



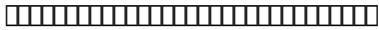
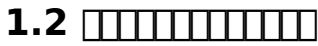
Solenoid interlock AZM40Z-I2-ST-1P2P



- 1
- 1.1
- 1.2
- 1.3
- 1.4
- 1.5
- 1.6
- 1.7
- 2
- 2.1
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- 4.3
- 4.4
- 5 /
- 6
- 6.1
- 6.2
- 6.3 LED
- 6.4
- 6.5
- 7
- 7.1
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- 8
- 8.1
- 8.2

1

1.1



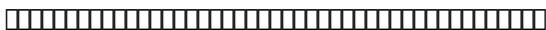
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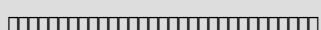
1.4 ☐ ☐



1.5

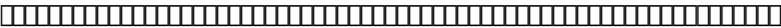


1.6



1.7 | | | | | |--|--|--|--| | | | | | |--|--|--|--|





2

2.1

 AZM40(1)-(2)-ST-1P2P-(3)	
(1)	
Z	
B	
(2)	
I	
I1	
I2	
(3)	
P	
PH	
	AZM40-B1
	AZM40-B1-PH

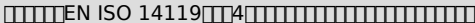
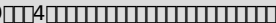
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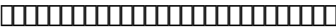


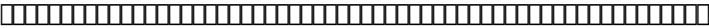
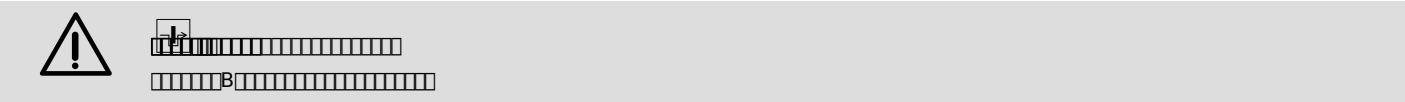
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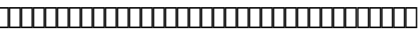


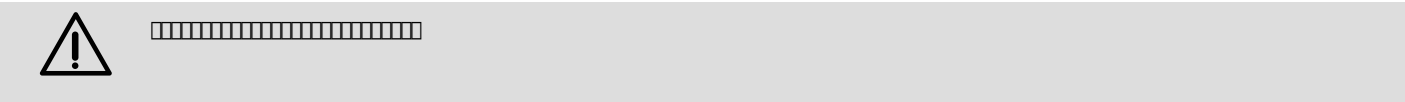
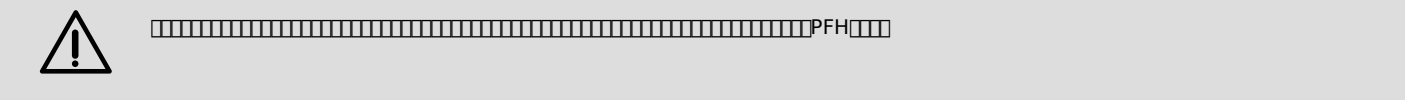
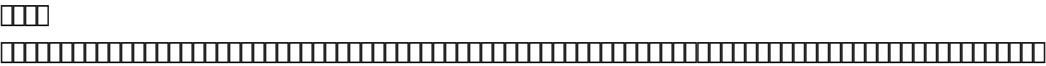
AZM4040 mm180°LED

EN ISO 14119





AZM40

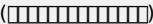


2.4

Approvals - Standards

Certificates	TÜV cULus FCC IC UKCA ANATEL
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General data

Standards	EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-3 EN IEC 61508
Coding	
Coding level according to EN ISO 14119	
Working principle	RFID
Frequency band RFID	125 kHz
Transmitter output RFID, maximum	-6 dB/m
Housing material	 ()
Reaction time, maximum	100 ms
Duration of risk, maximum	200 ms
Reaction time, switching off safety outputs via safety inputs, maximum	1.5 ms
Gross weight	300 g

General data - Features

Solenoid interlock monitored	□
Latching	□
Manual release	□
Short circuit detection	□
Cross-circuit detection	□
Series-wiring	□
Safety functions	□
Integral system diagnostics, status	□
Number of safety contacts	2

Safety classification

Vorschriften	EN ISO 13849-1 EN IEC 61508
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Safety classification - Interlocking function

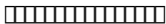
Performance Level, up to	e
Category	4
PFH value	$1.10 \times 10^{-9} /h$
PFD value	8.90×10^{-5}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Safety classification - Guard locking function

Performance Level, up to	d
Category	2
PFH value	$3.00 \times 10^{-9} /h$
PFD value	2.40×10^{-4}
Safety Integrity Level (SIL), suitable for applications in	2
Mission time	20 Year(s)

Mechanical data

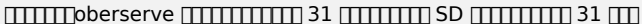
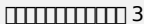
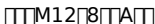
Interlocking principle	□□□
Mechanical lifetime, locking cycles	1,000,000 Operations
Mechanical lifetime, actuator cycles	500,000 Operations
Note (Mechanical lifetime)	from device version V2 (V1 = 200.000 actuator cycles)
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N

Holding force $F_{\max}$, maximum	2,600 N
Latching force	40 N
Note (Latch force)	+/- 25%
Actuating speed, maximum	0.5 m/s
Mounting	
Type of the fixing screws	2x M5
Tightening torque of the fixing screws, minimum	4 Nm
Tightening torque of the fixing screws, maximum	6 Nm
Note	

Mechanical data - Switching distances

Assured switching distance "ON" S_{ao}	1 mm
Assured switching distance "OFF" S_{ar}	8 mm
Note (switching distance)	All switching distances in accordance EN IEC 60947-5-3

Mechanical data - Connection technique

Length of sensor chain, maximum	200 m
Note (length of the sensor chain)	
Note (series-wiring)	 observe  31  SD  31 
Termination	 M12  8  A 

Mechanical data - Dimensions

Length of sensor	119.5 mm
Width of sensor	40 mm
Height of sensor	20 mm

Ambient conditions

Degree of protection	IP66 IP67 IP69
Ambient temperature	-20 ... +55 °C
Storage and transport temperature	-40 ... +85 °C
Relative humidity, maximum	93 %
Note (Relative humidity)	 
Resistance to vibrations	10 ... 55 Hz  1 mm
Restistance to shock	30 g / 11 ms
Protection class	III

Permissible installation altitude above sea level, maximum	2,000 m
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Ambient conditions - Insulation values

Rated insulation voltage U_i	32 VDC
Rated impulse withstand voltage $U_{i\text{imp}}$	0.8 kV
Overvoltage category	III
Degree of pollution	3

Electrical data

Operating voltage	24 VDC -15 % / +10 % (PELV)
No-load supply current I_0 , typical	100 mA
Current consumption magnet at switching moment, peak	600 mA / 100 ms
Rated operating voltage	24 VDC
Operating current	1,200 mA
Required rated short-circuit current	100 A
External wire and device fuse rating	2 A gG
Time to readiness, maximum	4,000 ms
Switching frequency, maximum	0.25 Hz
Utilisation category DC-12	24 VDC / 0.05 A
Electrical fuse rating, maximum	2 A

Electrical data - Magnet control

Designation, Magnet control	IN
Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
Magnet switch-on time	100 %
Test pulse duration, maximum	5 ms
Test pulse interval, minimum	40 ms
Classification ZVEI CB24I, Sink	C0
Classification ZVEI CB24I, Source	C1 C2 C3
Current consumption at 24V, minimum	10 mA
Current consumption at 24V, maximum	15 mA

Electrical data - Safety digital inputs

Designation, Safety inputs	X1 X2
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Switching thresholds	–3 V ... 5 V (Low) 15 V ... 30 V (High)
Current consumption at 24 V	5 mA
Test pulse duration, maximum	1 ms
Test pulse interval, minimum	100 ms
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Safety digital outputs

Designation, Safety outputs	Y1□Y2
Rated operating current (safety outputs)	250 mA
Design of control elements	□□□□P□
Voltage drop U_d , maximum	2 V
Leakage current I_r , maximum	0.5 mA
Voltage, Utilisation category DC-12	24 VDC
Current, Utilisation category DC-12	0.25 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.25 A
Test pulse interval, typical	1000 ms
Test pulse duration, maximum	0.5 ms
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

Electrical data - Diagnostic outputs

Designation, Diagnostic outputs	OUT
Design of control elements	□□□□P□
Voltage drop U_d , maximum	2 V
Voltage, Utilisation category DC-12	24 VDC
Current, Utilisation category DC-12	0.05 A
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.05 A

Status indication

Note (LED switching conditions display)	□□□□LED□ □□ / □□□□LED□ □□□□UB□LED □□
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Pin assignment

PIN 1	A1 UB
PIN 2	X1 1
PIN 3	A2 GND
PIN 4	Y1 1
PIN 5	OUT
PIN 6	X2 2
PIN 7	Y2 2
PIN 8	IN



AZM40Z...1P2P-... ()



OSSD



AZM
Y1/Y2 2

FCC/IC -

FCC 15 SED RSS /
(1)
(2)
100 mm (ISED SPR-002) K.A. Schmersal GmbH & Co. KG

/ SED " "
(1)
(2)
100 mm (ISED CNR-102)
K.A.Schmersal GmbH & Co. KG



20941-22-14519

Este equipamento nao tem direito àprotecao contra interferência prejudicial e nao pode causar interferencia em sistemas devidamente autorizados.
Para maiores informacoes consultar: www.gov.br/anatel

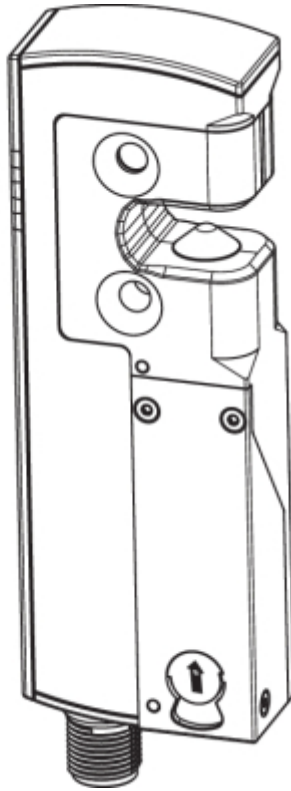
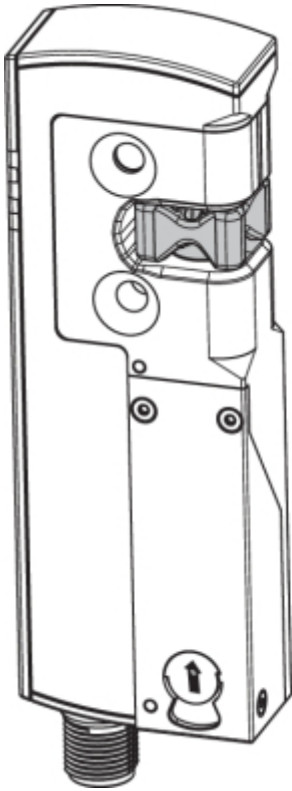
3

3.1



EN ISO 12100 EN ISO 14119 EN ISO 14120

EN ISO 12100
EN ISO 14119
EN ISO 14120



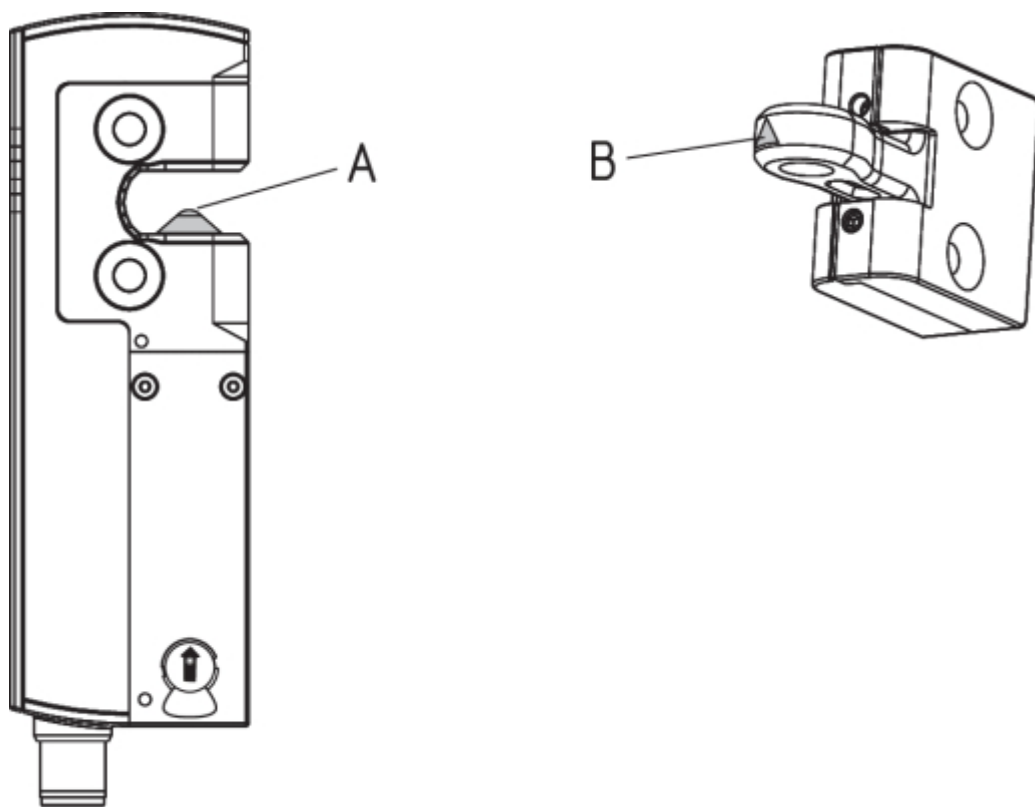
M5



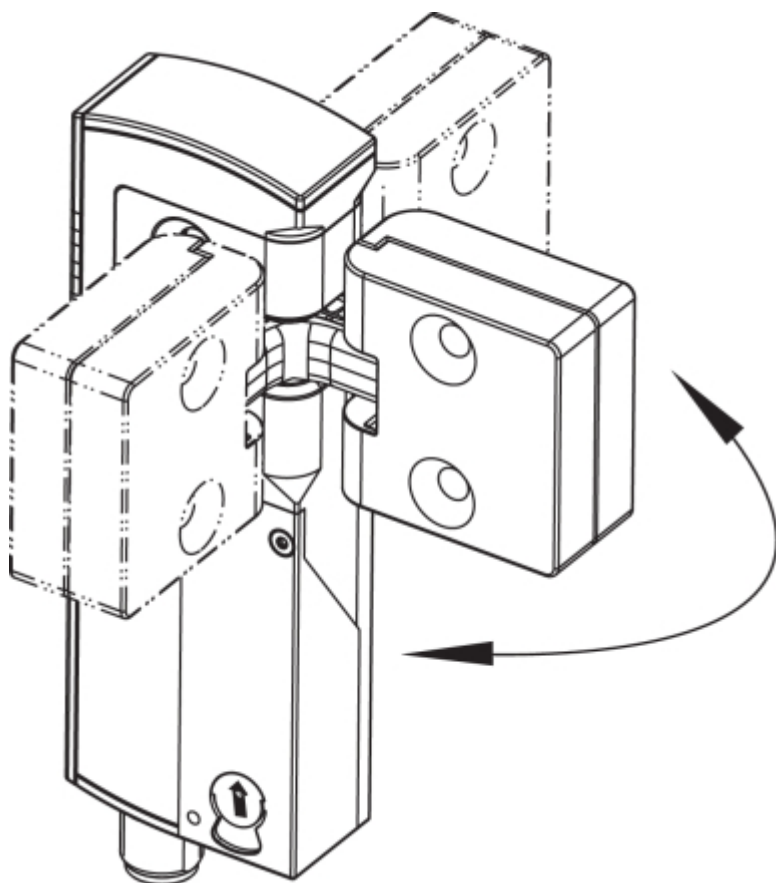
M5 8.8 80 M5 4 6Nm

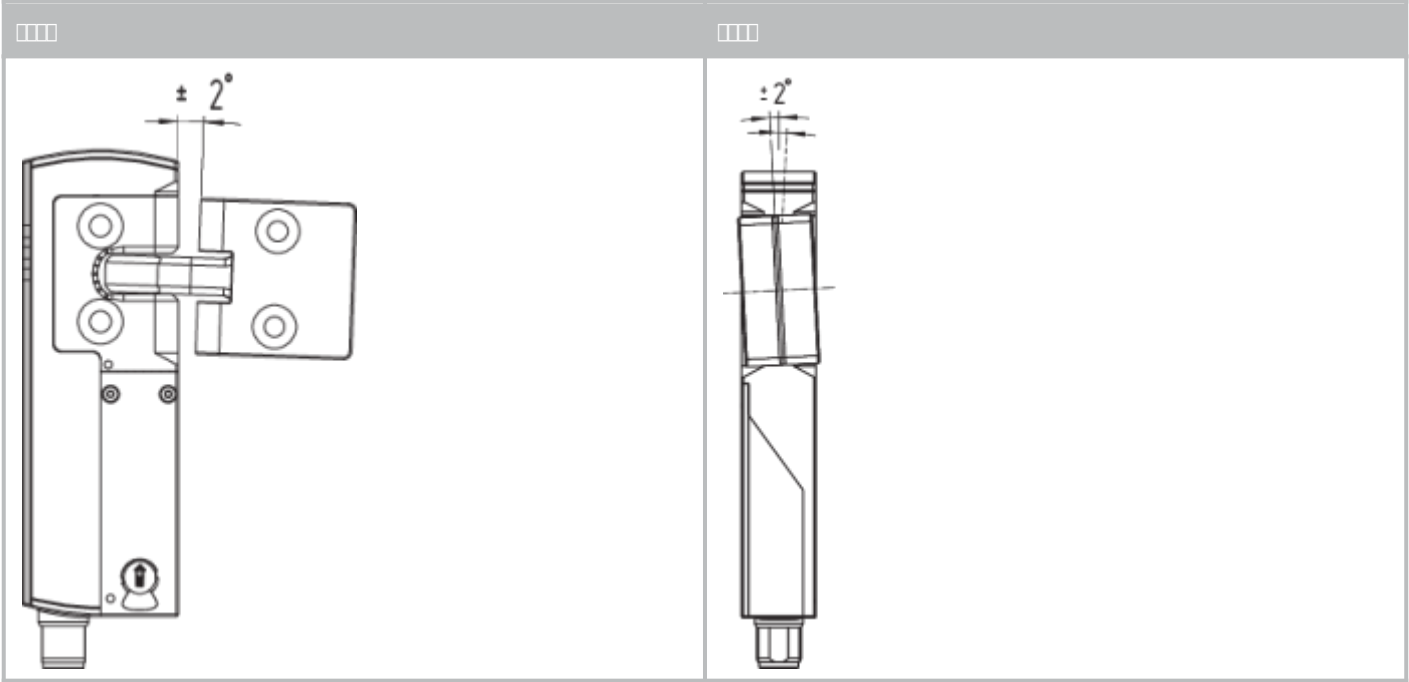
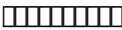
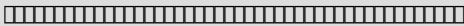


A B



□□□
 □□□□□□□□180°□

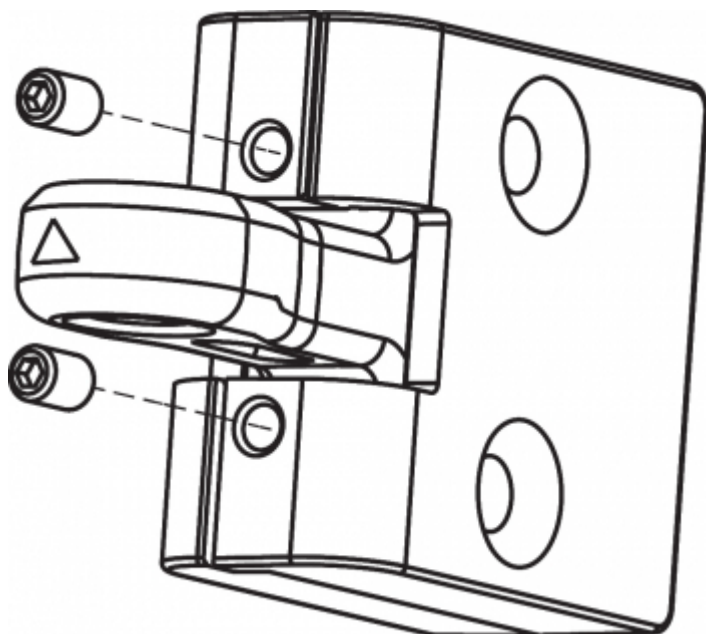




AZM40		
X	- 3 mm	
Y	± 1 mm	
Z	± 1.5 mm ()	

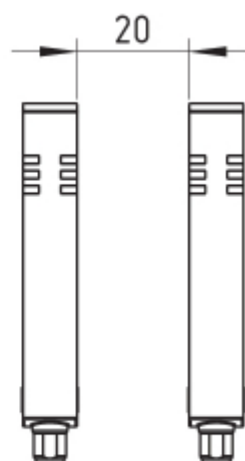
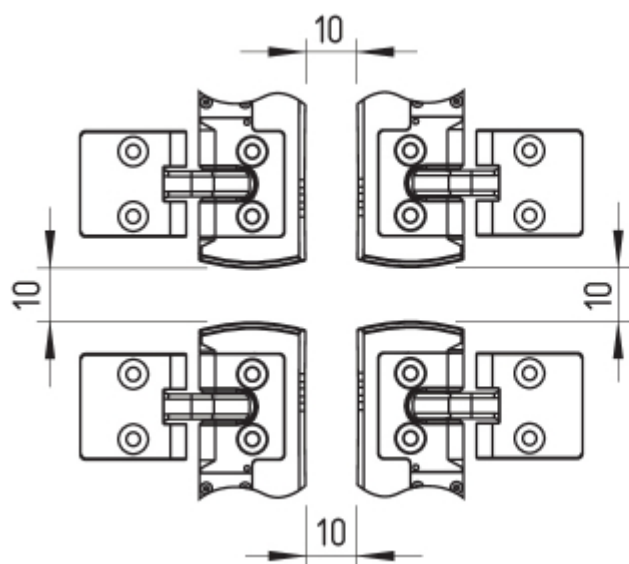
2 mmAF2M4X

M4Local



-
-

AZM40**(mm)**

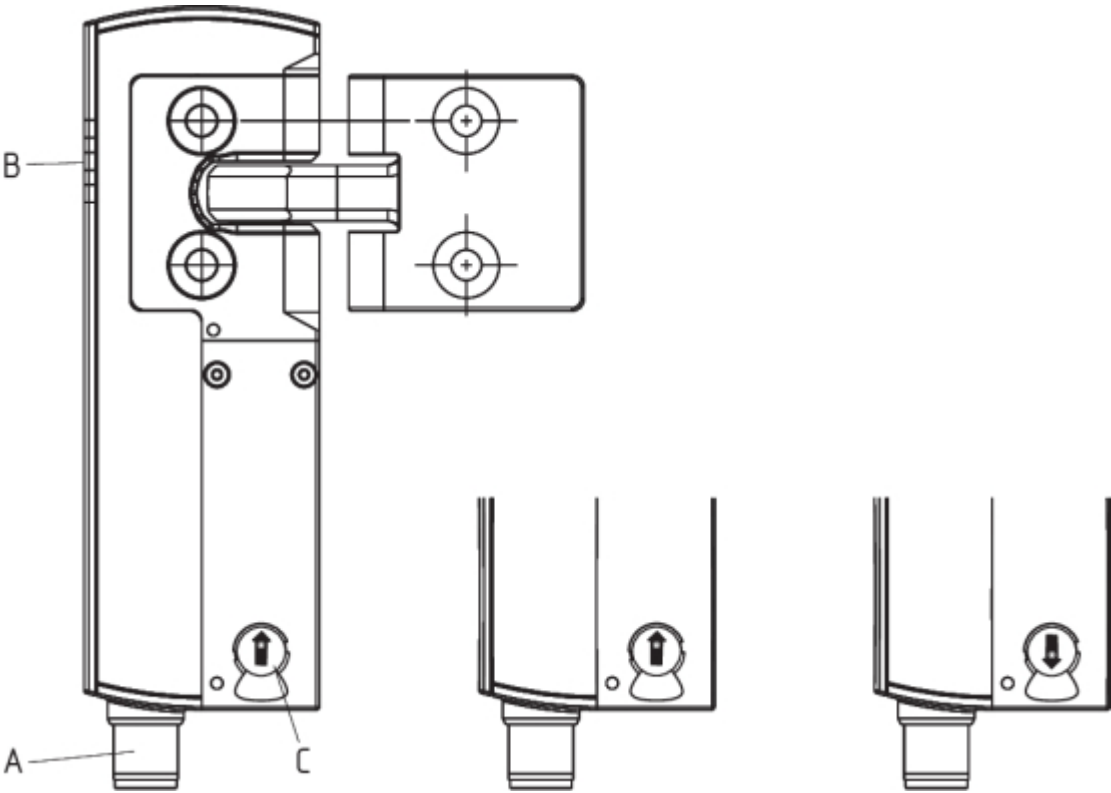
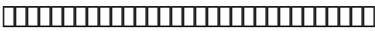


3.2

P



0.8 x 4 4.5 mm



A	M128
B	LED
C	
①	
①	

3.3

mm

ACC-AZM40-LEV

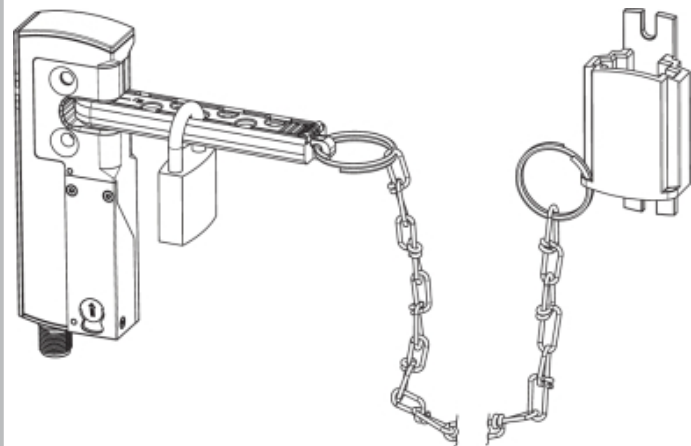


ACC-AZM40-PT

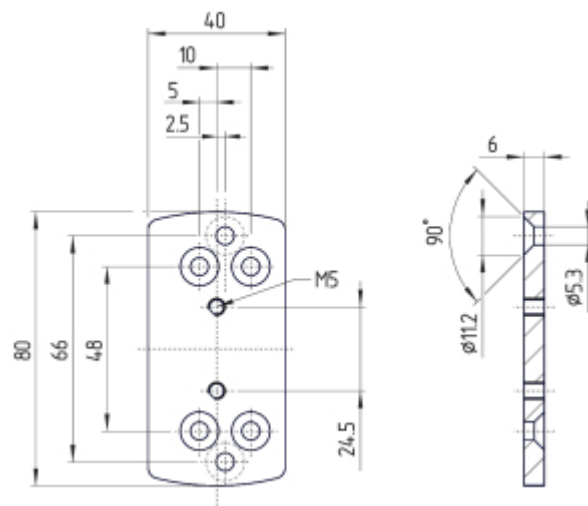


	□□	□□□□
□□□□	SZ40	103053182
□□□□□□□□20□30□45□50□60 mm□□□□2□□	MP-AZM40	103045324
□□□□ M5 x 25□□□□2□□	ACC-NRS-M5X25-FHS-2PCS	103045415
□□□□ M5 x 25□□□□2□□	ACC-NRS-M5X25-CSS-2PCS	103045416

SZ40



MP-AZM40

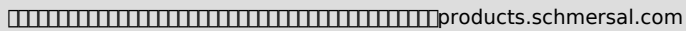
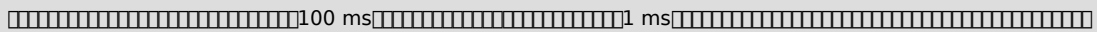


4 □□□□

4.1 □□□□□□



2p- (OSSD)



						Poss. EN 60947-5-2
				P67 / IP69 acc. DIN 47100		IP69 (PVC)
A1	Ue	1	WH	BN	BN	
X1	1	2	BN	WH	WH	
A2	GND	3	GN	BU	BU	
Y1	1	4	YE	BK	BK	
OUT		5	GY	GY	GY	
X2	2	6	PK	VT	PK	
Y2	2	7	BU	RD	VT	
IN		8	RD	PK	OR	

M12, 8 - 8 x 0.25 mm², IP67 / IP69

項目	項目
2.5 m	103011415
5.0 m	103007358
10.0 m	103007359
15.0 m	103011414

M12, 8□ - 8 x 0.21 mm² IP69

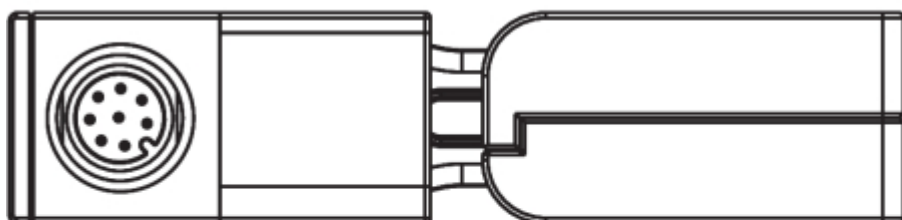
項目	単位
5.0 m	101210560
5.0m	101210561
10.0 m	103001389
15.0 m	103014823

| | | | |



AZM40

AZM40-B1

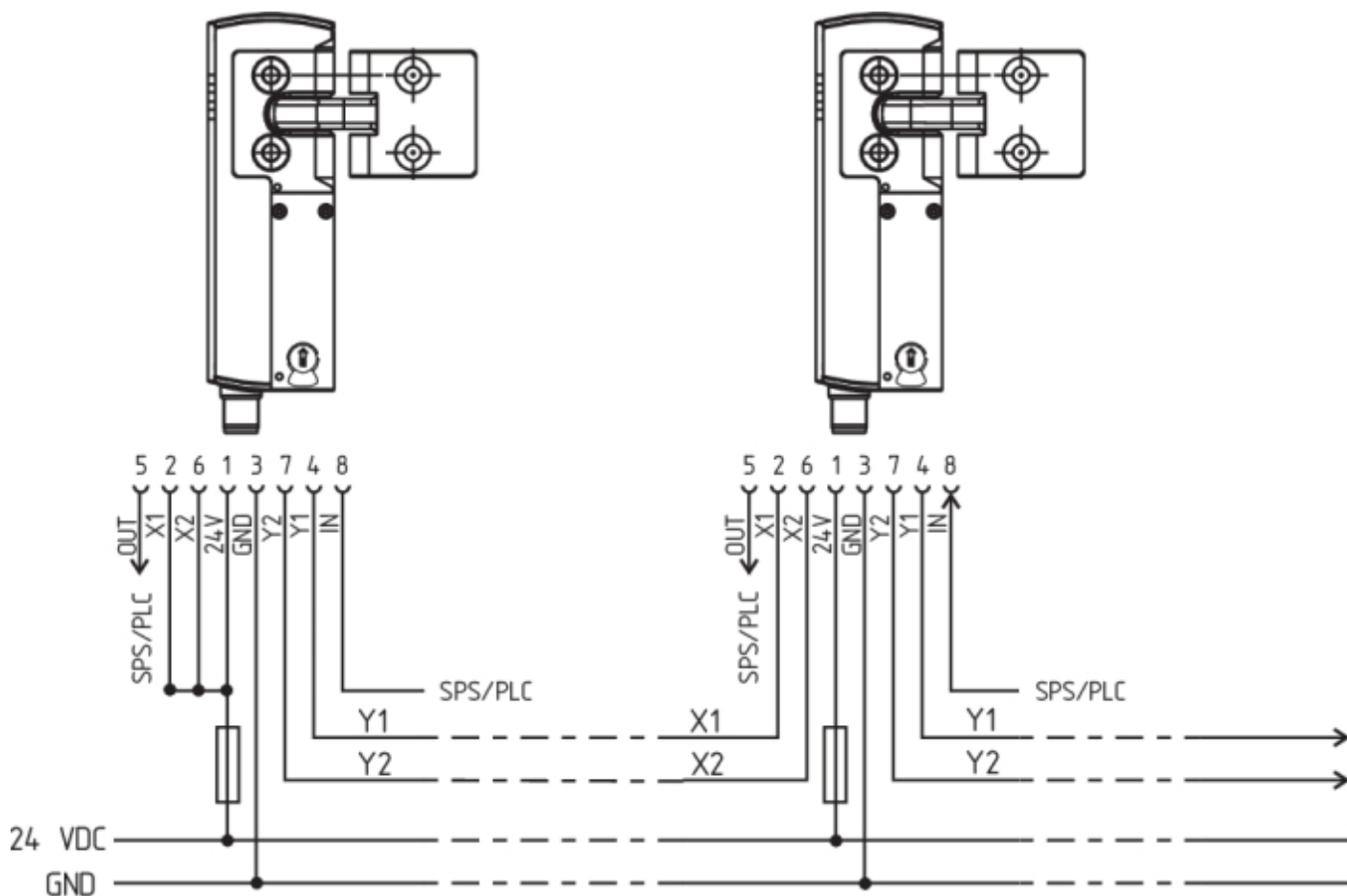
4.4

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[illegible]

□□□□ □□□□ **AZM40**

[illegible]



Y1[Y2] → []

5 [] / []

[]

[]

1. []
2. [] LED [] LED [] 1 Hz []
3. 10 [] 3 Hz [] 5 [] 5 []
4. []

[]-I1 []

[]-I2 [] 10 [] LED [] 10 []

6 []

6.1 []

[] (= 24 V) [] = 0 V []

6.2

AZM 40Z AZM40Z

AZM300B

30

6.3 LED

3 LED

	2 / LED

LED 1Hz (X1 / X2)

LED			
X1/X2			
	1 Hz		
	1 Hz		
	1 Hz		

6.4

OUT PLC

30 LED " " 2 30

2

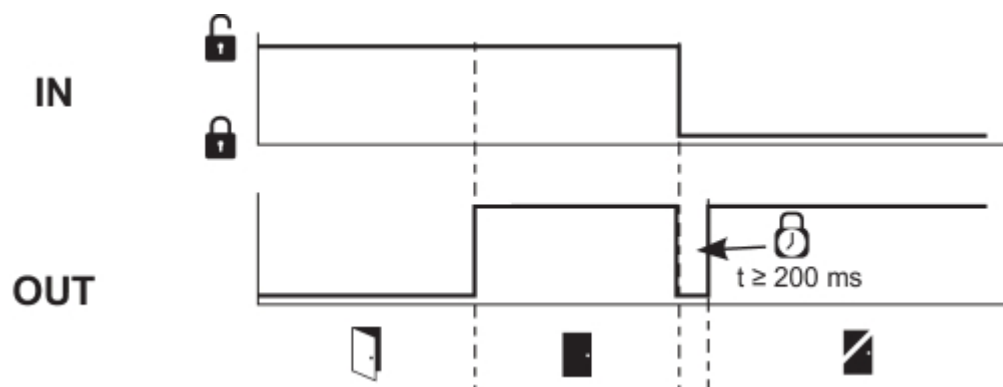


LED

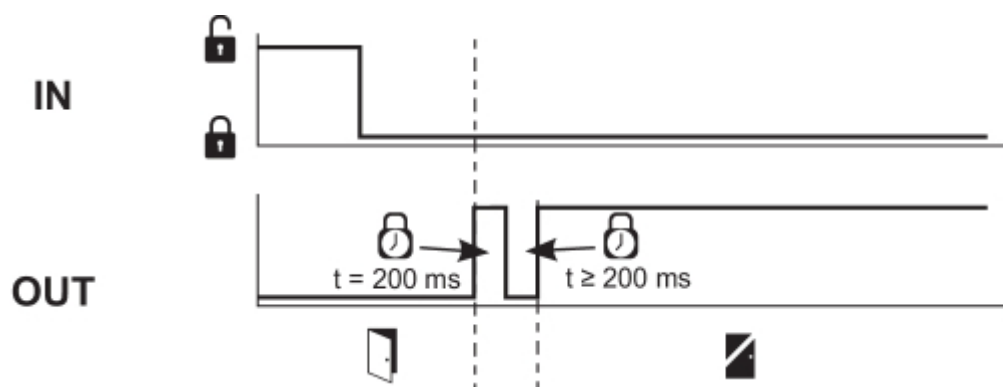


Y1 Y2

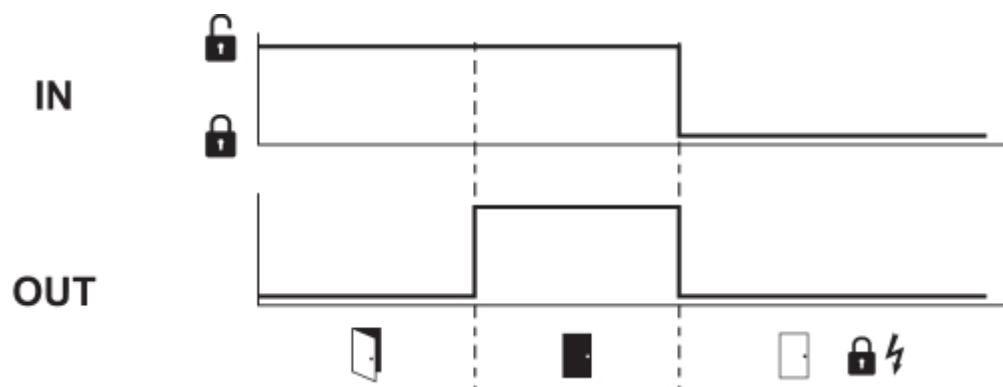
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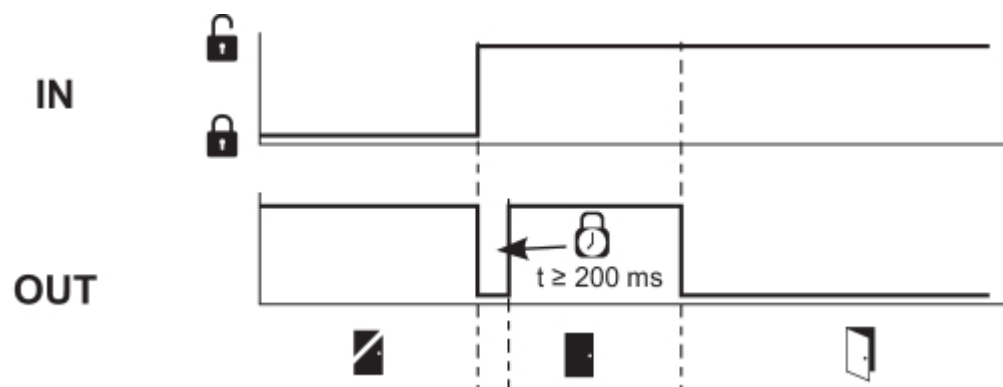
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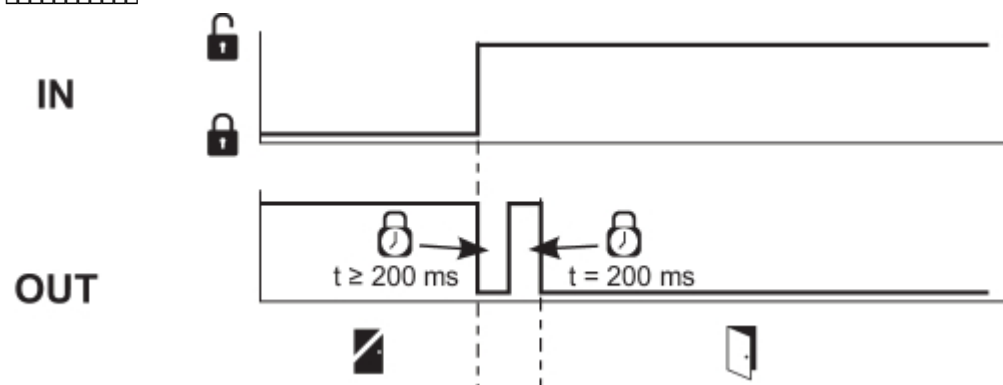
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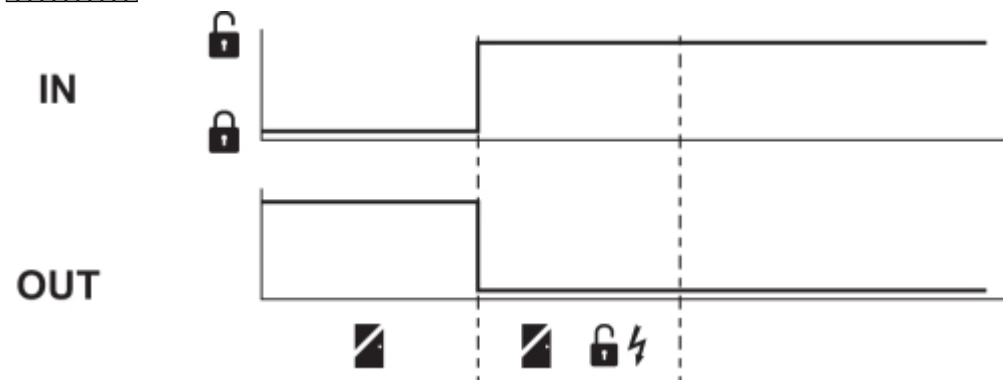
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□□□□

□□□□

6.5 □□□□

7.1

- 1.
- 2.
- 3.

7.2

- 1.
- 2. M4
- 3.
- 4.
- 5.



1,000,000 500,000 "V2 "

8

8.1

8.2

