

## MC0501A6

### Magnetic field sensors • Proximity switches

sensor magnetic, all-steel, M5x0.5 14long, Sn: 40mm, 8-30V DC, 1x PNP NO, Cable 3pin 2m PUR (Polyurethane), IP67, Stainless steel 1.4305, LED, 2.8mT

including Nut



Magnetic proximity switches are contact-free sensors. They detect magnetic objects and - or magnets, regardless of whether they move or not. Since magnetic fields penetrate all non-magnetizable materials, the sensors can detect magnets through walls made of nonferrous heavy metal, stainless steel, aluminum, plastic, wood or through excessive sailing, for instance. The achievable sensing range of the devices depends on the strength of the affecting magnetic field. Magnetic sensors are used for positioning (e.g. position checks on hoisting gear), speed checks (e.g. on conveyor belts or transmission cog wheels through the aluminum housings) or for position detection (e.g. of goods carriers).

#### Electrical features

Number of switching outputs	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Cable
Type of switching output	PNP
Rated switching current	150 mA
Absolute hysteresis	6 mm
Short-circuit protection	Yes
No-load current	20 mA
Magnetic sensitivity	2.8 mT
Switching distance	40 mm
Switching frequency	1000 Hz
Voltage drop	2 V
Reverse polarity protection	Yes
Operating voltage (DC)	8 - 30 V

**Mechanical features**

Number of cores	3
Design	Cylinder, screw-thread
Diameter	5 mm
Thread length	14.5 mm
Thread pitch	0.5 mm
Cable length	2 m
Length	14.5 mm
Degree of protection (IP)	IP67
Active area material of sensor	Stainless steel 1.4305
Housing material	Stainless steel 1.4305
Material of cable sheath	Plastic (PUR)
Thread dimension	M5
Ambient temperature	-25 - 70 °C

**Other features**

Harsh environmental conditions	Yes
Oil and cooling lubricants	Yes

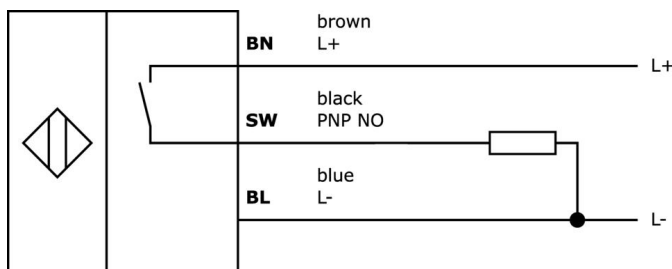
**Classification**

ETIM 8	EC002544 Magnetic proximity switch
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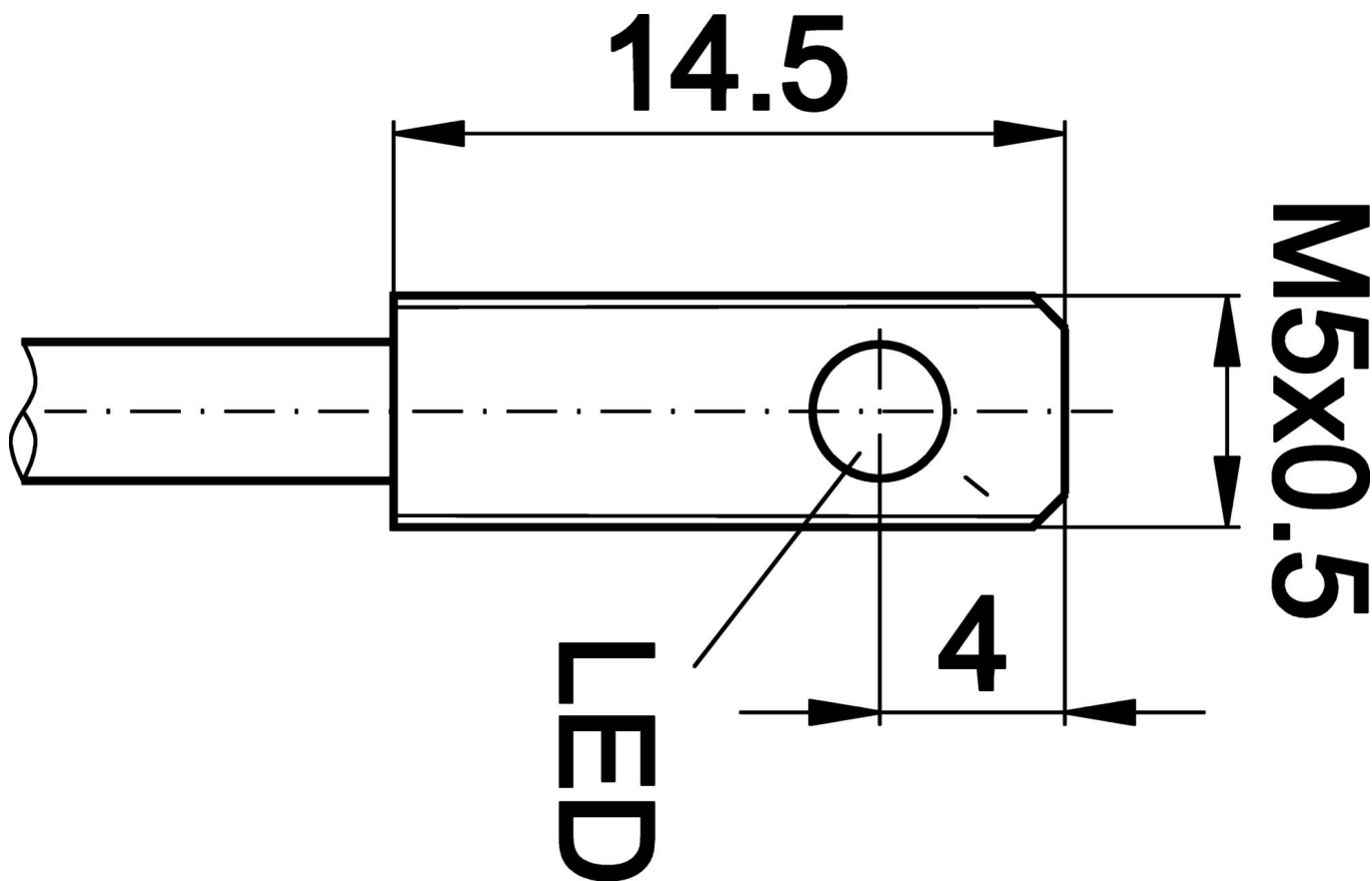
**More**

IPF Product Group	230 magnetic sensors
packaging dimensions	200 x 150 x 17 mm
gross weight	30 g
Customs tariff number	85365019
WEEE number	40951076
Reach-compliant	Yes
RoHS-compliant	Yes

**Connection**



**Dimensional drawing**



**Extract accessories program**

**VY000004**



DC power supply, sensor tester, 120x26x72mm, 18V, 0.04A, Spring clamp connection 4pin, IP20, Plastic

**AY000141**



Plastic sheath, Ø17mm, Inner diameter 10mm, -40-250°C, Glass fiber with silicone rubber, Short-term resistance to weld spatter 1200°C, Tensile strength 400N, Flexible, Flame retardant, yard good

**NG530002**



DC power supply, single-phase, 99x114x22mm, 24V, 0.1A, Number of relay outputs 2, 100-264V AC 50Hz, 100-264V AC 60Hz, Screw connection, IP20, Plastic, Stabilized, Output voltage, pulsed

**AM000001**



Accessories, magnetic, Ø20mm 6.5long, strontium ferrite, internal hole Ø4.3mm, 25-130°C

**AM000002**



Accessories, magnetic, Ø32mm 15long, strontium ferrite, internal hole Ø5.6mm, 25-130°C

**VK003076**



Cable connector, Angular, Suitable for self-assembly, Soldering connection, 4A, 60V, -40-85°C, M8 Male (connector) 3pin, IP67, Brass

**VK003078**



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

**AY000018**



accessories sensor, Ø5mm, Aluminum, For sensor 5mm, for Wall mounting, Screw mounting

**AY000023**



accessories, Hexagon nut, M5x0.5, Wrench size 7mm, Brass Nickel-plated

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.