

IOR40176

Inductive sensors • Full-metal housing

sensor inductive, all-steel, Ø4mm 30long, Non-flush, Sn: 3, 10-30V DC, -25-85°C, PNP NO, IO-Link, Cable connector M8 3pin 0.2m PUR (Polyurethane), IP67, Stainless steel 1.4305, Static, factor 1



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 (NO)
Type of electrical connection	Cable connector M8
Type of switching output	PNP
Rated switching current	200mA
Readiness delay	10ms
Relative hysteresis	20%
Correction factor (aluminum)	1
Correction factor (copper)	0.95
Correction factor (brass)	1.35
Correction factor (St37)	1
Correction factor (stainless steel V2A: 1mm)	0.4
Correction factor (stainless steel V2A: 2mm)	0.85
Short-circuit protection	Yes
No-load current	10mA
Max. line length	300m
Number of pins	3
Relative repeat accuracy	5%
Residual ripple	20%
Switching distance	3mm
Switching frequency	1200Hz
Switching behavior of the output	Static
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

Mechanical features

Number of cores	3
Conductor cross-section	0.06mm ²
Tightening torque	0.2Nm
Alignment of cable entry	axial
Design	Cylinder plain
Diameter	4mm
Cable length	0.2m
Cable infeed	axial
Length	30mm
Material thickness	0.22mm
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
Material of cable sheath	Plastic (PUR)
Material independent sensors (factor 1)	Yes
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 9x9x1mm
Ambient temperature	-25 - 85°C

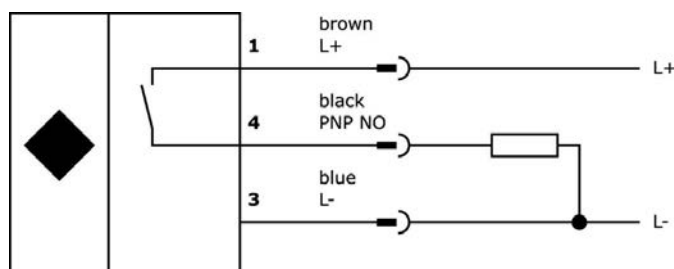
Classification

ETIM 8	EC002714 Inductive proximity switch
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More

IPF Product Group	205 inductive sensors (pro)
packaging dimensions	120 x 100 x 20 mm
gross weight	12 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