**RF02-N**  
Rotary type / Limit rotation specification

### Ordering method

<table>
<thead>
<tr>
<th>Model</th>
<th>Bearings</th>
<th>Torque</th>
<th>Cable entry location</th>
<th>Rotation direction</th>
<th>Cable length [m]</th>
</tr>
</thead>
<tbody>
<tr>
<td>RF02</td>
<td>S2</td>
<td>High</td>
<td>from the top</td>
<td>CCW</td>
<td>1</td>
</tr>
</tbody>
</table>

### Basic specifications

- **Motor**: 20 [I] Step motor  
- **Resolution (Pulse/rotation)**: 4096  
- **Repeatability (+/-0.05)**:  
- **Drive method**: Special warm gear + belt  
- **Max. speed (°/sec)**: 420  
- **Max. rotary speed (°/sec)**: 285  
- **Max. pushing torque (N-m)**: 0.22  
- **Backlash (+/-0.05)**:  
- **Max. moment of inertia (kg m²)**: 0.0015  
- **Rotation range (°)**: 310

### Moment of inertia Acceleration/deceleration

<table>
<thead>
<tr>
<th>Model</th>
<th>High rigidity</th>
<th>Standard model</th>
<th>High rigidity</th>
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<th>Standard model</th>
<th>High rigidity</th>
<th>Standard model</th>
</tr>
</thead>
<tbody>
<tr>
<td>78</td>
<td>88</td>
<td>107</td>
<td>106</td>
<td>91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Effective torque vs. speed

<table>
<thead>
<tr>
<th>Speed (°/s)</th>
<th>Torque (N m)</th>
<th>Torque (N m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0005</td>
<td>0.0015</td>
<td>0.0020</td>
</tr>
<tr>
<td>0.0025</td>
<td>0.0030</td>
<td>0.0035</td>
</tr>
<tr>
<td>0.0045</td>
<td>0.0050</td>
<td>0.0055</td>
</tr>
<tr>
<td>0.0065</td>
<td>0.0070</td>
<td>0.0075</td>
</tr>
</tbody>
</table>

### Allowable load

- **Allowable radial load (N)**: 78  
- **Allowable thrust load (N)**: 86

### Controller

- **Operation method**:  
- **Controller**:  
- **Robot positioner I/O**: 
  - Standard: 1 / Option: 3, 5, 10
- **Robot driver I/O cable**:  
  - Standard: 1 / Option: 3, 5, 10
- **Robot driver I/O**: 
  - Standard: 1 / Option: 3, 5, 10
- **Controller Operation method**:  
  - Standard: 1 / Option: 3, 5, 10
- **Robot positioner I/O**: 
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  - Standard: 1 / Option: 3, 5, 10
- **Robot positioner I/O**: 
  - Standard: 1 / Option: 3, 5, 10
- **Robot driver I/O cable**: 
  - Standard: 1 / Option: 3, 5, 10

### RF02-NN  
Limit rotation specification – Standard model

1. Table movable range by return-to-origin operation.  
2. Be careful not to interfere with the workpiece or equipment around the table.  
3. Values and characters in [ ] show those when the return-to-origin direction is changed.
RF02-N  Limit rotation specification – High rigidity model

1) Table movable range by return-to-origin operation.
   Be careful not to interfere with the workpiece or equipment around the table.
2) Return-to-origin position
3) Values and characters in [ ] show those when the return-to-origin direction is changed.

Note 1. This drawing is output under the conditions below.
   Bearing: High rigidity
   Torque: Standard/High torque

Note 2. The minimum bending radius of the motor cable is R30.

Note 3. The motor cable exit direction is only the left side.