

IB180121

Inductive sensors • Norm switching distance

sensor inductive, M18x1 72long, Flush, Sn: 5, 10-30V DC, PNP NO, Connector M12 3pin, IP67, Brass Nickel-plated

including Nut



The IB180121 inductive sensor is manufactured in accordance with EN 60947-5-2 and is suitable for standard applications. It recognizes conductive metals at short distances and is not affected by other materials, making it ideal for use in soiling and harsh environments. The sensor is set at the factory with a norm measuring plate whose edge length corresponds to the diameter of the sensor surface.

In accordance with the standard, the IB180121 flush sensor has a switching distance of 5mm. The housing of the sensor is made of brass and has an M18x1mm thread. The electrical connection is made via a 3-pin M12 plug connector.

Electrical features

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200 mA
Relative hysteresis	15 %
Correction factor (aluminum)	0.3
Correction factor (copper)	0.2
Correction factor (brass)	0.4
Correction factor (St37)	1
Correction factor (stainl. steel)	0.7
Short-circuit protection	Yes
No-load current	15 mA
Number of pins	3
Relative repeat accuracy	10 %
Switching distance	5 mm
Switching frequency	500 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Operating voltage (DC)	10 - 30 V

Mechanical features

Alignment of cable entry	axial
Design	Cylinder, screw-thread
Thread length	45 mm
Thread pitch	1 mm
Cable infeed	axial
Length	71.5 mm
Mechanical mounting condition for sensor	flush
Surface	nickel-plated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PA6.6)
Housing material	Brass
Thread dimension	M18
Ambient temperature	-25 - 70 °C

Other features

Reference medium / object	Standard measuring plate FE360 18x18x1mm
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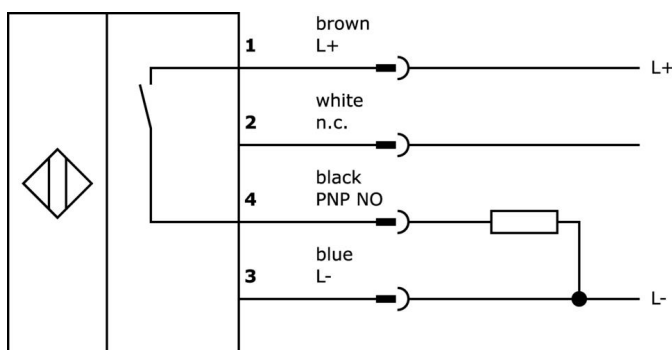
Classification

ETIM 8	EC002714 Inductive proximity switch
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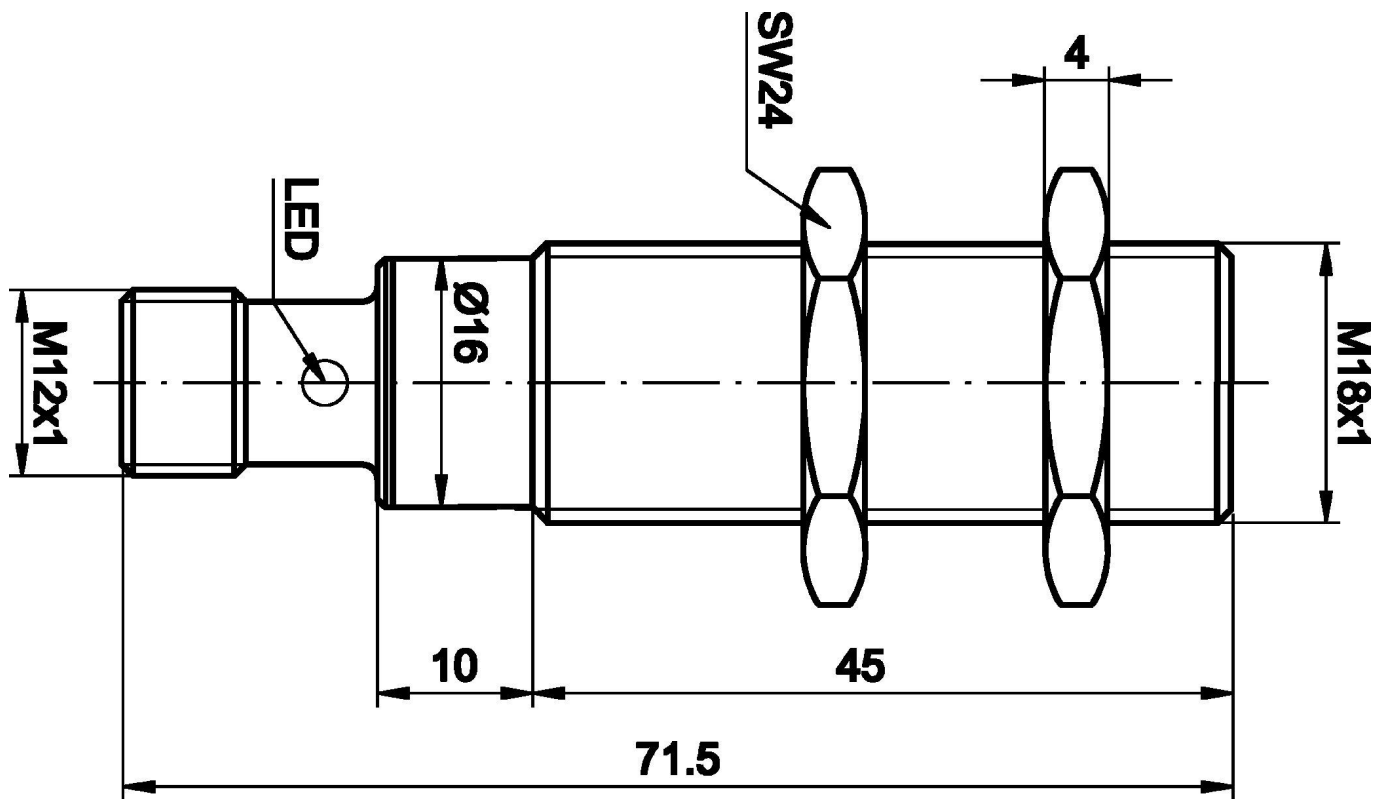
More

IPF Product Group	200 inductive sensors
packaging dimensions	120 x 100 x 40 mm
gross weight	57 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

AY000014



accessories sensor, Reduction sleeve, M18, Plastic

VK200221



Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silic...

VK200225



Connection cable, 2m, M12 Female (socket) 3pin Straight, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Sili...

VK200021



Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200025



Connection cable, 2m, M12 Female (socket) 3pin Straight, Free conductor end, 3x0.34mm², PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

AY000162



Accessories, magnetic, Ø43mm, neodymium-iron-boron, inside thread M5, rubber

AY000159



accessories sensor, Mounting pipe, Ø12mm 200long, Aluminum Anodised

AY000117



accessories sensor, Fixture kit, Metal, ball joint

VK030F23



Connection cable, 0.3m, M12 socket 4-pin angular, M12 connector 4-pin straight, 4x0.34mm², PUR (polyurethane), IP67, LED, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

You can find further accessories on our homepage



Installation

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



Disposal

WEEE number according to § 6 para. 3 ElektroG: 40951076

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.