



## AZM300Z-I2-ST-AS

- Thermoplastic enclosure
- Repeated individual coding with RFID technology
- Coding level "High" according to ISO 14119
- Suitable for hinged and sliding guards
- 3 different directions of actuation
- Guard locking monitored
- Power to unlock
- Magnet supply through the AS-Interface
- Hygienic design
- Protection class IP 69
- Solenoid interlock with integrated AS-i Safety Interface
- Universal repeatedly teachable or individual coding because of the RFID technology
- I-variants with coding level HIGH to ISO 14119
- 2 integrated snap-in stages

## Data

### Ordering data

EAN (European Article Number) 4030661475219

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  
ASi-SaW  
ECOLAB  
EAC  
FCC

## General data

|                                     |                                                                           |
|-------------------------------------|---------------------------------------------------------------------------|
| Standards                           | IEC 61508<br>EN 60947-5-1<br>EN ISO 14119<br>EN 62026-2<br>EN ISO 13849-1 |
| general information                 | Individual coding, multiple teaching                                      |
| Coding level according to ISO 14119 | High                                                                      |
| Active principle                    | RFID                                                                      |
| Enclosure material                  | Glass-fibre, reinforced thermoplastic                                     |
| Gross weight                        | 605 g                                                                     |
| Time to readiness, maximum          | 5,000 ms                                                                  |
| Reaction time, maximum              | 120 ms                                                                    |
| Duration of risk, maximum           | 200 ms                                                                    |

## General data - Features

|                                     |     |
|-------------------------------------|-----|
| Power to unlock                     | Yes |
| Guard locking monitored             | Yes |
| Latching                            | Yes |
| Manual release                      | Yes |
| Safety functions                    | Yes |
| Integral System Diagnostics, status | Yes |
| Number of actuating directions      | 3   |

## Safety appraisal

|                             |                           |
|-----------------------------|---------------------------|
| Standards                   | IEC 61508                 |
| Performance level, up to    | e                         |
| Control category to EN13849 | 4                         |
| PFH-value                   | $4.00 \times 10^{-10}$ /h |
| PFD value                   | $7.00 \times 10^{-5}$     |

|                                                               |            |
|---------------------------------------------------------------|------------|
| Safety Integrity Level (SIL),<br>suitable for applications in | 3          |
| Mission Time                                                  | 20 Year(s) |

### Mechanical data

|                                           |                                                                                                              |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Mechanical life, minimum                  | 1,000,000 Operations                                                                                         |
| Note (Mechanical lifetime)                | When using as door stop: $\geq 50.000$ operations (door mass $\leq 5$ kg and actuating speed $\leq 0.5$ m/s) |
| Clamping force                            | 1,150 N                                                                                                      |
| Latching force, adjustable, position<br>1 | 25 N                                                                                                         |
| Latching force, adjustable, position<br>2 | 50 N                                                                                                         |

### Mechanical data - Switching distances according IEC 60947-5-3

|                                        |       |
|----------------------------------------|-------|
| Switch distance                        | 2 mm  |
| Ensured switch distance "ON" $S_{ao}$  | 1 mm  |
| Ensured switch distance "OFF" $S_{ar}$ | 20 mm |

### Mechanical data - Connection technique

|                    |                                        |
|--------------------|----------------------------------------|
| Terminal Connector | Connector plug M12, 4-pole, (A-coding) |
|--------------------|----------------------------------------|

### Mechanical data - Dimensions

|                  |          |
|------------------|----------|
| Length of sensor | 34.4 mm  |
| Width of sensor  | 87.4 mm  |
| Height of sensor | 102.6 mm |

### Ambient conditions

|                                            |                                                              |
|--------------------------------------------|--------------------------------------------------------------|
| Degree of protection                       | IP66 to EN 60529<br>IP67 to EN 60529<br>IP69K to DIN 40050-9 |
| 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                             |
| Resistance to shock                        | 30 g / 11 ms                                                 |
| Protection rating                          | II                                                           |

### 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 - AS Interface

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| AS-i Operating voltage, minimum     | 26.5 VDC                             |
| AS-i Operating voltage AS-i maximum | 31.6 VDC                             |
| Note (AS-i Operating voltage)       | Protection against polarity reversal |
| AS-i Current consumption, maximum   | 200 mA                               |

### Electrical data - AS-Interface specification

|                    |              |
|--------------------|--------------|
| AS-i Specification | Safety-Slave |
| AS-i Version       | V 3.0        |

|                                  |                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------|
| AS-i Profile                     | S-7.B.F.E                                                                                           |
| AS-i Input, Channel 1            | Data bits DI 0 / DI 1 = dynamic code transmission                                                   |
| AS-i Input, Channel 2            | Data bits DI 2 / DI 3 = dynamic code transmission                                                   |
| AS-i Outputs, DO 0               | Solenoid control                                                                                    |
| AS-i Outputs, DO 1               | No Function                                                                                         |
| AS-i Outputs, DO 2               | No Function                                                                                         |
| AS-i Outputs, DO 3               | No Function                                                                                         |
| AS-i Parameter bits, P0          | Safety guard closed and can be locked                                                               |
| AS-i Parameter bits, P1          | Solenoid interlock locked                                                                           |
| AS-i Parameter bits, P2          | Auxiliary voltage in                                                                                |
| AS-i Parameter bits, P3          | Internal device error (FID)                                                                         |
| Note (AS-i Parameter bits)       | Set the parameter outputs to "1111" (0xF)<br>FID: periphery error                                   |
| AS-i Input module address        | 0                                                                                                   |
| Note (AS-i Input module address) | Preset to address 0, can be changed through AS-interface bus master or hand-held programming device |

## Status indication

|                                         |                                                                                                                                                                                                                                                                                 |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note (LED switching conditions display) | <p>(1) green/red LED (AS-i duo LED): Supply voltage/communication error/slave address = 0/periphery error detected/device error detected/manipulation protection active</p> <p>(2) LED yellow: Device condition (Enabling status)</p> <p>(3) LED red: Internal device error</p> |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## Pin assignment

|       |                |
|-------|----------------|
| PIN 1 | AS-Interface + |
| PIN 2 | Aux - (P)      |
| PIN 3 | AS-Interface - |
| PIN 4 | Aux + (P)      |

## Scope of delivery

Included in delivery

Actuators must be ordered separately.

## **Accessory**

Recommendation (actuator)

AZ/AZM300-B1

Schmersal, Inc., 15 Skyline Drive, Hawthorne, NY 10532

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: 11/9/2021, 11:11 AM