

## IY100320

### Inductive sensors • Ring sensors

sensor inductive, 20x71x35mm, ring 10.1, 10-35V DC, PNP NC/NO, Connector M12 3pin, IP67, Polyamide, Static



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

Response/decay time	0.5 ms
Display	LED display
Resolution	1.5 mm
Type of switching function	Normally closed contact/normally open contact
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	200 mA
Setting procedure	Potentiometer
Pulse stretching	10 - 150 ms
Short-circuit protection	Yes
No-load current	11 mA
Max. parts speed	35 m/s
Number of pins	3
Switching behavior of the output	Static
Voltage drop	2 V
Reverse polarity protection	Yes
Decay time	10 ms
Operating voltage (DC)	10 - 35 V
Output functions	Switching point

**Mechanical features**

Design	Ring-shaped
Width	35 mm
Height	20 mm
Length	71 mm
Mechanical mounting condition for sensor	non-flush
Ring diameter	10.1 mm
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (POM)
Housing material	Polyamide PA
Ambient temperature	-25 - 70 °C

**Other features**

Feeding technology	Yes
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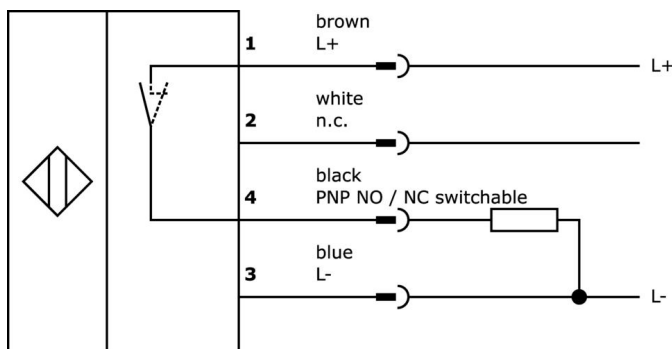
**Classification**

ETIM 8	EC002714 Inductive proximity switch
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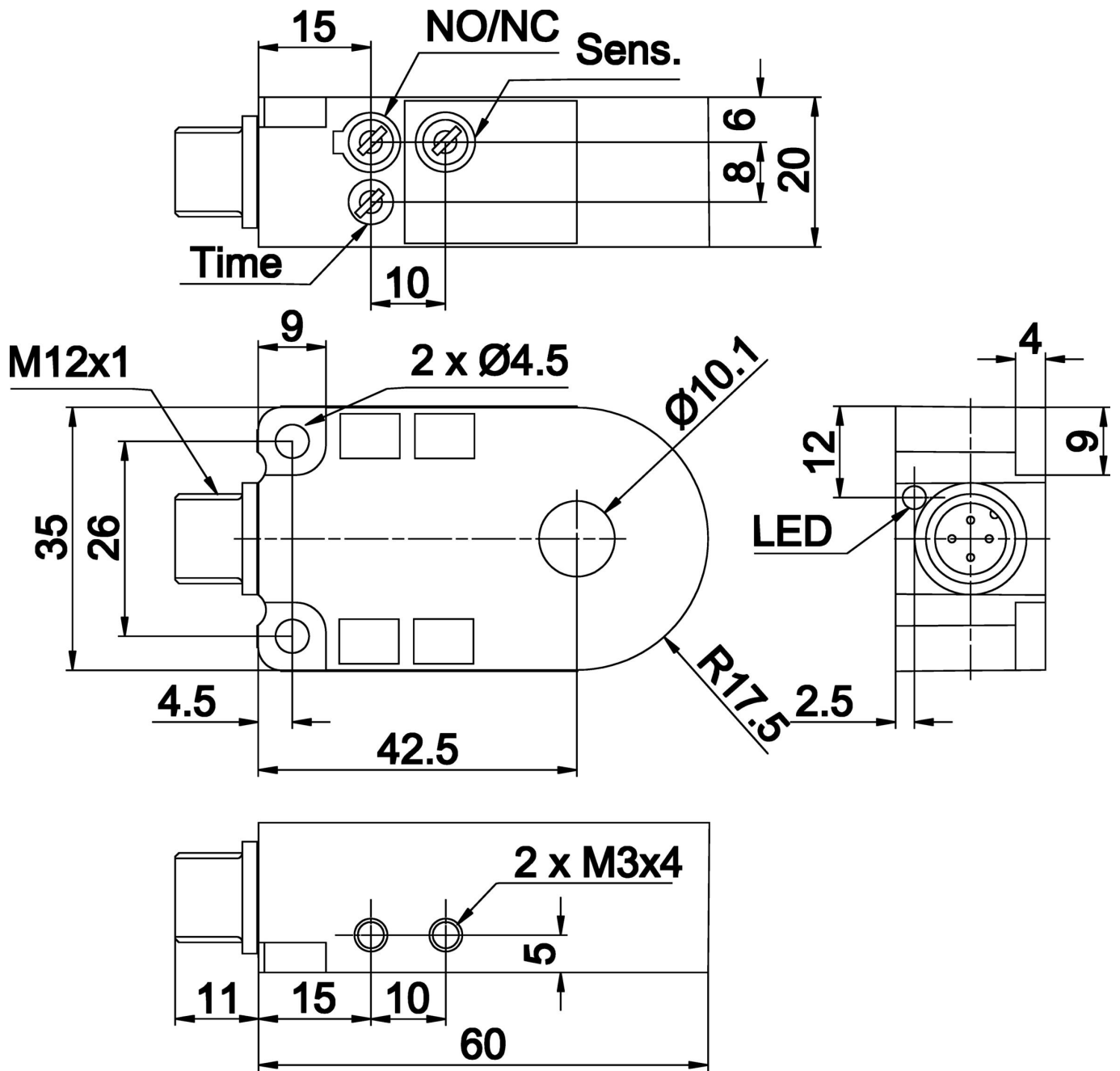
**More**

IPF Product Group	211 inductive sensors (ring/hose)
packaging dimensions	105 x 43 x 43 mm
gross weight	70 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



Dimensional drawing



**Extract accessories program**

**VK000041**



Adaption, M12 Female (socket)  
4pin Straight, M8 Male  
(connector) 4pin Straight, 24V, -  
25-85°C, IP67, Oil and cooling  
lubricants, Welding area

**NG400501**



DC power supply, 1-phase,  
125x114x40mm, 24-28V, 5A, 90-  
264V AC 50Hz, 90-264V AC 60Hz,  
127-370V DC, screw connection,  
IP20, aluminum, stabilized, pulsed  
output voltage

**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

**VK000037**



Adaption, M12 Female (socket)  
3pin Straight, M8 Male  
(connector) 3pin Straight, 24V, -  
25-85°C, IP67, Oil and cooling  
lubricants, Welding area

**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

**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.