### Technical data

- **Standards:** IEC/EN 60947-5-1
- **Enclosure:** light-alloy die-cast, enamel finish
- **Actuator and locking bolt:** zinc-plated metal / aluminium
- **Protection class:** IP 54
- **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 mm² (incl. conductor ferrules)
- **Cable entry:** 2 x M20 x 1.5
- **Uimp:** 4 kV
- **Uc:** 250 V
- **Ic:** 6 A
- **Utilisation category:** AC-15
- **Max. fuse rating:** 6 A Gl/G D-fuse
- **Positive break travel:** 5 mm
- **Positive break force:** min. 15 N (depending on the setting of the ball latch)
- **Magnet:** 100% ED
- **Ue:** 12 VDC
- **Ue:** 24 VAC/DC
- **Ue:** 110 VAC, 50/60 Hz
- **Ue:** 230 VAC, 50/60 Hz
- **Power consumption:** max. 10 W
- **Ambient temperature:** – 25 °C … + 50 °C
- **Mechanical life:** > 1 million operations
- **Fmax:** 3500 N
- **Latching force:** 0 - 500 N (adjustable)

### Contact variants

#### Power to unlock
- 2 NO
- 2 NC

#### Power to lock
- 2 NO
- 2 NC

### Contact symbols

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

<table>
<thead>
<tr>
<th>Model</th>
<th>Release Type</th>
<th>Description</th>
</tr>
</thead>
</table>
| 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 415-22xpkT | Emergency exit                | • 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 415-22xpkF | Emergency release             | • Emergency 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 |
| AZM 415-22xpkRS| Emergency release             | • Emergency release by means of M5 triangular key  
• 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 415-22xpkNS**

- 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
Solenoid interlocks

System components

<table>
<thead>
<tr>
<th>Component</th>
<th>Diagram</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight actuator AZM 415-B1</td>
<td><img src="image1.png" alt="Straight actuator AZM 415-B1" /></td>
</tr>
<tr>
<td>Flexible actuator AZM 415-B2</td>
<td><img src="image2.png" alt="Flexible actuator AZM 415-B2" /></td>
</tr>
<tr>
<td>Flexible actuator AZM 415-B3</td>
<td><img src="image3.png" alt="Flexible actuator AZM 415-B3" /></td>
</tr>
<tr>
<td>Lockout tag SZ 415-1/-2</td>
<td><img src="image4.png" alt="Lockout tag SZ 415-1/-2" /></td>
</tr>
<tr>
<td>Triangular key M5</td>
<td><img src="image5.png" alt="Triangular key M5" /></td>
</tr>
</tbody>
</table>

System components

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<tr>
<td>Mounting plate MP AZM 415-22</td>
<td><img src="image6.png" alt="Mounting plate MP AZM 415-22" /></td>
</tr>
<tr>
<td>Mounting plate MP AZM 415-B30</td>
<td><img src="image7.png" alt="Mounting plate MP AZM 415-B30" /></td>
</tr>
</tbody>
</table>

Ordering details

<table>
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<tr>
<th>Component</th>
<th>Code</th>
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<tr>
<td>Straight actuator</td>
<td>AZ/AZM 415-B1</td>
</tr>
<tr>
<td>Flexible actuator</td>
<td>AZ/AZM 415-B2</td>
</tr>
<tr>
<td>Flexible actuator</td>
<td>AZ/AZM 415-B3</td>
</tr>
<tr>
<td>Actuator with or without</td>
<td>AZ/AZM 415-B30</td>
</tr>
<tr>
<td>emergency handle</td>
<td></td>
</tr>
</tbody>
</table>

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