KN32E299

Capacitive sensors ● Increased ambient temperature

Sensor capacitive, M32x1.5 112long, non-flush, Sn: 20, 10-35V diagnostic coverage, -60-160°C, PNP/NPN programmable/configurable, M12-connector 3-pin PUR (polyurethane), IP67, stainl. steel, LED, manual setting

including 2x Nut

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.

Electrical features

Display	LED display
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP/NPN
Rated switching current	400mA
Setting procedure	Potentiometer
Short-circuit protection	Yes
No-load current	15mA
Number of pins	3
Residual ripple	10%
Switching distance	20mm
Switching frequency	50Hz
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 35V
Output functions	Switching point

Mechanical features

Number of cores	3
Design	Cylinder, screw-thread
Diameter	32mm
Thread length	40mm
Thread pitch	1.5mm
Length	112mm
Mechanical mounting condition for sensor	non-flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PTFE)
Housing material	Stainless steel 1.4305
Material of cable sheath	Plastic (PUR)
Thread dimension	M32
Ambient temperature	-60 - 160°C

Other features

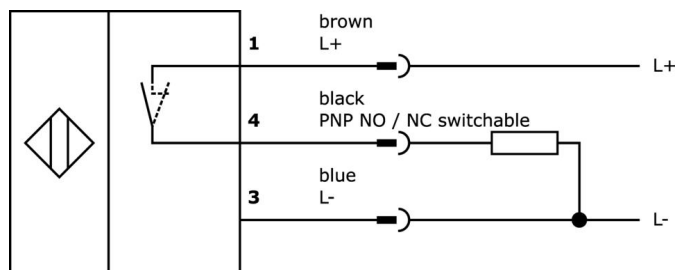|	
Important note	Das Potentiometer befindet sich hinter der Abdeckung.
Reference medium / object	Material with permittivity Ɛr=81
Ambient temperature	-60 - 160°C

Classification

ETIM 8	EC002715 Capacitive proximity switch

More

IPF Product Group	242 capacitive sensors (high temperature)
packaging dimensions	125 x 70 x 40 mm
gross weight	229 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection

Installation

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

Disposal

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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.

For suitable connection and mounting accessories, please refer to our website www.ipf-electronic.com.

Dimensional drawing

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