IPF ELECTRONIC

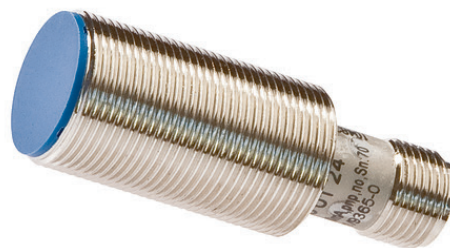DATA SHEET MS180124 • Subject to alteration! Version: 03.05.2019

MS180124

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

Ambient temperature	-20 °C ... 70 °C
Degree of protection (IP)	IP67
Housing design	Cylinder, screw-thread
Housing material	Nickel-plated brass
Increased ambient temperatures > 80°C	No
Metal housing	Yes
Sensor diameter	18 mm
Sensor length	81 mm
Strong vibration / motion	No
Thread length	30 mm
Thread pitch	1 mm
Thread size, metric	18

ELECTRICAL DATA

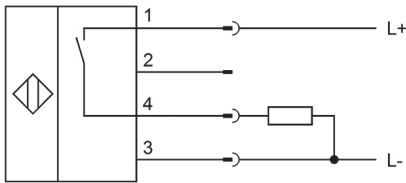|	
Cross/short circuit identification possible	Yes
Low sensitivity	No
Low switching hysteresis	No
Max. output current	200 mA
Number of pins	4
Number of switching outputs	1
Operating voltage	10 V ... 30 V
Reed contact	Yes
Reverse polarity protection	Yes
Setting via teach-in	No
Short-circuit-proof	Yes
Suitable for safety functions	No
Switching distance	70 mm
Two switching points	No
Type of electrical connection	Connector M12
Type of switching function	Normally open contact
Type of switching output	PNP

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ELECTRICAL DATA

Voltage type	DC
With LED display	Yes
With monitoring function of downstream devices	No

OTHER DATA

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

CONNECTION

Colors: 1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black)
Functions: 1 = L+, 2 = n. c., 3 = L-, 4 = PNP NO

DIMENSIONAL DRAWING

INSTALLATION

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

DISPOSAL

SAFETY WARNINGS

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

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