

**IM080170****INDUCTIVE SENSORS • NORM SWITCHING DISTANCE**

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	PA 6.6 (synthetic)
Ambient temperature	-25 °C ... 70 °C
Degree of protection (IP)	IP67
Housing coating	Nickel-plated
Housing design	Cylinder, screw-thread
Housing material	Brass
Mechanical mounting condition for sensor	Non-flush
Pressure-proof	-
Sensor length	50 mm
Thread length	30 mm
Thread pitch	1 mm
Thread size, metric	8

**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	200 mA
No-load current	15 mA
Norm measuring plate	8x8x1
Number of pins	3
Relative repeat accuracy	10 %
Reverse polarity protection	+
Short-circuit protection	+
Suitable for safety functions	-
Supply voltage	10 V ... 30 V
Switching distance	2 mm
Switching frequency	1000 Hz
Type of electrical connection	Connector M8

## ELECTRICAL FEATURES

Type of switching function	Normally open contact
Type of switching output	PNP
Voltage drop	2 V
Voltage type	DC
With LED display	+
With monitoring function of downstream devices	-

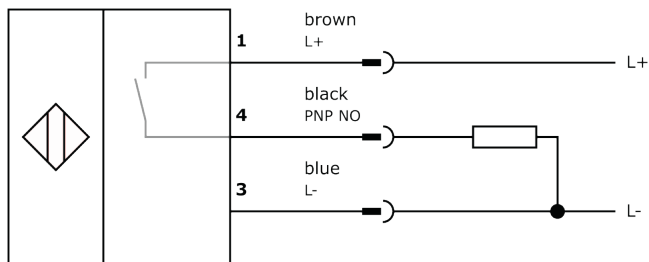
## Other

Packaging dimensions	100mm x 17.0mm x 120mm
Shipping weight	0.02kg
Tariff code	85365019

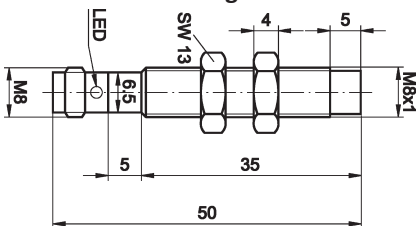
## Classification

ipf product group	216
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](http://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.