

Operating instructions

Magnetic Door Process Lock UMZ X.X-xxx-Mxx, (-Rxx)

Dear Customer,

For correct operation and for your own safety, please carefully read the attached instructions for use prior to starting the installation.

In case of any questions, please contact SEBATECC UG.

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Instructions for use

Any manufacturer's personal liability is excluded in case of non-adherence to these instructions as well as in case of incorrect use of this device. Additionally warranty on device and accessories will expire.

Devices

Magnetic coil with connector according to EN 50044 applicable as electric bolt keeper in connection with ferromagnetic anchor plates. Technical data of magnetic coils in chart 1. Technical data of adapted sensors in manufacturer's supplement.

Function

The product controls non security-relevant applications in process and automation technology. Conduct a functional test of all components.

Installation

For installation, maintenance and repair the relevant instructions must be observed. The electrical installation must be made by an electrical specialist under consideration of country-specific regulations. Prior to the installation, the indicated device code must be compared with the designated operating conditions to ensure operation in accordance with the regulations.

Assembly

The process bolt keeper can be assembled at swing doors with left or right swing or at sliding doors. Assemble the bolt keeper parallel opposite to the anchor plate. Fix the actuator non-detachably with safety screws or rivets.

Application

Magnetic bolts are electro-technical components. Operation without the respective anchor plate is not possible. The electric process bolt keeper can be supplemented by a corresponding sensor. Suitable sensors are listed as attachment. The process bolt keeper does not have a safety function. Remark: The installation instructions from the manufacturer of the sensors used must be observed.

Maintenance


The magnetic coils are maintenance-free. In the event of error or breakdown for unknown reason during operation, the magnetic bolts must be exchanged. Defective or broken magnetic coils or connectors must not be repaired. They must be exchanged. In case the magnetic coils are exposed to special strains, additional protective measures possibly must be taken.


Project planning


For safety-relevant functions, make a safety review of the entire system including all adapted safety-relevant components.

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Safety regulations

Danger	Risk of injury by improper application
	For safety-related functions to make sure a safety assessment of the entire system

Danger	Risk of injury by improper installation
	The product must be installed by qualified personnel, commissioned and serviced.


Danger	Risk of injury by improper use
	User manual and product data sheet read carefully. Necessarily provide instructions and information in this manual, the product data sheet sequence.

Operation


The electrical magnetic Bolt is dimensioned for 100% duty cycle (the permanent Magnetzuhaltung for 10% duty cycle) even in the worst ambient conditions allowed.

In operation, make sure that neither the max. permissible ambient and fluid temperatures of 50 ° C nor the power limit (10 max.% overvoltage) are exceeded. If desired, the solenoid is to be protected against overload.


To avoid voltage peaks that can lead to damage in the system, the user must provide appropriate protection measures. The surface of the magnet coil can get hot during continuous operation.

Caution	Personal injury from hot surfaces
	For continuous operation, do not touch the surface of the magnet coil.

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Caution	Influence
	Please note that magnetic disk wiping, electronic and mechanical components, e.g. Effect on pacemakers, may or destroy. Negative effects of magnetic fields on the People who originate from permanent magnets, are not known to us. Able from direct contact to magnetic materials and systems allergic reactions occur (eg against ceramic and metallic Materials as well as zinc, nickel and plastics.

For the operation of the sensors used by the user is to use the vendor's instructions. In particular, the correct assembly and checking the switching states is mandatory.

Danger	Injury due to improper application
	Always observe the manufacturer guide of the sensor. Sure to check the correct functioning of the sensor.

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Specifications of solenoid and process lock

Electrical data

Versorgungsspannung Ub	Supply voltage Ub	24 VDC
Spannungstoleranz	Voltage tolerance	+/- 10%
Leistungsaufnahme el. Mag. bei Ub	Power consumption el. at Ub	3,2 W/6 W
Leistungsaufnahme pe. Magn. bei Ub	Power consumption pe. at Ub	36 W
Magnethaltekraft El.Magnet	Magnetic holding force	140 N/500 N
Magnethaltekraft Pe.Magnet	Magnetic holding force	400 N
Fixierkraft	Fixing force	30 N
Einschaltdauer El. Magnet	Inrush time el. Magnet	100%
Einschaltdauer Pe. Magnet	Inrush time pe. Magnet	10%

Chart 1

Umgebungstemperatur	Ambiente temperature	-20 - +50°C
EMV	EMC	EN 55011
Temperatur Metallfläche	Metal surface temperature	75°C
Gewicht	Weight	500g

Chart 2

Mechanical data

Höhenversatz	Max. vertical offset	+/- 2,5 mm
Seitenversatz	Max. lateral offset	+/- 2,5 mm
Anschlussart	Connecting type	M12
Leitung	Cable	8x0,25 mm ²
Schutzart	Protection type	IP67
Schaltergehäuse	Switch housing	Alu, hart eloxiert
Anker Bodenplatte	Anchor baseplate	Alu, hart eloxiert
Ankerplatte	Anchor plate	Stahl, vernickelt/Steel
Abmessungen UMZ Basic	Dimensions UMZ Basic	
Sensor	Sensor	
Höhe	Height	110 mm
Breite	Width	40 mm
Tiefe	Depth	33,5 mm
Betätiger	Actuator	
Höhe	Height	110 mm
Breite	Width	45 mm
Tiefe	Depth	18 mm

Chart 3

Type

Typ/Type	Stück/Quantity	Wirkweise	Merkmale	Bestell-Nr.
UMZ 0.1-E145-ZZ	1 Inkl. Ankerplatte	El.-Magnetisch	Magnetisches Zuhaltesystem	0514500
UMZ 1.0-E475-MP	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltesystem, mit M12 Sensoraufnahme	1047512
UMZ 1.0-P400-MP	1 Inkl. Betätiger	Permanent	Magnetisch/permanentes Zuhaltesystem, M12 Sensoraufnahme	1040012
UMZ 2.0-E475-MR	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltesystem, mit M18 RFID Sensoraufnahme	2047518
UMZ 2.0-P400-MR	1 Inkl. Betätiger	Permanent	Magnetisch/permanentes Zuhaltesystem, M18 RFID Sensoraufnahme	2040018
UMZ 3.0-E475-RMP	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltesystem, mit rechteck Sensoraufnahme	3047501
UMZ 3.0-P400-RMP	1 Inkl. Betätiger	Permanent	Magnetisch/permanentes Zuhaltesystem, mit rechteck RFID Sensoraufnahme	3040001
UMZ 3.0-E475-RRP	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltesystem, mit rechteck	3047502

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			RFID Sensoraufnahme	
UMZ 3.0-P400-RRP	1 Inkl. Betätiger	Permanent	Magnetisch/permanentes Zuhaltssystem, mit rechteck Sensoraufnahme	3040002
UMZ 4.0-E475-RRS	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltssystem, mit rechteck RFID Sensoraufnahme	4047502
UMZ 13.0-E1000-RRP	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltssystem, mit rechteck RFID Sensoraufnahme	13010002
UMZ 14.0-E1000-RRS	1 Inkl. Betätiger	El.-Magnetisch	Magnetisches Zuhaltssystem, mit rechteck RFID Sensoraufnahme	14010002
UMZ Betätigerplatte -M12	1		Betätiger-/Ankerplatte beweglich, passend für UMZ 1.0/2.0xx-M12	1000012
UMZ Betätigerplatte -M18	1		Betätiger-/Ankerplatte beweglich, passend für UMZ 1.0/2.0xx-M18	2000018
UMZ Betätigerplatte-R	1		Betätiger-/Ankerplatte beweglich, passend für UMZ 3.0xx-	3000020
UMZ Betätigerplatte-S	1		Betätiger-/Ankerplatte beweglich, passend für UMZ 4.0xx-	4000020
UMZ Montagewinkel	1		Montagewinkel für Schwenktüren	4000001

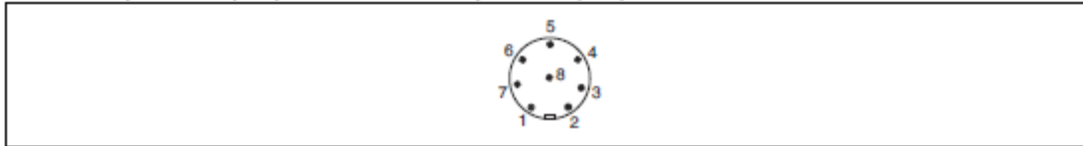
Chart 4

Operating instructions Electrical connection

Stiftstecker 8-pol. M8/M12 (male)

Connector 8-pin M8/M12 (male)

Connecteur mâle M8/M12 à 8 broches



Anschlussbelegung Stecker und Kabel

Pin assignment, connector and cable

Affectation des bornes - connecteur et câble

UMZ 1.0-E475-M12/ UMZ 1.0-P400-M12/ UMZ 3.0-E475-RMP/ UMZ 3.0-P400-RMP (Sensor manufactured by Pilz PSEN ma1.3/ma1.4)
The control of the solenoid operation PIN 5 (grey) 0V und/or PIN 8 (red) 24V

PIN/Broche	Farbe/Colour	Funktion/Function	Anschlussbezeichnung
1	Weiß	Sicherheitskontakt 2	
2	Braun	Meldeausgang +	
3	Grün	Sicherheitskontakt 1	
4	Gelb	Sicherheitskontakt 2	
5	Grau	Magnetansteuerung 0V	0V
6	Rosa	Sicherheitskontakt 1	
7	Blau	Meldeausgang -	0V
8	Rot	Magnetansteuerung 24V	+24 VDC

UMZ 2.0-E475-MR/UMZ 2.0-P400-MR (Sensor manufactured by Rockwell 440N-21Z-M18, Sick TR 4)
The control of the solenoid operation Pin 3 (green) 24V, Pin 7 (blue) -0V

PIN/Broche	Farbe/Colour	Funktion/Function	Anschlussbezeichnung
1	Weiß	Meldeausgang	Hilfsschalter A
2	Braun	Sensorversorgung	+24V UB
3	Grün	Magnetansteuerung	+24VDC
4	Gelb	Eingang 2	B+
5	Grau	Sicherheitsausgang 1	A
6	Rosa	Sicherheitsausgang 2	B
7	Blau	Magnetansteuerung 0V	0V
8	Rot	Eingang 1	A+

UMZ 3.0-E475-RRP/UMZ 3.0-P400-RRP (Sensor manufactured by Pilz PSEN cs 3.1/cs 4.1)
The control of the solenoid operation Pin 8 (red) 24V, Pin 7 (blue) 0V

PIN/Broche	Farbe/Colour	Funktion/Function	Anschlussbezeichnung
1	Weiß	Eingang Kanal 2	S21
2	Braun	+24V UB	A1
3	Grün	Ausgang Kanal 1	I2
4	Gelb	Ausgang Kanal 2	22
5	Grau	Meldeausgang	Y32
6	Rosa	Eingang Kanal 1	S11
7	Blau	0V Magnetansteuerung, 0V UB	0V UB
8	Rot	+24 V Magnetansteuerung	Magnetansteuerung +24VDC

UMZ 4.0-E475-RRS (Sensor manufactured by SSP Safix S1)
The control of the solenoid operation Pin 8 (red) 24V, Pin 3(blue) 0V

PIN/Broche	Farbe/Colour	Funktion/Function	Anschlussbezeichnung
1	Weiß/white	+24VDC UB	A1
2	Braun/brown	Eingang Kanal 1	X1
3	Grün/green	0V + 0V Magnet	A2
4	Gelb/yellow	Sicherheitsausgang 1	Y1 OSSD 1
5	Grau/grey	Meldeausgang	Info Out
6	Rosa/pink	Eingang Kanal 2	X2
7	Blau/blue	Sicherheitsausgang 2	Y2 OSSD 2
8	Rot/red	+24 V Magnetansteuerung	Magnetansteuerung +24VDC

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CE-Marking

The CE marking is not a quality characteristic, but an undertaking by the manufacturer to the user that the product complies with the requirements of the applicable directives. Enable the free movement of goods within the EU, the European Council adopted common guidelines for the European market, set the minimum requirements for health and safety. CE- Identification is confirmed that products comply with the guidelines, ie compliant with relevant, especially harmonized standards.

Note on Low Voltage Directive 2006/95/EG and MRL 2006/42/EG

Electromagnetic actuators and sensors without the electronics company's connect are Components or components for installation into equipment or electrical equipment are provided, or only in conjunction with other components is a direct function exercise. They do not fall under the scope of the Low Voltage Directive. To ensuring the safety the products according to applicable DIN VDE 0580 manufactured and tested.

The products are not covered by the Machinery Directive, as they called modules be responsible for building into machines, partly completed machinery or safety components are provided.

A security and risk assessment is only in the intended use or reasonably foreseeable use possible and done by the user.

Electromagnetic actuators and sensors without electronics are not covered by the above named Guidelines and may therefore not bear the CE mark.

CE Marking according to the Electromagnetic Compatibility Directive 2004/108/EG

List of named Sensors:

- **flexUMZ 3.0**
 - Pilz: PSEN cs 3.1p/cs 4.1p/ma 1.4p

- **flexUMZ 2.0**
 - Rockwell: 440N-21Z-S16H M18, Coded
 - Sick: TR 4 SAM 01C

- **flexUMZ 1.0**
 - Pilz: PSEN ma 1.3p

- **flexUMZ 4.0**
 - SSP: Safix