

IB050176

Inductive sensors • Increased switching distance

sensor inductive, M5x0.5 38long, Flush, Sn: 1.5, 10-30V DC, PNP NO, IO-Link, Connector M8 3pin, IP67, V4A

including Nut, Toothed washer



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 M8
Type of switching output	PNP
Rated switching current	200 mA
Relative hysteresis	10 %
Correction factor (aluminum)	0.4
Correction factor (copper)	0.4
Correction factor (brass)	0.5
Correction factor (St37)	1
Correction factor (stainl. steel)	0.75
Short-circuit protection	Yes
No-load current	10 mA
Number of pins	3
Relative repeat accuracy	2 %
Switching distance	1,5 mm
Switching frequency	3000 Hz
Switching behavior of the output	Static
Voltage drop	2 V
Reverse polarity protection	Yes
Supported communication interface	IO-Link
Operating voltage (DC)	10 - 30 V

Mechanical features

Alignment of cable entry	axial
Design	Cylinder, screw-thread
Diameter	5 mm
Thread length	23 mm
Thread pitch	0.5 mm
Cable infeed	axial
Length	38 mm
Maximum tightening torque	1.5 Nm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP67
Active area material of sensor	Plastic (POM)
Housing material	Stainless steel (V2A)
Thread dimension	M5
Ambient temperature	-25 - 70 °C

Other features

IO-Link version	V1.0.1
Reference medium / object	Standard measuring plate FE360 5x5x1mm

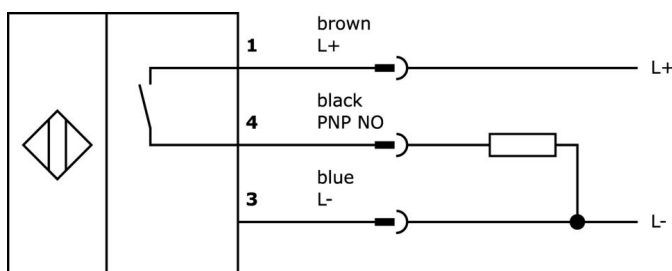
Classification

ETIM 8	EC002714 Inductive proximity switch
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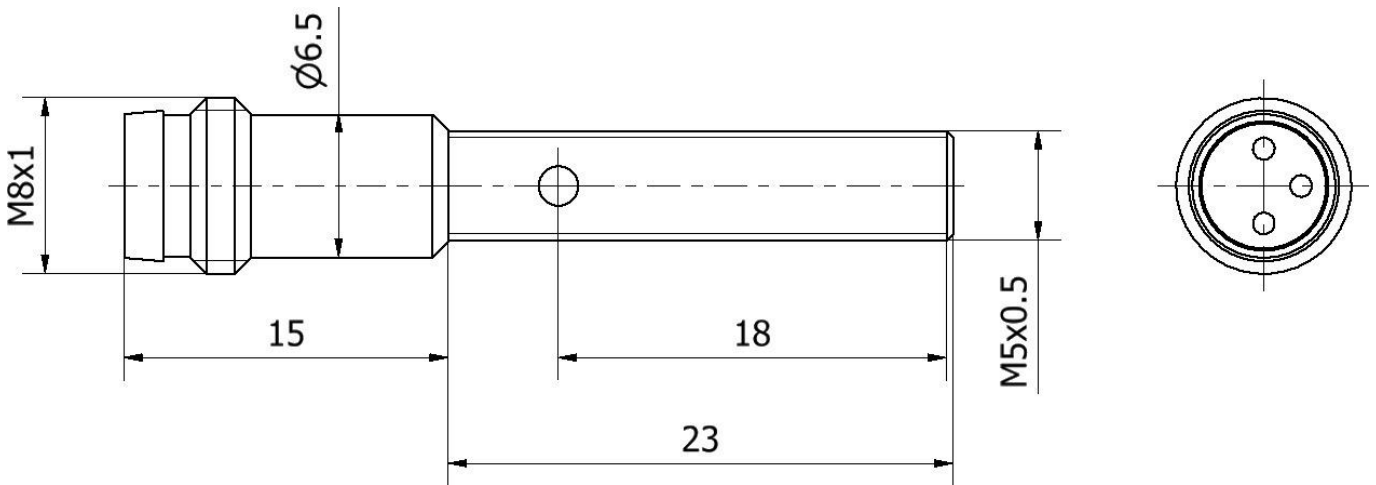
More

IPF Product Group	201 inductive sensors (plus / super plus)
packaging dimensions	215 x 180 x 17 mm
gross weight	15 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes
MTTF (25°C)	3110 year(s)
MTTF (40°C)	1165 year(s)
MTTF (70°C)	185 year(s)

Connection



Dimensional drawing



Extract accessories program

AY000115



accessories sensor, Fixture kit,
Metal, ball joint

AY000162



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

VK030F70



Connection cable, 0.3m, M8
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

VK030F74



Connection cable, 0.3m, M8
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

VK200071



Connection cable, 2m, M8 Female
(socket) 3pin Angular, Free
conductor end, 3x0.34mm², 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, 3x0.34mm², PUR
(Polyurethane), Ø4.3mm, 60V, -
30-90°C, IP67, suitable for trailing
chain and torsion resistant, oil and
cooling lubricants, welding area,
Silicone-free

VK200271



Connection cable, 2m, M8 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, Silico...

VK500271



Connection cable, 5m, M8 Female
(socket) 3pin Angular, Free
conductor end 3pin, 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, S...

VK030F80



Connection cable, 0.3m, M8
socket 3-pin angular, M12
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

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.
- /** Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: www.ipf-electronic.com