# **SCHMERSAL**

(EN)
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Operating instructions. . . . . . . . . . . . . pages 1 to 4 Original

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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 switchgear. The 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 indicates 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 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 liability for damages resulting from the use of unauthorised spare parts or accessories.

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-B1-①T② AZ/AZM201-B1-①T②

No.	Option	Description
1	L	Left-hand side actuating direction
	R	Right-hand side actuating direction
2		without emergency exit
	P0	with emergency exit



Actuators AZ/AZM 200-B1... are intended exclusively for combination with the AZ/AZM 200 series basic component. Actuators AZ/AZM201-B1... are intended exclusively for combination with the AZ/AZM201 series basic component.



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 Purpose

Actuators AZ/AZM 200-B1 and AZ/AZM201-B1 are the preferred choice for use on sliding safety guards.

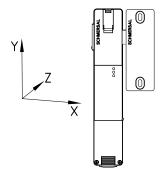
Actuator AZ/AZM 200-B1-...P0 or AZ/AZM201-B1-...P0 is only suitable for the solenoid interlock AZM 200 and AZM201 with concealed installation.

#### **Emergency exit P0**

When the emergency exit collar of the AZ/AZM 200-B1-...P0 or AZ/AZM201-B1-...P0 actuator with emergency exit is pulled in the direction of the arrow (see image), the AZM 200 / AZM201 is unlocked and the safety guard can be opened. When the safety guard is closed, it is immediately re-locked. The autonomous, spring-loaded return of the unlocking mechanism, which is installed by the builder, must be guaranteed.

# Actuator unit play

 $X = \pm 1.5 \text{ mm}$   $Y = \pm 5.0 \text{ mm}$  $Z = \pm 1.0 \text{ mm}$ 



# 3. Mounting

# 3.1 General mounting instructions

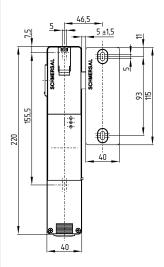


The installation may only be carried out by authorised personnel.

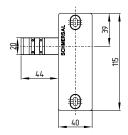
The actuator AZ/AZM 200-B1 and AZ/AZM201-B1 is mounted with a return spring. The spring travel is max. 5 mm. The distance between the flange of the actuator and the switch enclosure must be 5  $\pm$  1.5 mm with the actuator inserted.

#### 3.2 Dimensions

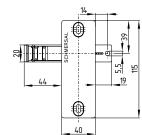
All measurements in mm.

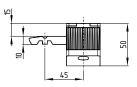


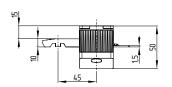
# Actuator AZ/AZM 200-B1 AZ/AZM201-B1



Actuator with emergency exit AZ/AZM 200-B1-...P0 AZ/AZM201-B1-...P0







# 3.3 Emergency exit with Schmersal pull wire system

Attach the quick link to the emergency exit tab. Starting at a pull-wire length of 2 metres, a minimum of 2 eyebolts is required as well as guide pulleys, if applicable.

# Schmersal pull wire system accessories

	Designation	Ordering code
Quick link	ACC-CQL-4MM	103040978
Wire rope 1 4 m, Nylon (yellow) with sphere (Wire thimble and wire clamp pre-mounted)	PR-B-xM	on request
Eyebolt	BM8X70	101192471
Pulley	ACC-PWR-PLY	103037516

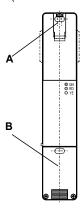
# 3.4 Sequence of the steps

# Step 1

 Unscrew cover B for the wiring compartment and open flap A manual release

#### To be observed

 Actuation of manual release with triangular key (included in delivery with safety switchgear AZ/AZM)

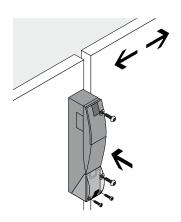


# Step 2

• Mount enclosure of safety switchgear AZ/AZM flush with doorpost

#### To be observed

- · Screws DIN 912-M6
- Max. torque for solenoid interlock = 8 Nm, cover screw = 0.7 ... 1 Nm (Torx T10)
- Wall thickness of the device 19 mm
- Washers DIN 125-6.4 (included in delivery with safety switchgear AZ/AZM)
- For applications with strong vibrations, please observe a proper securing of the screws

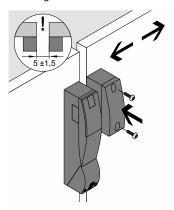


# Step 3

· Fit the actuator to the doorpost

#### To be observed

- Actuator with emergency release AZ/AZM 200-B1-...P0 and AZ/AZM201-B1-... may only be installed concealed.
- Top side of the safety switch or solenoid interlock flush with actuator top side
- Distance between safety switch or solenoid interlock and actuator:  $5 \pm 1.5 \text{ mm}$
- Screws DIN 912-M6
- Wall thickness of the device 8 mm
- Max. tightening torque 8 Nm
- For applications with strong vibrations, please observe a proper securing of the screws



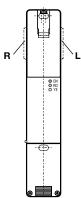
# Step 4

• Clip the dust-proof flap in the unused side

# To be observed

R = right-hand side actuating direction

L = Left-hand side actuating direction

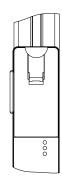


# Step 5

· Seal the cover

#### To be observed

 After being put into operation, the manual release must be secured by installing the seal, which is included in delivery.



4. Appendix

# 4.1 Set-up checklist

Within the sco	ety door handle system AZ/AZM 200 and AZ/AZM 201				
Checking safety door handle system AZ/AZM 200 and AZ/AZM 201 Within the scope of commissioning and regular maintenance of the machine, the following items of the safety door-handle system, consisting of AZM 200 or AZ/AZM 201, the corresponding actuator unit and the emergency exit must be checked and inspected by a specialist:					
1. Fixation:					
All fixing screw	vs installed and tightened with the specified torque				
2. Distance:					
	.5 mm between safety switchgear AZ/AZM 200 or AZ/AZM201 and nust be adhered to.				
3. Dust shield	cap:				
Check tight fitt	ing of the dust-proof flap				
4. Functional	testing:				
	signal is only transmitted to the safety circuit, unit is within range of the solenoid interlock and locked.				
LED	Status				
green yellow	Operating voltage Actuator inserted				
	(and locked for AZM 200 or AZM 201)				
riashes yellow	Actuator inserted and not locked (only for AZM 200 or AZM 201)				
red	Error				
5. Cover for n	nanual release:				
Cover is seale	d. (only for AZM 200 or AZM 201)				

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