

ROLLER DIAL INDEX DRIVES

Product Overview

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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

ROLLER DIAL INDEX DRIVES

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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** 1 hp 120V 425RD only
- 2** 1 hp 240V 425RD only
- 3** 1 hp 440V 425RD only
- 4** 2 hp 240V 800RD & 1301RD only
- 5** 2 hp 440V 800RD & 1301RD only
- 6** 3 hp 240V 1801RDM only
- 7** 3 hp 440V 1801RDM only



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*

*1301RD & 1801RD

Index Mounting
(See Figure 1)

- 1**
- 2**
- 3**
- 4**
- 5**
- 6**

Reducer Ratio

- A** 15
- B** 20
- C** 25
- D** 30
- E** 40
- F** 50
- G** 60

Reducer Mounting
(See Figure 4)

- A** **J**
- B** **K**
- C** **L**
- D** **M**
- E** **N**
- F** **P**
- G** **R**
- H** **S**

Signal Switch **Signal Switch Side**
(See Figure 2)

- M** Mechanical **R** Reducer
- P** Proximity **S** Shaft

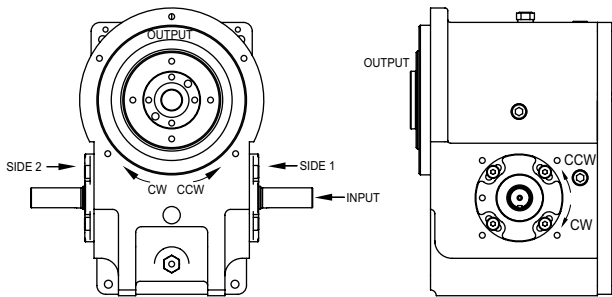
Example: MR, MS, PR or PS

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.

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

Input Shaft Configuration/Rotation (Figure 1)

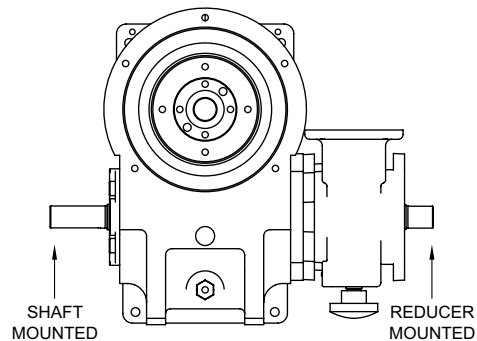


Relative Rotation for Right Hand Cam:

CW Input Side 1 CCW Output
CCW Input Side 2 CWW Output

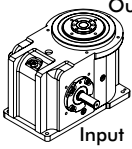
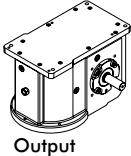
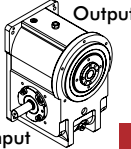
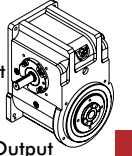
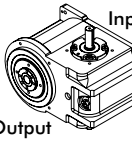
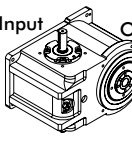
NOTE: Input can be driven in either direction

Signal Switch Mounting Position (Figure 2)

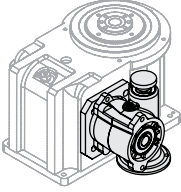
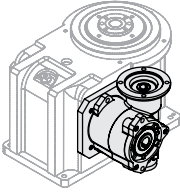
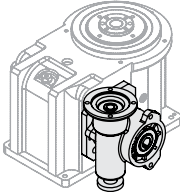
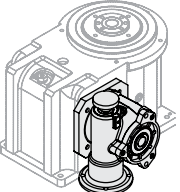
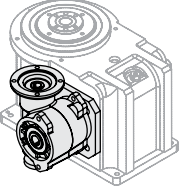
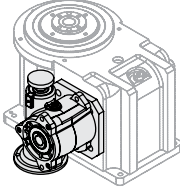
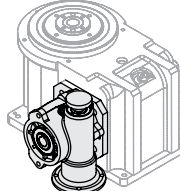
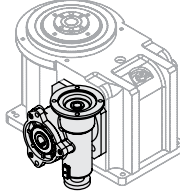
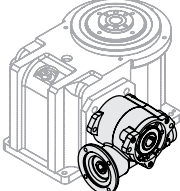
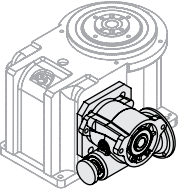
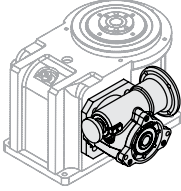
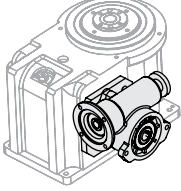
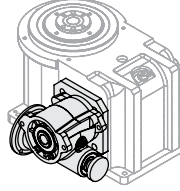
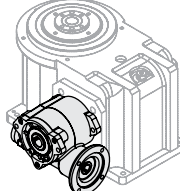
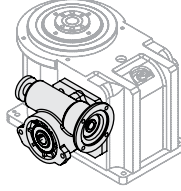
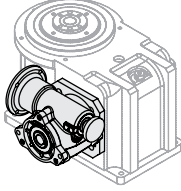


RD SERIES

Roller Dial Index Drives | Input/Output Orientation (Figure 3)

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)
 <p>Output</p> <p>Input</p> <p>1</p>	 <p>Input</p> <p>Output</p> <p>2</p>	 <p>Output</p> <p>Input</p> <p>3</p>	 <p>Input</p> <p>Output</p> <p>4</p>	 <p>Input</p> <p>Output</p> <p>5</p>	 <p>Input</p> <p>Output</p> <p>6</p>

Gear Reducer Mounting Positions (Figure 4)

		Mounting "A"		Mounting "B"	
		RD Worm	LD Worm	RD Worm	LD Worm
SIDE 1		 A	 B	 C	 D
SIDE 2		 E	 F	 G	 H
		Mounting "C"		Mounting "D"	
		RD Worm	LD Worm	RD Worm	LD Worm
SIDE 1		 J	 K	 L	 M
SIDE 2		 N	 P	 R	 S

Maximum Inertia x 1000 [lb-in ²] for standard package							
Stops	Motion Time [seconds]						
	0.458	0.611	0.764	0.917	1.222	1.528	1.833
2	0	1	2	4	11	16	22
3	1	2	6	11	25	37	50
4	1	5	10	19	44	66	90
6	4	11	24	44	100	150	156
8	7	20	43	79	156	156	156
12	16	45	89	136	147	147	147
Reducer Ratio							
	15	20	25	30	40	50	60

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

Optional Accessories

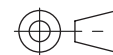
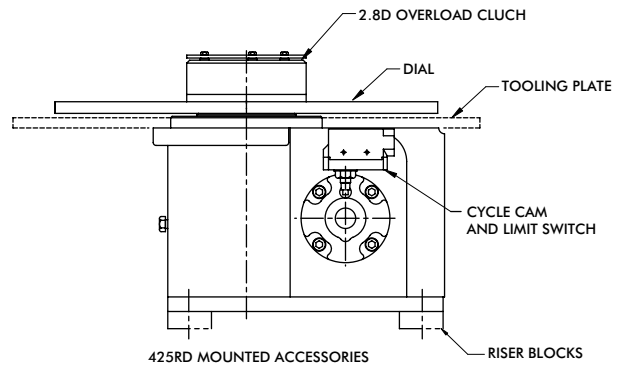
- 1/3 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- 2.8D Output Overload Clutch
 - Available Settings (in-lbs): 400, 480, 700, 850, 1100, 1300, 1800, 2200, 3100
- Center Thru Hole (0.81 in. Diameter)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for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

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



Unless otherwise noted, all dimensions are in inches.

Maximum Inertia x 1000 [lb-in ²] for standard package							
Stops	Motion Time [seconds]						
	0.458	0.611	0.764	0.917	1.222	1.528	1.833
2	2	8	17	32	55	83	114
3	7	19	40	72	125	187	258
4	13	35	72	130	223	334	459
6	30	79	164	293	504	753	1,034
8	54	142	292	521	897	1,232	1,232
12	123	312	522	794	1,156	1,156	1,156
Reducer Ratio							
	15	20	25	30	40	50	60

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

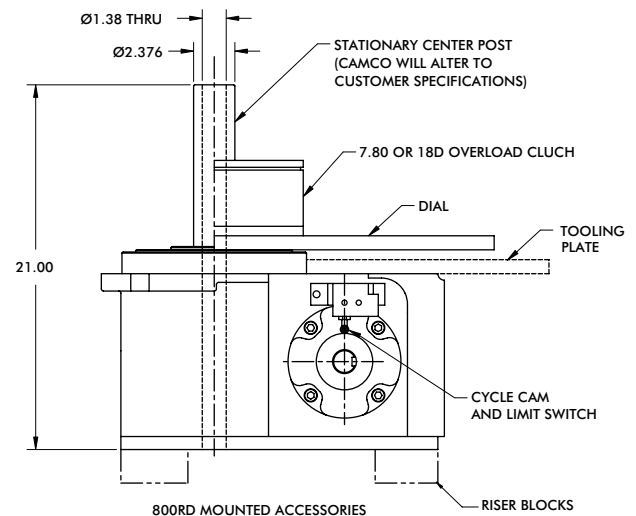
- 7350C Reducer (ratios from 5:1 to 60:1) with 1 hp AC or DC Motor
- 1 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 7.8D
 - Available Settings (in-lbs): 1400, 1700, 2600, 3200, 4200, 5000, 7200, 10,000
- Output Overload Clutch model 18D
 - Available Settings (in-lbs): 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 4,977 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



Unless otherwise noted, all dimensions are in inches.

Maximum Inertia x 1000 [lb-in ²] for standard package							
Stops	Motion Time [seconds]						
	0.458	0.611	0.764	0.917	1.222	1.528	1.833
2	0	5	15	29	51	78	108
3	4	16	37	68	119	179	246
4	10	31	67	123	214	321	440
6	26	73	155	281	485	725	995
8	48	132	278	503	865	1,291	1,771
12	111	301	630	1,135	1,951	2,909	3,989
16	201	538	1,122	2,020	3,471	5,174	7,093
Reducer Ratio							
	15	20	25	30	40	50	60

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

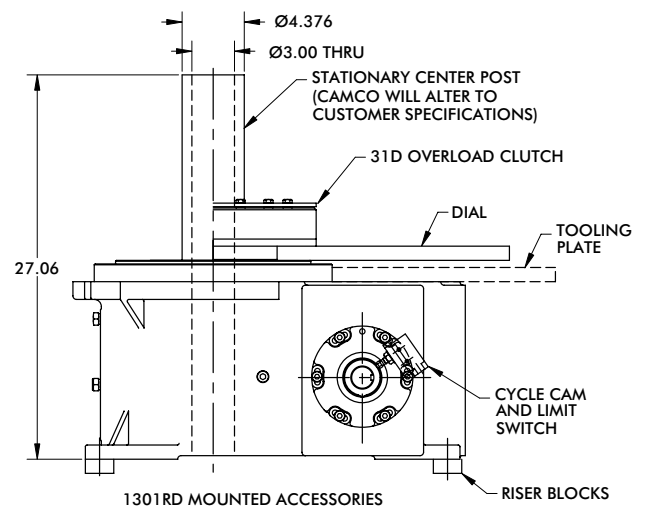
- 7400C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 2 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 31D
 - Available Settings (in-lbs): 8500, 13,000, 20,000, 31,000
- Center Thru Hole (4.75 in. Diameter)
- Stationary Center Post
- Dual Cam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

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



Unless otherwise noted, all dimensions are in inches.

Maximum Inertia x 1000 [lb-in ²] for standard package							
Stops	Motion Time [seconds]						
	0.458	0.611	0.764	0.917	1.222	1.528	1.833
2	0	5	18	39	109	229	412
3	2	17	44	86	230	476	850
4	9	39	92	175	458	939	1,672
6	27	91	205	383	989	2,021	3,593
8	54	168	370	687	1,763	3,598	6,393
12	127	383	839	1,552	3,973	8,102	14,391
16	232	687	1,498	2,765	7,070	1,441	19,455
Reducer Ratio							
	15	20	25	30	40	50	60

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

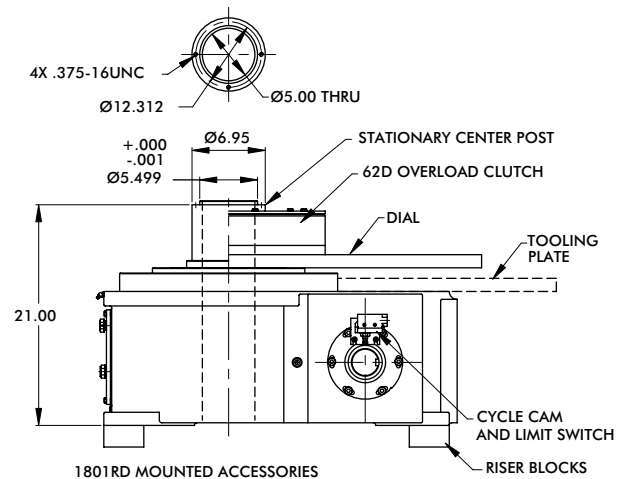
- 7600C or 7700C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 3 hp DC Motor
- Output Overload Clutch model 62D
 - Available Settings (in-lbs): 23,000, 36,000, 44,000, 50,000, 60,000
- Center Thru Hole (7.00 in. Diameter)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left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

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



Unless otherwise noted, all dimensions are in inches.