

## Datasheet - AZM 415-11/11ZPK14H 24 VAC/DC

Solenoid interlock / AZM 415



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

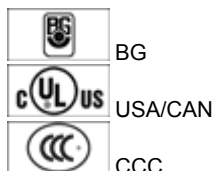
- Metal enclosure
- Interlock with protection against incorrect locking.
- Robust design
- Long life
- 2 cable entries M 20 x 1.5
- Cut clamp termination
- Adjustable ball latch to 400 N
- Problem-free opening of stressed doors by means of bell-crank system
- Two switches with separate actuators
- Suitable for Control Category 4
- The condition of the guard device can be scanned
- Spring-loaded actuators
- 130 mm x 144 mm x 56 mm

### Ordering details

Product type description	AZM 415-11/11ZPK14H 24 VAC/DC
Article number	101174534
EAN Code	4030661331935
eCl@ss	27-27-26-03

### Approval

Approval




### Classification

Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
Mission time notice	20 Years

$$MTTF_d = \frac{B_{10d}}{0,1 \times n_{op}}$$

$$n_{op} = \frac{d_{ap} \times h_{op} \times 3600 \text{ s/h}}{t_{cycle}}$$

### Global Properties

Permanent light	AZM 415
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) 	Yes
Number of guard doors	1
Number of actuating directions	1
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Aluminium
- Material of the actuator	zinc-plated metal
- Roller material	Plastic
- Material of the contacts	Silver
Housing coating	painted
Weight	1000

### Mechanical data

Design of electrical connection	Screw connection
Cable section	
- Min. Cable section	2 x 0,75 mm <sup>2</sup>
- Max. Cable section	2 x 2.5 mm <sup>2</sup>
Mechanical life	> 1.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	No
Emergency release (Y/N)	No
Latching force	150 N ... 400 N
Positive break force	15 N min.
positive break travel	5
Clamping force F	3500 N
Max. Actuating speed	0,2 m/s

### Ambient conditions

Ambient temperature	
- Min. environmental temperature	-25 °C
- Max. environmental temperature	+50 °C
Protection class	IP67 to IEC/EN 60529

### Electrical data

Design of control element	Normally open contact (NO), Opener (NC)
Switching principle	Creep circuit element
Number of auxiliary contacts	2
Number of safety contacts	2
Power to unlock	Yes
Power to lock	No
Rated control voltage U <sub>s</sub>	24 V AC/DC

Power consumption	max. 10 W
Rated impulse withstand voltage $U_{imp}$	4 kV
Rated insulation voltage $U_i$	250 V
Thermal test current $I_{the}$	6 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 1 A
Max. fuse rating	6 A gG D-fuse

**ATEX**

Explosion protection categories for gases	None
Explosion protected category for dusts	None

**Miscellaneous data**

Applications	<div>  sliding safety guard </div>
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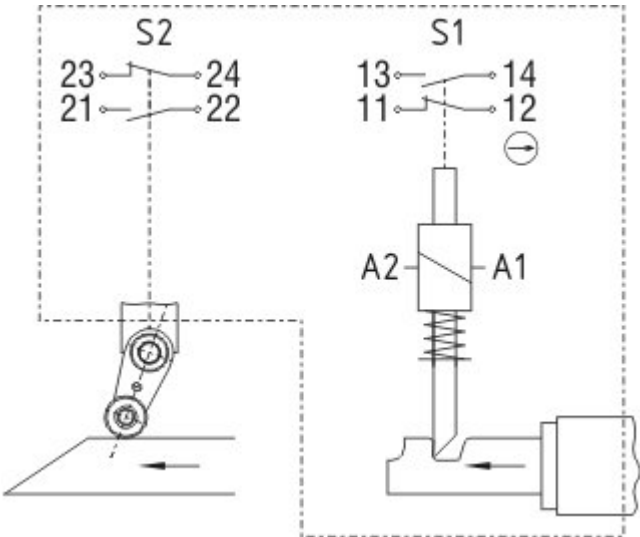
**Dimensions**






Dimensions of the sensor	
- Width of sensor	130
- Height of sensor	144
- Length of sensor	56
Roller wide	5

**notice - Dimensional drawing**

A	setting screw Ball latch
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**Diagram**



- Note Diagram
-  positive break NC contact
  -  active
  -  no active
  -  Normally-open contact
  -  Normally-closed contact

Ordering suffix

The applicable ordering suffix is added at the end of the part number of the safety switch.  
Order example: AZM 415-11/11ZPK14H 24 VAC/DC-1637

...-1637 0,3 µm gold-plated contacts

Ordering code

AZM 415-(1)(2)PK(3)-(4) (5)(6)-(7)	
(1)	
11/11	2 Opener (NC) / Normally open contact (NO) 2
11/02	3 Opener (NC) / 1 Normally open contact (NO)
11/20	1 Opener (NC) / 3 Normally open contact (NO)
02/11	3 Opener (NC) / 1 Normally open contact (NO)
02/20	2 Opener (NC) / 2 Normally open contact (NO)
02/02	4 Opener (NC)
(2)	
X	Protection class IP54
Z	Protection class IP67
(3)	
without	Power to unlock
A	Power to lock
(4)	
STR	connector M23 right
ST	connector M23 bottom
(5)	
without	without Manual release
E	Manual release using triangular key
F	using triangular key (secured with locking screw)
FE	using triangular key
RS	Manual release with key
T	Emergency exit using latched pushbutton (only for Power to unlock)
TE	Emergency exit and Manual release, Mounting outside (only for Power to unlock)
TEI	Emergency exit and Manual release, Mounting inside (only for Power to unlock)
NS	Emergency release using lock button
(6)	
24VAC/DC	Us: 24 VAC/DC
110VAC	Us: 110 VAC
230VAC	Us: 230 VAC
(7)	
1637	gold-plated contacts
AZM 415 for double doors	
AZM 415-33ZPDK(1)(2) (3)(4)	
(1)	
A	Power to lock
(2)	
ST	connector M23 right

<i>without</i>	Power to unlock
<b>STR</b>	connector M23 bottom
<b>(3)</b>	
<i>without</i>	without Manual release
<b>E</b>	Manual release using triangular key (only for Power to unlock)
<b>(4)</b>	
<b>1637</b>	gold-plated contacts

## Documents

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**Operating instructions and Declaration of conformity** (en) 287 kB, 23.11.2017

Code: mrl\_azm415-11-11xxx14h\_en

**Operating instructions and Declaration of conformity** (pt) 288 kB, 22.01.2018

Code: mrl\_azm415-11-11xxx14h\_pt

**Operating instructions and Declaration of conformity** (it) 284 kB, 09.01.2018

Code: mrl\_azm415-11-11xxx14h\_it

**Operating instructions and Declaration of conformity** (pl) 319 kB, 23.05.2018

Code: mrl\_azm415-11-11xxx14h\_pl

**Operating instructions and Declaration of conformity** (de) 270 kB, 23.11.2017

Code: mrl\_azm415-11-11xxx14h\_de

**Operating instructions and Declaration of conformity** (es) 287 kB, 12.01.2018

Code: mrl\_azm415-11-11xxx14h\_es

**Operating instructions and Declaration of conformity** (nl) 286 kB, 13.08.2018

Code: mrl\_azm415-11-11xxx14h\_nl

**CCC certification** (cn) 2 MB, 17.01.2018

Code: q\_azmp05

**CCC certification** (en) 2 MB, 17.01.2018

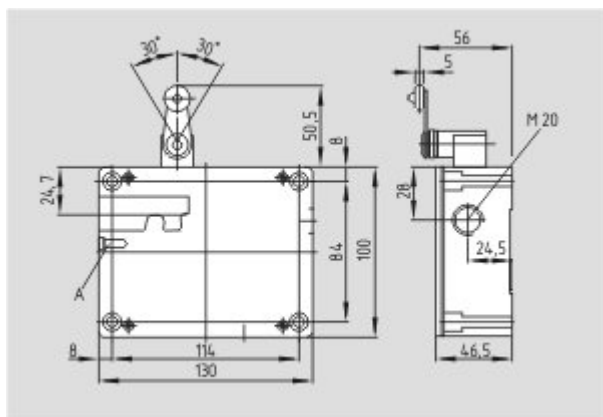
Code: q\_azmp04

**notice** (de, en, fr) 108 kB, 28.02.2007

Code: s\_zm4p01

## Images

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## System components

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### Actuator



#### **1128545 - AZ/AZM 415-B1**

- For sliding doors
- Actuators with return spring
- Tolerates up to max. 6 mm overtravel



#### **1144796 - AZ/AZM 415-B2**

- Particularly suitable for hinged guards
- For very small actuating radii in line with the plane of the actuator



#### **1144797 - AZ/AZM 415-B3**

- Particularly suitable for hinged guards
- For very small actuating radii at 90° to the plane of the actuator



#### **101142540 - AZ/AZM 415-B4PS**

- For sliding doors
- with locking bolt and ball latch

### Door-handle system



#### **AZM 415-ST30**

- Latching handle
- Suitable for all types of guard
- einsetzbar in Verbindung mit EX-AZM 415

### Accessories



#### **101100887 - TRIANGULAR KEY TK-M5**

- For manual release using M5 triangular key, available as accessory
- For maintenance, installation, etc.