

## IB120170

### Inductive sensors • Norm switching distance

sensor inductive, M12x1 60long, Flush, Sn: 3, 10-30V DC, PNP NO, Connector M8 3pin, IP67, Brass Nickel-plated

including Nut



The IB120170 is an inductive sensor that can detect conductive metals at short distances and is insensitive to other materials. It is suitable for use in soiling and harsh environments.

This sensor complies with the EN 60947-5-2 standard and is suitable for standard applications. The switching distance of the sensor is set at the factory using a norm measuring plate whose edge length corresponds to the diameter of the sensor surface.

In accordance with the standard, the IB120170 flush sensor achieves a switching distance of 3 mm. Its housing is made of brass and has an M12x1mm thread. The sensor is electrically connected via a 3-pin M8 plug connector.

#### Electrical features

Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M8
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	3 mm
Switching frequency	800 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	38.5 mm
Thread pitch	1 mm
Cable infeed	axial
Length	60 mm
Mechanical mounting condition for sensor	flush
Surface	nickel-plated
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PBT)
Housing material	Brass
Thread dimension	M12
Ambient temperature	-25 - 70 °C

**Other features**

Reference medium / object	Standard measuring plate FE360 12x12x1mm
---------------------------	--

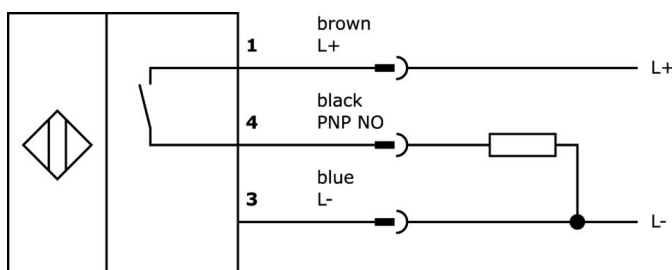
**Classification**

ETIM 8	EC002714 Inductive proximity switch
--------	-------------------------------------

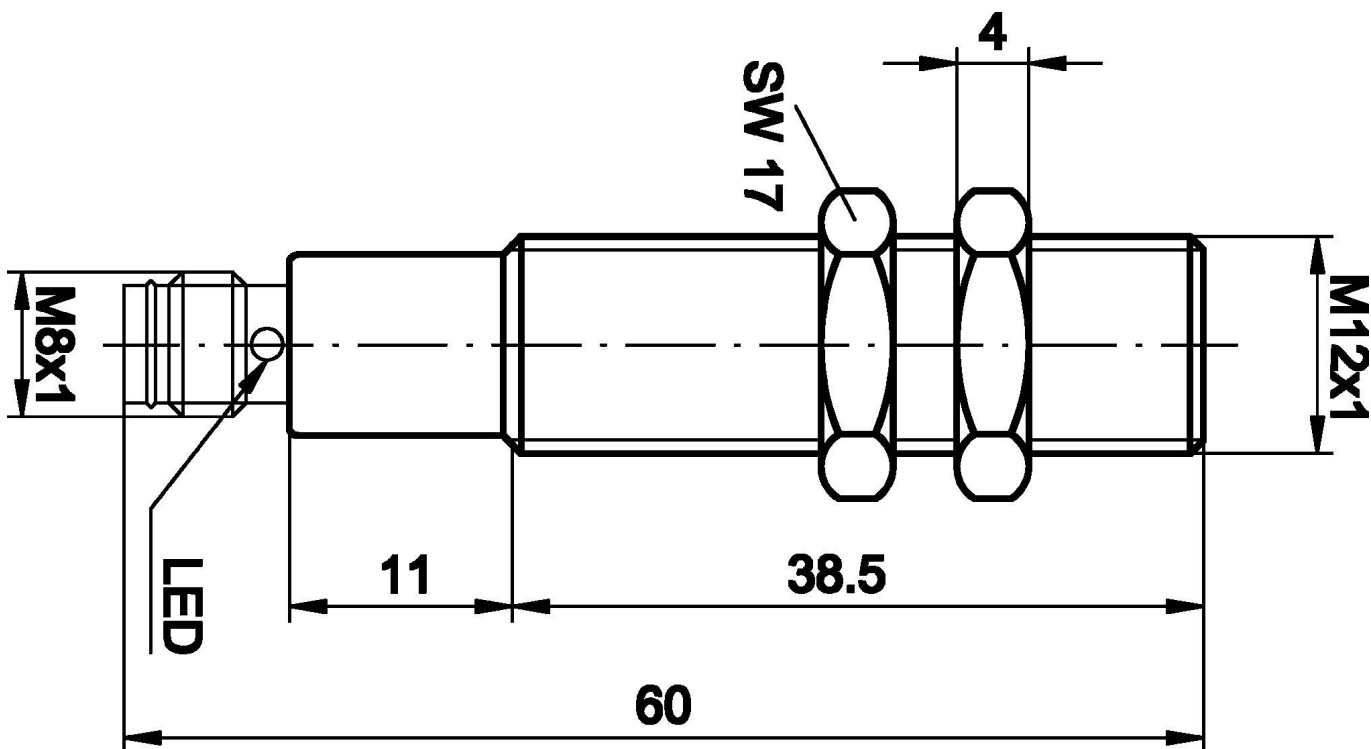
**More**

IPF Product Group	200 inductive sensors
packaging dimensions	120 x 100 x 17 mm
gross weight	30 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**

**VY000004**



DC power supply, sensor tester, 120x26x72mm, 18V, 0.04A, Spring clamp connection 4pin, IP20, Plastic

**AY000156**



accessories sensor, Clamp sleeve, M16x1 31long, Brass White bronze

**VK200271**



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silico...

**VK500271**



Connection cable, 5m, M8 Female (socket) 3pin Angular, Free conductor end 3pin, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, -30-90°C, IP67, With LED display, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, S...

**AY000115**



accessories sensor, Fixture kit, Metal, ball joint

**AY000162**



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

**VK200071**



Connection cable, 2m, M8 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 60V, -40-90°C, IP67, TPU, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

**VK200075**



Connection cable, 2m, M8 female (socket) 3pin Straight, free conductor end, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 60V, -30-90°C, IP67, suitable for trailing chain and torsion resistant, oil and cooling lubricants, welding area, Silicone-free

**VK030F70**



Connection cable, 0.3m, M8 socket 3-pin angular, M8 connector 3-pin straight, 3x0.34mm<sup>2</sup>, PUR (polyurethane), 60V, IP67, 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.