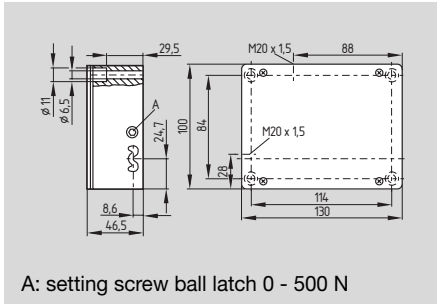


Solenoid interlocks

AZM 415



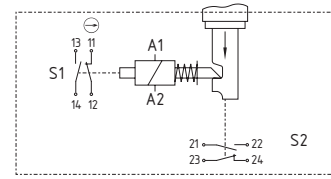
- Metal enclosure
- Two switches in one enclosure
- Problem-free opening of stressed doors by means of bell-crank system
- Robust design
- Long life
- High holding force 3500 N
- Adjustable ball latch to 500 N
- Various manual and emergency releases available
- Power to unlock/power to lock principle
- 2 cable entries M20 x 1.5
- EEx version available

Technical data

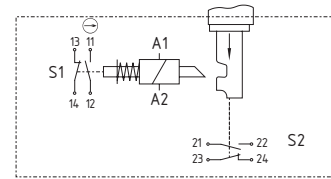
| | |
|----------------------------------|--|
| Standards: | IEC/EN 60947-5-1 BG-GS-ET-19 |
| Enclosure: | light-alloy die-cast, enamel finish |
| Actuator and locking bolt: | zinc-plated metal / aluminium |
| Protection class: | IP 54 ordering suffix F: IP 67 to EN 60529 |
| Contact material: | silver |
| Contact type: | change-over contact with double break, type Zb or 2 NC contacts, with galvanically separated contact bridges |
| Switching system: | ⊖ IEC 60947-5-1 slow action, NC contacts with positive break |
| Termination: | screw terminals |
| Cable section: | max. 2.5 mm ² (incl. conductor ferrules) |
| Cable entry: | 2 x M20 x 1.5 |
| U _{imp} : | 4 kV |
| U _i : | 250 V |
| I _{the} : | 6 A |
| Utilisation category: | AC-15 |
| I _e /U _e : | 4 A / 230 VAC |
| Max. fuse rating: | 6 A gL/gG D-fuse |
| Positive break travel: | 5 mm |
| Positive break force: | min. 15 N (depending on the setting of the ball latch) |
| Magnet: | 100% ED |
| U _s : | 12 VDC 24 VAC/DC 110 VAC, 50/60 Hz 230 VAC, 50/60 Hz |
| Power consumption: | max. 10 W |
| Ambient temperature: | - 25 °C ... + 50 °C |
| Mechanical life: | > 1 million operations |
| F _{max} : | 3500 N |
| Latching force: | 0 - 500 N (adjustable) |

Contact variants

Power to unlock
2 NO
2 NC



Power to lock
2 NO
2 NC



Approvals



Ordering details

AZM 415 -22①pk②③-④-⑤

| No. | Replace | Description |
|-----|---------|---|
| ① | x | Protection class IP 54 |
| | z | Protection class IP 67 |
| ② | | Power to unlock |
| | a | Power to lock |
| ③ | | Without manual release |
| | E | Manual release: Using triangular key |
| | F | Using triangular key (secured with locking screw) |
| | RS | With key |
| | T | Emergency exit using latched pushbutton |
| | NS | Emergency release using lock button |

Ordering details

| No. | Replace | Description |
|-----|-----------|----------------------|
| ④ | 12 VDC | Us 12 VDC |
| | 24 VAC/DC | Us 24 VAC/DC |
| | 110 VAC | Us 110 VAC |
| | 230 VAC | Us 230 VAC |
| ⑤ | 1637 | Gold-plated contacts |

Note

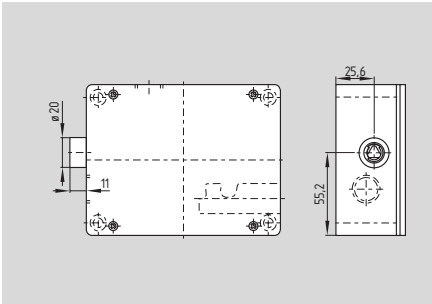
Contact symbols shown for the closed condition of the guard device. The contacts 11-12 and 13-14 are actuated when the solenoid A1-A2 is energised or de-energised. Contact 11-12 must be integrated in the safety circuit.

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.

Actuators and connector plugs must be ordered separately.

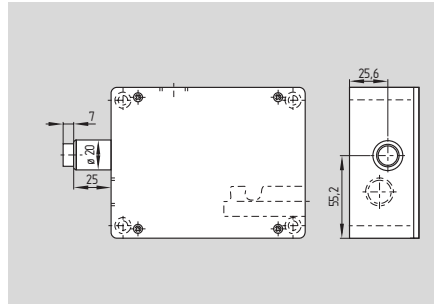
Solenoid interlocks

AZM 415-22xpkE



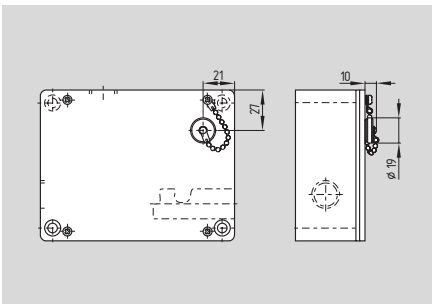
- Manual release
- Manual release by means of M5 triangular key
- M5 triangular key, available as accessory
- For maintenance, installation, etc.
- Only used on units with power to unlock principle

AZM 415-22xpkNS



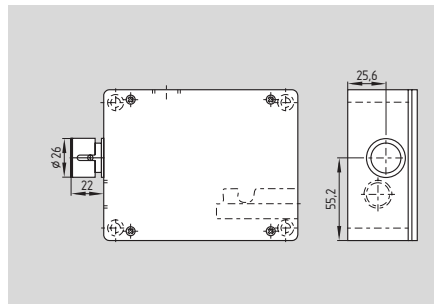
- Emergency release
- Emergency release is used where an „inadvertently locked-in“ person must leave a dangerous, already interlocked area
- Release by pressing in the lock button
- Resetting can only be carried out by authorized personnel using key
- In unlocked position the guard device is protected against unintended closing

AZM 415-22zpkF



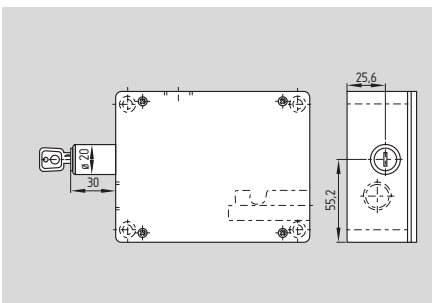
- Manual release
- Release by means of M5 triangular key
After removing the sealing screw, manual release can be carried out using a M5 triangular key
- M5 triangular key, available as accessory
- A chain secures the sealing plug against loss
- Only used on units with power to unlock principle

AZM 415-22xpkT



- Emergency exit
- The emergency release is used where an intervention in an already locked hazardous area is required
- Escape release by pressing the red push button
- Reset is carried out by pressing the latching pin
- In unlocked position the guard device is protected against unintended closing

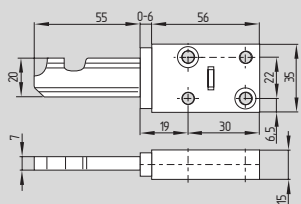
AZM 415-22xpkRS



- Manual release
- Release by means of cylinder lock
- Resetting can only be carried out by authorized personnel using key
- Only used on units with power to unlock principle
- In unlocked position the guard device is protected against unintended closing

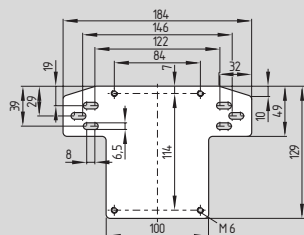
Solenoid interlocks

System components

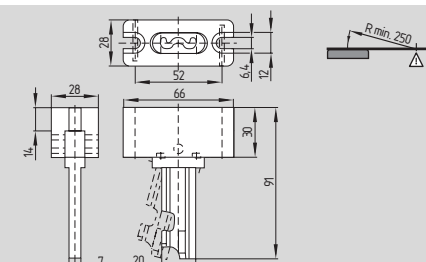


Straight actuator AZM 415-B1

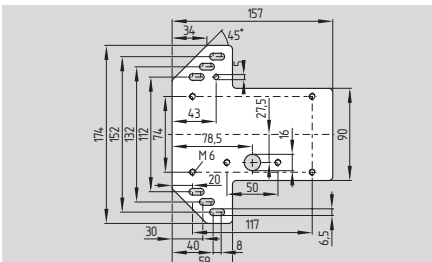
System components



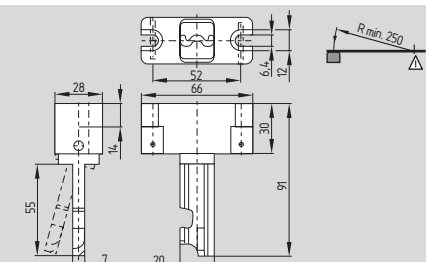
Mounting plate MP AZM 415-22



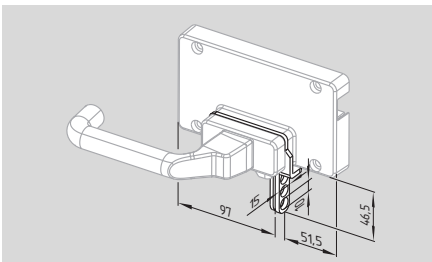
Flexible actuator AZM 415-B2



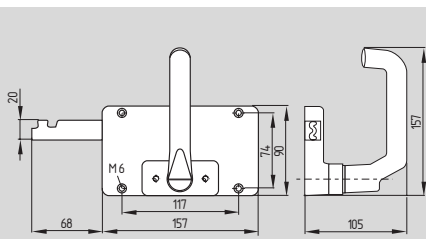
Mounting plate MP AZ/AZM 415-B30



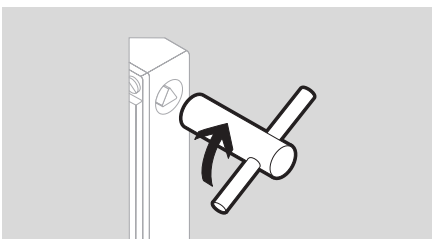
Flexible actuator AZM 415-B3



Lockout tag SZ 415-1/-2



Actuator AZM 415-B30



Triangular key M5

Ordering details

Straight actuator **AZ/AZM 415-B1**
 Flexible actuator **AZ/AZM 415-B2**
 Flexible actuator **AZ/AZM 415-B3**

Actuator with or without emergency handle **AZ/AZM 415-B30**

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

Ordering details

Mounting plate **MP AZM 415-22**
 Mounting plate **MP AZ/AZM 415-B30**
 Lockout tag **SZ 415-1/-2**
 Triangular key M5 **1100887**