

AZM400Z-ST2-2P2P-E



- manual release
- 2 Diagnostic outputs
- Clamping force 10.000
- Guard locking monitored
- Bistable, motor-driven system
- 2 Connector M12, 8- and 5-poles
- High tolerance to door misalignment
- Universal coding with RFID technology
- Operation on P/P- and P/N-switching outputs
- Electric manual release with auxiliary voltage
- Release possible against lateral forces up to 300 N
- Two-channel input signal of the guard locking function
- PL e / cat. 4 / SIL 3 for interlocking and guard locking function

Data

Ordering data

AZM400Z-ST2-2P2P-E

103003588

EAN (European Article Number)

4030661472638

eCl@ss number, Version 9.0

27-27-26-03

Approval - Standards

TÜV
cULus
EAC
FCC
IC

General data

AZM 400

	IEC 60947-5-1
	ISO 13849-1
	IEC 61508
	ISO 14119
general information	Universal coding
Coding level according to ISO 14119	Low
Active principle	Magnetic field RFID
Enclosure material	Light alloy die-casting
Gross weight	692 g
Time to readiness, maximum	1,500 ms
Reaction time, maximum	100 ms

General data - Features

Guard locking monitored	Yes
Electronic manual release	Yes
Manual release	Yes
Short circuit detection	Yes
Short-circuit recognition	Yes
Safety functions	Yes
Integral System Diagnostics, status	Yes
Number of diagnostic signals	2
Number of safety contacts	2

Safety appraisal

ISO 13849-1
IEC 61508

Safety appraisal - Interlocking

Performance level, up to	e
Control category	4
PFH-value	1.00×10^{-9} /h
PFD value	9.00×10^{-5}
Safety Integrity Level (SIL), applicable for	3
Mission Time	20 Year(s)

Safety appraisal - Guard locking

Performance level, up to	e
Control category	4
PFH-value	1.80×10^{-9} /h
PFD value	1.60×10^{-4}
Safety Integrity Level (SIL), applicable for	3
Mission Time	20 Year(s)

Mechanical data

Interlocking principle	bistable
Mechanical life, minimum	1,000,000 Operations
Note (Mechanical lifetime)	Which have a lateral force $F_{trans} = 100 \text{ N}$: 100.000 operations
Minimum distance devices	30 mm
Clamping force in accordance with ISO14119 F_{zh}	10,000 N
Clamping force, maximum F_{max}	13,000 N
Lateral force at bolt return, maximal (against locked door)	300 N
Note (Lateral force at bolt return)	Does not apply to emergency exit, Bowden cable and manual release
Tightening torque of the screw	8 Nm

Mechanical data - Connection technique

Terminal Connector	2 connector M12, 8 and 5 pin
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Mechanical data - Dimensions

Height of sensor	166.7 mm
Length of sensor	46.7 mm
Width of sensor	77.8 mm

Ambient conditions

Protection class	IP 66 to IEC/EN 60529 IP 67 to IEC/EN 60529
Ambient temperature, minimum	-20 °C
Ambient temperature, maximum	+55 °C
Storage and transport temperature, minimum	-40 °C
Storage and transport temperature, maximum	+85 °C
Resistance to vibrations to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm 30 g / 11 ms III

Ambient conditions - Insulation value

Rated impulse withstand voltage	0.8 kV III 3
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Electrical data

Operating Current	100 mA
Current consumption, maximum	600 mA
Current consumption at 24V, minimum	10 mA

Current consumption at 24V, maximum	15 mA
No-load current	100 mA
	24 VDC
	24 VDC
Operating current	50 mA
Required rated short-circuit current to EN 60947-5-1	100 A
Switching frequency, approx.	0.3 Hz
Open / close cycle (Motor), minimum	3
Minimal average cycle time (with continuous operation)	20 s

Electrical data - Control inputs

	–3 V ... 5 V (Low)
	15 V ... 30 V (High)
Allowable discrepancy time (input), maximum	10 s
	C0
	C1
	C2
	C3

Electrical data - Fail-safe digital inputs

C1

Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop U_d , maximum	2 V
Current leakage	1.5 mA
Voltage, Utilisation category DC12	24 VDC
Current, Utilisation category DC12	0.3 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.3 A
	C2
	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	0.1 A
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.1 A
Note	The diagnostic output are not safety relevant outputs!

Status indication

Note (LED switching conditions display)

Operating condition: LED green
Error / functional defect: LED red
Supply voltage UB: LED green

Pin assignment

Connection

Connector 1

PIN 1

OUT2 Diagnostic output 2

PIN 2

E1 Control input 1

PIN 3

n.c.

PIN 4

Y1 Safety output 1

PIN 5

OUT1 Diagnostic output 1

PIN 6

E3 Control input 3

PIN 7

Y2 Safety output 2

PIN 8

E2 Control input 2

Connection

Connector 2

PIN 1

A1 Supply voltage UB

PIN 2

H2 GND

PIN 3

A2 GND

PIN 4

H1 Auxiliary voltage Uhe

PIN 5

FE (functional earth connection)

Scope of delivery

Included in delivery

Actuators must be ordered separately.
2 x M6 (10.9)

Accessory

AZM400-B1

Ordering code

Product type description:

AZM400Z(1)(2)(3)(4)(5)

(1)

ST 1 Connector plug M12, 8-pin

ST2 2 Connector plug M12, 8-pin / 5-pin

(2)

without Standard coding

I1 Individual coding

I2 Individual coding, multiple teaching

(3)

1P2P 1 serial diagnostic output and 2 p-type safety outputs (only for ST)

2P2P 2 serial diagnostic output and 2 p-type safety outputs (only for ST2)

(4)

without Manual release

T Emergency exit

BOW With securing holes for Bowden cable assembly

(5)

without without electronic manual release (Only for ST)

E with electronic manual release (Only for ST2)

Pictures

Photo/Product/Catalogue



ID: kazm4f46

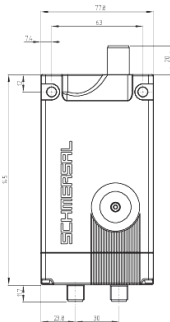
| 498,6 kB | .jpg | 352.778 x 174.272 mm - 1000 x 494

Pixel - 72 dpi

| 29,5 kB | .png | 74.083 x 36.689 mm - 210 x 104

Pixel - 72 dpi

Dimension/Product/Basic



ID: kazm4g18

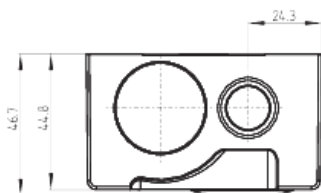
| 6,1 kB | .png | 74.083 x 137.583 mm - 210 x 390

Pixel - 72 dpi

| 211,9 kB | .jpg | 352.778 x 655.108 mm - 1000 x

1857 Pixel - 72 dpi

Dimension/Product/Basic

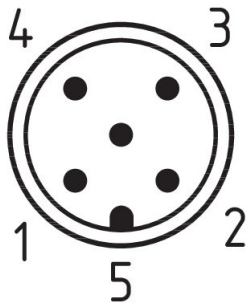


ID: kazm4g22

| 4,1 kB | .png | 74.083 x 44.097 mm - 210 x 125 Pixel
- 72 dpi

| 107,4 kB | .jpg | 352.778 x 210.608 mm - 1000 x 597
Pixel - 72 dpi

Graphic/Product/PIN



ID: km12-k5d

| 17,3 kB | .cdr |

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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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