

**IC18A174****Inductive sensors • Full-metal housing**

sensor inductive, all-steel, M18x1 50long, Flush, Sn: 10, 10-30V DC, -25-85°C, PNP NO, IO-Link, Cable 5m PUR (Polyurethane), IP68, Stainless steel 1.4305, factor 1

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**

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	200mA
Readiness delay	15ms
Relative hysteresis	15%
Correction factor (aluminum)	1
Correction factor (copper)	0.8
Correction factor (brass)	1.2
Correction factor (St37)	1
Correction factor (stainless steel V2A: 1mm)	0.5
Correction factor (stainless steel V2A: 2mm)	0.9
Short-circuit protection	Yes
No-load current	10mA
Line diameter	5mm
Max. line length	300m
Relative repeat accuracy	5%
Residual ripple	20%
Switching distance	10mm
Switching frequency	200Hz
Voltage drop	2V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30V

**Mechanical features**

Number of cores	3
Conductor cross-section	0.34mm <sup>2</sup>
Alignment of cable entry	axial
Design	Cylinder, screw-thread
Pressure resistance	60bar
Thread length	50mm
Thread pitch	1mm
Cable length	5m
Cable infeed	axial
Length	50mm
Material thickness	0.6mm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP68
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
Thread dimension	M18
Ambient temperature	-25 - 85°C

**Other features**

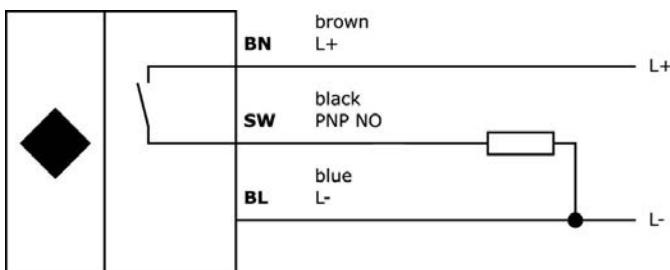
IO-Link version	V1.0.1
Harsh environmental conditions	Yes
Feeding technology	Yes
Oil and cooling lubricants	Yes
Reference medium / object	Standard measuring plate FE360 30x30x1mm
Ambient temperature	-25 - 85°C

**Classification**

ETIM 8	EC002714 Inductive proximity switch
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**More**

IPF Product Group	205 inductive sensors (pro)
packaging dimensions	215 x 180 x 20 mm
gross weight	232 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](http://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](http://www.ipf-electronic.com)

**Dimensional drawing**