

IA180120

Inductive sensors • Norm switching distance

Sensor inductive, preferential, M18x1 62long, flush, Sn: 5, 10-30V DC, PNP NO, M12 plug connector 3-pin, IP67, nickel-plated brass

including Nut



The IA180120 inductive sensor recognizes conductive metals at short distances and is insensitive to other materials. This makes it ideal for use in soiling and harsh environments. The sensor complies with EN 60947-5-2 and is suitable for standard applications.

The switching distance of the flush sensor is 5mm according to the norm measuring plate with an edge length corresponding to the diameter of the sensor surface. The housing of the sensor is made of brass via 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	35 mm
Thread pitch	1 mm
Cable infeed	axial
Length	62 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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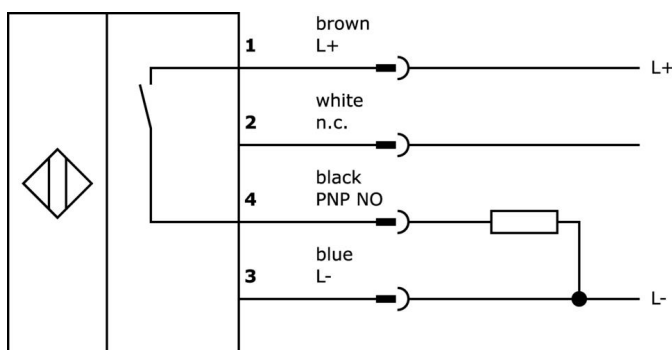
Classification

ETIM 8	EC002714 Inductive proximity switch
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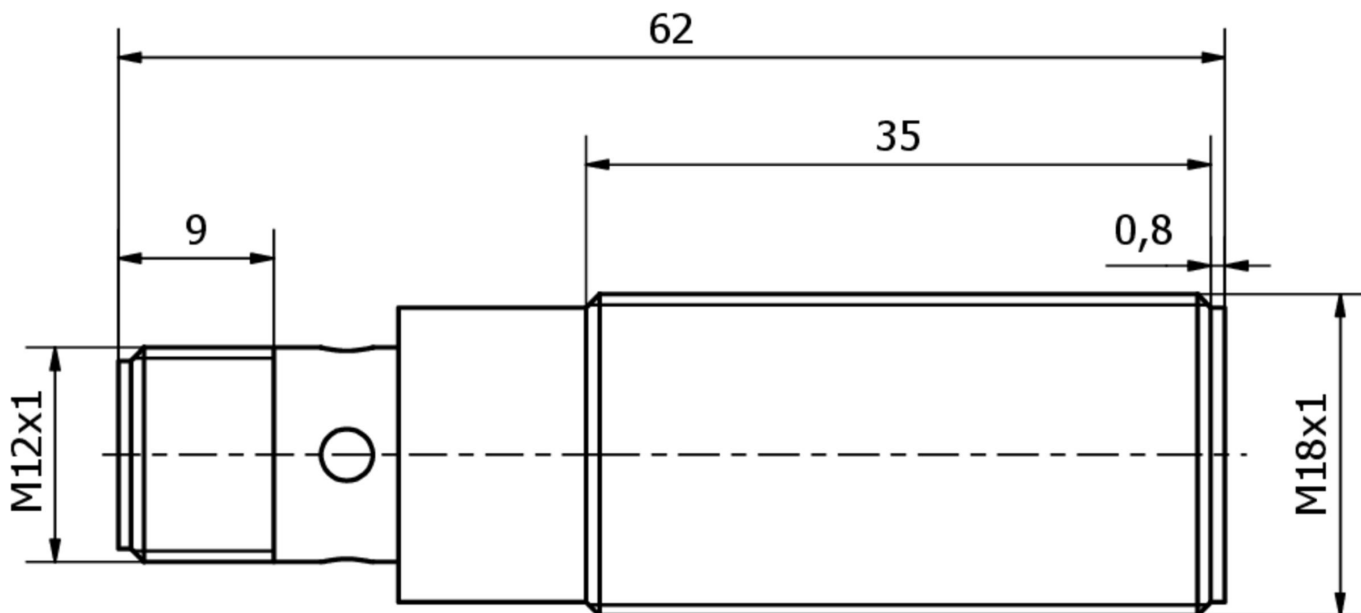
More

IPF Product Group	216 inductive sensors (preferential)
packaging dimensions	120 x 100 x 25 mm
gross weight	51 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

VK030F60



Connection cable, 0.3m, M12 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F64



Connection cable, 0.3m, M12 socket 3-pin straight, M8 connector 3-pin straight, 3x0.34mm², PUR (polyurethane), 60V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

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

VK003021



Cable socket, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

VK003025



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

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, Silii...

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.