IPF ELECTRONIC

Data sheet **KB32C501** • Subject to alteration! Version: 02.12.2019

KB32C501
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 ... 70 °C
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	PTFE
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Flush
Number of cores	4
Pressure-proof	-
Sensor length	70 mm
Teflon housing	+
Thread pitch	1.5 mm
Thread size, metric	32
Wire cross section	0.5 mm²

ELECTRICAL FEATURES

Cascadable	-
Max. output current	250 mA
No-load current	15 mA
Number of switching outputs	2
Rated control supply voltage Us at DC	10 V ... 35 V
Reverse polarity protection	+
Short-circuit protection	+
Suitable for safety functions	-
Supply voltage	10 V ... 35 V
Switching distance	20 mm
Switching distance	0.5 mm ... 30 mm
Switching frequency	200 Hz
Type of electrical connection	Cable
Type of switching function	Exclusive-OR
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	+

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ELECTRICAL FEATURES

With monitoring function of downstream devices	-

OTHER FEATURES

Level detection	+
Level detection of synthetic granules for injection molding machines	+

Other

Packaging dimensions	124.0mm x 35.0mm x 149.0mm
Shipping weight	0.27kg
Tariff code	85365019

Classification

ipf product group	700
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

BN	brown	L+
WH	white	PNP NC
BK	black	PNP NO
BU	blue	L-
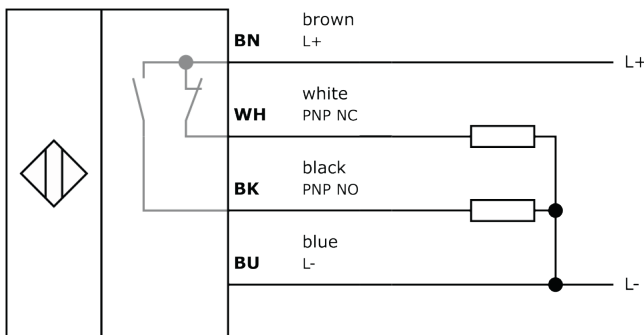
Dimensional drawing

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.