

IN18E250 INDUCTIVE SENSORS • ENLARGED AMBIENT TEMPERATURE

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.



MECHANICAL FEATURES

Active area material of sensor	Vectra®
Ambient temperature	0 °C ... 180 °C
Cable length	0.5 m
Degree of protection (IP)	IP65
Housing design	Cylinder, screw-thread
Housing material	Stainless steel 1.4305
Increased ambient temperatures > 80°C	+
Material of cable sheath	Silicone
Mechanical mounting condition for sensor	Non-flush
Pressure-proof	-
Sensor length	77 mm
Thread length	60 mm
Thread pitch	1 mm
Thread size, metric	18
Wire cross section	0.25 mm ²

ELECTRICAL FEATURES

Cascadable	-
Correction factor (aluminum)	0.3
Correction factor (brass)	0.4
Correction factor (copper)	0.2
Correction factor (St37)	1
Correction factor (stainl. steel)	0.7
Hysteresis	15 %
Max. output current	150 mA
No-load current	15 mA
Norm measuring plate	18x18x1
Number of pins	3
Readiness delay	5 ms
Relative repeat accuracy	3 %
Residual ripple	10 %
Response time	1.2 ms
Reverse polarity protection	+

ELECTRICAL FEATURES

Short-circuit protection	+
Suitable for safety functions	-
Supply voltage	10 V ... 35 V
Switching distance	8 mm
Switching frequency	400 Hz
Type of electrical connection	Cable connector M12
Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With monitoring function of downstream devices	-

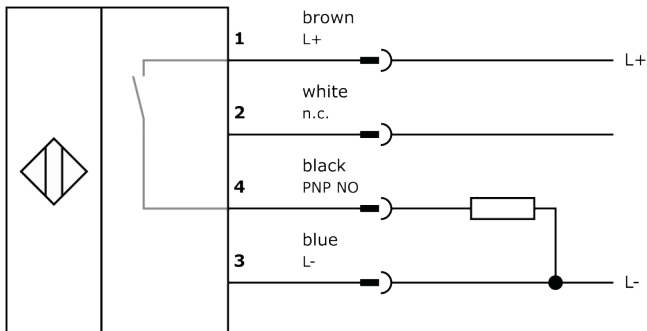
Other

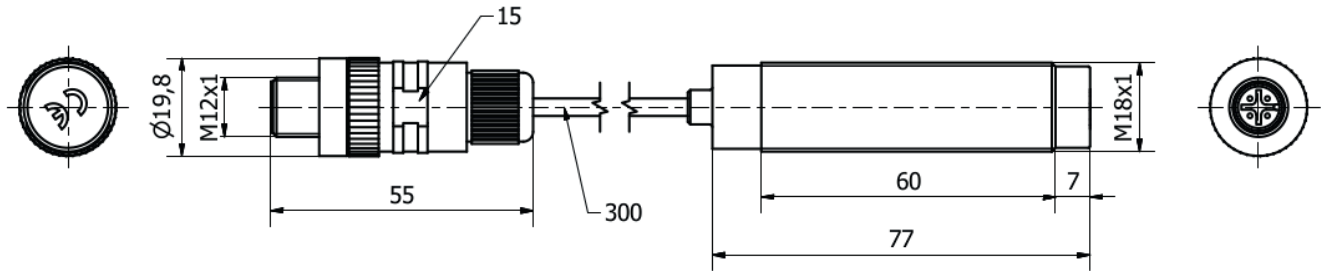
Packaging dimensions	77.0mm x 25.0mm x 123.0mm
Shipping weight	0.12kg
Tariff code	85365019

Classification

ipf product group	700
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**

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

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.