

## Datasheet - AZM190-02/10RK-48VAC

Solenoid interlock / AZM190



- Thermoplastic enclosure
- Long life
- Interlock with protection against incorrect locking.
- 89 mm x 178 mm x 41 mm
- Actuating head can be repositioned by 4 x 90°
- 2 cable entries M 20 x 1.5
- Wiring compartment
- Slim design, particularly suitable for fitting on hinged doors, aluminium profiles and fencing
- Sealing mechanism to prevent the ingress of dirt
- Cut clamp termination
- Manual release

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

### Ordering details

Product type description	AZM190-02/10RK-48VAC
Article number	101030186
EAN Code	4030661446066
Replaced article number 101155610	
eCl@ss	27-27-26-03

### Approval

Approval



BG



CCC

### Classification


Standards	EN ISO 13849-1
B10d Normally-closed contact (NC)	2.000.000
B10d Normally open contact (NO)	1.000.000
Mission time	20 Years

notice

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

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

### Global Properties

Permanent light	AZM190
Standards	EN 60947-5-1, BG-GS-ET-19
Compliance with the Directives (Y/N) 	Yes
Number of actuating directions	4
Active principle	electromechanical
Duty cycle ED	Magnet 100 %
Materials	
- Material of the housings	Plastic, glass-fibre reinforced thermoplastic
- Material of the contacts	Silver
Housing coating	None
Weight	480

## Mechanical data

Connection type	Screw connection
Cable section	
- Min. Cable section	1 x 0,5 mm <sup>2</sup>
- Max. Cable section	1 x 1.5 mm <sup>2</sup>
Mechanical life	2.000.000 operations
notice	All indications about the cable section are including the conductor ferrules.
Emergency unlocking device (Y/N)	No
Manual release (Y/N)	Yes
- front	
Emergency release (Y/N)	No
Latching force	20 N
Positive break force	20 N
positive break travel	2 x 3.5 mm
Clamping force F	1950 N

## Ambient conditions

Ambient temperature	
- Min. environmental temperature	0 °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	1
Number of safety contacts	2
Power to unlock	Yes
Power to lock	No
Rated control voltage U <sub>s</sub>	48 VAC
Power consumption	max. 8.5 W
Power consumption	max. 8.5 W
Rated impulse withstand voltage U <sub>imp</sub>	4 kV
Rated insulation voltage U <sub>i</sub>	250 V
Thermal test current I <sub>the</sub>	4 A
Utilisation category	AC-15: 230 V / 4 A, DC-13: 24 V / 4 A
Max. fuse rating	4 A gG D-fuse to DIN EN 60269-1

## ATEX

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Explosion protection categories for gases

None

Explosion protected category for dusts

None

## Miscellaneous data

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Applications



hinged safety guard

## Dimensions

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Dimensions of the sensor

- Width of sensor	89 mm
- Height of sensor	178 mm
- Length of sensor	41 mm

## notice

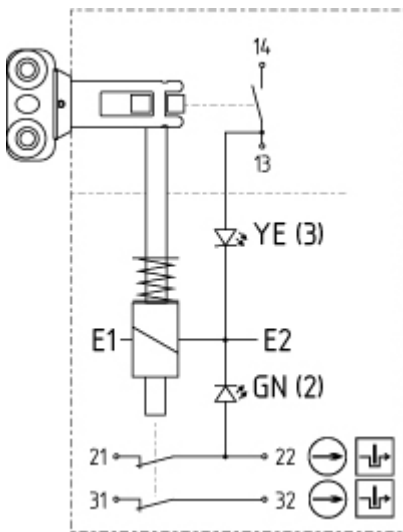
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Manual release


- For manual release using triangular key M3 (included in delivery)
- For maintenance, installation, etc.


## Diagram


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
Note Diagram

 positive break NC contact

 active

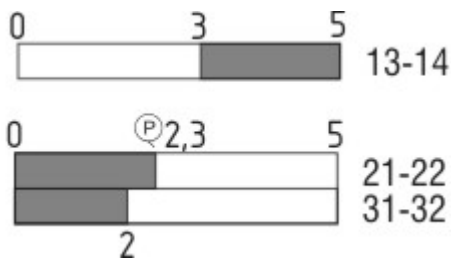
 no active

 Normally-open contact

 Normally-closed contact

## Switch travel diagram

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Notes Switch travel diagram

- Contact closed
- Contact open
- Setting range
- Break point
- Positive opening sequence/- angle
- VS** adjustable range of NO contact
- VÖ** adjustable range of NC contact
- N** after travel

**Ordering code**

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AZM190-(1)RK(2)(3)-(4)-(5)

(1)

<b>02/01</b>	Magnet: 2 Opener (NC); Actuator: 1 Opener (NC)
<b>02/02</b>	Magnet: 2 Opener (NC); Actuator 2 Opener (NC)
<b>02/10</b>	Magnet: 2 Opener (NC); Actuator: 1 Normally open contact (NO)
<b>02/11</b>	Magnet: 2 Opener (NC); Actuator: 1 Opener (NC) / 1 Normally open contact (NO)
<b>11/01</b>	Magnet: 1 Opener (NC) / 1 Normally open contact (NO); Actuator: 1 Opener (NC)
<b>11/02</b>	Magnet: 1 Opener (NC) / 1 Normally open contact (NO); Actuator: 2 Opener (NC)
<b>11/10</b>	Magnet: 1 Opener (NC) / 1 Normally open contact (NO); Actuator: 1 Normally open contact (NO)
<b>11/11</b>	Magnet: 1 Opener (NC) / 1 Normally open contact (NO); Actuator: 1 Opener (NC) / 1 Normally open contact (NO)

(2)

<i>without</i>	Power to unlock
<b>A</b>	Power to lock

(3)

<i>without</i>	With Manual release cover-side
<b>E0</b>	Without Manual release
<b>E1</b>	With Manual release lateral (right)
<b>N</b>	Emergency release
<b>T</b>	Emergency unlocking device

(4)

<i>without</i>	Without LED switching conditions display
<b>G</b>	With LED switching conditions display (Only for 24 VAC/DC; not combinable in combination with -E1 und -T)

(5)

<b>24VAC</b>	Us: 24 VAC
<b>24VDC</b>	Us: 24 VDC
<b>48VAC</b>	Us: 48 VAC
<b>110VAC</b>	Us: 110 VAC
<b>230VAC</b>	Us: 230 VAC

## Documents

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**Operating instructions and Declaration of conformity (it)** 470 kB, 15.04.2016

Code: mrl\_azm190\_it

**Operating instructions and Declaration of conformity (jp)** 576 kB, 19.05.2017

Code: mrl\_azm190\_jp

**Operating instructions and Declaration of conformity (fr)** 474 kB, 27.04.2016

Code: mrl\_azm190\_fr

**Operating instructions and Declaration of conformity (pl)** 509 kB, 19.04.2016

Code: mrl\_azm190\_pl

**Operating instructions and Declaration of conformity (en)** 470 kB, 14.03.2016

Code: mrl\_azm190\_en

**Operating instructions and Declaration of conformity (cn)** 553 kB, 01.06.2017

Code: mrl\_azm190\_cn

**Operating instructions and Declaration of conformity (nl)** 506 kB, 30.07.2018

Code: mrl\_azm190\_nl

**Operating instructions and Declaration of conformity (pt)** 474 kB, 17.02.2017

Code: mrl\_azm190\_pt

**Operating instructions and Declaration of conformity (es)** 472 kB, 06.04.2016

Code: mrl\_azm190\_es

**Operating instructions and Declaration of conformity (de)** 472 kB, 14.03.2016

Code: mrl\_azm190\_de

**BG-test certificate (en)** 166 kB, 27.02.2014

Code: z\_m19p02

**BG-test certificate (de)** 169 kB, 27.02.2014

Code: z\_m19p01

**CCC certification (cn)** 872 kB, 16.08.2016

Code: q\_azmp07

**CCC certification (en)** 896 kB, 16.08.2016

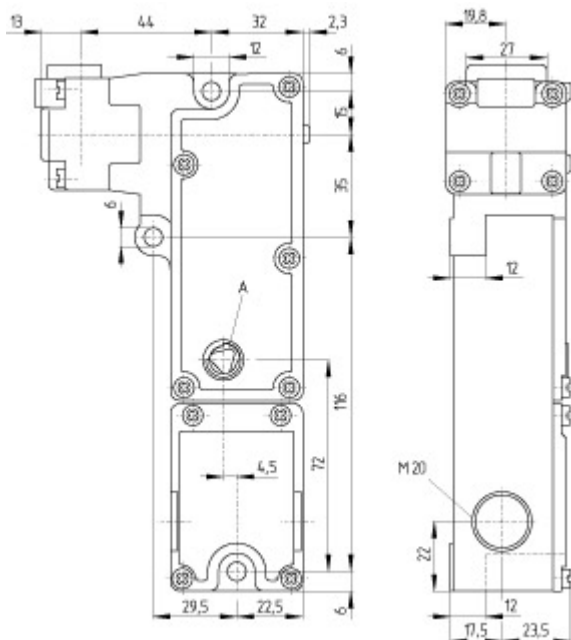
Code: q\_azmp06

**EAC certification (ru)** 809 kB, 05.10.2015

Code: q\_6040p17\_ru

## Images

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Dimensional drawing (basic component)

## System components

### Actuator



**101029965 - AZM190-B1**

- Compensation for tolerances by means of rubber buffers



**101029967 - AZM190-B3/1X15**



**101029968 - AZM190-B3/1X7,5**



**101029938 - AZM190-B3/2X15**

- For very small actuating radii in line with or at 90° to the plane of the actuator

**101029966 - AZM190-B5**

- Particularly suitable for front mounting e.g. on hinged guards



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**103009445 - AZM190-B3V/15**

- Especially for aluminium profiles



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**103009443 - AZM190-B3V/2X15**

- For very small actuating radii in line with or at 90° to the plane of the actuator
- Especially for aluminium profiles



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**103009444 - AZM190-B3V/7,5**

- Especially for aluminium profiles



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**Accessories**



**101029969 - MP190 MOUNTING PLATE**

- For simple mounting of an AZM190 on profile systems



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**101028565 - TRIANGULAR KEY TZ-75**

- For manual release
- angled triangular key



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**103009486 - MP190-V MOUNTING PLATE**

- Mounting of the solenoid interlock and mounting plate on the inside for right-hinged doors

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**103009487 - MP190-VD MOUNTING PLATE**

- Mounting of the solenoid interlock and mounting plate on the inside for left-hinged doors



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The data and values have been checked thoroughly. Technical modifications and errors excepted.

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