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Operating instructions. . . . . . . . . . . . . pages 1 to 6

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### 1. About this document

#### 1.1 Function

This operating instructions manual provides all the information you need for the mounting, set-up and commissioning to ensure the safe operation and disassembly of the the product. he operating instructions must be available in a legible condition and a complete version in the vicinity of the device.

### 1.2 Target group: authorised qualified personnel

All operations described in this operating instructions manual must be carried out by trained specialist personnel, authorised by the plant operator only.

Please make sure that you have read and understood these operating instructions and that you know all applicable legislations regarding occupational safety and accident prevention prior to installation and putting the component into operation.

The machine builder must carefully select the harmonised standards to be complied with as well as other technical specifications for the selection, mounting and integration of the components.

#### 1.3 Explanation of the symbols used



#### Information, hint, note:

This symbol is used for identifying useful additional information.



**Caution:** Failure to comply with this warning notice could lead to failures or malfunctions.

**Warning:** Failure to comply with this warning notice could lead to physical injury and/or damage to the machine.

#### 1.4 General safety instructions

The user must observe the safety instructions in this operating instructions manual, the country-specific installation standards as well as all prevailing safety regulations and accident prevention rules.



Further technical information can be found in the Schmersal catalogues or in the online catalogue on the Internet: products.schmersal.com.

The information contained in this operating instructions manual is provided without liability and is subject to technical modifications.

There are no residual risks, provided that the safety instructions as well as the instructions regarding mounting, commissioning, operation and maintenance are observed.

#### 1.5 Warning about misuse



In case of inadequate or improper use or manipulations of the component, personal hazards or damage to machinery or plant components cannot be excluded. The relevant requirements of the standard EN ISO 14119 must be observed.

### 1.6 Exclusion of liability

We shall accept no liability for damages and malfunctions resulting from defective mounting or failure to comply with this operating instructions manual. The manufacturer shall accept no further liability for damages resulting from the use of unauthorised spare parts, accessories or attachments.

For safety reasons, invasive work on the device as well as arbitrary repairs, conversions and modifications to the device are strictly forbidden; the manufacturer shall accept no liability for damages resulting from such invasive work, arbitrary repairs, conversions and/or modifications to the device.

# 2. Product description

#### 2.1 Ordering code

This operating instructions manual applies to the following types:

AZ/AZM 200-B30-①TA23-4 AZ/AZM201-B30-①TA23-4

No.	Option	Description
1	L	Door hinge on left-hand side
	R	Door hinge on right-hand side
2	G1	With doorhandle
	G2	With rotating knob
3	P30	Locking rod without emergency exit
	P31	Locking rod with emergency exit
4		without lockout tag
	SZ	With lockout tag



Only if the information described in this operating instructions manual are realised correctly, the safety function and therefore the compliance of the entire system with the Machinery Directive is maintained.

#### 2.2 Special versions

For special versions, which are not listed in the order code below 2.1, these specifications apply accordingly, provided that they correspond to the standard version.

#### 2.3 Destination and use

The actuator unit with emergency exit release is used to open the safety guard inside the hazardous area. By actuating the emergency exit, the safety guard can be opened from within the hazardous area without the need for unlocking the solenoid interlock. The safety guard cannot be locked from inside. Particularly suitable for double wing doors as a system with higher mechanical stability that also offers protection in the event of larger workpieces being thrown out.



Fitting and actuation of emergency exit release only from within the hazardous area.



#### Holding force:

- F<sub>Zh</sub>: 5,500 N - F<sub>max</sub>: 7,150 N

# 3. Mounting

#### 3.1 General mounting instructions

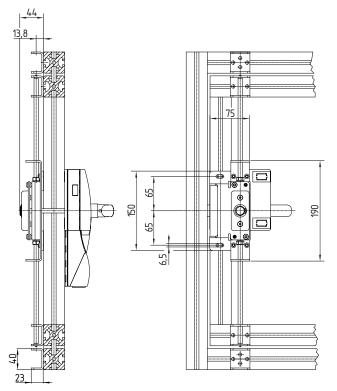


The installation may only be carried out by authorised

#### 3.2 Dimensions

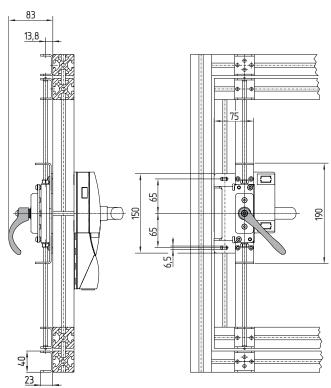
All measurements in mm.

# P30



Assembly of the system AZ/AZM 200 and AZ/AZM201 with actuators AZ/AZM 200-B30 and AZ/AZM201-B30 is performed following the same work steps as those described in the relevant operating instructions. Worksteps that differ or supplement these are to be observed as follows.

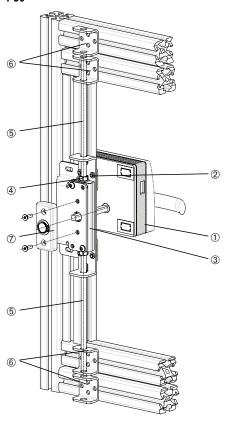
#### P31



# 3.3 Installation example

Exterior installation of actuator unit AZ/AZM 200-B30 and AZ/AZM201-B30 for left hinged door (Bar lock P30 and P31 on inside)

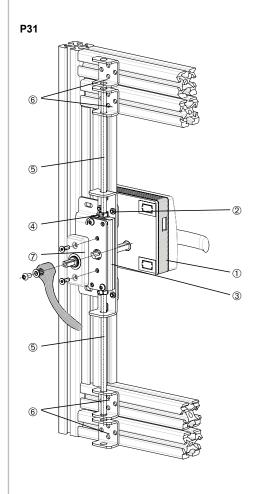
# P30





The individual items 1, 2, 3 and 4 are supplied preassembled.

- ① Actuator unit AZ/AZM 200-B30 and AZ/AZM201-B30 incl. square rod
- ② 4 x M5 x 10 countersunk screws, ISO 7380
- 3 Rod lock with guide plate
- 4 2 x M8 hexagon nuts, ISO 4032
- ⑤ 2 x locking bars, D = 8 mm, L = 1200 mm, galvanised
- 6 4 x U-pieces
- $\odot$  Counter bearing (for P30) or complete emergency exit release (for P31) (inc. 2 x M5 x 16 countersunk bolts, ISO 10642)



# Step 1... 7

• See operating instructions for AZ/AZM 200-B30 and AZ/AZM 201-B30.



# Step 8

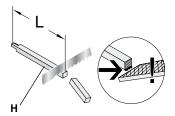
- $\bullet$  Cut the square bar  $\boldsymbol{H}$  to size
- Deburr cut edges.

#### To be observed:

- Max. door leaf thickness S = 150 mm
- $\bullet$  Length of sawn off square rod  $\boldsymbol{\mathsf{H}}$

P30/P31: L = S + 50 mm

• Through-hole for square tube  $\mathbf{H} \varnothing$  16 mm



#### Note:

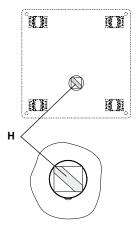
Work steps 9 to 11 according to operating instructions AZ/AZM 200-B30 and AZ/AZM 201-B30 discontinued.

#### Step 12

• Insert square rod H in the rear of the actuator unit

#### To be observed:

• Insert chamfer of the square into the emergency exit either the cut side of the square into the actuator unit. Position of the chamfer, as shown, when actuator unit G1 is unactuated.



#### Note

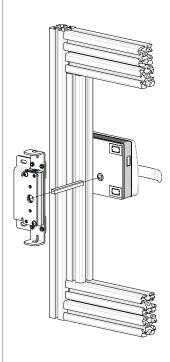
Work steps 13 to 15 according to operating instructions AZ/AZM 200-B30 and AZ/AZM 201-B30 discontinued.

#### Step 16-01

• Mount rod lock with guide plate on door

#### To be observed

- Square rod centred in square aperture
- Observe direction of chamfer for P31

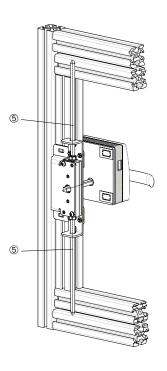


# Step 16-02

• Shorten locking rods \$ (= height of door frame ± 3 mm) and deburr

#### To be observed

- Rod lock in retracted state
- Rods flush with upper and lower edge of door

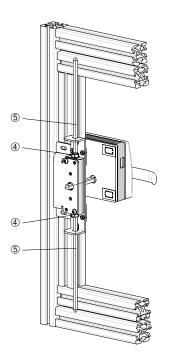


# Step 16-03

• Screw locking rod ⑤ in rod lock ③ using M8 hexagon nut ④

#### To be observed

• Counterlock using M8 hexagon nut (ISO 4032) ④

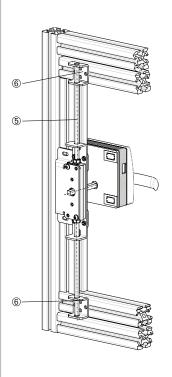


# Step 16-04

• Secure U-pieces ® to upper and lower edge of door

#### To be observed

- Push U-piece ® on locking rod ®
- Secure U-piece ® on upper and lower edge of door

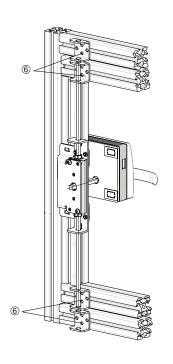


# Step 16-05

• Secure U-pieces ® on upper and lower door cowling

#### To be observed

• Maximum distance between U-pieces: 10 mm - 3 mm



#### Step 16-06

#### For version P30:

Mount counter bearing ⑦

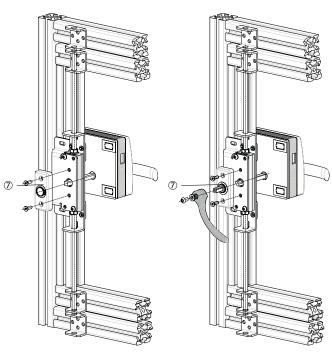
• For version P31:

Mount emergency exit release unit ⑦

#### To be observed

• M5 x 16 countersunk bolts (ISO 10642) Tightening torque MA = 6...8 Nm

P30 P31



#### Note:

Proceed as per operating instructions AZ/AZM 200-B30 and AZ/AZM 201-B30.

# 4. Set-up and maintenance

#### 4.1 Functional testing

In the course of commissioning, a check must be carried out on the safety door handle system AZ/AZM 200 and AZ/AZM201, comprising AZ or AZM 200 and associated actuator unit and emergency exit release AZ/AZM 200-B30-...-P30/ ...-P31 and AZ/AZM201-B30-...-P30/ ...-P31.

The following conditions must be previously checked and met:

- 1. Fitting of the solenoid interlock and the actuator
- 2. Check the integrity of the cable entry and connections
- 3. Check the switch enclosure for damage
- 4. Ensure ease of movement of the system
- Do not introduce tension in the components when installing (they must be flush)



# Functional check of version AZ/AZM 200-B30...-P31 and AZ/AZM201-B30...-P31

To activate the emergency exit, turn the red lever in the direction of the arrow to the end stop. The safety outputs switch off and the guard system can be opened. The blocked position is cancelled by turning the lever in the opposite direction. In the unlocked position, the guard system is secured against unintentional locking.

#### 4.2 Maintenance

We recommend a regular visual inspection and functional test, including the following steps:

- 1. Check for tight installation of the actuator and the switch
- 2. Remove particles of dust and soiling
- 3. Check cable entry and connections

Damaged or defective components must be replaced.

# 5. Disassembly and disposal

#### 5.1 Disassembly

The safety door handle system may only be removed in a de-energised state.

#### 5.2 Disposal

The safety door handle system must be disposed of in an appropriate manner in accordance with national rules and regulations.

#### K.A. Schmersal GmbH & Co. KG

Möddinghofe 30, 42279 Wuppertal

Germany

Phone: +49 202 6474-0
Telefax: +49 202 6474-100
E-Mail: info@schmersal.com
Internet: www.schmersal.com

