

KB210170

Capacitive sensors • Norm switching distance

sensor capacitive, 43x12x20mm, Flush, Sn: 5, 10-30V DC, PNP NO, Connector M8, IP65, Nickel-plated brass Nickel-plated, LED



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	Normally open contact (NO)
Type of electrical connection	Connector M8
Type of switching output	PNP
Rated switching current	200mA
Short-circuit protection	Yes
No-load current	20mA
Switching distance	5mm
Switching frequency	50Hz
Voltage drop	1.5V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

Mechanical features

Design	Cuboid
Width	20mm
Height	43mm
Length	12mm
Mechanical mounting condition for sensor	flush
Surface	nickel-plated
Degree of protection (IP)	IP65
Housing material	Nickel-plated brass
Ambient temperature	-25 - 75°C

Other features

Level detection	Yes
Reference medium / object	Material with permittivity $\epsilon_r=81$
Ambient temperature	-25 - 75°C

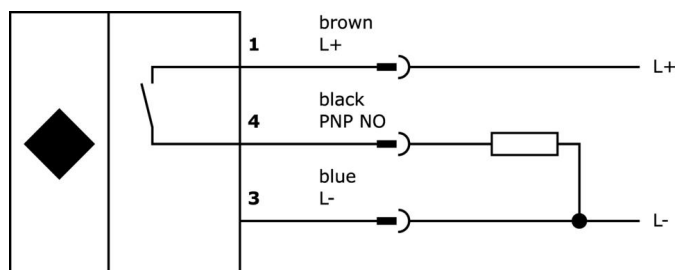
Classification

ETIM 8	EC002715 Capacitive proximity switch
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More

IPF Product Group	243 capacitive sensors (diverse)
packaging dimensions	120 x 100 x 17 mm
gross weight	30 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



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.

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