

IO18012F

Inductive sensors • Chip resistant

sensor inductive, all-steel, M18x1 64long, Non-flush, Sn: 5, 10-30V DC, -25-85°C, PNP NO, IO-Link, Connector M12 4pin, IP67, Stainless steel 1.4305, Static

including 2x Nut, 2x Toothed washer



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

Display	LED display
Type of switching function	Normally open contact
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200mA
Relative hysteresis	15%
Correction factor (aluminum)	1.7
Correction factor (copper)	1.5
Correction factor (brass)	1.7
Correction factor (St37)	1
Correction factor (stainless steel V2A: 2mm)	0.2
Short-circuit protection	Yes
No-load current	10mA
Max. line length	300m
Number of pins	4
Relative repeat accuracy	7%
Residual ripple	20%
Switching distance	5mm
Switching frequency	200Hz
Switching behavior of the output	Static
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

Mechanical features

Alignment of cable entry	axial
Design	Cylinder, screw-thread
Pressure resistance	60bar
Thread length	35mm
Thread pitch	1mm
Cable infeed	axial
Length	63.5mm
Material thickness	0.6mm
Maximum tightening torque	50Nm
Mechanical mounting condition for sensor	non-flush
Degree of protection (IP)	IP67
Active area material of sensor	Stainless steel 1.4305
Housing material	Stainless steel 1.4305
Thread dimension	M18
Ambient temperature	-25 - 85°C

Other features

IO-Link version	V1.0.1
Harsh environmental conditions	Yes
Oil and cooling lubricants	Yes
Reference medium / object	Standard measuring plate FE360 18x18x1mm
Ambient temperature	-25 - 85°C

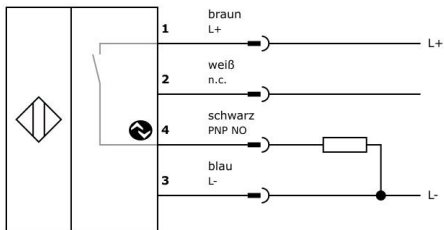
Classification

ETIM 8	EC002714 Inductive proximity switch
eClass 7.0	27270101
eClass 7.1	27270101
eClass 8.0	27270101
eClass 9.0	27270101
eClass 9.1	27270101

More

IPF Product Group	205 inductive sensors (pro)
packaging dimensions	215 x 180 x 19 mm
gross weight	72 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



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.

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com

Dimensional drawing

