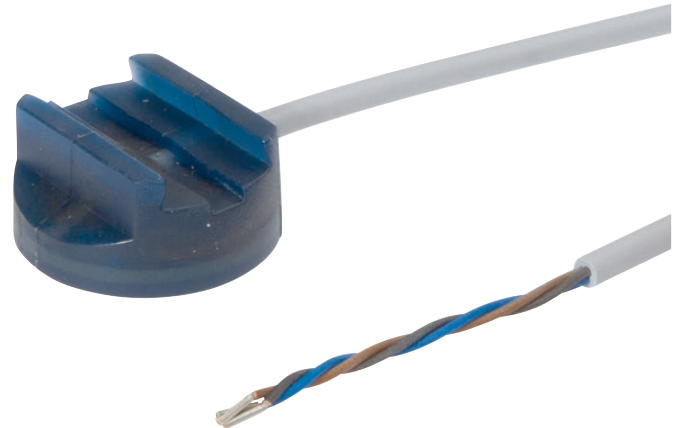


KBRC0103

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 DATA

Active area material of sensor	PA
Ambient temperature (MAX)	70 °C
Ambient temperature (MIN)	-25 °C
Cable length	2 m
Degree of protection (IP)	IP68
Devices for hose / pipe mounting	Yes
Housing design	Cylinder plain
Housing material	PA
Material of cable sheath	PVC
Mechanical mounting condition for sensor	Flush
Number of wires	3
Pressure-proof	No
Sensor diameter	30 mm
Sensor length	14 mm
Wire cross section	0.14 mm ²

ELECTRICAL DATA

Cascadable	No
Max. output current	200 mA
No-load current	15 mA
Number of switching outputs	1
Rated control supply voltage U_s at DC (MAX)	35 V
Rated control supply voltage U_s at DC (MIN)	10 V
Residual ripple	10 %
Reverse polarity protection	Yes
Setting procedure	Teach-In
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	35 V
Supply voltage (MIN)	10 V
Switching distance	15 mm

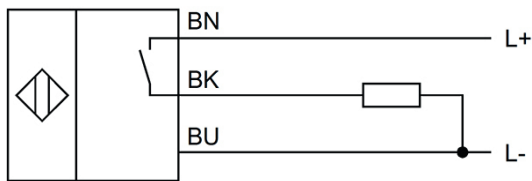
ELECTRICAL DATA

Switching distance (MAX)	15 mm
Switching frequency	2 Hz
Type of actuation	Other
Type of electrical connection	Cable
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	Yes
With monitoring function of downstream devices	No

OTHER DATA

Explosion protection category for dust	None
Explosion protection category for gas	None
Level detection	Yes

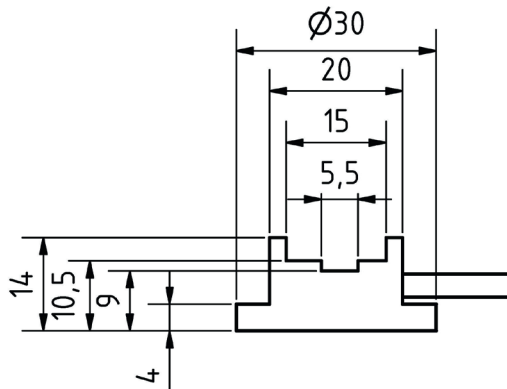
CONNECTION



Colors: BN (brown), BU (blue), BK (black)

Functions: BN = L+, BU = L-, BK = PNP NO

DIMENSIONAL DRAWING



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.