



## AZM201Z-I2-ST2-T-1P2PW

- Repeated individual coding with RFID technology
- Power to unlock
- Guard locking monitored
- Thermoplastic enclosure
- Max. length of the sensor chain 200 m
- Self-monitoring series-wiring
- Coding in accordance to ISO 14119 by using RFID-Technology
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of  $\pm 5$  mm vertically and  $\pm 3$  mm horizontally
- Suitable for hinged and sliding guards
- Intelligent diagnosis
- Manual release
- Protection class IP66, IP67
- High holding force 2000
- symmetrical construction form, assembly on 40mm profiles
- OSSD safety outputs
- Emergency exit / Emergency release suitable for retrofitting

## Data

### Ordering data

EAN (European Article Number)	4030661493299
eCl@ss number, Version 9.0	27-27-26-03
eCl@ss number, Version 11.0	27-27-26-03

### Approval - Standards

Certificates	TÜV
	cULus
	EAC
	FCC
	IC

## General data

Standards	IEC 60947-5-1 EN ISO 13849-1 IEC 61508 IEC 60947-5-3 EN ISO 14119 IEC 62061
general information	Individual coding, multiple teaching
Coding level according to ISO 14119	High
Active principle	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	588 g
Time to readiness, maximum	4,000 ms
Duration of risk, maximum	200 ms
Response time safety outputs in case of switch-off by actuator, maximum	100 ms
Response time safety outputs in case of switch-off by safety inputs, maximum	0.5 ms

## General data - Features

Power to unlock	Yes
Guard locking monitored	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

Standards	IEC 62061 IEC 61508 EN ISO 13849-1
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## Safety appraisal - Interlocking

Performance level, up to	e
Control category	4
PFH-value	$1.90 \times 10^{-9}$ /h
PFD value	$1.60 \times 10^{-4}$
Safety Integrity Level (SIL), suitable for applications in	3
Mission Time	20 Year(s)

## Safety appraisal - Guard locking

Performance level, up to	d
Control category	2
PFH-value	$1.00 \times 10^{-8}$ /h
PFD value	$8.90 \times 10^{-4}$
Safety Integrity Level (SIL), suitable for applications in	2
Mission Time	20 Year(s)

## Mechanical data

Mechanical life, minimum	1,000,000 Operations
Clamping force in accordance with ISO14119 $F_{zh}$	2,000 N
Clamping force, maximum $F_{max}$	2,600 N
Latching force	30 N

Actuating speed, maximum	0.2 m/s
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### Mechanical data - Connection technique

Terminal Connector	Connector M12, 8-pole
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### Mechanical data - Dimensions

Length of sensor	50 mm
Width of sensor	40 mm
Height of sensor	220 mm

### Ambient conditions

Degree of protection	IP66 to EN 60529 IP67 to EN 60529
Ambient temperature, minimum	-25 °C
Ambient temperature, maximum	+60 °C
Storage and transport temperature, minimum	-25 °C
Storage and transport temperature, maximum	+85 °C
Relative humidity, minimum	30 %
Relative humidity, maximum	95 %
Note (Relative humidity)	non-condensing
Resistance to vibrations to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm
Resistance to shock	30 g / 11 ms
Protection rating	III

### Ambient conditions - Insulation value

Rated insulation voltage $U_i$	32 VDC
Rated impulse withstand voltage $U_{imp}$	0.8 kV

Overvoltage category	III
Degree of pollution to VDE 0100	3

## Electrical data

Operating voltage, minimum	20.4 VDC
Operating voltage, maximum	26.4 VDC
No-load supply current $I_0$	50 mA
Current consumption with solenoid ON, average	200 mA
Current consumption with solenoid ON, peak	700 mA / 100 ms
Operating current	1,200 mA
Switching frequency, approx.	1 Hz

## Electrical data - Solenoid control

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
Classification ZVEI CB24I, Sink	C0
Classification ZVEI CB24I, Source	C1 C2 C3

## Electrical data - Fail-safe digital inputs

Switching thresholds	-3 V ... 5 V (Low) 15 V ... 30 V (High)
Classification ZVEI CB24I, Sink	C1
Classification ZVEI CB24I, Source	C1 C2 C3

## Electrical data - Fail-safe digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop $U_d$ , maximum	4 V
Current leakage $I_r$	0.5 mA
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.25 A
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

### Electrical data - Diagnostic output

Operating current	50 mA
Voltage drop $U_d$ , maximum	4 V
Voltage, Utilisation category DC13	24 VDC
Current, Utilisation category DC13	0.05 A

### Status indication

Note (LED switching conditions display)	Operating condition: LED green Error / functional defect: LED red Supply voltage UB: LED green
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### 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.  
Triangular key for AZM 201

## Accessory

Recommendation (actuator)

AZ/AZM201-B1  
AZ/AZM201-B30

## Notes

Note (General)

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.

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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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