Articulated robots

Linear conveyor modules

Compact single-axis robots

Motor-less single-axis robots

Cartesian robots XY-X

SCARA robots YK-X

Pick & place robots YP-X

CLEAN CONTROLLER INFORMATION

Note 1. Upper robot cable (U) on models equipped with brake is a special-order item, so please consult our sales office or sales representative for assistance. (External dimensions: overall length + 20 mm)

Note 2. The robot cable is standard cable (3L/UL100), but can be changed to flexible cable. See P.614 for details on robot cable.

Note 3. See P.522 for DIN rail mounting bracket.

Note 4. Acceleration / deceleration is different depending on the Positioner or Controller or Driver.

Note 5. Select this selection when using the gateway function. For details, see P.66.

### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Lead</th>
<th>Length</th>
<th>Motor type</th>
<th>Cable entry location</th>
<th>Code</th>
<th>Driver</th>
<th>Power supply voltage</th>
<th>Power capacity</th>
<th>Regenerative unit</th>
<th>I/O selection</th>
<th>ID selection</th>
<th>Battery</th>
</tr>
</thead>
<tbody>
<tr>
<td>F17L-50</td>
<td>L+L</td>
<td>50</td>
<td>None</td>
<td>Right side</td>
<td>200</td>
<td>TSX-220</td>
<td>1000/600V/400W</td>
<td>2000W</td>
<td>None</td>
<td>No entry</td>
<td>MP/None</td>
<td>None</td>
</tr>
</tbody>
</table>

### Specifications

- **AC servo motor output (W)**: 600
- **Repeatability (mm)**: ±0.02
- **Deceleration mechanism**: Ball screw 2Q5
- **Ball screw load (mm)**: 50
- **Maximum speed (mm/sec)**: 250
- **Maximum payload (kg)**: 50
- **Rated thrust (N)**: 2204
- **Overall length (mm)**: W168 + H110
- **Cable length (m)**: Standard: 3.5 / Option: 6.10
- **Linear guide type**: 4 rows of circular arc grooves × 2 rail
- **Position detector Resolution (Pulse/Rotation)**: 16384
- **Cable entry section of main unit (mm)**: (Note 1)
- **Position detector type**: Resolvers
- **Drive (total)**: RDV-X 2

### Allowable overhang

<table>
<thead>
<tr>
<th>Positioner</th>
<th>Note 3</th>
<th>Driver</th>
<th>Note 4</th>
<th>Power capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSX-220</td>
<td>None</td>
<td>2000W</td>
<td>2000W</td>
<td></td>
</tr>
<tr>
<td>SR1-X</td>
<td>None</td>
<td>2000W</td>
<td>2000W</td>
<td></td>
</tr>
<tr>
<td>RDV-X</td>
<td>None</td>
<td>2000W</td>
<td>2000W</td>
<td></td>
</tr>
</tbody>
</table>

### Static loading moment

- **Controller**: SR1-X 220 540 514 RDV-X 528
- **Positioner**: TSX-220
- **Power-supply voltage**: Driver: Power capacity
- **Regenerative unit**: None

### F17L

- **Approx. 250 (Motor cable length)**: 293±7. When origin is on motor side
- **Effective stroke**: 182±7. When origin is on non-motor side

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**Note 1.** Positioning repeatability is in the same direction.

**Note 2.** When the stroke is longer than 1200mm, resonance of the ball screw may occur depending on the operation conditions (critical speed). In this case, reduce the speed setting on the program referring to the maximum speeds shown in the table below.

**Note 3.** Position detectors (resolvers) are common to incremental and absolute specifications. If the controller has a backup function then it will be absolute specifications.

**Note 4.** Acceleration / deceleration is different depending on the Positioner or Controller or Driver.

**Note 5.** When the stroke exceeds 1200mm, although depending on the moving range, the ball screw may resonate (critical speed). In that case, make adjustment to lower the speed on the program using the maximum speed given in the above table as a guide.