MC120155

MAGNETIC SENSORS • PROXIMITY SWITCHES

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).



MECHANICAL DATA

Number of switching outputs

Reverse polarity protection

Operating voltage

Setting via teach-in

Short-circuit-proof

Reed contact

| Ambient temperature | -25 °C 130 °C |
|---|------------------------|
| Cable length | 2 m |
| Degree of protection (IP) | IP67 |
| Housing design | Cylinder, screw-thread |
| Housing material | Stainless steel |
| Increased ambient temperatures > 80°C | Yes |
| Material of cable sheath | Silicone |
| Metal housing | Yes |
| Number of wires | 3 |
| Sensor diameter | 12 mm |
| Sensor length | 69 mm |
| Strong vibration / motion | No |
| Thread length | 55 mm |
| Thread pitch | 1 mm |
| Thread size, metric | 12 |
| ELECTRICAL DATA | |
| Cross/short circuit identification possible | No |
| Hysteresis | 6 mm |
| Low sensitivity | No |
| Low switching hysteresis | No |
| Magnetic sensitivity | 2.8 mT |
| Max. output current | 100 mA |
| No-load current | 20 mA |
| Number of pins | 3 |

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No

Yes

No

Yes

18 V ... 30 V

IPF ELECTRONIC

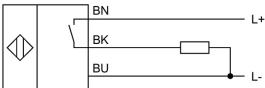
ELECTRICAL DATA

| Suitable for safety functions | No |
|--|-----------------------|
| Switching distance | 40 mm |
| Switching frequency | 1000 Hz |
| Two switching points | No |
| Type of electrical connection | Cable |
| Type of switching function | Normally open contact |
| Type of switching output | PNP |
| Voltage drop | 2 V |
| Voltage type | DC |
| With LED display | No |
| With monitoring function of downstream devices | No |

OTHER DATA

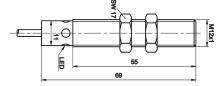
| Cylinder sensors | No |
|--------------------------------|-----|
| Harsh environmental conditions | Yes |
| Metallic sensor surface | Yes |
| Oil and cooling lubricants | Yes |
| Short travel path | No |

CONNECTION



Colors: BN (brown), BU (blue), BK (black) **Functions:** BN = L+, BU = L-, BK = PNP NO

DIMENSIONAL DRAWING



INSTALLATION

DISPOSAL





Mounting / Installation may only be carried out by a qualified electrician!



SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!