

### IO18012F

## **INDUCTIVE SENSORS • FULL-METAL HOUSING**

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



### **MECHANICAL FEATURES**

Active area material of sensor	Stainless steel 1.4305
Alignment of cable entry	Axial
Ambient temperature	-25 °C 85 °C
Cable infeed	Axial
Degree of protection (IP)	IP67
Design	Cylinder, screw-thread
Housing material	Stainless steel 1.4305
Material thickness	0.6 mm
Max. tightening torque	50 Nm
Mechanical mounting condition for sensor	Non-flush
Pressure resistance	60 bar
Pressure-proof	-
Sensor length	63.5 mm
Thread length	35 mm
Thread pitch	1 mm
Thread size, metric	18

# **ELECTRICAL FEATURES**

ELECTRICAL FEATORES	
Cascadable	-
Correction factor (aluminum)	1.7
Correction factor (brass)	1.7
Correction factor (copper)	1.5
Correction factor (St37)	1
Correction factor (stainless steel V2A: 2mm)	0.2
Hysteresis	15 %
IO-Link compatible	+
Max. line length	300 m
No-load current	10 mA
Norm measuring plate	18x18x1
Number of pins	4
Operating voltage	30 V 10 V
Rated switching current	200 mA
Relative repeat accuracy	7 %



## **ELECTRICAL FEATURES**

Reverse polarity protection + Short-circuit protection + Suitable for safety functions - Supply voltage 10 V 30 V Switching behavior of the output Static Switching distance 5 mm Switching frequency 200 Hz Type of electrical connection Connector M12 Type of switching function Normally open contact Type of switching output PNP Voltage drop 2 V Voltage type DC With LED display (functional reserve) + With monitoring function of downstream devices -	Residual ripple	20 %
Suitable for safety functions  Supply voltage  Switching behavior of the output  Static  Switching distance  Switching frequency  Type of electrical connection  Connector M12  Type of switching function  Normally open contact  Type of switching output  PNP  Voltage drop  Voltage type  DC  With LED display (functional reserve)  +	Reverse polarity protection	+
Supply voltage 10 V 30 V Switching behavior of the output Static Switching distance 5 mm Switching frequency 200 Hz Type of electrical connection Connector M12 Type of switching function Normally open contact Type of switching output PNP Voltage drop 2 V Voltage type DC With LED display + With LED display (functional reserve) +	Short-circuit protection	+
Switching behavior of the output  Switching distance  Switching frequency  Type of electrical connection  Connector M12  Type of switching function  Normally open contact  Type of switching output  PNP  Voltage drop  Voltage type  DC  With LED display  With LED display (functional reserve)  +	Suitable for safety functions	-
Switching distance 5 mm  Switching frequency 200 Hz  Type of electrical connection Connector M12  Type of switching function Normally open contact  Type of switching output PNP  Voltage drop 2 V  Voltage type DC  With LED display +  With LED display (functional reserve) +	Supply voltage	10 V 30 V
Switching frequency Type of electrical connection Connector M12 Type of switching function Normally open contact Type of switching output PNP Voltage drop 2 V Voltage type DC With LED display + With LED display (functional reserve) +	Switching behavior of the output	Static
Type of electrical connection  Type of switching function  Normally open contact  PNP  Voltage drop  Voltage type  DC  With LED display  With LED display (functional reserve)  Connector M12  Normally open contact  PNP  2 V  DC  +	Switching distance	5 mm
Type of switching function  Normally open contact  PNP  Voltage drop  Voltage type  DC  With LED display  With LED display (functional reserve)  Normally open contact  PNP  2 V  +	Switching frequency	200 Hz
Type of switching output  Voltage drop  Voltage type  DC  With LED display  With LED display (functional reserve)  PNP  2 V  DC  +	Type of electrical connection	Connector M12
Voltage drop 2 V Voltage type DC With LED display + With LED display (functional reserve) +	Type of switching function	Normally open contact
Voltage type DC With LED display + With LED display (functional reserve) +	Type of switching output	PNP
With LED display + With LED display (functional reserve) +	Voltage drop	2 V
With LED display (functional reserve) +	Voltage type	DC
	With LED display	+
With monitoring function of downstream devices -	With LED display (functional reserve)	+
	With monitoring function of downstream devices	-

### **OTHER FEATURES**

Harsh environmental conditions	+
Hygienic and wet area	+
Metallic sensor surface	+
Oil and cooling lubricants	+

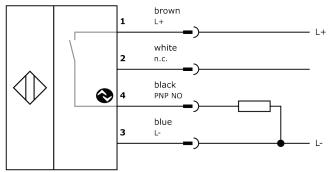
### Other

Packaging dimensions	77.0mm x 25.0mm x 123.0mm
Shipping weight	0.07kg
Tariff code	85365019

## Classification

ipf product group	205
eClass 8.0	27270101
eClass 9.0	27270101
eClass 9.1	27270101
ETIM-5.0	EC002714
ETIM-6.0	EC002714
ETIM-7.0	EC002714

## Connection





### **Dimensional drawing**





### Installation



Mounting / installation may only be carried out by a qualified electrician!

## Disposal



#### Software

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

### 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.

LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.