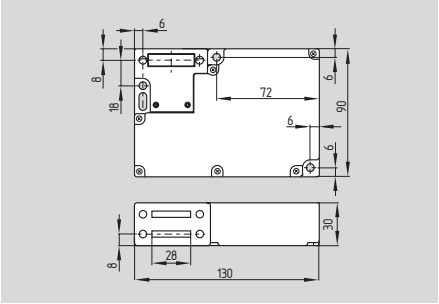
AZM 161





- Thermoplastic enclosure
- 6 contacts
- Manual release, emergency exit or emergency release
- Long life
- Double insulated ⧈
- High holding force 2000 N
- 30 N latching force
- Large wiring compartment
- Power to unlock/power to lock principle
- Screw terminals or cage clamps
- 3 or 4 cable entries M16 x 1.5
- Actuating play 5.5 mm in direction of actuation
- Individual coding available on request
- AS-Interface Safety at Work available, see chapter 5

Approvals

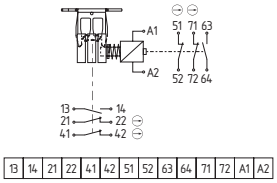
BG UL SP CE

Technical data

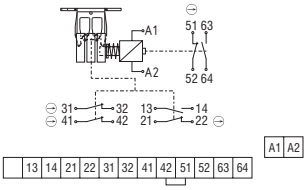
Standards:	IEC/EN 60947-5-1 BG-GS-ET-19
Enclosure:	glass-fibre reinforced thermoplastic, self-extinguishing
Actuator and locking bolt:	stainless steel 1.4301
Protection class:	IP 67 to EN 60529
Contact material:	silver
Contact type:	change-over contact with double break, type Zb, with galvanically separated contact bridges
Switching system:	⊖ IEC 60947-5-1 slow action, NC contacts with positive break
Termination:	screw terminals or cage clamps
Cable section:	max. 1.5 mm² (incl. conductor ferrules)
Cable entry:	AZM 161-24, -33: 3 x M16 x 1.5 AZM 161-12/12: 4 x M16 x 1.5
U_{imp}:	4 kV
U_i:	250 V
I_{the}:	10 A
Utilisation category:	AC-15, DC-13
I_e/U_e:	4 A / 230 VAC 2.5 A / 24 VDC
Max. fuse rating:	6 A gL/gG D-fuse
Positive break travel:	AZM 161-24, -33: 8.8 mm AZM 161-12/12: 9.5 mm
Positive break force:	10 N for each NC contact fitted
U_s:	24 VAC/DC 110/230 VAC, 50/60Hz
Magnet:	100% ED
Power consumption:	max. 10 W
Ambient temperature:	– 25 °C … + 60 °C
Mechanical life:	> 1 million operations
F_{max}:	2000 N
Latching force:	30 N

Contact variants

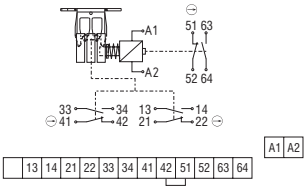
Power to unlock
2 NO / 4 NC (12/12)



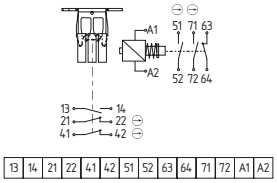
2 NO / 4 NC



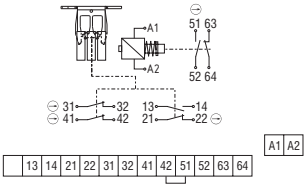
3 NO / 3 NC



Power to lock
2 NO / 4 NC (12/12)



2 NO / 4 NC

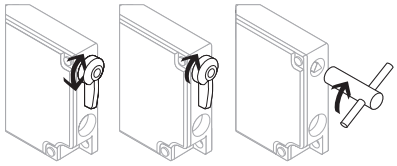


Ordering details

AZM 161 ①-②rk③ ④-⑤-⑥

No.	Replace	Description
①	SK	Screw terminals
	CC	Cage clamp
	ST	Connector M 12 x 1
②	12/12	2NO/4NC
	24	2NO/4NC
	33	3NO/3NC
③		Power to unlock
	a	Power to lock
④		Manual release
	T or N	see notice on the right
⑤		Without LED
	G	With LED (only for -24, -33)
⑥	024	Us 24 VAC/DC
	110/230	Us 110 / 230 VAC

Note

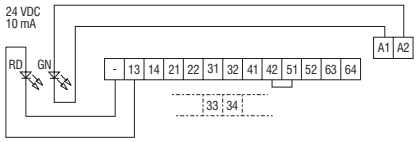


Emergency exit (left)
- For cases of danger
- Actuation from within the hazardous area
- Ordering suffix T

Emergency release (middle)
- For cases of danger
- Mounting only outside the guarded area
- Ordering suffix N

Manual release (right)
- For manual release using M5 triangular key, available as accessory
- For maintenance, setting-up, etc.

Note



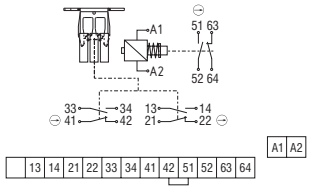
LED version:
Ordering suffix G,
limited terminating space 0.75 mm²
Protected against incorrect polarity and voltage spikes.

Actuators must be ordered separately.

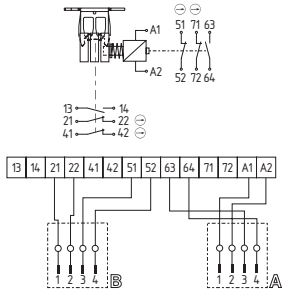
Solenoid interlocks

Contact variants

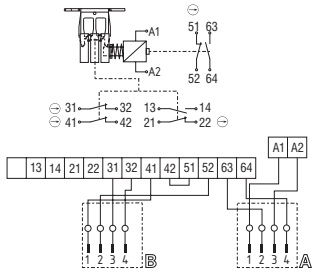
Power to lock
3 NO / 3 NC



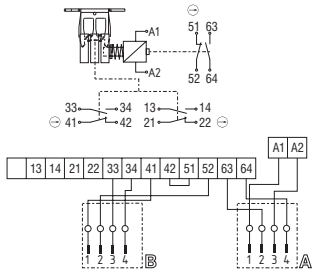
Connector
2 NO / 4 NC (12/12)



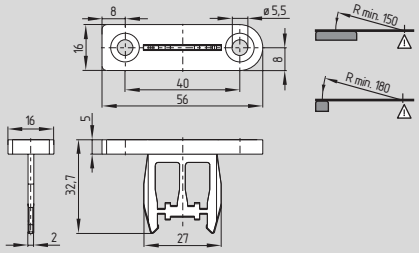
1 NO / 3 NC



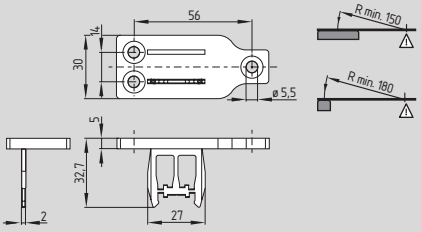
2 NO / 2 NC



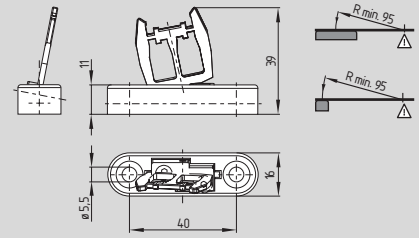
System components



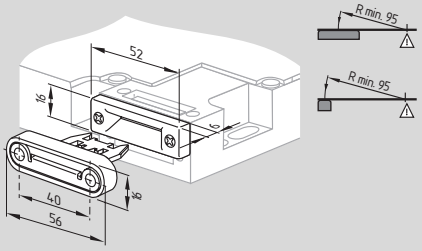
Straight actuator AZM 161-B1



Straight actuator AZM 161-B1E

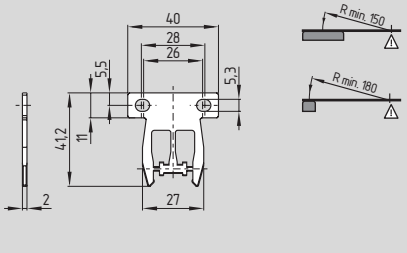


Flexible actuator AZM 161-B6

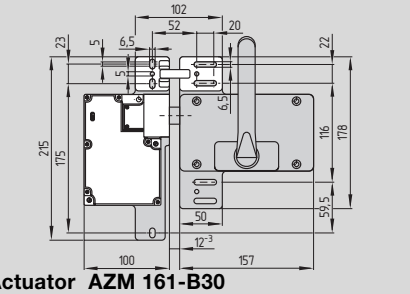


AZM 161-B6-2177 with centering guide

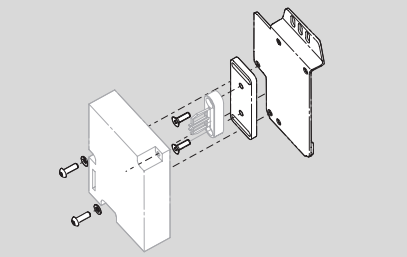
System components



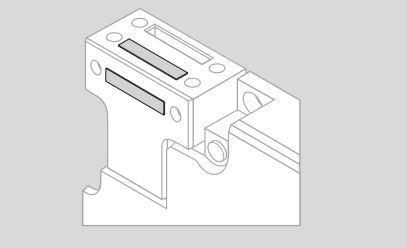
Straight actuator AZM 161-B1F



Actuator AZM 161-B30



Mounting set MS AZM 161



Slot sealing plug AZM 161

Note

The contacts 51-52 and 63-64 are actuated when the solenoid A1-A2 is energised or de-energised.
Contact 51-52 must be integrated in the safety circuit.
Circuit diagrams show de-energised condition with actuator inserted (0 in switch travel diagram).

Interlocks with power to lock principle may only be used in special cases after a thorough evaluation of the accident risk, since the guarding device can immediately be opened on failure of the electrical power supply or when the main switch is opened.

Ordering details

Straight actuator	**AZM 161-B1**
Straight actuator	**AZM 161-B1E**
Flexible actuator with centering guide	**AZM 161-B6** **AZM 161-B6-2177**

Ordering details

Straight actuator	**AZM 161-B1F**
Actuator with or without emergency handle	**AZM 161-B30**

A detailed product description can be found in the „Safety door handle system STS“ brochure.

Mounting set	**MS AZM 161**
Slot sealing plug AZM 161	**1145379**
Tamperproof screws with unidirectional slots (without drawing)	
M5 x 12	**1135338**
M5 x 16	**1135339**
M5 x 20	**1135340**
(Quantity 2 pcs)	