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Work from Within

The CAMCO Ring Drive offers easy-to-integrate automation that fits easily into your operations.

Minimize machine footprint: Mount your equipment inside the through-hole of the CAMCO Ring Drive.

Easily tool the ring drive: Attach fixtures directly to the dial ring, eliminating the need for an additional dial plate.

Best technical support and service: Worldwide access to our global network.

Applications

Printing and decorating machines
Rotary automatic assembly machines
Ideal for assembly systems requiring a large number of tooling stations
The Ring Drive can replace a small conveyor

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Licensed under U.S. Patent No. 5,950,503
**Ring Drive Dial Indexer | Features and Benefits | How to Order**

### Ring Drive Features

**Great Design Flexibility**

Available in three sizes (Ø): .75 m [29.53 in], 1.1 m [43.31 in] and 1.6 m [62.99 in]

Complete motorized drive package with reducer and AC inverter drive to suit most applications

Dial Ring can be removed for machining to mounting your tooling and fixtures.

Large center through-hole to accommodate auxiliary equipment

60 station capability, ideal for multiple part automatic assembly machines

Steel Dial Ring or optional Aluminum Ring

Broad range of motions/drive packages

**Robust And Reliable**

Superior accuracy, similar to a precision link conveyor - your work station is located over the cam for maximum accuracy.

High precision, hardened cams available in standard and special motions

Sealed 4-point contact output bearing and large cam followers for superior accuracy and load capability (models 750RNG, 1100RNG and 1550RNG)

Modular shaft-mounted reducers for application flexibility and easy maintenance

Access to cam followers for easy inspection and replacement

Tapered roller bearings on camshaft

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

**Base Model**

<table>
<thead>
<tr>
<th>Control</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 HP 120V 750RNG &amp; 1100RNG only</td>
</tr>
<tr>
<td>2</td>
<td>1 HP 240V 750RNG &amp; 1100RNG only</td>
</tr>
<tr>
<td>3</td>
<td>1 HP 440V 750RNG &amp; 1100RNG only</td>
</tr>
<tr>
<td>4</td>
<td>2 HP 240V 1550RNG only</td>
</tr>
<tr>
<td>5</td>
<td>2 HP 440V 1550RNG only</td>
</tr>
</tbody>
</table>

**Reducer Ratio**

<table>
<thead>
<tr>
<th>Reducer Ratio</th>
<th>750RNG</th>
<th>1100RNG</th>
<th>1550RNG</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>15.31</td>
<td>29.96</td>
<td>39.61</td>
</tr>
<tr>
<td>B</td>
<td>20.91</td>
<td>37.97</td>
<td>49.95</td>
</tr>
<tr>
<td>C</td>
<td>24.99</td>
<td>49.79</td>
<td>63.30</td>
</tr>
<tr>
<td>D</td>
<td>29.96</td>
<td>58.60</td>
<td>69.84</td>
</tr>
<tr>
<td>E</td>
<td>37.97</td>
<td>67.80</td>
<td>75.20</td>
</tr>
<tr>
<td>F</td>
<td>49.79</td>
<td>72.54</td>
<td>85.12</td>
</tr>
<tr>
<td>G</td>
<td>58.60</td>
<td>83.69</td>
<td>90.86</td>
</tr>
</tbody>
</table>

**Signal Switch**

<table>
<thead>
<tr>
<th>Signal Switch</th>
<th>Signal Switch Side</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>Mechanical</td>
</tr>
<tr>
<td>P</td>
<td>Proximity</td>
</tr>
<tr>
<td>S</td>
<td>Shaft</td>
</tr>
</tbody>
</table>

**Example:** MS or PS

Note about signal switch options:

a) Mechanical is a single switch with cam.

b) Proximity option is a mounting bracket for 8 or 12 mm proximity switch. A proximity switch will not be supplied. Cam supplied as target.
**Right Hand Cam Standard:**

CW Input Side 1, CCW Output
CCW Input Side 1, CW Output

NOTE: Input can be driven in either direction

---

**Gear Reducer Mounting Positions (Figure 3)**

- **MOUNTING "A"**
- **MOUNTING "B"**

Dimensions and technical information are subject to change without notice
Dimensions and technical information are subject to change without notice.
### Maximum Inertia x 1000 kg-cm² [lb-in²] for standard package

<table>
<thead>
<tr>
<th>Stops</th>
<th>Motion Time [seconds]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.468</td>
</tr>
</tbody>
</table>

Reducer Ratio

|   | 15.31 | 20.19 | 24.99 | 29.96 | 37.97 | 49.79 | 58.60 |

### Features

- KH37 Reducer (Ratios from 15.31:1 to 58.6:1)
- 1 HP AC Drive Package with Inverter Duty Motor and IM-pAC AC Drive (up to 60 cpm)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (Ø230 mm [Ø9.05 in])
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

### Optional Accessories

- KH47 Reducer
- 2 HP AC Drive Package with Inverter Duty Motor and Commander SK AC Drive (up to 60 cpm)
- Dual Cam and Limit Switch
- Left Hand Cam
- AC brake Motor
- Aluminum dial ring
- Servo motor drive package with precision planetary reducer for applications requiring flexibility or fewer than 6 stations
- Custom dials & tooling plates
- Machined base (see pg. IN-MCH-84)

### Output Bearing Capacity

(loads carried during index):
- **Radial**: 25740 N [5580 lbs]
- **Axial**: 64020 N [14550 lbs]
- **Moment**: 6915 N-m [61200 in-lbs]

**Accuracy**: ±60 arcsec / ±0.047 mm [±.0019 in] at 324 mm [12.75 in] Radius

**Repeatability**: ±15 arcsec / ±0.012 mm [±.0005 in] at 324 mm [12.75 in] Radius
1100RNG SERIES
Ring Drive Dial Indexer | Dimensions

Dimensions and technical information are subject to change without notice.
### Maximum Inertia x 1000 kg-cm² [lb-in²] for standard package

<table>
<thead>
<tr>
<th>Stops</th>
<th>0.915</th>
<th>1.359</th>
<th>1.521</th>
<th>1.791</th>
<th>2.072</th>
<th>2.217</th>
<th>2.557</th>
</tr>
</thead>
</table>

| Reducer Ratio | 29.96 | 37.97 | 49.79 | 58.60 | 67.80 | 72.54 | 83.69 |

### Features
- KH37 Reducer (Ratios from 29.96:1 to 83.69:1)
- 1 HP AC Drive Package with Inverter Duty Motor and IM-pAC AC Drive (up to 60 cpm)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (Ø800 mm [Ø31.50 in])
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

### Optional Accessories
- KH47 Reducer
- 2 HP AC Drive Package with Inverter Duty Motor and Commander SK AC Drive (up to 60 cpm)
- Dual Cam and Limit Switch
- Left Hand Cam
- AC brake Motor
- Aluminum dial ring
- Servo motor drive package with precision planetary reducer for applications requiring flexibility or fewer than 6 stations
- Custom dials & tooling plates
- Machined base (see pg. IN-MCH-84)

### Output Bearing Capacity (loads carried during index):
- **Radial**: 159940 N [36350 lbs]
- **Axial**: 72829 N [16552 lbs]
- **Moment**: 16879 N-m [149376 in-lbs]

### Accuracy
- ±35 arcsec / ±0.038 mm [±.0015 in] at 448 mm [17.65 in] Radius

### Repeatability
- ±9 arcsec / ±0.010 mm [±.0004 in] at 448 mm [17.65 in] Radius
1550RNG SERIES
Ring Drive Dial Indexer | Dimensions

Dimensions and technical information are subject to change without notice.
Ring Drive Dial Indexer | Features | Optional Accessories | Technical Information

### Maximum Inertia x 1000 kg-cm² [lb-in²] for standard package

<table>
<thead>
<tr>
<th>Stops</th>
<th>1.210</th>
<th>1.496</th>
<th>1.934</th>
<th>2.134</th>
<th>2.298</th>
<th>2.601</th>
<th>2.776</th>
</tr>
</thead>
</table>

### Motion Time [seconds]

| Reducer Ratio | 39.61 | 48.95 | 63.30 | 69.84 | 75.20 | 85.12 | 90.86 |

### Features

- KH47 Reducer (Ratios from 39.61:1 to 90.866:1)
- 2 HP AC Drive Package with Inverter Duty Motor and IM-pAC AC Drive (up to 60 cpm)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (Ø1210 mm [Ø47.64 in])
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

### Optional Accessories

- Dual Cam and Limit Switch
- Left Hand Cam
- AC brake Motor
- Aluminum dial ring
- Servo motor drive package with precision planetary reducer for applications requiring flexibility or fewer than 6 stations
- Custom dials & tooling plates
- Machined base (see pg. IN-MCH-84)

### Output Bearing Capacity (loads carried during index):

- **Radial**: 239052 N [54330 lbs]
- **Axial**: 76635 N [17417 lbs]
- **Moment**: 25720 N-m [227622 in-lbs]

#### Accuracy

- ±25 arcsec / ±0.039 mm [±.0015 in] at 648 mm [25.51 in] Radius

#### Repeatability

- ±6 arcsec / ±0.010 mm [±.0004 in] at 648 mm [25.51 in] Radius