Control Devices
Position switches

8070/1-2-HV  Art. No. 131847

- Interchangeable contact element with snap-action contact, slow-action contact or overlapping slow-action contact
- Various actuators possible, all of which can be repositioned by 4 x 90°
- Suitable for safety circuits in accordance with IEC/EN 60947-5-1, category 1 safety position switch, dimensions and characteristics in accordance with EN 50041

R. STAHL's 8070 series position switches are suitable for switching control and signal circuits and for safety circuits in accordance with EN 60947-5-1 in "increased safety" enclosures. The dimensions comply with EN 50047. They are able to switch different potentials, comprise an interchangeable Ex d contact element with positive-opening contacts, and are available with a variety of actuators.

Technical Data

**Explosion Protection**

<table>
<thead>
<tr>
<th>Application range (zones)</th>
<th>1</th>
<th>2</th>
<th>21</th>
<th>22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate IECEx Gas</td>
<td>IECEx PTB 06.0092</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Certificate ATEX Gas</td>
<td>PTB 01 ATEX 1053</td>
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<tr>
<td>Certificate IECEx Dust</td>
<td>IECEx PTB 06.0092</td>
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<tr>
<td>Certificate ATEX Dust</td>
<td>PTB 01 ATEX 1053</td>
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<tr>
<td>Gas explosion protection IECEx</td>
<td>Ex de IIC T6</td>
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<tr>
<td>Gas explosion protection ATEX</td>
<td>≥ II 2 G Ex de IIC T6</td>
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<td></td>
<td></td>
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<tr>
<td>Dust explosion protection IECEx</td>
<td>Ex tD A21 T80 °C</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Dust explosion protection ATEX</td>
<td>≥ II 2 D Ex tD A21 T80 °C</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

**Electrical Data**

<table>
<thead>
<tr>
<th>DC rated operational voltage</th>
<th>250 V</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC oper vol. (equal potential)</td>
<td>500 V</td>
</tr>
<tr>
<td>AC op vol. (unequal potential)</td>
<td>250 V</td>
</tr>
<tr>
<td>Rated operational current</td>
<td>10 A</td>
</tr>
<tr>
<td>Electrical service life</td>
<td>1 operating cycles</td>
</tr>
<tr>
<td>Mechanical service life</td>
<td>≥ 1 x 10⁶ operating cycles</td>
</tr>
<tr>
<td>Outdoor range</td>
<td>0 m</td>
</tr>
<tr>
<td>Data rate</td>
<td>0 kbit/s</td>
</tr>
<tr>
<td>Channel bandwidth</td>
<td>0 kHz</td>
</tr>
<tr>
<td>Actuating time</td>
<td>0</td>
</tr>
<tr>
<td>Rated surge voltage</td>
<td>0 kV</td>
</tr>
<tr>
<td>Short-circuit protection, max.</td>
<td>10 A</td>
</tr>
<tr>
<td>Tripping characteristic</td>
<td>gG</td>
</tr>
</tbody>
</table>

WebCode 8070A

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Control Devices
Position switches

8070/1-2-HV   Art. No. 131847

**Electrical Data**
- **Switching function**: Snap-action contact, With spring

**Ambient Conditions**
- **Min. ambient temperature**: -20 °C
- **Max. ambient temperature**: +50 °C
- **Ambient temperature**: -20 °C ... +50 °C

**Mechanical Data**
- **Degree of protection (IP)**: IP65
- **Enclosure material**: Polyamide, Glass fibre reinforced
- **Contact material**: Silver-nickel
- **Max. clamping range**: 13 mm
- **Min. clamping range**: 4 mm
- **Terminals**: 1 x 2.5 mm² or 2 x 1 mm²
- **Number of NCs**: 1
- **Number of NOs**: 1
- **Actuator**: Adjustable roller lever
- **Type of connection cable**: Solid
  - Finely stranded
- **Contacts**: 1 NC + 1 NO
- **Service life, min.**: 1 operating cycles
- **Enclosure colour**: Black
- **Packaging unit**: 1
- **Weight**: 0.323 kg

**Components**
- **Actuator 2**: With rotary drive head
- **Actuator 3**: Roller (moulded material)
- **Actuator 4**: Roller rod (stainless steel)
- **Cable entry**: 1 x M20 x 1.5

**Technical Drawings**

Diagram with positive opening

Nominal contact travels or angles:
- ■ = Contact closed
- □ = Contact open
- Zw = Travel for positive opening
Control Devices
Position switches

8070/1-2-HV  Art. No. 131847

Adjustable roller lever
Should the adjustable roller lever swing back from an angle exceeding 40°, the lever could cause a false signal.

V = 1.4 m/s

V = max. operation speed
→ = direction of operation

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations

Accessories and Spare Parts

<table>
<thead>
<tr>
<th>Actuator</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjustable roller lever 8070/1-0-HV</td>
<td>131818</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Cable gland</th>
<th>Art. No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8161/7-M20-1304 4 ... 13 mm², 50 pieces (delivery lot*)</td>
<td>239156</td>
</tr>
</tbody>
</table>

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.