IPF ELECTRONIC

KN98C161

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	PEEK
Ambient temperature	-25 °C 70 °C
Degree of protection (IP)	IP67
Housing design	Cylinder plain
Mechanical mounting condition for sensor	Non-flush
Pressure-proof	No
Sensor diameter	50 mm
Sensor length	70 mm
ELECTRICAL DATA	
Cascadable	No
Max. output current	250 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	10 V 35 V
Switching distance	50 mm
Switching distance	1 mm 50 mm
Switching frequency	100 Hz
Type of electrical connection	Connector M12
Type of switching function	Anticoincidence
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

Level detection

Yes

DIMENSIONAL DRAWING

INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!





SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!