

IN120170

Inductive sensors • Norm switching distance

Sensor inductive, M12x1 60long, non-flush, Sn: 6, 10-30V DC, PNP NO, M8 plug connector 3-pin, IP67, nickel-plated (n-pltd) brass

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 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	6 mm
Switching frequency	400 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	33 mm
Thread pitch	1 mm
Cable infeed	axial
Length	60 mm
Mechanical mounting condition for sensor	non-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
---------------------------	--

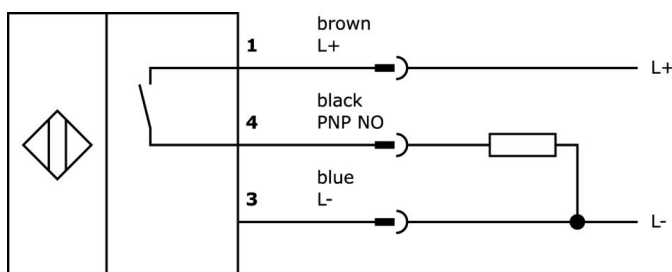
Classification

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

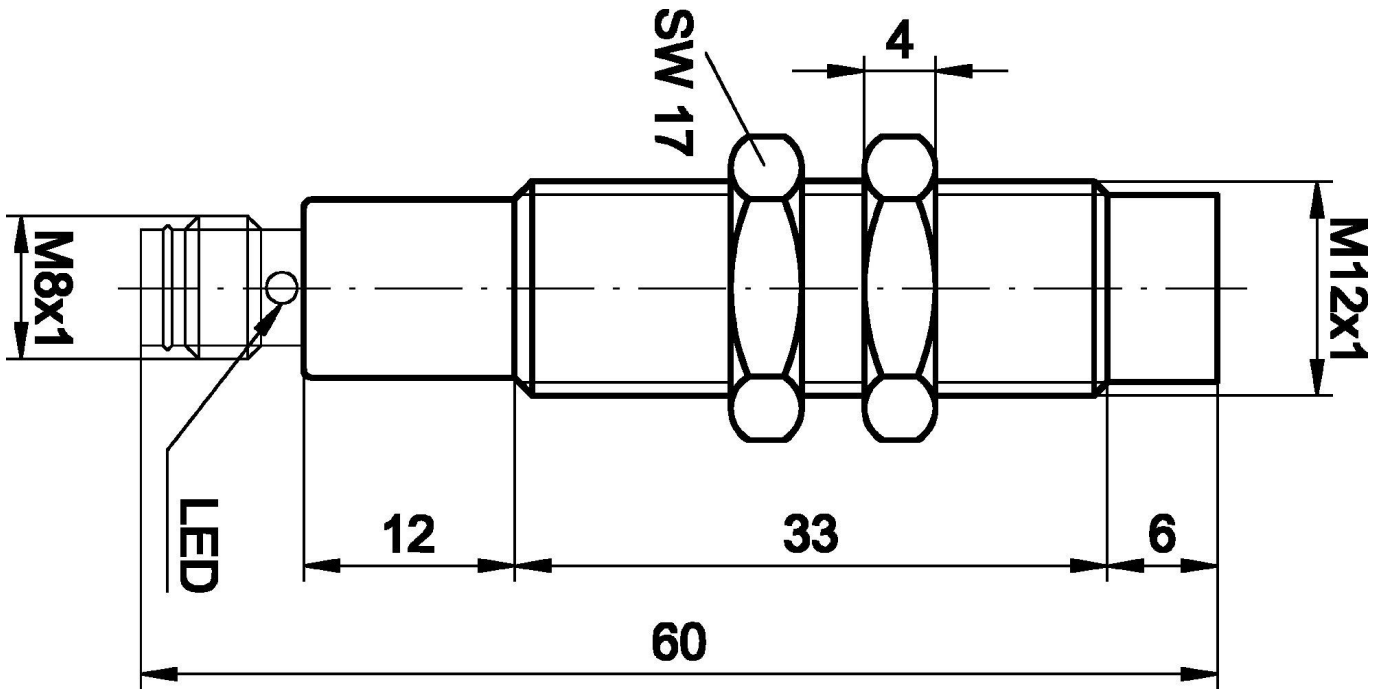
More

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

VY030170

time stage, Turn-off delay, 0-0.15s, 10-35V DC, 1x NO, M8 3pin 0.3m, IP67, Plastic, Potentiometer



VY030174

time stage, Turn-off delay, 0-0.15s, 10-35V DC, 1x NO, M8 3pin 0.3m, IP67, Plastic, Potentiometer



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...



VK003070

Cable socket, Angular, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass



VK003074

Cable socket, Straight, Suitable for self-assembly, Soldering connection, Ø3.5-5mm, 4A, 60V, -40-85°C, M8 Female (socket) 3pin, IP67, Brass



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



VK030F84

Connection cable, 0.3m, M8 socket 3-pin straight, 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



VK030F72

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