

Datasheet - AZM300B-I2-ST-SD2P-A

Solenoid interlock / AZM300



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

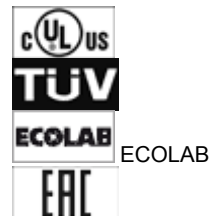
(Minor differences between the printed image and the original product may exist!)

Ordering details

| | |
|--------------------------|----------------------|
| Product type description | AZM300B-I2-ST-SD2P-A |
| Article number | 103001428 |
| EAN Code | |
| eCl@ss | 27-27-26-03 |

Approval


Approval



Classification

| | |
|------------------|----------------------------------|
| Standards | EN ISO 13849-1, IEC 61508 |
| PL | e |
| Control category | 4 |
| SIL | 3 |
| Mission time | 20 Years |
| PFH value | $5.2 \times 10^{-10} / \text{h}$ |

Global Properties

| | |
|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Permanent light | AZM300 |
| Standards | EN 60947-5-1, IEC 60947-5-3, IEC 61508, EN ISO 13849-1 |
| Compliance with the Directives (Y/N)  | Yes |
| Suitable for safety functions (Y/N) | Yes |
| Series-wiring | Yes |
| Length of the sensor chain | 200 |
| Active principle | RFID |
| Coding | Individual coding, multiple teaching |
| Coding levels according to ISO 14119 | High |
| Duty cycle | 100 |
| Materials | |
| - Material of the housings | Plastic, glass-fibre reinforced thermoplastic |
| Housing coating | None |
| Weight | |
| Guard locking monitored (Y/N) | No |
| Actuator monitored (Y/N) | Yes |
| Idle assignable pushbutton and LED (Y/N) | No |
| Reaction time | < 120 |
| Duration of risk | < 200 |
| Time to readiness | 5 s |
| Recommended actuator | AZ/AZM300-B1 |

Mechanical data

| | |
|---------------------------------------------------|---------------------------------------------------------------------|
| Design of electrical connection | Connector M12, 8-pole, A-coded |
| Mechanical life | ≥ 1.000.000 operations |
| notice - Mechanical life (when used as door stop) | ≥ 50.000 operations for guards ≤ 5 kg; actuating speed ≤ 0,5 m/s |
| Switch distance | 2 |
| Ensured switch distance ON | 1 |
| Ensured switch distance OFF | 20 |
| restistance to shock | 30 / 11 |
| Resistance to vibration | 10 ... 150 HZ, Amplitude 0,35 mm |
| Emergency unlocking device (Y/N) | No |
| Manual release (Y/N) | Yes |
| Emergency release (Y/N) | No |
| Latching (Y/N) | Yes |
| Latching force | 25 / 50 |
| Clamping force F | 1150 N |
| Actuator and interlock misalignment | ≤ 2 |
| fixing screws | 2 x M6 |

Ambient conditions

| | |
|------------------------------------------|-------------------------------|
| Ambient temperature | |
| - Min. environmental temperature | 0 |
| - Max. environmental temperature | +60 |
| Storage and transport temperature | |
| - Min. Storage and transport temperature | -10 |
| - Max. Storage and transport temperature | +90 |
| Protection class | IP66, IP67, IP69 to IEC 60529 |
| Protection rating | II |

Air clearances and creepage distances To IEC/EN 60664-1

| | |
|-----------------------------------|-----|
| - Rated impulse withstand voltage | 0,8 |
| - Overvoltage category | III |
| - Degree of pollution | 3 |

Electrical data

| | |
|--------------------------------------------------------|---------------------------------------------------------------------------------------|
| Number of auxiliary contacts | 0 |
| Number of safety contacts | 2 |
| Cross circuit/short circuit recognition possible (Y/N) | Yes |
| Power to unlock | No |
| Power to lock | Yes |
| Supply voltage (stabilised PELV) | 24 -15 / +10 |
| Switch frequency | 0,5 |
| Operating current | 100 (without load) |
| Rated insulation voltage | 32 VDC |
| Operating current I_e | 1 A |
| Utilisation category | DC-13 |
| Required rated short-circuit current | 100 A |
| Device insulation | 2 A |
| notice | Cable length and cable section alter the voltage drop depending on the output current |

Electrical data - Safety inputs

| | |
|----------------------|--------------------------------------|
| Safety inputs | X1 and X2 |
| Switching thresholds | -3 ... 5 (Low) 15 ... 30 (High) |
| Operating current | 5 mA / 24 V |

Electrical data - Safety outputs

| | |
|--------------------------|------------------------------|
| Safety outputs | Y1 and Y2 |
| Design of control output | short-circuit proof, p-type |
| Rated operating voltage | 0 ... 4 under Supply voltage |
| Residual current | $\leq 0,5$ |
| Operating current | 0,25 A |
| Utilisation category | DC-12, DC-13 |
| Test impulse width | $< 0,5$ |
| Test frequency | 1 |

Electrical data - Diagnostic output

| | |
|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| Serial diagnostics (Y/N) | Yes |
| Design of control output | short-circuit proof, p-type |
| Rated operating voltage U_e | 0 V ... 4 V under Supply voltage U_B |
| Operating current | 0,05 A |
| Utilisation category | DC-12, DC-13 |
| Wiring capacitance for serial diagnostics | - |
| diagnostic signals | guard door closed and interlocking device locked |
| Operating principle of the diagnostic output | The short-circuit proof diagnostic output OUT can be used for central visualisation or control tasks, e.g. in a PLC. |
| notice | The diagnostic output is not a safety-relevant output! |

Electrical data - Solenoid control IN

Control command

Interlocking the solenoid interlock

LED switching conditions display

LED switching conditions display (Y/N)

Yes

LED switching conditions display

- Supply voltage

green LED

- switching condition

yellow LED

- Error functional defect

red LED

ATEX

Explosion protection categories for gases

None

Explosion protected category for dusts

None

Dimensions

Dimensions of the sensor

- Width of sensor

85

- Height of sensor

100

- Length of sensor

35

Pin assignment

| | |
|---|-----------------------|
| 1 | A1 Supply voltage |
| 2 | X1 Safety input 1 |
| 3 | A2 GND |
| 4 | Y1 Safety output 1 |
| 5 | OUT Diagnostic output |
| 6 | X2 Safety input 2 |
| 7 | Y2 Safety output 2 |
| 8 | IN Solenoid control |

notice

As long as the actuating unit remains inserted in the solenoid interlock, the unlocked safety guard can be relocked. The safety outputs then will be enabled again; opening the safety guard therefore is not required.

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.

Included in delivery

Actuators must be ordered separately.

Ordering code

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

(1)

Z Guard locking monitored

B Actuator monitored

(2)

| | |
|----------------|----------------------------------------------------------|
| <i>without</i> | Included in standard versioncoding |
| I1 | Individual coding |
| I2 | Individual coding, multiple teaching |
| (3) | |
| 1P2P | 1 Diagnostic output, p-type and 2 Safety outputs, p-type |
| SD2P | serial diagnostic output and 2 Safety outputs, p-type |
| (4) | |
| <i>without</i> | Power to unlock |
| A | Power to lock |
| (5) | |
| <i>without</i> | Manual release |
| T | Emergency exit |
| N | Emergency release |

Documents

Operating instructions and Declaration of conformity (jp) 1 MB, 18.09.2017

Code: mrl_azm300_jp

Operating instructions and Declaration of conformity (it) 1 MB, 11.07.2018

Code: mrl_azm300_it

Operating instructions and Declaration of conformity (sv) 1 MB, 18.09.2017

Code: mrl_azm300_sv

Operating instructions and Declaration of conformity (en) 1 MB, 18.06.2018

Code: mrl_azm300_en

Operating instructions and Declaration of conformity (da) 1 MB, 18.09.2017

Code: mrl_azm300_da

Operating instructions and Declaration of conformity (cn) 1 MB, 22.11.2018

Code: mrl_azm300_cn

Operating instructions and Declaration of conformity (es) 1 MB, 01.08.2018

Code: mrl_azm300_es

Operating instructions and Declaration of conformity (de) 1 MB, 18.06.2018

Code: mrl_azm300_de

Operating instructions and Declaration of conformity (fr) 1 MB, 01.08.2018

Code: mrl_azm300_fr

Operating instructions and Declaration of conformity (nl) 1 MB, 01.08.2018

Code: mrl_azm300_nl

Operating instructions and Declaration of conformity (pt) 1 MB, 01.08.2018

Code: mrl_azm300_pt

Operating instructions and Declaration of conformity (pl) 1 MB, 21.11.2018

Code: mrl_azm300_pl

Brochure (it) 877 kB, 29.04.2016

Code: b_azm300p01_it

Brochure (en) 857 kB, 23.07.2015

Code: b_azm300p01_en

Brochure (de) 863 kB, 23.07.2015

Code: b_azm300p01_de

Brochure (es) 2 MB, 03.05.2013

Code: b_azm300p01_es

Brochure (jp) 1 MB, 13.03.2013

Code: b_azm300p01_jp

Brochure (pt) 1 MB, 03.05.2013

Code: b_azm300p01_pt

Brochure (fr) 2 MB, 03.05.2013

Code: b_azm300p01_fr

Brochure (br) 2 MB, 08.03.2013

Code: b_azm300p01_br

Brochure (br) 2 MB, 03.05.2013

Code: b_azm300p01_br

Brochure (nl) 1 MB, 03.05.2013

Code: b_azm300p01_nl

Brochure (cs) 2 MB, 03.05.2013

Code: b_azm300p01_cs

Brochure (pl) 2 MB, 03.05.2013

Code: b_azm300p01_pl

Brochure (de) 6 MB, 15.02.2018

Code: b_css_brosch09_de

Brochure (en) 6 MB, 15.02.2018

Code: b_css_brosch09_en

TÜV certification (de, en) 761 kB, 17.09.2018

Code: z_azmp05

EAC certification (ru) 809 kB, 05.10.2015

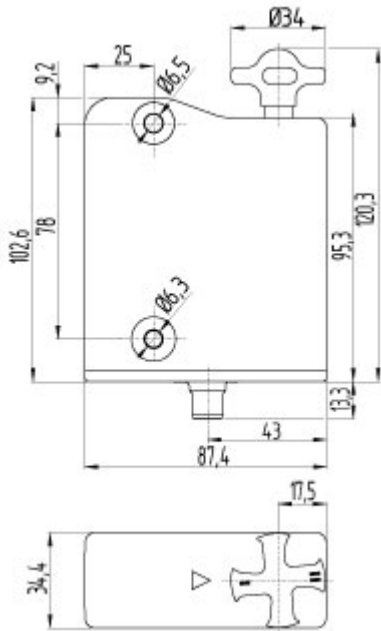
Code: q_6040p17_ru

ECOLAB certification (en) 94 kB, 08.04.2013

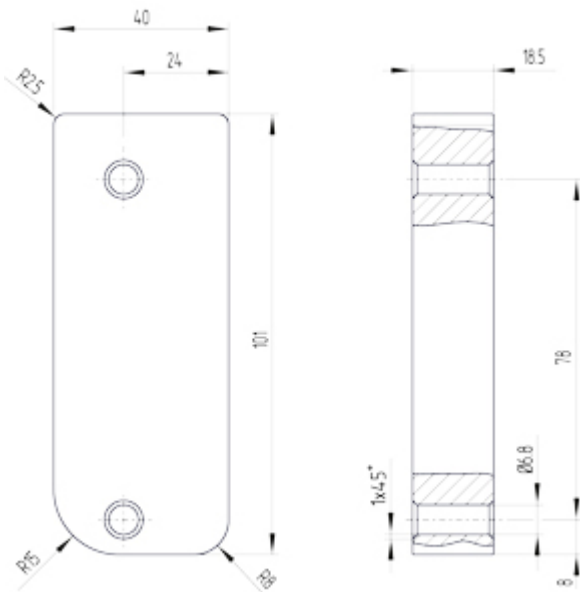
Code: q_azmp03

ECOLAB certification (de) 93 kB, 08.04.2013

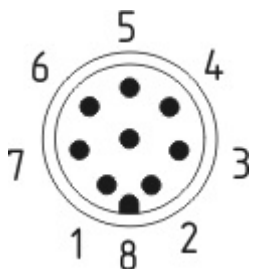
Code: q_azmp02



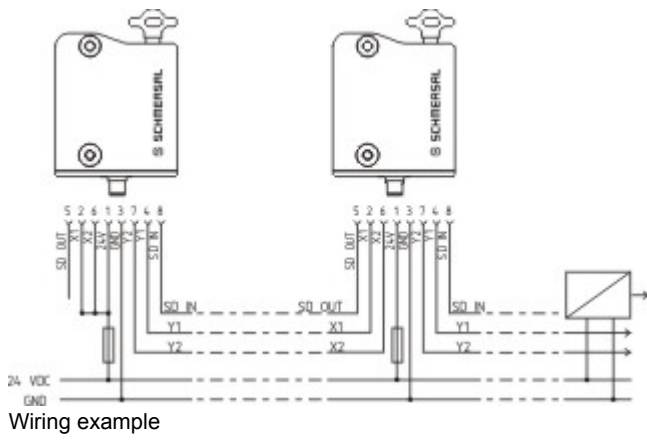
Dimensional drawing (basic component)



Dimensional drawing (miscellaneous)



Contact arrangement



System components

Actuator



101218025 - AZ/AZM300-B1

- 3 different directions of actuation

Accessories



103002891 - MS-AZ/AZM300-B1-1



103003172 - MP-AZ/AZM300-1

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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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