INDEXERS

Servo Positioners

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

- **DSR Series**
  - Double Contact Bearing
  - HD Servo Positioner............. IN-SRV-19

- **PGM Series**
  - Parallel Gear
  - Servo Positioner................ IN-SRV-33

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

Mechanical Indexers

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

- **RA Series**
  - Right Angle Index Drive ....... IN-MCH-18

- **RD Series**
  - Roller Dial Index Drive......... IN-MCH-28

- **E Series**
  - Heavy-Duty Index Drive .......... IN-MCH-40

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

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

Mechanical Indexers (cont’d)

- **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

- **Precision Link Series**
  - Table-Top ......................... IN-CNV-2
  - Heavy-Duty ....................... IN-CNV-14
  - Thin-Profile ...................... IN-CNV-23

PARTS HANDLERS

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

- **RPP Series**
  - Rotary Part Handlers .......... IN-PRT-8
CAMCO Right Angle Index Drives are ideal for dial applications or actuation-type applications such as driving a linkage or in-line conveyor.

Fixed center distance between input and output

Hardened, ground barrel cam

Compact design requiring minimum use of floor space.

Preloaded “rib-centered” design with modified-sine motion provides smooth acceleration and deceleration with precision positioning.

Universal mounting available on RA models.

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**RA SERIES**

Right Angle Index Drive | How to Order

### Indexer Ordering Procedure

1. Model
2. Input Shaft Configuration
   - Side 1
   - Side 2
   - Double Input – DI (Standard)
3. Indexer Mounting Position: 1-6
4. Indexer Housing Mounting Holes: Side 1-6
   (more than one side can be selected)

### Reducer Ordering Procedure

1. Model
2. Ratio: 5:1, 10:1, 15:1, 20:1, 25:1, 30:1, 40:1, 50:1, 60:1
3. Motor Adapter
4. Reducer Input Shaft Extension:
   - Single Input (SE) or Double Input (DE)
5. Mounting (see diagram below)

### Input Shaft Configuration (Top View)

![Input Shaft Configuration Diagram](image-url)

**Input Shaft Rotation**

![Input Shaft Rotation Diagram](image-url)

**Relative Rotation for Right Hand Cam:**

- CW Input Side 1 CCW Output
- CCW Input Side 2 CCW Output

**NOTE:** Input can be driven in either direction

Dimensions and technical information are subject to change without notice
### RA SERIES

**Right Angle Index Drive | Indexer Mounting Position**

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

#### Side 1

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

#### Gear Reducer Mounting Positions

<table>
<thead>
<tr>
<th>Mounting “C”</th>
<th>Mounting “D”</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RH</strong></td>
<td><strong>RH</strong></td>
</tr>
<tr>
<td><strong>LH</strong></td>
<td><strong>LH</strong></td>
</tr>
</tbody>
</table>

#### Side 2

- **SIDE 2**
  - **E**
  - **F**
  - **G**
  - **H**

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Dimensions and technical information are subject to change without notice.
Dimensions and technical information are subject to change without notice.
**Output Load Capacity** (loads carried during index):

- **Radial**: 3603 N [810 lbs]
- **Thrust/Axial**: 6254 N [1406 lbs]
- **Moment**: 183 N·m [1620 in-lb]

**Accuracy**:

- ±48 arcsec / ±0.178 mm [±.0007 in] at 76.2 [3 in] Radius

**Repeatability**:

- ±12 arcsec / ± 0.051 mm [±.0002 in] at 76.2 [3 in] Radius

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**Features**

- **R180 Reducer** (ratios from 15:1 to 60:1)
  - Double Extended Worm Shaft (Input)
  - Worm Shaft Handwheel
- **Double Extended Camshaft** (Input Shaft)
- **1/3 HP AC Drive Package with Inverter Duty Motor and IM-pAC AC Drive** (up to 60 cpm)
- **Cycle Cam and Limit Switch Mounted to Camshaft**
- **Right Hand Cam**

**Optional Accessories**

- **1/3 hp DC motor**
- **R225 Reducer** (ratios from 10:1 to 60:1)
  - 1 hp DC Motor
  - 56C Motor Adapter and Coupling
- **Varipak DC Motor Control** (up to 30 cpm)
- **Output Overload Clutch Models**: 2.3F, 2.3FC, 2.3S, 2.3C, 2.3FC-SD, 2.3S-SD, 2.3C-SD
  - Available Settings (in-lb): 400, 600, 700, 850, 1000, 1300, 1800, 2000, 2300
- **Dual Cycle Cam and Limit Switch**
- **Finished cover for ceiling mount or tooling plate mounting**
- **Left Hand Cam**
- **Relief in Dwell for shot-pin applications**

---

**400RA Indexer Capacities**

<table>
<thead>
<tr>
<th>Stops</th>
<th>Index Period</th>
<th>Motion</th>
<th>(B_n) Capacity at 50 RPM N·m [in-lb]</th>
<th>Internal Inertia kg·cm² [lb-in²]</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>270</td>
<td>ms</td>
<td>180 [1591]</td>
<td>44 [15]</td>
<td>400RA4H24-270</td>
</tr>
<tr>
<td>4</td>
<td>270</td>
<td>ms</td>
<td>210 [1858]</td>
<td>44 [15]</td>
<td>400RA4H24-270</td>
</tr>
<tr>
<td>120</td>
<td>270</td>
<td>ms</td>
<td>266 [2354]</td>
<td>44 [15]</td>
<td>400RAH24-120</td>
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<tr>
<td>120</td>
<td>270</td>
<td>ms</td>
<td>177 [1568]</td>
<td>44 [15]</td>
<td>400RA12H20-120</td>
</tr>
<tr>
<td>180</td>
<td>270</td>
<td>ms</td>
<td>333 [2947]</td>
<td>44 [15]</td>
<td>400RA16H24-180 II</td>
</tr>
</tbody>
</table>

Other Motions (stops and index periods) available. Contact your DESTACO sales representative for more information.
*See table on top of page 8 for dimensions
**Features**

- R225 Reducer (ratios from 10:1 to 60:1)
  - 56C Motor Adapter and Coupling
- Double Extended Camshaft (Input Shaft)
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

**Optional Accessories**

- 1 hp DC motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch Models: 6.0F, 6.0FC, 6.0S and 6.0C, 6.0C-SD, 6.0FC-SD, 6.0S-SD
  - Available Settings (in-lb): 670, 825, 1100, 1400, 1700, 2000, 2300, 2500, 3000, 3800, 4000, 5000, 6000
- Dual Cycle Cam and Limit Switch
- Finished cover for ceiling mount or tooling plate mounting
- Left Hand Cam
- Relief in Dwell for shot-pin applications

**Output Load Capacity** (loads carried during index):
- Radial: 8834 N [1,986 lbs]
- Thrust/Axial: 10129 N [2,277 lbs]
- Moment: 785 N-m [6,951 in-lb]

**Accuracy**
- ±37 arcsec / ±0.028 mm [±.0011 in] at 152.4 [6 in] Radius

**Repeatability**
- ±9 arcsec / ± 0.008 mm [±.0003 in] at 152.4 [6 in] Radius

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**512RA Indexer Capacities**

<table>
<thead>
<tr>
<th>Stops</th>
<th>Index Period</th>
<th>Motion</th>
<th>B&lt;sub&gt;j&lt;/sub&gt; Capacity at 50 RPM N-m [in-lb]</th>
<th>Internal Inertia kg-cm&lt;sup&gt;2&lt;/sup&gt; [lb-in&lt;sup&gt;2&lt;/sup&gt;]</th>
<th>Model</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120</td>
<td>ms</td>
<td>132 [45]</td>
<td>412 [3648]</td>
<td>512RA4H32-120 MSC.0.33</td>
<td>379,2 [14.93]</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ms</td>
<td>132 [45]</td>
<td>359 [3179]</td>
<td>512RA6H32-120</td>
<td>368,3 [14.50]</td>
</tr>
<tr>
<td>8</td>
<td>270</td>
<td>ms</td>
<td>132 [45]</td>
<td>358 [3172]</td>
<td>512RA8H32-270</td>
<td>368,3 [14.50]</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ms</td>
<td>132 [45]</td>
<td>430 [3802]</td>
<td>512RA8H32-120</td>
<td>368,3 [14.50]</td>
</tr>
</tbody>
</table>

Other Motions (stops and index periods) available. Contact your DESTACO sales representative for more information.
662RA SERIES
Right Angle Index Drive | Dimensions

Dimensions and technical information are subject to change without notice.

*See table on top of page 8 for dimensions
**Features**

- 7300C Reducer (ratios from 5:1 to 60:1)
  - Motor Adapter and Coupling
- Double Extended Camshaft (Input Shaft)
- 1 or 2 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Varipak DC Motor Control (up to 30 cpm)
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

**Optional Accessories**

- 1 hp DC motor
- 7350C Reducer (ratios from 5:1 to 60:1)
  - Motor Adapter and Coupling
- 2 hp DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch Models:
  - 11F, 11FC, 11FC-SD
  - Available Settings (in-lb): 2300, 4000, 6000, 8500, 11,000
- Dual Cycle Cam and Limit Switch
- Finished cover for ceiling mount or tooling plate mounting
- Left Hand Cam
- Relief in Dwell for shot-pin applications

**Output Load Capacity** (loads carried during index):
- Radial: 12642 N [2842 lbs]
- Thrust/Axial: 23304 N [5239 lbs]
- Moment: 334 N-m [2959 in-lb]

**Accuracy**
- ±36 arcsec / ±0.025 mm [±.001 in]
- at 152.4 [6 in] Radius

**Repeatability**
- ±9 arcsec / ± 0.008 mm [±.0003 in]
- at 152.4 [6 in] Radius

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**512RA Indexer Capacities**

<table>
<thead>
<tr>
<th>Stops</th>
<th>Index</th>
<th>Motion</th>
<th>$B_c$ Capacity at 50 RPM N-m [in-lb]</th>
<th>Internal Inertia kg-cm² [lb-in²]</th>
<th>Model</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>270</td>
<td>ms.33</td>
<td>668 [5913]</td>
<td>495 [169]</td>
<td>512RA3H32-270</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td></td>
<td>180</td>
<td>ms.33</td>
<td>694 [6146]</td>
<td>495 [169]</td>
<td>512RA3H32-180 MSC 0.33</td>
<td>379.2 [14.93]</td>
</tr>
<tr>
<td>3</td>
<td>270</td>
<td>ms</td>
<td>780 [6903]</td>
<td>503 [172]</td>
<td>512RA4H32-270</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ms.33</td>
<td>876 [7751]</td>
<td>503 [172]</td>
<td>512RA4H32-120 MSC 0.33</td>
<td>379.2 [14.93]</td>
</tr>
<tr>
<td>4</td>
<td>270</td>
<td>ms</td>
<td>648 [5734]</td>
<td>495 [169]</td>
<td>512RA6H32-270</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ms</td>
<td>853 [7551]</td>
<td>495 [169]</td>
<td>512RA6H32-120</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td>6</td>
<td>270</td>
<td>ms</td>
<td>812 [7187]</td>
<td>503 [172]</td>
<td>512RA8H32-270</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td></td>
<td>120</td>
<td>ms</td>
<td>1015 [8987]</td>
<td>503 [172]</td>
<td>512RA8H32-120</td>
<td>368.3 [14.50]</td>
</tr>
<tr>
<td>8</td>
<td>270</td>
<td>ms</td>
<td>509 [4504]</td>
<td>483 [165]</td>
<td>512RA12H28-270</td>
<td>368.3 [14.50]</td>
</tr>
</tbody>
</table>

*Other Motions (stops and index periods) available. Contact your DESTACO sales representative for more information.*