SCHMERSAL
THE DNA OF SAFETY

AZM300B-I2-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**
- **Suitable for mounting to profile systems**
- **Coding level "High" according to ISO 14119**
- **Repeated individual coding with RFID technology**
- **RFID-technology for needs-based protection against tampering**

Data

Ordering data	
	AZM300B-I2-ST-1P2P-A
	103001427
EAN (European Article Number)	4030661425849
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, multiple teaching
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	5.20×10^{-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

	III
	3
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	
Current consumption of the magnet control at 24V	-3 V ... 5 V (Low) 15 V ... 30 V (High) 10 mA C0 C1 C2 C3
Electrical data - Fail-safe digital inputs	
Current consumption of the safety inputs at 24V	−3 V ... 5 V (Low) 15 V ... 30 V (High) 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

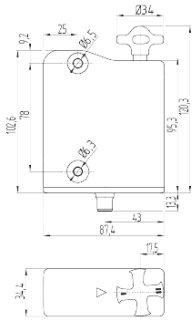
Photo/Product/Catalogue



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

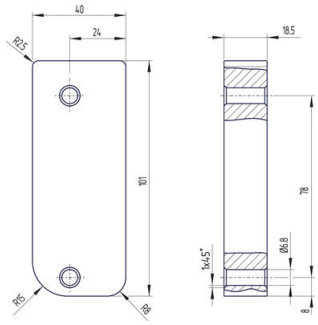
Dimension/Product/Basic



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

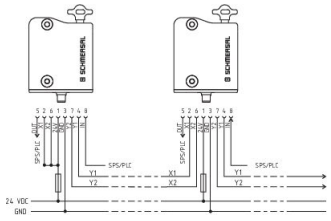
Dimension/Other



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

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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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