Connection of potentiometer (optional)

**Technical data**

**DC-motor with automatic reset thermal switch**
- 12 VDC (10 – 32 V)
- 24 VDC (20 – 40 V)
- 36 VDC (30 – 50 V)

**AC-motor with automatic reset thermal switch**
- 115 VAC (102 – 130 V)
- 230 VAC (212 – 240 V)
- 3400 VAC (360 – 420 V)

**Reed switch sensor data**
- Max. power (VA)
- Max. current (A)
- Max. voltage (VDC)

**Options**
- Feedback potentiometer
- Electrically released brake
- Reed switch sensors
- Trunnion
- Pin holders
- Ultra low noise

**Pin holders**
- Normally open D535 070 / normally closed D535 071

**Lubrication**
- for life

**Protection class**
- IP67

**Part numbers**
- normally open D535 070 / normally closed D535 071

**Protection class**
- IP65 – IP65 – IP65 – – –
- IP67 – – – – – –
- IP67 –
- – – yes
- – yes
- – yes
- – yes
- – yes
- yes
- yes
- yes (set to 1.2 – 1.5 × max. dynamic load – 1 cycle at full load)
- – yes
- yes
- yes
- yes
- yes
- yes
- yes
- – yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes
- yes

CAUTION!
Always turn power off before working on the actuator or the wiring.

Installation manual for LA1, LA5, LA10, LA14, LA24, FA14 and IA14 actuators

POTENTIOMETER DATA
<table>
<thead>
<tr>
<th>Stroke (cm)</th>
<th>R (kΩ/cm)</th>
<th>Min. stroke (cm)</th>
<th>Max. stroke (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>940</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td>3 – 4</td>
<td>470</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 – 6</td>
<td>315</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>1 – 3</td>
<td>390</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>4 – 5</td>
<td>200</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>6 – 10</td>
<td>100</td>
<td>23</td>
<td>25</td>
</tr>
</tbody>
</table>

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</tr>
</thead>
<tbody>
<tr>
<td>1 – 2</td>
<td>115</td>
<td>0.9</td>
<td>1</td>
</tr>
<tr>
<td>3 – 4</td>
<td>50</td>
<td>1.3</td>
<td>1.5</td>
</tr>
<tr>
<td>5 – 6</td>
<td>25</td>
<td>2.3</td>
<td>2.5</td>
</tr>
</tbody>
</table>

We recommend to always install fuse or thermal breaker between motor and power supply to protect actuator, wiring and other items.

Tollo Linear AB
Box 9053, SE-291 09 Kristianstad, Sweden
Tel. +46 (0)44-246700, Fax +46 (0)44-244085
**Basic mounting rules**

- **Only mount actuator in these points!**
- **Trunnion holders (option):**
  - LA1, LA5, LA10, LA14, LA24
  - LA5, LA10
  - LA14, LA24
- **Pin holders (option):**
  - LA1, LA5, LA10, LA14, LA24
- **Restraining torque:**
  - Torque needed to prevent extension hole from rotating.
- **Foot mount (standard):**
  - LA1, LA5, LA10, LA14, LA24
- **Motor flange:**
  - LA1, LA5, LA10, LA14, LA24

**Motor flange**

- Drill hole and make key way in the coupling to fit your motor shaft. The coupling accepts holes between ø10 – 19 mm.

**Foot mount (standard)**

- Drill hole and make key way in the coupling to fit your motor shaft. The coupling accepts holes between ø10 – 19 mm.

**Wire cross section**

- **Only use solid pins!**
- Correct tightening torque = 44 Nm.

**Connection of motor**

- **230 and 115 Vac supply without brake (A22-xxxxxMxxxxNxxxx), A22-xxxx-xxxxNxxxx, A**
- **3 x 400 Vac supply without brake (A42-xxxxxMxxxxNxxxx, AA42-xxxxxMxxxxNxxxx)**
- **230 and 115 Vac supply with brake (A22-xxxxxMxxxxBxxxx), A22-xxxx-xxxxBxxxx, A**
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