ROTARY PART HANDLER

Product Overview

INDEXERS

Servo Positioners

GTB Series
Globoidal (Roller Gear)
Servo Positioner..................IN-SRV-1

RSD Series
Rotary Servo Drives............IN-SRV-39

Mechanical Indexers

RDM Series
Rotary Index Drive ..............IN-MCH-2

RD Series
Roller Dial Index Drive.........IN-MCH-18

E Series
Heavy-Duty Index Drive .......IN-MCH-30

RA Series
Right Angle Index Drive ........IN-MCH-42

RGD/RGS Series
Roller Gear Index Drive .......IN-MCH-52

P Series
Parallel Shaft/Flange Drive....IN-MCH-72

RNG Series
Ring Drive Dial Indexer......IN-MCH-84

OVERLOAD CLUTCHES

Overload Clutches
Output Overload.................IN-CLU-1

CUSTOM CAMS

Custom Cams
Cam Design Solutions........IN-CAM-1

CONVEYORS

Rite-Link Series
Thin-Profile.....................IN-CNV-1

Precision Link Series
Table-Top .......................IN-CNV-4

Precision Link Series
Heavy-Duty .....................IN-CNV-16

PARTS HANDLERS

LPP Series
Linear Part Handlers ..........IN-PRT-2

RPP Series
Rotary Part Handlers ..........IN-PRT-8
Features:

The CAMCO RPP Cambot® Rotary Parts Handler is designed for high precision and high capacity. This proven design can be used in a wide variety of industries including automotive, packaging and electronics among others. The RPP can be combined with other CAMCO products such as index drives and precision conveyors for a complete, automated system. The RPP is ideal for pick and place applications with features including:

- Rugged and precise cam operated mechanisms engineered for a minimum of 8000 hours of maintenance-free life.
- Hardened and ground cams drive both the lift and rotary axes.
- Preloaded precision cam followers eliminate backlash and ensure smooth movement.
- Preloaded taper roller bearings on the camshaft (Input Shaft).
- Four-point contact preloaded roller bearing on the rotary axis.
- All bearings are lubricated by an oil bath.
- One-piece lift arm.
- Ball bushings (recirculating-ball type) support the main lift shaft and turn the large output surface and ride on hardened shafts for stability and stiffness.
- Manufactured in a fully integrated application, design, manufacturing and inspection environment.

Table of Contents

<table>
<thead>
<tr>
<th>Feature</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>How to Order</td>
<td>3</td>
</tr>
<tr>
<td>300RPP</td>
<td>5</td>
</tr>
<tr>
<td>500RPP</td>
<td>7</td>
</tr>
<tr>
<td>Timing Diagrams</td>
<td>9</td>
</tr>
</tbody>
</table>

Dimensions and technical information are subject to change without notice.
How to Order

RPP Ordering Procedure
1. Model
2. Rotary Motion (degrees)
   • Oscillator or indexer
   • Oscillator: Home at X or Y
   • Indexer: CW or CCW index
3. Lift (inches)
4. Input Shaft: Side 1, Side 2 or Double Input (DI)
5. Mounting Position: 1-6

Reducer Ordering Procedure
1. Reducer Model, Ratio and Mounting Position
2. Motor Adaptor Model
3. Motor size

Input Shaft Configuration

Standard Output Sequence

Dimensions and technical information are subject to change without notice
### Gear Reducer Mounting Positions

<table>
<thead>
<tr>
<th>Mounting “A”</th>
<th>Mounting “B”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RH</strong></td>
<td><strong>LH</strong></td>
</tr>
<tr>
<td><strong>SIDE 1</strong></td>
<td><strong>SIDE 1</strong></td>
</tr>
<tr>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>E</td>
<td>F</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mounting “C”</th>
<th>Mounting “D”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RH</strong></td>
<td><strong>LH</strong></td>
</tr>
<tr>
<td><strong>SIDE 1</strong></td>
<td><strong>SIDE 1</strong></td>
</tr>
<tr>
<td>J</td>
<td>K</td>
</tr>
<tr>
<td>N</td>
<td>P</td>
</tr>
</tbody>
</table>

**OVOI** (output vertical, over input)  
**OVUI** (output vertical, under input)  
**OHOI** (output horizontal, over input)  
**OHUI** (output horizontal, under input)  
**H-S1-UP** (output horizontal, side 1 up)  
**H-S2-UP** (output horizontal, side 2 up)  

Dimensions and technical information are subject to change without notice.
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Capacity:
- Maximum Mass 68,04 kg [150 lbm]
- Maximum Inertia 4975 kg-cm² [1700 lb-in²]

* Note: These values are for speeds of less than 30 rpm, the minimum cam time for rise and rotation, and are for reference only. Each application must be reviewed and approved by CAMCO Engineering.

Features
- Standard Indexing or Oscillating Motion
- R225 Reducer (Ratios from 5:1 to 60:1) — 56C Motor Adapter and Coupling
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)

Optional Accessories
- 1 HP DC Motor
- Varipak DC Motor Control (up to 30 cpm)
### Features

- Standard Indexing or Oscillating Motion
- R225 Reducer (Ratios from 5:1 to 60:1)
  — 56C Motor Adapter and Coupling
- 1 hp AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)

### Optional Accessories

- 1 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)

### Indexing Motion

<table>
<thead>
<tr>
<th>Rotation</th>
<th>Angle A</th>
<th>Lift [mm (in)]</th>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>180°</td>
<td>0°</td>
<td>50.8 [2]</td>
<td>500RPP2H32-2H32</td>
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<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP2H32-3H32</td>
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<tr>
<td></td>
<td></td>
<td>101.6 [4]</td>
<td>500RPP2H32-4H32</td>
</tr>
<tr>
<td>120°</td>
<td>0°</td>
<td>50.8 [2]</td>
<td>500RPP3H32-2H32</td>
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<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP3H32-3H32</td>
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<td></td>
<td></td>
<td>101.6 [4]</td>
<td>500RPP3H32-4H32</td>
</tr>
<tr>
<td>90°</td>
<td>0°</td>
<td>50.8 [2]</td>
<td>500RPP4H32-2H32</td>
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<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP4H32-3H32</td>
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<td></td>
<td></td>
<td>101.6 [4]</td>
<td>500RPP4H32-4H32</td>
</tr>
<tr>
<td>60°</td>
<td>0°</td>
<td>50.8 [2]</td>
<td>500RPP6H32-2H32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP6H32-3H32</td>
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<td></td>
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<td>101.6 [4]</td>
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### Oscillating Motion

<table>
<thead>
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<th>Angle A</th>
<th>Lift [mm (in)]</th>
<th>Model</th>
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<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP120H32-3H32</td>
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<tr>
<td>90°</td>
<td>15°</td>
<td>50.8 [2]</td>
<td>500RPP90H32-2H32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>101.6 [4]</td>
<td>500RPP90H32-4H32</td>
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<tr>
<td>60°</td>
<td>0°</td>
<td>50.8 [2]</td>
<td>500RPP60H32-2H32</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76.2 [3]</td>
<td>500RPP60H32-3H32</td>
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<tr>
<td></td>
<td></td>
<td>101.6 [4]</td>
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<tr>
<td>45°</td>
<td>22.5°</td>
<td>50.8 [2]</td>
<td>500RPP45H32-2H32</td>
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<td></td>
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<td></td>
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<td>500RPP45H32-4H32</td>
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### Capacity:

<table>
<thead>
<tr>
<th>Capacity</th>
<th>Value</th>
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<tbody>
<tr>
<td>Maximum Mass</td>
<td>81.65 kg (180 lbm)</td>
</tr>
<tr>
<td>Maximum Inertia</td>
<td>9204 kg-cm² (3145 lb-in²)</td>
</tr>
</tbody>
</table>

*Note: These values are for speeds of less than 30 rpm, the minimum cam time for rise and rotation, and are for reference only. Each application must be reviewed and approved by CAMCO Engineering.*
Motion Options

- Standard starting position (home) at time 0 is at maximum rise (up) and at the X rotary position.
- The standard sequence can be mirrored in either the lift, rotary or both:
  - The mirrored lift starts in the zero elevation or down position
  - The mirrored rotary motion starts at Y.
- Custom motion times are also available – consult your Sales Agent for more information.
Motion Options

- Standard starting position (home) at time 0 is at maximum rise (up) and at the start of a counter-clockwise index (right-hand cam helix).
- The standard sequence can be mirrored in either the lift, rotary or both:
  — The mirrored lift starts in the zero elevation or down position
  — The mirrored rotary motion is a clockwise index (left-hand helix)
- Custom motion times are also available – consult your Sales Agent for more information.