SRD03

**Articulated robots**

**Compact single-axis robots**

**TRANSERVO**

**Single-axis robots**

**FLIP-X**

**Linear motor single-axis robots**

**XY-X**

**SCARA robots**

**YK-X**

**Pick & place robots**

**YP-X**

**CLEAN CONTROLLER INFORMATION**

**Linear conveyor modules**

**LCM100**

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### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Option</th>
<th>Brake</th>
<th>Origin position</th>
<th>Bracket plate</th>
<th>Stroke</th>
<th>Cable length</th>
<th>Robot positioner</th>
<th>Robot driver</th>
<th>Robot positioner</th>
<th>Robot driver</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRD03</td>
<td>Lead</td>
<td>42</td>
<td>Step motor</td>
<td>12</td>
<td>Vertical</td>
<td>265</td>
<td>20m</td>
<td>S2</td>
<td>TS-S2</td>
<td>TS-S2</td>
<td>TS-S2</td>
</tr>
</tbody>
</table>

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### Basic specifications

- **Motor**: 42 Step motor
- **Resolution (Pulse/rotation)**: 20480
- **Repeatability (mm)**: +/-0.02
- **Deceleration mechanism**: Ball screw #8 (Class C10)
- **Ball screw lead (mm)**: 12
- **Maximum speed** (mm/sec): 500
- **Maximum payload (kg)**: 10
- **Max. pressing force (N)**: 75
- **Stroke (mm)**: 50 to 200 (50 pitch)
- **Lost motion**: 0.1mm or less
- **Effective stroke**
- **Max. outside dimension of body cross-section (mm)**: W48 x H56.5
- **Overall length (mm)**: Vertical 236.5, Horizontal 276.5
- **Cable length (m)**: 500
- **Effective stroke+78**: Lead 6
- **Effective stroke+236.5**: Lead 12
- **Effective stroke+276.5**: Vertical

Note 1. See P.129 for grease gun nozzles.
Note 2. If changing from the origin position at the time of purchase, the machine reference amount must be reset. For details, refer to the manual.

### Speed vs. payload

- **Horizontal**: Lead 6, Lead 12
- **Vertical**: Lead 6, Lead 12

**Controller**

- **Operation method**: TS-S2, TS-SH
- **Ordering method**: TS-SD, Pulse train control

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**Running life**

5000 km on models other than shown below.
Running life of only the model shown below becomes shorter than 5000 km depending on the payload, so check the running life curve.

**Controller**

- **Operation method**: TS-S2, TS-SH
- **Ordering method**: TS-SD, Pulse train control

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**SRD03 Straight model**

- **Effective stroke+78**: Lead 6
- **Effective stroke+236.5**: Lead 12
- **Effective stroke+276.5**: Vertical

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**Note**

1. It is possible to apply only the axial load.
2. Use the external guide together so that any radial load is not applied to the rod.
3. When running the cables, secure cables so that any load is not applied to them.
4. Effective screw thread depth 5.
5. The cable's minimum bend radius is R30.

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**Caption**

- **Controller**: TS-S2, TS-SH
- **Ordering method**: TS-SD, Pulse train control
SRD03  Space-saving model  (motor installed on top)  

**SRD03**

**Effective stroke**

<table>
<thead>
<tr>
<th>L1</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>161</td>
<td>211</td>
<td>261</td>
<td>311</td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>K</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
</tr>
</tbody>
</table>

**Weight (kg)**

| L1  | 1.7 | 1.9 | 2.1 | 2.3 |

**Notes:**

1. It is possible to apply only the axial load.
2. Use the external guide together so that any radial load is not applied to the rod.
3. The orientation of the width across flat part is undefined to the base surface.
4. Use the support guide together to maintain the straightness.
5. When running the cables, secure cables so that any load is not applied to them.
6. Use the support guide together to maintain the straightness.
7. Models with a brake will be 0.2kg heavier.
8. Use the support guide together to maintain the straightness.