

## KB250100

### CAPACITIVE SENSORS • NORM SWITCHING DISTANCE

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.



#### MECHANICAL FEATURES

Ambient temperature	-25 °C ... 75 °C
Cable length	1.5 m
Degree of protection (IP)	IP65
Housing design	Cuboid
Housing material	PBT
Material of cable sheath	PVC
Mechanical mounting condition for sensor	Flush
Number of cores	3
Pressure-proof	-
Sensor height	50 mm
Sensor length	10.1 mm
Sensor width	25 mm
Wire cross section	0.34 mm <sup>2</sup>

#### ELECTRICAL FEATURES

Cascadable	-
Hysteresis	20 %
Max. output current	200 mA
No-load current	15 mA
Rated control supply voltage $U_s$ at DC	10 V ... 36 V
Reverse polarity protection	+
Setting procedure	Manual adjustment
Short-circuit protection	+
Suitable for safety functions	-
Supply voltage	10 V ... 36 V
Switching distance	8 mm
Switching distance	2 mm ... 8 mm
Switching frequency	25 Hz
Type of electrical connection	Cable
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	1.5 V
Voltage type	DC

## ELECTRICAL FEATURES

With LED display	+
With monitoring function of downstream devices	-

## OTHER FEATURES

Level detection	+
-----------------	---

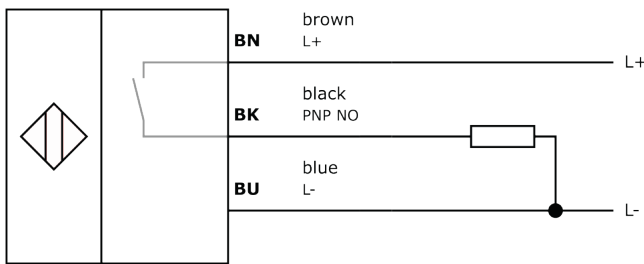
### Other

Packaging dimensions	77.0mm x 25.0mm x 123.0mm
Shipping weight	0.09kg
Tariff code	85365019

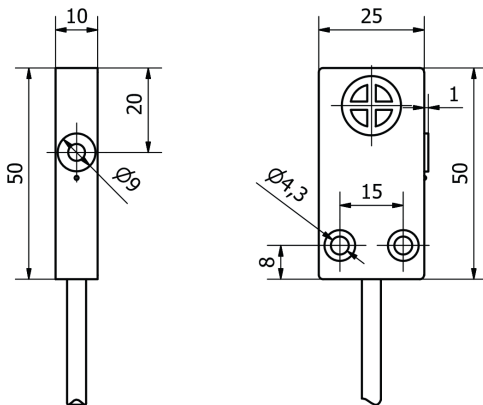
### Classification

ipf product group	245
eClass 8.0	27270102
eClass 9.0	27270102
eClass 9.1	27270102
ETIM-5.0	EC002715
ETIM-6.0	EC002715
ETIM-7.0	EC002715

## Connection



## Dimensional drawing



## Installation



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

## Disposal



## Software

Please download the software or driver required for operating your new device on our homepage: [www.ipf.de](http://www.ipf.de)

## 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.  
LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.