connector, Angular, Suitable for self-assembly, Soldering connection, 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.