ROLLER DIAL INDEX DRIVES

Product Overview

You are currently viewing:

RD HD Dial Indexers

Additional Indexing Products:

- Servo Positioner
  Rotary Table ..................... IN-GTB
- RDM Dial Indexers .......... IN-RDM
- RA Right Angle Drives ........ IN-RA
- E-Series HD Drives .......... IN-EHD
- MDE/HDE Indexers .......... IN-MDE
- RSD Flexible Servo Drives .. IN-RSD
- RGS/RGD
  Shaft/Flange Drives .......... IN-RGS
- Parallel Shaft/Flange Drives ............ IN-PAR
- RNG Easy Access
  Dial Indexers ................. IN-RNG
- Rite-Link Conveyors .......... IN-RLC
- Table-Top Modular
  Conveyors ........................ IN-TTC
- Heavy Duty
  Modular Conveyors .......... IN-HDC
- LPP Linear Part Handles ...... IN-LPP
- RPP Rotating Part Handlers .. IN-RPP
- Overload Clutches ............. IN-CLU
- Custom Cams ................. IN-CAM

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

CAMCO Roller Dial Index Drives have a robust, flexible design with superior load capabilities. Other features include:

- Short camshaft motion periods, due to oversized roller gear cam design, are well suited for continuous running applications or for special motion requirements such as oscillating motions.

- Universal mounting including a horizontal mounting ideal for trunnion applications.

- Option Center Thru-Hole facilitates passage of electrical wiring, pneumatic lines or mechanical linkages.

- Optional Stationary Center Post with thru-hole provides mounting for upper tool plate.

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RD SERIES
Roller Dial Index Drives | How To Order

### Base Model Description
- **425RD**: w/ R180 reducer & 1/3 hp AC motor (220/440V)
- **800RD**: w/ 7300C reducer & 2 hp AC motor (220/440V)
- **1301RD**: w/ 7350C reducer & 2 hp AC motor (220/440V)
- **1801RD**: w/ 7500C reducer & 3 hp AC motor (220/440V)

### Control (only available with these models)
- 1 hp 120V 425RD only
- 1 hp 240V 425RD only
- 1 hp 440V 425RD only
- 2 hp 240V 800RD & 1301RD only
- 2 hp 440V 800RD & 1301RD only
- 3 hp 240V 1801RDM only
- 3 hp 440V 1801RDM only

### Reducer Ratio
- A: 15
- B: 20
- C: 25
- D: 30
- E: 40
- F: 50
- G: 60

### Motion Stops Index Period
- A: 2 330
- B: 3 330
- C: 4 330
- D: 6 330
- E: 8 330
- F: 12 330
- G: 16 330

### Signal Switch Side
- M: Mechanical
- R: Reducer
- P: Proximity
- S: Shaft

**Example: MR, MS, PR or PS**
- Mechanical is a single switch with cam.
- Proximity option is a mounting bracket for 8 or 12 mm proximity switch. A proximity switch will not be supplied. Cam supplied as target.

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

### Relative Rotation for Right Hand Cam:
- CW Input Side 1 CCW Output
- CCW Input Side 2 CWW Output

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

Dimensions and technical information are subject to change without notice
## Gear Reducer Mounting Positions (Figure 4)

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<thead>
<tr>
<th>Mounting “A”</th>
<th>Mounting “B”</th>
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<td><strong>LD Worm</strong></td>
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<td><strong>SIDE 1</strong></td>
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Unless otherwise noted, all dimensions are in inches.
## 425RD SERIES

### Roller Dial Index Drives | Product Overview | Technical Information | Optional Accessories

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

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### Reducer Ratio

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<th>25</th>
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<th>40</th>
<th>50</th>
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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)**
- **R225 Reducer with 1 hp AC or DC Motor (ratios of 5:1 to 60:1)**
- Cycle Cam and Limit Switch Mounted to Camshaft
- Right Hand Cam

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

- **Radial**: 2,700 lbs
- **Thrust/Axial**: 1,600 lbs
- **Moment**: 5,800 in-lbs

### Accuracy

- **±47 arcsec / ±.0027” at 12” Radius**

### Repeatability

- **±12 arcsec / ±.0007” at 12” Radius**

### Optional Accessories

- **1/3 hp DC Motor**
- **Varipak DC Motor Control (up to 30 cpm)**
- **2.8D Output Overload Clutch**
  - Available Settings (in-lbs): 400, 480, 700, 850, 1100, 1300, 1800, 2200, 3100
- **Center Thru Hole (0.81 in. Diameter)**
- **Stationary Center Post**
- **Dual Cam and Limit Switch**
- **Left Hand Cam**
- **Relief in Dwell for shot-pin applications**
- **Universal Mounting Capability**
- **Custom Dial Plate**

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

- **2.8D OVERLOAD CLUTCH**
- **DIAL**
- **TOOLING PLATE**
- **CYCLE CAM AND LIMIT SWITCH**
- **RISER BLOCKS**

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Unless otherwise noted, all dimensions are in inches.
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Dimensions and technical information are subject to change without notice.
800RD Series
Roller Dial Index Drives | Product Overview | Technical Information | Optional Accessories

**Maximum Inertia x 1000 [lb-in²] for standard package**

<table>
<thead>
<tr>
<th>Stops</th>
<th>0.458</th>
<th>0.611</th>
<th>0.764</th>
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**Reducer Ratio**

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</table>

**Features**

- **7300C Reducer** (ratios from 15:1 to 60:1)
  - Double Extended Worm Shaft (Input)
  - Motor Adapter and Coupling
- **Double Extended Camshaft** (Input Shaft)
- **1 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**

- **7350C Reducer** (ratios from 5:1 to 60:1) with 1 hp AC or DC Motor
- **1 hp DC Motor**
- **Varipak DC Motor Control** (up to 30 cpm)
- **Output Overload Clutch model 7.8D**
  - Available Settings (in-lbs): 1400, 1700, 2600, 3200, 4200, 5000, 7200, 10,000
- **Output Overload Clutch model 18D**
  - Available Settings (in-lbs): 5000, 7000, 7800, 10,000, 12,000, 16,000, 19,000, 21,000, 27,000, 42,000, 45,000
- **Center Thru Hole** (2.50 in. Diameter)
- **Stationary Center Post**
- **Dual Cam and Limit Switch**
- **Left Hand Cam**
- **Relief in Dwell for shot-pin applications**
- **Universal Mounting Capability**
- **Custom Dial Plate**

**Output Load Capacity** (loads carried during index):

- **Radial**: 4,777 lbs
- **Thrust/Axial**: 3,561 lbs
- **Moment**: 22,398 in-lbs

**Accuracy**: ±30 arcsec / ±.004” at 24” Radius

**Repeatability**: ±8 arcsec / ±.0009” at 24” Radius

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31D OVERLOAD CLUTCH
STATIONARY CENTER POST
(CAMCO WILL ALTER TO CUSTOMER SPECIFICATIONS)

1301RD MOUNTED ACCESSORIES RISER BLOCKS
AND LIMIT SWITCH
CYCLE CAM
DIAL
TOOLING PLATE

27.06 Ø4.376 Ø3.00 THRU

Output Load Capacity (loads carried during index):
- Radial 15,800 lbs
- Thrust/Axial 10,800 lbs
- Moment 109,000 in-lbs

Accuracy ±39 arcsec / ±.0068” at 36” Radius
Repeatability ±10 arcsec / ±.0017” at 36” Radius

Features
- 7350C Reducer (Ratios from 15:1 to 60:1)
  - Double Extended Worm Shaft (Input)
  - Motor Adapter and Coupling
- Double Extended Camshaft (Input Shaft)
- 2 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
- 7400C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 2 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 31D
  - Available Settings (in-lbs): 8500, 13,000, 20,000, 31,000
- Center Thru Hole (4.75 in. Diameter)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications
- Universal Mounting Capability
- Custom Dial Plate

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

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Reducer Ratio

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IN-RD | 10
Output Load Capacity (loads carried during index):
- Radial: 14,800 lbs
- Thrust/Axial: 12,600 lbs
- Moment: 107,000 in-lbs

Accuracy: ±27 arcsec / ±.0063” at 48” Radius
Repeatability: ±7 arcsec / ±.0016” at 48” Radius

**Features**
- 7500C Reducer (Ratios from 15:1 to 60:1)
  - Double Extended Worm Shaft (Input)
  - Motor Adapter and Coupling
- Double Extended Camshaft (Input Shaft)
- 3 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**
- 7600C or 7700C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 3 hp DC Motor
- Output Overload Clutch model 62D
  - Available Settings (in-lbs): 23,000, 36,000, 44,000, 50,000, 60,000
- Center Thru Hole (7.00 in. Diameter)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications
- Custom Dial Plate

**Maximum Inertia x 1000 [lb-in^2] for standard package**

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<td>107,000 in-lbs</td>
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