



AZM40Z-I2-ST-1P2P-PH

- Compact, flat design
- 119,5 mm x 40 mm x 20 mm
- High holding force 2000
- Latching force 40 N
- RFID-technology for needs-based protection against tampering
- Individually coded version with coding level "High" according to ISO 14119
- Only one version for hinged and sliding doors
- Actuator can approach interlock continuously within a 180 degree angle.
- Symmetrical mounting, can be bolted on either side

Data

Ordering data

EAN (European Article Number)	4030661543758
eCl@ss number, Version 9.0	27-27-26-03
eCl@ss number, Version 11.0	27-27-26-03

Approval - Standards

Certificates	TÜV cULus
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General data

Standards	IEC 61508 EN 60947-5-3 EN ISO 13849-1 EN ISO 14119
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general information	Individual coding, multiple teaching
Coding level according to ISO 14119	High
Active principle	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic and light-alloy diecast
Gross weight	303.9 g
Time to readiness, maximum	4,000 ms
Reaction time, maximum	100 ms
Duration of risk, maximum	200 ms
Response time safety outputs in case of switch-off by safety inputs, maximum	1.5 ms

General data - Features

Guard locking monitored	Yes
Latching	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Series-wiring	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of safety contacts	2

Safety appraisal

Standards	IEC 61508 EN ISO 13849-1
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Safety appraisal - Interlocking

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

Safety appraisal - Guard locking

Performance level, up to	d
Control category	2
PFH-value	3.00×10^{-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	bistable
Mechanical life, minimum	200,000 Operations
Clamping force in accordance with ISO14119 F_{zh}	2,000 N
Clamping force, maximum F_{max}	2,600 N
Latching force	40 N
Actuating speed, maximum	0.5 m/s
Type of the fixing screws	DESIGN_MOUNTING_SCREWS111111111111111112

Mechanical data - Switching distances according IEC 60947-5-3

Ensured switch distance "ON" S_{ao}	1 mm
Ensured switch distance "OFF" S_{ar}	8 mm

Mechanical data - Connection technique

Terminal Connector	Connector M12, 8-pole, A-coded
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Mechanical data - Dimensions

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

Degree of protection	IP66 to EN 60529 IP67 to EN 60529
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Ambient temperature, minimum	+0 °C
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Ambient temperature, maximum	+55 °C
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Storage and transport temperature, minimum	-40 °C
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Storage and transport temperature, maximum	+85 °C
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Resistance to vibrations to EN 60068- 2-6	10 ... 55 Hz, amplitude 1 mm
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Resistance to shock	30 g / 11 ms
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Protection rating	III
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Ambient conditions - Insulation value

Rated insulation voltage U_i	32 VDC
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Rated impulse withstand voltage U_{imp}	0.8 kV
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Overvoltage category	III
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Degree of pollution to VDE 0100	3
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Electrical data

No-load supply current I_0	100 mA
Rated operating voltage	24 VDC - 15 % / + 10 % (stabilised PELV)
Operating current	1,200 mA
Required rated short-circuit current to EN 60947-5-1	100 A
Note	Cable length and cable section alter the voltage drop depending on the output current
Switching frequency, maximum	0.3 Hz
Current consumption solenoid at switching moment, peak	600 mA / 100ms

Electrical data - Solenoid control

Switching thresholds	-3 V ... 5 V (Low) 5 V ... 30 V (High)
Current consumption at 24V	15 mA
Classification ZVEI CB24I, Sink	C0
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Fail-safe digital inputs

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
Current consumption at 24V	5 mA
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs)	250 mA
Versions	short-circuit proof, p-type

Voltage drop U_d , maximum	2 V
Current leakage I_r	0.5 mA
Voltage, Utilisation category DC12	24 VDC
Current, Utilisation category DC12	0.25 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.25 A
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

Electrical data - Diagnostic output

Versions	short-circuit proof, p-type
Voltage drop U_d , maximum	2 V
Voltage, Utilisation category DC12	24 VDC
Current, Utilisation category DC12	0.05 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.05 A

Status indication

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
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Pin assignment

PIN 1	A1 Supply voltage UB
PIN 2	X1 Safety input 1
PIN 3	A2 GND
PIN 4	Y1 Safety output 1
PIN 5	OUT Diagnostic output
PIN 6	X2 Safety input 2

Accessory

Recommendation (actuator) AZM 40-B1

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.
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