

## IB120123

### Inductive sensors • Increased switching distance

sensor inductive, M12x1 60long, Flush, Sn: 4, 10-30V DC, PNP NO, Connector M12 3pin, IP67, Stainless steel 1.4305 Nickel-plated

including Nut



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.

#### 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	4 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	40 mm
Thread pitch	1 mm
Cable infeed	axial
Length	60 mm
Maximum tightening torque	20 Nm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (PA6)
Housing material	Stainless steel 1.4305
Thread dimension	M12
Ambient temperature	-25 - 70 °C

**Other features**

Reference medium / object	Standard measuring plate FE360 12x12x1mm
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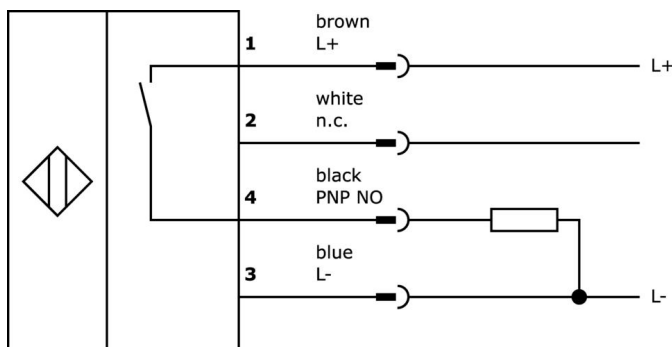
**Classification**

ETIM 8	EC002714 Inductive proximity switch
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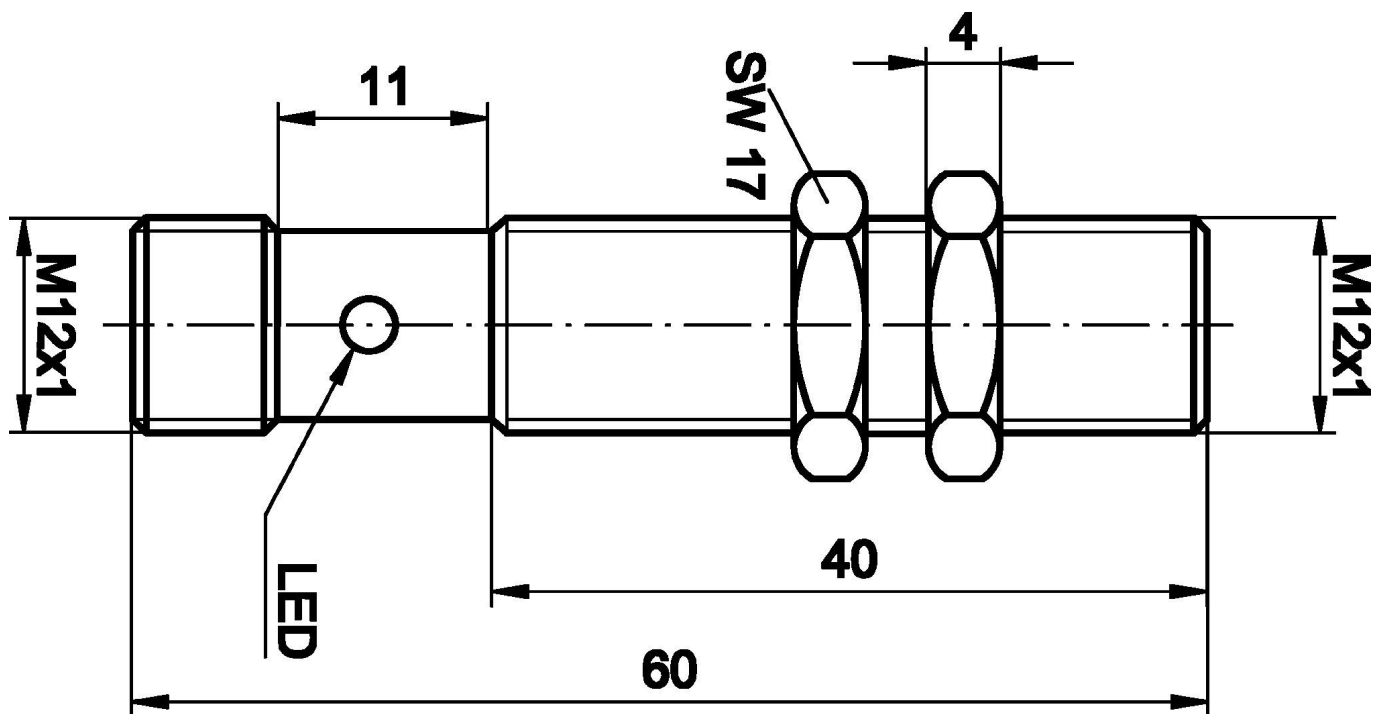
**More**

IPF Product Group	200 inductive sensors
packaging dimensions	120 x 100 x 17 mm
gross weight	27 g
Customs tariff number	85365019
WEEE number	40951076
OzDS-compliant	Yes
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF	2243 year(s)
MTTFd	449 year(s)

**Connection**



**Dimensional drawing**



**Extract accessories program**

**VK003020**



Cable socket, angular, self-assembly, screw connection, Ø3-6. 5mm, 4A, 240V, -25-90°C, M12 socket 4-pin, IP67, PBT

**VK003024**



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Female (socket) 4pin, IP67, PBT

**AY000156**



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

**VK200221**



Connection cable, 2m, M12 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, Silic...

**VK200225**



Connection cable, 2m, M12 Female (socket) 3pin Straight, 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, Sili...

**AY000115**



accessories sensor, Fixture kit, Metal, ball joint

**AY000162**



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

**VK200021**



Connection cable, 2m, M12 Female (socket) 3pin Angular, Free conductor end, 3x0.34mm<sup>2</sup>, 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, 3x0.34mm<sup>2</sup>, PUR (Polyurethane), Ø4.3mm, 250V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil 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.