PRECISION INDEXING SOLUTIONS

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Dimensions and technical information are subject to change without notice
Features:

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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**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)

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**Input Shaft Configuration (Top View)**

![Input Shaft Configuration Diagram](image)

**Input Shaft Rotation**

![Input Shaft Rotation](image)

**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
### Gear Reducer Mounting Positions

#### RA Series

<table>
<thead>
<tr>
<th>OVOI</th>
<th>OVUI</th>
<th>OHOI</th>
<th>OHUI</th>
<th>H-S1-UP</th>
<th>H-S2-UP</th>
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#### Mounting “A”

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#### Mounting “B”

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#### Mounting “C”

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#### Mounting “D”

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Dimensions and technical information are subject to change without notice.
Dimensions and technical information are subject to change without notice.
### 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

### Output Load Capacity
- **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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### 400RA Indexer Capacities

<table>
<thead>
<tr>
<th>Stops</th>
<th>Index Period</th>
<th>Motion</th>
<th>B₀ 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 ms</td>
<td></td>
<td>180 [1591]</td>
<td>44 [15]</td>
<td>400RA3H24-270</td>
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<tr>
<td>4</td>
<td>270 ms</td>
<td></td>
<td>210 [1858]</td>
<td>44 [15]</td>
<td>400RA4H24-270</td>
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<tr>
<td></td>
<td>120 ms</td>
<td></td>
<td>229 [2024]</td>
<td>44 [15]</td>
<td>400RA6H24-120</td>
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<tr>
<td></td>
<td>120 ms</td>
<td></td>
<td>266 [2354]</td>
<td>44 [15]</td>
<td>400RA8H24-120</td>
</tr>
<tr>
<td></td>
<td>120 ms</td>
<td></td>
<td>177 [1568]</td>
<td>44 [15]</td>
<td>400RA12H20-120</td>
</tr>
<tr>
<td></td>
<td>180 ms</td>
<td></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.

Dimensions and technical information are subject to change without notice
512RA SERIES
Right Angle Index Drive | Dimensions

*See table on top of page 8 for dimensions

Dimensions and technical information are subject to change without notice

IN-MCH | 47
Dimensions and technical information are subject to change without notice
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

Dimensions and technical information are subject to change without notice.
662RA SERIES
Right Angle Index Drive | Dimensions

*See table on top of page 8 for dimensions

Dimensions and technical information are subject to change without notice
**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 Period</th>
<th>Motion</th>
<th>( B_0 ) 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>3</td>
<td>270</td>
<td>ms</td>
<td>668 [5913]</td>
<td>495 [169]</td>
<td>512RA3H32-270</td>
<td>368,3 [14.50]</td>
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<tr>
<td></td>
<td>180</td>
<td>ms.33</td>
<td>694 [6164]</td>
<td>495 [169]</td>
<td>512RA3H32-180 MSC 0.33</td>
<td>379,2 [14.93]</td>
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<tr>
<td>4</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>
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<tr>
<td>6</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>8</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>
</tbody>
</table>

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