

AZM400Z-ST2-I1-2P2P-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
- Individual coding with RFID technology
- Coding level "High" according to ISO 14119
- 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-I1-2P2P-E
	103003724
EAN (European Article Number)	4030661472652
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	Individual coding
Coding level according to ISO 14119	High
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
--------------------	------------------------------

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
---------------------------------	--------------------

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

A1 Supply voltage UB

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

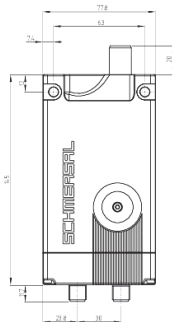
| 498,6 kB | .jpg | 352.778 x 174.272 mm - 1000 x 494

Pixel - 72 dpi

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

Pixel - 72 dpi

Dimension/Product/Basic



ID: kazm4g18

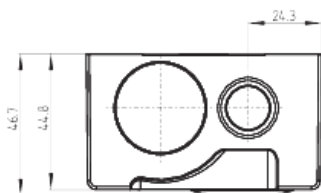
| 6,1 kB | .png | 74.083 x 137.583 mm - 210 x 390

Pixel - 72 dpi

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

1857 Pixel - 72 dpi

Dimension/Product/Basic

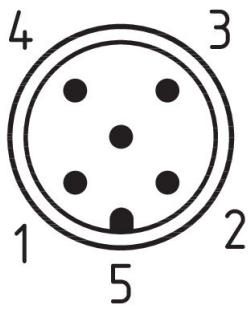


ID: kazm4g22

| 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 |

K.A. Schmersal GmbH & Co. KG, Möddinghofe 3, D-42279 Wuppertal

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.

Generated on 402021-01-30T18:55:40+01:000601Europe/BerlinSat, 30 Jan 2021 18:55:40

+010040pmSaturday.30pm31Europe/BerlinCET5501Europe/BerlinJanuary2021Sat, 30 Jan 2021 18:55:40
+010001pm31