

IC080176

Inductive sensors • Full-metal housing

sensor inductive, all-steel, M8x1 60long, Flush, Sn: 3, 10-30V DC, -25-85°C, PNP NO, IO-Link, Connector M8 3pin, IP69K, Stainless steel 1.4305, factor 1

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
Readiness delay	10 ms
Relative hysteresis	20 %
Correction factor (aluminum)	1
Correction factor (copper)	0.9
Correction factor (brass)	1.35
Correction factor (St37)	1
Correction factor (stainless steel V2A: 1mm)	0.3
Correction factor (stainless steel V2A: 2mm)	0.6
Short-circuit protection	Yes
No-load current	10 mA
Max. line length	300 m
Number of pins	3
Relative repeat accuracy	5 %
Residual ripple	20 %
Switching distance	3 mm
Switching frequency	1200 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Supported communication interface	IO-Link
Operating voltage (DC)	10 - 30 V

Mechanical features

Tightening torque	6 Nm
Alignment of cable entry	axial
Design	Cylinder, screw-thread
Pressure resistance	100 bar
Thread length	45 mm
Thread pitch	1 mm
Cable infeed	axial
Length	60 mm
Material thickness	0.25 mm
Maximum tightening torque	6 Nm
Mechanical mounting condition for sensor	flush
Degree of protection (IP)	IP69K
Active area material of sensor	Stainless steel 1.4305
Housing material	Stainless steel 1.4305
Thread dimension	M8
Ambient temperature	-25 - 85 °C

Other features

IO-Link version	V1.0.1
Harsh environmental conditions	Yes
Feeding technology	Yes
Oil and cooling lubricants	Yes
Reference medium / object	Standard measuring plate FE360 9x9x1mm

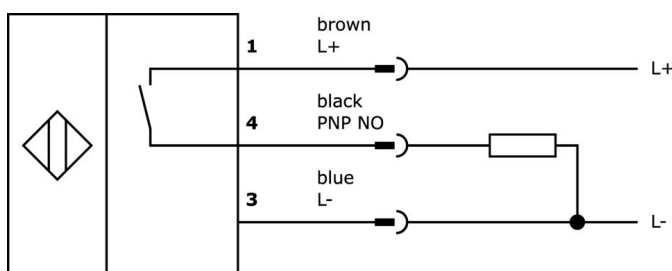
Classification

ETIM 8	EC002714 Inductive proximity switch
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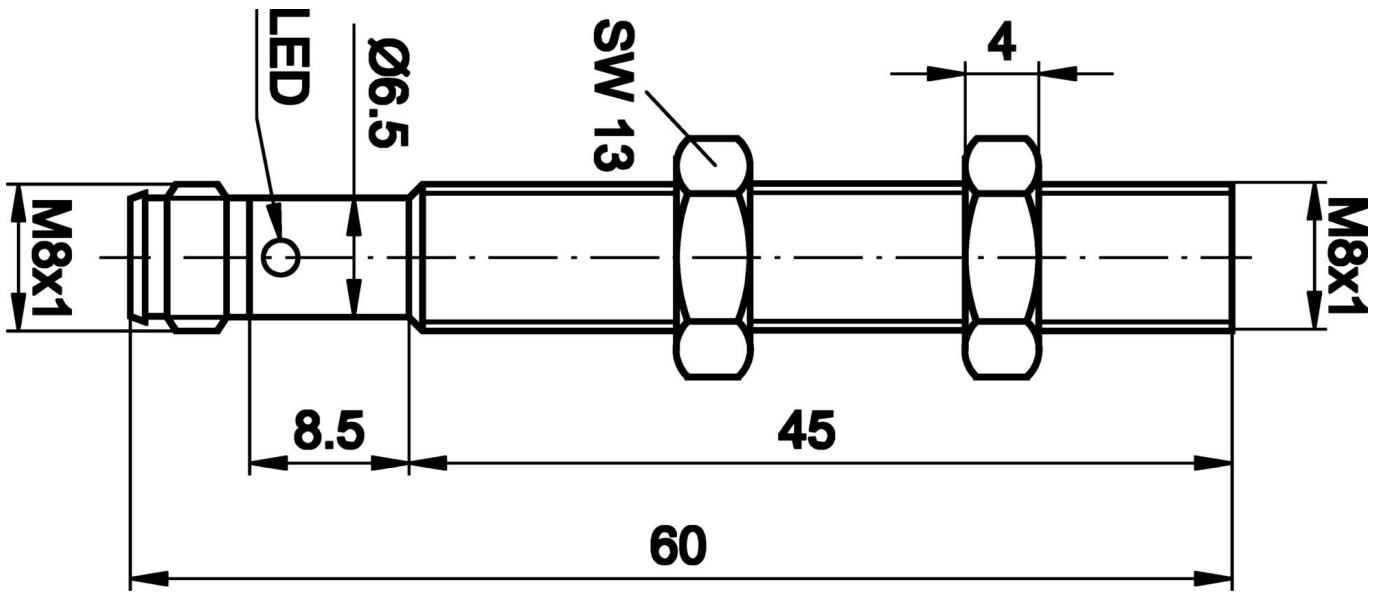
More

IPF Product Group	205 inductive sensors (pro)
packaging dimensions	215 x 180 x 10 mm
gross weight	24 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

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

AY000162

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

AY000159

accessories sensor, Mounting pipe, Ø12mm 200long, Aluminum Anodised

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...

VK030F82

Connection cable, 0.3m, M8 socket 3-pin angular, M12 connector 3-pin straight, 3x0.34mm², 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.
- /** 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