

## KN180107

### Capacitive sensors • Norm switching distance

sensor capacitive, M18x1 81long, Non-flush, Sn: 1-8, 10-60V DC, PNP NO, Cable 2m PVC, IP67, PBT, LED, Manual adjustment

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

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	200mA
Setting procedure	Potentiometer
Relative hysteresis	20%
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	20mA
Switching distance	1 - 8mm
Switching frequency	25Hz
Voltage drop	3V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 60V
Output functions	Switching point

## Mechanical features

Number of cores	3
Design	Cylinder, screw-thread
Diameter	18mm
Thread length	40mm
Thread pitch	1mm
Cable length	2m
Length	81mm
Mechanical mounting condition for sensor	non-flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PA6.6)
Housing material	PBT
Material of cable sheath	Plastic (PVC)
Thread dimension	M18
Ambient temperature	-25 - 70°C

## Other features

Level detection	Yes
Reference medium / object	Material with permittivity $\epsilon_r=81$
Ambient temperature	-25 - 70°C

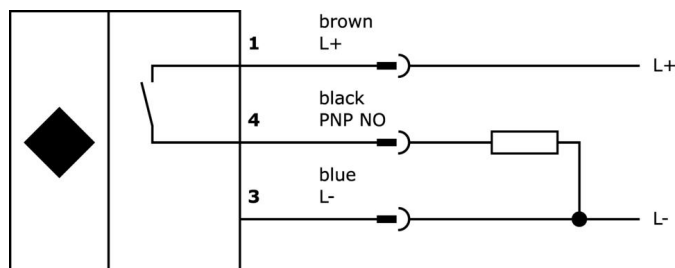
## Classification

ETIM 8	EC002715 Capacitive proximity switch
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## More

IPF Product Group	243 capacitive sensors (diverse)
packaging dimensions	125 x 70 x 40 mm
gross weight	150 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
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](http://www.ipf-electronic.com).

#### Dimensional drawing

