SRD04

**Articulated robots**

**Linear conveyor modules**

**Compact single-axis robots**

**TRANSERVO Motor-less single-axis robots**

**PHASER Cartesian robots**

**XY-X**

**SCARA robots**

**YK-X**

**Pick & place robots**

**YP-X**

**CLEANCONTROLLER**

**INFORMATION**

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### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Model</th>
<th>Brake</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRD04-S</td>
<td>M40</td>
<td>SRD04-U</td>
<td>M40</td>
</tr>
</tbody>
</table>

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### Basic specifications

- **Motor**
  - 42Z Step motor

- **Resolution (Pulse/rotation)**
  - 20480

- **Maximum payload (kg)**
  - 20

- **Cable length (m)**
  - 58

- **Stroke (mm)**
  - 3.5

- **Origin position**
  - Note 2

- **Max. pressing force (N)**
  - 150

- **Overall length (mm)**
  - Stroke+263

- **Horizontal stroke (mm)**
  - Vertical stroke=263

- **Maximum outside dimension of body cross-section (mm)**
  - W48 x H58

- **Cable length (m)**
  - Standard: 1 Option: 3, 5, 10

- **Note 1**
  - The maximum speed needs to be changed in accordance with the payload. See the “Speed vs. payload” graph shown on the right.

- **Note 2**
  - For lead 2mm specifications, the origin on the non-motor side cannot be reset. For details, refer to the manual.

### Speed vs. payload

- **Horizontal Speed (mm/s)**
  - Lead 2: 20, 25, 30, 35, 40, 45, 50
  - Lead 6: 15, 20, 25, 30, 35, 40

### 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

- **Controller**
  - TS-S2
  - TS-SH
  - TS-SD
  - Pulse train control

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### SRD04 Straight model S

- **See Note 4. The robot cable is flexible and resists bending.**
- **Note 5. See P.152 for DIN rail mounting bracket.**
- **Note 6. Models with a brake will be 0.2kg heavier.**
- **Note 7. Distance to mechanical stopper.**

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### Parts list

- **Motor**
  - M40

- **Cable length (m)**
  - 58

- **Origin position**
  - Note 2

- **Max. pressing force (N)**
  - 150

- **Overall length (mm)**
  - Stroke+263

- **Horizontal stroke (mm)**
  - Vertical stroke=263

- **Maximum outside dimension of body cross-section (mm)**
  - W48 x H58

- **Cable length (m)**
  - Standard: 1 Option: 3, 5, 10

- **Note 1**
  - The maximum speed needs to be changed in accordance with the payload. See the “Speed vs. payload” graph shown on the right.

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**Controller**

- **TS-S2 > 514**
- **TS-SH > 514**
- **TS-SD > 524**
SRD04  Space-saving model (motor installed on top)  

**Option: Horizontal installation plate (foot)***

* Contents of option: Plate, 2 pcs., Nut, 12 pcs.
See our robot manuals for additional settings.

**Effective stroke**

<table>
<thead>
<tr>
<th>Effective stroke</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>162.5</td>
<td>212.5</td>
<td>262.5</td>
<td>312.5</td>
<td>362.5</td>
<td>412.5</td>
</tr>
<tr>
<td>L2</td>
<td>209.5</td>
<td>259.5</td>
<td>309.5</td>
<td>359.5</td>
<td>409.5</td>
<td>459.5</td>
</tr>
</tbody>
</table>

**Weight (kg)**

<table>
<thead>
<tr>
<th>Maximum speed for each stroke (mm/sec)</th>
<th>50</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
<th>300</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead 12</td>
<td>2.2</td>
<td>2.6</td>
<td>2.9</td>
<td>3.2</td>
<td>3.5</td>
<td>3.9</td>
</tr>
<tr>
<td>Lead 6</td>
<td>2.5</td>
<td>3.0</td>
<td>3.2</td>
<td>3.5</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Lead 2</td>
<td>80</td>
<td>220</td>
<td>310</td>
<td>400</td>
<td>490</td>
<td>580</td>
</tr>
</tbody>
</table>

Note 1. It is possible to apply only the axial load.
Use the external guide together so that any radial load is not applied to the rod.
Note 2. The orientation of the width across flat part is undefined to the base surface.

Note 3. Use the support guide together to maintain the straightness.
Note 4. When running the cables, secure cables so that any load is not applied to them.
Note 5. Remove the M4 hex. socket head cap set bolts and use them to secure the cables. (Effective screw thread depth 5)
Note 6. The cable’s minimum bend radius is R30.
Note 7. Models with a brake will be 0.2kg heavier.
Note 8. Distance to mechanical stopper.
Note 9. For lead 2mm specifications, the origin on the non-motor side cannot be set.