Non-contact safety switches .......................... 506
Safety switches .......................................... 513
Solenoid, gate and rope switches ................. 516
BNS260 – Compact magnetic safety switch

BNS260 coded magnetic safety switches are designed for use in machinery which needs a constant stop cycle for human intervention of the machine cycle.

### Features
- 1 NC/1 NO (anti-valent switching) or 2 NC contacts
- For left or right opening guards
- Compact size
- Concealed mounting possible
- No mechanical wear
- Insensitive to transverse misalignment
- LED indication

<table>
<thead>
<tr>
<th>Mission Time</th>
<th>20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bistable value</td>
<td>25 million</td>
</tr>
</tbody>
</table>

### Technical specification
- **Contacts**
  - 1 NC/1 NO Left hand
  - 1 NC/1 NO Right hand
  - 2 NC Left hand
  - 2 NC Right hand

### Cable Connection

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Guards</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NC/1 NO</td>
<td>Left hand</td>
<td>BNS260-11/01ZG-L</td>
<td>£58.46</td>
</tr>
<tr>
<td>1 NC/1 NO</td>
<td>Right hand</td>
<td>BNS260-11/01ZG-R</td>
<td>£58.46</td>
</tr>
<tr>
<td>2 NC</td>
<td>Left hand</td>
<td>BNS260-02/01ZG-L</td>
<td>£58.46</td>
</tr>
<tr>
<td>2 NC</td>
<td>Right hand</td>
<td>BNS260-02/01ZG-R</td>
<td>£58.46</td>
</tr>
</tbody>
</table>

### Plug Connection

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Guards</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NC/1 NO</td>
<td>Left hand</td>
<td>BNS260-11/01ZG-ST-L</td>
<td>£66.54</td>
</tr>
<tr>
<td>1 NC/1 NO</td>
<td>Right hand</td>
<td>BNS260-11/01ZG-ST-R</td>
<td>£66.54</td>
</tr>
<tr>
<td>2 NC</td>
<td>Left hand</td>
<td>BNS260-02/01ZG-ST-L</td>
<td>£56.11</td>
</tr>
<tr>
<td>2 NC</td>
<td>Right hand</td>
<td>BNS260-02/01ZG-ST-R</td>
<td>£56.11</td>
</tr>
</tbody>
</table>

### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuator</td>
<td>BPS260-1</td>
<td>£6.56</td>
</tr>
<tr>
<td>Actuator – 90º fixing</td>
<td>BPS260-2</td>
<td>£6.56</td>
</tr>
<tr>
<td>Cable with M8, 6-pin plug, 5m</td>
<td>101206011</td>
<td>£23.95</td>
</tr>
</tbody>
</table>

### RSS260 – Electronic coded safety switches

The RSS260 is a RFID safety sensor designed for applications in safety circuits and is used to monitor the position of moveable safety guards, hinged or sliding doors.

### Features
- High protection against tampering through RFID technology
- Compact, subtle and elegant design
- Easy installation without additional angles
- Universal application through different targets for typical installation situations
- Repeated universal or individual coding
- Preservation of safety levels and diagnostic capability even when connected in series
- For left or right opening guards

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard coding</td>
<td>RSS260-D-ST</td>
<td>£86.91</td>
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<tr>
<td>Individual coding with teach</td>
<td>RSS260-I2-D-ST</td>
<td>£124.97</td>
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### Actuators

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sliding door actuator</td>
<td>RST16-1</td>
<td>£14.16</td>
</tr>
<tr>
<td>Plexiglass door actuator</td>
<td>RST-U-2</td>
<td>£14.16</td>
</tr>
<tr>
<td>Swivel door frame actuator</td>
<td>RST260-1</td>
<td>£14.16</td>
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### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable with M8, 8-pin connector, 2m</td>
<td>A-K8P-M8-S-G-2M-BK-2-X-A-4</td>
<td>£24.24</td>
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<tr>
<td>Cable with M8, 8-pin connector, 5m</td>
<td>A-K8P-M8-S-G-5M-BK-2-X-A-4</td>
<td>£32.24</td>
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</table>
RSS16 – Electronic coded safety switches

The RSS16 safety sensor is based on the AZ16 classic switch. This versatile construction is now available as a non-contact system using RFID technology, suitable for the most demanding safety applications.

The non-contact operation provides a high tolerance to door misalignment and a latching sensor option is available with a 60N locking force to hold the door in position.

### Features
- Encoding level "high" according to ISO 14119 with an individual RFID code
- Three encoding options for demand-protection against manipulation
- Three actuating directions
- Door stop with magnetic latching function
- Connection terminal or plug connection

### Technical specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Sensing distance</td>
<td>. . . . . . . . . . . . . . . . . . 15mm</td>
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<tr>
<td>Supply requirements</td>
<td>24V d.c., 2.1A</td>
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<tr>
<td>Switching capacity</td>
<td>24V d.c., 1A</td>
</tr>
<tr>
<td>Number of inputs</td>
<td>. . . . . . . . . . . . . . . . . . 2</td>
</tr>
<tr>
<td>Number of outputs</td>
<td>2 x OSSD, 1 x diagnostic</td>
</tr>
<tr>
<td>Serial diagnostics</td>
<td>. . . . . . . . . . . . . . . . . . Yes</td>
</tr>
<tr>
<td>Latching option</td>
<td>. . . . . . . . . . . . . . . . . . . . . . . . . . 40N front holding force</td>
</tr>
<tr>
<td>Connection</td>
<td>. . . . . . . . . . . . . . . . . . . Screw terminal/M12, 8-pin</td>
</tr>
<tr>
<td>Ambient temperature</td>
<td>. . . . . . . . . . . . . . . . . . -25 to +70ºC</td>
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<tr>
<td>Housing material</td>
<td>. . . . . . . . . . . . . . . . . . Thermoplastic</td>
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<tr>
<td>Protection</td>
<td>. . . . . . . . . . . . . . . . . . . . . . . . . . IP65/IP67</td>
</tr>
<tr>
<td>Dimensions</td>
<td>. . . . . . . . . . . . . . . . . . . . . . . . . . h91 x w52 x d30mm</td>
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</table>

### Description

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latch function, M12 connection</td>
<td>RSS16-D-R-ST8H</td>
<td>£125.13</td>
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<tr>
<td>Individual code, M12 connection</td>
<td>RSS16-I2-D-ST8H</td>
<td>£146.39</td>
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<tr>
<td>Latch function, screw terminal</td>
<td>RSS16-D-R-SK</td>
<td>£125.13</td>
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<tr>
<td>Screw terminal</td>
<td>RSS16-D-SK</td>
<td>£108.61</td>
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<tr>
<td>Individual code latch, M12 connection</td>
<td>RSS16-I2-D-R-ST8H</td>
<td>£146.39</td>
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<tr>
<td>M12 connection</td>
<td>RSS16-D-ST8H</td>
<td>£122.78</td>
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<tr>
<td>Individual code screw terminal</td>
<td>RSS16-I2-D-R-SK</td>
<td>£153.46</td>
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### Actuators

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sliding door actuator without latching</td>
<td>RST16-1</td>
<td>£14.16</td>
</tr>
<tr>
<td>Sliding door actuator with latching</td>
<td>RST16-1-R</td>
<td>£18.89</td>
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### Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable with M12 8-pin connector, 2.5m</td>
<td>A-K8P-M12-S-G-2.5M-BK-2-X-A-4-69</td>
<td>£37.88</td>
</tr>
<tr>
<td>Cable with M12, 8-pin connector, 5m</td>
<td>A-K8P-M12-S-G-5M-BK-2-X-A-4-69</td>
<td>£31.59</td>
</tr>
</tbody>
</table>

### Would you like to place your orders online?
We can help with that ...

[www.lcautomation.com](http://www.lcautomation.com)
BNS40S – IP69K magnetic safety switches for hygienic applications

Features
- Stainless steel enclosure
- Suitable for food processing industry
- Concealed mounting possible
- Long life
- No mechanical wear
- Insensitive to transverse misalignment
- Easy to clean through concealed threaded holes at the rear

Technical specification
- Active area: Side
- Contacts: 1NO/1NC
- Ensured switch distance ON: 8mm
- Ensured switch distance OFF: 18mm
- Switch frequency: max. 5Hz
- Switching voltage: max. 24V d.c.
- Switching current: max. 10mA
- Switching capacity: max. 240mW
- Connection: 6 core 1m cable
- Protection: IP69K
- Dimensions: h27 x w88 x d14.5mm
- Mission Time: 20 years
- B10d value: 25 million

Description | Order Code | List Price
--- | --- | ---
Magnetic safety switch | BNS40S-12Z | £97.98
Magnetic safety switch with LED | BNS40S-12ZG | £103.22
Actuator (stainless steel) – mounting level | BPS40S-1 | £24.49
Actuator (stainless steel) – 90° attached to sensor | BPS40S-2 | £24.49

With concealed threaded holes on reverse

Description | Order Code | List Price
--- | --- | ---
Magnetic safety switch with concealed holes | BNS40S-12Z-C | £97.88
Magnetic safety switch with LED and concealed holes | BNS40S-12ZG-C | £103.22
Actuator (stainless steel) – mounting level | BPS40S-1-C | £24.49
Actuator (stainless steel) – 90° attached to sensor | BPS40S-2-C | £24.49

ATEX explosion protection technical specification

Categories for gases: ATEX gas ex-protection, Cat. 3G
Zones for gases: 2

Categories for dusts: ATEX dust ex-protection, Cat. 3D
Zones for dusts: 22

Certified

Description | Order Code | List Price
--- | --- | ---
Magnetic safety switch with concealed holes | EX-BNS40S-12Z-C | £157.83
Magnetic safety switch with concealed holes, 5m cable | EX-BNS40S-12Z-C-5M | £173.60
Actuator (stainless steel) – mounting level | BPS40S-1-C | £24.49
Actuator (stainless steel) – 90° attached to sensor | BPS40S-2-C | £24.49

See pages 486-488

Call Blackburn – 01254 685900 or Chippenham – 01249 460099
RE1/RE2 – Magnetic safety switches

Features
- Response range of up to 7mm (RE1) 9mm (RE2)
- Just one safety switch in conjunction with a suitable safety module makes it possible to solve applications up to PLe and Cat. 4 (EN ISO 13849)
- Direct connection to the safe control solution eliminates any additional wiring and reduces installation time
- Long service life due to durable and low-maintenance design
- Space-saving mounting due to compact housing design
- High level of machine availability due to high tolerances for door misalignment
- LED status indicator (RE27)
- Includes actuator

Technical specification
- PFHd ............. $2.5 \times 10^{-8}$ (EN ISO 13849)
- Enclosure rating ................. IP 67
- Ambient temperature ....... -20° to +60 °C
- Shock resistance ................. 30g, 1 ms (EN 60947-5-3)
- Vibration resistance ....... 10 to 55Hz, 1 mm (EN 60947-5-3)
- Type of output ............. Reed contacts

RE1

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Connection</th>
<th>Safe Switch on</th>
<th>Safe Switch off</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NO/1 NC</td>
<td>5m cable</td>
<td>3mm</td>
<td>12mm</td>
<td>RE11-SA05</td>
<td>£34.74</td>
</tr>
<tr>
<td>1 NO/1 NC</td>
<td>M8 plug, 4 pin</td>
<td>3mm</td>
<td>12mm</td>
<td>RE11-SAC</td>
<td>£38.78</td>
</tr>
<tr>
<td>2 NO</td>
<td>5m cable</td>
<td>7mm</td>
<td>20mm</td>
<td>RE13-SA05</td>
<td>£35.02</td>
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<tr>
<td>2 NO</td>
<td>M8 plug, 4 pin</td>
<td>7mm</td>
<td>20mm</td>
<td>RE13-SAC</td>
<td>£38.76</td>
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</table>

RE2

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Connection</th>
<th>Safe Switch on</th>
<th>Safe Switch off</th>
<th>Status Display</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 NO/1 NC</td>
<td>5m cable</td>
<td>6mm</td>
<td>31mm</td>
<td>—</td>
<td>RE21-SA05</td>
<td>£32.85</td>
</tr>
<tr>
<td>1 NO/1 NC</td>
<td>M8 plug, 4 pin</td>
<td>6mm</td>
<td>31mm</td>
<td>—</td>
<td>RE21-SAC</td>
<td>£34.28</td>
</tr>
<tr>
<td>3 NO</td>
<td>5m cable</td>
<td>9mm</td>
<td>20mm</td>
<td>●</td>
<td>RE27-SA05L</td>
<td>£41.14</td>
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<tr>
<td>3 NO</td>
<td>10m cable</td>
<td>9mm</td>
<td>20mm</td>
<td>●</td>
<td>RE27-SA10L</td>
<td>£47.59</td>
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Connecting cables

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5m M8 4 pin female straight connector</td>
<td>2095889</td>
<td>£9.44</td>
</tr>
<tr>
<td>5m M8 4 pin female right angle connector</td>
<td>2095963</td>
<td>£9.44</td>
</tr>
<tr>
<td>10m M8 4 pin female straight connector</td>
<td>2095890</td>
<td>£13.00</td>
</tr>
<tr>
<td>10m M8 4 pin female right angle connector</td>
<td>2095964</td>
<td>£13.00</td>
</tr>
</tbody>
</table>

Do you need Technical Support?

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Call and speak to one of our technical support engineers for free expert technical advice

Blackburn - 01254 685900

Check latest prices and stock availability @ www.lcautomation.com
The STR1 transponder safety switch has monitored semi-conductor outputs (OSSDs) and can be safely connected either individually or in series.

It can be used for applications where a high level of manipulation protection is required. The STR1 is available with three codes. Universally coded sensors accept all actuators. An actuator must be taught into both the uniquely coded and permanently coded variants, this is the only actuator that the STR1 then accepts.

The sensor has three active sensor surfaces. The actuator comes in three different sizes. This allows the STR1 to offer maximum mounting flexibility.

**Features**

- High level of flexibility when mounting the sensor and actuator
- Reduced need for storage, as one sensor is suitable for a wide range of different applications
- High level of manipulation protection due to individually coded actuator
- High level of machine availability due to large door offset tolerance and high level of shock and vibration resistance
- Economical solution due to series connection of up to 30 sensors
- Fast diagnosis via LED status indicator
- Long product service life due to low-wastage and low-maintenance configuration

**Technical specification**

- **Coding**: Low or high (EN ISO 13849)
- **Safe switch off distance**: Up to 28mm
- **Active sensor surfaces**: Up to 28mm
- **Response time**: 40ms
- **Protection**: IP67
- **Ambient temperature**: -10 to +70°C

<table>
<thead>
<tr>
<th>Coding</th>
<th>Safe switch off distance</th>
<th>Active sensor surfaces</th>
<th>Response time</th>
<th>Protection</th>
<th>Ambient temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low or high</td>
<td>Up to 28mm</td>
<td>Up to 28mm</td>
<td>40ms</td>
<td>IP67</td>
<td>-10 to +70°C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actuator</th>
<th>Coding</th>
<th>Connection</th>
<th>Cable</th>
<th>Cascadable</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>Universal</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SASM0AC5</td>
<td>£83.22</td>
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<tr>
<td>Standard</td>
<td>Universal</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SASM0AC8</td>
<td>£90.70</td>
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<tr>
<td>Standard</td>
<td>Universal</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SASM03P5</td>
<td>£90.70</td>
</tr>
<tr>
<td>Standard</td>
<td>Permanent</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SASF0AC5</td>
<td>£104.72</td>
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<td>Permanent</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
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<td>STR1-SASF0AC8</td>
<td>£112.20</td>
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<tr>
<td>Standard</td>
<td>Permanent</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SASF03P5</td>
<td>£112.20</td>
</tr>
<tr>
<td>Flat</td>
<td>Universal</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAFM0AZ5</td>
<td>£90.70</td>
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<tr>
<td>Flat</td>
<td>Universal</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAFM0AC8</td>
<td>£90.70</td>
</tr>
<tr>
<td>Flat</td>
<td>Universal</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SAFM03P5</td>
<td>£90.70</td>
</tr>
<tr>
<td>Flat</td>
<td>Permanent</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAFF0AC5</td>
<td>£112.20</td>
</tr>
<tr>
<td>Flat</td>
<td>Permanent</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAFF0AC8</td>
<td>£112.20</td>
</tr>
<tr>
<td>Flat</td>
<td>Permanent</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SAFF03P5</td>
<td>£112.20</td>
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<tr>
<td>Mini</td>
<td>Universal</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
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<td>STR1-SAMM0AC5</td>
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</tr>
<tr>
<td>Mini</td>
<td>Universal</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAMM0AC8</td>
<td>£90.70</td>
</tr>
<tr>
<td>Mini</td>
<td>Universal</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SAMM03P5</td>
<td>£90.70</td>
</tr>
<tr>
<td>Mini</td>
<td>Permanent</td>
<td>M12, 5-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAMF0AC5</td>
<td>£112.20</td>
</tr>
<tr>
<td>Mini</td>
<td>Permanent</td>
<td>M12, 8-pin</td>
<td>0.2m</td>
<td>—</td>
<td>STR1-SAMF0AC8</td>
<td>£112.20</td>
</tr>
<tr>
<td>Mini</td>
<td>Permanent</td>
<td>Cable, 5 wire</td>
<td>3m</td>
<td>—</td>
<td>STR1-SAMF03P5</td>
<td>£112.20</td>
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**Connecting cables**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2m PUR cable with M12 5 pin female straight connector, unshielded</td>
<td>2095617</td>
<td>£9.26</td>
</tr>
<tr>
<td>5m PUR cable with M12 5 pin female straight connector, unshielded</td>
<td>2095618</td>
<td>£14.77</td>
</tr>
<tr>
<td>10m PUR cable with M12 5 pin female straight connector, unshielded</td>
<td>2095734</td>
<td>£48.06</td>
</tr>
<tr>
<td>2m PVC cable with M12 8 pin female straight connector, shielded</td>
<td>2096244</td>
<td>£28.42</td>
</tr>
<tr>
<td>5m PVC cable with M12 8 pin female straight connector, shielded</td>
<td>2096245</td>
<td>£39.18</td>
</tr>
<tr>
<td>10m PVC cable with M12 8 pin female straight connector, shielded</td>
<td>2096356</td>
<td>£54.32</td>
</tr>
<tr>
<td>30m PVC cable with M12 8 pin female straight connector, shielded</td>
<td>2096357</td>
<td>£93.13</td>
</tr>
<tr>
<td>T-connector for safe series connection</td>
<td>5325889</td>
<td>£33.01</td>
</tr>
</tbody>
</table>
IN4000 Direct – Non-contact inductive safety switch

The IN4000 Direct is a non-contact, inductive safety switch. It has an integrated evaluation unit that is activated by metal, so it does not need a separate coded actuator.

Due to the non-contact form of operation, it is straightforward to adjust and install. It also has increased resistance to shock and vibration.

**Features**
- Two OSSD safety outputs for direct connection of sensors to a single safety controller
- Response range of up to 15 mm
- Fast diagnostics via LED status indicator
- Easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards

**Technical specification**
- PFHd ............ $2.5 \times 10^{-9}$ (EN ISO 13849)
- Enclosure rating ......... IP 67 (EN 60529)
- Type of output ............. Semiconductor (OSSD)
- Safe outputs .................. 2
- Safe switch on .................. 15 mm
- Installation type ............. Non-flush
- Dimensions ............ $h40 \times w40 \times d66$ mm

**Accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rectangular inductive sensor with M12 connector</td>
<td>IN40-E0101K</td>
<td>£198.90</td>
</tr>
</tbody>
</table>

IN30000 Direct
Cylindrical non-contact inductive safety switch

The IN3000 Direct non-contact safety switch is activated by metal and therefore doesn’t need a separate actuator.

It can be connected via two outputs directly to a suitable electronic evaluation system such as a safe control solution. Its small design makes integration into the machine design possible and combines the benefits of a small housing with easy and direct evaluation.

**Features**
- Direct connection to safe control solution possible
- Response range of up to 15 mm
- LED status indicator
- M12 plug connector
- Easy to clean, making them suitable for contaminated areas or environments with strict hygiene standards

**Technical specification**
- PFHd ............ $1.0 \times 10^{-7}$ (EN ISO 13849)
- Type of output ............. Semiconductor
- Safe outputs .................. 2
- Installation type ............. Non-flush
- Ambient temperature ........ $-25^\circ$ to $+70^\circ$C

**Accessories**

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mounting bracket, M12 thread</td>
<td>BEF-WN-M12</td>
<td>£2.42</td>
</tr>
<tr>
<td>Mounting bracket, M18 thread</td>
<td>BEF-WN-M18</td>
<td>£2.42</td>
</tr>
<tr>
<td>Mounting bracket, M30 thread</td>
<td>BEF-WN-M30</td>
<td>£2.42</td>
</tr>
<tr>
<td>5m PVC cable with female connector</td>
<td>2096235</td>
<td>£9.44</td>
</tr>
<tr>
<td>10m PVC cable with female connector</td>
<td>2096236</td>
<td>£13.79</td>
</tr>
</tbody>
</table>
RSS and CSS switches use advanced circuit technology for functional safety applications. Up to 31 devices can be connected in series (daisy chain) and still meet the highest safety level to EN13849-1.

Each switch has a monitoring system, so if a fault condition appears there is no loss of safety. The switch can also send a signal to a control system either by separate inputs or via a series connected diagnostic system.

The main benefit of these products is they do not allow any single channel faults to disrupt any operational cycle.

In a conventional series connected system, a single channel fault could result in an unnecessary component change because they are not easy to detect. Recycling of the safety circuit can also make the problem disappear until the next fault occurs.

Schmersal’s CSS technology prevents these faults ever occurring.

### Common features
- Electronic contact-free, coded system
- Misaligned actuation possible
- High repeat accuracy of the switching points
- Can be connected in series, maximum length of the sensor chain is 200m
- Supply voltage 24V d.c.
- 2 short-circuit proof PN P safety outputs. No special safety monitor required
- Integral cross short, wire breakage and external voltage monitoring of the safety cables up to the control cabinet, eliminates single channel faults
- 2 safety and 1 diagnostic outputs

### Technical specification
- **Supply voltage**: 24V d.c.
- **Electrical connection**: M12 8 pole plug
- **Safety outputs**: 2 PN P short circuit proof safety outputs
- **Supply voltage**: 24V d.c.
- **Safery output current**: RSS36 0.25A
- **CSS8 0.5A
- **Diagnostic outputs**: 1 x PN P
- **Diagnostic output current**: 0.05A
- **Inputs**: 2 safety inputs for series wiring
- **Diagnostic display**: RSS36
  - Green LED: Supply voltage
  - Red LED: Error
  - Yellow LED: Switching condition
- **CSS8**: 1 x multicoloured LED

### Common Features
- **EN 954-1 Category**: Cat 4
- **EN ISO 13849-1 Performance Level**: PLe
- **EN 62061 SIL Claim**: SIL CL 3
- **Mission Time**: 20 years
- **EN 954-1 Category**: Cat 4
- **EN ISO 13849-1 Performance Level**: PLe
- **EN 62061 SIL Claim**: SIL CL 3
- **Mission Time**: 20 years

### RSS36 – RFID electronic safety switch

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>RFID electronic safety switch – M12</td>
<td>RSS36-D-ST</td>
<td>£124.24</td>
</tr>
<tr>
<td>Actuator</td>
<td>RST36-1</td>
<td>£25.21</td>
</tr>
<tr>
<td>RFID electronic safety switch, latching – M12</td>
<td>RSS36-D-R-ST</td>
<td>£141.81</td>
</tr>
<tr>
<td>Actuator</td>
<td>RST36-1-R</td>
<td>£55.40</td>
</tr>
</tbody>
</table>

### CSS180 - M18 safety switch

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series connection – M12</td>
<td>CSS8-180-2P-D-M-ST</td>
<td>£373.04</td>
</tr>
<tr>
<td>End of line connection – M12</td>
<td>CSS8-180-2P-D-E-LST</td>
<td>£181.15</td>
</tr>
<tr>
<td>Actuator</td>
<td>CST180-1</td>
<td>£13.93</td>
</tr>
</tbody>
</table>
GNI-3S – Magnetic interlock switches

The Tapeswitch GNI-3 magnetic interlock provides a low-cost solution for guarding personnel access into dangerous areas. This makes it ideal for use on guard doors and perimeter gates.

The moulded ABS enclosure combines high resistance to industrial contaminants with an IP67 protection rating which allows for power cleaning or even immersion.

Features
- Easy installation
- Non-contact operation
- Compact, rugged design
- IP67 protection rating
- Zero maintenance
- High tolerance to misalignment

Technical specification
- Interlock contacts: 2 NO
- Interlock contact max. rating: 24V d.c./500mA resistive
- Internal fuse rating: 500mA
- Auxiliary contacts: 1 NC
- Auxiliary contact max. rating: 500mA resistive
- Operating temperature: -10°C to +55°C
- Construction: Red ABS, resin filled
- Operating distance: 18mm (front) 9mm (side)

Magnetic interlock switch with 5m lead GNI-3S £64.07
Magnetic interlock switch with M12 plug GNI-3S-QD £81.53
Replacement Magnet MAGNET-FOR-GNI3 £22.00

AZ16 – Safety switch with separate actuator

The AZ16 has 2 x NC contacts for safe monitoring. There is also a version with an additional 1 x NO contact which allows auxiliary feedback to non-safety systems.

Contacts are disconnected by a positive force which gives a high level of safety.

Features
- Thermoplastic enclosure
- Double-insulated
- High level of contact reliability with low voltages and currents
- M20 cable entry with gland
- IP67 protection rating

Technical specification
- Latching force: 30N
- Positive break force: 20N
- Positive break travel: 8mm
- Switching principle: Creep circuit element
- Contact ratings: AC-15 4A 230V a.c.
- DC-13 4A 24V d.c.
- Protection rating: IP67
- Dimensions: h90 x w52 x d30mm

AZ16 safety switch 2 NC AZ16-02ZVRK-M20 £23.25
AZ16 safety switch 2 NC/1 NO AZ16-12ZVRK-M20 £26.92
Standard actuator AZ15/16-B1 £6.75
Flexible actuator for very small actuating radii AZ15/16-B2 £8.43
Small – 90º actuator AZ15/16-B3 £8.43
AZ17 – Compact safety switch with separate actuator

The AZ17 is a compact safety switch for light duty applications. The switch has two actuation points which can cover up to eight mounting planes. Connection is made by a M16 cable gland. The switch has 2 x NC safety contacts for monitoring.

Features
- Thermoplastic enclosure
- Small body
- 8 actuating planes
- Double-insulated
- Patented roller system is not sensitive to dirty conditions
- M16 cable gland
- IP67 protection rating

Technical specification
- Standards: EN ISO 13849-1
- Latching force: 30N
- Positive break force: 17N
- Positive break travel: 11mm
- Design of control element: Opener (NC)
- Switching principle: Creep circuit element
- Safety contacts: 2
- Contact ratings:
  - DC-13: 4A 24V d.c.
- Protection rating: IP67
- Dimensions: h60 x w30 x d30mm

i17S – Electro-mechanical safety switch

Features
- Compact plastic housing
- Rigid or mobile actuators
- 3 x M20 x 1.5 cable entry glands
- Slow-action switching elements with 3 contacts
- IP67 enclosure rating

Technical specification
- Contact rating: 3A @ 240V a.c.
- 2A @ 24V d.c.
- No. of positive action N/C contacts: 2
- No. of N/O contacts: 1
- Retaining force: ≤12 N
- Actuation frequency: ≤7,200/h
- Actuation directions: 3
- Approach speed: ≤10m/min
- B10d value: 2 x 10^6
- EN ISO 14119: Type 2

REMINDER
Please remember that you will need to purchase the actuator
i110P – Electro-mechanical safety position switches

**Features**
- Standardised metal housing
- Roller plunger with stainless steel roller
- M20 x 1.5 cable entry gland
- Slow-action or snap-action switching elements with up to four contacts

**Technical specification**
- Contact rating: 3A @ 240V a.c., 3A @ 24V d.c.
- No. of positive action:
  - N/C contacts: 1/2/3 (depending on type)
- No. of N/O contacts: 1/2 (depending on type)
- Sw itching principle: Slow action switching element/snap action switching element (depending on type)
- Type of actuator: Roller plunger
- Ambient temperature: -25 to +80ºC
- Protection: IP66

<table>
<thead>
<tr>
<th>No. of Positive Action</th>
<th>N/C Contacts</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>i110-PA123</td>
<td>£32.56</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>i110-PA223</td>
<td>£33.71</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>i110-PA313</td>
<td>£33.71</td>
</tr>
</tbody>
</table>

**Accessories**
- M20 cable gland, black

i10P – Electro-mechanical safety switch

**Features**
- Standardised plastic housing
- Roller plunger with plastic roller
- M20 x 1.5 cable entry gland
- Slow-action switching elements with three contacts

**Technical specification**
- Contact rating: 3A @ 240V a.c., 3A @ 24V d.c.
- No. of positive action:
  - N/C contacts: 2
- No. of N/O contacts: 1
- Sw itching principle: Slow action switching element
- Type of actuator: Roller plunger
- Ambient temperature: -25 to +80ºC
- Protection: IP66

<table>
<thead>
<tr>
<th>No. of Positive Action</th>
<th>N/C Contacts</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>i10-PA213</td>
<td>£21.34</td>
</tr>
</tbody>
</table>

**Accessories**
- M20 cable gland, black

Check latest prices and stock availability @ www.lcautomation.com
i10 Lock – Solenoid safety interlock switch

**Technical specification**
- Solenoid supply ................. 24V d.c.
- Power consumption ................. 8W
- Contact ratings
- Cable entry units ................. 4A @ 240V a.c.
- 4A @ 24V d.c.
- M12 8-pin connector units 1A @ 240V a.c.
- 1A @ 24V d.c.
- No. of positive action N/C solenoid monitoring contacts ....... 2/1 (depending on type)
- No. of N/O solenoid monitoring contacts ....... 1/0 (depending on type)
- No. of positive actions N/C door monitoring contacts ............ 0/1/2 (depending on type)
- No. of door monitoring contacts
  - N/O ............ 0/1 (depending on type)
  - N/C ............ 1/0 (depending on type)

**Features**
- Narrow plastic housing
- Rigid or mobile actuators
- Available with M20 x 1.5 cable entry glands or Flexi Loop compatible M12 plug connector (depending on variant)
- Locked by spring force and magnetic force
- Lock and door monitoring

**Solenoid Monitoring Contacts**

<table>
<thead>
<tr>
<th>Locking Type</th>
<th>Positive Action N/C</th>
<th>Positive Action N/O</th>
<th>Connection Type</th>
<th>Order Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mechanical</td>
<td>2</td>
<td>1</td>
<td>Cable entry</td>
<td>i10-M0233</td>
<td>£137.47</td>
</tr>
<tr>
<td>Mechanical</td>
<td>2</td>
<td>0</td>
<td>Cable entry</td>
<td>i10-M0453</td>
<td>£143.21</td>
</tr>
<tr>
<td>Electrical</td>
<td>2</td>
<td>2</td>
<td>Connector</td>
<td>i10-M0454</td>
<td>£184.81</td>
</tr>
<tr>
<td>Electrical</td>
<td>2</td>
<td>1</td>
<td>Connector</td>
<td>i10-E0233</td>
<td>£137.47</td>
</tr>
</tbody>
</table>

**Door Monitoring**

<table>
<thead>
<tr>
<th></th>
<th>Positive Action N/C</th>
<th>N/O</th>
<th>Positive Action N/C</th>
<th>N/O</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

**Actuators**

<table>
<thead>
<tr>
<th>Design</th>
<th>Actuator Option</th>
<th>Method of Actuation</th>
<th>Minimum Door Radius</th>
<th>Order Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>Rubber mounted</td>
<td>—</td>
<td>≥1000mm</td>
<td>IE10-S2</td>
<td>£5.23</td>
</tr>
<tr>
<td>Angled</td>
<td>Rigid</td>
<td>With overtravel</td>
<td>≥1000mm</td>
<td>IE10-A4</td>
<td>£4.27</td>
</tr>
<tr>
<td>Radial</td>
<td>Semi flexible</td>
<td>Door hinged at top/bottom</td>
<td>≥90mm</td>
<td>IE10-R1</td>
<td>£11.64</td>
</tr>
<tr>
<td>Radial</td>
<td>Semi flexible</td>
<td>Door hinged at left/right</td>
<td>≥100mm</td>
<td>IE10-R2</td>
<td>£9.63</td>
</tr>
</tbody>
</table>

**Plug connectors and cables**

<table>
<thead>
<tr>
<th>Size of Cable Gland</th>
<th>Direction of Cable Outlet</th>
<th>Cable Material</th>
<th>Cable Length</th>
<th>Order Code</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>M12, 8-pin</td>
<td>Straight</td>
<td>PVC</td>
<td>5m</td>
<td>2096244</td>
<td>£28.42</td>
</tr>
<tr>
<td>M12, 8-pin</td>
<td>Straight</td>
<td>PVC</td>
<td>10m</td>
<td>2096245</td>
<td>£39.18</td>
</tr>
<tr>
<td>M12, 8-pin</td>
<td>Straight</td>
<td>PVC</td>
<td>15m</td>
<td>2096356</td>
<td>£54.32</td>
</tr>
<tr>
<td>M12, 8-pin</td>
<td>Straight</td>
<td>PVC</td>
<td>30m</td>
<td>2096357</td>
<td>£93.13</td>
</tr>
<tr>
<td>M20 cable gland</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>5309164</td>
<td>£1.17</td>
</tr>
</tbody>
</table>
i14 Lock – Solenoid safety interlock switch

**Technical specification**

- **Contact rating**: 3A @ 240V a.c.
  2A @ 24V d.c.
- **Solenoid supply**: 24V d.c. 7W
- **No. of positive action N/C solenoid monitoring contacts**: 2
- **No. of N/O solenoid monitoring contacts**: 0/1 (depending on type)
- **No. of positive action N/C door monitoring contacts**: 0
- **No. of door monitoring contacts**:
  - N/O: 0
  - N/C: 0
- **Locking type**: Mechanical
- **Locking force max**: ≤1,200N (EN ISO 14119)
- **Ambient temperature**: -20 to +60ºC
- **Protection**: IP65
- **Dimensions**: h120 x w58 x d35mm

**Features**

- Compact plastic housing
- M20 x 1.5 cable entry gland
- Locked with spring force
- Lock monitoring
- LED locking indicator
- Mechanical unlocking mechanism on three sides

**Actuator**

<table>
<thead>
<tr>
<th>Design</th>
<th>Actuator Option</th>
<th>Method of Actuation</th>
<th>Minimum Door Radius</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight</td>
<td>Rigid</td>
<td>Catch &amp; retainer set for increased retaining force</td>
<td>160mm</td>
<td>iE14-S1</td>
<td>£11.18</td>
</tr>
</tbody>
</table>

**REMINDER**

Please remember that you will need to purchase the actuator.

Check latest prices and stock availability @ www.lcautomation.com
i200 Lock – Solenoid safety interlock switch

Features
- Compact plastic housing
- Stainless steel entry for actuator
- Either rigid, mobile or bold actuators available
- 3 x M20 x 1.5 cable entry gland
- Locked by spring force and magnetic force
- Lock and door monitoring
- LED locking indicator

Technical specification
- Contact rating: 3A @ 240V a.c.
  2A @ 24V d.c.
- Solenoid supply: 24V d.c. 7W
- No. of positive action N/C solenoid monitoring contacts: 1/2 (depending on type)
- No. of N/O solenoid monitoring contacts: 0/1 (depending on type)
- No. of positive action N/C door monitoring contacts: 2
- No. of door monitoring contacts: N/O 1
  N/C 0
- Locking type: Electrical/mechanical
- Locking force max: ≤2,000N* (EN ISO 14119)
- Ambient temperature: -20 to +60ºC
- Protection: IP65
- Dimensions: h126 x w93 x d37mm
  *only in combination with the delivered fixing screws, otherwise 1500N

REMINDER
Please remember that you will need to purchase the actuator

<table>
<thead>
<tr>
<th>Locking Type</th>
<th>Solenoid Monitoring Contacts</th>
<th>Door Monitoring</th>
<th>Connection Type</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive Action N/C</td>
<td>N/O</td>
<td>Positive Action N/C</td>
<td>N/O</td>
<td>Cable entry</td>
</tr>
<tr>
<td>Mechanical</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>i200-M0413</td>
</tr>
<tr>
<td>Mechanical</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>i200-E0323</td>
</tr>
<tr>
<td>Electrical</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

| Accessories |
|--------------|------------------|----------------|----------------|------------|------------|
| Description | Actuator Option | Minimum Door Radius | Order Code | List Price |
| Straight actuator | Rigid | 160mm | i200-S1 | £6.47 |
| Radial actuator | Fully flexible | 80mm | i200-F1 | £14.94 |
| Bolt actuator straight | Rigid | 175mm | i200-B1 | £114.97 |
| M20 cable gland, black | — | — | 5309164 | £1.17 |
AZM161 – Heavy duty solenoid interlock switch

The AZM161 is designed for installations such as machines or robot cells where access to the hazard is to be controlled until a safe condition exists on the machine. The device can be unlocked when power is applied to the solenoid. This signal can be initiated by a timer or a standstill monitoring device. The power to unlock version is a common mode of operation for this application.

Power to lock versions are also available, please call our head office sales department on 01254 685900 for further details.

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 NC/1 NO actuator, 2 NC/1 NO solenoid</td>
<td>AZM161SK-12/12RK-024</td>
<td>£171.54</td>
</tr>
<tr>
<td>Straight actuator</td>
<td>AZM161-B1</td>
<td>£8.44</td>
</tr>
<tr>
<td>Flexible actuator</td>
<td>AZM161-B6</td>
<td>£23.62</td>
</tr>
</tbody>
</table>

Struggling to find what you need?

We can help with that ...

Blackburn 01254 685900  Chippenham 01249 460099

Check latest prices and stock availability @ www.lcautomation.com
AZM170 – Solenoid interlock switch with separate actuator

Features
- Thermoplastic enclosure
- 1 cable entry M20 x 1.5
- 1000N holding force
- Screw connection
- Manual release
- 2 actuator contacts

Power to lock versions are also available, please call our head office sales department on 01254 685900 for further details.

The AZM170 is a safety solenoid interlocking switch which has been designed for machines that need to restrict access to a hazard during normal operation.

The power to unlock version is a common mode of operation for this application.

AZM415 – Heavy duty solenoid interlock switch

Features
- Metal enclosure
- 3500N holding force
- 2 x M20 cable entries
- 2 switches in one enclosure
- Problem-free opening of stressed doors by means of bell-crank system
- 4 normally closed contacts

The AZM415 has a rugged, enamel coated enclosure and is ideal for use in harsh industrial environments with an IP67 protection rating.

See pages 486-488 for recommended SRB series safety relays.

Technical specification
Latching force .................. 30N
Positive break force ............. 8.5N
Positive break travel ............. 11mm
Switching principle .............. Creep circuit element
Clamping force Fmax ............. 1000N
Power consumption .............. max. 10W
Actuator contacts .............. 2 NC or 1 NC/1 NO
Solenoïd contact .............. 1 NC power to unlock
Contact ratings
DC-13 .................. 4A 24V d.c.
Protection rating .............. IP67
Dimensions .............. h90 x w84 x d30mm

Mission Time 20 years
B10d value 2 million
AZM201 – Solenoid interlock

Features
- Locking principles – power to unlock or lock available
- Thermoplastic enclosure
- RFID-technology for needs-based protection against tampering
- Max. length of the sensor chain 200m
- Coding level “High” according to ISO 14119
- Suitable for SIL3 applications
- Self-monitoring series-wiring of 31 sensors
- 3 LEDs to show operating conditions
- Sensor technology permits an offset between actuator and interlock of ±5mm vertically and ±3mm horizontally
- Suitable for hinged and sliding guards
- Intelligent diagnosis
- Manual release

Technical specification
- Latching force: 30N
- Clamping force: 2000N
- Mechanical life: ≥1,000,000 operations
- Protection: IP67
- Electrical connection: M12 8 pin plug
- Outputs: 2 safety outputs p-type, 1 diagnostic output p-type
- Inputs: 2 safety inputs for series wiring
- Diagnostic display: 3 LEDs for condition status
- Ambient temperature: -25 to +60°C
- Dimensions: h220 x w40 x d50mm

Interlock switch - order code options

<table>
<thead>
<tr>
<th>Type</th>
<th>Monitoring</th>
<th>Coding</th>
<th>Connection</th>
<th>Output options</th>
<th>Electrical options</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZM201</td>
<td>Z Solenoid</td>
<td>I1 Individual</td>
<td>ST2 M12 8 pin plug</td>
<td>1P2PW 1 diagnostic and 2 safety outputs, p-type</td>
<td>A Power to unlock</td>
</tr>
<tr>
<td></td>
<td>B Actuator</td>
<td>I2 Individual</td>
<td>CC Cage clamps</td>
<td>SD2P Serial diagnostic output and 2 safety outputs, p-type</td>
<td></td>
</tr>
</tbody>
</table>

Power to Unlock
- AZM201-Z-ST2-T-1P2PW £439.53
- AZM201-B-ST2-T-1P2PW £439.53

Power to Lock
- AZM201-B-ST2-T-1P2PW-A £439.53

Sliding door actuators

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sliding door - slides from the left</td>
<td>AZ/AZM201-B1-LT</td>
<td>£94.88</td>
</tr>
<tr>
<td>Sliding door - slides from the right</td>
<td>AZ/AZM201-B1-RT</td>
<td>£94.88</td>
</tr>
</tbody>
</table>

Emergency Exit Version
(includes emergency release mechanism)

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ/AZM201-B1-LT-P0</td>
<td>£131.27</td>
<td></td>
</tr>
<tr>
<td>AZ/AZM201-B1-RT-P0</td>
<td>£131.27</td>
<td></td>
</tr>
</tbody>
</table>

Standard door actuators

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard door with left-hand hinge</td>
<td>AZ/AZM201-B30-L-TA-G1</td>
<td>£145.41</td>
</tr>
<tr>
<td>Standard door with right-hand hinge</td>
<td>AZ/AZM201-B30-R-TA-G1</td>
<td>£145.41</td>
</tr>
</tbody>
</table>

Emergency Exit Version
(includes override handle on reverse of actuator)

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZ/AZM201-B30-L-TA-G1-P1</td>
<td>£217.16</td>
<td></td>
</tr>
<tr>
<td>AZ/AZM201-B30-R-TA-G1-P1</td>
<td>£217.16</td>
<td></td>
</tr>
</tbody>
</table>
AZM300 – Electronic coded solenoid interlock

Solenoid interlock monitoring
The safety outputs of the AZM300Z solenoid interlock are enabled when the safety guard is closed and the solenoid interlock is locked.

Actuator monitoring
For applications, where process protection is required, the AZM300B version can be used. The safety outputs of this model are enabled when the safety guard is closed. With this device locking is not required for operation.

Features
- Hygiene compliant design, resistant to many cleaning agents
- Protection class IP69k
- Power to lock or power to unlock
- Actuator or solenoid-interlock monitoring
- Series wiring without reduction of the safety level
- Switchable latching force
- LED diagnostics
- RFID coded sensor
- Large actuator tolerances

Technical specification
- Latching force: 25N/50N
- Clamping force: 1000N Fmax
- Protection: IP69K
- Mechanical life: 1,000,000 operations
- Supply voltage: 24V d.c. -15%/+10%
- Electrical connection: M12 8 pin plug
- Outputs: 2 safety outputs p-type, 1 diagnostic output p-type
- Inputs: 2 safety inputs for series wiring
- Diagnostic display: 3 LEDs for condition status
- Ambient temperature: 0 to +60ºC
- Dimensions: h100 x w85 x d35mm

<table>
<thead>
<tr>
<th>EN 954-1 Category</th>
<th>Order Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 4</td>
<td>AZM300B-ST-1P2P £364.49</td>
</tr>
<tr>
<td>Cat 4</td>
<td>AZM300Z-ST-1P2P £364.49</td>
</tr>
</tbody>
</table>

Power to Unlock
- Actuator monitoring: AZM300B-ST-1P2P £364.49
- Solenoid monitoring: AZM300Z-ST-1P2P £364.49

Power to Lock
- Actuator monitoring: AZM300B-ST-1P2P £364.49
- Solenoid monitoring: AZM300Z-ST-1P2P £364.49

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight actuator, 3 directions of actuation</td>
<td>AZ/AZM300-B1</td>
<td>£47.37</td>
</tr>
<tr>
<td>Cable with M12, 8-pin connector, 5m</td>
<td>A-K8P-M12-S-G-5M-BK-1-XA-4-69-VA</td>
<td>£38.19</td>
</tr>
<tr>
<td>Cable with M12, 8-pin connector, 10m</td>
<td>A-K8P-M12-S-G-10M-BK-1-XA-4-69-VA</td>
<td>£61.53</td>
</tr>
</tbody>
</table>
AZM400 – Electronic coded solenoid interlock

The AZM400 safety locking devices include a safety solenoid interlock with bolt locking. Consisting of a locking unit with sensor technology, a motor driven bolt, and a coded RFID actuator.

There are two versions, an electric manual release (actuator is released when voltage is applied to the release circuit) or an emergency exit version.

Features
- Bistable, motor-driven system
- Holding force 10,000N
- Release possible against lateral forces up to 300N
- Individually coded version with coding level high according to ISO 14119
- Two channel input signal of the guard locking function
- High tolerance to door misalignment
- 1 diagnostic output plus 2 safety outputs
- Emergency exit or electric manual release
- Assembly set for simple installation on 40mm aluminium profiles

Technical specification
- Latching force ........... 300N
- Clamping force .......... 10,000N
- Supply requirements ..... 24V d.c., 0.6A
- Switching capacity ....... 24V d.c., 0.25A
- Inputs .................. 2
- Outputs .............. 2 x OSSD, 1 x diagnostic
- Serial diagnostics ....... Yes
- Connection ............. M12, 8-pin
- Protection ............. IP66/IP67
- Ambient temperature .... -25 to +70ºC
- Housing material ......... Metal
- Dimensions ....... h157 x w78 x d47mm

Emergency Exit Version
(includes emergency release mechanism)

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solenoid interlock, standard coding</td>
<td>AZM400Z-ST-1P2P</td>
<td>£454.50</td>
</tr>
<tr>
<td>Solenoid interlock, individual coding, multiple teaching</td>
<td>AZM400Z-ST-I2-1P2P</td>
<td>£466.23</td>
</tr>
</tbody>
</table>

Accessories

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight actuator</td>
<td>AZM400-B1</td>
<td>£61.98</td>
</tr>
<tr>
<td>Mounting bracket</td>
<td>MS-AZM400</td>
<td>£31.67</td>
</tr>
</tbody>
</table>

Cables

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable with M12 8-pin connector, 2.5m</td>
<td>A-K8P-M12-5G-2.5M-BK-2-XA-4-69</td>
<td>£37.88</td>
</tr>
<tr>
<td>Cable with M12, 8-pin connector, 5m</td>
<td>A-K8P-M12-5G-5M-BK-2-XA-4-69</td>
<td>£31.59</td>
</tr>
</tbody>
</table>

PSENmech – Solenoid interlock switch

The mechanical safety switch PSENmech is suitable for safe monitoring and locking of movable guards which must not be opened until a safe state has been achieved (such as the hazardous moving parts coming to a standstill).

Features
- 8 actuation directions (4 horizontal, 4 vertical) provide flexible installation
- Standard actuator is used where alignment is easier
- Radius actuator version for more difficult alignment
- Long service life due to robust design and high mechanical load capacity
- Wide operating temperature range for use in a variety of applications
- Housing is dust-tight, insensitive to dirt and waterproof

Power to release with auxiliary release
(complete unit including actuator)

<table>
<thead>
<tr>
<th>Supply Voltage</th>
<th>Standard Actuator</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V a.c/d.c.</td>
<td>570000 PSENme 1S/1AS</td>
<td>£103.88</td>
<td></td>
</tr>
<tr>
<td>110-230V a.c.</td>
<td>570006 PSENme 1.2S/1AS</td>
<td>£148.29</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supply Voltage</th>
<th>Radius Actuator</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V a.c/d.c.</td>
<td>570001 PSENme 1S/1AR</td>
<td>£132.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>570007 PSENme 1.2S/1AR</td>
<td>£170.23</td>
<td></td>
</tr>
</tbody>
</table>

Power to lock
(complete unit including actuator)

<table>
<thead>
<tr>
<th>Supply Voltage</th>
<th>Standard Actuator</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V a.c/d.c.</td>
<td>570004 PSENme 1M/1AS</td>
<td>£109.65</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Supply Voltage</th>
<th>Radius Actuator</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>24V a.c/d.c.</td>
<td>570005 PSENme 1M/1AR</td>
<td>£139.46</td>
<td></td>
</tr>
</tbody>
</table>
ZQ700 – Thermoplastic pull wire
E-stop switches

Features
- One tension force for cable lengths of either 5m or 10m
- Thermoplastic enclosure
- Double insulated
- One side operation
- Release push button
- Position indicator
- Large wiring compartment
- Twisting of towing eye not possible
- Wire pull and breakage detection
- Requires fixing kit, see below

Technical specification
- Number of contacts: 1 NO/1 NC (1 safety, 1 auxiliary) or 2 NC (2 safety)
- Contact rating: 4A @ 24V d.c. or 230V a.c.
- Emergency stop button: Not fitted
- Cable entry: M20
- Connection type: Screw terminals
- Ambient temperature: -25 to +70ºC
- Maximum wire length: 10m

Fixing kits
- 1 x wire rope
- 2 x wire clamps
- 1 x wire thimble
- 1 x eyebolt
- 1 x duplex wire clamp
- Red PVC sheath

Fixing kits contain:
- 1 x wire rope
- 2 x wire clamps
- 1 x wire thimble
- 1 x eyebolt
- 1 x duplex wire clamp
- Red PVC sheath

See next page for ZQ900 – Metal pull wire E-stop switches

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www.lcautomation.com
ZQ900 – Metal pull wire E-stop switches

Features
- One tension force for cable lengths from 5m to 50m
- Robust metal enclosure
- 3 x M20 cable entries
- One side operation
- Release push button
- Position indicator
- Large wiring compartment
- Twisting of towing eye not possible
- External watertight collar
- Wire pull and breakage detection
- Requires fixing kit, see below

Technical specification
Number of contacts
- 1 x NC positive break safety
- 1 x NO auxiliary
Contact rating
- 1A @ 24V d.c.
- 4A 230V a.c.
Cable entry
- 3 x M20
Connection type
- Screw terminals
Ambient temperature
- -25 to +70°C
Maximum wire length
- 50m

ATEX switches
Explosion protected category for dusts
- ATEX dust ex-protection, Cat. 3D
Explosion protection zones for dust
- Zone 22

Fixing kits
- 1 x wire rope
- 2 x wire clamps
- 1 x wire thimble
- 1 x eyebolt
- 1 x duplex wire clamp
- Red PVC sheath

Fixing kits contain:

<table>
<thead>
<tr>
<th>Description</th>
<th>Order Code</th>
<th>List Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixing kit 5 – 5m wire rope</td>
<td>WIRE ROPE COMPLETE FIXING KIT-5m</td>
<td>£28.69</td>
</tr>
<tr>
<td>Fixing kit 10 – 10m wire rope</td>
<td>WIRE ROPE COMPLETE FIXING KIT-10m</td>
<td>£38.71</td>
</tr>
<tr>
<td>Fixing kit 15 – 15m wire rope</td>
<td>WIRE ROPE COMPLETE FIXING KIT-15m</td>
<td>£46.70</td>
</tr>
<tr>
<td>Fixing kit 30 – 30m wire rope</td>
<td>WIRE ROPE COMPLETE FIXING KIT-30m</td>
<td>£63.73</td>
</tr>
<tr>
<td>Fixing kit 50 – 50m wire rope</td>
<td>WIRE ROPE COMPLETE FIXING KIT-50m</td>
<td>£93.43</td>
</tr>
</tbody>
</table>

See pages 486-488 for recommended SRB series safety relays