

KB050180

Capacitive sensors • Norm switching distance

sensor capacitive, M5x0.5 20long, Flush, Sn: 1, 10-35V DC, -55-125°C, 1x PNP NO, Cable 2m PVC, IP67, V2A

including 2x Nut, 1x 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

Number of switching outputs	1
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	250mA
Relative hysteresis	10%
Short-circuit protection	Yes
No-load current	10mA
Line diameter	2.8mm
Residual ripple	5%
Switching distance	1mm
Switching frequency	50Hz
Voltage drop	2.5V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35V

Mechanical features

Number of cores	4
Conductor cross-section	0.14mm ²
Design	Cylinder, screw-thread
Thread length	17mm
Thread pitch	0.5mm
Cable length	2m
Length	20mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PTFE)
Housing material	Stainless steel (V2A)
Material of cable sheath	Plastic (PVC)
Thread dimension	M5
Ambient temperature	-55 - 125°C

Other features

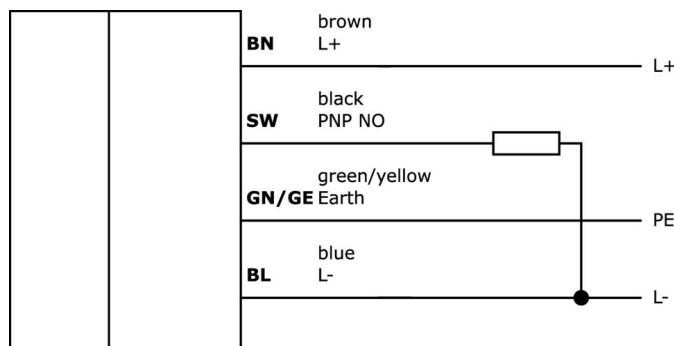
Level detection	Yes
Reference medium / object	Material with permittivity $\epsilon_r=81$
Ambient temperature	-55 - 125°C

Classification

ETIM 8	EC002715 Capacitive proximity switch
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More

IPF Product Group	243 capacitive sensors (diverse)
packaging dimensions	149 x 124 x 28 mm
gross weight	108 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection

Installation

Mounting / installation may only be carried out by a qualified electrician!

Disposal**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.

For suitable connection and mounting accessories, please refer to our website www.ipf-electronic.com.

Dimensional drawing