

## KN990649

### CAPACITIVE SENSORS • ENLARGED AMBIENT TEMPERATURE

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	PTFE
Ambient temperature (MAX)	160 °C
Ambient temperature (MIN)	-60 °C
Ambient temperatures < -25°C	Yes
Cable length	2 m
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	Stainless steel V2A
Increased ambient temperatures > 80°C	Yes
Material of cable sheath	PUR (Polyurethane)
Mechanical mounting condition for sensor	Non-flush
Number of wires	3
Pressure-proof	No
Sensor length	100 mm
Thread length	40 mm
Thread pitch	1.5 mm
Thread size, metric	32
Wire cross section	0.75 mm <sup>2</sup>

#### ELECTRICAL DATA

Cascadable	No
Max. output current	400 mA
No-load current	15 mA
Residual ripple	10 %
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Suitable for safety functions	No
Supply voltage (MAX)	35 V
Supply voltage (MIN)	10 V
Switching distance	20 mm

**ELECTRICAL DATA**

Switching frequency	50 Hz
Type of electrical connection	Cable
Type of switching function	Programmable/configurable
Type of switching output	PNP/NPN
Voltage drop	2 V
Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

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

**Functions:** A: 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.