

IC12E087

Inductive sensors • Full-metal housing

sensor inductive, all-steel, M12x1 60long, Flush, Sn: 3, 10-36V DC, -40-60°C, PNP NO, Connector M12 3pin, IP67, V4A, ATEX, Static

including 2x Nut



Inductive proximity switches are contact-free sensors. They detect all conductive metals, regardless of whether they move or not. The achievable sensing range of the devices depends on the object material and its dimensions. The vibration-resistant sensors can be approached laterally or frontally. Inductive proximity switches are used for presence detection (e.g. goods carriers), positioning (e.g. dampers), counting (e.g. nuts /bolts), speed detection (e.g. for cog wheels), on conveyor systems (e.g. hose feedings) or distance measurements (e.g. press-in checking) of metallic objects.

Electrical features

Response/decay time	5ms
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	100mA
Relative hysteresis	20%
Correction factor (aluminum)	0.3
Correction factor (copper)	0.1
Correction factor (brass)	0.4
Correction factor (St37)	1
Correction factor (stainl. steel)	0.7
Short-circuit protection	Yes
No-load current	20mA
Number of pins	3
Switching distance	3mm
Switching frequency	100Hz
Switching behavior of the output	Static
Voltage drop	2.5V
Reverse polarity protection	Yes
Min. output current	100mA
Operating voltage (DC)	10 - 36V

Mechanical features

Alignment of cable entry	axial
Design	Cylinder, screw-thread
Pressure resistance	100bar
Thread length	40mm
Thread pitch	1mm
Cable infeed	axial
Length	60mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Stainless steel 1.4404
Housing material	Stainless steel 1.4404
Thread dimension	M12
Ambient temperature	-40 - 60°C

Other features

Explosion safety category for gas	ATEX gas-ex-protection, Cat. 3G
Explosion safety category for dust	ATEX dust-ex-protection, Cat. 3D
Harsh environmental conditions	Yes
Feeding technology	Yes
Oil and cooling lubricants	Yes
Reference medium / object	Standard measuring plate FE360 12x12x1mm
Ambient temperature	-40 - 60°C

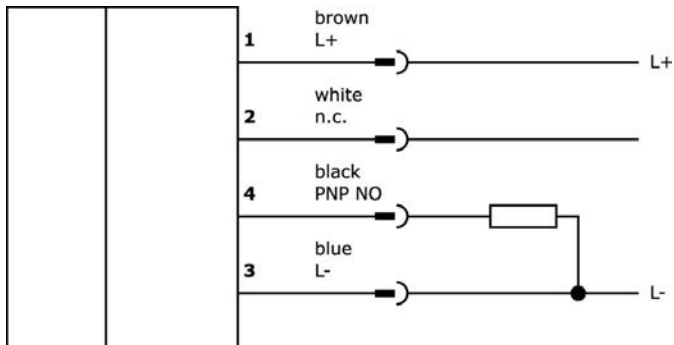
Classification

ETIM 8	EC002714 Inductive proximity switch
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More

IPF Product Group	204 inductive sensors (all-steel)
packaging dimensions	149 x 124 x 28 mm
gross weight	76 g
Customs tariff number	85365019
WEEE number	40951076
ATEX-compliant	Yes
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.

Dimensional drawing

