

# RIGHT ANGLE INDEX DRIVES

## Product Overview

You are currently viewing:



**RA Right Angle Drives**

## Additional Indexing Products:



**Servo Positioner  
Rotary Table** .....IN-GTB



**RDM Dial Indexers** ..... IN-RDM



**RD HD Dial Indexers** ..... IN-RD



**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

# RIGHT ANGLE INDEX DRIVES

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## **Features:**

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**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

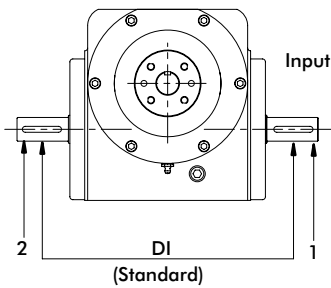
### Indexer Ordering Procedure

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

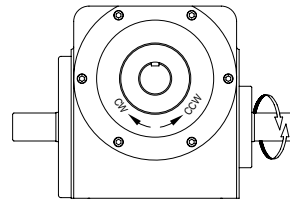
### Reducer Ordering Procedure

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)



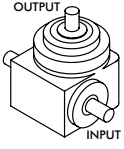
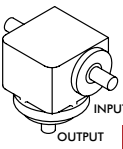
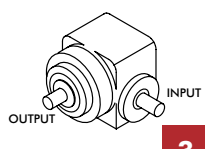
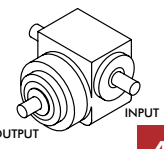
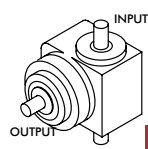
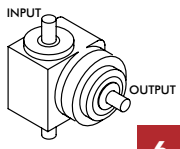
### Input Shaft Rotation



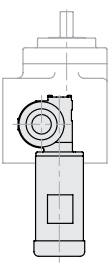
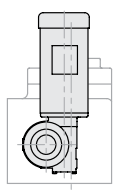
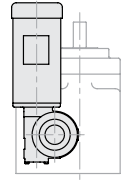
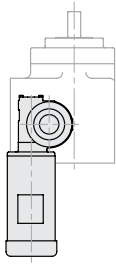
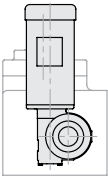
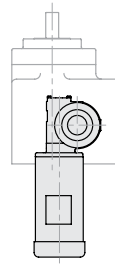
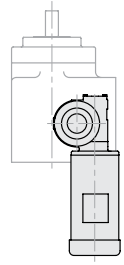
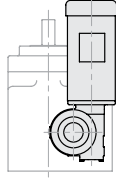
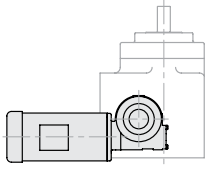
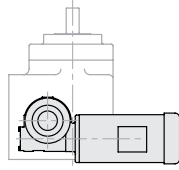
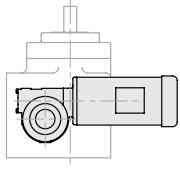
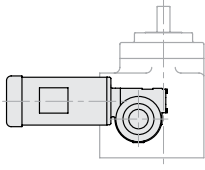
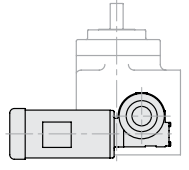
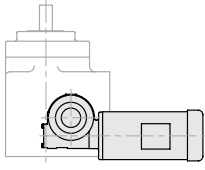
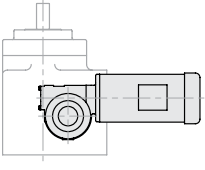
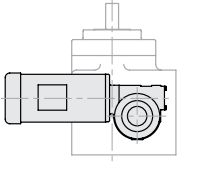
#### Relative Rotation for Right Hand Cam:

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

NOTE: Input can be driven in either direction

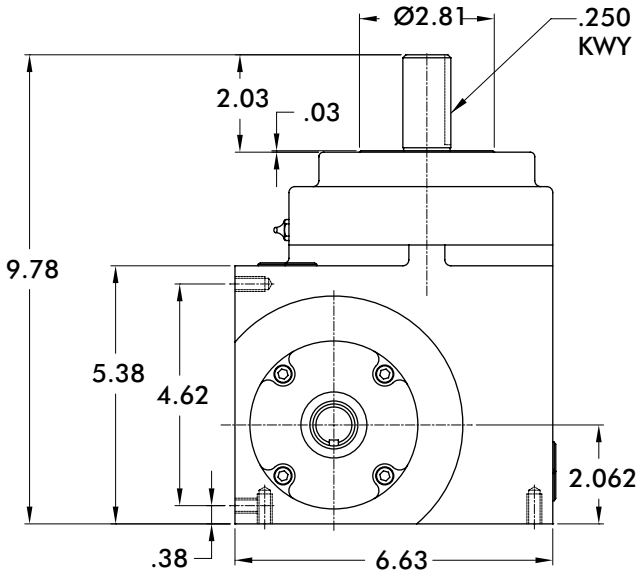
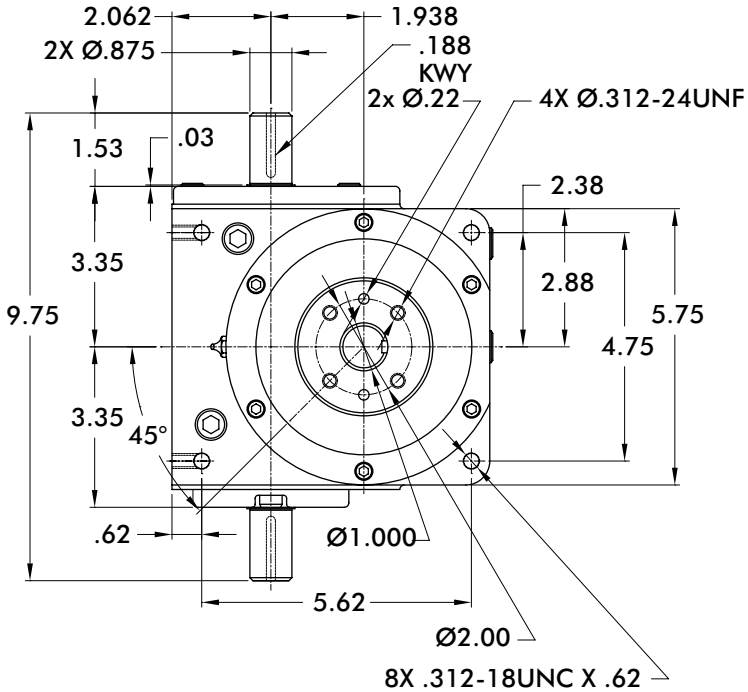
<b>OVOI</b> (output vertical, over input)	<b>OVUI</b> (output vertical, under input)	<b>OHOI</b> (output horizontal, over input)	<b>OHUI</b> (output horizontal, under input)	<b>H-S1-UP</b> (output horizontal, side 1 up)	<b>H-S2-UP</b> (output horizontal, side 2 up)
 <b>1</b>	 <b>2</b>	 <b>3</b>	 <b>4</b>	 <b>5</b>	 <b>6</b>

### Gear Reducer Mounting Positions

		<b>Mounting "A"</b>		<b>Mounting "B"</b>	
		<b>RH</b>	<b>LH</b>	<b>RH</b>	<b>LH</b>
<b>SIDE 1</b>	 <b>A</b>	 <b>B</b>	 <b>C</b>	 <b>D</b>	
	<b>SIDE 2</b>	 <b>E</b>	 <b>F</b>	 <b>G</b>	 <b>H</b>
		<b>Mounting "C"</b>		<b>Mounting "D"</b>	
		<b>RH</b>	<b>LH</b>	<b>RH</b>	<b>LH</b>
<b>SIDE 1</b>	 <b>J</b>	 <b>K</b>	 <b>L</b>	 <b>M</b>	
	<b>SIDE 2</b>	 <b>N</b>	 <b>P</b>	 <b>R</b>	 <b>S</b>

# 400RA SERIES

## Right Angle Index Drive | Dimensions



400RA Indexer Capacities					
Stops	Index Period	Motion	B <sub>10</sub> Capacity at 50 RPM (in-lb)	Internal Inertia (lb-in <sup>2</sup> )	Model
2	330	ms	595	15	400RA2H20-330
3	270	ms	1591	15	400RA3H24-270
4	270	ms	1858	15	400RA4H24-270
	180	ms	2098	15	400RA4H24-180
6	270	ms	1711	15	400RA6H24-270
	120	ms	2024	15	400RA6H24-120
8	270	ms	1987	15	400RA8H24-270
	120	ms	2354	15	400RA8H24-120
12	270	ms	1290	15	400RA12H20-270
	120	ms	1568	15	400RA12H20-120
16	270	ms	1426	15	400RA16H20-270 II
	180	ms	2947	15	400RA16H24-180 II
24	270	ms	1640	15	400RA24H20-270 II
	180	ms	1894	15	400RA24H20-180 II

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

### 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

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

Radial	810 lbs
Thrust/Axial	1,406 lbs
Moment	1,620 in-lb

**Accuracy** ±48 arcsec / ±.0007" at 3" Radius

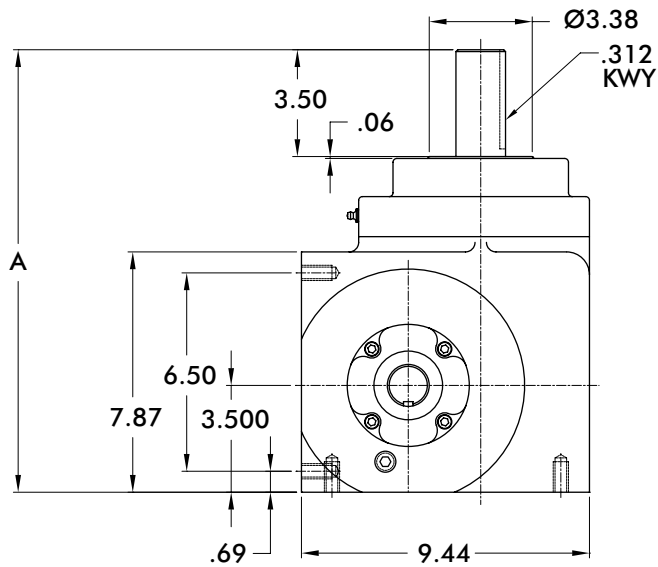
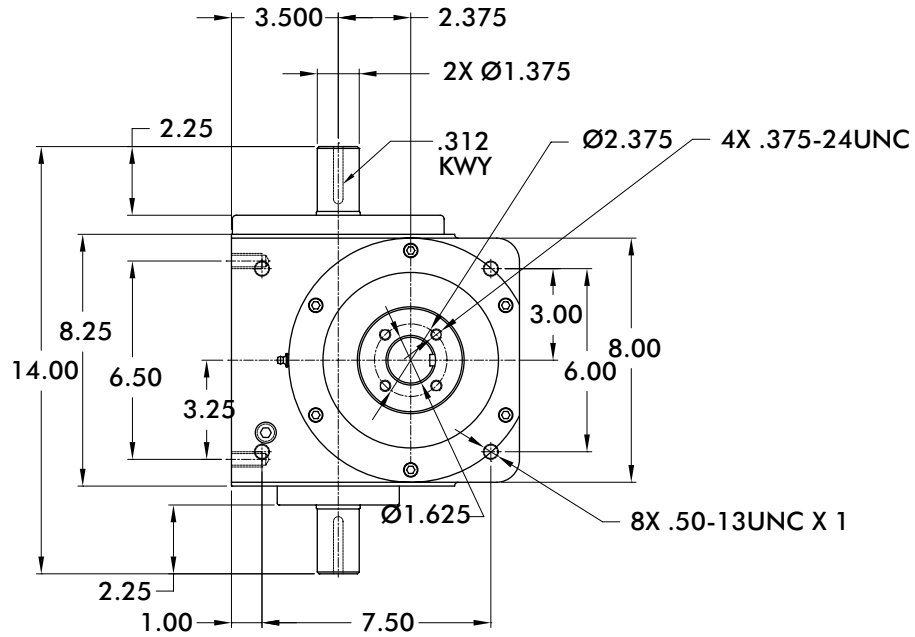
**Repeatability** ±12 arcsec / ±.0002" at 3" Radius

### 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

# 512RA SERIES

## Right Angle Index Drive | Dimensions



512RA Indexer Capacities						
Stops	Index Period	Motion	B <sub>10</sub> Capacity at 50 RPM (in-lb)	Internal Inertia (lb-in <sup>2</sup> )	Model	A
2	270	msc.33	2061	45	512RA2H32-270 MSC.33	14.93
3	270	ms	2360	45	512RA3H32-270	14.50
	180	msc.33	2852	45	512RA3H32-180 MSC 0.33	14.93
4	270	ms	2710	45	512RA4H32-270	14.50
	120	msc.33	3648	45	512RA4H32-120 MSC 0.33	14.93
6	270	ms	2613	45	512RA6H32-270	14.50
	120	ms	3179	45	512RA6H32-120	14.50
8	270	ms	3172	45	512RA8H32-270	14.50
	120	ms	3802	45	512RA8H32-120	14.50
12	270	ms	2738	45	512RA12H28-270	14.50
	120	ms	3176	45	512RA12H28-120	14.93

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

### 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

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

Radial	1,986 lbs
Thrust/Axial	2,277 lbs
Moment	6,951 in-lb

**Accuracy** ±37 arcsec / ±.0011" at 6" Radius

**Repeatability** ±9 arcsec / ±.0003" at 6" Radius

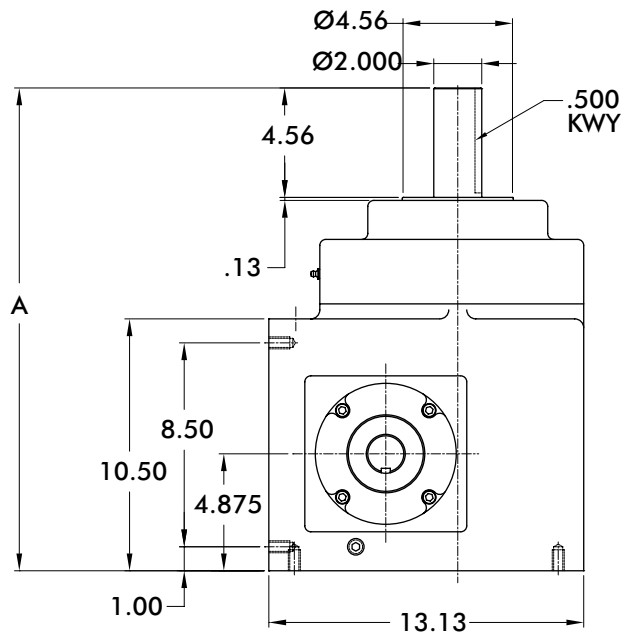
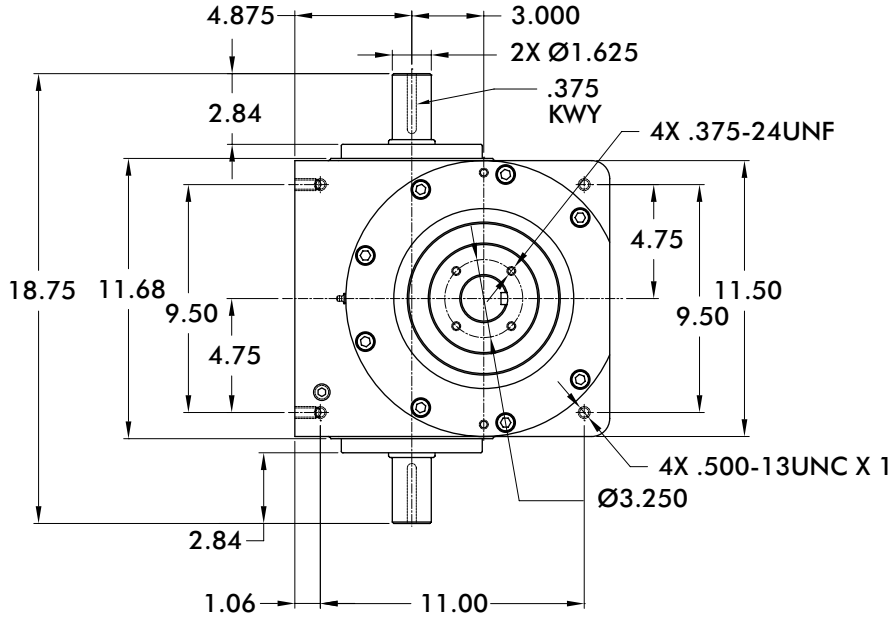
### Optional Accessories

- 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



# 662RA SERIES

## Right Angle Index Drive | Dimensions



662RA Indexer Capacities						
Stops	Index Period	Motion	B <sub>10</sub> Capacity at 50 RPM (in-lb)	Internal Inertia (lb-in <sup>2</sup> )	Model	A
2	270	ms	6534	172	662RA2H48-270	20.88
3	270	ms	5913	169	662RA3H40-270	20.13
	180	ms	6146	169	662RA3H40-180	20.88
4	270	ms	6903	172	662RA4H40-270	20.13
	120	ms	7751	172	662RA4H40-120	20.88
6	270	ms	5734	169	662RA6H40-270	20.13
	120	ms	7551	169	662RA6H40-120	20.13
8	270	ms	7187	172	662RA8H40-270	20.13
	90	ms	8987	172	662RA8H40-90	20.88
12	270	ms	4504	165	662RA12H32-270	20.13
	90	ms	5536	165	662RA12H32-90	20.88

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

### 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

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

Radial	2,842 lbs
Thrust/Axial	5,239 lbs
Moment	2,959 in-lb

### Accuracy

±36 arcsec / ±.001" at 6" Radius

### Repeatability

±9 arcsec / ±.0003" at 6" Radius

### 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