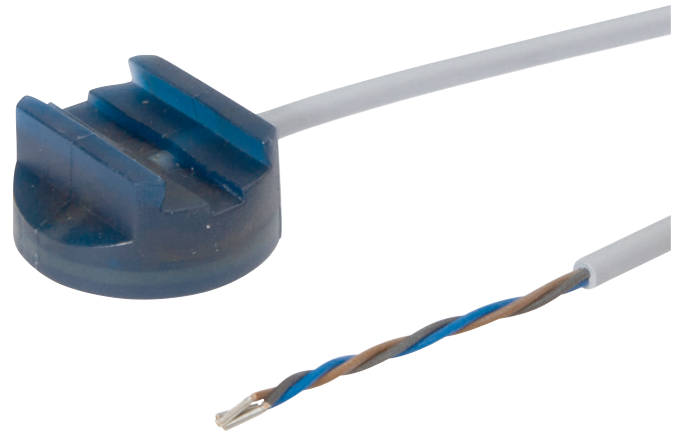


KBRC0103 CAPACITIVE SENSORS • ENLARGED SWITCHING DISTANCE

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

Active area material of sensor	PA
Ambient temperature	-25 °C ... 70 °C
Cable length	2 m
Degree of protection (IP)	IP68
Devices for hose / pipe mounting	+
Housing design	Cylinder plain
Housing material	PA
Material of cable sheath	PVC
Mechanical mounting condition for sensor	Flush
Number of cores	3
Pressure-proof	-
Sensor diameter	30 mm
Sensor height	14 mm
Sensor length	14 mm
Wire cross section	0.14 mm ²

ELECTRICAL FEATURES

Cascadable	-
Max. output current	200 mA
No-load current	15 mA
Number of switching outputs	1
Rated control supply voltage U_s at DC	10 V ... 35 V
Residual ripple	10 %
Reverse polarity protection	+
Setting procedure	Teach-In
Short-circuit protection	+
Suitable for safety functions	-
Supply voltage	10 V ... 35 V
Switching distance	15 mm
Switching distance (MAX)	15 mm
Switching frequency	2 Hz
Type of actuation	Other
Type of electrical connection	Cable

ELECTRICAL FEATURES

Type of interface	None
Type of interface for safety communication	None
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	+
With monitoring function of downstream devices	-

OTHER FEATURES

Explosion safety category for dust	None
Explosion safety category for gas	None
Level detection	+

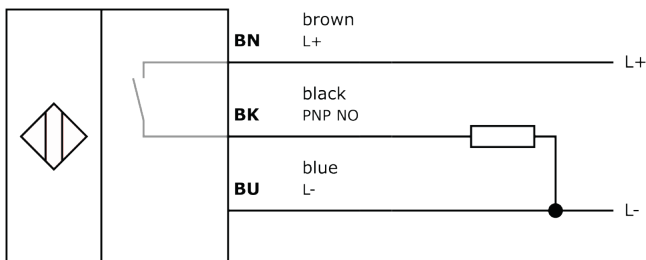
Other

Packaging dimensions	77.0mm x 25.0mm x 123.0mm
Shipping weight	0.07kg
Tariff code	85365019

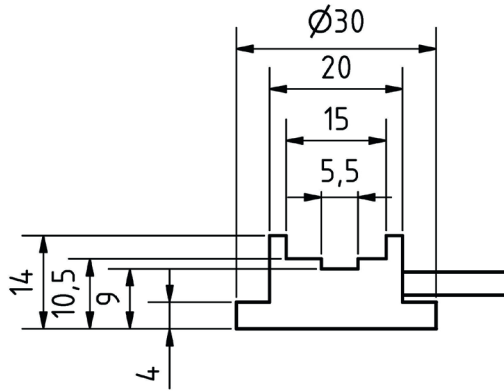
Classification

ipf product group	240
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

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.