

## KN18C386

### 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 DATA

|  |                        |
|--|------------------------|
| Active area material of sensor           | PBT                    |
| Ambient temperature (MIN)                | -45 °C                 |
| Ambient temperatures < -25°C             | Yes                    |
| Cable length                             | 1.5 m                  |
| Degree of protection (IP)                | IP67                   |
| Housing design                           | Cylinder, screw-thread |
| Material of cable sheath                 | PVC                    |
| Mechanical mounting condition for sensor | Non-flush              |
| Number of wires                          | 4                      |
| Pressure-proof                           | No                     |
| Sensor diameter                          | 18 mm                  |
| Sensor length                            | 65 mm                  |
| Thread pitch                             | 1 mm                   |
| Thread size, metric                      | 18                     |
| Wire cross section                       | 0.34 mm <sup>2</sup>   |

#### ELECTRICAL DATA

|  |                   |
|--|-------------------|
| Cascadable                               | No                |
| Hysteresis                               | 20 %              |
| Max. output current                      | 200 mA            |
| No-load current                          | 20 mA             |
| Rated control supply voltage $U_s$ at DC | 10 V ... 60 V     |
| Reverse polarity protection              | Yes               |
| Short-circuit-proof                      | Yes               |
| Suitable for safety functions            | No                |
| Supply voltage                           | 10 V ... 60 V     |
| Switching distance                       | 7 mm              |
| Switching distance                       | 6.5 mm ... 7.9 mm |
| Switching frequency                      | 25 Hz             |
| Type of electrical connection            | Cable             |
| Type of switching function               | Anticoincidence   |

**ELECTRICAL DATA**

|  |     |
|--|-----|
| Type of switching output                       | PNP |
| Voltage drop                                   | 2 V |
| Voltage type                                   | DC  |
| With monitoring function of downstream devices | 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!