DATASHEET

AZM201Z-I2-ST2-T-1P2PW-DU

- 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 ± 5 mm vertically and ± 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

Product type description	AZM201Z-I2-ST2-T-1P2PW-DU
Article number (order number)	103044808
EAN (European Article Number)	4030661563800
eCl@ss number, version 12.0	27-27-26-03
eCl@ss number, version 11.0	27-27-26-03
eCl@ss number, version 9.0	27-27-26-03
ETIM number, version 7.0	EC002593
ETIM number, version 6.0	EC002593

Approvals - Standards

Certificates	TÜV cULus EAC FCC IC

General data

Standards	EN IEC 62061 EN ISO 13849-1 EN ISO 14119 EN IEC 60947-5-1 EN IEC 60947-5-3 EN IEC 61508
Coding	Individual coding, multiple teaching
Coding level according to EN ISO 14119	High
Working principle	RFID
Enclosure material	Glass-fibre, reinforced thermoplastic
Gross weight	495 g
Time to readiness, maximum	4,000 ms
Duration of risk, maximum	200 ms
Reaction time, switching off safety outputs via actuator, maximum	100 ms
Reaction time, switching off safety outputs via safety inputs, maximum	0.5 ms

General data - Features

Power to unlock	Yes
Solenoid interlock monitored	Yes
Manual release	Yes
Short circuit detection	Yes
Cross-circuit detection	Yes
Series-wiring	Yes
Safety functions	Yes
Integral system diagnostics, status	Yes

Number of safety contacts	2

Safety classification

Standards	EN ISO 13849-1 EN IEC 62061 EN IEC 61508

Safety classification - Interlocking function

Performance Level, up to	e
Category	4
PFH value	1.90 x 10^{-9} /h
PFD value	1.60 x 10^{-4}
Safety Integrity Level (SIL), suitable for applications in	3
Mission time	20 Year(s)

Safety classification - Guard locking function

Performance Level, up to	d
Category	2
PFH value	1.00 x 10^{-8} /h
PFD value	8.90 x 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
Holding force F_{Zh} in accordance with EN ISO 14119	2,000 N
Holding force F_{max}, maximum	2,600 N
Latching force	30 N

Actuating speed, maximum	0.2 m/s

Mechanical data - Connection technique

Termination	Connector M12, 8-pole

Mechanical data - Dimensions

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

Ambient conditions

Degree of protection	IP67 IP66
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 vibration to EN 60068-2-6	10 ... 150 Hz, amplitude 0.35 mm
Restistance to shock	30 g / 11 ms
Protection class	III

Ambient conditions - Insulation values

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, maximum	50 mA
Current consumption with magnet ON, average	200 mA
Current consumption with magnet ON, peak	700 mA / 100 ms
Operating current	1,200 mA
Switching frequency, approx.	1 Hz

Electrical data - Magnet 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 - Safety 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 - Safety digital outputs

Rated operating current (safety outputs)	250 mA
Voltage drop U_d, maximum	2 V

Leakage current I_r, maximum	0.5 mA
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.25 A
Classification ZVEI CB24I, Source	C2
Classification ZVEI CB24I, Sink	C1 C2

Electrical data - Diagnostic outputs

Operating current	50 mA
Voltage drop U_d, maximum	4 V
Voltage, Utilisation category DC-13	24 VDC
Current, Utilisation category DC-13	0.05 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

Scope of delivery	Actuators must be ordered separately. Triangular key for AZM 201

Accessory

Recommendation (actuator)	AZ/AZM201-B1 AZ/AZM201-B30

Note

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.

Ordering code

Product type description:
AZM201(1)-(2)-(3)-T-(4)-(5)

(1)

Z	Solenoid interlock monitored
B	Actuator monitored

(2)

without	Standard coding
I1	Individual coding
I2	Individual coding, re-teaching enabled

(3)

SK	Screw terminals
CC	Cage clamps
ST2	Connector plug M12, 8-pole

(4)

1P2PW	1 diagnostic output, p-type and >2 safety outputs, p-type > (combined diagnostic signal: guard system closed and interlock locked)

SD2P	serial diagnostic output and 2 p-type safety outputs

(5)

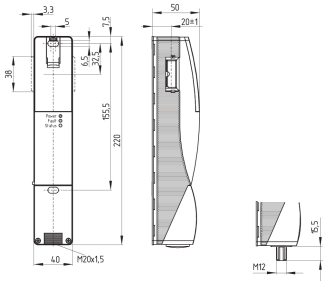
without	Power to unlock
A	Power to lock

Pictures

Product picture (catalogue individual photo)

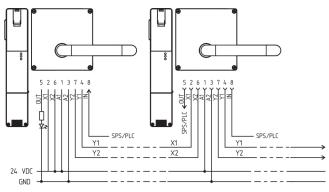
ID: kazm2f51
| 441.1 kB | .jpg | 134.761 x 625.122 mm - 382 x 1772 px - 72 dpi
| 218.5 kB | .png | 74.083 x 343.606 mm - 210 x 974 px - 72 dpi

Dimensional drawing basic component



ID: 1azm2g12
| 146.3 kB | .jpg | 352.778 x 308.681 mm - 1000 x 875 px - 72 dpi
| 5.3 kB | .png | 74.083 x 64.911 mm - 210 x 184 px - 72 dpi
| 21.1 kB | .jpg | 169.686 x 148.519 mm - 481 x 421 px - 72 dpi

Wiring example



ID: kazm2l26
| 50.3 kB | .cdr |
| 105.6 kB | .jpg | 352.778 x 192.969 mm - 1000 x 547 px - 72 dpi