

AZM300B-I1-ST-1P2P-A



- Power to lock
- Series-wiring
- Compact design
- Manual release
- Diagnostic output
- Actuator monitored
- Connector M12, 8-pole
- Thermoplastic enclosure
- 3 different directions of actuation
- 3 LEDs to show operating conditions
- Suitable for hinged and sliding guards
- Individual coding with RFID technology
- Suitable for mounting to profile systems
- Coding level "High" according to ISO 14119
- RFID-technology for needs-based protection against tampering

Data

Ordering data

	AZM300B-I1-ST-1P2P-A
	103001425
EAN (European Article Number)	4030661425801
eCl@ss number, Version 9.0	27-27-26-03

Approval - Standards

TÜV
cULus
ECOLAB
EAC
FCC
IC

General data

AZM 300

	ISO 13849-1
	IEC 61508
	IEC 60947-5-3
	ISO 14119
	IEC 62061
general information	Individual coding
Coding level according to ISO 14119	High
	RFID
Enclosure material	Plastic, glass-fibre reinforced thermoplastic, self-extinguishing
Gross weight	550 g
Time to readiness, maximum	5,000 ms
Duration of risk, maximum	200 ms

General data - Features

Power to lock	Yes
Actuator 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

ISO 13849-1
IEC 62061
IEC 61508

Safety appraisal - Interlocking

Performance level, up to	e
Control category	4
PFH-value	$5.20 \times 10^{-10} /h$
PFD value	4.50×10^{-5}
Safety Integrity Level (SIL), applicable for	3
Mission Time	20 Year(s)

Mechanical data

Mechanical life, minimum	1,000,000 Operations
--------------------------	----------------------

Note (Mechanical lifetime)	When using as door hinge: ≥ 50.000 operations (Türmassen ≤ 5 kg and actuating speed ≤ 0.5 m/s)
Switch distance	2 mm
Ensured switch distance "ON" S_{ao}	1 mm
Ensured switch distance "OFF" S_{ar}	20 mm
Clamping force in accordance with ISO14119 F _{zh}	1,150 N
Clamping force, maximum F _{max}	1,500 N
Latching force	50 N
Tightening torque of the fixing screws, minimum	6 Nm
Tightening torque for the fixing screws, maximum	7 Nm

Mechanical data - Connection technique

Terminal Connector	Connector M12, 8-pole, A-coded
--------------------	--------------------------------

Mechanical data - Dimensions

Height of sensor	100 mm
Length of sensor	35 mm
Width of sensor	85 mm

Ambient conditions

Protection class	IP66 to IEC 60529 IP67 to IEC 60529 IP69 to IEC 60529
Ambient temperature, minimum	+0 °C
Ambient temperature, maximum	+60 °C
Storage and transport temperature, minimum	-10 °C
Storage and transport temperature, maximum	+90 °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
---------------------------------	--------

Electrical data

Operating voltage, minimum 20.4 VDC

Operating voltage, maximum 26.4 VDC

No-load current 100 mA

Required rated short-circuit
current to EN 60947-5-1 100 A

Reaction time of actuator,
maximum 100 ms

Reaction time of input,
maximum 0.5 ms

Switching frequency,
maximum 0.5 Hz

Note Cable length and cable section alter the voltage drop depending on the output current

Electrical data - Solenoid control

-3 V ... 5 V (Low)

15 V ... 30 V (High)

Current consumption of the
magnet control at 24V 10 mA

C0

C1

C2

C3

Electrical data - Fail-safe digital inputs

-3 V ... 5 V (Low)

15 V ... 30 V (High)

Current consumption of the
safety inputs at 24V 5 mA

C1

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 4 V

Current leakage 0.5 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

Operating current (diagnostic output)	50 mA
---------------------------------------	-------

Versions	short-circuit proof, p-type
----------	-----------------------------

Voltage drop U_d , maximum	4 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
------------------------------------	-------

Status indication

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

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

PIN 7	Y2 Safety output 2
-------	--------------------

PIN 8	IN Solenoid control
-------	---------------------

Scope of delivery

Included in delivery	Actuators must be ordered separately.
----------------------	---------------------------------------

Accessory

AZ/AZM300-B1

Notes

Note (General)	For doors that are flush with the door frame, the optional mounting plate MP-AZ/AZM300-1 can be used.
	For glass and Makrolon doors, the optional mounting kit MS-AZ/AZM300-B1-1 can be used.
	As long as the actuating unit remains inserted in the solenoid interlock, the unlocked safety guard can be relocked. In this case, the safety outputs are re-enabled, so that the safety guard must not be opened.

Ordering code

Product type description:

AZM300(1)(2)-ST(3)-(4)-(5)

(1)

Z Guard locking monitored

NB, MBN, BN Actuator monitored

(2)

without Standard coding

I1 Individual coding

I2 Individual coding, multiple teaching

(3)

1P2P 1 p-type diagnostic output and 2 p-type safety outputs

SD2P serial diagnostic output and 2 p-type safety outputs

(4)

without Power to unlock

A Power to lock

(5)

without Manual release

T Emergency exit

N Emergency release

Pictures

Photo/Product/Catalogue



ID: kazm3f26

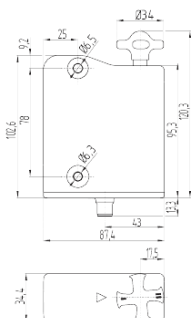
| 59,1 kB | .png | 74.083 x 92.428 mm - 210 x 262

Pixel - 72 dpi

| 905,6 kB | .jpg | 352.425 x 440.619 mm - 999 x 1249

Pixel - 72 dpi

Dimension/Product/Basic



ID: 5azm3g02

| 5,8 kB | .png | 74.083 x 124.531 mm - 210 x 353

Pixel - 72 dpi

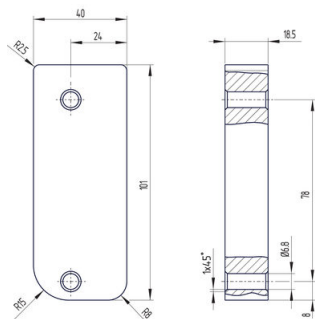
| 10,7 kB | .png | 29.803 x 50.038 mm - 352 x 591

Pixel - 300 dpi

| 190,4 kB | .jpg | 352.778 x 593.372 mm - 1000 x

1682 Pixel - 72 dpi

Dimension/Other



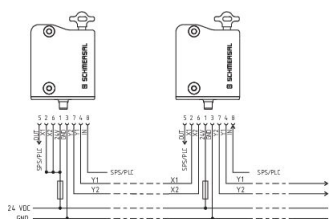
ID: kazm3g01

| 23,7 kB | .cdr |

| 133,3 kB | .jpg | 352.778 x 366.889 mm - 1000 x

1040 Pixel - 72 dpi

Graphic/Product/Wiring



ID: kazm3l01

| 37,8 kB | .cdr |

| 111,9 kB | .jpg | 352.778 x 231.422 mm - 1000 x 656

Pixel - 72 dpi

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 362021-01-30T18:44:36+01:000601Europe/BerlinSat, 30 Jan 2021 18:44:36

+010036pmSaturday.30pm31Europe/BerlinCET4401Europe/BerlinJanuary2021Sat, 30 Jan 2021 18:44:36

+010001pm31