

Precision Indexing Products

04/11/2022

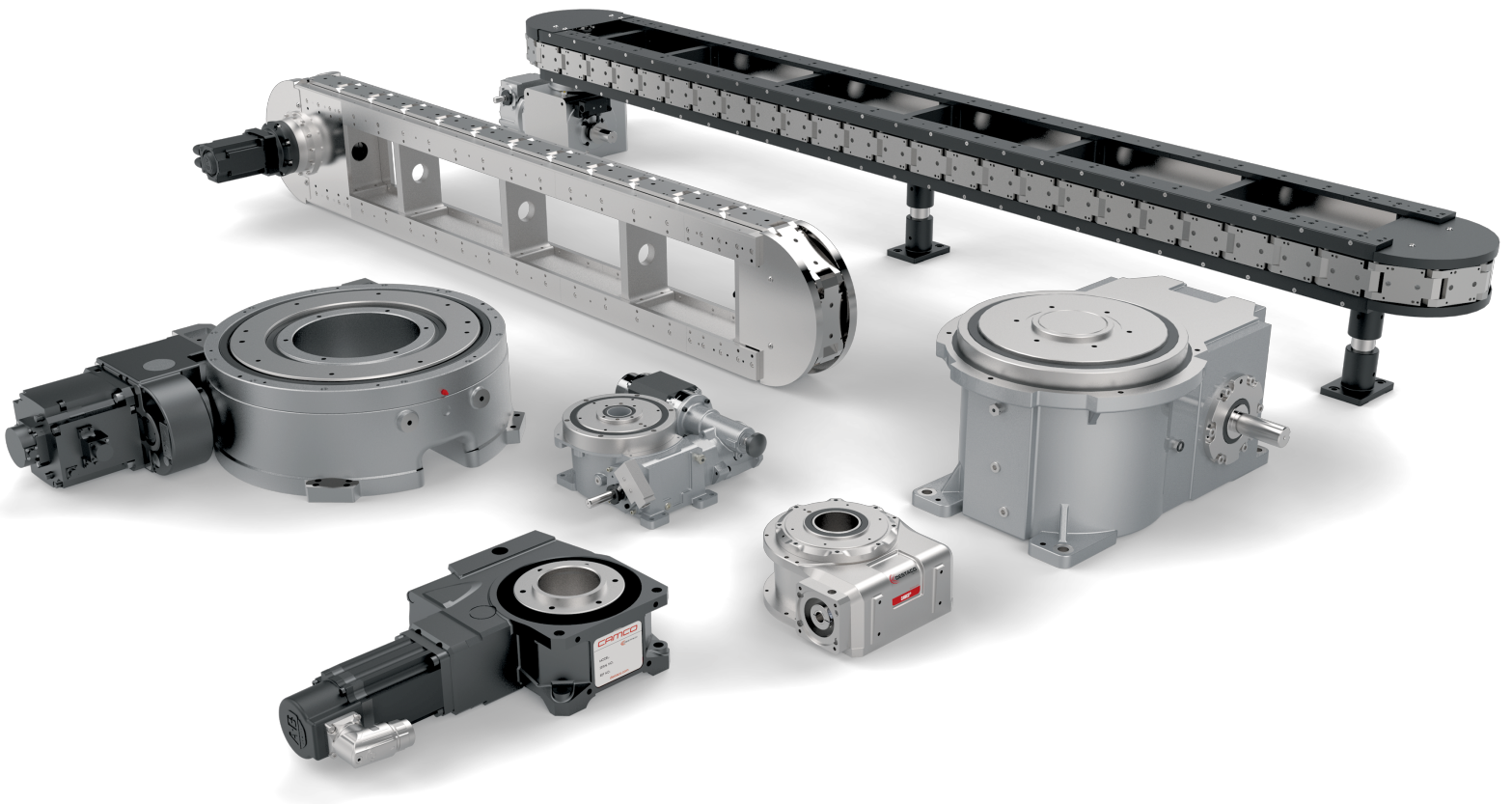


Motion & Flow Control Products

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Precision Indexing Products

04/11/2022

This catalog is a custom document and the products included is based on your unique selection from portions of complete catalogs that already exist. Please refer to our full catalogs for more information on products not included in this customized document.

Table of Contents

| | |
|--------------------------------------|------------------|
| GTB Servo Indexers | IN-SRV-1 |
| RSD Servo Indexers | IN-SRV-39 |
| RDM Dial Indexers | IN-MCH-1 |
| RD HD Dial Indexers | IN-MCH-27 |
| E-Series HD Drives | IN-MCH-39 |
| RA Right Angle Drives | IN-MCH-17 |
| RGS/RGD Shaft/Flange Drives | IN-MCH-51 |
| Parallel Shaft/Flange Drives | IN-MCH-71 |
| RNG Easy Access Dial Indexers | IN-MCH-83 |
| Overload Clutches | IN-CLU-1 |
| Custom Cams | IN-CAM-1 |
| Rite-Link Conveyors | IN-CNV-1 |
| Table-Top Modular Conveyors | IN-CNV-3 |
| Heavy Duty Modular Conveyors | IN-CNV-15 |
| LPP Lineal Part Handles | IN-PRT-1 |
| RPP Rotating Part Handlers | IN-PRT-7 |

Precision Indexing Products

04/11/2022

Table of Contents (continued)

GTB SERIES

Globoidal (Roller Gear) Servo Positioner | Table of Contents



Features:

Destaco's **CAMCO GTB Series** are lightweight, compact, high-accuracy programmable servo positioners.

The exceptional low profile high-torque output design supports the demands of high inertia load applications.

Available in four sizes, the GTB series units are lubricated for life and can be mounted in either horizontal or vertical orientations. The GTB Series feature the largest utility through hole diameter available for its size, making it ideal for space constrained machine applications.

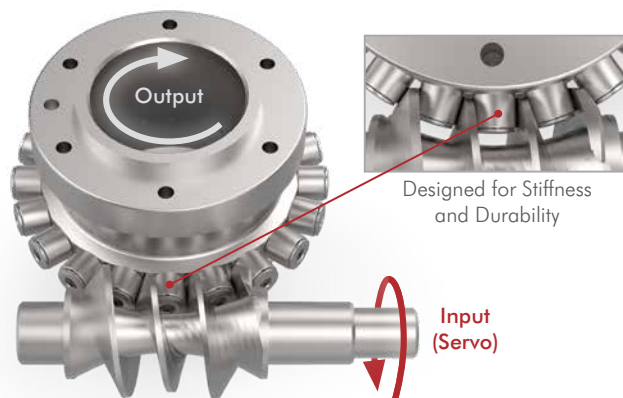
Table of Contents

IN-SRV-#

| | |
|---------------------------|----|
| Features & Benefits | 2 |
| How to Order | 3 |
| Specifications | 5 |
| Indexer Sizing | 6 |
| GTB40 | 7 |
| GTB63 | 10 |
| GTB80 | 13 |
| GTB100 | 16 |

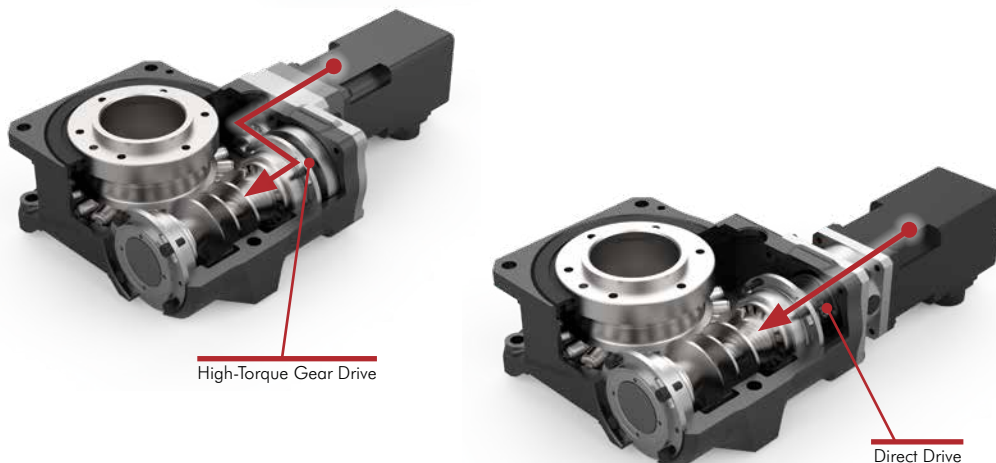
Zero Backlash Roller Gear Cam Mechanism

Innovative roller gear design provides exceptionally smooth motion performance. The globoidal cam and output turret with integrated rollers are a preloaded system that delivers zero backlash for superior accuracy, stiffness and long term durability.



Flexible Drive Options

Each GTB model can be ordered in two different drive options. The high-torque gear drive option is used for applications with large inertia requirements while maintaining a small motor size. The direct drive option provides zero backlash, high precision operation. Both options interface with an array of servo motor suppliers.

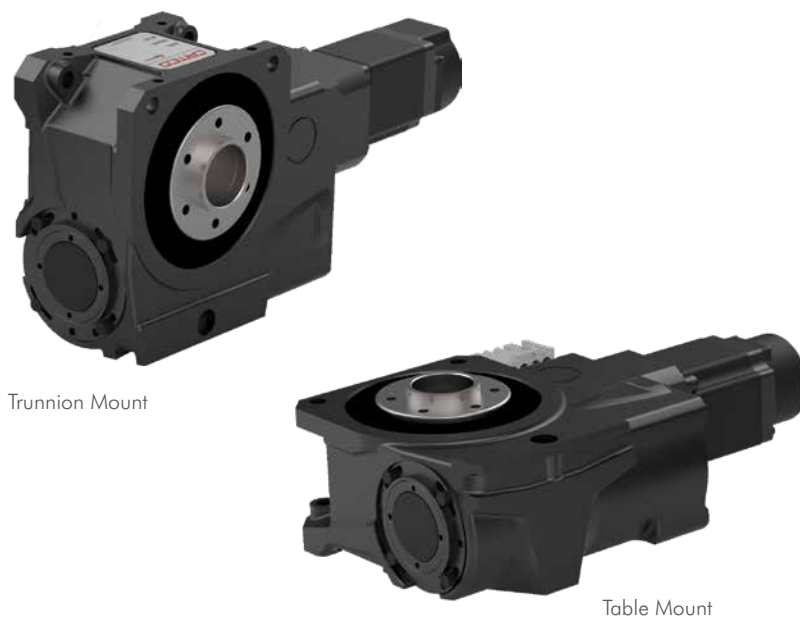


Orientation Independent Mounting

GTB Series units can be mounted in any orientation for easy installation and machine standardization.

Install units in any configuration:

- Flat horizontal table mounting
- Vertical mounting
- Trunnion Mounting
- Inverted (upside down) mounting



GTB SERIES

Globoidal (Roller Gear) Servo Positioner | How To Order

GTB Series: How To Order

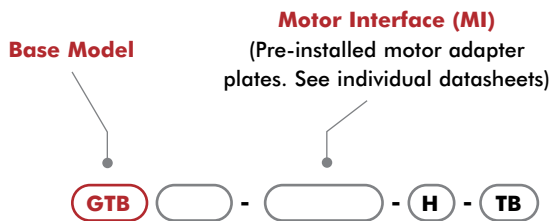
Globoidal (Roller Gear) Servo Positioner Base Unit

GTB Series units can be interfaced with wide variety of servo motor manufacturers. Use the MI code tables to identify the supported motors for each GTB unit. The MI code specifies the motor adapter plate that provides direct easy motor mounting to the GTB servo positioner.

The -H option for independent mounting orientation comes standard with every GTB series unit. The -T option for precision dial plate locating dowel hole and -B option for precision mounting dowel holes are also provided as standard.



GTB Series without motor installed



| Size | Supported Gear Ratios |
|------|-----------------------|
| 40 | 45:1 |
| | 15:1 |
| 63 | 60:1 |
| | 20:1 |
| 80 | 60:1 |
| | 20:1 |
| 100 | 60:1 |
| | 20:1 |

Standard Features

- H** Orientation independent mounting. Supports vertical, horizontal, trunnion applications
- T** Single output flange surface dowel hole for precision dial plate locating
- B** Precision placement housing dowel holes, 2 on top of unit, 2 on bottom of unit

Easily Integrates with a Variety of Servo Motor Manufacturers

| | |
|---------------|------------|
| Allen Bradley | Mitsubishi |
| AMK | Panasonic |
| Mitsubishi | Sanyo |
| FANUC | SEW |
| Keyence | Siemens |
| KUKA | Yaskawa |

Units are available in two different gear ratios based on Direct or Geared motor coupling. Contact Sales to determine what motors are supported for precision direct drive applications and geared drive high torque configurations.



Gear Drive:
High Inertia Applications
45:1 GTB40
60:1 GTB63, GTB80, GTB100



Direct Drive:
Zero Backlash Precision Applications
15:1 GTB40
20:1 GTB63, GTB80, GTB100

GTB Series: How to Order configured System (Allen Bradley only)

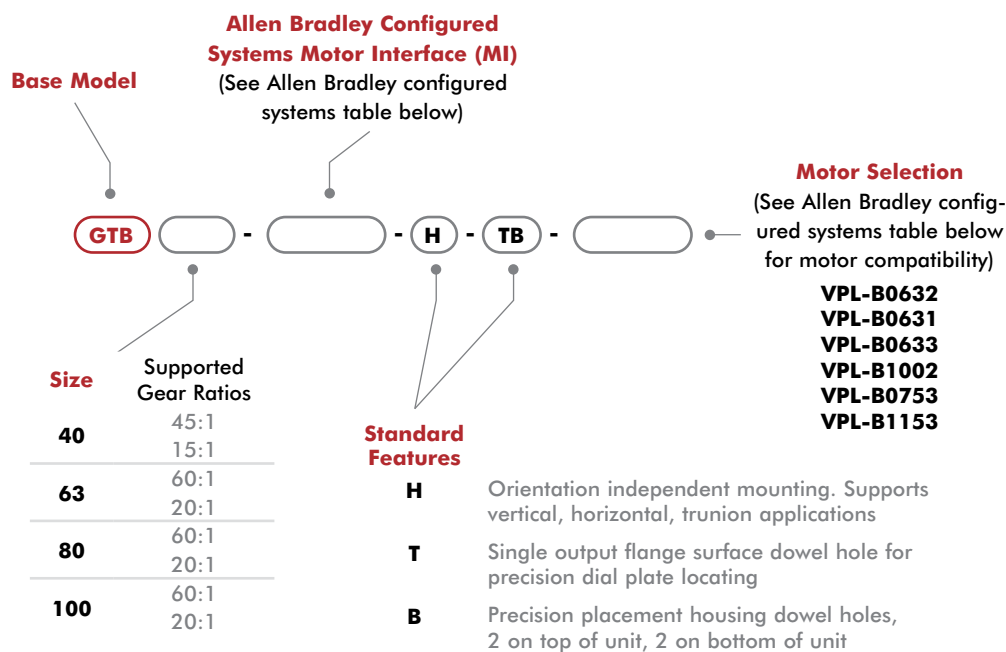
Servo Positioner Configured Systems

GTB Series units can be interfaced with wide variety of servo motor manufacturers. Use the MI code table to identify the supported motors for each GTB unit.

GTB series are also offered as a configured system when selecting Allen Bradley servo motors. The Allen Bradley servo motor will be installed to the GTB unit and shipped as a complete assembly. The GTB series and motor combinations are a matched pair that supports a variety of servo positioning rotary table applications. To use one of the configured systems you must verify the application requirements are within the operating parameters of the GTB unit and motor combination.



GTB Series with Allen Bradley Motor Installed*



Allen Bradley Configured Systems

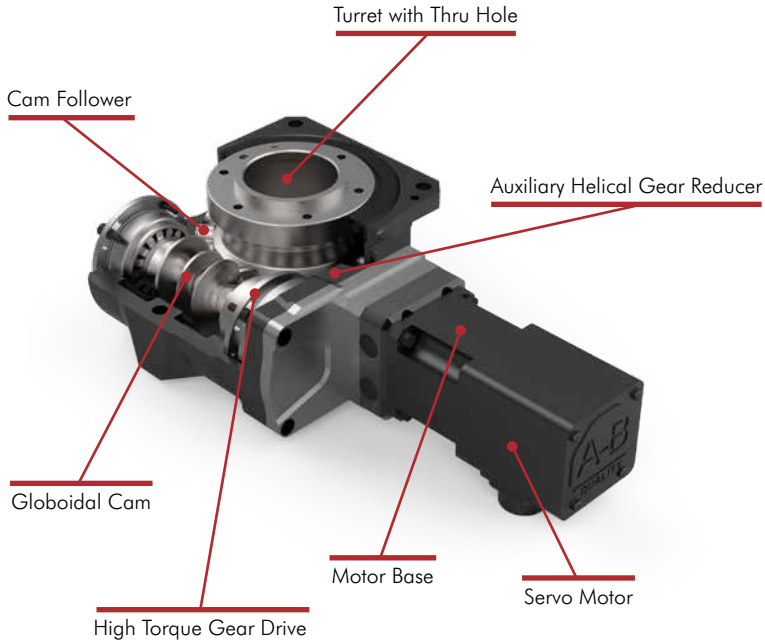
| Size | Base Part # | Allen Bradley MI Code # | Motor Coupling | Gear Ratio | Motor Vendor | Allen Bradley Motor Part # | Motor Frame mm [in] | Flange size mm [in] | Shaft Ø mm [in] |
|------|-------------|-------------------------|----------------|------------|---------------|----------------------------|---------------------|---------------------|-----------------|
| 40 | GTB40 | FDG20 | Direct | 15:1 | Allen Bradley | VPL-B0632 | 60 [2.36] | 63 [2.48] | 9 [0.35] |
| | GTB40 | FGC20 | Geared | 45:1 | | VPL-B0631 | | | |
| 63 | GTB63 | GDP20 | Direct | 20:1 | | VPL-B0633 | | | |
| | GTB63 | GGC22 | Geared | 60:1 | | VPL-B0632 | | | |
| 80 | GTB80 | HDP20 | Direct | 20:1 | | VPL-B1002 | 100 [3.94] | 100 [3.94] | 16 [0.63] |
| | GTB80 | HGD24 | Geared | 60:1 | | VPL-B0753 | 80 [3.15] | 75 [2.95] | 11 [0.43] |
| 100 | GTB100 | JDG20 | Direct | 20:1 | | VPL-B1153 | 100 [3.94] | 115 [4.53] | 19 [0.75] |
| | GTB100 | JGE27 | Geared | 60:1 | | | | | |

* = Servo Positioner units are assembled, tested and shipped with the above recommended motor for best performance.

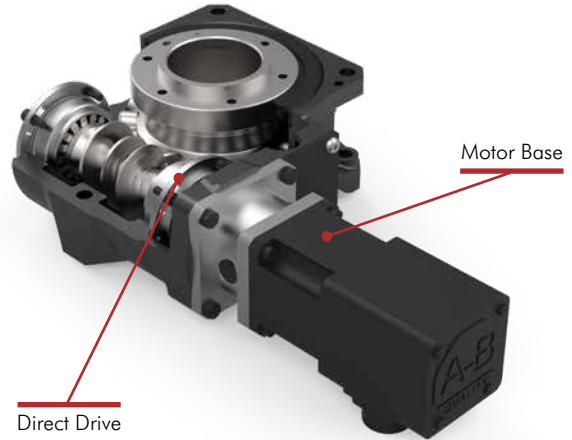
GTB SERIES

Globoidal (Roller Gear) Servo Positioner | Specifications

High Torque Gear Drive:
High Inertia Application



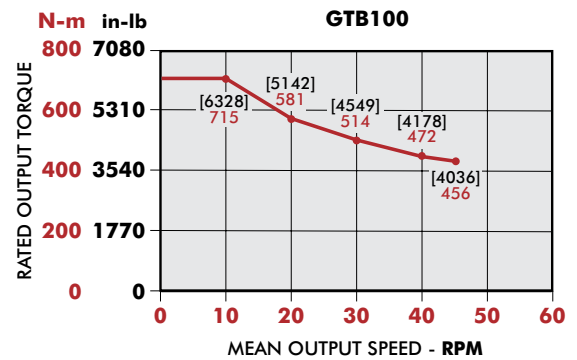
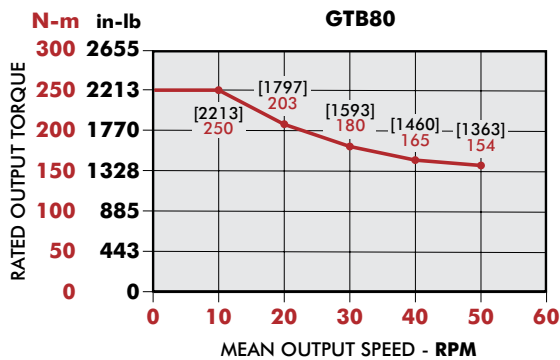
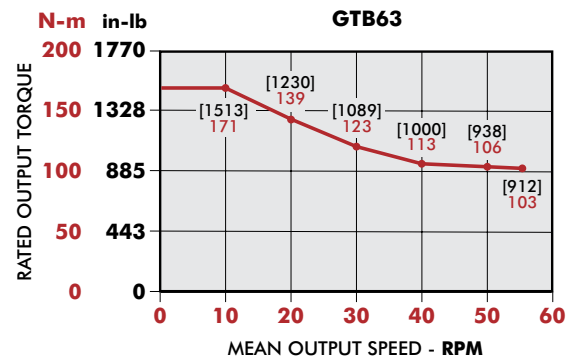
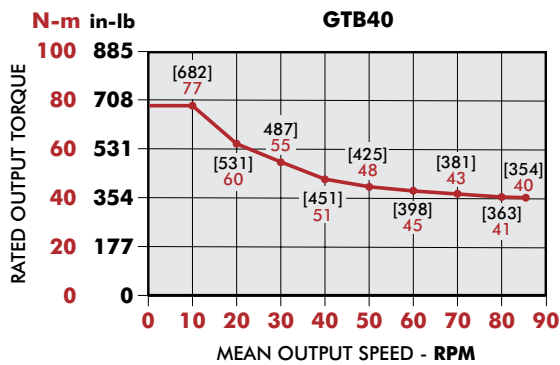
Direct Drive:
Zero Backlash Precision Applications



NOTE:

Motor brake must be applied for applications with gravity torque acting on output table (trunnion mounting) in the case of power loss. Follow the instruction manual for fitting and installing motor. Improper handling can cause damage or product malfunction.

| General Specifications | Symbol | Units | GTB40 | | GTB63 | | GTB80 | | GTB100 | |
|------------------------------|---------------------|---|-----------------|----------------|------------------|----------------|------------------|-----------------|-------------------|-----------------|
| | | | Direct | Geared | Direct | Geared | Direct | Geared | Direct | Geared |
| Motor Coupling | | | Direct | Geared | Direct | Geared | Direct | Geared | Direct | Geared |
| Constant lead ratio | | | 15:1 | 45:1 | 20:1 | 60:1 | 20:1 | 60:1 | 20:1 | 60:1 |
| Center distance | | mm [in] | 40 [1.57] | | 63 [2.48] | | 80 [3.15] | | 100 [3.94] | |
| Through hole diameter | Ø | mm [in] | 25 [0.98] | | 50 [1.97] | | 75 [2.95] | | 85 [3.35] | |
| Accuracy | | arc-sec | 90 ±45 | | 60 ±30 | | 40 ±20 | | 40 ±20 | |
| Repeatability | | arc-sec | 20 ±10 | | 14 ±7 | | 10 ±5 | | 10 ±5 | |
| Allowable static torque | T _S | N-m [in-lb] | 176 [1558] | | 411 [3637] | | 600 [5310] | | 1341 [11868] | |
| Max start / stop torque | T _U | N-m [in-lb] | 94 [832] | | 210 [1859] | | 307 [2717] | | 880 [7789] | |
| Allow. mean output speed | N _m | rpm | 86 | | 55 | | 50 | | 45 | |
| Allow. ultimate output speed | N _U | rpm | 100 | | 70 | | 60 | | 50 | |
| Allow. axial cap. on output | P _a | N [lbs] | 1100 [247] | | 1850 [416] | | 3632 [816] | | 4100 [922] | |
| Allow. radial cap. on output | P _r | N [lbs] | 740 [166] | | 1500 [337] | | 3100 [697] | | 3420 [769] | |
| Allow. moment cap. on output | P _{moment} | N-m [in-lb] | 40 [354] | | 85 [752] | | 226 [2000] | | 313 [2770] | |
| Inertia moment on input axis | J | [lb-ft ²] x 10 ⁻⁴ [kg-m ²] x 10 ⁻⁴ | [6.24] 0.263 | [4.03] 0.17 | [20.67] 0.871 | [9.49] 0.4 | [76.27] 3.214 | [36.07] 1.52 | [246.55] 10.39 | [96.82] 4.08 |
| Backlash | | arc-sec | 0 | 25 | 0 | 15 | 0 | 15 | 0 | 10 |
| Average efficiency | | % | 90 | 80 | 90 | 80 | 90 | 80 | 90 | 80 |
| Lubrication (Maint. Free) | | | Grease | | Grease | | Grease | | Grease | |
| Weight | | [lbm] kg | [7.28] 3.3 | [7.72] 3.5 | [13.01] 5.9 | [13.67] 6.2 | [28.44] 12.9 | [31.09] 14.1 | [53.58] 24.3 | [55.57] 25.2 |

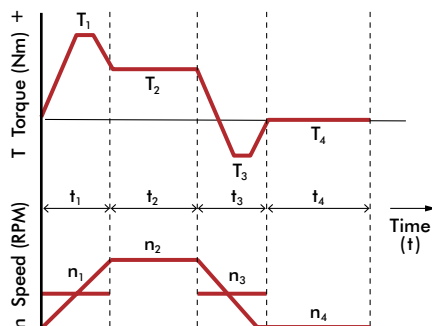


Sizing GTB Series for an Application (Contact Destaco for sizing application support)

1. Load diagram

Check motion profile and resultant inertia torque.
(Add working torque if applied).

Start and stop speed can be simplified to average speed within a segment.



2. Check key conditions

$$\text{Mean torque } T_{mean} = \sqrt{\frac{10}{3} \frac{n_1 \cdot t_1 \cdot |T_1|^3 + n_2 \cdot t_2 \cdot |T_2|^3 + \dots + n_n \cdot t_n \cdot |T_n|^3}{n_1 \cdot t_1 + n_2 \cdot t_2 + \dots + n_n \cdot t_n}} \quad (\text{N-m})$$

$$\text{Mean output speed } n_{mean} = \frac{n_1 \cdot t_1 + n_2 \cdot t_2 + \dots + n_n \cdot t_n}{t_1 + t_2 + \dots + t_n} \quad (\text{rpm})$$

$$\text{Max output speed } n_{max} \quad (\text{rpm})$$

3. Pre-selection

Choose a size that meets these criteria.

$$T_{mean} < \text{Maximum rated output torque (N-m)}$$

$$n_{mean} < \text{Allowable mean output speed Nm (rpm)}$$

$$n_{max} < \text{Allowable ultimate output speed Nu (rpm)}$$

4. Check specifications

Start/stop torque $T_1 < \text{Maximum rated output torque (N-m)}$
 $T_3 < \text{Maximum rated output torque (N-m)}$

Operation condition factor
 Smooth without any impact or sudden load $f = 1.0$
 Normal, but occasional emergency stop $f = 1.5$
 Operation with frequent impact or sudden load $f = 3.0$

$$\text{Estimated lifetime } L_h = 12000 \left(\frac{T_{op}}{f \cdot T_{mean}} \right)^{\frac{10}{3}} \quad (\text{hours})$$

5. Selection complete

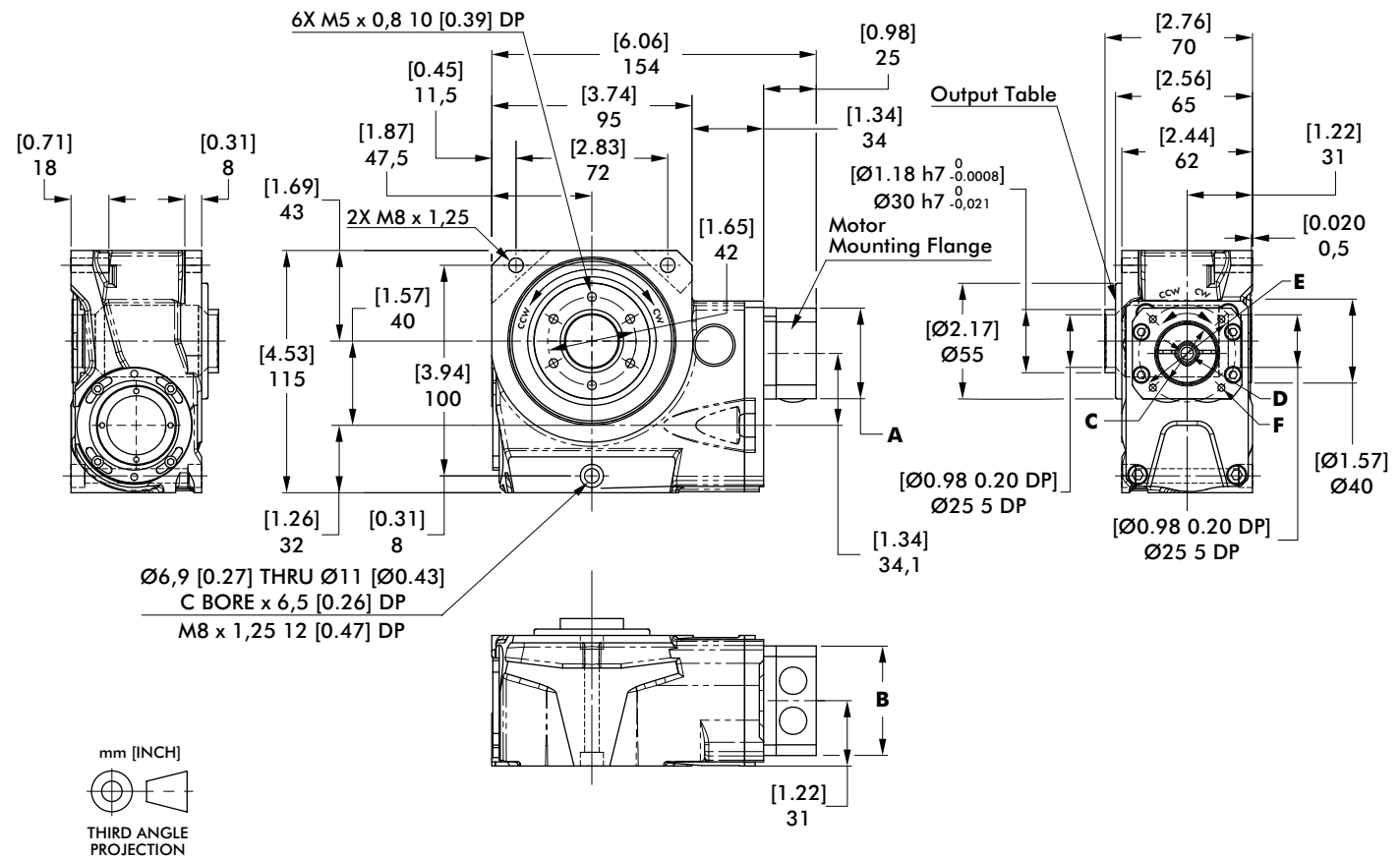
If above values don't satisfy requirements, go back to step 2 and 3 to re-select size.

GTB40 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB40-FG (Motor Frame Size □ = 38 [1.50], 40 [1.57])

Gear Drive: High Inertia Applications: Ratio 45:1



Input/Output Rotation: CW/CCW

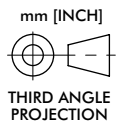
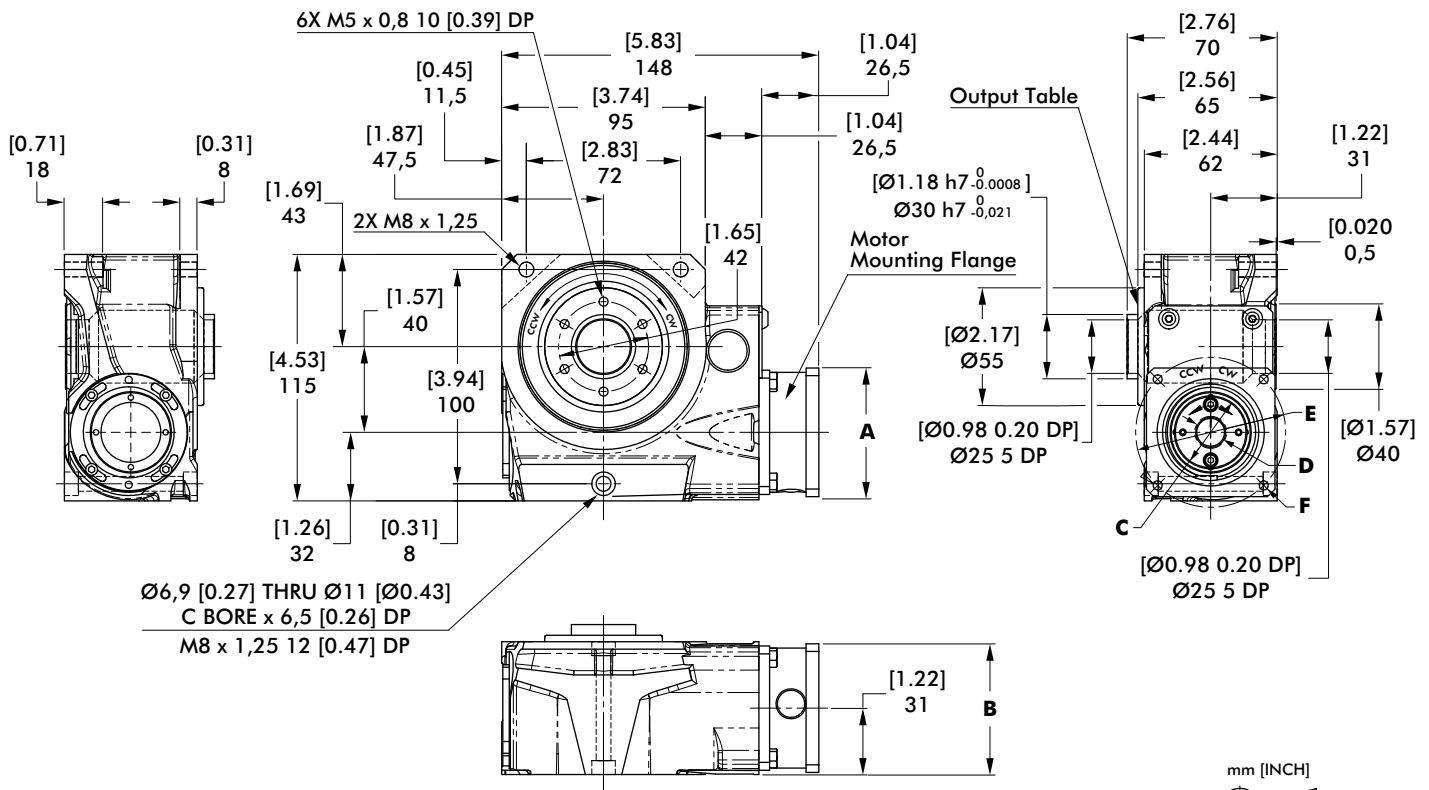
| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|-----------------------|------------------------|---------------------------------|-------------------------|----------------------------------|---|
| FGA20 | 43 [1.69] | 52 [2.05] | Ø30 [1.18] x 4 [0.16] | 8 [0.31] | 46 [1.81] | 4X M4 x 11,5 [0.45] DEEP |
| FGB20 | 43 [1.69] | 52 [2.05] | Ø30 [1.18] x 4 [0.16] | 8 [0.31] | 45 [1.77] | 4X M3 x 8,5 [0.33] DEEP |
| FGC20 | 55 [2.17] | 55 [2.17] | Ø40 [1.57] x 3 [0.12] | 9 [0.35] | 63 [2.48] | 4X M5 X 14 [0.55] DEEP |
| FGD20 | 55 [2.17] | 55 [2.17] | Ø40 [1.57] x 3 [0.12] | 9 [0.35] | 63 [2.48] | 4X M4 X 11,5 [0.45] DEEP |

GTB40 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB40-FD (Motor Frame Size □ = 60 [2.37])

Direct Drive: Zero Backlash Precision Applications: Ratio 15:1



Input/Output Rotation: CW/CCW

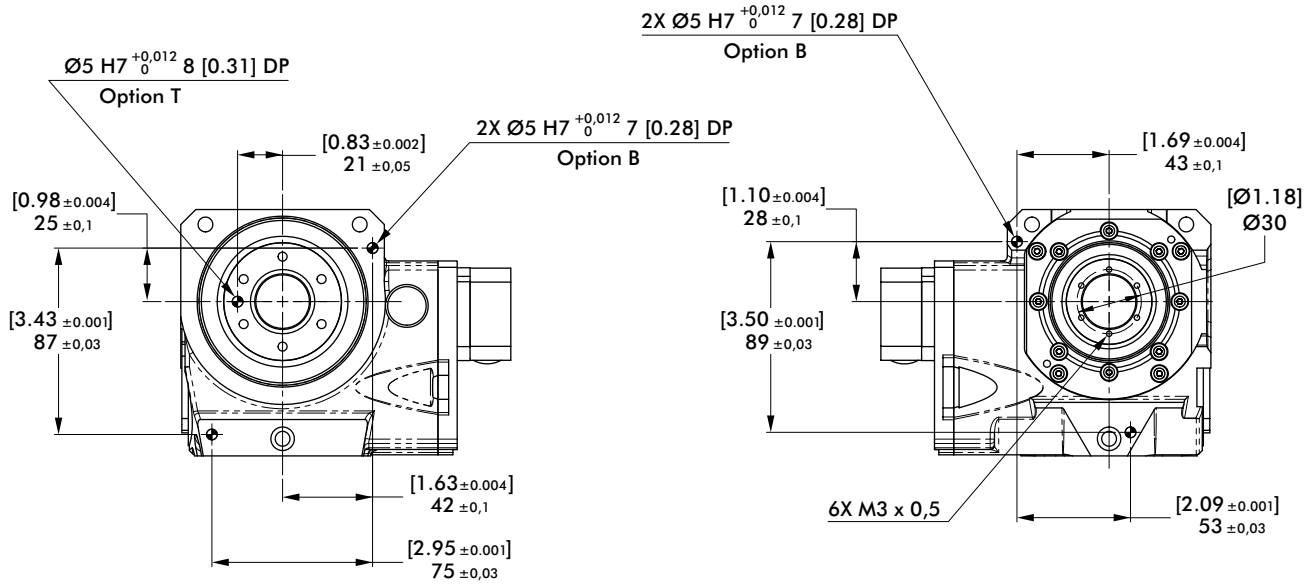
| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|-----------------------|------------------------|---------------------------------|-------------------------|----------------------------------|---|
| FDA20 | 60 [2.36] | 60 [2.36] | Ø50 [1.97] x 4 [0.16] | Ø14 [0.55] | Ø70 [2.76] | 4X M5 THRU |
| FDB20 | | | | Ø11 [0.43] | | |
| FDC20 | | | | Ø14 [0.55] | | |
| FDD20 | | | | Ø9 [0.35] | | |
| FDE20 | | | | Ø12 [0.47] | | |
| FDF20 | 55 [2.17] | 55 [2.17] | Ø40 [1.57] x 4 [0.16] | Ø9 [0.35] | Ø63 [2.48] | 4X M5 THRU |
| FDG20 | | | | Ø9 [0.35] | | |
| FDH20 | | | | Ø11 [0.43] | | |
| FDJ20 | | | | Ø9 [0.35] | | |
| FDK20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] X 4 [0.16] | Ø16 [0.63] | Ø100 [3.94] | 4X M6 THRU |

GTB40 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB40 Option Specifications

Dowel Hole Option -B, Housing -T: Output Table

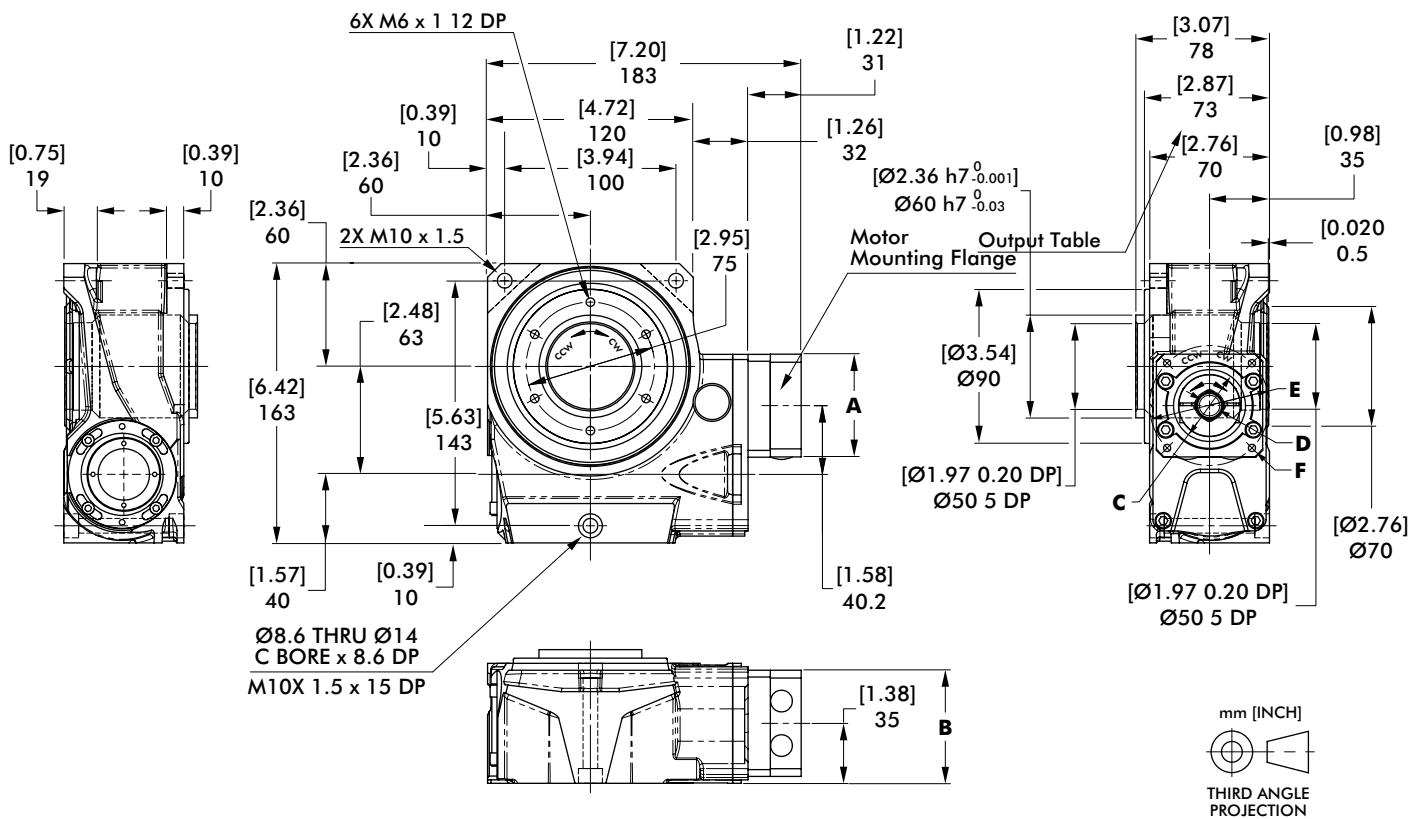


GTB63 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB-63-GG (Motor Frame Size □ = 60 [2.37])

Gear Drive: High Inertia applications: Ratio 60:1



Input/Output Rotation: CW/CCW

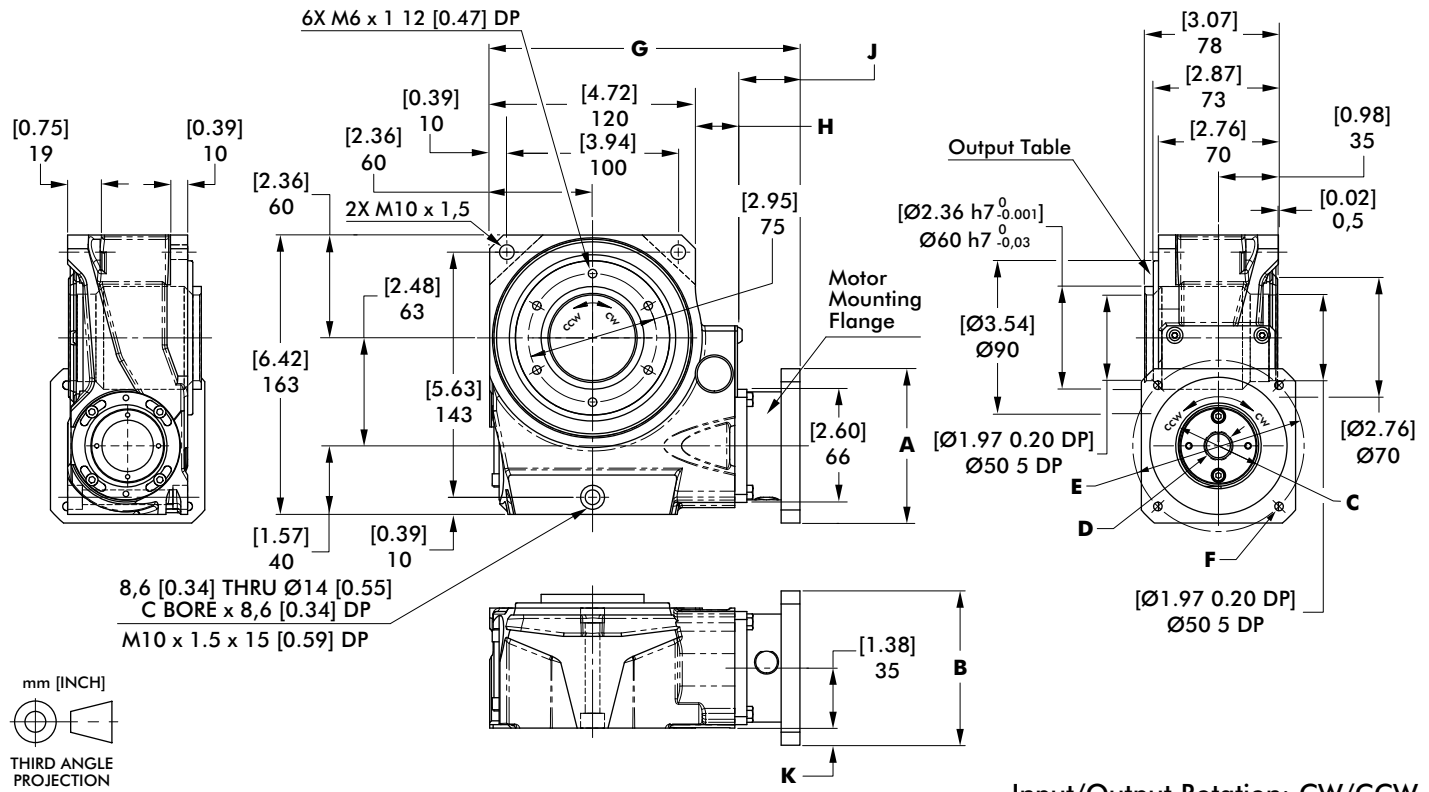
| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|-----------------------|------------------------|---------------------------------|-------------------------|----------------------------------|---|
| GGA20 | 60 [2.36] | 62 [2.44] | Ø50 [1.97] x 5 [0.20] | Ø14 [0.55] | Ø70 [2.76] | 4X M5 x 14 [0.55] Deep |
| GGA22 | | | | Ø9 [0.35] | | |
| GGB20 | | | | Ø14 [0.55] | | |
| GGB21 | | | | Ø11 [0.43] | | |
| GGC22 | 70 [2.76] | 70 [2.76] | Ø40 [1.57] x 3 [0.12] | Ø9 [0.35] | Ø63 [2.48] | 4X M5 x 14 [0.55] Deep |
| GGD23 | | | | Ø12 [0.47] | Ø70 [2.76] | |
| GGE24 | | | | Ø11 [0.43] | Ø75 [2.95] | |
| GGF22 | 60 [2.36] | 62 [2.44] | Ø40 [1.57] x 3 [0.12] | Ø9 [0.35] | Ø63 [2.48] | 4X M4 x 11,5 [0.45] Deep |
| GGG20 | 70 [2.76] | 70 [2.76] | Ø60 [2.36] x 5 [0.20] | Ø14 [0.55] | Ø75 [2.95] | 4X M6 x 16 [0.63] Deep |

GTB63 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB63-GD (Motor Frame Size □ = 60 [2.36], 80 [3.15], 86 [3.39], 90 [3.54])

Direct Drive: Ratio 20:1



| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|--------------------|---------------------|------------------------------|----------------------|-------------------------------|--------------------------------------|
| GDA20 | 60 [2.36] | 60 [2.36] | Ø50 [1.97] x 4 [0.16] | Ø14 [0.55] | Ø70 [2.76] | 4X M5 THRU |
| GDB20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4 [0.16] | Ø19 [0.75] | Ø90 [3.54] | |
| GDC20 | | | | Ø14 [0.55] | | 4X M6 THRU |
| GDD20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 6 [0.24] | Ø16 [0.63] | Ø100 [3.94] | |
| GDE20 | | | | Ø16 [0.63] | | |
| GDF20 | 60 [2.36] | 60 [2.36] | Ø50 [1.97] x 4 [0.16] | Ø14 [0.55] | Ø70 [2.76] | 4X M4 THRU |
| GDG20 | | | | Ø19 [0.75] | | 4X M5 THRU |
| GDH20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4 [0.16] | Ø14 [0.55] | Ø90 [3.54] | |
| GDJ20 | | | | Ø16 [0.63] | | 4X M6 THRU |
| GDK20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 6 [0.24] | Ø10 [0.39] | Ø100 [3.94] | |
| GDL20 | 60 [2.36] | 60 [2.36] | Ø50 [1.97] x 4 [0.16] | Ø12 [0.47] | Ø70 [2.76] | 4X M5 THRU |
| GDM20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4 [0.16] | Ø16 [0.63] | Ø90 [3.54] | 4X M6 THRU |
| GDN20 | 72 [2.83] | 72 [2.83] | Ø60 [2.36] x 4 [0.16] | Ø14 [0.55] | Ø75 [2.95] | |
| GDP20 | 55 [2.17] | 55 [2.17] | Ø40 [1.57] x 5 [0.20] | Ø9 [0.35] | Ø63 [2.48] | |
| GDQ20 | | | | | | 4X M5 THRU |
| GDR20 | 70 [2.76] | 70 [2.76] | Ø60 [2.36] x 4 [0.16] | Ø11 [0.43] | Ø75 [2.95] | |



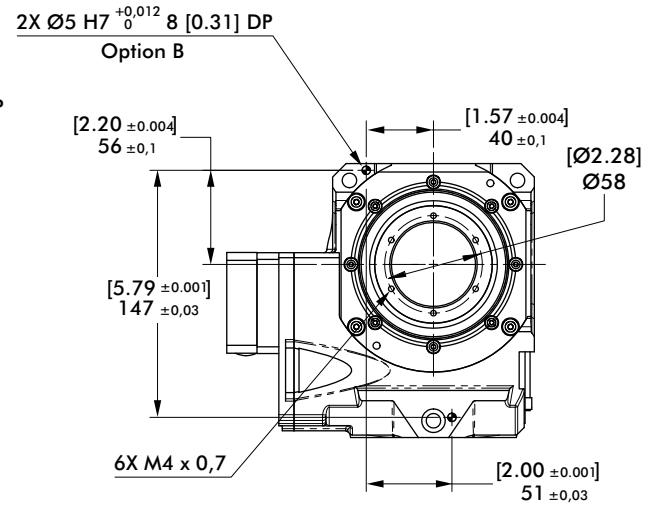
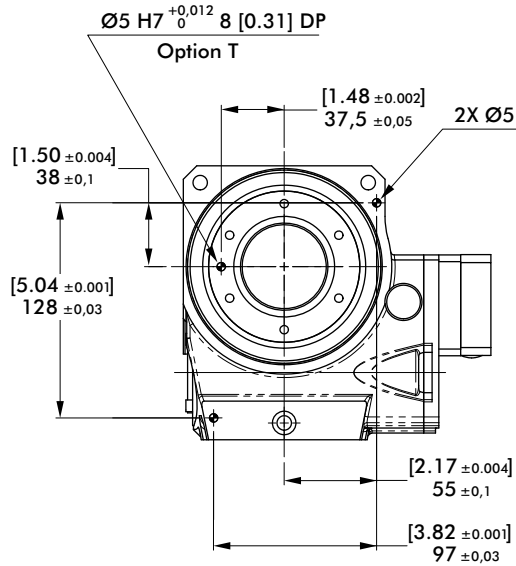
| Frame Size | G | H | J | K |
|------------|------------|-------------|-------------|-----------|
| 60 | 178 [7.01] | 24,5 [0.96] | 33,5 [1.32] | -- |
| 80 | 180 [7.09] | | 35,5 [1.40] | 5 [0.20] |
| 86 | 181 [7.13] | | 36,5 [1.44] | 10 [0.39] |
| 90 | | | | |

GTB63 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB63 Option Specifications

Dowel Hole Option -B, Housing -T: Output Table

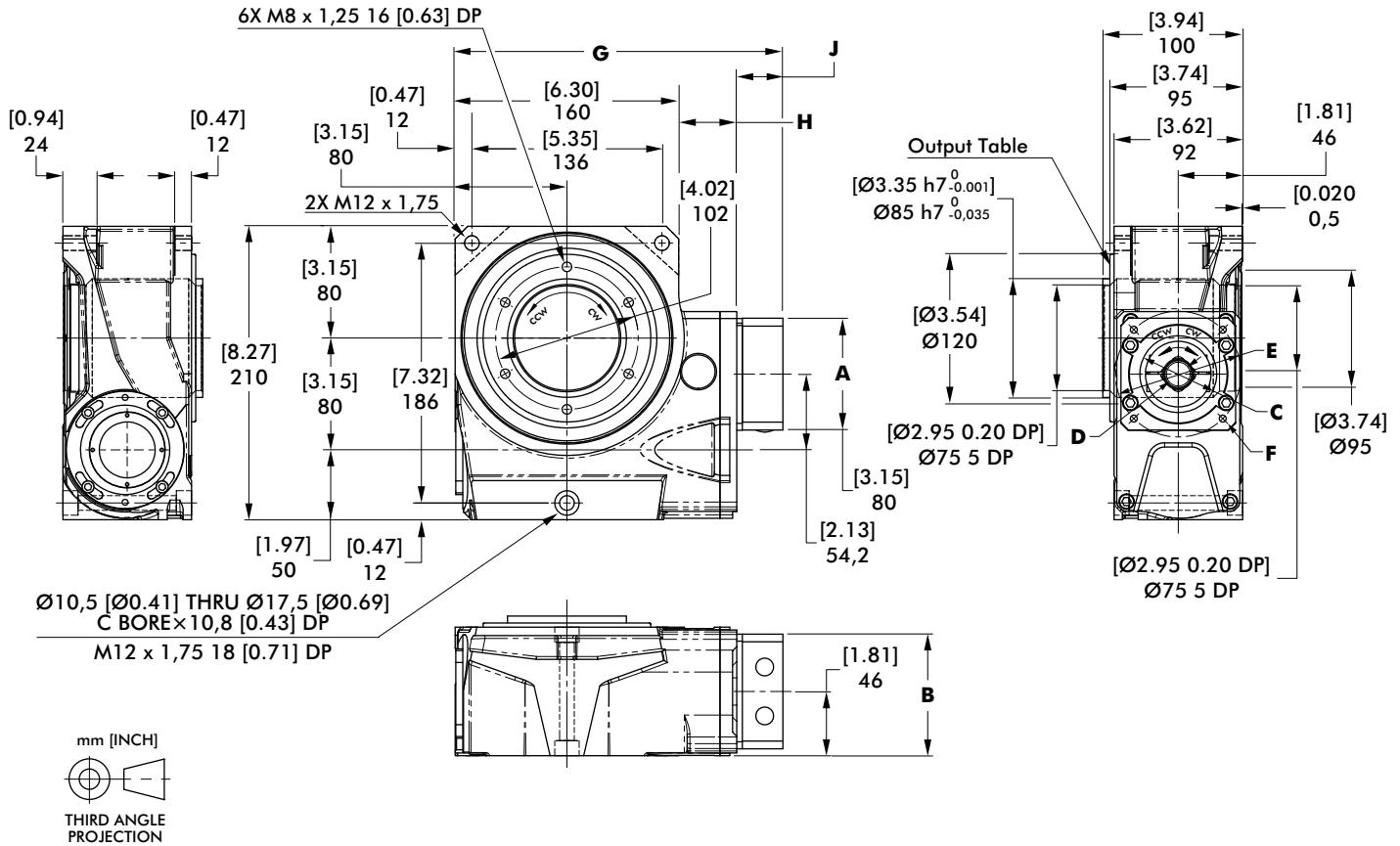


GTB80 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB80-HG (Motor Frame Size □ = 80 [3.15], 86 [3.39], 90 [3.54])

Gear Drive: High Inertia Applications: Ratio 60:1



Input/Output Rotation: CW/CCW

| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|-----------------------|------------------------|---------------------------------|-------------------------|----------------------------------|---|
| HGA20 | 80 [3.15] | 82 [3.23] | Ø70 [2.76] x 4,5 [0.18] | Ø19 [0.75] | Ø90 [3.54] | 4X M6 THRU |
| HGA22 | | | | Ø16 [0.63] | | 4X M6 x 17 [0.67] DEEP |
| HGB21 | 90 [3.54] | 88 [3.46] | Ø80 [3.15] x 7 [0.28] | Ø14 [0.55] | Ø100 [3.94] | 4X M6 THRU |
| HGB22 | | | | Ø16 [0.63] | | 4X M6 x 17 [0.67] DEEP |
| HGB23 | 80 [3.15] | 82 [3.23] | Ø70 [2.76] x 4,5 [0.18] | Ø10 [0.39] | Ø75 [2.95] | 4X M6 THRU |
| HGC20 | | | Ø60 [2.36] x 3 [0.12] | Ø11 [0.43] | | 4X M5 x 14 [0.55] DEEP |
| HGD24 | 80 [3.15] | 82 [3.23] | Ø70 [2.76] x 4,5 [0.18] | Ø16 [0.63] | Ø90 [3.54] | 4X M6 THRU |
| HGE22 | | | Ø60 [2.36] x 4 [0.16] | Ø14 [0.55] | | |
| HGF25 | 90 [3.54] | 88 [3.46] | Ø80 [3.15] x 4 [0.16] | Ø16 [0.63] | Ø100 [3.94] | 4X M6 x 15 [0.59] DEEP |
| HGG26 | | | Ø14 [0.55] | | | |
| HGG25 | 90 [3.54] | 88 [3.46] | Ø80 [3.15] x 4 [0.16] | Ø14 [0.55] | Ø100 [3.94] | 4X M6 x 15 [0.59] DEEP |
| HGH20 | 98 [3.86] | 98 [3.86] | Ø95 [3.74] x 4 [0.16] | Ø19 [0.75] | Ø115 [4.53] | 4X M8 x 22,5 [0.89] DEEP |



80



86/90

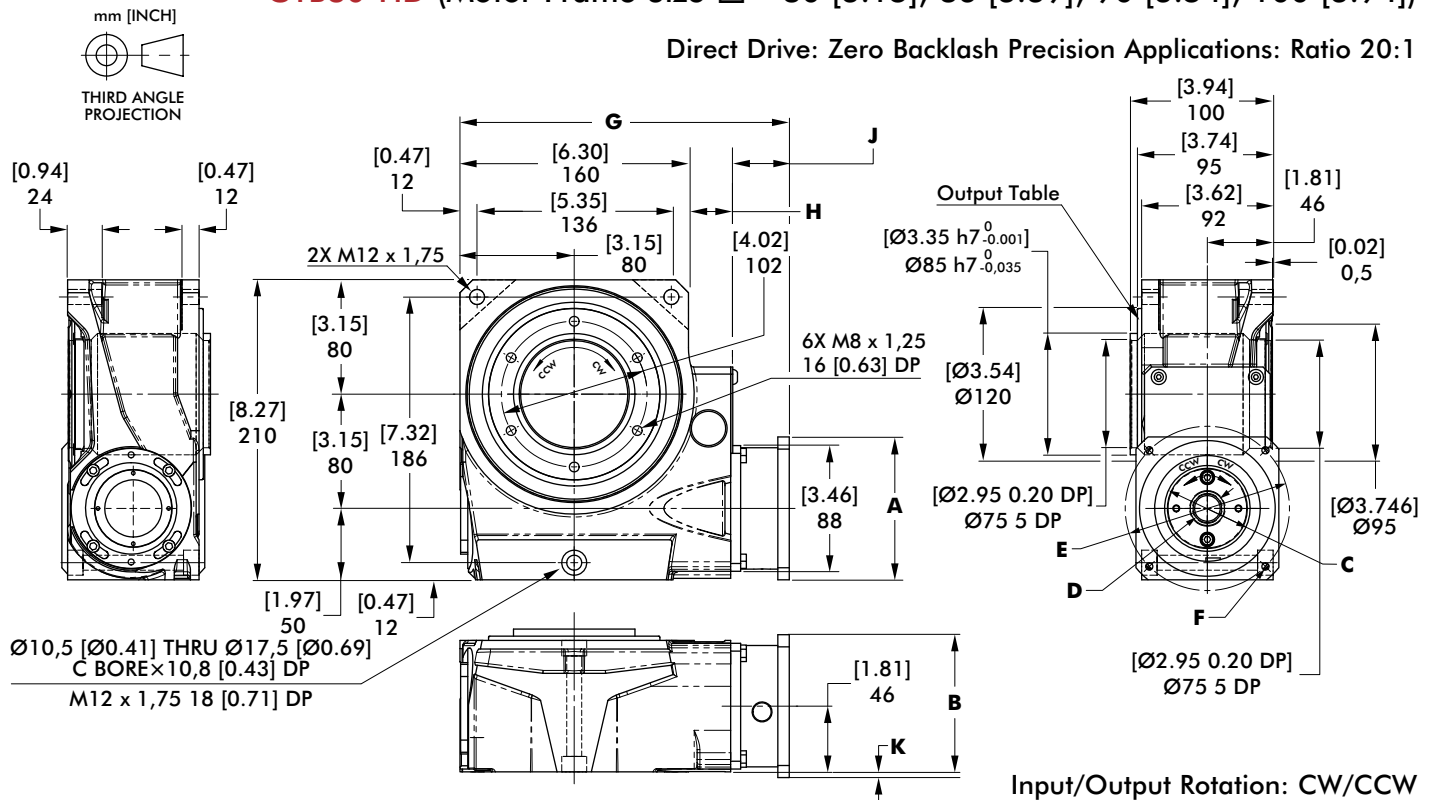
| Frame Size | G | H | J |
|------------|------------|-------------|-------------|
| 80 | 234 [9.21] | 41,5 [1.63] | 33 [1.30] |
| 86 | 241 [9.49] | 45,5 [1.79] | 35,5 [1.40] |
| 90 | | | |

GTB80 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB80-HD (Motor Frame Size □ = 80 [3.15], 86 [3.39], 90 [3.54], 100 [3.94])

Direct Drive: Zero Backlash Precision Applications: Ratio 20:1



| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|--------------------|---------------------|------------------------------|----------------------|-------------------------------|--------------------------------------|
| HDA20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4,5 [0.18] | Ø19 [0.75] | Ø90 [3.54] | |
| HDB20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 5,5 [0.22] | Ø14 [0.55] | Ø100 [3.94] | 4X M6 THRU |
| HDC20 | | | | Ø16 [0.63] | | |
| HDD20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 3,5 [0.14] | Ø24 [0.94] | Ø115 [4.53] | |
| HDE20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4,5 [0.18] | | Ø90 [3.54] | 4X M5 THRU |
| HDF20 | | | Ø95 [3.74] x 3,5 [0.14] | Ø19 [0.75] | | |
| HDG20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 7,5 [0.30] | | Ø115 [4.53] | 4X M8 THRU |
| HDH20 | 80 [3.15] | 80 [3.15] | Ø70 [2.76] x 4,5 [0.18] | Ø16 [0.63] | Ø90 [3.54] | |
| HDJ20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 5,5 [0.22] | | Ø100 [3.94] | 4X M6 THRU |
| HDK20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 3,5 [0.14] | Ø22 [0.87] | Ø115 [4.53] | 4X M8 THRU |
| HDL20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 5,5 [0.22] | Ø10 [0.39] | Ø100 [3.94] | 4X M6 THRU |
| HDM20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 7,5 [0.30] | Ø22 [0.87] | Ø115 [4.53] | 4X M8 THRU |
| HDN20 | 96 [3.78] | 96 [3.78] | Ø80 [3.15] x 4 [0.16] | Ø19 [0.75] | Ø100 [3.94] | 4X M6 THRU |
| HDP20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 3,5 [0.14] | Ø16 [0.63] | Ø100 [3.94] | 4X M3 THRU |
| HDQ20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 3,5 [0.14] | Ø19 [0.75] | Ø115 [4.53] | 4X M8 THRU |
| HDR20 | | | | | | |
| HDS20 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 3,5 [0.14] | Ø14 [0.55] | Ø100 [3.94] | 4X M6 THRU |
| HDT20 | 114 [4.49] | 114 [4.49] | Ø110 [4.33] x 4 [0.16] | Ø24 [0.94] | Ø130 [5.12] | 4X M8 THRU |



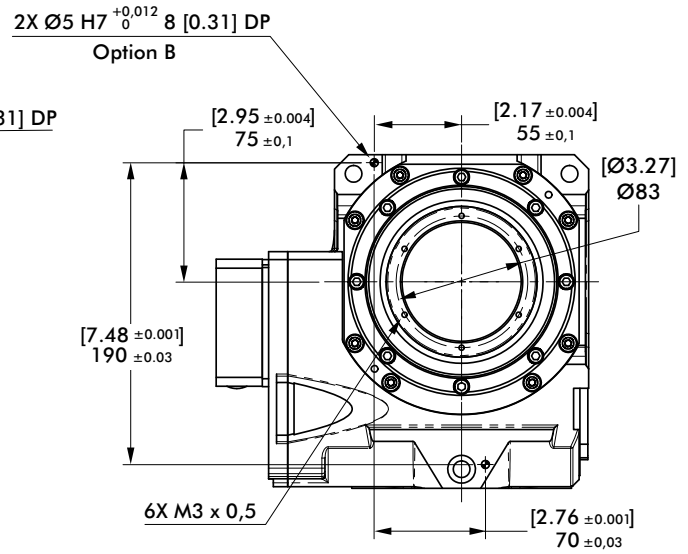
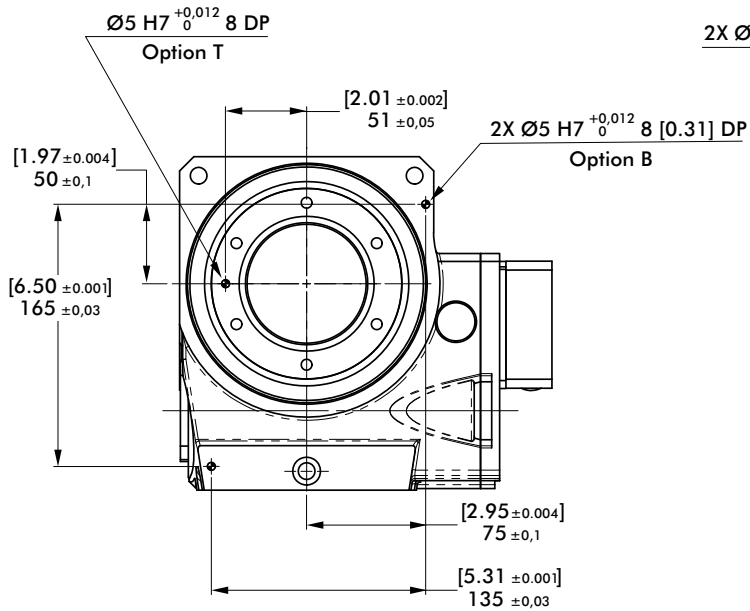
| Frame Size | G | H | J | K |
|------------|--------------|-----------|-------------|----------|
| 80 | 226,5 [8.92] | | 35,5 [1.40] | |
| 86 | | 31 [1.22] | | -- |
| 90 | 230,5 [9.07] | | 39,5 [1.56] | |
| 100 | | | | 4 [0.16] |

GTB80 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB80 Option Specifications

Dowel Hole Option -B, Housing -T: Output Table

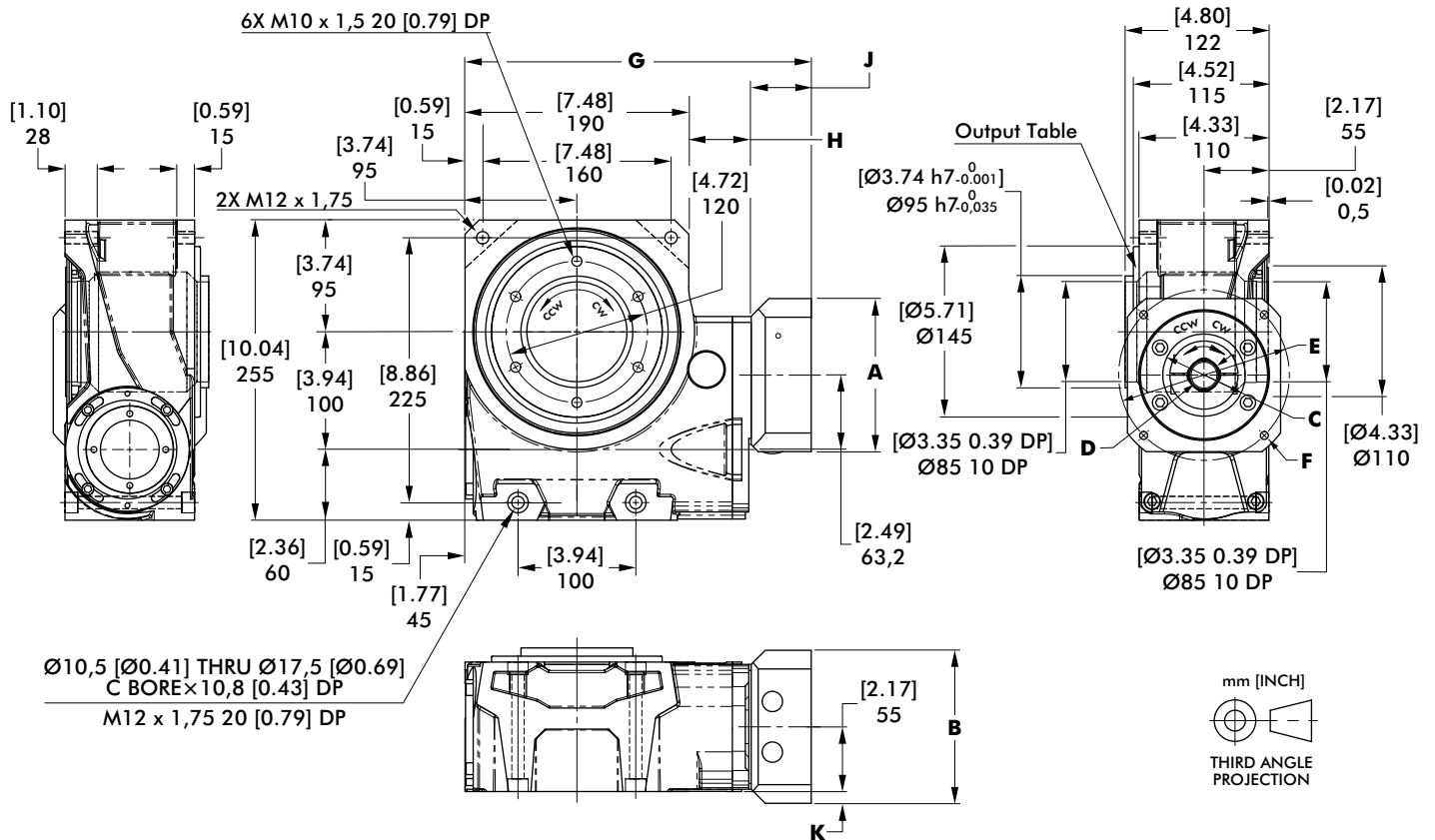


GTB100 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB100-JG (Motor Frame Size □ = 90 [3.54], 100 [3.94], 130 [5.12])

Gear Drive: High Inertia applications: Ratio 60:1



Input/Output Rotation: CW/CCW

| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|--------------------|---------------------|------------------------------|----------------------|-------------------------------|--------------------------------------|
| JGA20 | | | | Ø24 [0.94] | | |
| JGA21 | 130 [5.12] | 130 [5.12] | Ø110 [4.33] x 7 [0.28] | Ø19 [0.75] | Ø145 [5.71] | 4X M8 x 22,5 [0.89] Deep |
| JGA22 | | | | Ø22 [0.87] | | |
| JGB23 | | | | Ø14 [0.55] | | |
| JGB24 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 9,5 [0.37] | Ø16 [0.63] | Ø100 [3.94] | |
| JGB25 | | | | Ø10 [0.39] | | 4X M6 x 17 [0.67] Deep |
| JGC20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 5,5 [0.22] | Ø24 [0.94] | Ø115 [4.53] | |
| JGD26 | 90 [3.54] | 90 [3.54] | Ø80 [3.15] x 9,5 [0.37] | Ø16 [0.63] | Ø100 [3.94] | |
| JGE22 | | | | Ø22 [0.87] | | |
| JGE27 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 7,5 [0.30] | Ø19 [0.75] | Ø115 [4.53] | 4X M8 x 22,5 [0.89] Deep |
| JGF27 | 96 [3.78] | 96 [3.78] | Ø80 [3.15] x 5 [0.20] | Ø19 [0.75] | Ø100 [3.94] | 4X M6 x 17 [0.67] Deep |
| JGG20 | 114 [4.49] | 114 [4.49] | Ø110 [4.33] x 3,5 [0.14] | Ø24 [0.94] | Ø130 [5.12] | 4X M8 x 22,5 [0.89] Deep |



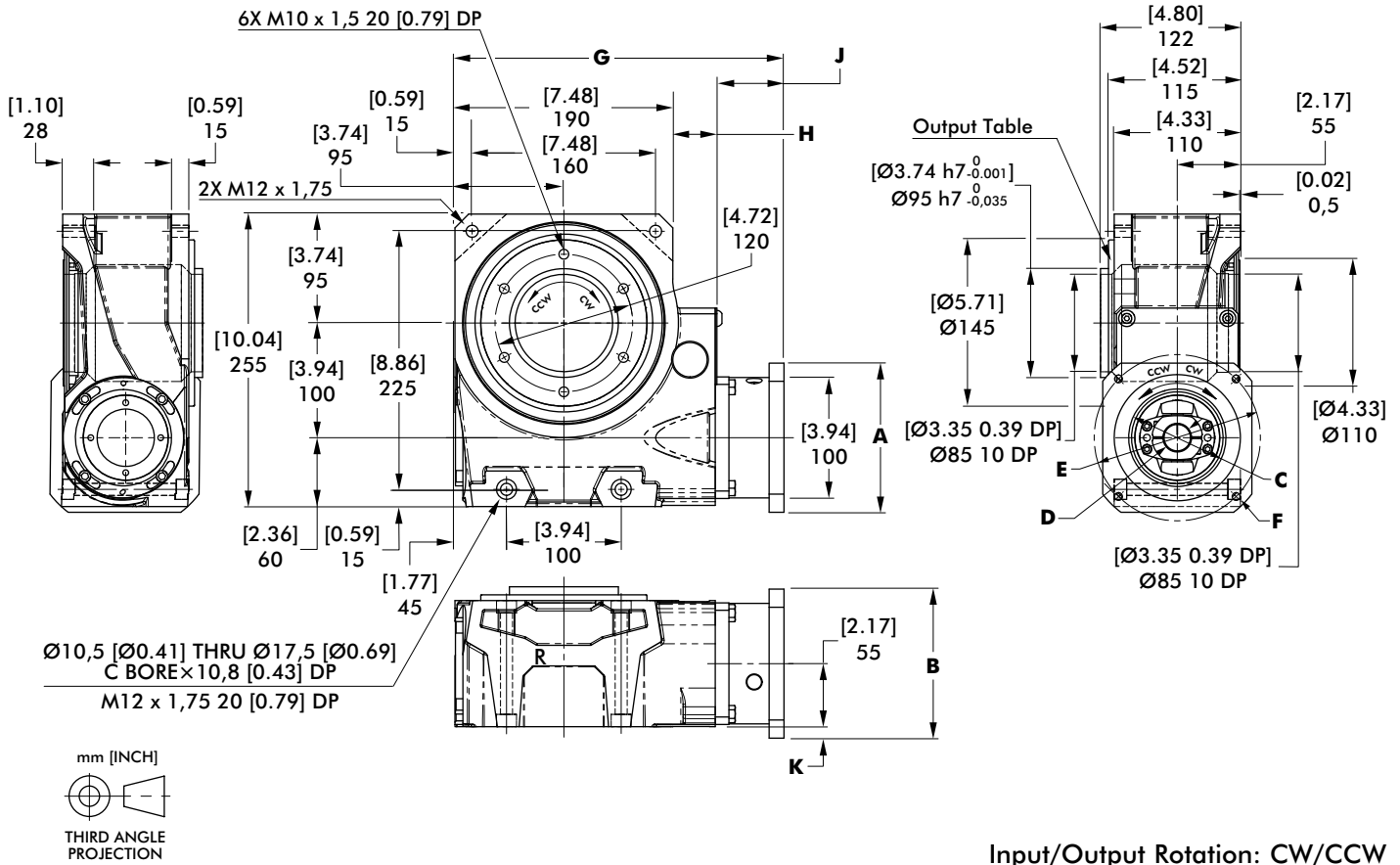
| Frame Size | G | H | J | K |
|------------|-------------|-----------|-----------|-----------|
| 90 | 280 [11.02] | 51 [2.01] | 39 [1.54] | -- |
| 100 | 281 [11.06] | 53 [2.09] | 38 [1.50] | |
| 130 | 280 [11.02] | | 51 [2.01] | 10 [0.39] |

GTB100 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB100-JD (Motor Frame Size □ = 100 [3.94], 130 [5.12])

Direct Drive: Zero Backlash Precision Applications: Ratio 20:1



Input/Output Rotation: CW/CCW

| MI CODE | A Width mm [in] | B Height mm [in] | C Pilot Ø x Depth mm [in] | D Shaft Ø mm [in] | E Fixing Holes PCD mm [in] | F Fixing Holes Qty x Size mm [in] |
|---------|--------------------|---------------------|------------------------------|----------------------|-------------------------------|--------------------------------------|
| JDA20 | 130 [5.12] | 130 [5.12] | Ø110 [4.33] x 6,5 [0.26] | Ø19 [0.75] | Ø145 [5.71] | 4X M8 THRU |
| JDB20 | 130 [5.12] | 130 [5.12] | Ø110 [4.33] x 6,5 [0.26] | Ø22 [0.87] | Ø145 [5.71] | 4X M8 THRU |
| JDC20 | 130 [5.12] | 130 [5.12] | Ø110 [4.33] x 6,5 [0.26] | Ø24 [0.94] | Ø145 [5.71] | 4X M8 THRU |
| JDD20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 5,5 [0.22] | Ø24 [0.94] | Ø115 [4.53] | 4X M6 THRU |
| JDE20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 7,5 [0.22] | Ø22 [0.87] | Ø115 [4.53] | 4X M6 THRU |
| JDF20 | 126 [4.96] | 126 [4.96] | Ø110 [4.33] x 4,5 [0.18] | Ø24 [0.94] | Ø130 [5.12] | 4X M8 THRU |
| JDG20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 3,5 [0.14] | Ø19 [0.75] | Ø115 [4.53] | 4X M8 THRU |
| JDH20 | 114 [4.49] | 114 [4.49] | Ø110 [4.33] x 3,5 [0.14] | Ø24 [0.94] | Ø130 [5.12] | 4X M8 THRU |
| JDJ20 | 100 [3.94] | 100 [3.94] | Ø95 [3.74] x 3,5 [0.14] | Ø19 [0.75] | Ø115 [4.53] | 4X M8 THRU |
| JDK20 | 114 [4.49] | 114 [4.49] | Ø110 [4.33] x 3,5 [0.14] | Ø24 [0.94] | Ø130 [5.12] | 4X M8 THRU |
| JDL20 | 126 [4.96] | 126 [4.96] | Ø110 [4.33] x 4,5 [0.18] | Ø19 [0.75] | Ø130 [5.12] | 4X M8 THRU |



90



130

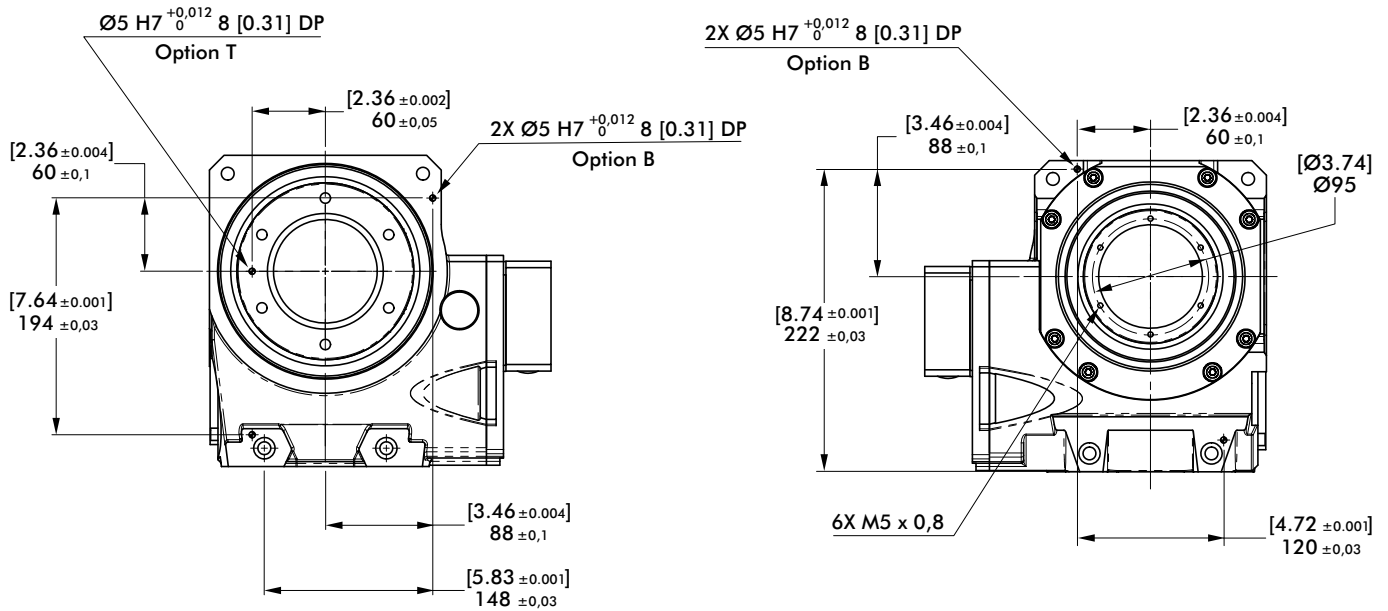
| Frame Size | G | H | J | K |
|------------|-------------|-------------|-------------|-----------|
| 100 | 284 [11.18] | 38,5 [1.52] | 55,5 [2.19] | -- |
| 130 | 287 [11.30] | 38,5 [1.52] | 58,5 [2.30] | 10 [0.39] |

GTB100 SERIES

Globoidal (Roller Gear) Servo Positioner | Dimensions

GTB100 Option Specifications

Dowel Hole Option -B, Housing -T: Output Table



RSD SERIES

Rotary Servo Drive | Product Overview



Flange output



Shaft output



Internal shrink disk output



Shrink disk output

Smarter Indexing

The **CAMCO RSD Rotary Servo Drive** is a zero-backlash, cam-actuated drive compatible with industry-standard servo motors for precise control, efficiency and flexibility.

Universal mounting

Maintenance-free operation

Large output bearing for greater overturning moment capacity

Large thru-hole for accessory lines (electric, pneumatic, etc.)

IP-65 rating

Class 100 rated with Med-Redi preparation

Features

Designed to accept a variety of servo motors

Preloaded system

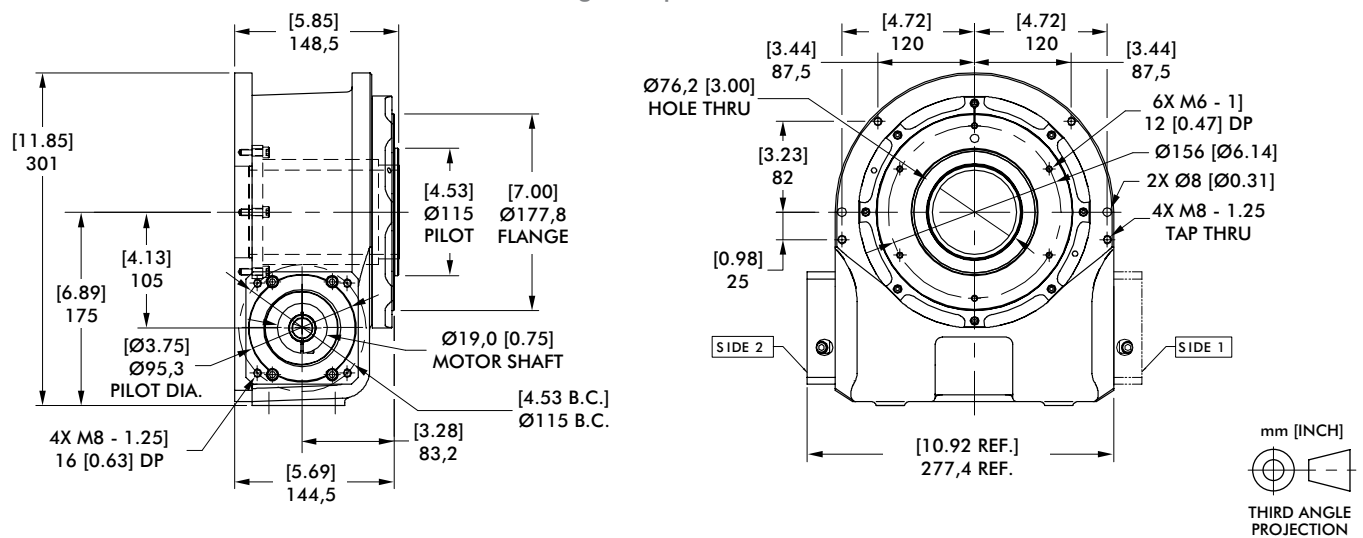
- Zero backlash
- High accuracy
- Smooth motion
- Quiet operation
- High speed

Indexing flexibility

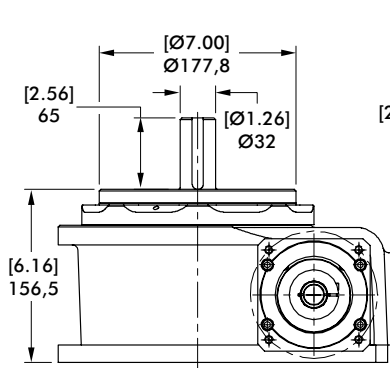
- Run different parts on the same indexer
- Variable indexing: reversing, sorting, vary distance with each index

4:1 to 18:1 ratios in a single stage

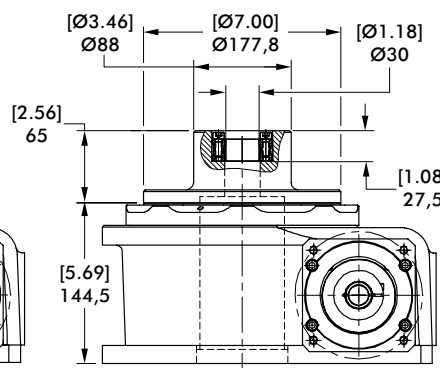
Flange Output



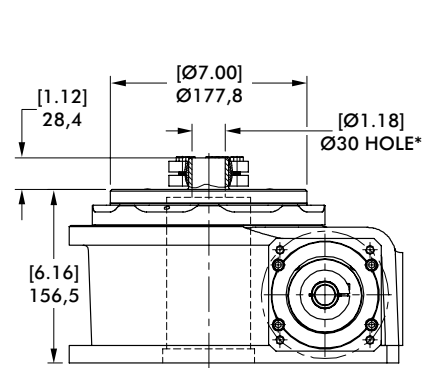
Shaft Output



Internal Shrink Disk Output



Shrink Disk Output



* Also available with 40 mm [1.57 in] bore.

| Specifications | Units | Standard Ratios | | | | | Other Available Ratios | | | | |
|--|-----------------------|------------------|--------|--------|--------|--------|------------------------|--------|--------|--------|--|
| Single Reduction Ratio | - | 8:1 | 16:1 | 4:1 | 5:1 | 6:1 | 9:1 | 12:1 | 15:1 | 18:1 | |
| Maximum Torque Capacity | [in-lb] | [3540] | [3755] | [2950] | [3195] | [3355] | [3595] | [3695] | [3740] | [3770] | |
| | N-m | 400 | 424 | 333 | 361 | 379 | 406 | 418 | 423 | 426 | |
| Maximum Inertia on Output Dial | [lb-ft ²] | [1622] | [6488] | [406] | [634] | [912] | [2053] | [3649] | [5702] | [8211] | |
| | kg-m ² | 68 | 273 | 17 | 27 | 38 | 87 | 154 | 240 | 346 | |
| Unit Output Inertia Reflected at Input Shaft | [lb-ft ²] | [0.44] | [0.33] | [0.94] | [0.73] | [0.55] | [0.40] | [0.43] | [0.34] | [0.31] | |
| | kg-m ² | 0,05 | 0,04 | 0,11 | 0,08 | 0,06 | 0,05 | 0,05 | 0,04 | 0,03 | |
| Stiffness | in-lb/arcmin | [169] | [179] | [141] | [153] | [160] | [172] | [177] | [179] | [180] | |
| | N-m/arcmin | 19,1 | 20,2 | 15,9 | 17,3 | 18,1 | 19,4 | 20 | 20,2 | 20,3 | |
| Input Torque of Unit Only | N-m [in-lb] | 2,26 [20] | | | | | | | | | |
| Maximum Axial Load | kN [lbf] | 10 [2270] | | | | | | | | | |
| Maximum Radial Load | kN [lbf] | 4 [910] | | | | | | | | | |
| Maximum Offset Load (Overturning Moment) | N-m [in-lb] | 359 [3180] | | | | | | | | | |
| Output Face Flatness | TIR mm [in] | 0,05 [0.002] | | | | | | | | | |
| Axial Run-Out | mm [in] | 0,04 [0.0015] | | | | | | | | | |
| Accuracy | arc seconds | ±30 | | | | | | | | | |
| Repeatability | arc seconds | ±7 | | | | | | | | | |
| Torsional Backlash | arc seconds | 0 | | | | | | | | | |
| Operating Temperature Range | C° [F°] | 60 [140] Minimum | | | | | | | | | |

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

ROTARY INDEX DRIVES

Features | Table of Contents



Features:

The **CAMCO RDM Series Index Drive** is ideal for rotary dial applications with features including:

Large output Mounting Surface supported by 4-point contact bearing offering superior thrust and moment capacity

Large Center Thru Hole

Low Profile

Complete, Motorized Drive Packages

Optional Output Overload Clutch

Table of Contents

| | |
|--------------------|----|
| How to Order | 3 |
| 80RDM | 5 |
| 601RDM | 7 |
| 902RDM | 9 |
| 1100RDM | 11 |
| 1305RDM | 13 |
| 1800RDM | 15 |

RDM SERIES

Rotary Index Drive | How To Order

| Base Model | Description kW [HP] |
|----------------|--|
| 80RDM | w/ R180 reducer & 0.25 [1/3] AC motor (220/440V) |
| 601RDM | w/ R180 reducer & 0.25 [1/3] AC motor (220/440V) |
| 902RDM | w/ R225 reducer & 0.75 [1] AC motor (220/440V) |
| 1100RDM | w/ KH47 reducer & 1.12 [1-1/2] AC motor (220/440V) |
| 1305RDM | w/ 7300C reducer & 1.49 [2] AC motor (220/440V) |
| 1800RDM | w/ 7400C reducer & 2.24 [3] AC motor (220/440V) |

| Control | Description |
|----------|--------------------------------------|
| 1 | 1 HP 120V 80RDM,601RDM & 902RDM only |
| 2 | 1 HP 240V 80RDM,601RDM & 902RDM only |
| 3 | 1 HP 440V 80RDM,601RDM & 902RDM only |
| 4 | 2 HP 240V 1100RDM & 1305RDM only |
| 5 | 2 HP 440V 1100RDM & 1305RDM only |
| 6 | 3 HP 240V 1800RDM only |
| 7 | 3 HP 440V 1800RDM only |

| Clutch | Description |
|----------|--------------------------|
| 1 | Standard detector plate |
| 2 | Detector plate with hole |

| Setting | N-m [in-lbs] |
|----------|--------------|
| A | 47 [420] |
| B | 70 [620] |
| C | 85 [750] |
| D | 130 [1150] |
| E | 198 [1750] |
| F | 333 [2950] |
| G | 452 [4000] |

* Eg: For 601RDM

| 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 |

| Index Mounting | Reducer Ratio |
|----------------|-------------------|
| (See Figure 3) | 1100RDM |
| 1 | A 15 15.86 |
| 2 | B 20 19.58 |
| 3 | C 25 24.06 |
| 4 | D 30 29.37 |
| 5 | E 40 39.61 |
| 6 | F 50 48.95 |
| | G 60 56.83 |
| | H 15 -- |

| Reducer Mounting | Signal Switch |
|------------------|---------------------|
| (See Figure 4) | M Mechanical |
| A | D Double |
| B | P Proximity |
| C | J |
| D | K |
| E | L |
| F | M |
| G | N |
| H | P |
| | R |
| | S |

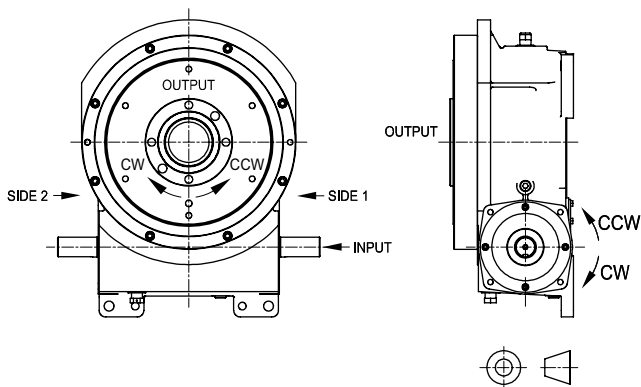
| Signal Switch Side |
|--------------------|
| (See Figure 2) |
| R Reducer |
| S Shaft |

Example: MR, MS, DR, DS, 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)

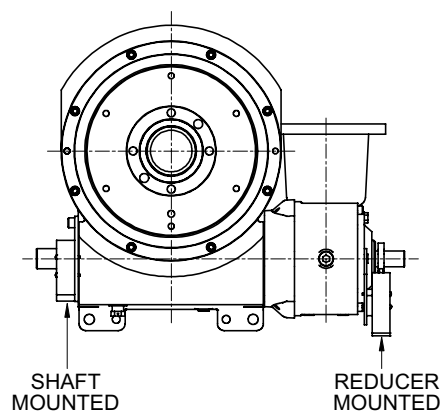


Relative Rotation for Right Hand Cam:

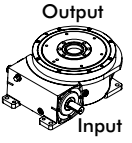
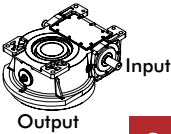
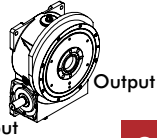
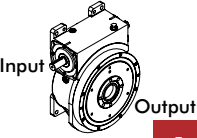
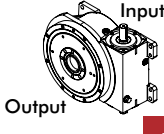
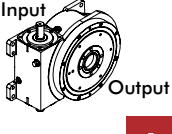
CW Input Side 1 CCW Output
 CCW Input Side 2 CCW Output

NOTE: Input can be driven in either direction

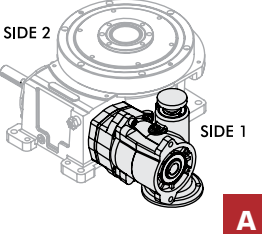
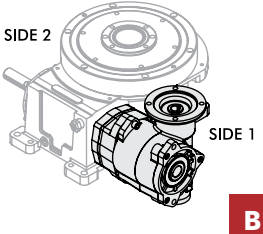
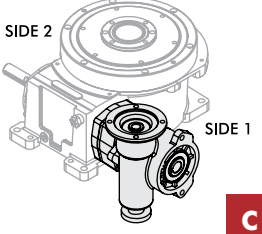
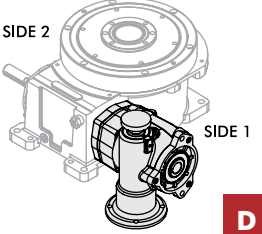
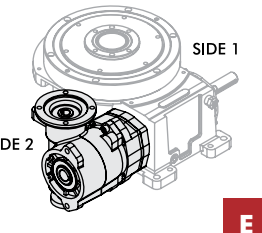
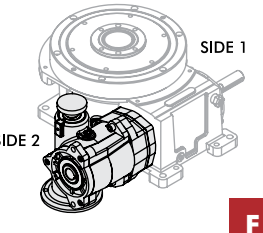
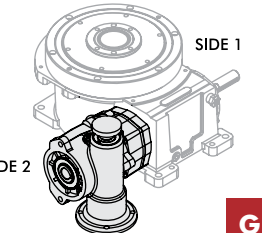
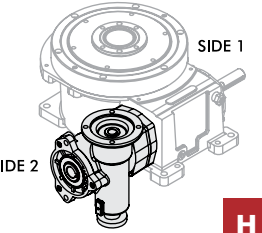
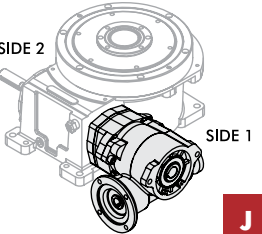
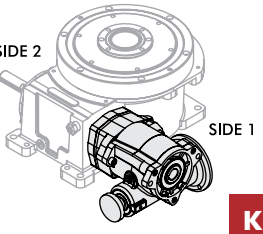
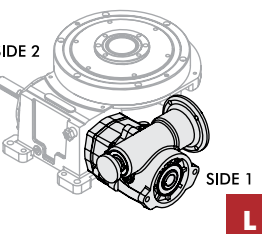
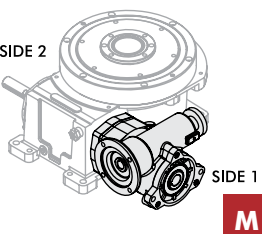
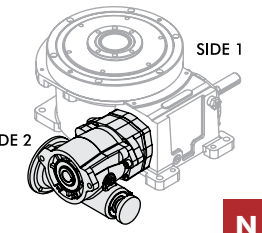
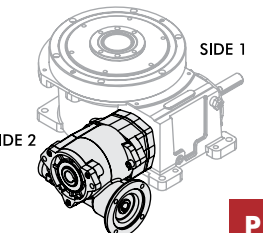
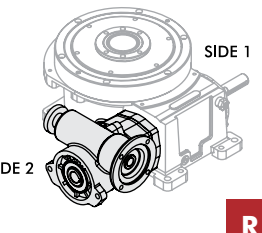
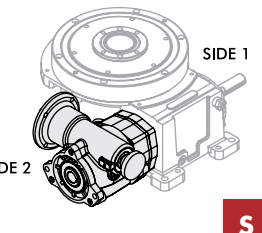
Signal Switch Mounting Position (Figure 2)



Rotary Index Drive | Input/Output Orientation (Figure 3)

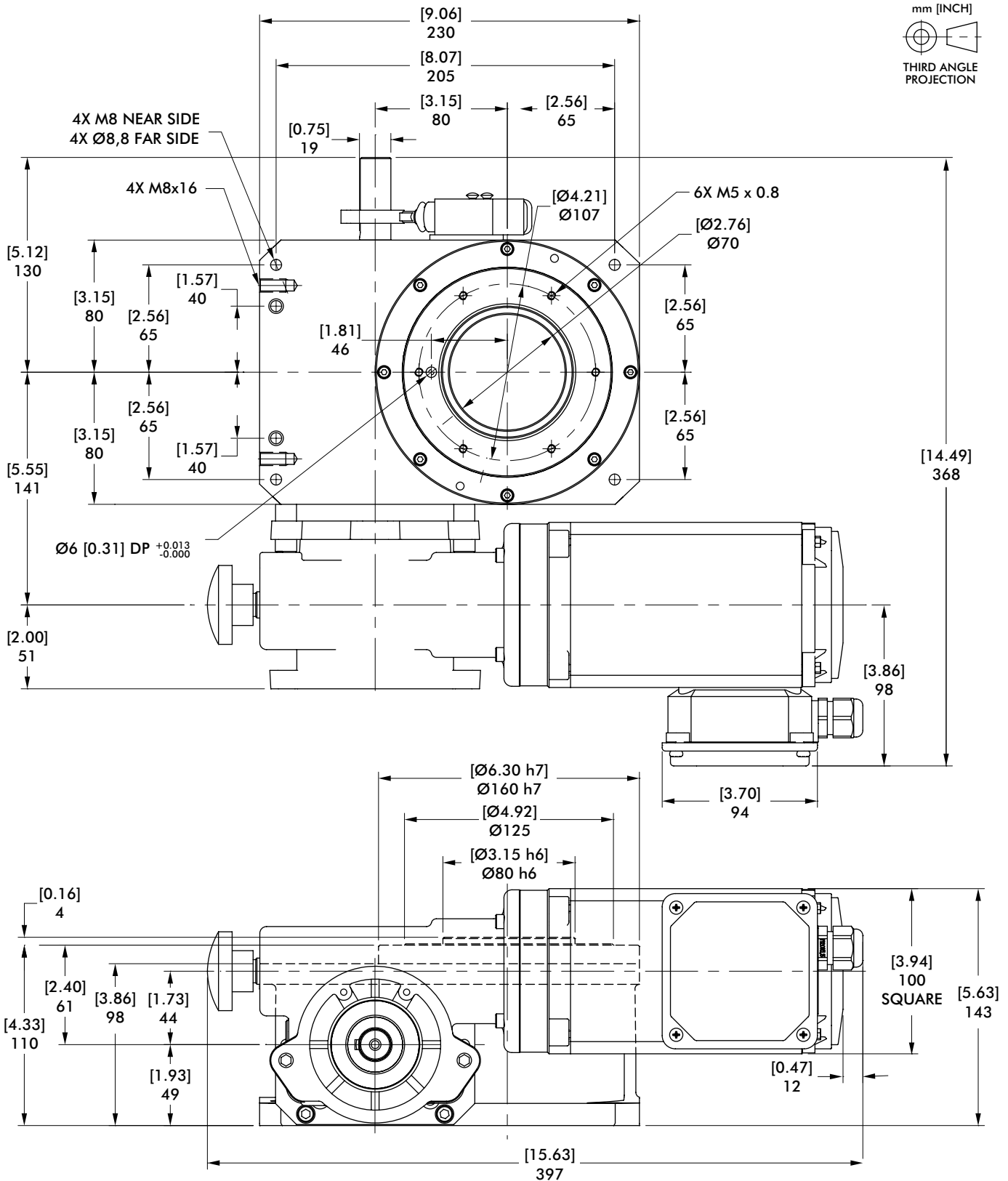
| OVOI (output vertical, over input) | OVUI (output vertical, under input) | OHOI (output horizontal, over input) | OHUI (output horizontal, under input) | H-S1-UP (output horizontal, side 1 up) | H-S2-UP (output horizontal, side 2 up) |
|---|---|---|--|---|---|
|  <p>Output Input</p> <p>1</p> |  <p>Input Output</p> <p>2</p> |  <p>Output Input</p> <p>3</p> |  <p>Input Output</p> <p>4</p> |  <p>Input Output</p> <p>5</p> |  <p>Input 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 |  <p>A</p> |  <p>B</p> |  <p>C</p> |  <p>D</p> | |
| | SIDE 2 |  <p>E</p> |  <p>F</p> |  <p>G</p> |  <p>H</p> |
| | | Mounting "C" | | Mounting "D" | |
| | | RD Worm | LD Worm | RD Worm | LD Worm |
| SIDE 1 |  <p>J</p> |  <p>K</p> |  <p>L</p> |  <p>M</p> | |
| | SIDE 2 |  <p>N</p> |  <p>P</p> |  <p>R</p> |  <p>S</p> |

8ORDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 3 [1] | 6 [2] | 15 [5] | 29 [10] | 47 [16] | 67 [23] |
| 3 | 3 [1] | 9 [3] | 20 [7] | 32 [11] | 61 [21] | 94 [32] | 138 [47] |
| 4 | 6 [2] | 18 [6] | 38 [13] | 67 [23] | 135[46] | 217 [74] | 304 [104] |
| 6 | 15 [5] | 38 [13] | 82 [28] | 126 [43] | 246 [84] | 401 [137] | 559 [191] |
| 8 | 20 [7] | 44 [15] | 73 [25] | 114 [39] | 222 [76] | 372 [127] | 559 [191] |
| 12 | 50 [17] | 99 [34] | 167 [57] | 258 [88] | 497 [170] | 559 [191] | 559 [191] |
| 16 | 47 [16] | 91 [31] | 152 [52] | 231 [79] | 448 [153] | 559 [191] | 559 [191] |
| Reducer Ratio | | | | | | | |
| | 15 | 20 | 25 | 30 | 40 | 50 | 60 |

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)
- Center Thru Hole (Ø70 mm [Ø2.76])
- 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
- Universal Mounting Capability

Output Load Capacity (loads carried during index):
 Radial 3358 N [755 lbs]
 Thrust/Axial 8385 N [1885 lbs]
 Moment 213 N-m [1885 in-lb]

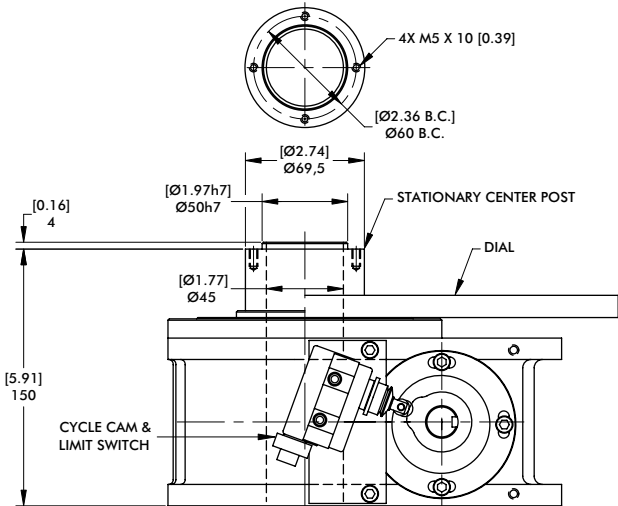
Typical Application Dial Diameter: 203 mm [8 in] to 711 mm [28 in]

Accuracy ±44 arcsec / ±0,08 mm [±.003in] at 355,6 mm [14in] Radius

Repeatability ±11 arcsec / ±0,018 mm [±.0007in] at 355,6 mm [14in] Radius

Optional Accessories

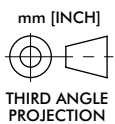
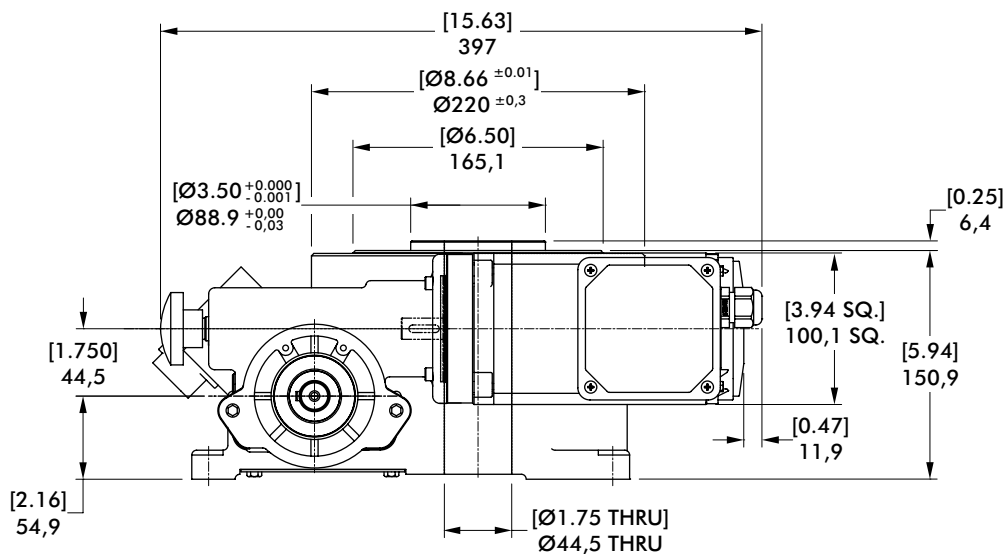
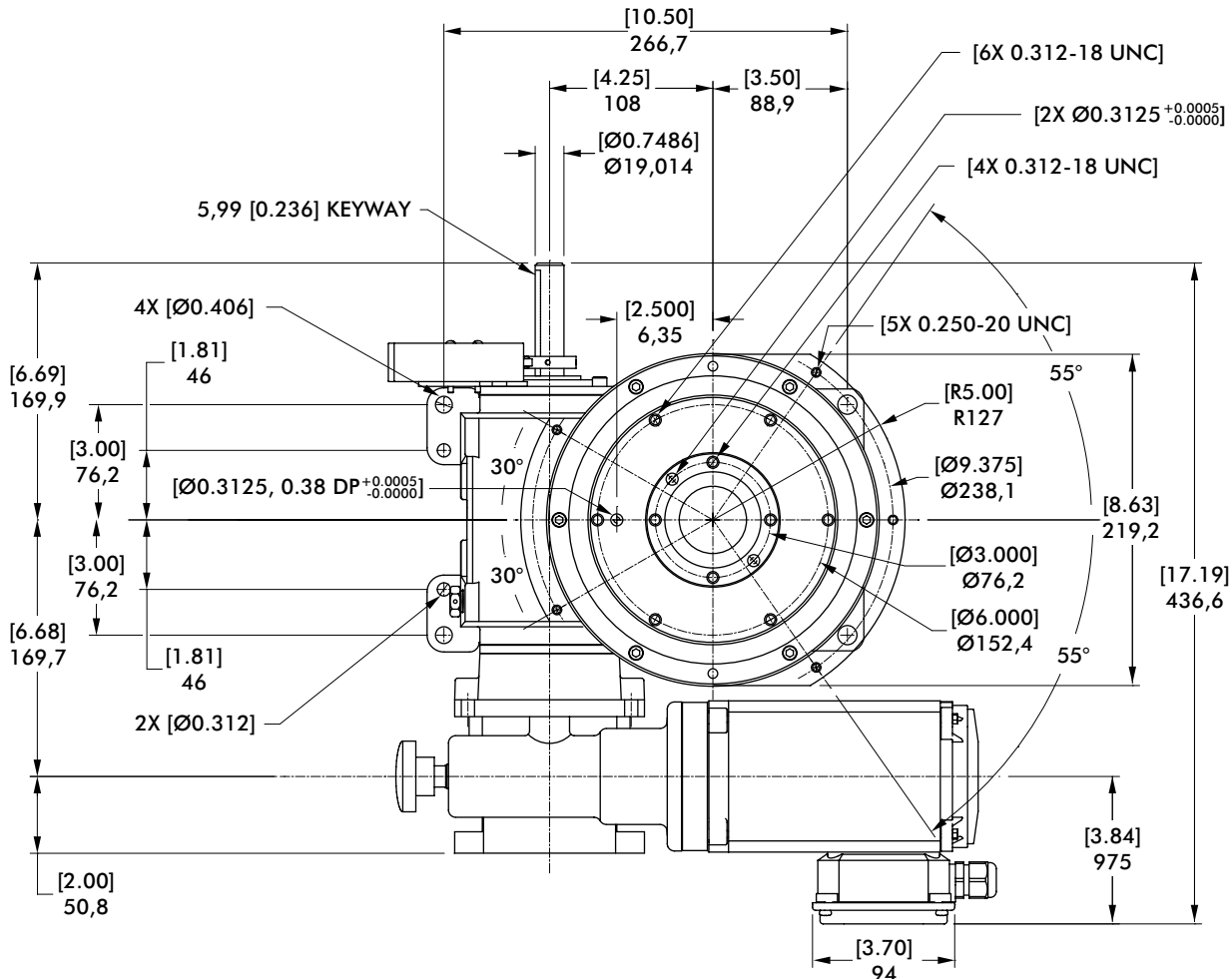
- 1/3 HP DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Stationary Center Post
- Dual Cam and Limit Switch
- Electric Clutch-Brake
- Left Hand Cam



Unless otherwise noted, all dimensions are in mm.

601RDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 3 [1] | 6 [2] | 15 [5] | 32 [11] | 50 [17] | 70 [24] |
| 3 | 3 [1] | 9 [3] | 20 [7] | 35 [12] | 82 [28] | 123 [42] | 170 [58] |
| 4 | 6 [2] | 18 [6] | 38 [13] | 67 [23] | 152 [52] | 228 [78] | 310 [106] |
| 6 | 15 [5] | 41 [14] | 82 [28] | 149 [51] | 328 [112] | 492 [168] | 667 [228] |
| 8 | 29 [10] | 73 [25] | 149 [51] | 263 [90] | 582 [199] | 875 [299] | 1188 [406] |
| 12 | 64 [22] | 167 [57] | 337 [115] | 597 [204] | 1314 [449] | 1399 [478] | 1399 [478] |
| 16 | 117 [40] | 296 [101] | 600 [205] | 1056 [361] | 1399 [478] | 1399 [478] | 1399 [478] |
| Reducer Ratio | | | | | | | |
| | 15 | 20 | 25 | 30 | 40 | 50 | 60 |

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)
- Center Thru Hole (Ø44,45 [Ø1.75])
- 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 | 4204 N [945 lbs] |
| Thrust/Axial | 10498 N [2360 lbs] |
| Moment | 373 N-m [3305 in-lb] |

Typical Application Dial Diameter:

305 mm [12 in] to 914 mm [36 in]

Accuracy

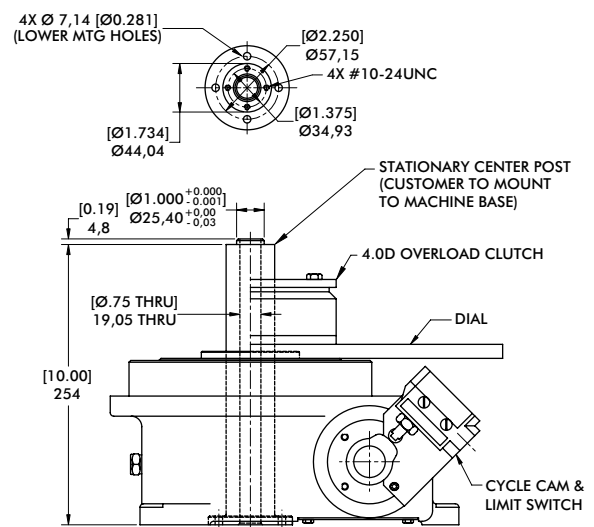
±39 arcsec / ±0,08 mm [±.003in]
at 457,2 mm [18in] Radius

Repeatability

±10 arcsec / ±0,023 mm [±.0009in]
at 457,2 mm [18in] Radius

Optional Accessories

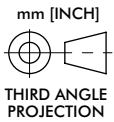
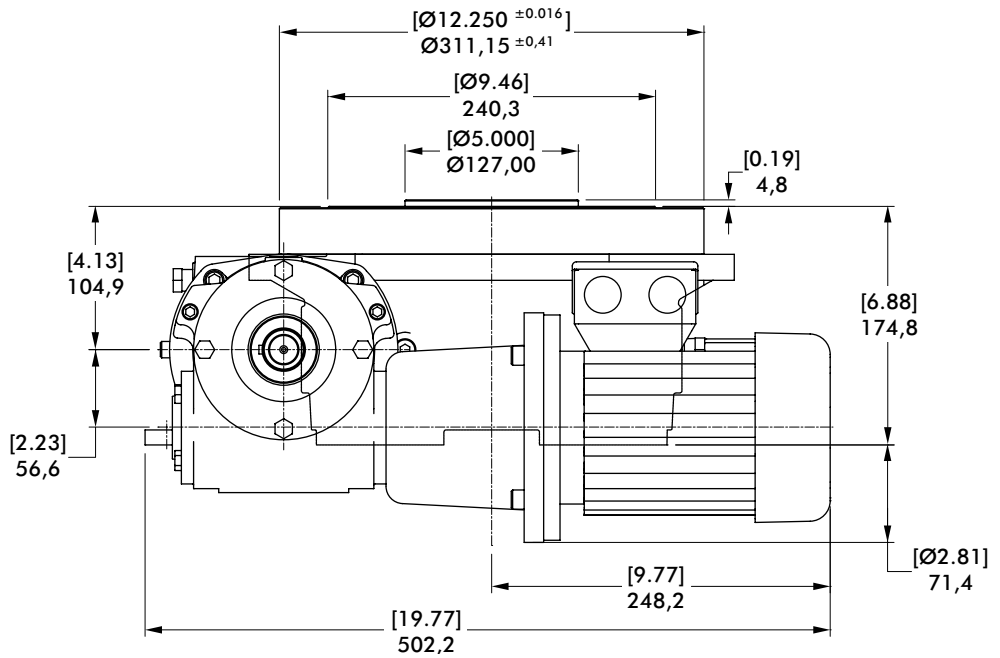
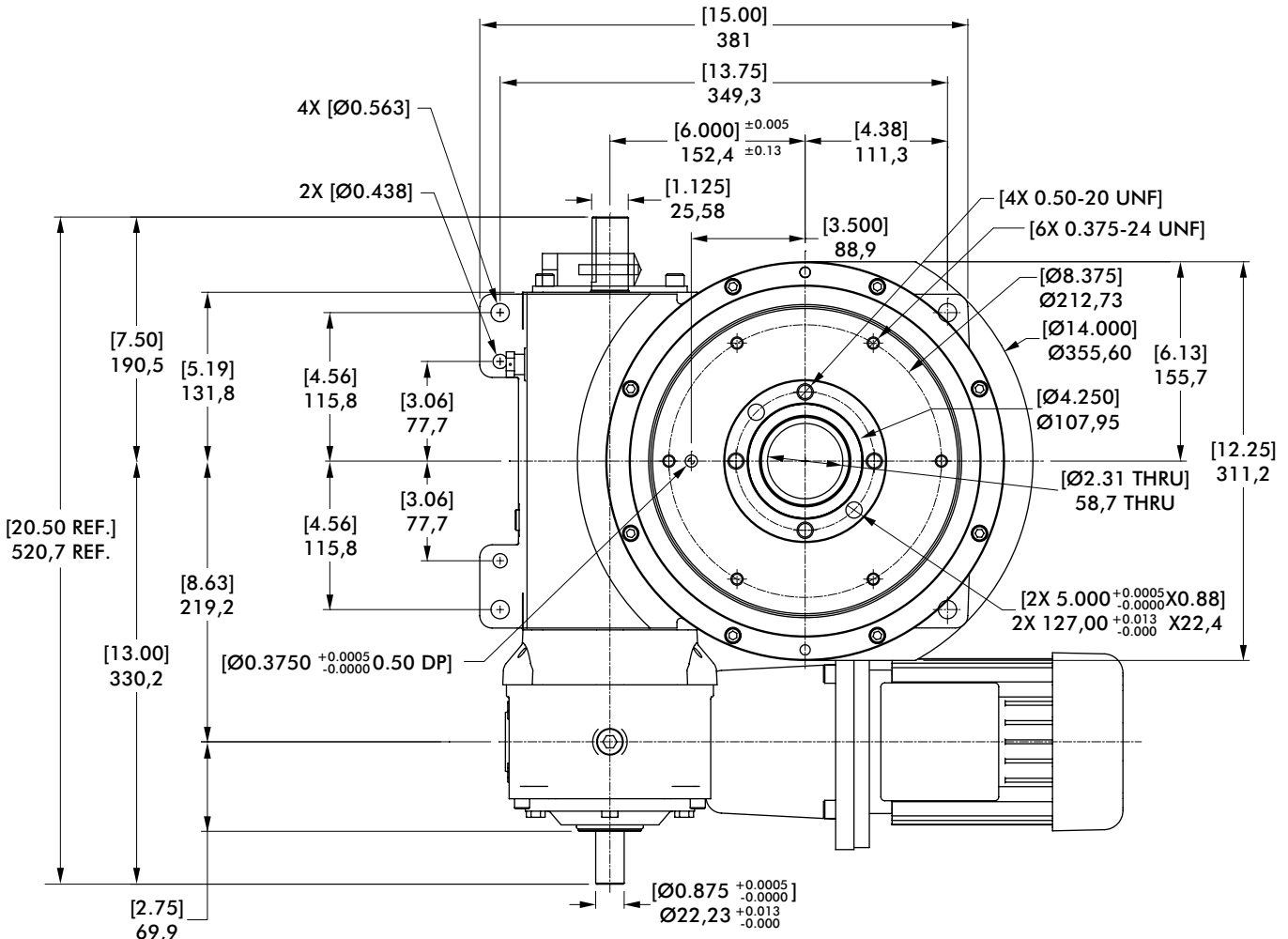
- 1/3 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 4.0D
 - Available Settings (in-lbs): 420, 620, 750, 1150, 1750, 2940, 4000
- Stationary Center Post
- Dual Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications



Unless otherwise noted,
all dimensions are in inches.

902RDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 | 3 [1] | 9 [3] | 20 [7] | 35 [12] | 76 [26] | 117 [40] | 161 [55] |
| 3 | 12 [4] | 32 [11] | 67 [23] | 120 [41] | 246 [84] | 369 [126] | 509 [174] |
| 4 | 23 [8] | 59 [20] | 120 [41] | 214 [73] | 439 [150] | 661 [226] | 907 [310] |
| 6 | 53 [18] | 129 [44] | 263 [90] | 462 [158] | 945 [323] | 1419 [485] | 1952 [667] |
| 8 | 94 [32] | 234 [80] | 468 [160] | 825 [282] | 1683 [575] | 2528 [864] | 3474 [1187] |
| 12 | 214 [73] | 530 [181] | 989 [338] | 1425 [487] | 2531 [865] | 3956 [1352] | 5701 [1948] |
| 16 | 380 [130] | 916 [313] | 1481 [506] | 2130 [728] | 3790 [1295] | 5923 [2024] | 8528 [2914] |
| Reducer Ratio | | | | | | | |
| | 15 | 20 | 25 | 30 | 40 | 50 | 60 |

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

Features

- R225 Reducer (Ratios from 15:1 to 60:1)
- Single Extended wormshaft (Standard)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (Ø57,15 mm [Ø2.25])
- 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

Output Load Capacity (loads carried during index):

| | |
|--------------|------------------------|
| Radial | 15747 N [3540 lbs] |
| Thrust/Axial | 31138 N [7000 lbs] |
| Moment | 2443 N-m [21620 in-lb] |

Typical Application

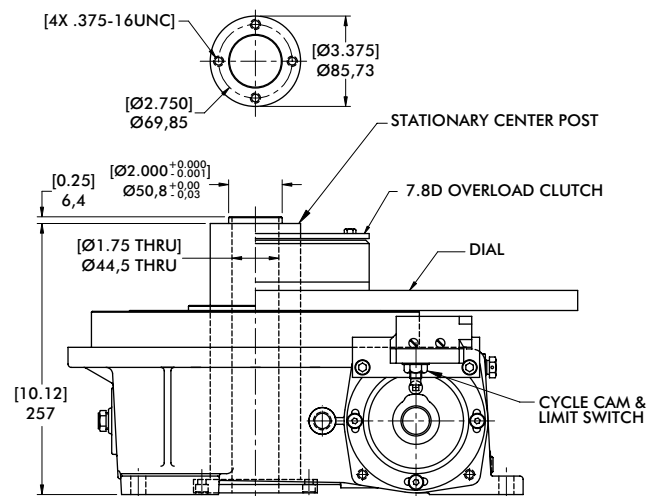
Dial Diameter: 508 mm [20 in] to 1219 mm [48 in]

Accuracy ±27 arcsec / ±0,08 mm [±.003in] at 609,6 mm [24in] Radius

Repeatability ±7 arcsec / ±0,020 mm [±.0008in] at 609,6 mm [24in] Radius

Optional Accessories

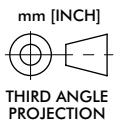
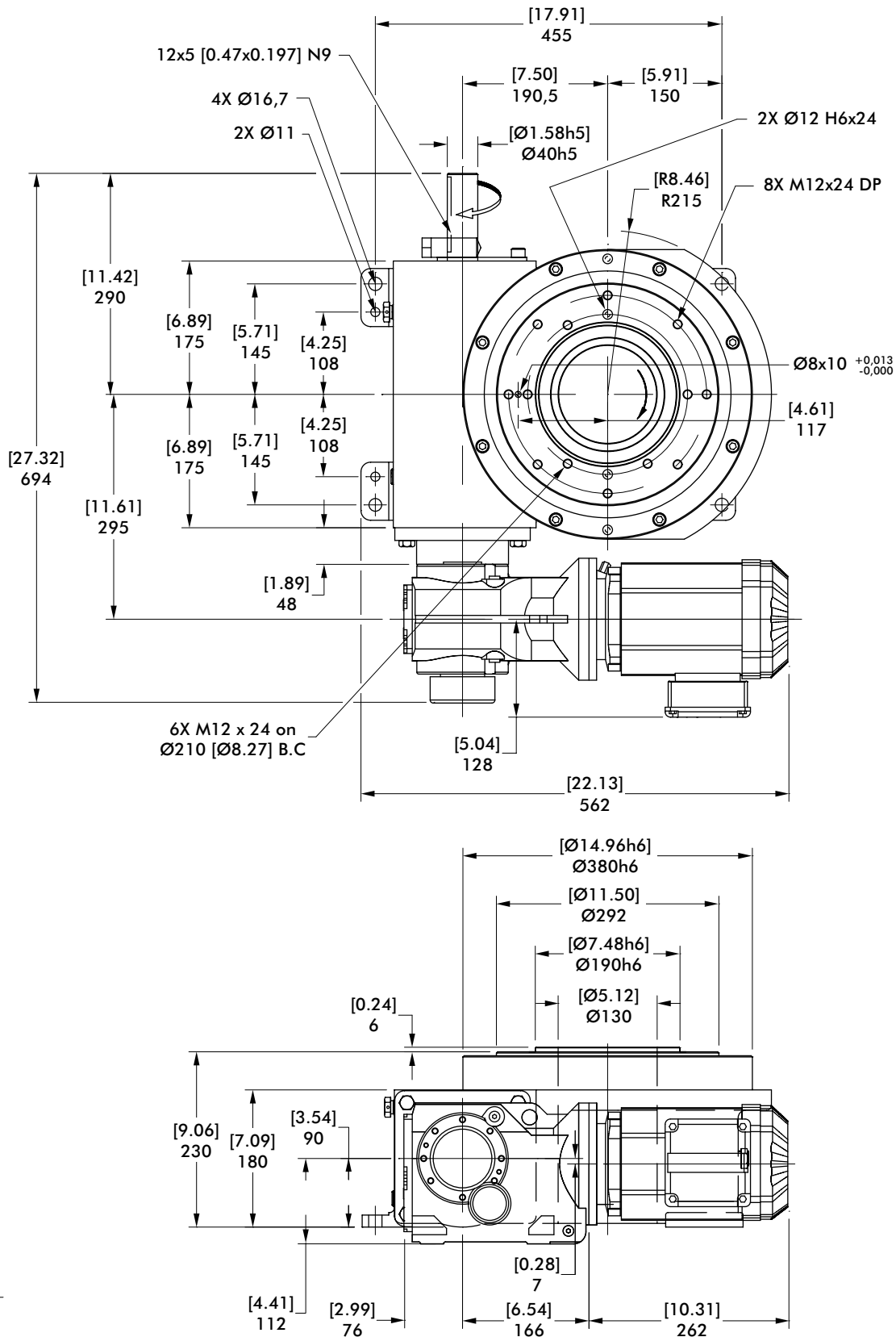
- 1 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 7.8D
 - Available Settings (in-lbs): 1400, 1700, 2600, 3200, 4200, 5000, 7200, 10000
- Stationary Center Post
- Dual Cam and Limit Switch
- Base Riser Blocks
- Electric Clutch-Brake
- Left Hand Cam
- Relief in Dwell for shot-pin applications



Unless otherwise noted,
all dimensions are in inches.

1100RDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 | 3 [1] | 15 [5] | 32 [11] | 64 [22] | 176 [60] | 342 [117] | 518 [177] |
| 3 | 18 [6] | 38 [13] | 79 [27] | 152 [52] | 401 [137] | 775 [265] | 1171 [400] |
| 4 | 38 [13] | 79 [27] | 161 [55] | 304 [104] | 790 [270] | 1525 [521] | 2297 [785] |
| 6 | 88 [30] | 179 [61] | 351 [120] | 664 [227] | 1703 [582] | 3283 [1122] | 4940 [1688] |
| 8 | 161 [55] | 325 [111] | 632 [216] | 1185 [405] | 3035 [1037] | 5838 [1995] | 7916 [2705] |
| 12 | 369 [126] | 735 [251] | 1428 [488] | 2672 [913] | 6833 [2335] | 12563 [4293] | 16932 [5786] |
| 16 | 658 [225] | 1314 [449] | 2543 [869] | 4138 [1414] | 7781 [2659] | 11884 [4061] | 16019 [5474] |
| Reducer Ratio | | | | | | | |
| | 15.86 | 19.58 | 24.06 | 29.32 | 39.61 | 48.95 | 56.83 |

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

Features

- KH47 Reducer and AC Motor with Optional Brake
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (130 mm / 5.1 in. Diameter)
- 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

- 7300C Reducer (Ratios from 15:1 to 60:1)
- 1.5 HP DC motor
- Varipak DC Motor Control (up to 30 cpm)
- 7350C Heavy Duty Reducer (Ratios from 10:1 to 60:1)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications

Output Load Capacity (loads carried during index):

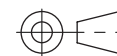
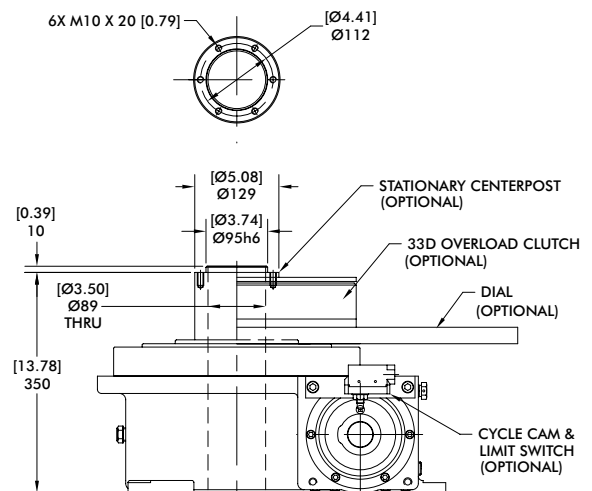
| | |
|--------------|------------------------|
| Radial | 13789 N [3100 lbs] |
| Thrust/Axial | 35586 N [8000 lbs] |
| Moment | 3240 N-m [28674 in-lb] |

Typical Application

Dial Diameter: 508 mm [20 in] to 1524 mm [60 in]

Accuracy ±22 arcsec / ±0,08 mm [±.003in] at 76 mm [30in] Radius

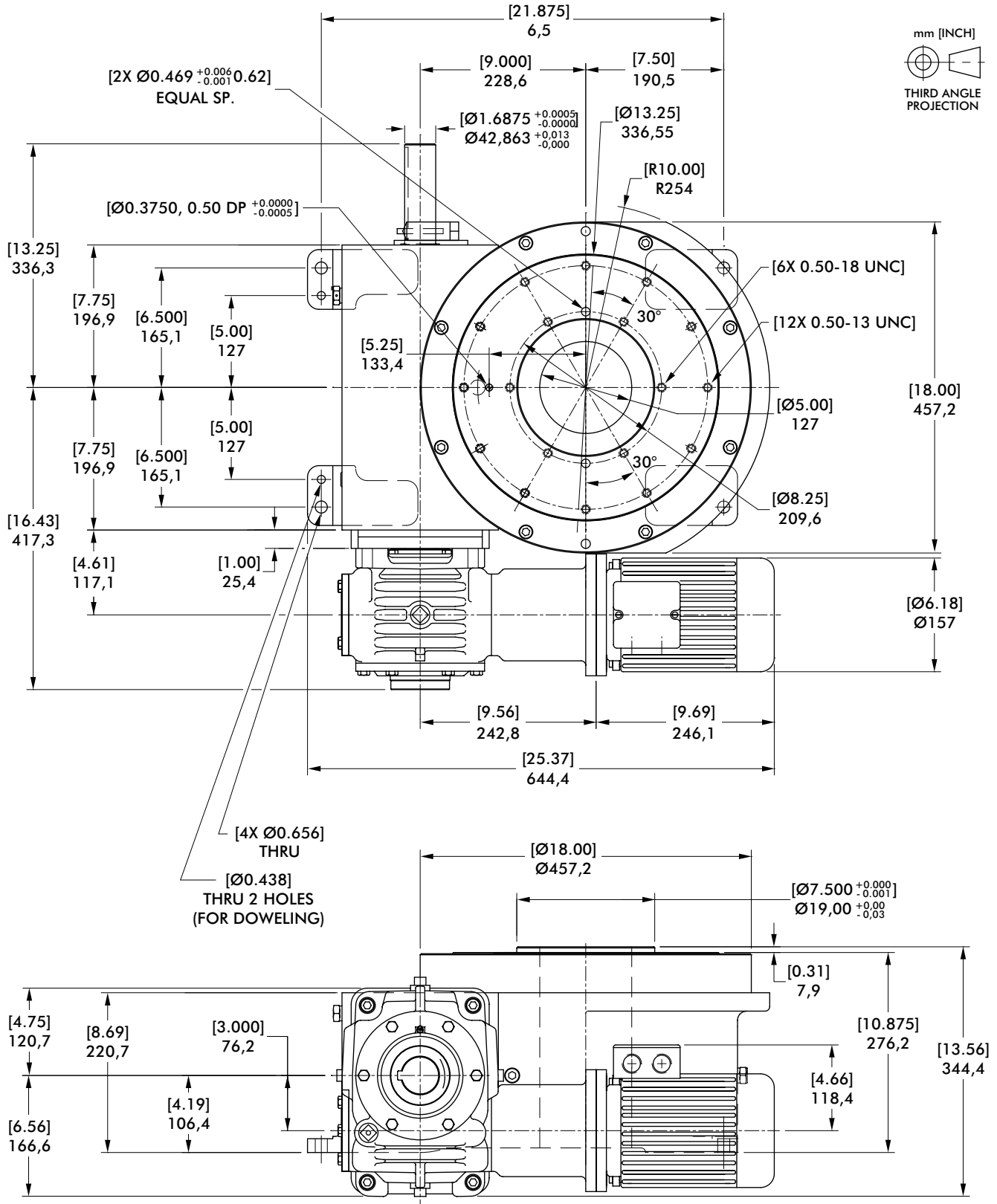
Repeatability ±5 arcsec / ±0,020 mm [±.0008in] at 762 mm [30in] Radius



Unless otherwise noted, all dimensions are in mm.

1305RDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 12 [4] | 38 [13] | 76 [26] | 140 [48] | 214 [73] | 298 [102] |
| 3 | 6 [2] | 32 [11] | 76 [26] | 146 [50] | 258 [88] | 389 [133] | 538 [184] |
| 4 | 29 [10] | 94 [32] | 208 [71] | 380 [130] | 664 [227] | 995 [340] | 1367 [467] |
| 6 | 73 [25] | 211 [72] | 451 [154] | 822 [281] | 1419 [485] | 2119 [724] | 2909 [994] |
| 8 | 138 [47] | 383 [131] | 811 [277] | 1469 [502] | 2528 [864] | 3775 [1290] | 5180 [1770] |
| 12 | 325 [111] | 878 [300] | 1841 [629] | 3319 [1134] | 5706 [1950] | 8510 [2908] | 11670 [3988] |
| 16 | 585 [200] | 1571 [537] | 3280 [1121] | 5908 [2019] | 10155 [3470] | 15138 [5173] | 20754 [7092] |
| Reducer Ratio | | | | | | | |
| | 15 | 20 | 25 | 30 | 40 | 50 | 60 |

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

Features

- 7300C Reducer (Ratios from 15:1 to 60:1)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (5.00 in. Diameter)
- 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

- 2 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- 7350C Heavy Duty Reducer (Ratios from 10:1 to 60:1)
- Output Overload Clutch model 32D
 - Available Settings (in-lbs): 8500, 13000, 20000, 31000
- Stationary Center Post
- Dual Cam and Limit Switch
- Base Riser Blocks
- Electric Clutch-Brake
- Left Hand Cam
- Relief in Dwell for shot-pin applications

Output Load Capacity (loads carried during index):

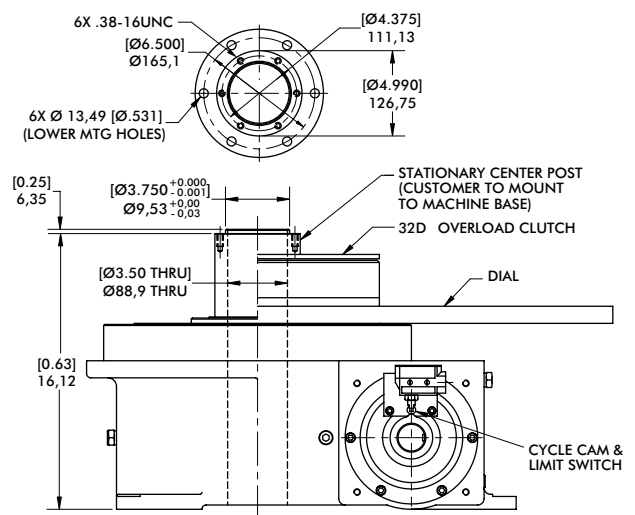
| | |
|--------------|------------------------|
| Radial | 20684 N [4650 lbs] |
| Thrust/Axial | 51822 N [11650 lbs] |
| Moment | 4579 N-m [40528 in-lb] |

Typical Application

Dial Diameter: 508 mm [20 in] to 1829 mm [72 in]

Accuracy ±38 arcsec / ±0,18 mm [±.007in] at 914,4 mm [36in] Radius

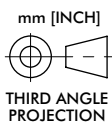
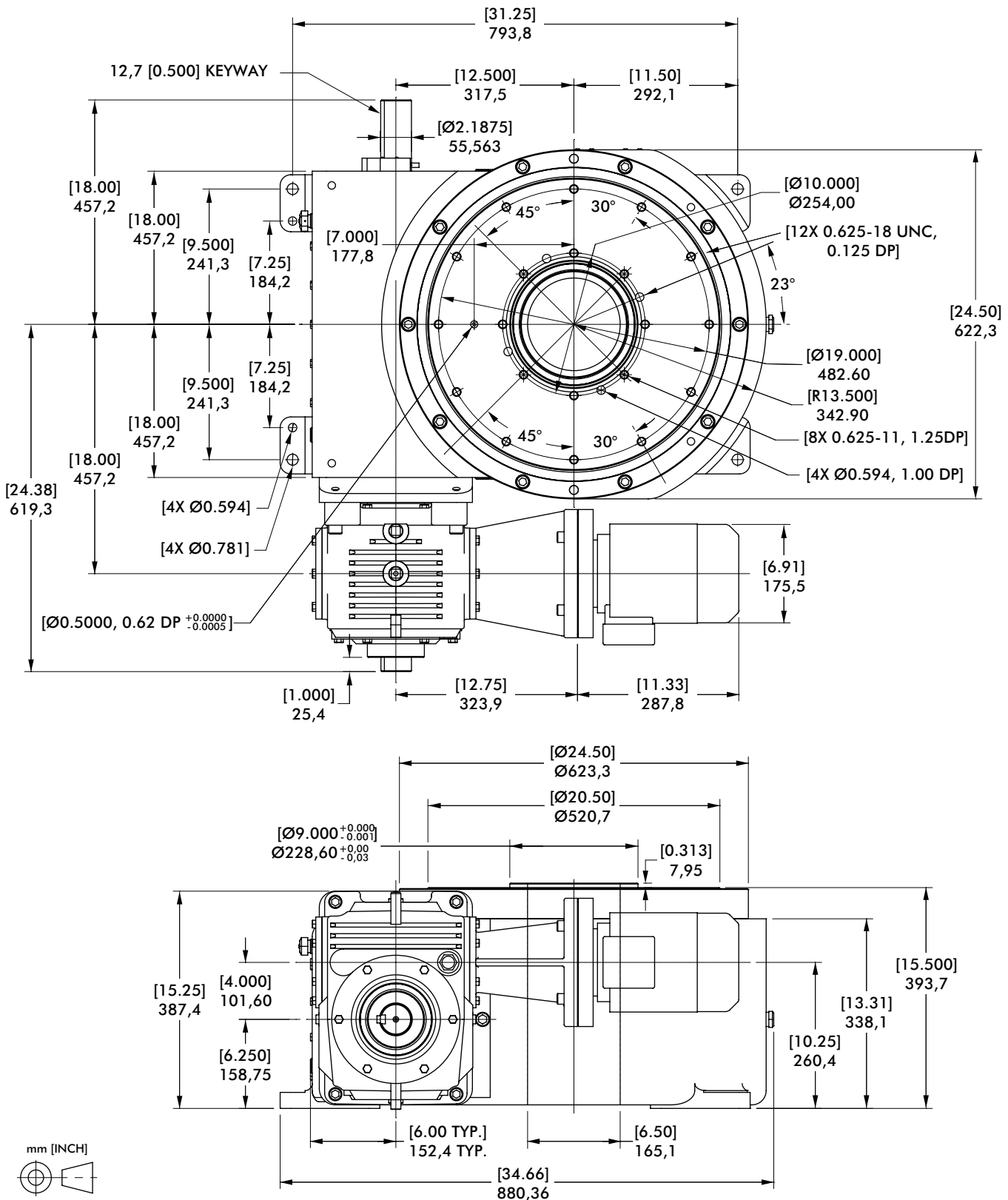
Repeatability ±10 arcsec / ±0,05 mm [±.002in] at 914,4 mm [36in] Radius



Unless otherwise noted, all dimensions are in inches.

180ORDM SERIES

Rotary Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 0 [0] | 23 [8] | 79 [27] | 266 [91] | 533 [182] | 749 [256] |
| 3 | 0 [0] | 32 [11] | 120 [41] | 255 [87] | 720 [246] | 1381 [472] | 1917 [655] |
| 4 | 3 [1] | 91 [31] | 249 [85] | 495 [169] | 1332 [455] | 2523 [862] | 3488 [1192] |
| 6 | 56 [19] | 243 [83] | 577 [197] | 1097 [375] | 2871 [981] | 5390 [1842] | 7439 [2542] |
| 8 | 132 [45] | 462 [158] | 1056 [361] | 1984 [678] | 5133 [1754] | 9616 [3286] | 13257 [4530] |
| 12 | 351 [120] | 1100 [376] | 2435 [832] | 4518 [1544] | 11606 [3966] | 21690 [7412] | 29881 [10211] |
| 16 | 656 [224] | 1987 [679] | 4360 [1490] | 8065 [2756] | 20666 [7062] | 38593 [13188] | 53152 [18163] |
| Reducer Ratio | | | | | | | |
| | 15 | 20 | 25 | 30 | 40 | 50 | 60 |

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

Features

- 7400C Reducer (Ratios from 15:1 to 60:1)
- Double Extended Camshaft (Input Shaft)
- Center Thru Hole (6.50 in. Diameter)
- 2 or 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

- 2 hp DC Motor with Varipak DC Motor Control (up to 30 cpm)
- 3 hp DC Motor
- 7500C Heavy Duty Reducer (Ratios from 10:1 to 60:1)
- Output Overload Clutch model 61D – Available Settings (in-lbs): 23000, 36000, 44000, 50000, 60000
- Stationary Center Post
- Dual Cam and Limit Switch
- Base Riser Blocks
- Electric Clutch-Brake
- Left Hand Cam
- Relief in Dwell for shot-pin applications

Output Load Capacity (loads carried during index):

- Radial 26022 N [5850 lbs]
- Thrust/Axial 61166 N [14650 lbs]
- Moment 7696 N-m [68119 in-lb]

Typical Application Dial Diameter:

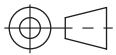
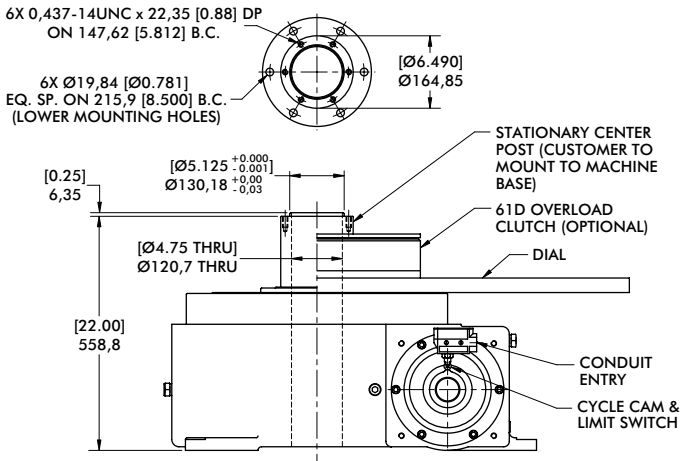
660 mm [26 in] to 1829 mm [96 in]

Accuracy

±27 arcsec / ±0,15 mm [±.006in] at 1219,2 mm [48in] Radius

Repeatability

±7 arcsec / ±0,041 mm [±.0016in] at 1219,2 mm [48in] Radius



Unless otherwise noted, all dimensions are in inches.

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

ROLLER DIAL INDEX DRIVES

Features | Table of Contents



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

Table of Contents

| | |
|--------------------|----|
| How to Order | 3 |
| 425RD | 5 |
| 800RD | 7 |
| 1301RD | 9 |
| 1801RD | 11 |

RD SERIES

Roller Dial Index Drives | How To Order

| | |
|-------------------|--|
| Base Model | Description kW [HP] |
| 425RD | w/ R180 reducer & 0.25 [1/3] AC motor (220/440V) |
| 800RD | w/ 7300C reducer & 1.49 [2] AC motor (220/440V) |
| 1301RD | w/ 7350C reducer & 1.49 [2] AC motor (220/440V) |
| 1801RD | w/ 7500C reducer & 2.24 [3] 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

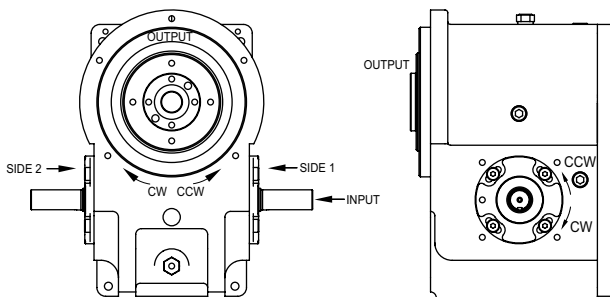
Example: MR, MS, PR or PS

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)

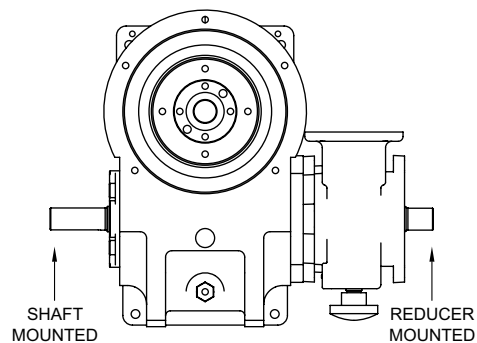


Relative Rotation for Right Hand Cam:

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

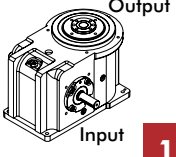
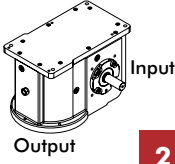
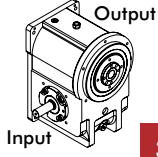
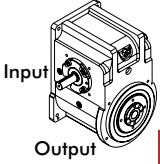
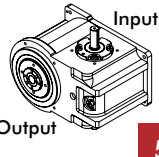
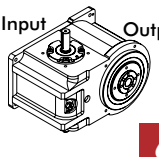
NOTE: Input can be driven in either direction

Signal Switch Mounting Position (Figure 2)

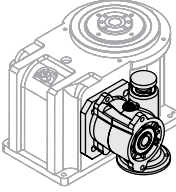
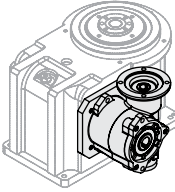
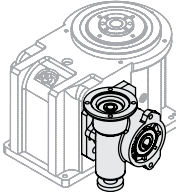
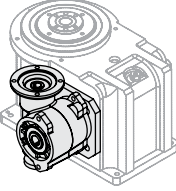
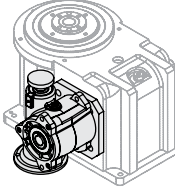
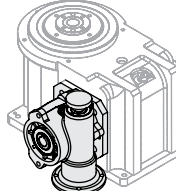
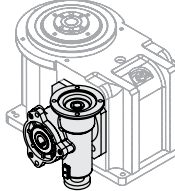
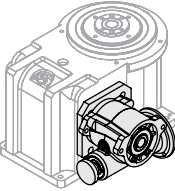
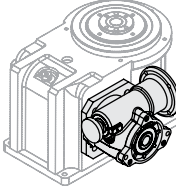
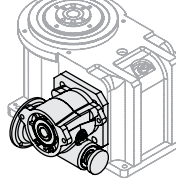
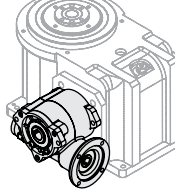
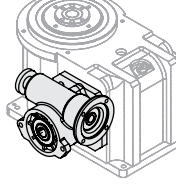
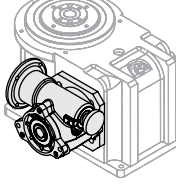


RD SERIES

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

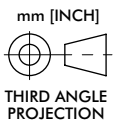
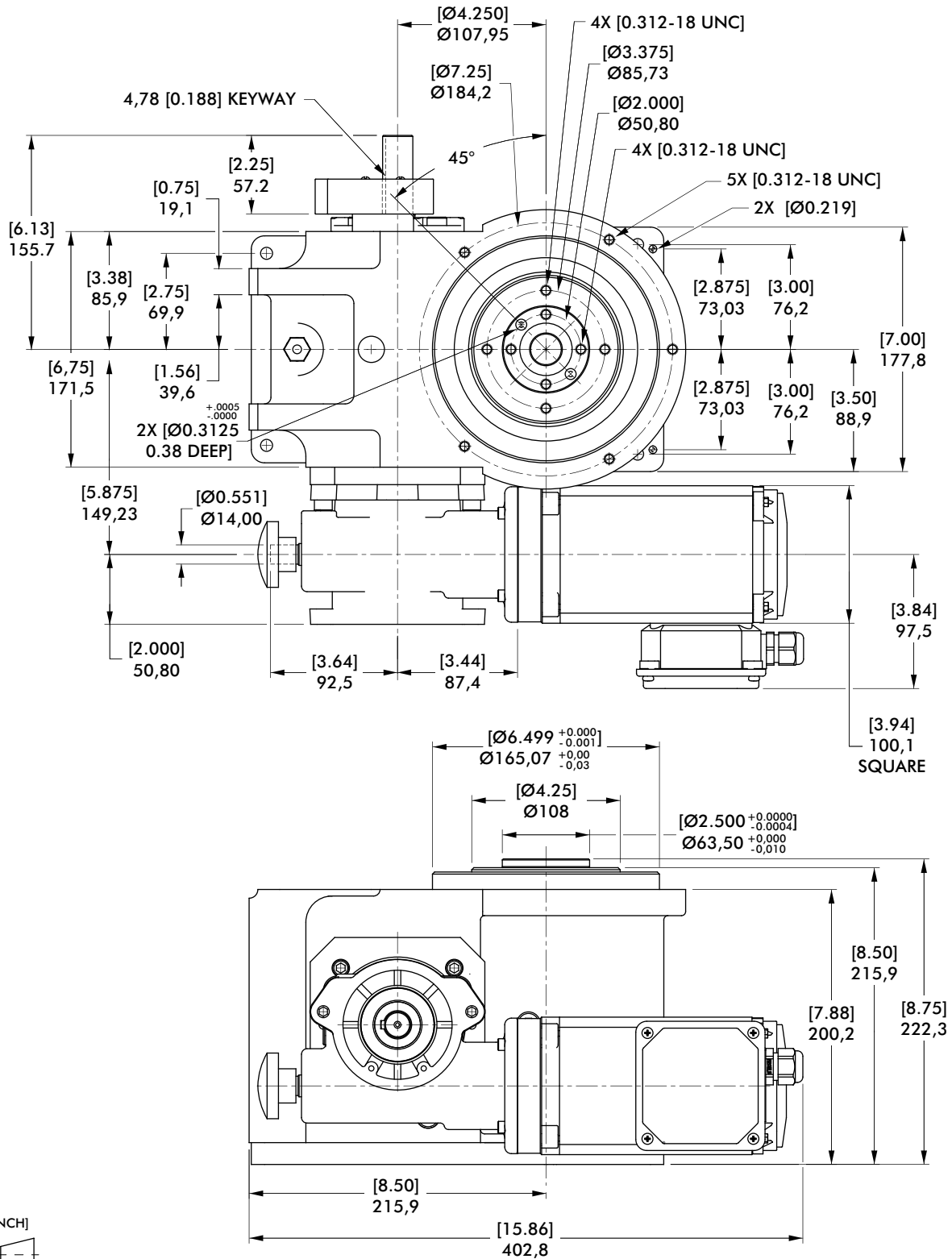
| OVOI (output vertical, over input) | OVUI (output vertical, under input) | OHOI (output horizontal, over input) | OHUI (output horizontal, under input) | H-S1-UP (output horizontal, side 1 up) | H-S2-UP (output horizontal, side 2 up) |
|--|--|--|---|--|--|
|  <p>Output</p> <p>Input</p> <p>1</p> |  <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 |

425RD SERIES

Roller Dial Index Drives | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 3 [1] | 6 [2] | 12 [4] | 32 [11] | 47 [16] | 64 [22] |
| 3 | 3 [1] | 6 [2] | 18 [6] | 32 [11] | 73 [25] | 108 [37] | 146 [50] |
| 4 | 3 [1] | 15 [5] | 29 [10] | 56 [19] | 129 [44] | 193 [66] | 263 [90] |
| 6 | 12 [4] | 32 [11] | 70 [24] | 129 [44] | 293 [100] | 439 [150] | 457 [156] |
| 8 | 20 [7] | 59 [20] | 126 [43] | 231 [79] | 457 [156] | 457 [156] | 457 [156] |
| 12 | 47 [16] | 132 [45] | 260 [89] | 398 [136] | 430 [147] | 430 [147] | 430 [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):

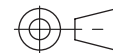
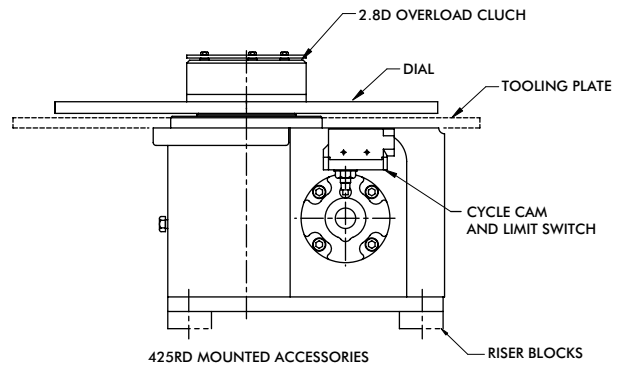
Radial 12010 N [2700 lbs]
 Thrust/Axial 717 N [1600 lbs]
 Moment 655 N-m [5800 in-lbs]

Accuracy

±47 arcsec / ±0,025 mm [±.0027 in] at 304,8 mm [12 in] Radius

Repeatability

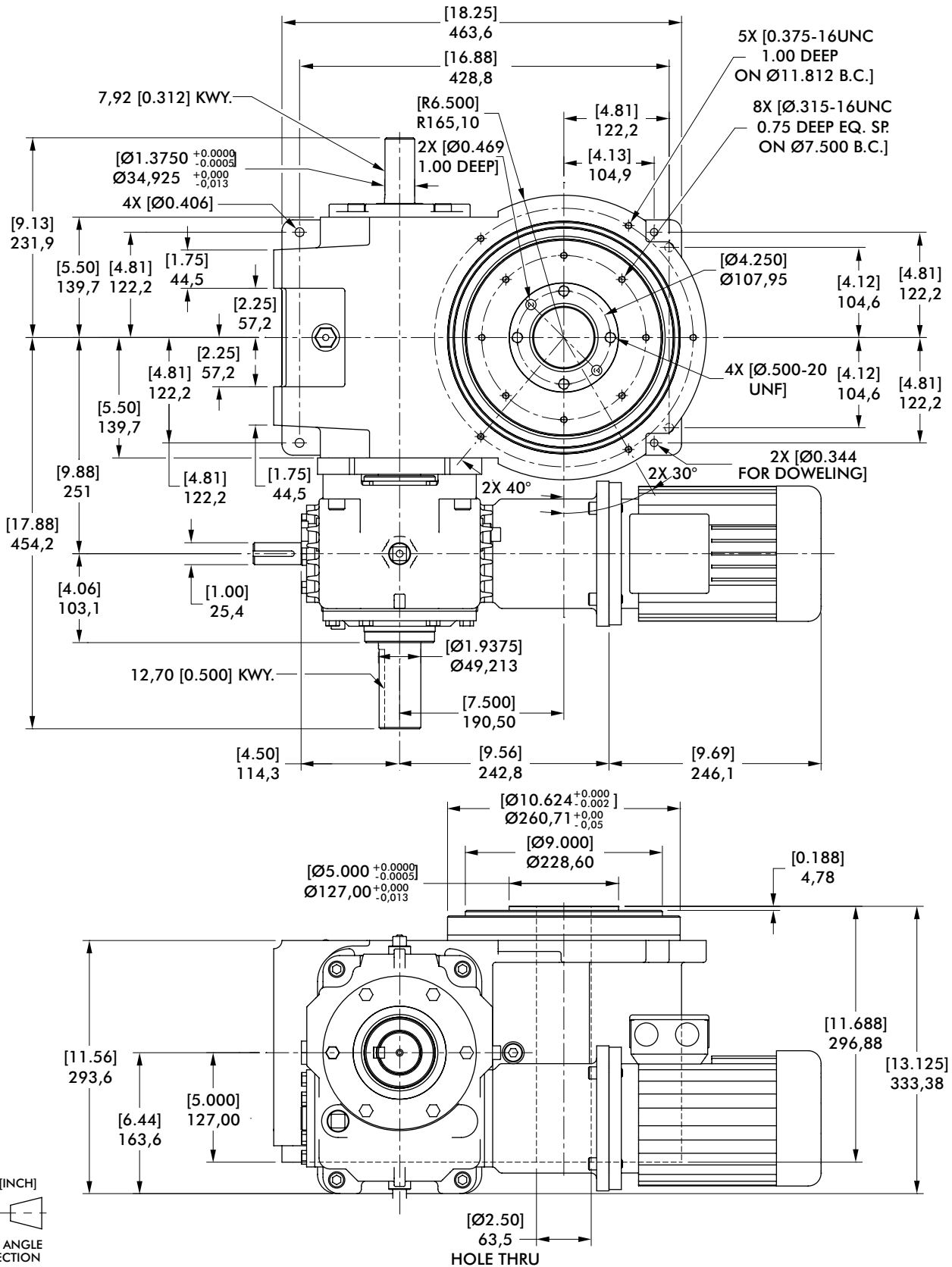
±12 arcsec / ±0,018 mm [±.0007 in] at 304,8 mm [12 in] Radius



Unless otherwise noted, all dimensions are in inches.

800RD SERIES

Roller Dial Index Drives | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 | 6 [2] | 23 [8] | 50 [17] | 94 [32] | 161 [55] | 243 [83] | 334 [114] |
| 3 | 20 [7] | 56 [19] | 117 [40] | 211 [72] | 366 [125] | 547 [187] | 755 [258] |
| 4 | 38 [13] | 102 [35] | 211 [72] | 380 [130] | 653 [223] | 977 [334] | 1343 [459] |
| 6 | 88 [30] | 231 [79] | 480 [164] | 857 [293] | 1475 [504] | 2204 [753] | 3026 [1034] |
| 8 | 158 [54] | 416 [142] | 855 [292] | 1525 [521] | 2625 [897] | 3605 [1232] | 3605 [1232] |
| 12 | 360 [123] | 913 [312] | 1528 [522] | 2324 [794] | 3383 [1156] | 3383 [1156] | 3383 [1156] |
| 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):

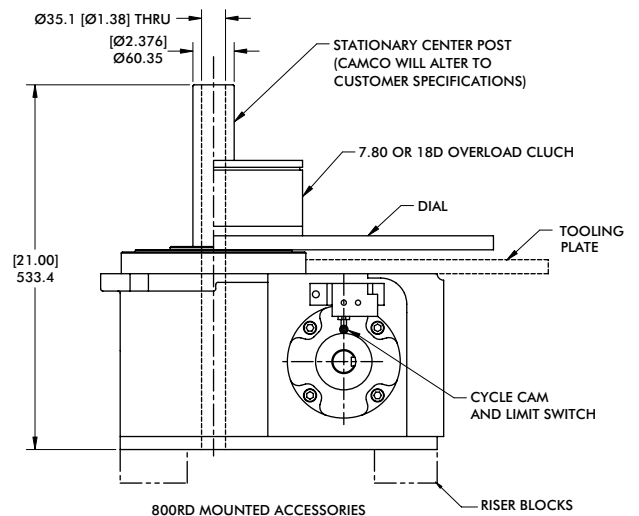
Radial 22139 N [4977 lbs]
 Thrust/Axial 15840 N [3561 lbs]
 Moment 2531 N-m [22398 in-lbs]

Accuracy

±30 arcsec / ±0,102 mm [±.004 in] at 609,6 mm [24 in] Radius

Repeatability

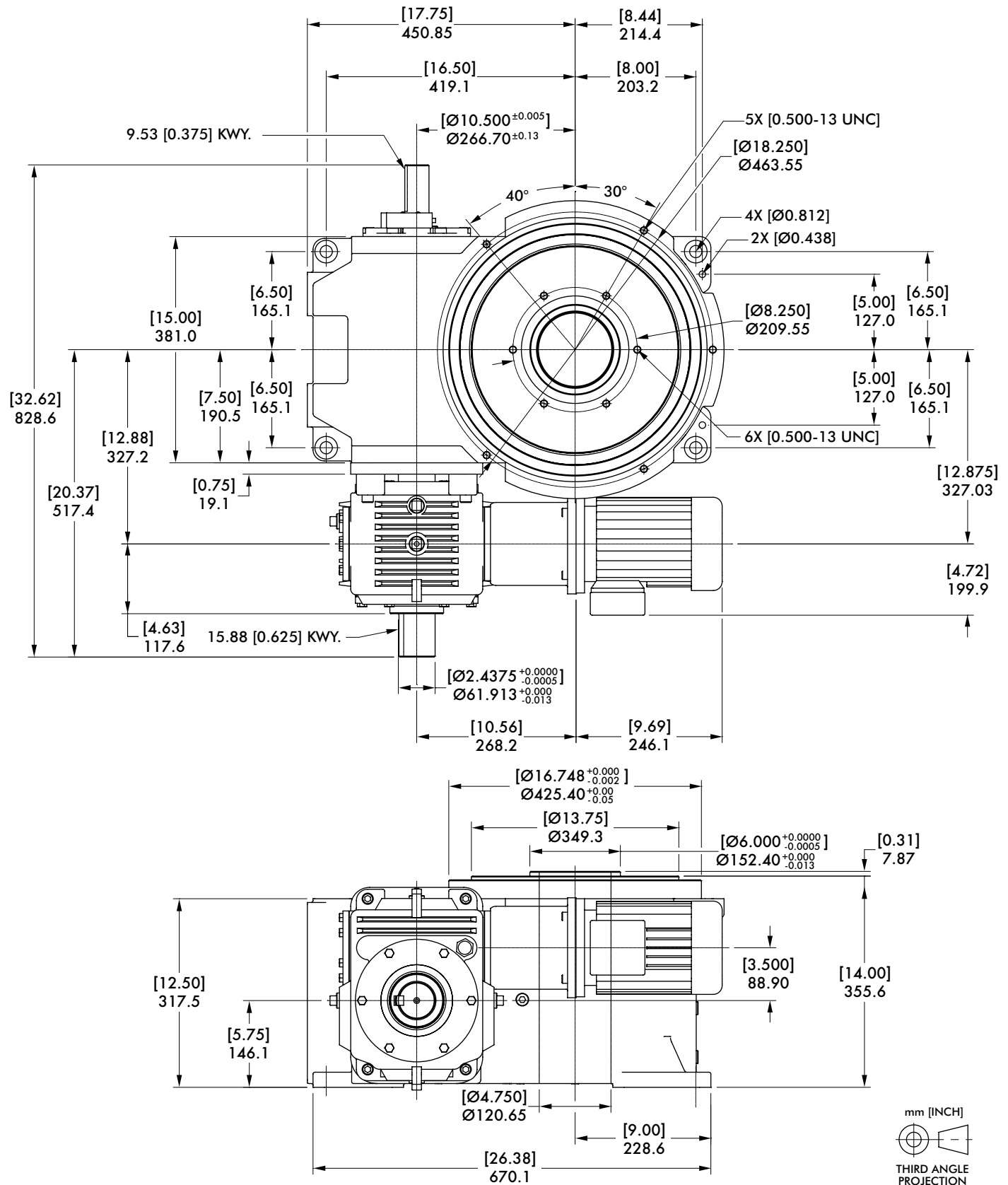
±8 arcsec / ±0,023 mm [±.0009 in] at 609,6 mm [24 in] Radius



Unless otherwise noted, all dimensions are in inches.

1301RD SERIES

Roller Dial Index Drives | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 15 [5] | 44 [15] | 85 [29] | 149 [51] | 228 [78] | 316 [108] |
| 3 | 12 [4] | 47 [16] | 108 [37] | 199 [68] | 348 [119] | 524 [179] | 720 [246] |
| 4 | 29 [10] | 91 [31] | 196 [67] | 360 [123] | 626 [214] | 939 [321] | 1288 [440] |
| 6 | 76 [26] | 214 [73] | 454 [155] | 822 [281] | 1419 [485] | 2122 [725] | 2912 [995] |
| 8 | 140 [48] | 386 [132] | 814 [278] | 1472 [503] | 2531 [865] | 3778 [1291] | 5183 [1771] |
| 12 | 325 [111] | 881 [301] | 1844 [630] | 3321 [1135] | 5709 [1951] | 8513 [2909] | 11673 [3989] |
| 16 | 588 [201] | 1574 [538] | 3283 [1122] | 5911 [2020] | 10158 [3471] | 15141 [5174] | 20757 [7093] |
| 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

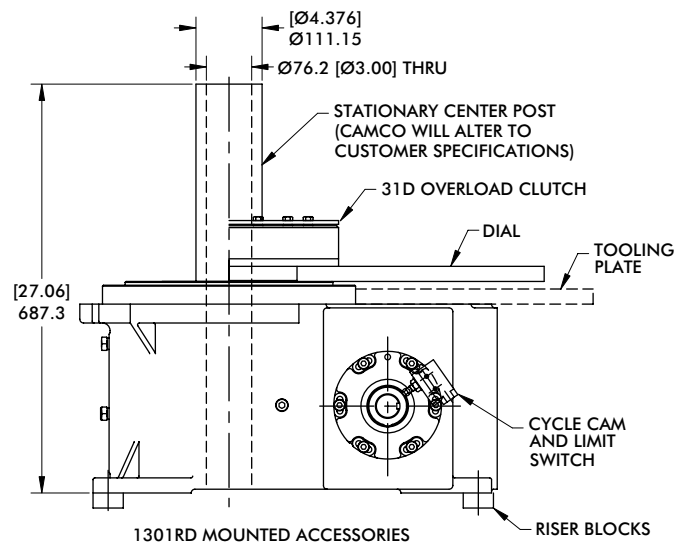
- 7400C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 2 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch model 31D
 - Available Settings (in-lbs): 8500, 13,000, 20,000, 31,000
- Center Thru Hole (4.75 in. Diameter)
- Stationary Center Post
- Dual Cam 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 70282 N [15800 lbs]
 Thrust/Axial 48041N [10800 lbs]
 Moment 12315 N-m [109000 in-lbs]

Accuracy ±39 arcsec / ±0,173 mm [±.0068 in] at 914,4 mm [36 in] Radius

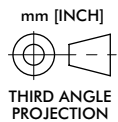
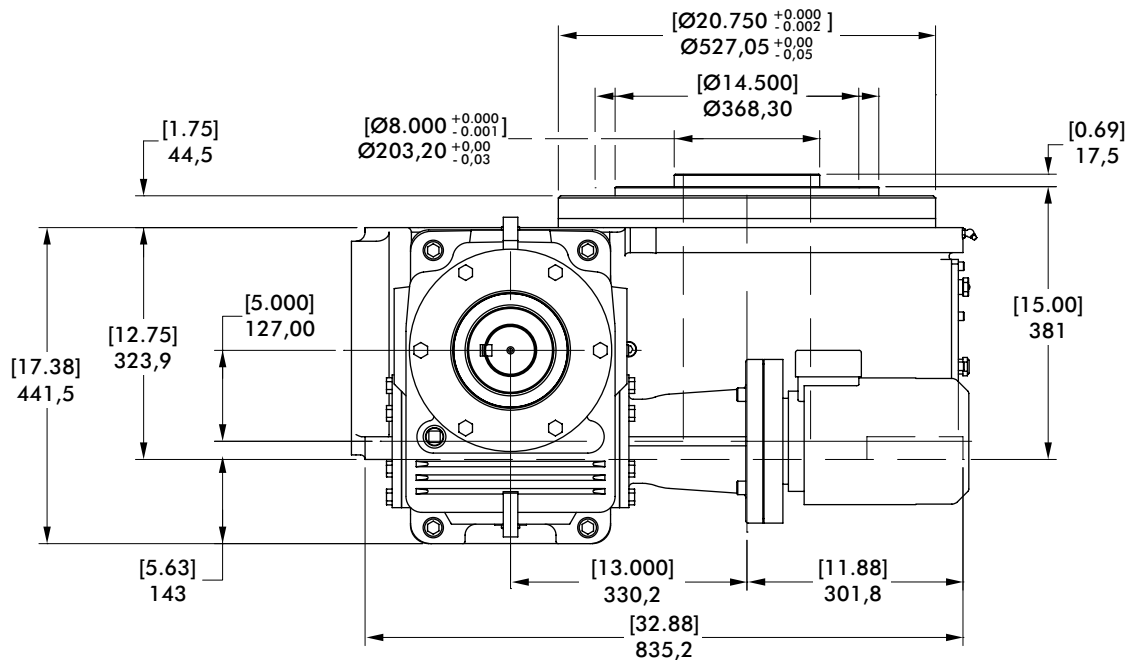
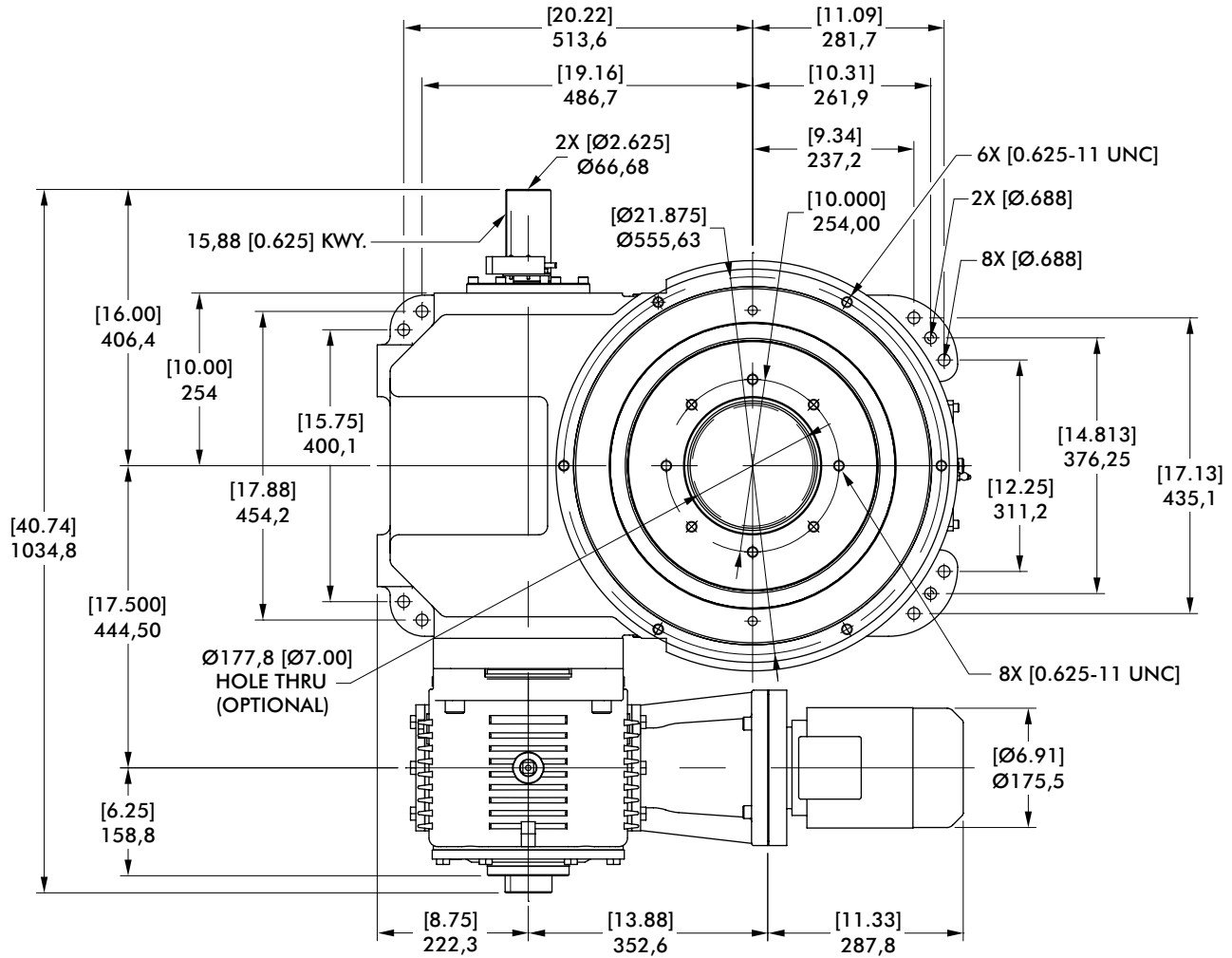
Repeatability ±10 arcsec / ±0,043 mm [±.0017 in] at 914,4 mm [36 in] Radius



Unless otherwise noted, all dimensions are in inches.

1801RD SERIES

Roller Dial Index Drives | Dimensions



| Maximum Inertia x 1000 kg-cm ² [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 [0] | 15 [5] | 53 [18] | 114 [39] | 319 [109] | 670 [229] | 1,206 [412] |
| 3 | 6 [2] | 50 [17] | 129 [44] | 252 [86] | 673 [230] | 1,393 [476] | 2,487 [850] |
| 4 | 26 [9] | 114 [39] | 269 [92] | 512 [175] | 1,340 [458] | 2,748 [939] | 4,893 [1,672] |
| 6 | 79 [27] | 266 [91] | 600 [205] | 1,121 [383] | 2,894 [989] | 5,914 [2,021] | 10,515 [3,593] |
| 8 | 158 [54] | 492 [168] | 1,083 [370] | 2,010 [687] | 5,159 [1,763] | 10,529 [3,598] | 18,708 [6,393] |
| 12 | 372 [127] | 1,121 [383] | 2,455 [839] | 4,542 [1,552] | 11,627 [3,973] | 23,710 [8,102] | 42,114 [14,391] |
| 16 | 679 [232] | 2,010 [687] | 4,384 [1,498] | 8,091 [2,765] | 20,690 [7,070] | 42,17 [1,441] | 56,933 [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

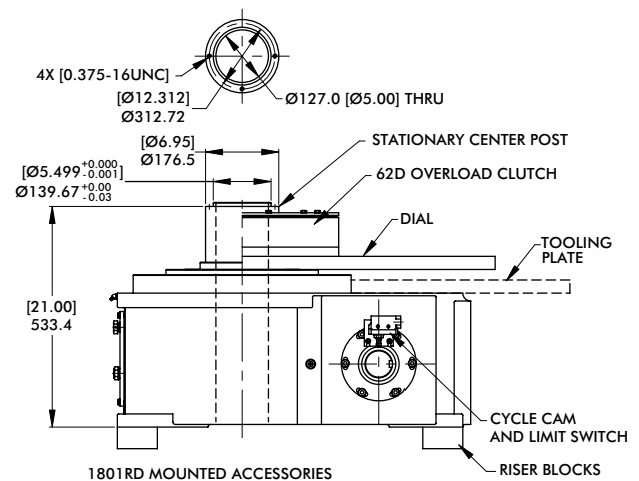
- 7600C or 7700C Reducer (Ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 3 hp DC Motor
- Output Overload Clutch model 62D
 - Available Settings (in-lbs): 23,000, 36,000, 44,000, 50,000, 60,000
- Center Thru Hole (7.00 in. Diameter)
- Stationary Center Post
- Dual Cam and Limit Switch
- Left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

Output Load Capacity (loads carried during index):

Radial 65,834 N [14,800 lbs]
 Thrust/Axial 56,048 N [12,600 lbs]
 Moment 12,089 N-m [107,000 in-lbs]

Accuracy ±27 arcsec / ±.160 mm [±.0063 in] at 1,219.2 mm [48 in] Radius

Repeatability ±7 arcsec / ±.041 mm [±.0016 in] at 1,219.2 mm [48 in] Radius



Unless otherwise noted, all dimensions are in inches.

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

HEAVY DUTY INDEX DRIVE

Table of Contents



Features:

The **CAMCO E-Series Heavy Duty Index Drive** is ideal for heavy-duty rotary dial applications with features including:

Large output mounting surface supported by a 4-point contact bearing providing superior thrust and moment capacity

Large center thru-hole to accommodate stationary center post, electrical wiring and air or hydraulic lines

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

Precision cam with preloaded cam followers for maximum accuracy

Durable welded steel housing

Preloaded "center rib" design for smooth acceleration and deceleration with precision positioning

Table of Contents

| | |
|--------------------|----|
| How to Order | 3 |
| 750E..... | 5 |
| 950E..... | 7 |
| 1150E..... | 9 |
| 1550E..... | 11 |

E-SERIES

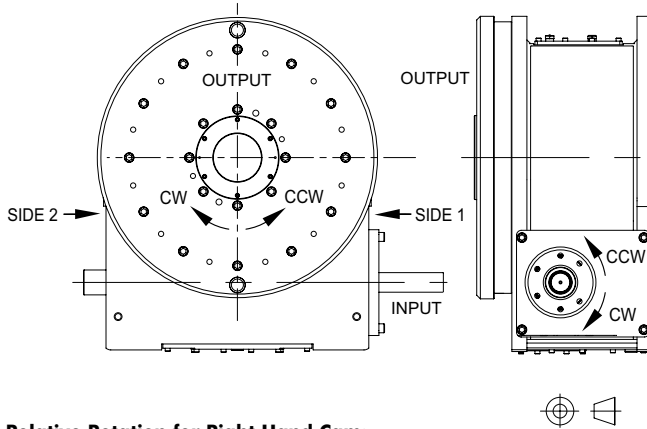
Heavy Duty Index Drive | How To Order

| | | | |
|--|--|--|--|
| <p>Base Model Description</p> <p>750E w/ KH87 reducer & 12.5 HP AC motor (220/440V)</p> <p>950E w/ KH87 reducer & 15 HP AC motor (220/440V)</p> <p>1150E w/ KH107 reducer & 25 HP AC motor (220/440V)</p> <p>1550E w/ KH127 reducer & 30 HP AC motor (220/440V)</p> | | <p>Control (only available with these models)</p> <p>1 15 HP 240V 750E & 950E only</p> <p>2 15 HP 440V 750E & 950E only</p> <p>3 25 HP 240V 1150E only</p> <p>4 25 HP 440V 1150E only</p> <p>5 30 HP 240V 1550E only</p> <p>6 30 HP 440V 1550E only</p> | |
|--|--|--|--|

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|--------|-------|------|-------|-------|----------|-------|-------|-------|--|----------|-------|-------|-------|--|----------|-------|-------|-------|--|----------|-------|-------|-------|--|----------|-------|-------|-------|--|----------|-------|-------|--------|--|----------|-------|-------|--------|--|---|--|---|
| <p>Motion Stops Index Period</p> <p>A 2 330</p> <p>B 3 330</p> <p>C 4 330</p> <p>D 6 330</p> <p>E 8 330</p> <p>F 12 330</p> <p>G 16 330</p> | <p>Index Mounting (See Figure 1)</p> <p>1</p> <p>2</p> <p>3</p> <p>4</p> <p>5</p> <p>6</p> | <p>Reducer Ratio</p> <table border="0"> <tr> <td></td> <td>750E</td> <td>950E</td> <td>1150E</td> <td>1550E</td> </tr> <tr> <td>A</td> <td>14.50</td> <td>29.00</td> <td>40.19</td> <td></td> </tr> <tr> <td>B</td> <td>19.95</td> <td>42.33</td> <td>54.07</td> <td></td> </tr> <tr> <td>C</td> <td>24.92</td> <td>49.90</td> <td>70.95</td> <td></td> </tr> <tr> <td>D</td> <td>31.39</td> <td>52.17</td> <td>81.98</td> <td></td> </tr> <tr> <td>E</td> <td>44.02</td> <td>66.52</td> <td>89.89</td> <td></td> </tr> <tr> <td>F</td> <td>49.16</td> <td>73.30</td> <td>110.18</td> <td></td> </tr> <tr> <td>G</td> <td>63.00</td> <td>82.61</td> <td>122.98</td> <td></td> </tr> </table> | | 750E | 950E | 1150E | 1550E | A | 14.50 | 29.00 | 40.19 | | B | 19.95 | 42.33 | 54.07 | | C | 24.92 | 49.90 | 70.95 | | D | 31.39 | 52.17 | 81.98 | | E | 44.02 | 66.52 | 89.89 | | F | 49.16 | 73.30 | 110.18 | | G | 63.00 | 82.61 | 122.98 | | <p>Reducer Mounting (See Figure 3)</p> <p>A</p> | <p>Signal Switch</p> <p>M Mechanical</p> <p>P Proximity</p> <p>Example: MS or PS</p> <p>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.</p> | <p>Signal Switch Side (See Figure 2)</p> <p>S Shaft</p> |
| | 750E | 950E | 1150E | 1550E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| A | 14.50 | 29.00 | 40.19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B | 19.95 | 42.33 | 54.07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C | 24.92 | 49.90 | 70.95 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D | 31.39 | 52.17 | 81.98 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E | 44.02 | 66.52 | 89.89 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F | 49.16 | 73.30 | 110.18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G | 63.00 | 82.61 | 122.98 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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

Input Shaft Configuration/Rotations (Figure 1)

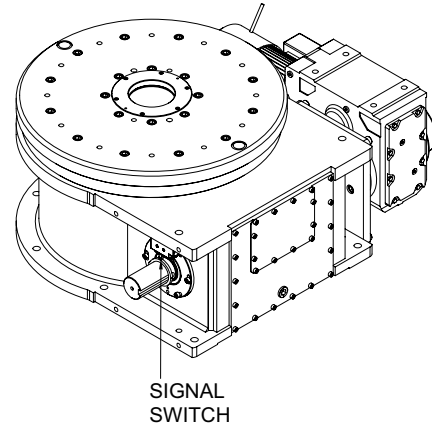


Relative Rotation for Right Hand Cam:

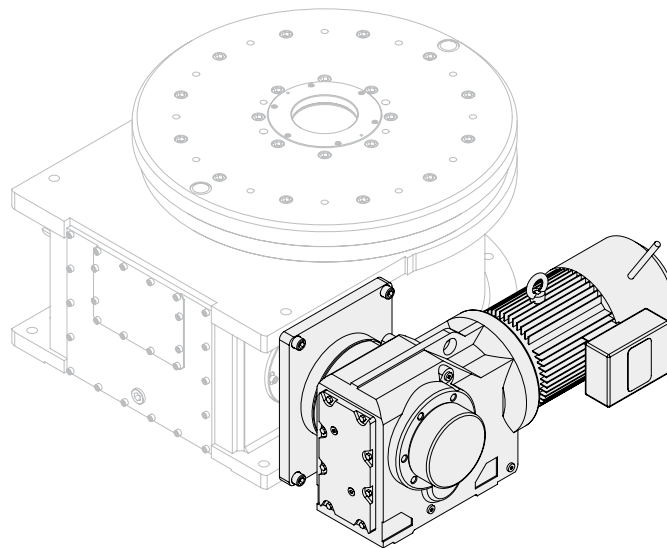
CW Input Side 1 CCW Output
CCW Input Side 2 CW Output

NOTE: Input can be driven in either direction

Signal Switch Mounting Position (Figure 2)

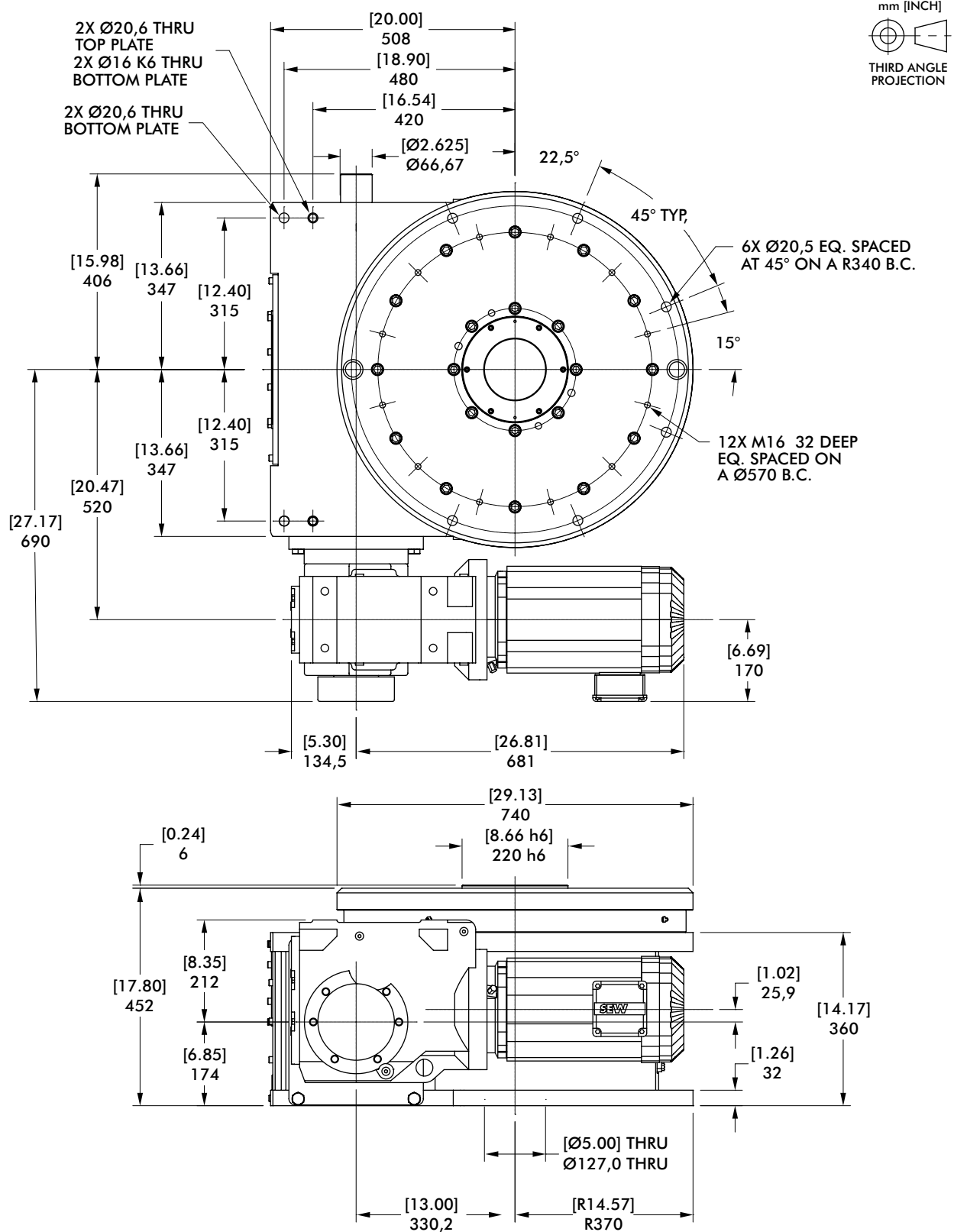


Gear Reducer Mounting Position (Figure 3)



750E SERIES

Heavy Duty Index Drive | Dimensions



| Maximum Inertia x 1000 [lb-in ²] kg-cm ² for standard package | | | | | | | |
|--|-----------------------|----------------|-----------------|-----------------|------------------|------------------|------------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 0.44 | 0.59 | 0.76 | 0.96 | 1.35 | 1.50 | 1.93 |
| 2 | [0] 0 | [27] 79 | [105] 307 | [254] 743 | [751] 2198 | [987] 2888 | [1647] 4820 |
| 3 | [14] 41 | [98] 287 | [257] 752 | [562] 1645 | [1577] 4615 | [2058] 6023 | [3407] 9970 |
| 4 | [67] 196 | [231] 676 | [542] 1586 | [1140] 3336 | [3128] 9154 | [4072] 11916 | [6714] 19648 |
| 6 | [191] 559 | [542] 1586 | [1209] 3538 | [2491] 7290 | [6756] 19771 | [8781] 25697 | [14447] 42278 |
| 8 | [372] 1089 | [931] 2724 | [1677] 4908 | [2841] 8314 | [5587] 16350 | [6968] 20391 | [11444] 33490 |
| 12 | [886] 2593 | [2291] 6704 | [4840] 14164 | [8195] 23982 | [16116] 47162 | [20100] 58821 | [33010] 96600 |
| 16 | [1351] 3954 | [2717] 7951 | [4837] 14155 | [8254] 24154 | [16263] 47592 | [20283] 59356 | [33311] 97481 |
| Reducer Ratio | | | | | | | |
| | 14.45 | 19.45 | 24.92 | 31.39 | 44.02 | 49.16 | 63.00 |

Features

- KH87 Gear Reducer with Brake-motor
- Double Extended Camshaft (Input shaft)
- Center Thru Hole (Ø127 mm [Ø5 in])
- Cycle Cam and Limit Switch
- Right Hand Cam

Optional Accessories

- Left Hand Cam
- Relief in Dwell for Shot-Pin applications
- Dual Cam & limit Switch
- KH97 Gear Reducer with Brake-motor
- Stationary Center Post
- Visual Disk Dwell Indicator

Output Load Capacity (loads carried during index):

| | |
|--------------|---------------------------|
| Radial | 129888 N [29200 lbs] |
| Thrust/Axial | 186825 N [42000 lbs] |
| Moment | 46830 N-m [414500 in-lbs] |

Typical Application Dial Diameter:

1397 mm to 2794 mm [55 in to 110 in]

Accuracy

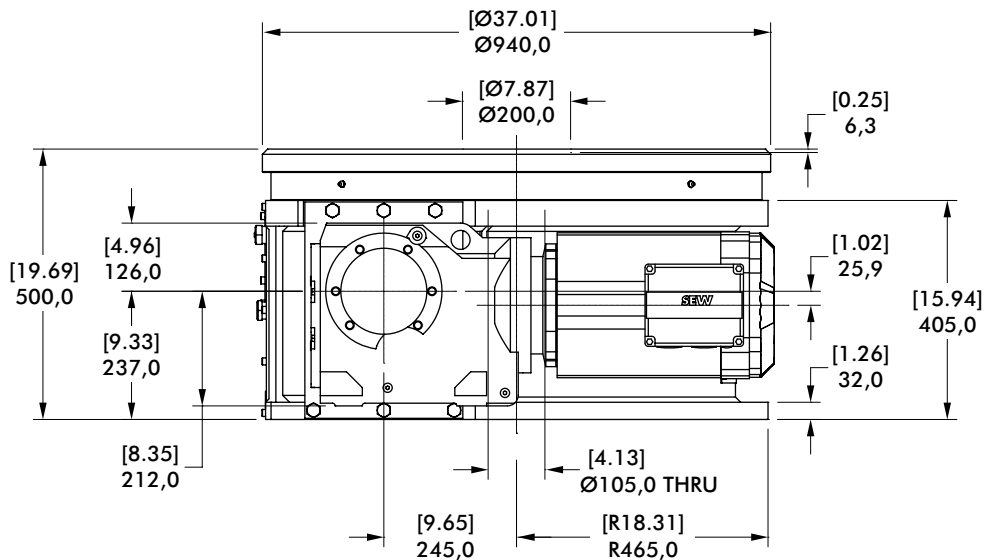
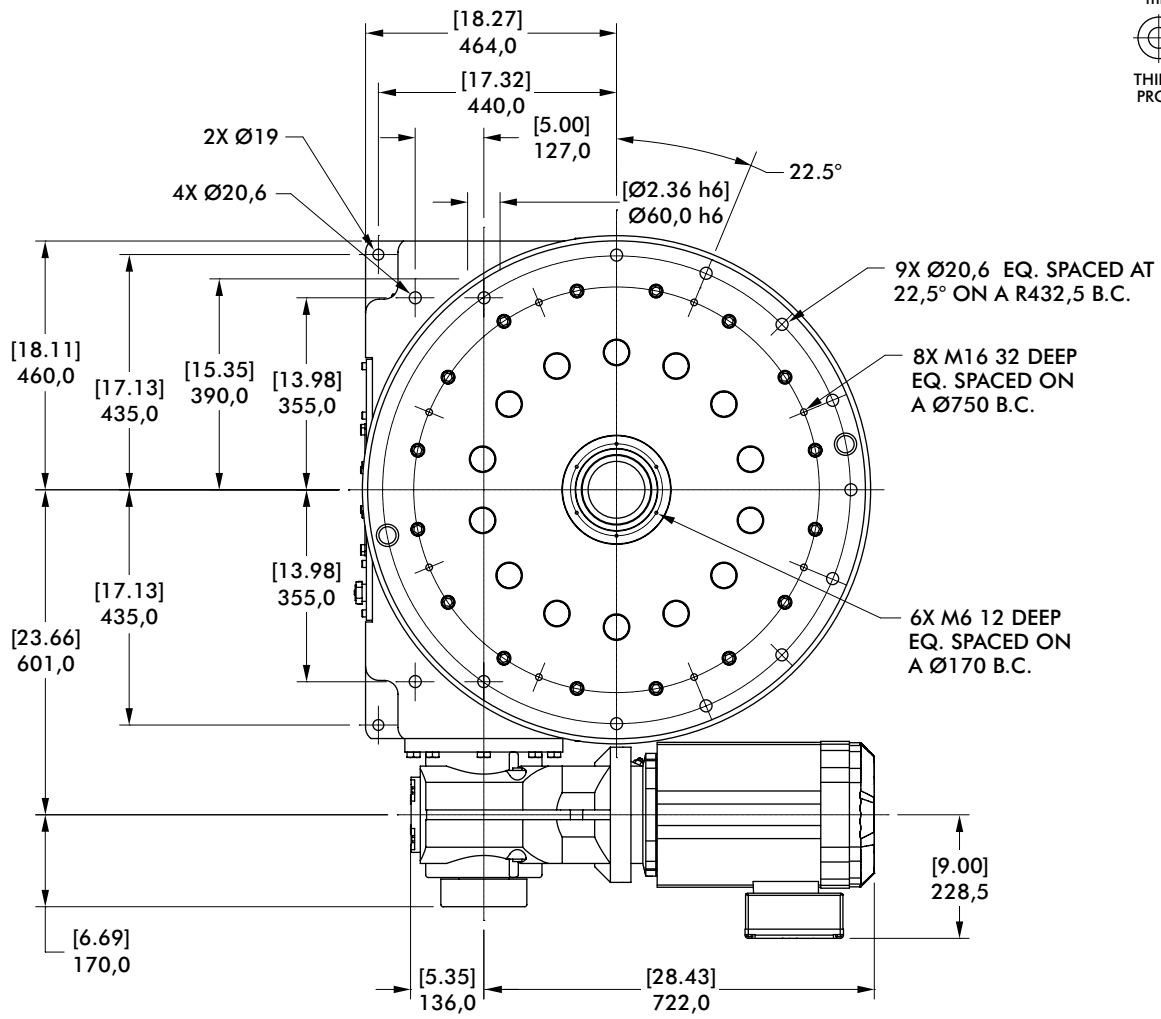
±27 arcsec / ±.0,05 mm [±.002 in]
at 381 mm [15in] Radius

Repeatability

±7 arcsec / ±.0,013 mm [±.0005 in]
at 381 mm [15in] Radius

950E SERIES

Heavy Duty Index Drive | Dimensions



| Maximum Inertia x 1000 [lb-in ²] kg-cm ² for standard package | | | | | | | |
|--|-----------------------|----------------|-----------------|------------------|------------------|------------------|-------------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 0.44 | 0.59 | 0.76 | 0.96 | 1.35 | 1.50 | 1.93 |
| 2 | [0] 0 | [0] 0 | [61] 179 | [224] 656 | [619] 1811 | [833] 2438 | [1433] 4194 |
| 3 | [0] 0 | [59] 173 | [250] 732 | [619] 1811 | [1507] 4410 | [1989] 5821 | [3337] 9765 |
| 4 | [16] 47 | [205] 600 | [564] 1650 | [1252] 3664 | [2911] 8519 | [3810] 11150 | [6329] 18521 |
| 6 | [187] 547 | [634] 1855 | [1479] 4328 | [3102] 9078 | [7013] 20523 | [9135] 26733 | [15073] 44110 |
| 8 | [412] 1206 | [1169] 3421 | [2603] 7617 | [5287] 15472 | [11478] 33589 | [14315] 41891 | [23511] 68803 |
| 12 | [1025] 3000 | [2729] 7986 | [5956] 17430 | [10793] 31585 | [23621] 69124 | [30484] 89208 | [53172] 155602 |
| 16 | [1290] 3775 | [2647] 7746 | [4753] 13909 | [8147] 23841 | [17305] 50641 | [21582] 63157 | [35445] 103726 |
| Reducer Ratio | | | | | | | |
| | 14.45 | 19.45 | 24.92 | 31.39 | 44.02 | 49.16 | 63.00 |

Features

- KH87 Gear Reducer with Brake-motor
- Double Extended Camshaft (Input shaft)
- Center Thru Hole (Ø105 mm [Ø4.13 in])
- Cycle Cam and Limit Switch
- Right Hand Cam

Optional Accessories

- Left Hand Cam
- Relief in Dwell for Shot-Pin applications
- Dual Cam & limit Switch
- KH97 Gear Reducer with Brake-motor
- Stationary Center Post
- Visual Disk Dwell Indicator

Output Load Capacity (loads carried during index):

| | |
|--------------|----------------------------|
| Radial | 233976 N [52600 lbs] |
| Thrust/Axial | 337397 N [75850 lbs] |
| Moment | 110438 N-m [977500 in-lbs] |

Typical Application

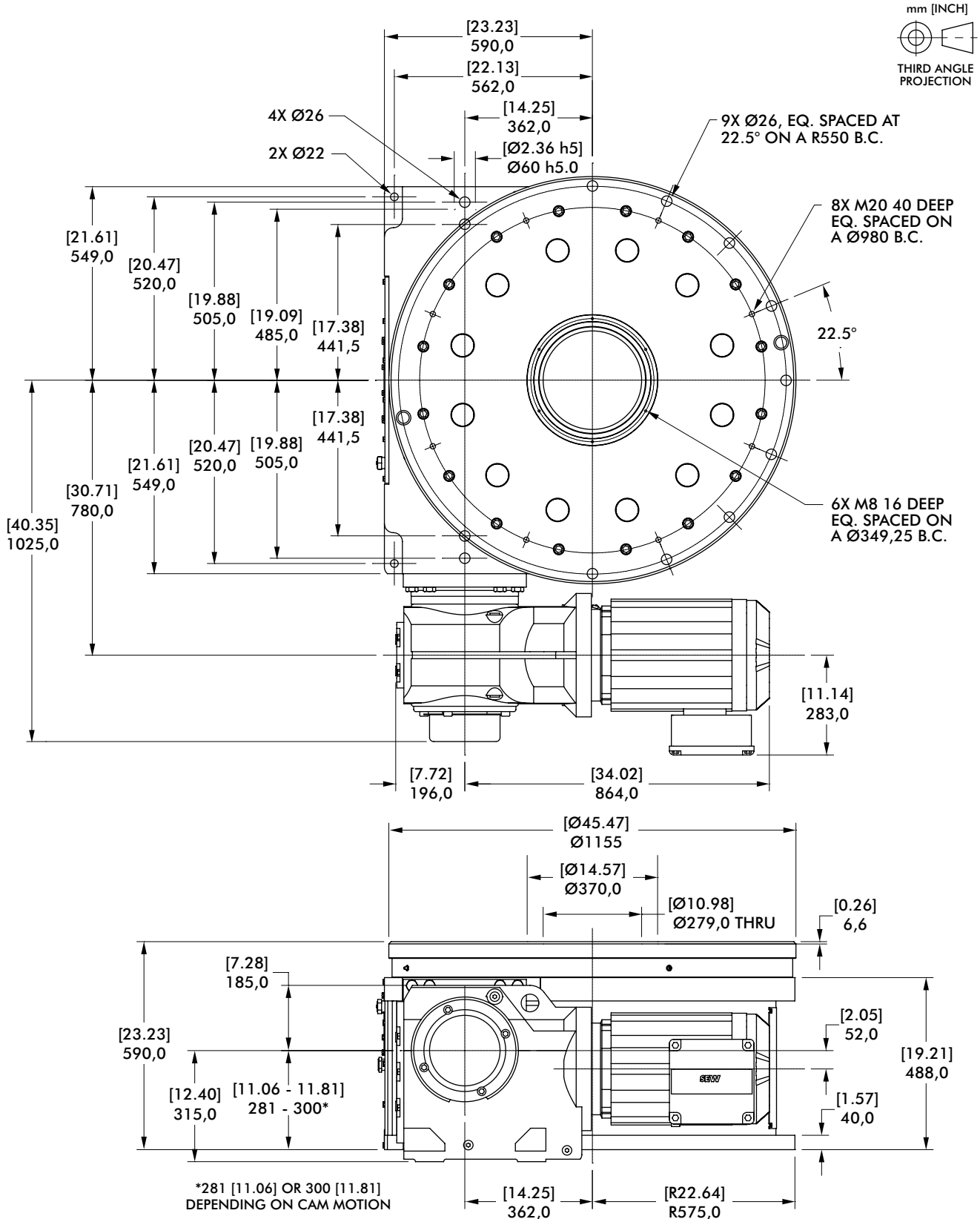
Dial Diameter: 1778 mm to 3556 mm [70 in to 140 in]

Accuracy ±29 arcsec / ±0,058 mm [±.0023 in] at 762 mm [30in] Radius

Repeatability ±6 arcsec / ±0,015 mm [±.0006 in] at 762 mm [30in] Radius

1150E SERIES

Heavy Duty Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [lb-in ²] for standard package | | | | | | | |
|--|-----------------------|-------------------|-------------------|--------------------|--------------------|--------------------|--------------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 0.89 | 1.29 | 1.52 | 1.75 | 2.03 | 2.24 | 2.52 |
| 2 | [134] 392 | [1141] 3339 | [2093] 6125 | [3329] 9742 | [4746] 13889 | [5835] 17076 | [7501] 21951 |
| 3 | [698] 2043 | [2965] 8677 | [5108] 14948 | [7887] 23080 | [11077] 32416 | [13526] 39582 | [17275] 50554 |
| 4 | [1445] 4229 | [5474] 16019 | [9284] 27169 | [14225] 41628 | [19896] 58224 | [24249] 70962 | [30915] 90470 |
| 6 | [3780] 11062 | [12845] 37590 | [21419] 62680 | [32537] 95216 | [45296] 132554 | [55090] 161215 | [70088] 205105 |
| 8 | [6581] 19259 | [21959] 64261 | [36502] 106819 | [54381] 159140 | [73624] 215453 | [89397] 261611 | [113548] 332286 |
| 12 | [15621] 45713 | [50221] 146967 | [82944] 242727 | [123772] 362206 | [167569] 490373 | [203468] 595428 | [258436] 756286 |
| 16 | [27975] 81866 | [61083] 178753 | [84884] 248404 | [111420] 326059 | [150846] 441435 | [183162] 536005 | [232645] 680812 |
| Reducer Ratio | | | | | | | |
| | 29.00 | 42.33 | 49.90 | 57.17 | 66.52 | 73.30 | 82.61 |

Features

- KH107 Gear Reducer with Brake-motor
- Double Extended Camshaft (Input shaft)
- Center Thru Hole (Ø278 mm [Ø10.94 in])
- Cycle Cam & limit Switch
- Right Hand Cam

Optional Accessories

- Left Hand Cam
- Relief in Dwell for Shot-Pin applications
- Dual Cam & limit Switch
- KH127 Gear Reducer with Brake-motor
- Stationary Center Post
- Visual Disk Dwell Indicator

Output Load Capacity (loads carried during index):

| | |
|--------------|-----------------------------|
| Radial | 262556 N [59025 lbs] |
| Thrust/Axial | 380189 N [85470 lbs] |
| Moment | 165968 N-m [1469000 in-lbs] |

Typical Application

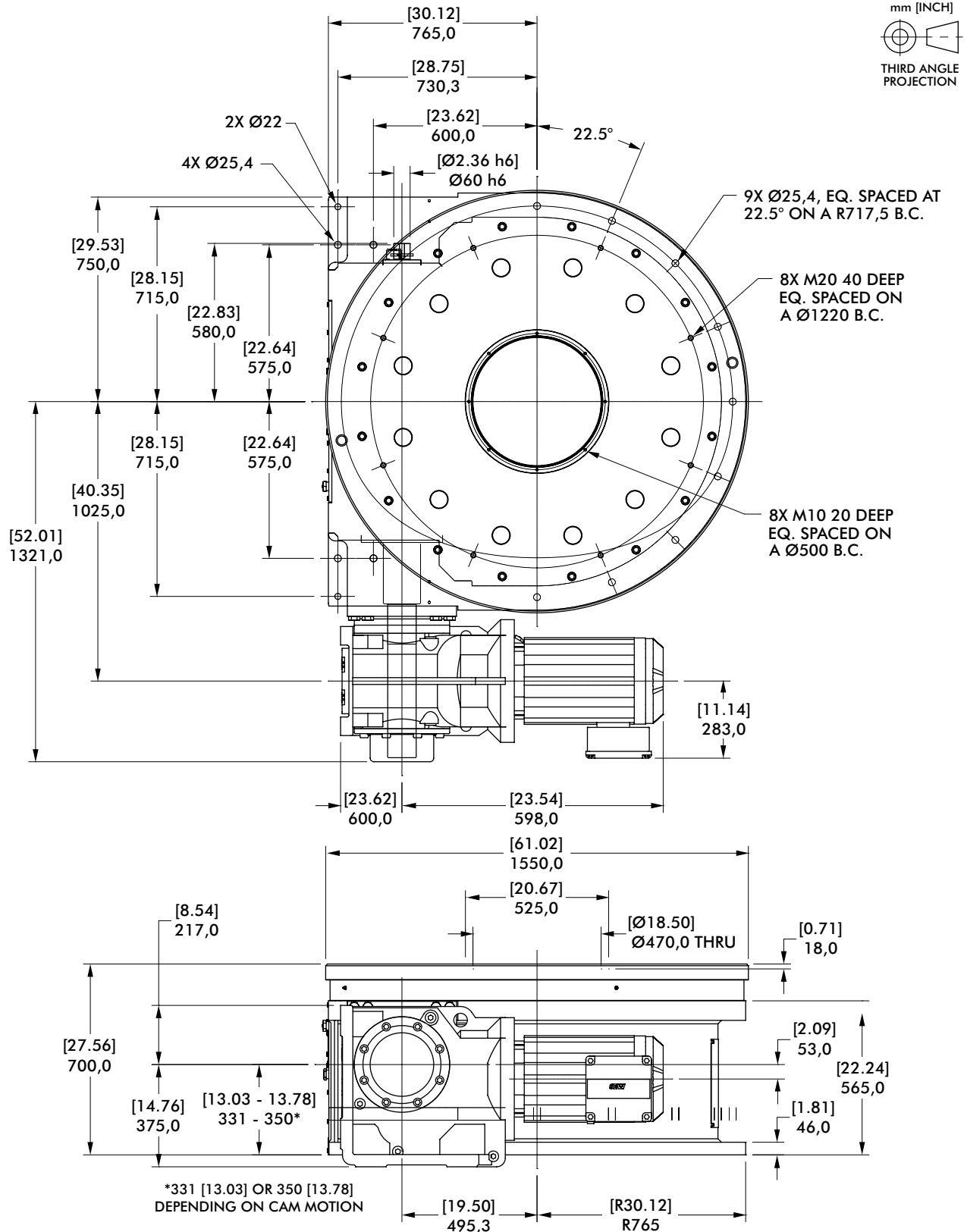
Dial Diameter: 2286 mm to 4572 mm [90 in to 180 in]

Accuracy ±16 arcsec / ±0,05 mm [±.002 in] at 635 mm [25in] Radius

Repeatability ±4 arcsec / ±0,013 mm [±.0005 in] at 635 mm [25in] Radius

1550E SERIES

Heavy Duty Index Drive | Dimensions



| Maximum Inertia x 1000 kg-cm ² [lb-in ²] for standard package | | | | | | | |
|--|-----------------------|--------------------|---------------------|---------------------|---------------------|---------------------|----------------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 1.23 | 1.65 | 2.17 | 2.50 | 2.75 | 3.37 | 3.74 |
| 2 | [0] 0 | [1926] 5636 | [6208] 18167 | [10388] 30399 | [13740] 40209 | [21944] 64217 | [26735] 78237 |
| 3 | [1811] 5300 | [6814] 19940 | [17561] 51390 | [28054] 82097 | [36466] 106714 | [57057] 166971 | [69084] 202167 |
| 4 | [4396] 12864 | [13172] 38546 | [32028] 93727 | [50439] 147605 | [65198] 190795 | [101324] 296514 | [122426] 358267 |
| 6 | [11290] 33039 | [30132] 88178 | [70615] 206647 | [110143] 322322 | [141829] 415048 | [219391] 642025 | [264696] 774605 |
| 8 | [22185] 64922 | [57289] 167650 | [132712] 388368 | [195668] 572602 | [235249] 688432 | 1034294 [353436] | [436753] 1278112 |
| 12 | 146334 [50005] | 366888 [125372] | [287302] 840760 | 1303461 [445415] | 1674364 [572159] | 2582270 [882406] | 3038949 [1038461] |
| 16 | 263112 [89910] | 603493 [206224] | 1039120 [355085] | 1387320 [474071] | 1667952 [569968] | 2505914 [856314] | 3038949 [1038461] |
| Reducer Ratio | | | | | | | |
| | 40.19 | 54.07 | 70.95 | 81.98 | 89.89 | 110.18 | 122.48 |

Features

- KH127 Gear Reducer with Brake-motor
- Double Extended Camshaft (Input shaft)
- Center Thru Hole (Ø470 mm [Ø18.50 in])
- Cycle Cam and Limit Switch
- Right Hand Cam

Optional Accessories

- Left Hand Cam
- Relief in Dwell for Shot-Pin applications
- Dual Cam & limit Switch
- KH157 Gear Reducer with Brake-motor
- Stationary Center Post
- Visual Disk Dwell Indicator

Output Load Capacity (loads carried during index):

| | |
|--------------|-----------------------------|
| Radial | 367423 N [82600 lbs] |
| Thrust/Axial | 533786 N [120000 lbs] |
| Moment | 328094 N-m [2904000 in-lbs] |

Typical Application

Dial Diameter: 2997 mm to 5994 mm [118 in to 236 in]

Accuracy ±12 arcsec / ±0,043 mm [±.0017 in] at 762 mm [30in] Radius

Repeatability ±3 arcsec / ±0,010 mm [±.0004 in] at 762 mm [30in] Radius

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



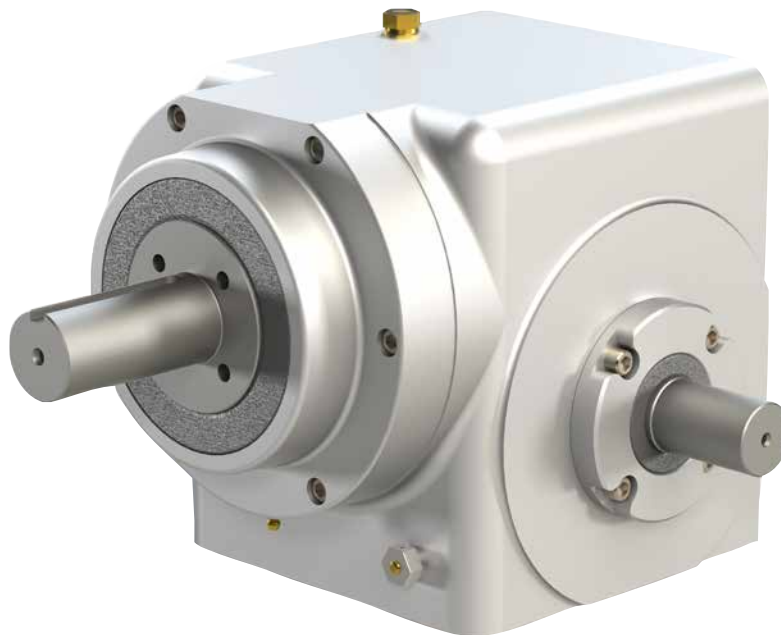
LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

RIGHT ANGLE INDEX DRIVES

Features | Table of Contents



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.

Table of Contents

| | |
|--------------------|---|
| How to Order | 3 |
| 400RA | 5 |
| 512RA | 7 |
| 662RA | 9 |

RA SERIES

Right Angle Index Drive | How to Order

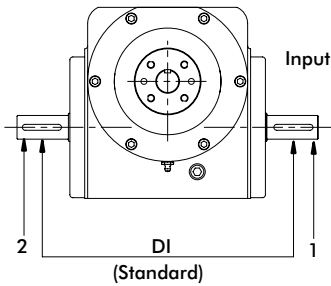
Indexer Ordering Procedure

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)

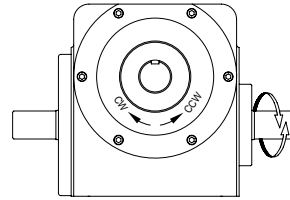
Reducer Ordering Procedure

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)



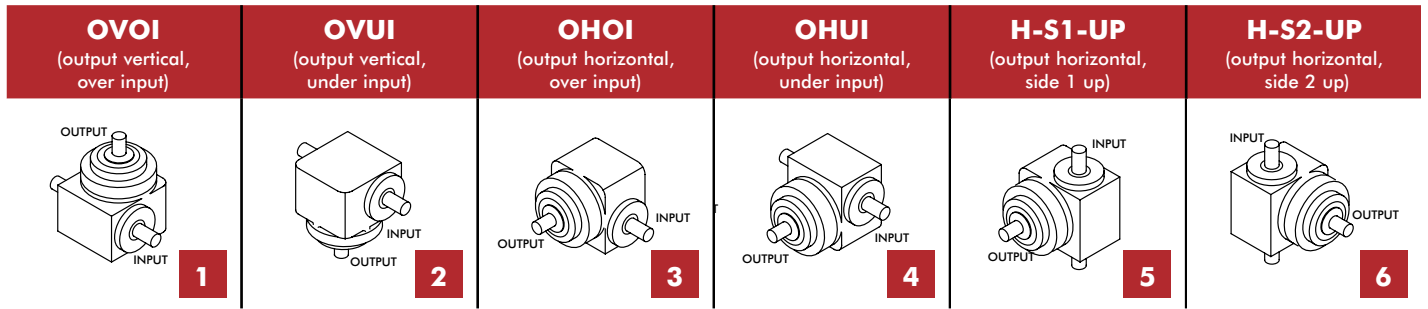
Input Shaft Rotation



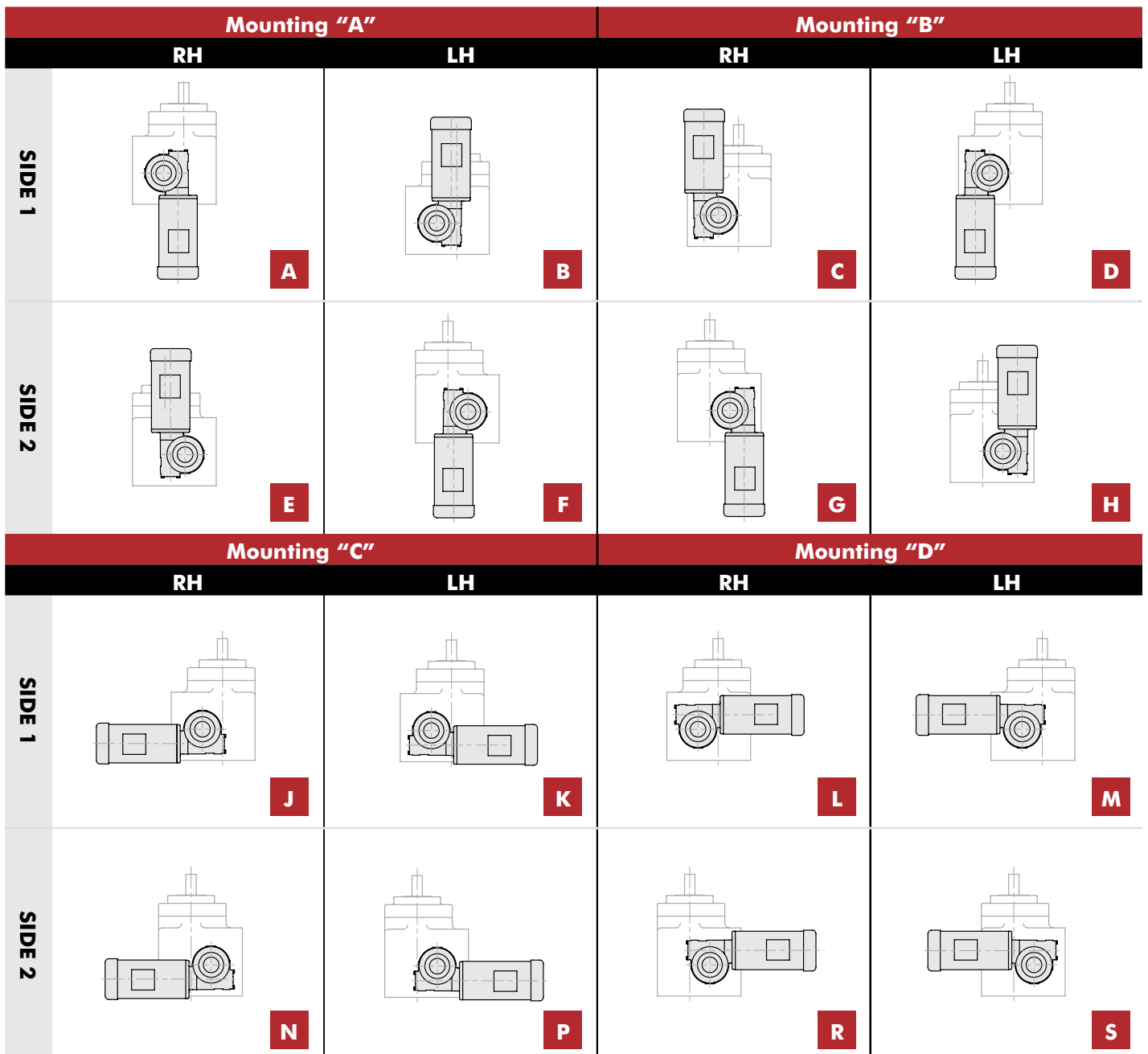
Relative Rotation for Right Hand Cam:

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

NOTE: Input can be driven in either direction

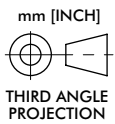
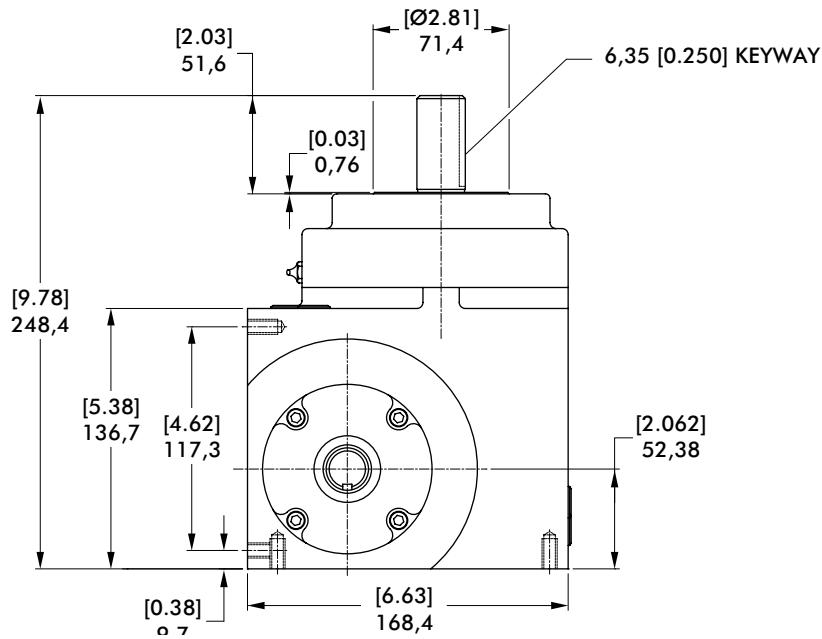
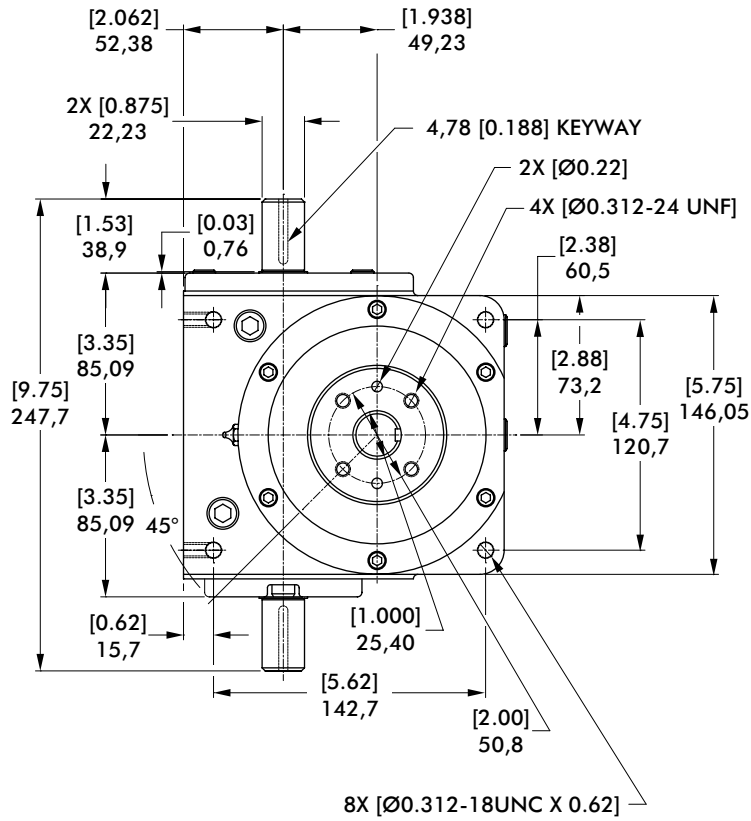


Gear Reducer Mounting Positions



400RA SERIES

Right Angle Index Drive | Dimensions



| 400RA Indexer Capacities | | | | | |
|--------------------------|--------------|--------|---|--|-------------------|
| Stops | Index Period | Motion | B ₁₀ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 330 | ms | 67 [595] | 44 [15] | 400RA2H20-330 |
| 3 | 270 | ms | 180 [1591] | 44 [15] | 400RA3H24-270 |
| 4 | 270 | ms | 210 [1858] | 44 [15] | 400RA4H24-270 |
| | 180 | ms | 237 [2098] | 44 [15] | 400RA4H24-180 |
| 6 | 270 | ms | 193 [1711] | 44 [15] | 400RA6H24-270 |
| | 120 | ms | 229 [2024] | 44 [15] | 400RA6H24-120 |
| 8 | 270 | ms | 224 [1987] | 44 [15] | 400RA8H24-270 |
| | 120 | ms | 266 [2354] | 44 [15] | 400RA8H24-120 |
| 12 | 270 | ms | 146 [1290] | 44 [15] | 400RA12H20-270 |
| | 120 | ms | 177 [1568] | 44 [15] | 400RA12H20-120 |
| 16 | 270 | ms | 161 [1426] | 44 [15] | 400RA16H20-270 II |
| | 180 | ms | 333 [2947] | 44 [15] | 400RA16H24-180 II |
| 24 | 270 | ms | 185 [1640] | 44 [15] | 400RA24H20-270 II |
| | 180 | ms | 214 [1894] | 44 [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 | 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

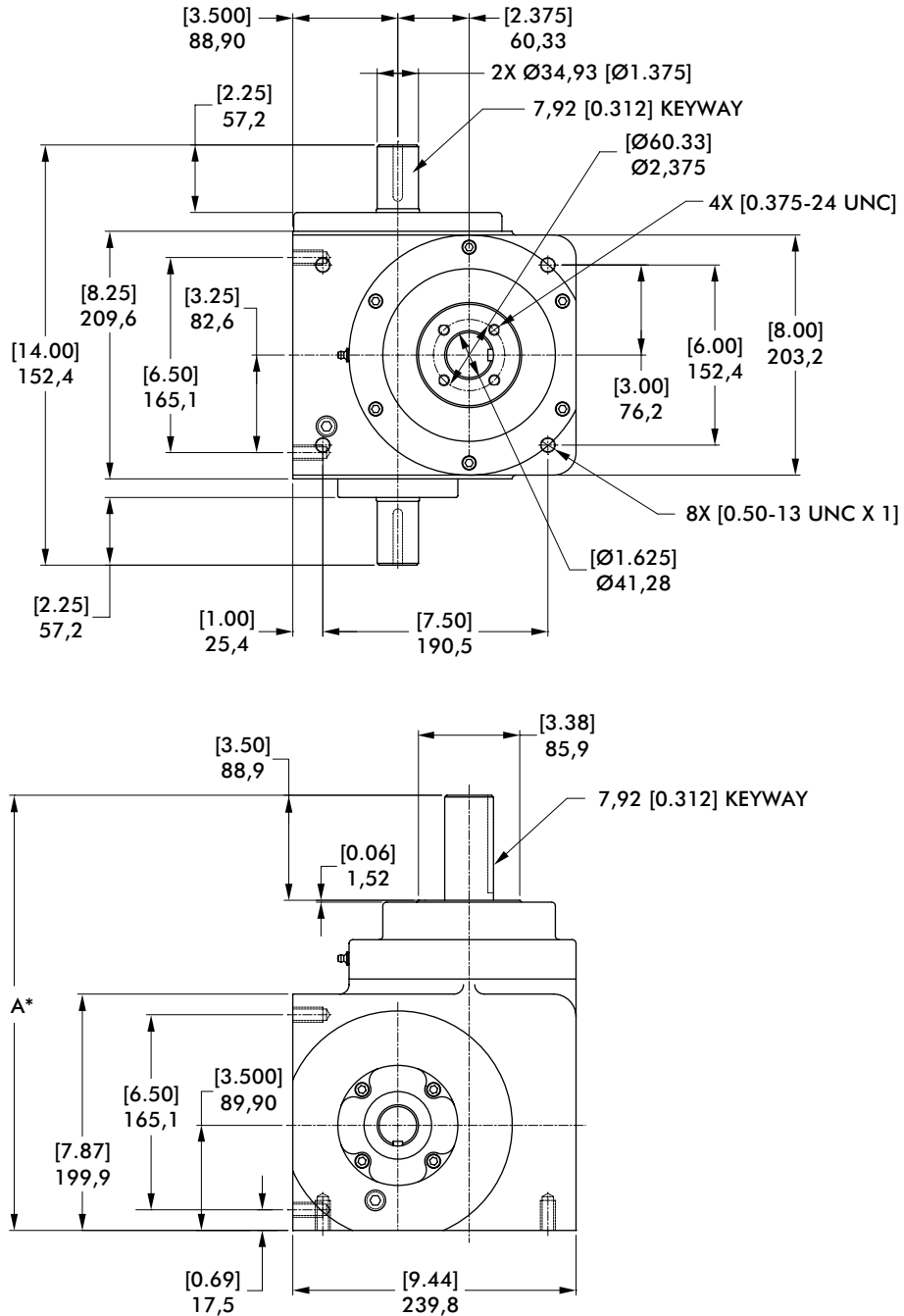
±12 arcsec / ± 0,051 mm [±.0002 in]
at 76,2 [3 in] Radius

Optional Accessories

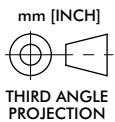
- 1/3 hp DC motor
- R225 Reducer (ratios from 10:1 to 60:1)
 - 1 hp DC Motor
 - 56C Motor Adapter and Coupling
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch Models: 2.3F, 2.3FC, 2.3S, 2.3C, 2.3FC-SD, 2.3S-SD, 2.3C-SD
 - Available Settings (in-lb): 400, 600, 700, 850, 1000, 1300, 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



*See table on top of page 8 for dimensions



| 512RA Indexer Capacities | | | | | | |
|--------------------------|--------------|--------|---|--|------------------------|---------------|
| Stops | Index Period | Motion | B ₅₀ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | A |
| 2 | 270 | msc.33 | 233 [2061] | 132 [45] | 512RA2H32-270 MSC.33 | 379,2 [14.93] |
| 3 | 270 | ms | 267 [2360] | 132 [45] | 512RA3H32-270 | 368,3 [14.50] |
| | 180 | msc.33 | 322 [2852] | 132 [45] | 512RA3H32-180 MSC 0.33 | 379,2 [14.93] |
| 4 | 270 | ms | 306 [2710] | 132 [45] | 512RA4H32-270 | 368,3 [14.50] |
| | 120 | msc.33 | 412 [3648] | 132 [45] | 512RA4H32-120 MSC 0.33 | 379,2 [14.93] |
| 6 | 270 | ms | 295 [2613] | 132 [45] | 512RA6H32-270 | 368,3 [14.50] |
| | 120 | ms | 359 [3179] | 132 [45] | 512RA6H32-120 | 368,3 [14.50] |
| 8 | 270 | ms | 358 [3172] | 132 [45] | 512RA8H32-270 | 368,3 [14.50] |
| | 120 | ms | 430 [3802] | 132 [45] | 512RA8H32-120 | 368,3 [14.50] |
| 12 | 270 | ms | 309 [2738] | 132 [45] | 512RA12H28-270 | 368,3 [14.50] |
| | 120 | ms | 359 [3176] | 132 [45] | 512RA12H28-120 | 379,2 [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 | 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

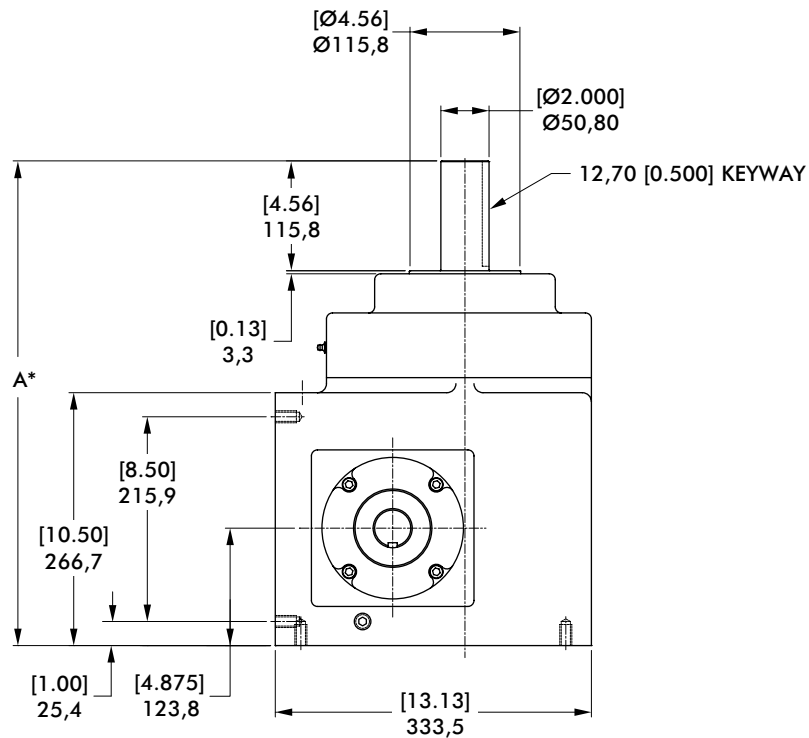
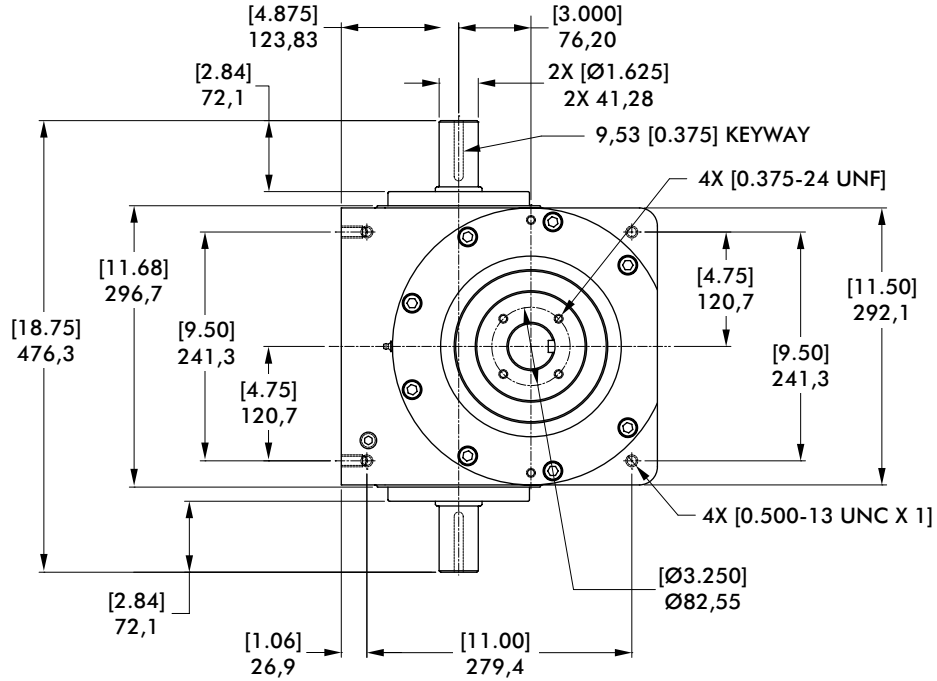
±9 arcsec / ± 0,008 mm [±.0003 in]
at 152,4 [6 in] Radius

Optional Accessories

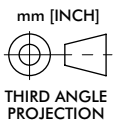
- 1 hp DC motor
- Varipak DC Motor Control (up to 30 cpm)
- Output Overload Clutch Models: 6.0F, 6.0FC, 6.0S and 6.0C, 6.0C-SD, 6.0FC-SD, 6.0S-SD
– Available Settings (in-lb): 670, 825, 1100, 1400, 1700, 2000, 2300, 2500, 3000, 3800, 4000, 5000, 6000
- Dual Cycle Cam and Limit Switch
- Finished cover for ceiling mount or tooling plate mounting
- Left Hand Cam
- Relief in Dwell for shot-pin applications

662RA SERIES

Right Angle Index Drive | Dimensions



*See table on top of page 8 for dimensions



| 512RA Indexer Capacities | | | | | | |
|--------------------------|--------------|--------|--|--|------------------------|---------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | A |
| 2 | 270 | msc.33 | 738 [6534] | 503 [172] | 512RA2H32-270 MSC.33 | 379,2 [14.93] |
| 3 | 270 | ms | 668 [5913] | 495 [169] | 512RA3H32-270 | 368,3 [14.50] |
| | 180 | msc.33 | 694 [6146] | 495 [169] | 512RA3H32-180 MSC 0.33 | 379,2 [14.93] |
| 4 | 270 | ms | 780 [6903] | 503 [172] | 512RA4H32-270 | 368,3 [14.50] |
| | 120 | msc.33 | 876 [7751] | 503 [172] | 512RA4H32-120 MSC 0.33 | 379,2 [14.93] |
| 6 | 270 | ms | 648 [5734] | 495 [169] | 512RA6H32-270 | 368,3 [14.50] |
| | 120 | ms | 853 [7551] | 495 [169] | 512RA6H32-120 | 368,3 [14.50] |
| 8 | 270 | ms | 812 [7187] | 503 [172] | 512RA8H32-270 | 368,3 [14.50] |
| | 120 | ms | 1015 [8987] | 503 [172] | 512RA8H32-120 | 368,3 [14.50] |
| 12 | 270 | ms | 509 [4504] | 483 [165] | 512RA12H28-270 | 368,3 [14.50] |
| | 120 | ms | 625 [5536] | 483 [165] | 512RA12H28-120 | 379,2 [14.93] |

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 | 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

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

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

ROLLER GEAR INDEX DRIVE

Precision Indexing | Table of Contents



Features:

The **CAMCO Roller Gear Index Drives** are robust, versatile units suitable for a wide variety of applications.

Available with a flange (RGD) or shaft (RGS) output

All six surfaces are machined for universal mounting

Optional center thru-hole in flange version facilitates passage of electrical wiring, pneumatic lines or mechanical linkages

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

Table of Contents

| | |
|---------------------|----|
| How to Order | 3 |
| 40RGD/40RGS | 5 |
| 50RGD/50RGS | 7 |
| 70RGD/70RGS | 9 |
| 80RGD/80RGS | 11 |
| 110RGD/110RGS | 13 |
| 350RGD/350RGS | 15 |
| 500RGD/500RGS | 17 |
| 600RGD/600RGS | 19 |

RGD/RGS SERIES

Roller Gear Index Drive | How To Order

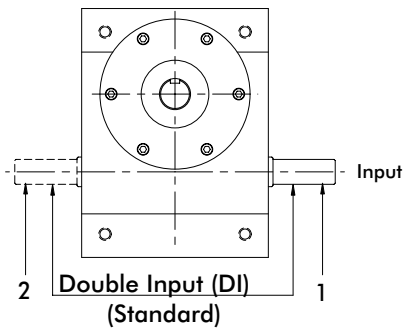
Indexer Ordering Procedure

1. Model
 2. Input Shaft Configuration
 - Side 1
 - Side 2
 - Double Input – DI (Standard)
 3. Cam Lead (Helix)
 - Right Hand (Standard)
 - Left Hand
- NOTE: Input may rotate in either direction to achieve desired direction of output rotation.
4. Indexer Mounting Position: 1-6
 5. Indexer Housing Mounting Holes: Side 1-6 (more than one side can be selected)

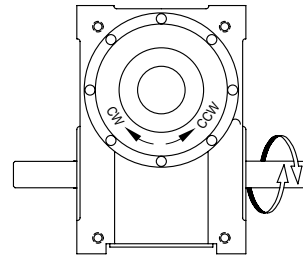
Reducer Ordering Procedure

1. Model
2. Ratio
 - 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
 - Mounting Position A, B, C, or D
 - Mounted on Indexer Side 1 or Side 2
6. Input Shaft Orientation
 - Left or Right (See Diagram Below)

Input Shaft Configuration (Top View)



Input Shaft Rotation

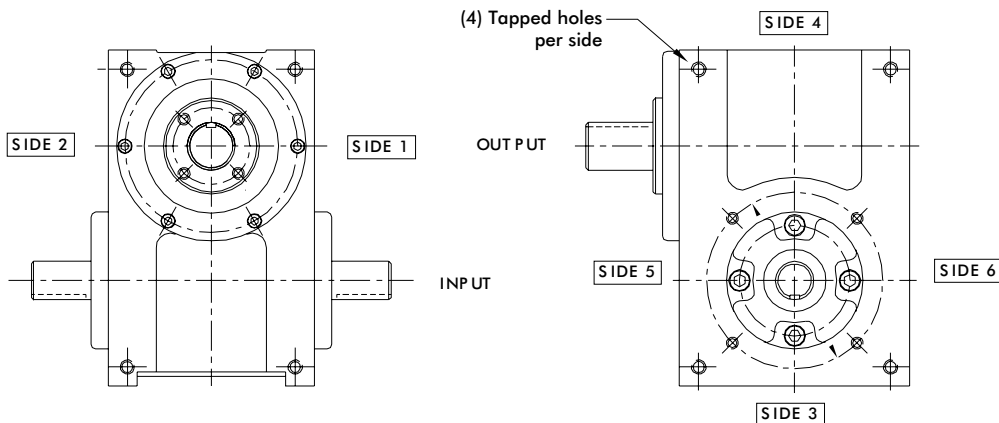


Relative Rotation for Right Hand Cam:

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

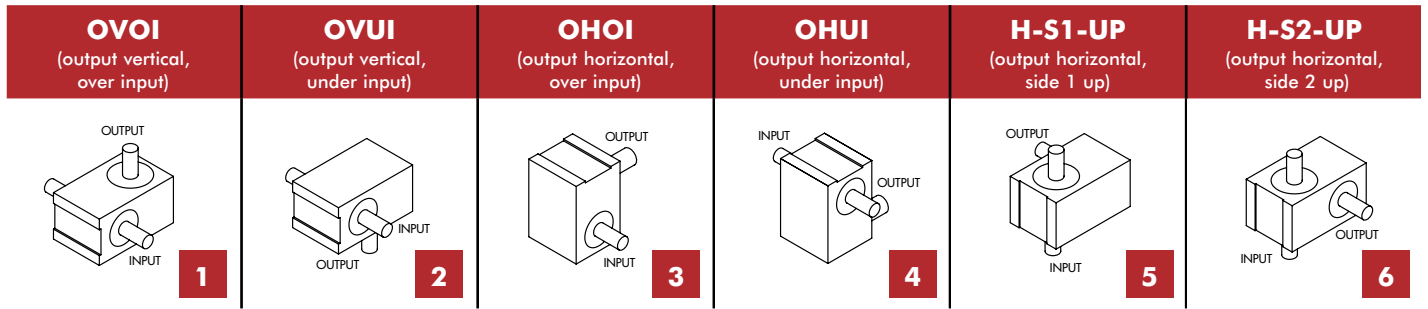
NOTE: Input can be driven in either direction

Indexer Housing Mounting Holes

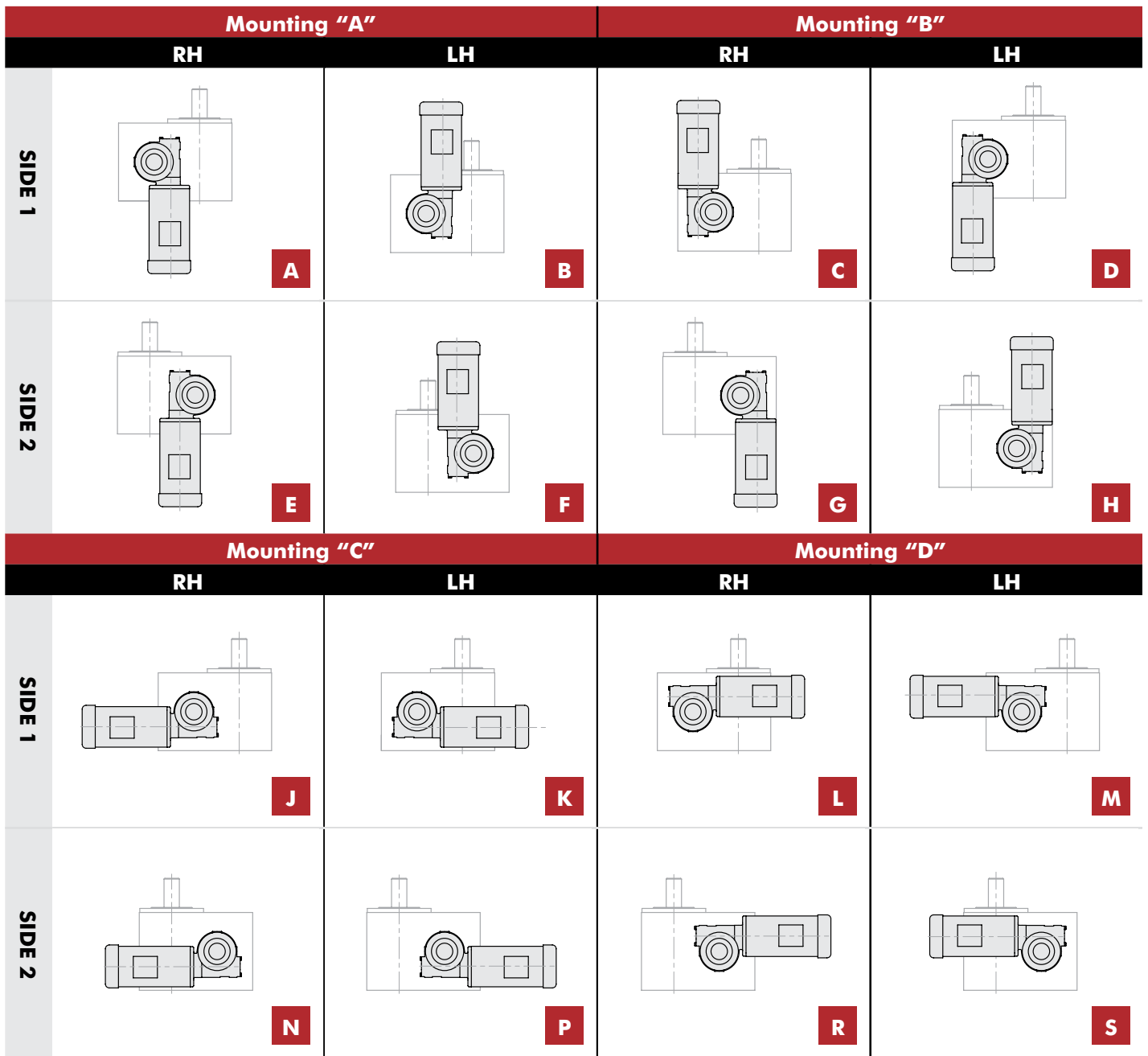


RGD/RGS SERIES

Roller Gear Index Drive | Indexer Mounting Position



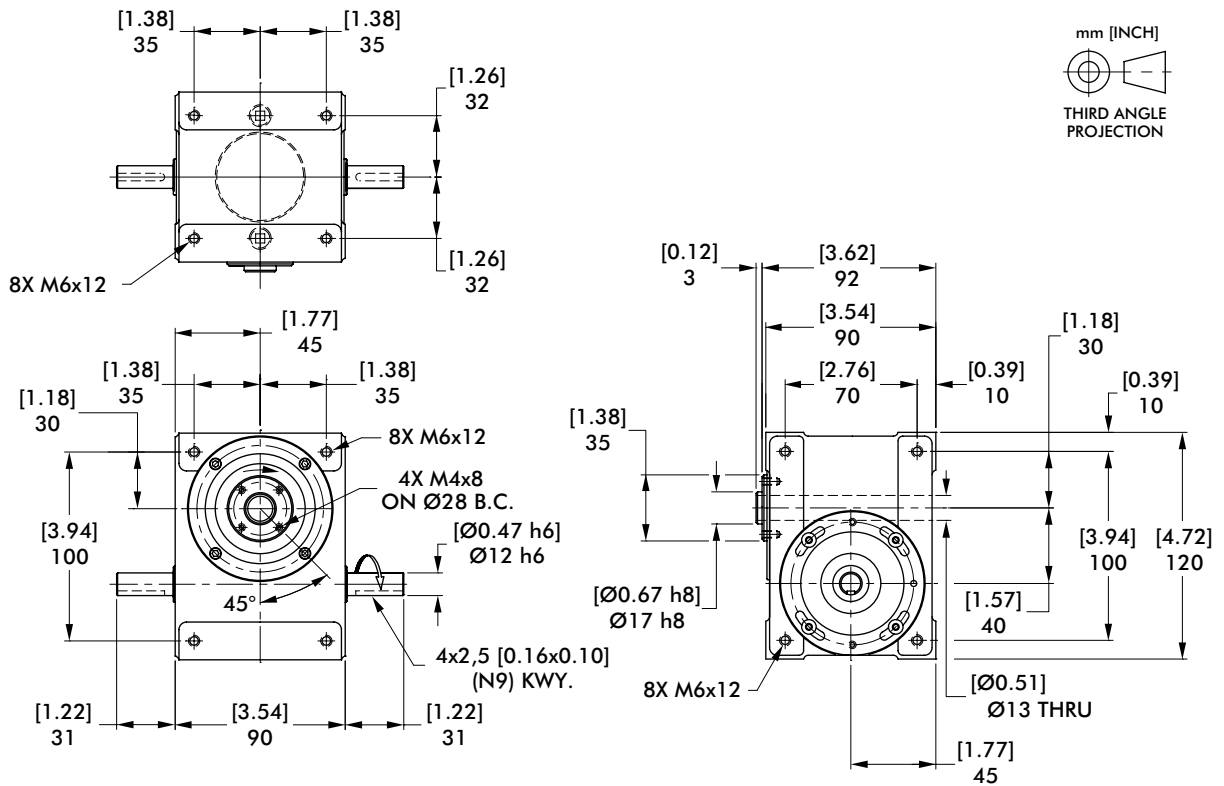
Gear Reducer Mounting Positions (Figure 4)



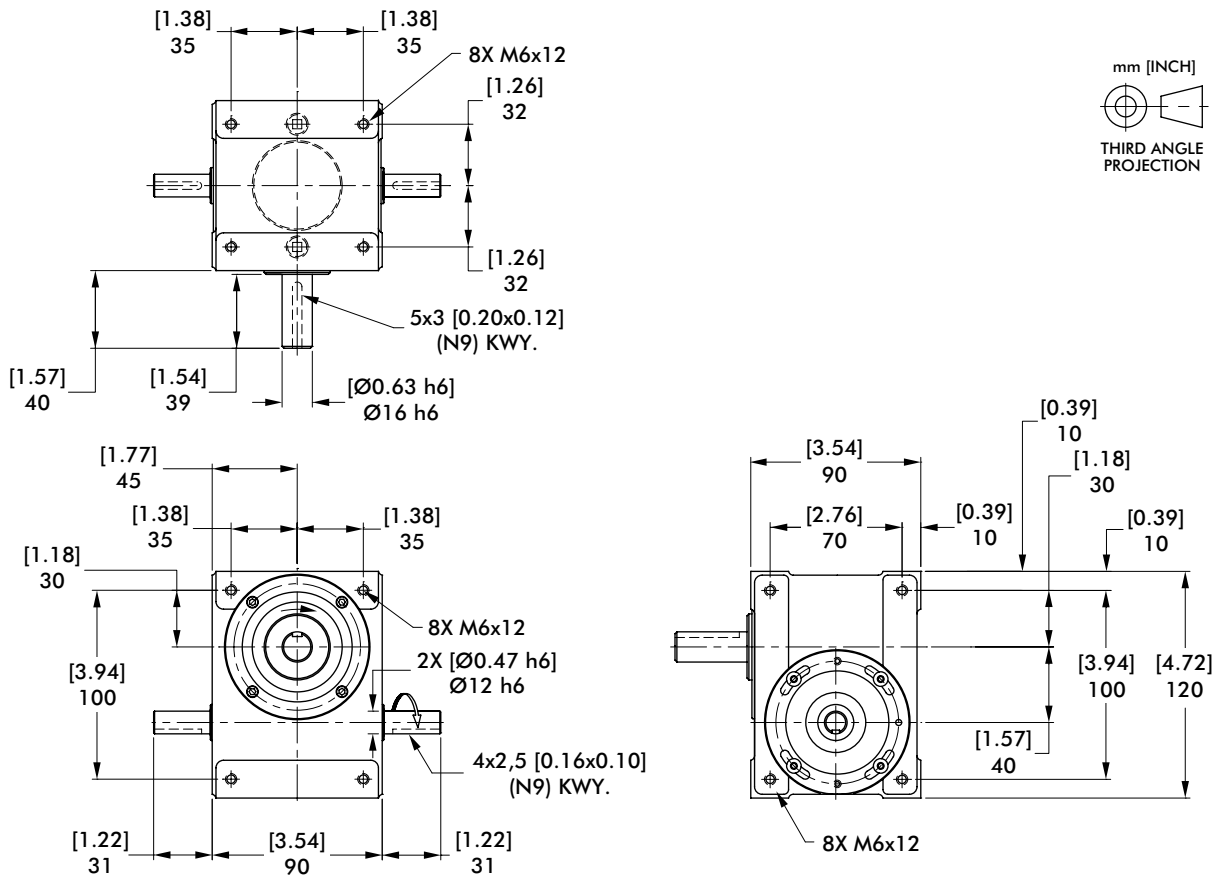
40RGD/40RGS SERIES

Roller Gear Index Drive | Dimensions

40RGD



40RGS



40RGD/40RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 40RGD/40RGS Indexer Capacities | | | | | | |
|--------------------------------|--------------|--------|---|---|---|------------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 270 | ms | 17 [150] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)2H12-270 |
| 3 | 270 | ms | 21 [187] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)3H12-270 |
| 4 | 270 | ms | 24 [214] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)4H12-270 |
| | 180 | ms | 25 [225] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)4H12-180 |
| 6 | 270 | ms | 22 [193] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)6H12-270 |
| | 90 | ms | 24 [216] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)6H12-90 |
| 8 | 270 | ms | 24 [216] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)8H12-270 |
| | 90 | ms | 28 [249] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)8H12-90 |
| 12 | 270 | ms | 14 [124] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)12H9-270 |
| | 90 | ms | 16 [139] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)12H9-90 |
| 16 | 270 | ms | 29 [254] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)16H12-270 II |
| | 120 | ms | 35 [312] | 1,2 [0.4] | 1,2 [0.4] | 40RG(D/S)16H12-120 II |
| 24 | 180 | ms | 20 [173] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)24H9-180 II |
| | 120 | ms | 37 [326] | 0,9 [0.3] | 1,2 [0.4] | 40RG(D/S)24H12-120 III |

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

Features

- Fully Metric
- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø13 mm [Ø.50 in]) in RGD model.
- Right Hand Cam

Optional Accessories

- STM RMI28 Gear Reducer (ratios from 7:1 to 100:1) with
 - IEC56B14 Motor Adapter
 - 1/12 HP AC Motor and Inverter Drive (up to 60 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications

Output Load Capacity (loads carried during index):

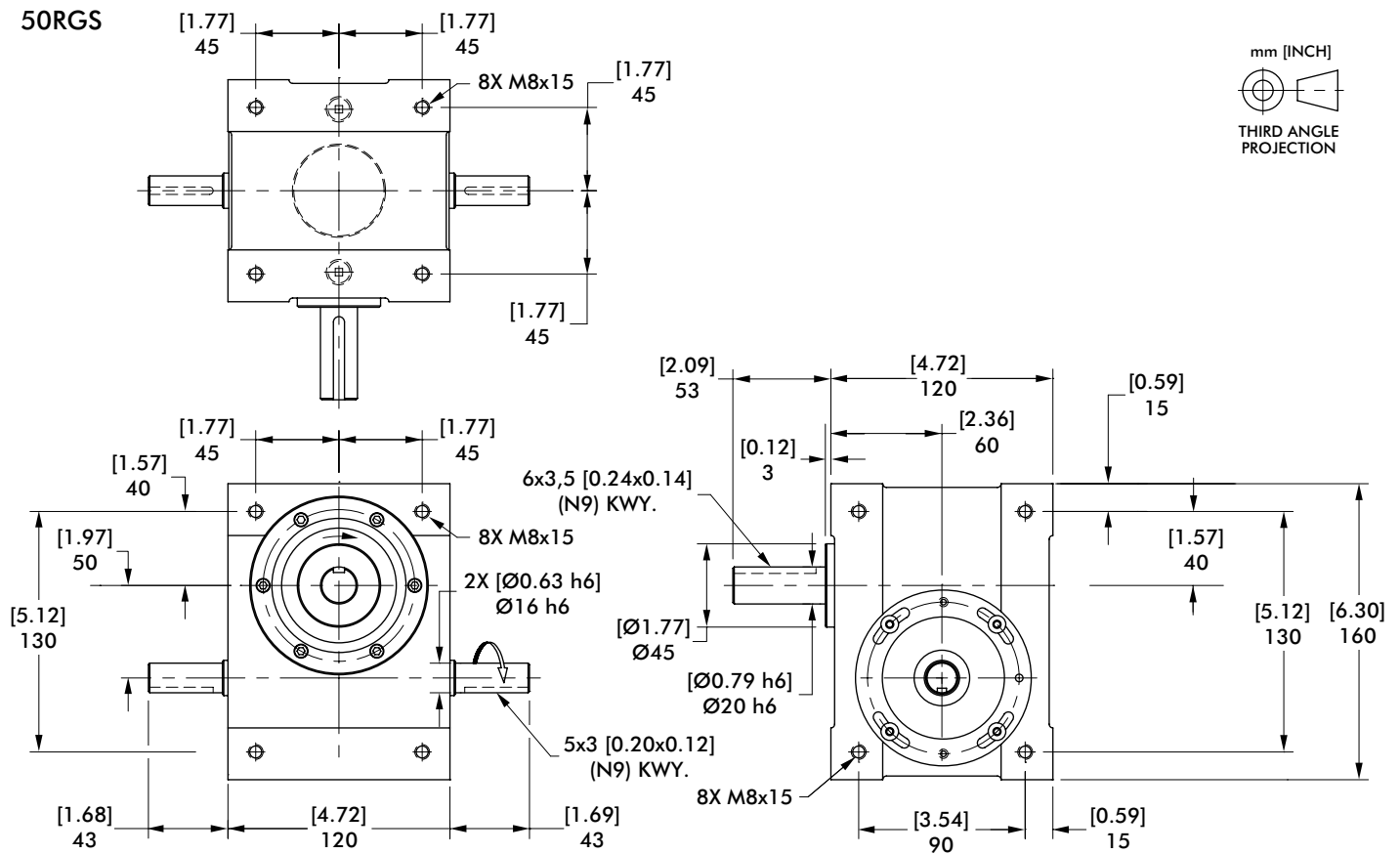
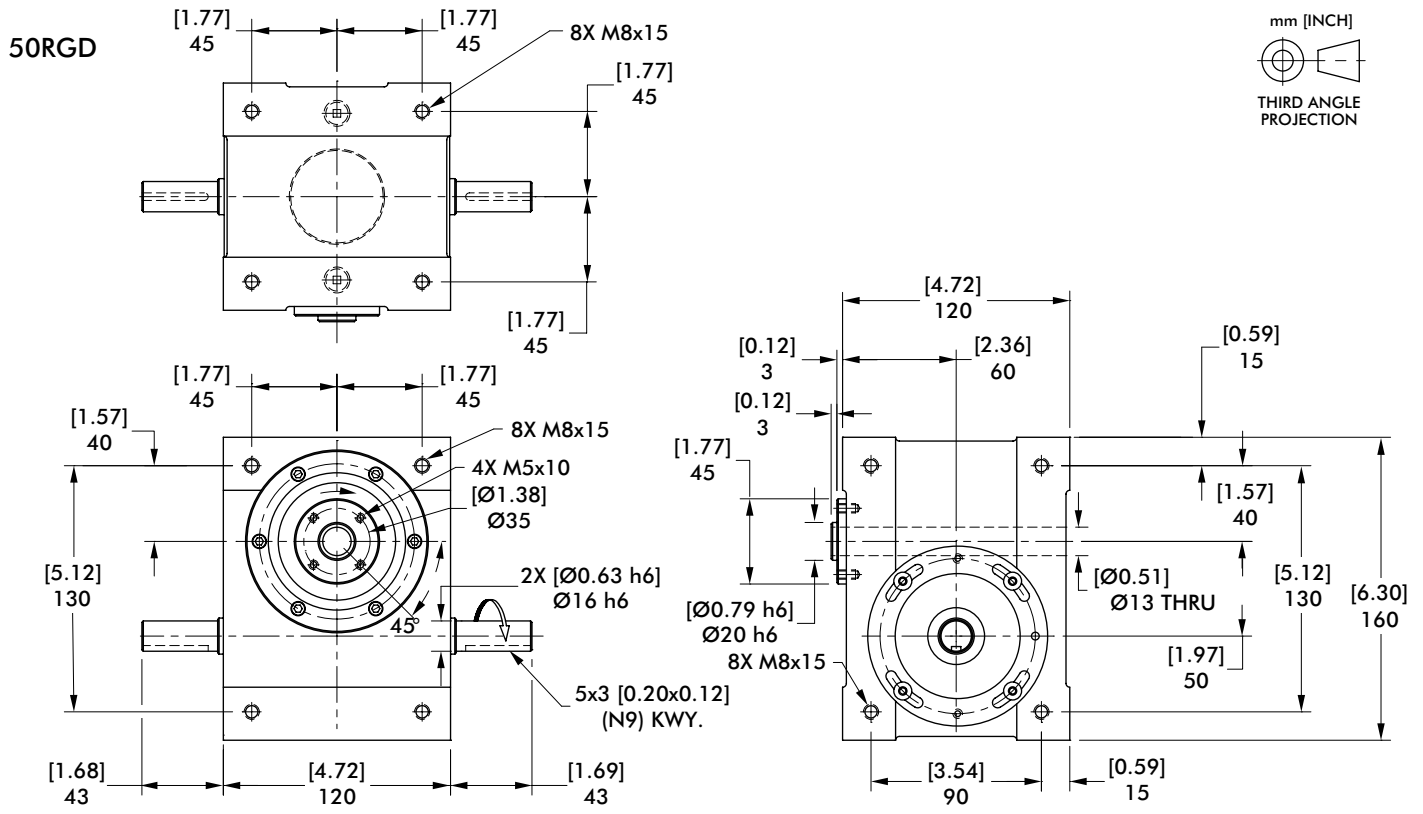
| | RGD | RGS |
|--------------|--------------------|--------------------|
| Radial | 4924 N [1107 lbs] | 916 N [206 lbs] |
| Thrust/Axial | 3519 N [791 lbs] | 2189 N [492 lbs] |
| Moment | 86 N-m [762 in-lb] | 46 N-m [405 in-lb] |

Accuracy ±90 arcsec / ±0,033 mm [±.0013 in] at 76,2 mm [3 in] Radius

Repeatability ±22 arcsec / ±0,008 mm [±.0003 in] at 76,2 mm [3 in] Radius

50RGD/50RGS SERIES

Roller Gear Index Drive | Dimensions



50RGD/50RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 40RGD/40RGS Indexer Capacities | | | | | | |
|--------------------------------|--------------|--------|---|---|---|-----------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 270 | msc.50 | 70 [621] | 4,1 [1.4] | 4,7 [1.6] | 50RG(D/S)2H18-270 |
| 3 | 270 | ms | 32 [287] | 3,8 [1.3] | 4,4 [1.5] | 50RG(D/S)3H14-270 |
| | 180 | ms | 34 [300] | 3,8 [1.3] | 4,4 [1.5] | 50RG(D/S)3H14-180 |
| 4 | 270 | ms | 37 [326] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)4H14-270 |
| | 180 | ms | 40 [351] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)4H14-180 |
| 6 | 270 | ms | 68 [606] | 4,1 [1.4] | 4,7 [1.6] | 50RG(D/S)6H18-270 |
| | 90 | ms | 83 [734] | 4,1 [1.4] | 4,7 [1.6] | 50RG(D/S)6H18-90 |
| 8 | 270 | ms | 38 [336] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)8H14-270 |
| | 90 | ms | 46 [403] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)8H14-90 |
| 12 | 270 | ms | 31 [275] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)12H12-270 |
| | 90 | ms | 37 [329] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)12H12-90 |
| 16 | 180 | ms | 51 [447] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)16H14-180 II |
| 24 | 180 | ms | 42 [374] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)24H12-180 II |
| | 120 | ms | 46 [409] | 4,1 [1.4] | 4,4 [1.5] | 50RG(D/S)24H12-120 II |

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

Features

- Fully Metric
- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø15 mm [Ø.59 in]) in RGD model.
- Right Hand Cam

Optional Accessories

- R180 Reducer (Ratios from 15:1 to 60:1)
 - Double Extended Worm Shaft (Input)
 - Worm Shaft Handwheel
- 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
- Universal Mounting Capability

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|----------------------|--------------------|
| Radial | 7896 N [1775 lbs] | 1686 N [379 lbs] |
| Thrust/Axial | 4115 N [925 lbs] | 2424 N [545 lbs] |
| Moment | 178 N-m [1572 in-lb] | 89 N-m [791 in-lb] |

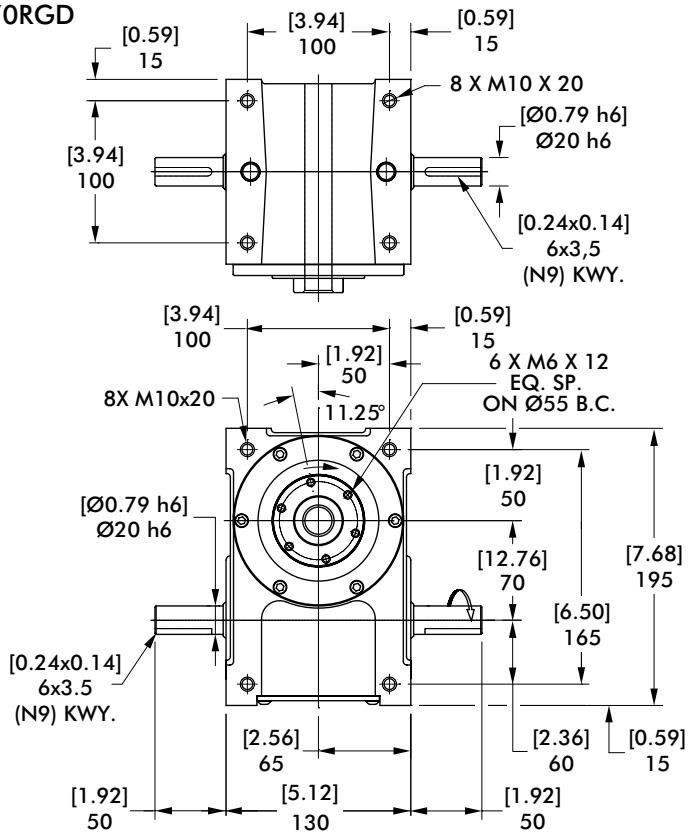
Accuracy ±73 arcsec / ±0,028 mm [±.0011 in] at 76,2 mm [3 in] Radius

Repeatability ±18 arcsec / ±0,008 mm [±.0003 in] at 76,2 mm [3 in] Radius

70RGD/70RGS SERIES

Roller Gear Index Drive | Dimensions

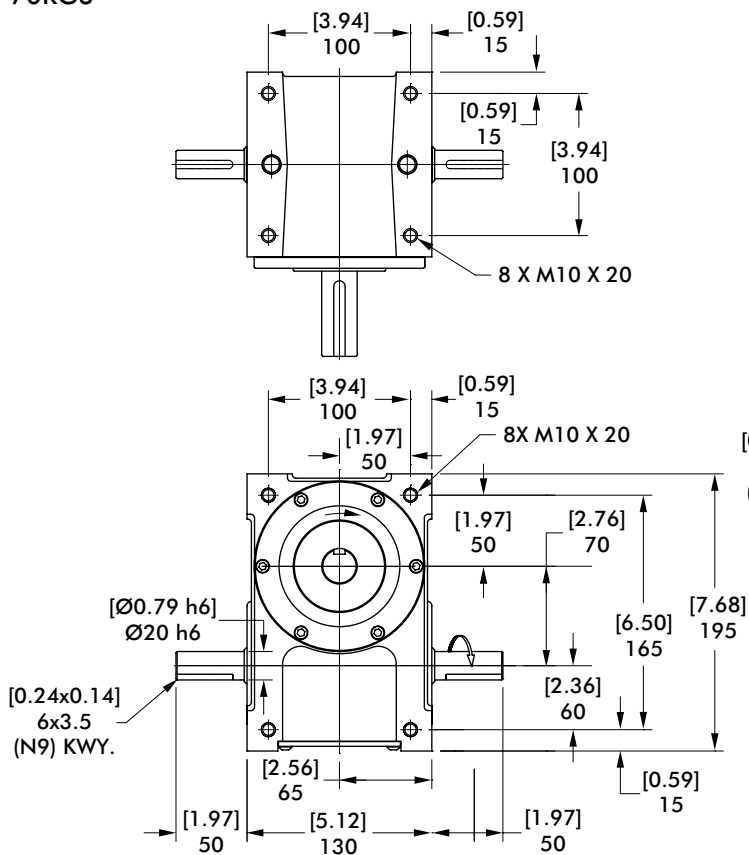
70RGD



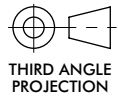
mm [INCH]



70RGS



mm [INCH]



70RGD/70RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 40RGD/40RGS Indexer Capacities | | | | | | |
|--------------------------------|--------------|--------|---|---|---|-----------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 270 | ms | 66 [585] | 20,5 [7] | 23,4 [8] | 70RG(D/S)2H20-270 |
| | 180 | ms | 63 [562] | 20,5 [7] | 23,4 [8] | 70RG(D/S)2H18-180 |
| 3 | 270 | ms | 81 [720] | 20,5 [7] | 23,4 [8] | 70RG(D/S)3H20-270 |
| | 180 | ms | 85 [753] | 20,5 [7] | 23,4 [8] | 70RG(D/S)3H20-180 |
| 4 | 270 | ms | 93 [821] | 26,3 [9] | 29,3 [10] | 70RG(D/S)4H20-270 |
| | 120 | msc,33 | 125 [1107] | 29,3 [10] | 29,3 [10] | 70RG(D/S)4H18-120 |
| 6 | 270 | ms | 159 [1406] | 26,3 [9] | 29,3 [10] | 70RG(D/S)6H24-270 |
| | 90 | msc,33 | 238 [2110] | 26,3 [9] | 29,3 [10] | 70RG(D/S)6H24-90 |
| 8 | 270 | ms | 96 [853] | 26,3 [9] | 29,3 [10] | 70RG(D/S)8H20-270 |
| | 90 | ms | 120 [1063] | 26,3 [9] | 29,3 [10] | 70RG(D/S)8H20-90 |
| 12 | 270 | ms | 53 [470] | 29,3 [10] | 29,3 [10] | 70RG(D/S)12H14-270 |
| | 90 | ms | 66 [584] | 29,3 [10] | 29,3 [10] | 70RG(D/S)12H14-90 |
| 24 | 180 | ms | 72 [635] | 29,3 [10] | 29,3 [10] | 70RG(D/S)24H14-180 II |

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

Features

- Fully Metric
- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø19 mm [Ø.75 in]) in RGD model.
- Right Hand Cam

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|----------------------|----------------------|
| Radial | 12602 N [2833 lbs] | 2491 N [560 lbs] |
| Thrust/Axial | 9893 N [2224 lbs] | 3567 N [802 lbs] |
| Moment | 410 N-m [3626 in-lb] | 175 N-m [1545 in-lb] |

Accuracy ±50 arcsec / ±0,020 mm [±.0008 in] at 76,2 mm [3 in] Radius

Repeatability ±13 arcsec / ±0,005 mm [±.0002 in] at 76,2 mm [3 in] Radius

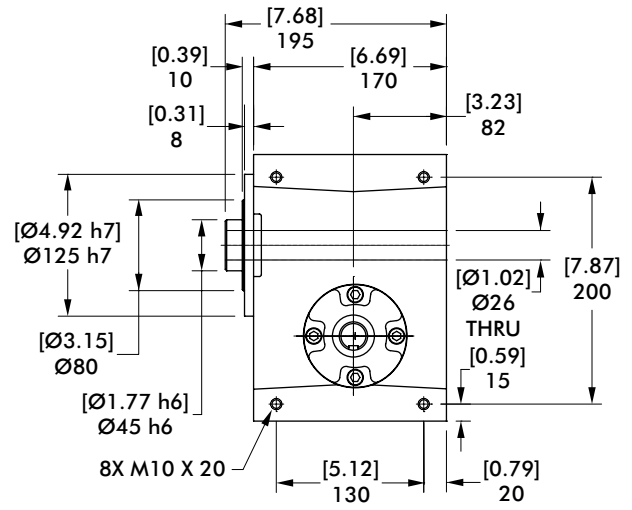
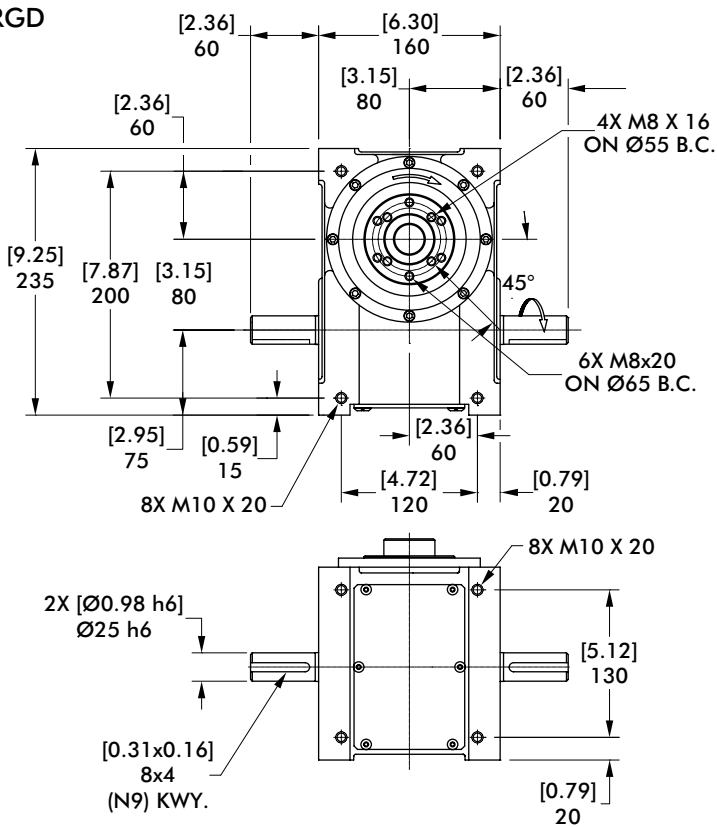
Optional Accessories

- R180 Reducer (Ratios from 5:1 to 60:1)
- 1/3 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- 1/3 HP DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications

80RGD/80RGS SERIES

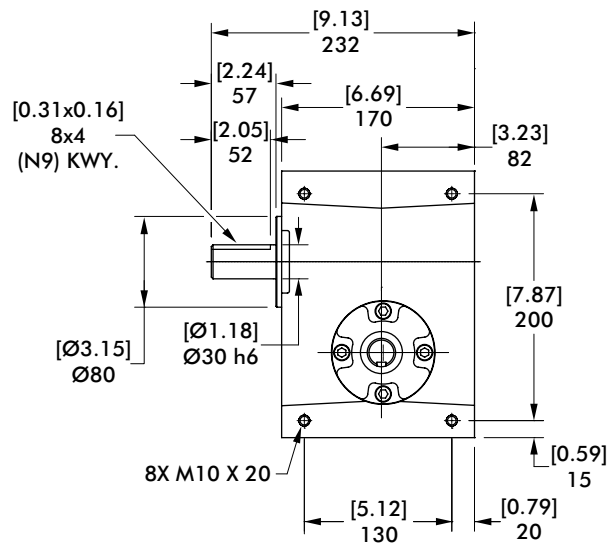
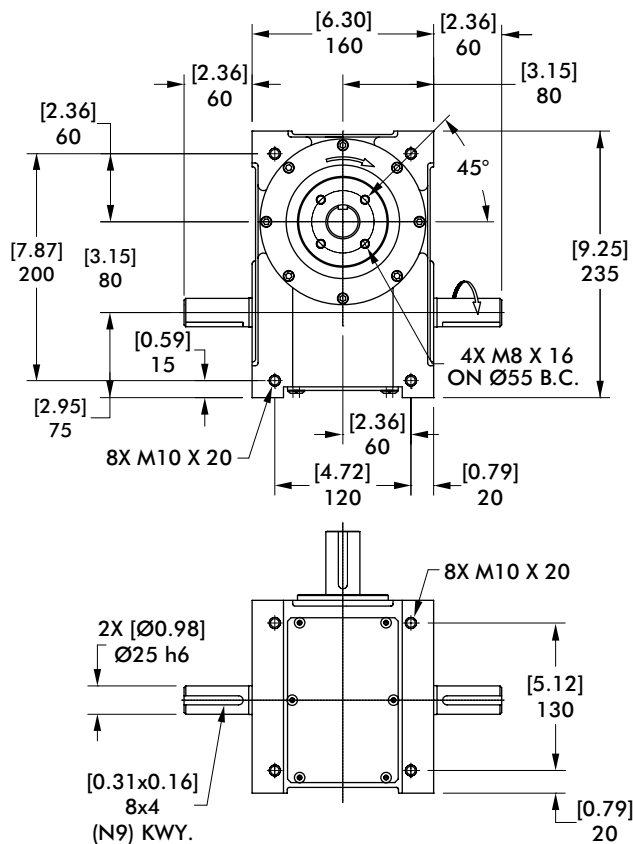
Roller Gear Index Drive | Dimensions

80RGD



mm [INCH]
THIRD ANGLE PROJECTION

80RGS



mm [INCH]
THIRD ANGLE PROJECTION

80RGD/80RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 40RGD/40RGS Indexer Capacities | | | | | | |
|--------------------------------|--------------|--------|---|---|---|--------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 330 | ms | 129 [1144] | 46,8 [16] | 49,7 [17] | 80RG(D/S)2H24-330 |
| | 270 | msc.33 | 157 [1388] | 46,8 [16] | 49,7 [17] | 80RG(D/S)2H24-270 |
| 3 | 270 | ms | 161 [1422] | 46,8 [16] | 49,7 [17] | 80RG(D/S)3H24-270 |
| | 180 | ms | 171 [1513] | 46,8 [16] | 49,7 [17] | 80RG(D/S)3H24-180 |
| 4 | 270 | ms | 188 [1663] | 61,5 [21] | 61,5 [21] | 80RG(D/S)4H24-270 |
| | 180 | msc.33 | 269 [2377] | 61,5 [21] | 61,5 [21] | 80RG(D/S)4H24-180 |
| 6 | 270 | ms | 172 [1524] | 52,7 [18] | 55,6 [19] | 80RG(D/S)6H28-270 |
| | 90 | msc.50 | 262 [2323] | 52,7 [18] | 55,6 [19] | 80RG(D/S)6H28-90 |
| 8 | 270 | ms | 196 [1733] | 61,5 [21] | 61,5 [21] | 80RG(D/S)8H24-270 |
| | 90 | msc.33 | 332 [2937] | 61,5 [21] | 61,5 [21] | 80RG(D/S)8H24-90 |
| 12 | 270 | ms | 114 [1011] | 58,5 [20] | 58,5 [20] | 80RG(D/S)12H18-270 |
| | 90 | msc.60 | 195 [1725] | 58,5 [20] | 58,5 [20] | 80RG(D/S)12H18-90 |

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

Features

- Fully Metric
- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø26 mm [Ø1.02 in]) in RGD model.
- Right Hand Cam

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|----------------------|----------------------|
| Radial | 21,307 N [4790 lbs] | 5289 N [1189 lbs] |
| Thrust/Axial | 15435 N [3470 lbs] | 5542 N [1246 lbs] |
| Moment | 852 N-m [7544 in-lb] | 302 N-m [2669 in-lb] |

Accuracy ±48 arcsec / ±0,018 mm [±.0007 in] at 76,2 mm [3 in] Radius

Repeatability ±12 arcsec / ±0,005 mm [±.0002 in] at 76,2 mm [3 in] Radius

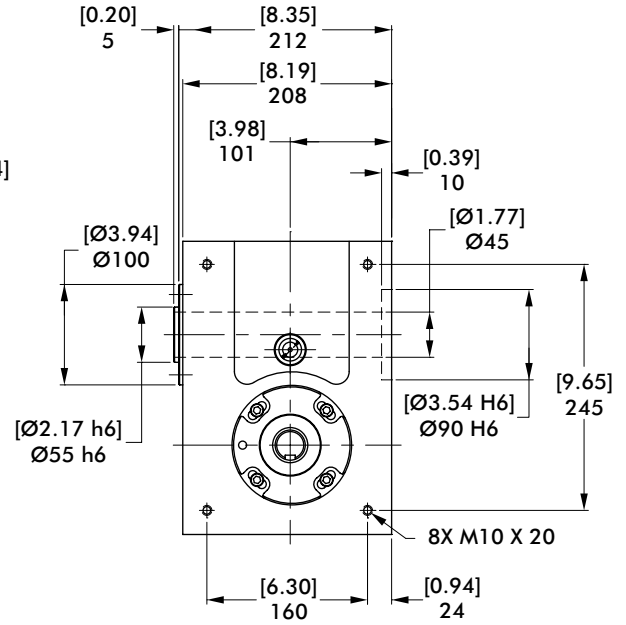
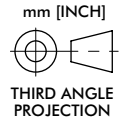
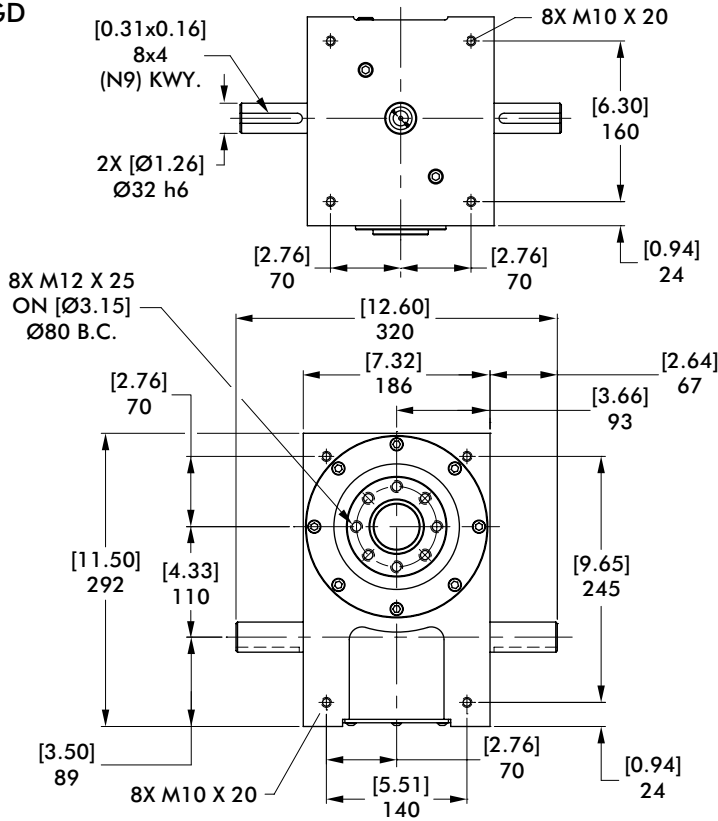
Optional Accessories

- R180 Reducer (Ratios from 5:1 to 60:1)
- 1/3 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- 1/3 HP DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications

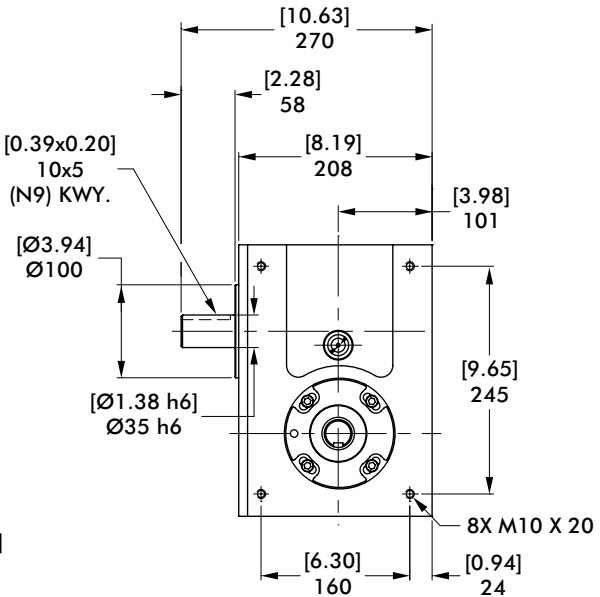
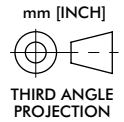
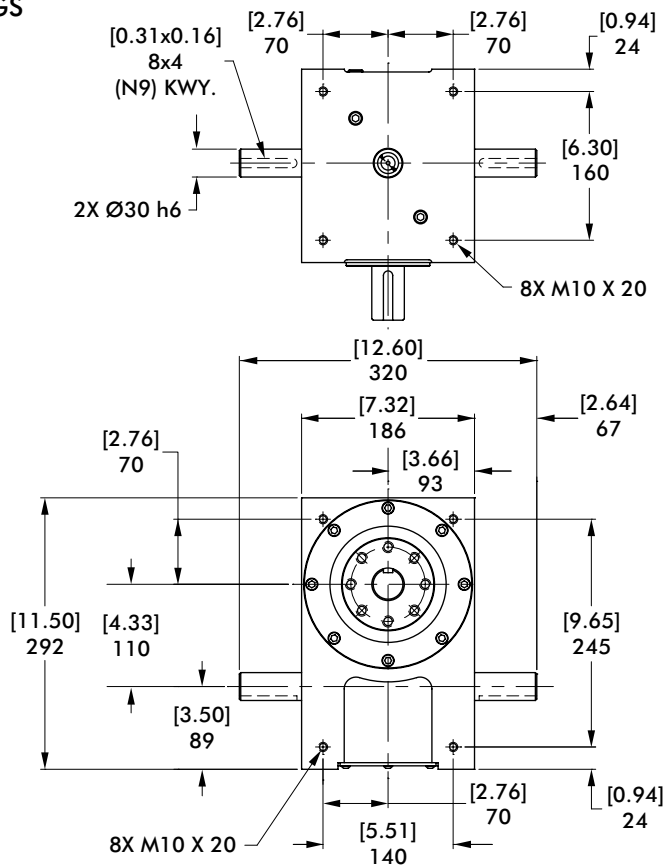
110RGD/110RGS SERIES

Roller Gear Index Drive | Dimensions

110RGD



110RGS



110RGD/110RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 110RGD/110RGS Indexer Capacities | | | | | | |
|----------------------------------|--------------|--------|---|---|---|------------------------|
| Stops | Index Period | Motion | B _e Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 300 | msc.33 | 596 [5271] | 149,2 [51] | 163,9 [56] | 110RG(D/S)2H40-300 |
| | 270 | msc.50 | 692 [6126] | 149,2 [51] | 163,9 [56] | 110RG(D/S)2H40-270 |
| 3 | 270 | ms | 634 [5609] | 149,2 [51] | 163,9 [56] | 110RG(D/S)3H40-270 |
| | 180 | msc.50 | 885 [7829] | 149,2 [51] | 163,9 [56] | 110RG(D/S)3H40-180 |
| 4 | 270 | ms | 371 [3282] | 140,5 [48] | 161,0 [55] | 110RG(D/S)4H32-270 |
| | 180 | msc.33 | 469 [4147] | 140,5 [48] | 161,0 [55] | 110RG(D/S)4H32-180 |
| 6 | 270 | ms | 834 [7378] | 152,2 [52] | 204,8 [70] | 110RG(D/S)6H48-270 |
| | 120 | msc.33 | 918 [8127] | 149,2 [51] | 163,9 [56] | 110RG(D/S)6H40-120 |
| 8 | 270 | ms | 389 [3440] | 140,5 [48] | 161,0 [55] | 110RG(D/S)8H32-270 |
| | 120 | ms | 469 [4149] | 140,5 [48] | 161,0 [55] | 110RG(D/S)8H32-120 |
| 12 | 270 | ms | 318 [2815] | 137,5 [47] | 161,0 [55] | 110RG(D/S)12H28-270 |
| | 120 | ms | 380 [3367] | 131,7 [45] | 149,2 [51] | 110RG(D/S)12H24-120 |
| 16 | 270 | ms | 182 [1610] | 131,7 [45] | 155,1 [53] | 110RG(D/S)16H20-270 |
| | 120 | ms | 225 [1992] | 131,7 [45] | 155,1 [53] | 110RG(D/S)16H20-120 |
| 24 | 270 | ms | 412 [3650] | 131,7 [45] | 149,2 [51] | 110RG(D/S)24H24-270 II |
| | 180 | ms | 467 [4134] | 131,7 [45] | 149,2 [51] | 110RG(D/S)24H24-180 II |

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

Features

- Fully Metric
- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø45 mm [Ø1.77 in]) in RGD model.
- Right Hand Cam

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|---------------|------------------------|-------------------|
| Radial | 24968 N [5613 lbs] | 8256 N [1156 lbs] |
| Thrust/Axial | 19621 N [4411 lbs] | 9132 N [2053 lbs] |
| Moment in-lb] | 1248 N-m [11050 in-lb] | 479 N-m [4238] |

Accuracy ±30 arcsec / ±0,023 mm [±.0009 in] at 152,4 mm [6 in] Radius

Repeatability ±8 arcsec / ±0,005 mm [±.0002 in] at 152,4 mm [6 in] Radius

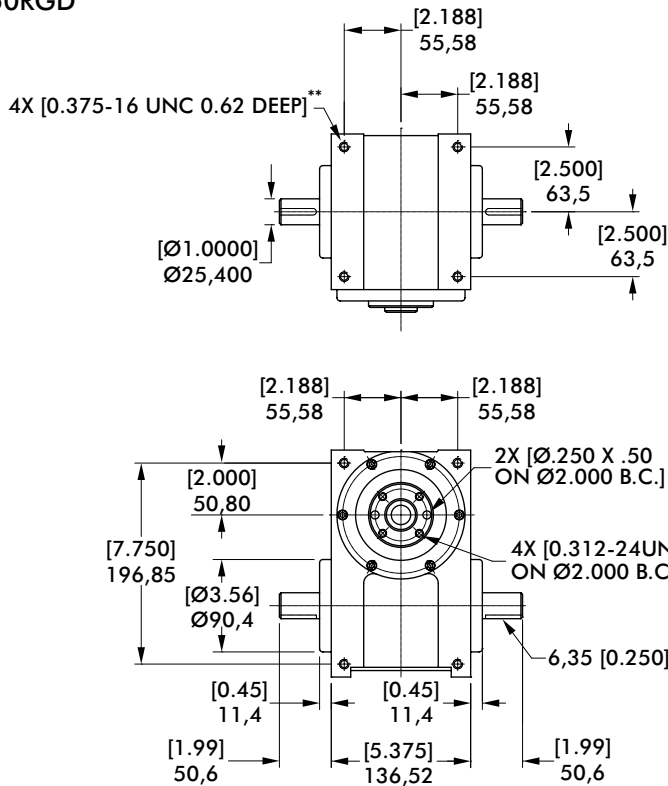
Optional Accessories

- KH37 Reducer
 - Ratios from 5.36:1 to 106.38:1 (consult factory for exact ratios available)
 - 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Left Hand Cam
- Relief in Dwell for shot-pin applications

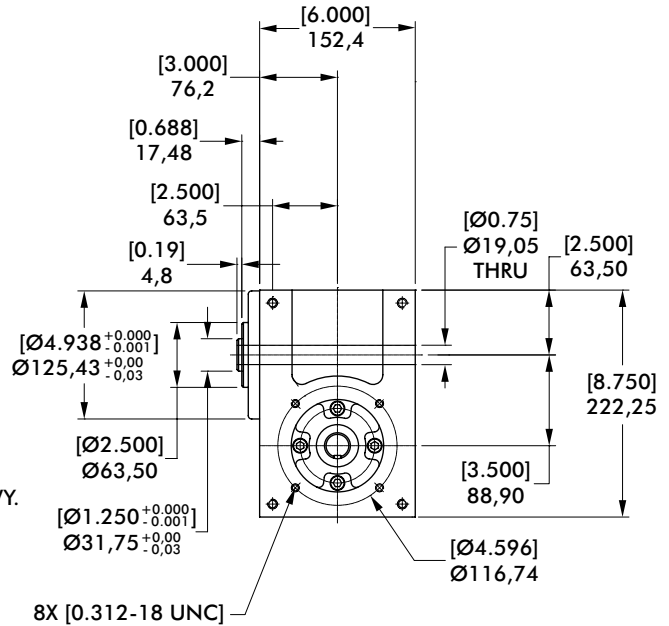
350RGD/350RGS SERIES

Roller Gear Index Drive | Dimensions

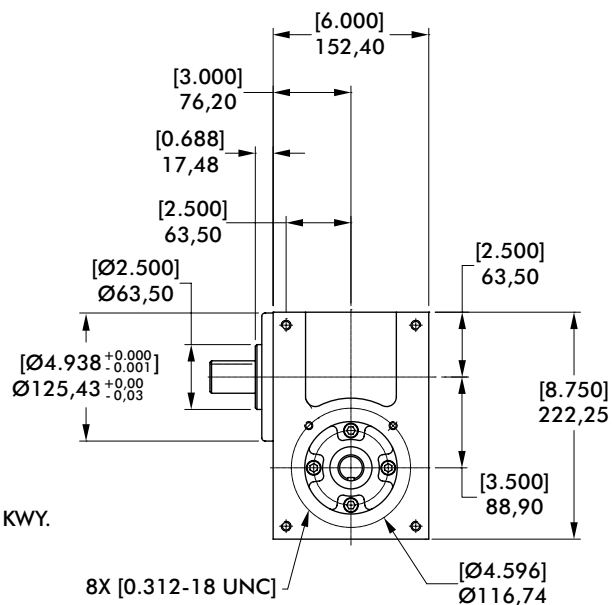
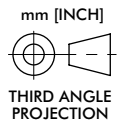
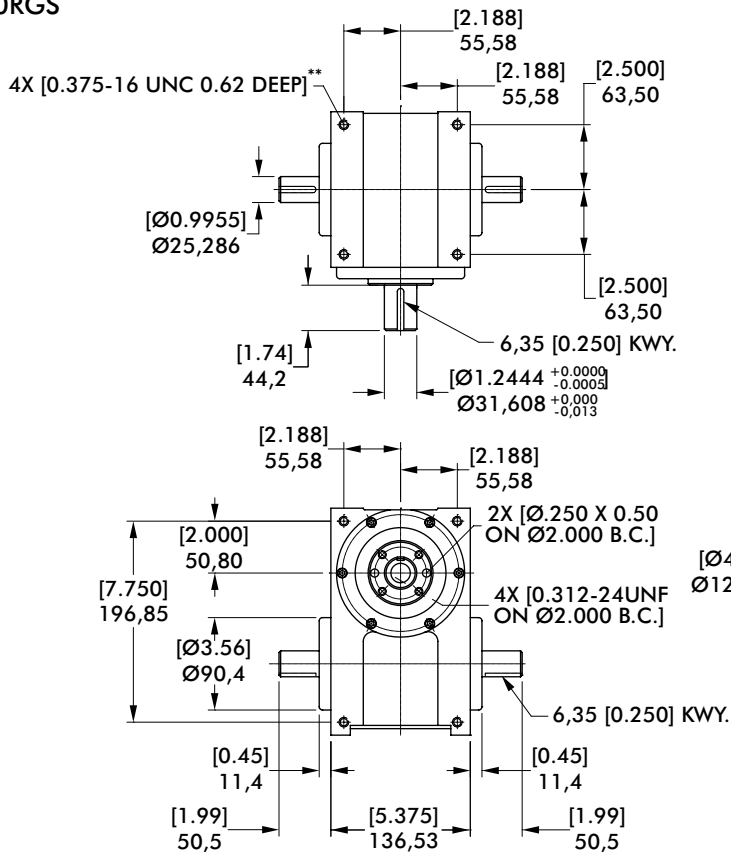
350RGD



** 4 TAPPED MOUNTING HOLES IN ANY ONE OF SIX FINISHED SIDES, TO BE SPECIFIED BY CUSTOMER



350RGS



350RGD/350RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 350RGD/350RGS Indexer Capacities | | | | | | |
|----------------------------------|--------------|--------|---|---|---|---------------------|
| Stops | Index Period | Motion | B _e Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 1 | 330 | msc.50 | 200 [1774] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)1H24-330 |
| 2 | 270 | ms | 141 [1244] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)2H24-270 |
| | 180 | msc.67 | 231 [2047] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)2H24-180 |
| 3 | 270 | ms | 173 [1530] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)3H24-270 |
| | 180 | ms | 181 [1601] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)3H24-180 |
| 4 | 300 | ms | 192 [1701] | 23,7 [8.1] | 29,6 [10.1] | 350RG(D/S)4H24-300 |
| | 180 | ms | 226 [2001] | 23,7 [8.1] | 29,6 [10.1] | 350RG(D/S)4H24-180 |
| 6 | 270 | ms | 182 [1615] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)6H24-270 |
| | 90 | ms | 233 [2063] | 22,5 [7.7] | 28,4 [9.7] | 350RG(D/S)6H24-90 |
| 8 | 270 | ms | 208 [1840] | 23,7 [8.1] | 29,6 [10.1] | 350RG(D/S)8H24-270 |
| | 90 | ms | 307 [2716] | 23,7 [8.1] | 29,6 [10.1] | 350RG(D/S)8H24-90 |
| 12 | 270 | ms | 128 [1132] | 23,1 [7.9] | 29,0 [9.9] | 350RG(D/S)12H20-270 |
| | 90 | ms | 167 [1476] | 23,1 [7.9] | 29,0 [9.9] | 350RG(D/S)12H20-90 |

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

Features

- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø19.05 mm [Ø.75 in]) in RGD model.
- Right Hand Cam Standard

Optional Accessories

- R180 Reducer (Ratios from 5:1 to 60:1)
 - 1/3 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
 - 1/3 HP DC Motor with Varipak DC Motor Control (up to 30 cpm)
- R225 Reducer (Ratios from 5:1 to 60:1)
 - 56C Motor Adapter and Coupling
 - 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
 - 1 HP DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Relief in Dwell for shot-pin applications
- Left Hand Cam
- Relief in Dwell for shot-pin applications

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|----------------------|----------------------|
| Radial | 8607 N [1935 lbs] | 8042 N [1808 lbs] |
| Thrust/Axial | 6254 N [1406 lbs] | 3496 N [786 lbs] |
| Moment | 273 N-m [2419 in-lb] | 357 N-m [3164 in-lb] |

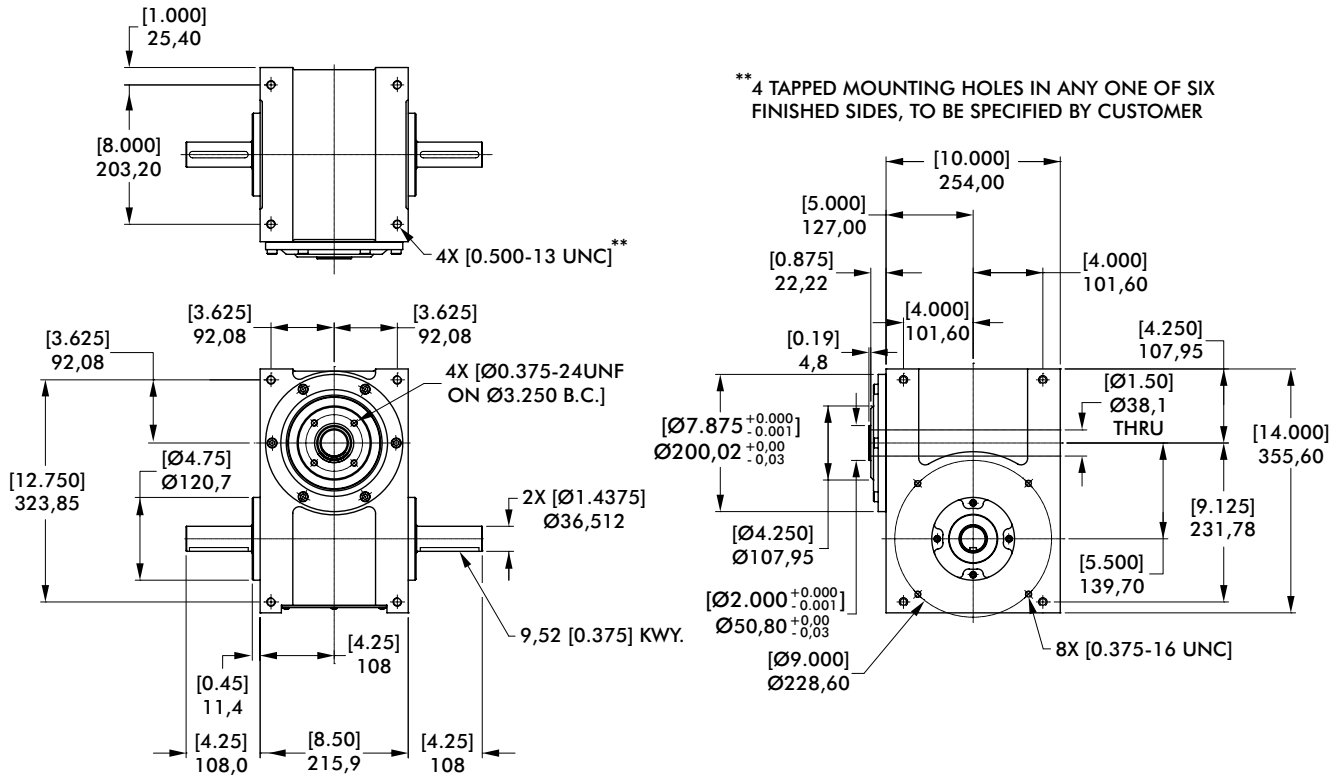
Accuracy ±41 arcsec / ±0,030 mm [±.0012 in] at 152,4 mm [6 in] Radius

Repeatability ±10 arcsec / ±0,008 mm [±.0003 in] at 152,4 mm [6 in] Radius

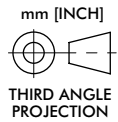
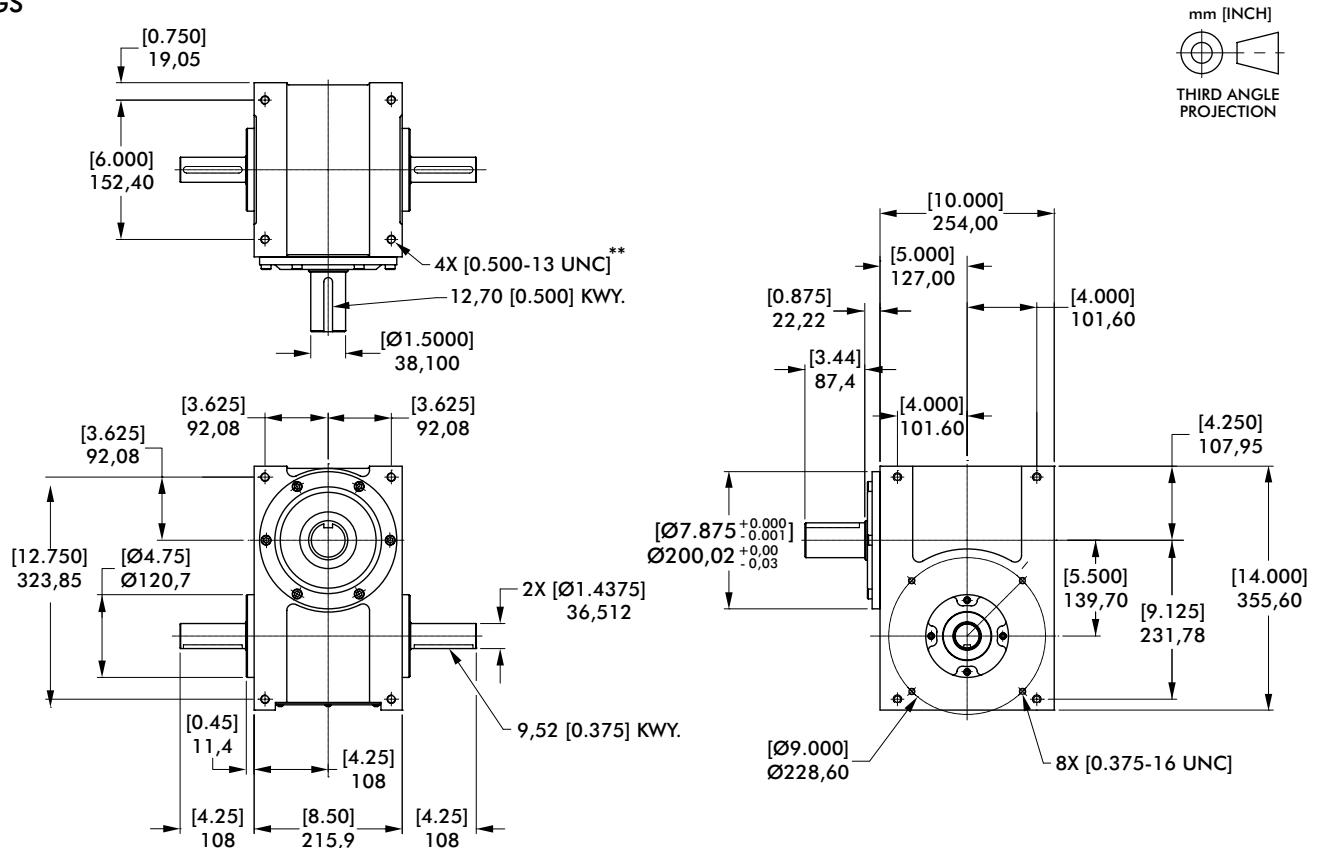
500RGD/500RGS SERIES

Roller Gear Index Drive | Dimensions

500RGD



500RGS



500RGD/500RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 500RGD/500RGS Indexer Capacities | | | | | | |
|----------------------------------|--------------|--------|---|---|---|---------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 1 | 330 | msc.60 | 765 [6767] | 181,4 [62] | 131,7 [45] | 500RG(D/S)1H40-330 |
| 2 | 270 | ms | 497 [4400] | 181,4 [62] | 131,7 [45] | 500RG(D/S)2H40-270 |
| 3 | 270 | ms | 595 [5265] | 181,4 [62] | 131,7 [45] | 500RG(D/S)3H40-270 |
| | 180 | ms | 645 [5706] | 181,4 [62] | 131,7 [45] | 500RG(D/S)3H40-180 |
| 4 | 270 | ms | 692 [6121] | 193,1 [66] | 140,5 [48] | 500RG(D/S)4H40-270 |
| | 120 | msc.20 | 440 [3892] | 175,6 [60] | 122,9 [42] | 500RG(D/S)4H32-120 |
| 6 | 270 | ms | 617 [5464] | 181,4 [62] | 131,7 [45] | 500RG(D/S)6H40-270 |
| | 90 | ms | 781 [6909] | 181,4 [62] | 131,7 [45] | 500RG(D/S)6H40-90 |
| 8 | 270 | ms | 695 [6151] | 193,1 [66] | 140,5 [48] | 500RG(D/S)8H40-270 |
| | 90 | ms | 929 [8219] | 193,1 [66] | 140,5 [48] | 500RG(D/S)8H40-90 |
| 12 | 270 | ms | 296 [2616] | 169,7 [58] | 117,1 [40] | 500RG(D/S)12H28-270 |
| | 90 | ms | 390 [3449] | 169,7 [58] | 117,1 [40] | 500RG(D/S)12H28-90 |

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

Features

- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø38.1 mm [Ø1.50 in]) in RGD model.
- Right Hand Cam Standard

Optional Accessories

- 1 hp AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- 1 hp DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Output Overload Clutch Models: 11S, 11C, 11F, 11C-SD, 11S-SD, 11FC-SD
 - Available Settings (in-lbs): 2300, 4000, 6000, 8500, 11000
- Left Hand Cam
- Relief in Dwell for shot-pin applications
- Left Hand Cam

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|----------------------|------------------------|
| Radial | 17811 N [4004 lbs] | 16756 N [3767 lbs] |
| Thrust/Axial | 12273 N [2759 lbs] | 6374 N [1433 lbs] |
| Moment | 961 N-m [8509 in-lb] | 1464 N-m [12959 in-lb] |

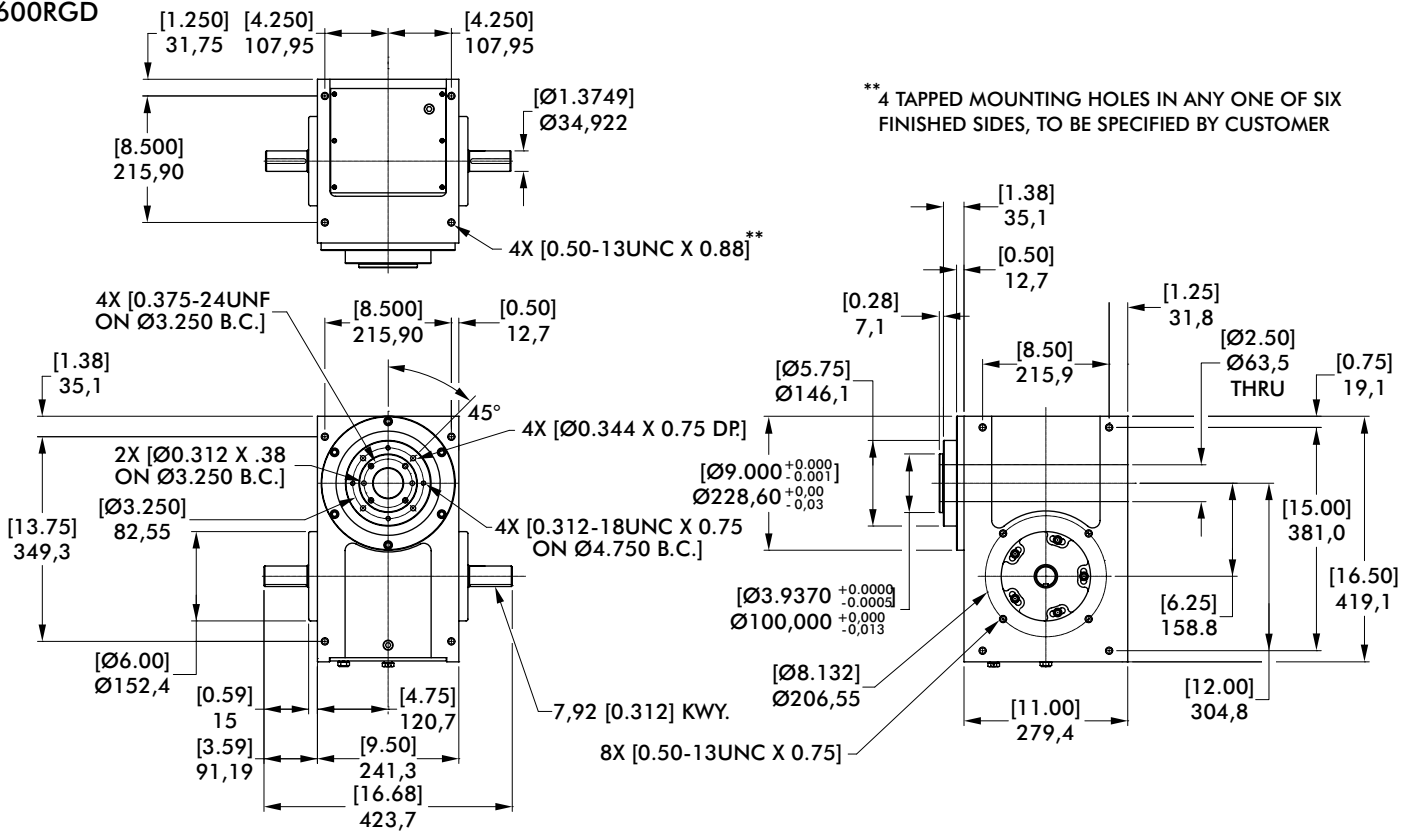
Accuracy ±29 arcsec / ±0,020 mm [±.0008 in] at 152,4 mm [6 in] Radius

Repeatability ±7 arcsec / ±0,005 mm [±.0002 in] at 152,4 mm [6 in] Radius

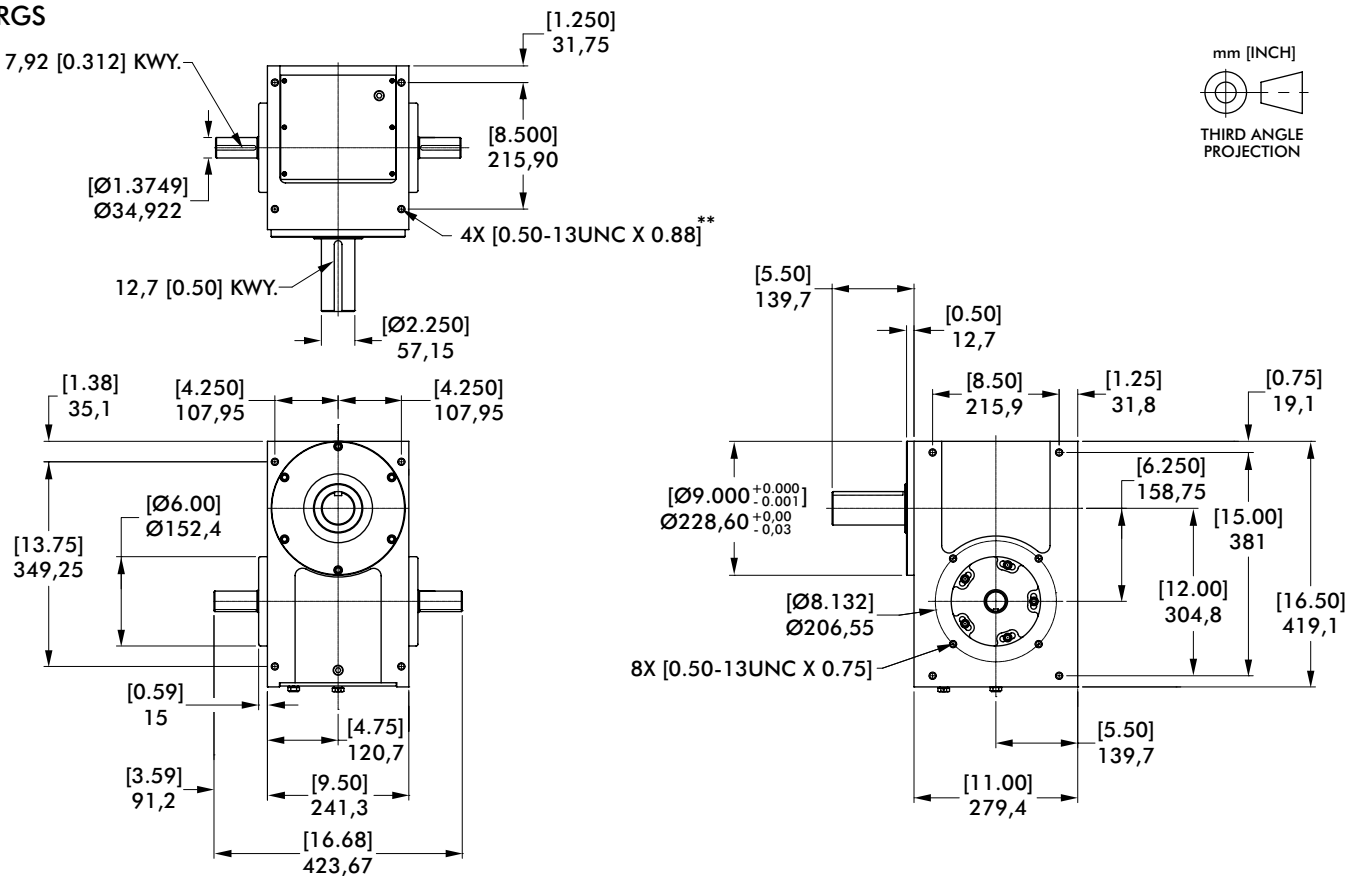
600RGD/600RGS SERIES

Roller Gear Index Drive | Dimensions

600RGD



600RGS



600RGD/600RGS SERIES

Roller Gear Index Drive | Features | Optional Accessories | Technical Information

| 600RGD/600RGS Indexer Capacities | | | | | | |
|----------------------------------|--------------|--------|--|---|---|------------------------|
| Stops | Index Period | Motion | B ₁₀ Capacity at 50 RPM N-m [in-lb] | RGD Internal Inertia kg-cm ² [lb-in ²] | RGS Internal Inertia kg-cm ² [lb-in ²] | Model |
| 2 | 300 | ms | 736 [6516] | 749,2 [256] | 400,9 [137] | 600RG(D/S)2H48-300 |
| 3 | 270 | ms | 899 [7955] | 749,2 [256] | 400,9 [137] | 600RG(D/S)3H48-270 |
| | 180 | ms | 991 [8769] | 749,2 [256] | 400,9 [137] | 600RG(D/S)3H48-180 |
| 4 | 270 | ms | 763 [6749] | 728,7 [249] | 383,4 [131] | 600RG(D/S)4H40-270 |
| | 180 | ms | 845 [7477] | 728,7 [249] | 383,4 [131] | 600RG(D/S)4H40-180 |
| 6 | 270 | ms | 936 [8286] | 749,2 [256] | 400,9 [137] | 600RG(D/S)6H48-270 |
| | 90 | ms | 1211 [10715] | 749,2 [256] | 400,9 [137] | 600RG(D/S)6H48-90 |
| 8 | 270 | ms | 783 [6928] | 714 [244] | 368,7 [126] | 600RG(D/S)8H40-270 |
| | 90 | ms | 1010 [8936] | 714 [244] | 368,7 [126] | 600RG(D/S)8H40-90 |
| 12 | 270 | ms | 462 [4091] | 714 [244] | 368,7 [126] | 600RG(D/S)12H32-270 |
| | 90 | ms | 615 [5444] | 714 [244] | 368,7 [126] | 600RG(D/S)12H32-90 |
| 16 | 270 | ms | 1079 [9553] | 728,7 [249] | 383,4 [131] | 600RG(D/S)16H40-270 II |
| | 90 | ms | 1381 [12224] | 728,7 [249] | 383,4 [131] | 600RG(D/S)16H40-90 II |

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

Features

- Universal Mounting: mounting holes on any of 6 sides
- Center Through Hole (Ø63.5 mm [Ø2.50 in]) in RGD model.
- Right Hand Cam Standard

Optional Accessories

- 7300C or 7350C Reducer (Ratios from 5:1 to 60:1)
- 1 or 2 hp AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- 1 or 2 hp DC Motor with Varipak DC Motor Control (up to 30 cpm)
- Single or Dual Cycle Cam and Limit Switch
- Output Overload Clutch Models: 11FM, 11SM
– Available Settings (in-lbs): 2300, 4000, 6000, 8500, 11000
- Left Hand Cam
- Relief in Dwell for shot-pin applications
- Left Hand Cam

Output Load Capacity (loads carried during index):

| | RGD | RGS |
|--------------|------------------------|------------------------|
| Radial | 25208 N [5667 lbs] | 17028 N [3828 lbs] |
| Thrust/Axial | 15693 N [3528 lbs] | 15698 N [3529 lbs] |
| Moment | 1841 N-m [16292 in-lb] | 2085 N-m [18451 in-lb] |

Accuracy ±40 arcsec / ±0,028 mm [±.0011 in] at 152,4 mm [6 in] Radius

Repeatability ±10 arcsec / ±0,008 mm [±.0003 in] at 152,4 mm [6 in] Radius

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



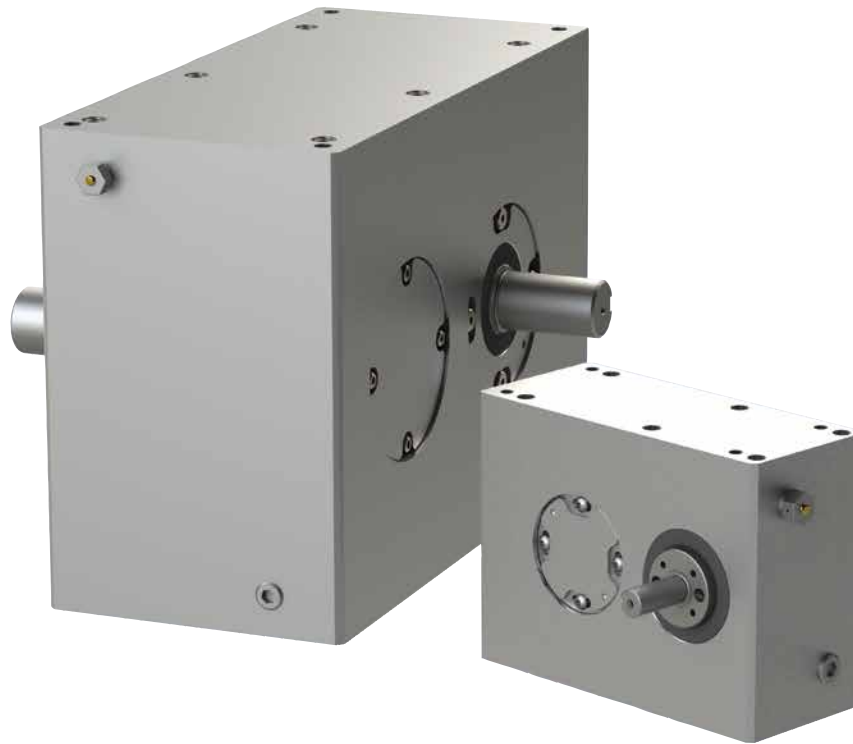
LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

PARALLEL SHAFT/FLANGE DRIVES

Features | Table of Contents



Features:

Camco Parallel Index Drives are ideal for high-speed applications or for actuation-type applications such as driving a linkage or a conveyor.

Hardened and ground conjugate cams

Yoke-mounted, preloaded cam followers are non-reversing for high capacity and speed capability

Whole or fractional stops, oscillating and complex custom motions are available

Long transfer distances achieved with simple linkages

Preloaded, tapered roller bearings for rigidity and backlash-free operation

Table of Contents

| | |
|--------------------|----|
| How to Order | 3 |
| 250P..... | 5 |
| 387P..... | 7 |
| 512P..... | 9 |
| 662P..... | 11 |

P SERIES

Parallel Shaft/Flange Drives | How To Order

Indexer Ordering Procedure

1. Input Assembly: Right, Left or Double (DE)
2. Output Assembly: Right, Left or Double (DE).
 - Flanged output is primary output. For Double Output, specify whether flanged output is on right or left side.

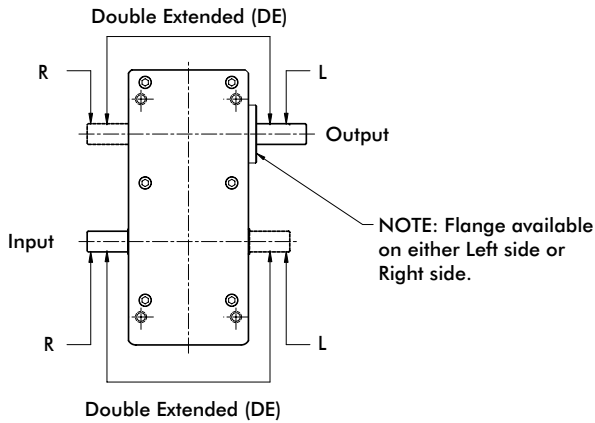
NOTE: Input may rotate in either direction to achieve desired direction of output rotation.

3. Mounting Position: 1-6

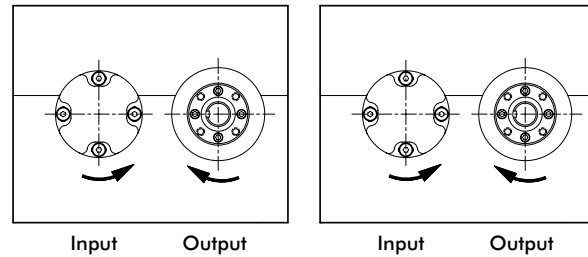
Reducer Ordering Procedure

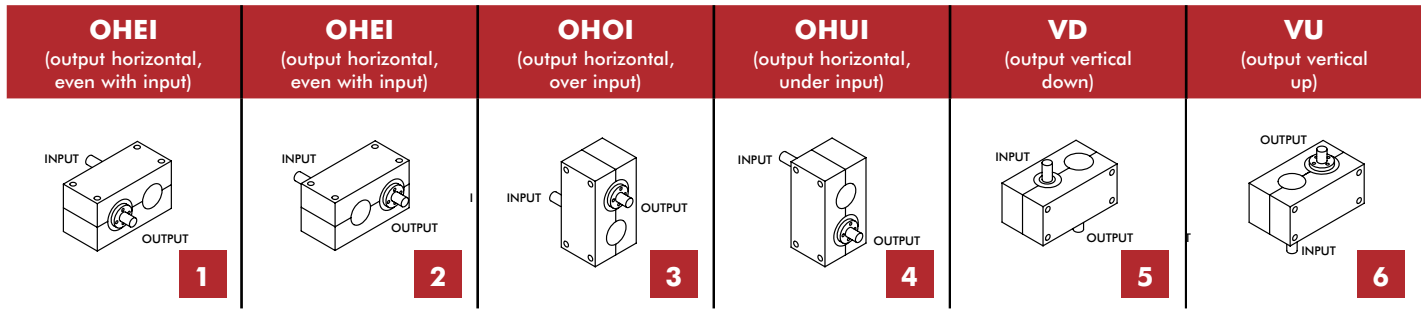
1. Model
2. Ratio: 5:1, 10:1, 15:1, 20:1, 25:1, 30:1, 40:1, 50:1, 60:1
3. Motor Adapter
4. Reducer Input Shaft Extension: Single Input (SE) or Double Input (DE)
5. Mounting (see diagram below)

Position of Shafts (Top View)

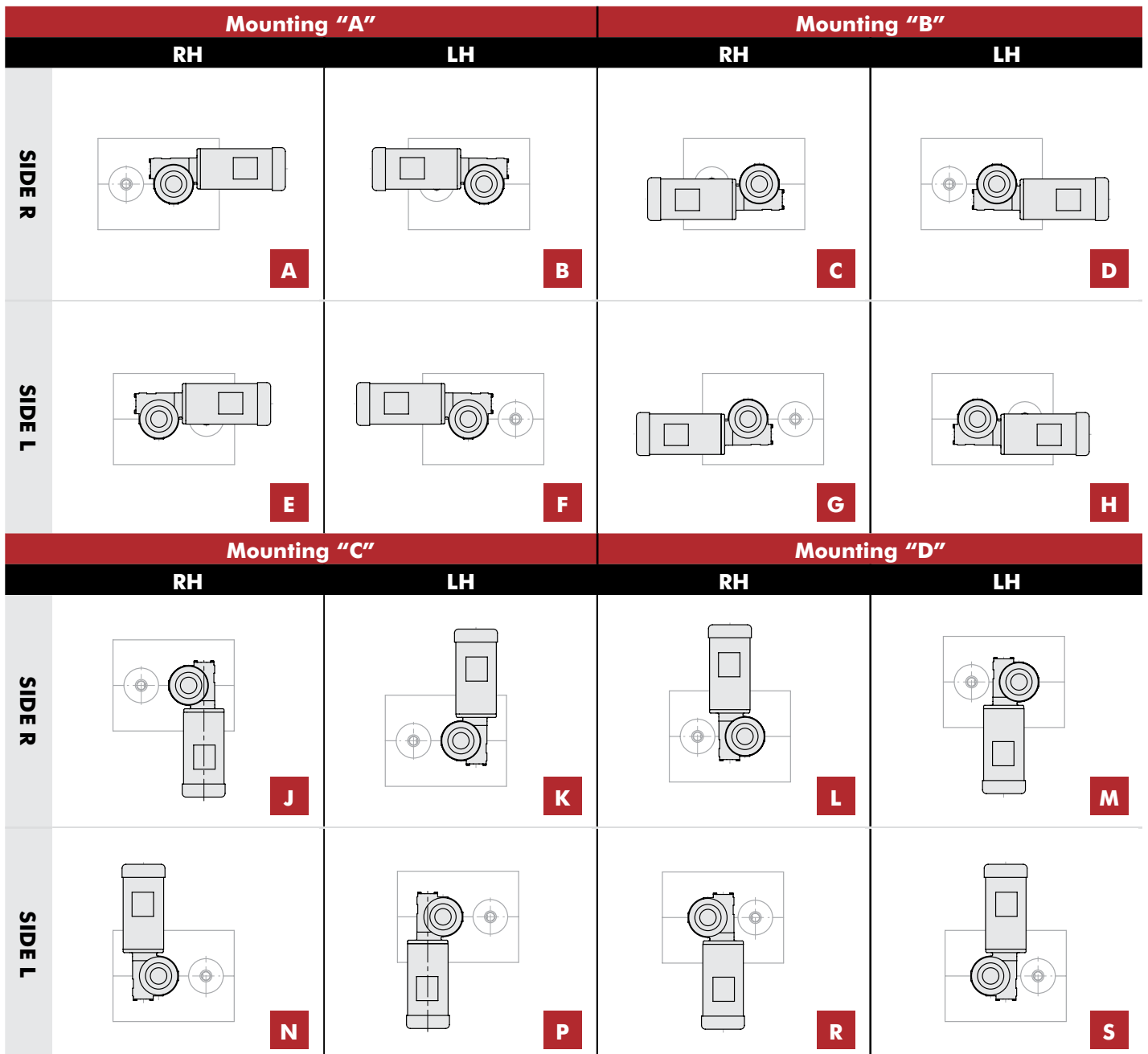


Input/Output Shaft Rotation



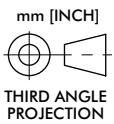
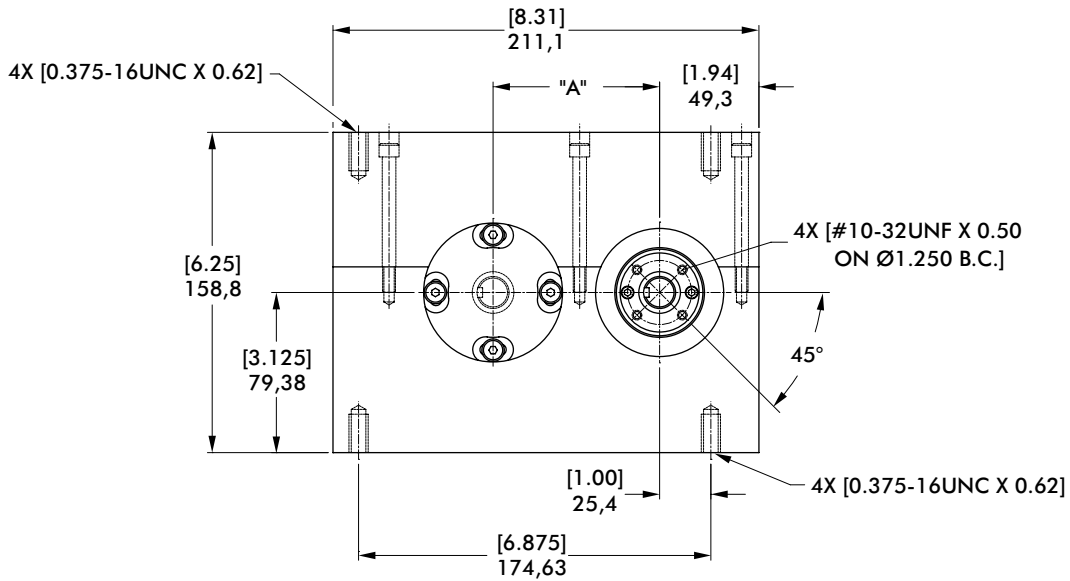
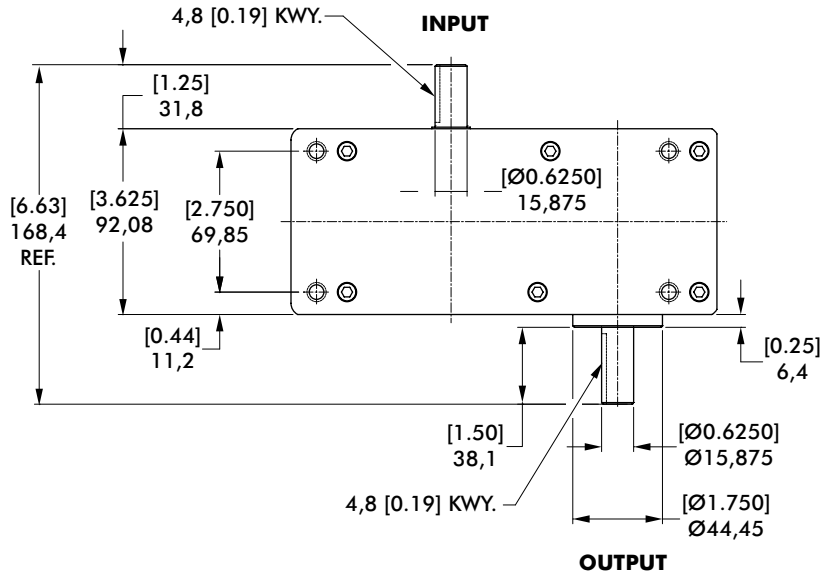


Gear Reducer Mounting Positions (Figure 4)



250P SERIES

Parallel Shaft/Flange Drives | Dimensions



| 250P Indexer Capacities | | | | | | |
|-------------------------|--------------|--------|---|---|-----------------|--------------------|
| Stops | Index Period | Motion | B ₂ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | "A" Center mm [in] |
| 1 | 300 | msc.50 | 50 [444] | 8,8 [3] | 250P1H20-300 | 82,6 [3.25] |
| 1.5 | 270 | msc.33 | 54 [481] | 5,9 [2] | 250P1.5H20-270 | 82,6 [3.25] |
| 2 | 270 | ms | 49 [433] | 8,8 [3] | 250P2H20-270 | 82,6 [3.25] |
| | 180 | msc.33 | 62 [546] | 8,8 [3] | 250P2H20-180 | 82,6 [3.25] |
| 3 | 270 | ms | 66 [582] | 5,9 [2] | 250P3H20-270 | 69,9 [2.75] |
| | 120 | ms | 74 [653] | 5,9 [2] | 250P3H20-120 | 82,6 [3.25] |
| 4 | 270 | ms | 65 [571] | 8,8 [3] | 250P4H20-270 | 69,9 [2.75] |
| | 90 | msc.25 | 88 [782] | 8,8 [3] | 250P4H20-90 | 82,6 [3.25] |
| 6 | 270 | ms | 100 [888] | 5,9 [2] | 250P6H20-270 II | 69,9 [2.75] |
| | 180 | msc.33 | 235 [2078] | 8,8 [3] | 250P6H24-180 II | 69,9 [2.75] |
| 8 | 270 | ms | 95 [843] | 8,8 [3] | 250P8H20-270 II | 69,9 [2.75] |
| | 120 | ms | 112 [993] | 8,8 [3] | 250P8H20-120 II | 82,6 [3.25] |

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

Features

- Single Input Shaft and Single Output Shaft
- Output horizontal even with input Mounting
- R180 Reducer (ratios from 15:1 to 60:1)
 - Double Extended Worm (input) Shaft
 - Worm Shaft Handwheel
- 1/3 or 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Single Cycle Cam and Limit Switch

Output Load Capacity (loads carried during index):

| | |
|--------------|--------------------|
| Radial | 1406 N [316 lbs] |
| Thrust/Axial | 1397 N [314 lbs] |
| Moment | 45 N-m [395 in-lb] |

Accuracy

±77 arcsec / ±0,028 mm [±.0011 in] at 76,2 mm [3 in] Radius

Repeatability

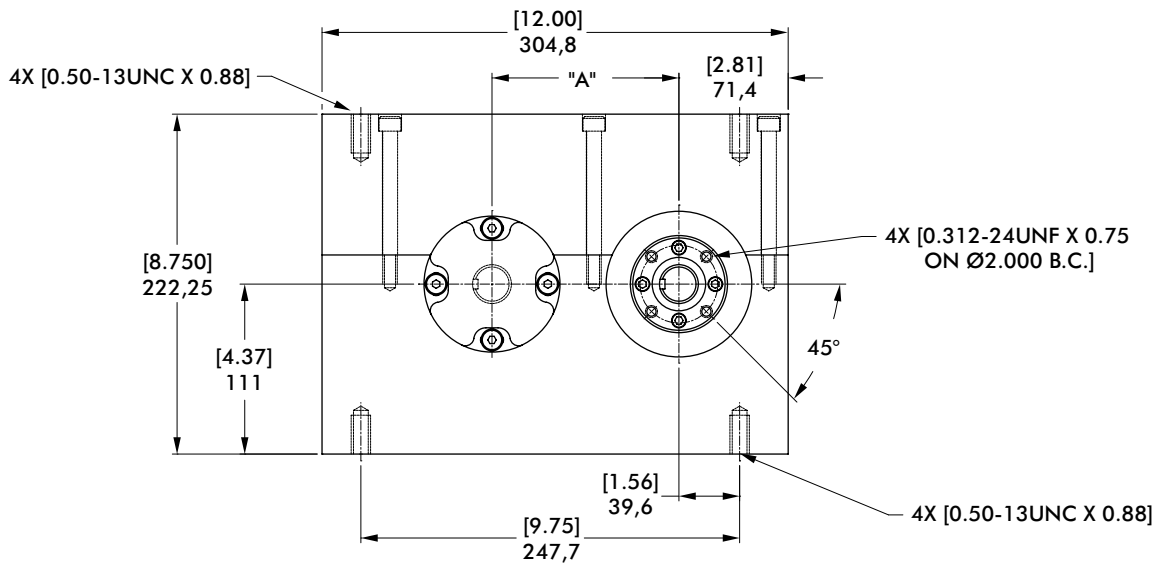
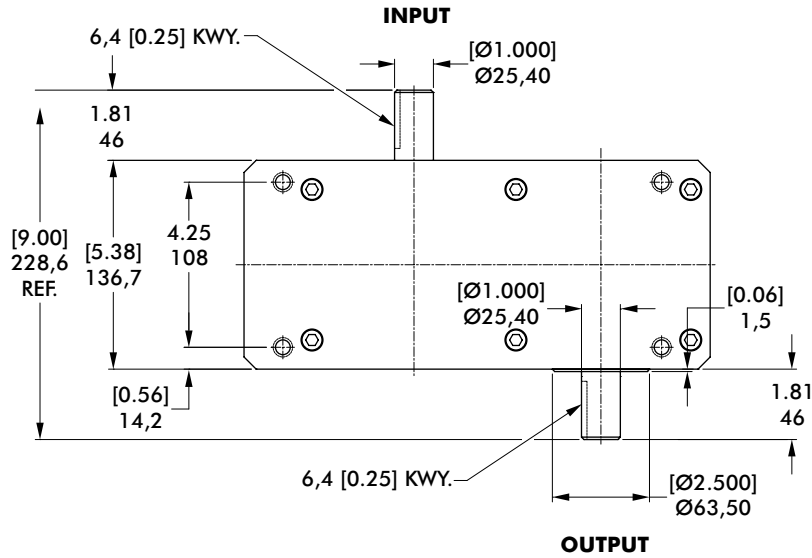
±19 arcsec / ±0,008 mm [±.0003 in] at 76,2 mm [3 in] Radius

Optional Accessories

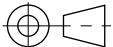
- 1/3 hp DC motor
- Varipak DC Motor Control (up to 30 cpm)
- R225 Reducer (ratios from 10:1 to 60:1)
 - 1 hp AC or DC drive package
 - 56C Motor Adapter and Coupling
- Output Overload Clutch Models: .39F, .39FC, .39S and .39C, .39C-SD, .39FC-SD, .39S-SD
 - Available Settings (in-lb): 160, 210, 270, 320, 390
- Dual Cycle Cam and Limit Switch
- Oscillating motion
- Double Input Shaft
- Double Output Shaft
- Output and Input Vertical Mounting

387P SERIES

Parallel Shaft/Flange Drives | Dimensions



mm [INCH]



THIRD ANGLE PROJECTION

| 387P Indexer Capacities | | | | | | |
|-------------------------|--------------|--------|-----------------------------------|---|--------------------|--------------------|
| Stops | Index Period | Motion | B. Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | "A" Center mm [in] |
| 1 | 300 | msc.66 | 156 [1385] | 41,0 [14] | 387P1H28-300 | 122,22 [4.812] |
| 1.33 | 315 | msc.10 | 120 [1062] | 38,0 [13] | 387P1.33H28-315 | 122,22 [4.812] |
| 1.5 | 300 | ms | 124 [1099] | 38,0 [13] | 387P1.5H28-300 | 122,22 [4.812] |
| 2 | 270 | msc.33 | 202 [1788] | 41,0 [14] | 387P2H32-270 | 122,22 [4.812] |
| | 180 | msc.33 | 237 [2095] | 41,0 [14] | 387P2H32-180 | 122,22 [4.812] |
| 2.67 | 270 | msc.33 | 245 [2171] | 41,0 [14] | 387P2.67H28-270 II | 122,22 [4.812] |
| 3 | 270 | ms | 181 [1601] | 38,0 [13] | 387P3H28-270 | 101,60 [4.000] |
| | 120 | msc.33 | 234 [2067] | 41,0 [14] | 387P3H28-120 | 122,22 [4.812] |
| 4 | 270 | ms | 181 [1605] | 41,0 [14] | 387P4H28-270 | 101,60 [4.000] |
| | 90 | msc.33 | 250 [2214] | 41,0 [14] | 387P4H28-90 | 122,22 [4.812] |
| 6 | 270 | ms | 276 [2445] | 38,0 [13] | 387P6H28-270 II | 101,60 [4.000] |
| | 180 | ms | 278 [2463] | 38,0 [13] | 387P6H28-180 II | 122,22 [4.812] |
| 8 | 270 | ms | 269 [2378] | 41,0 [14] | 387P8H28-270 II | 101,60 [4.000] |

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

Features

- Single Input Shaft and Single Output Shaft
- Output horizontal even with input Mounting
- R225 Reducer (ratios from 10:1 to 60:1)
 - 56C Motor Adapter and Coupling
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Single Cycle Cam and Limit Switch

Output Load Capacity (loads carried during index):

- Radial 3981 N [895 lbs]
- Thrust/Axial 2567 N [577 lbs]
- Moment 183 N-m [1620 in-lb]

Accuracy

±50 arcsec / ±0,018 mm [±.0007 in] at 76,2 mm [3 in] Radius

Repeatability

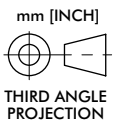
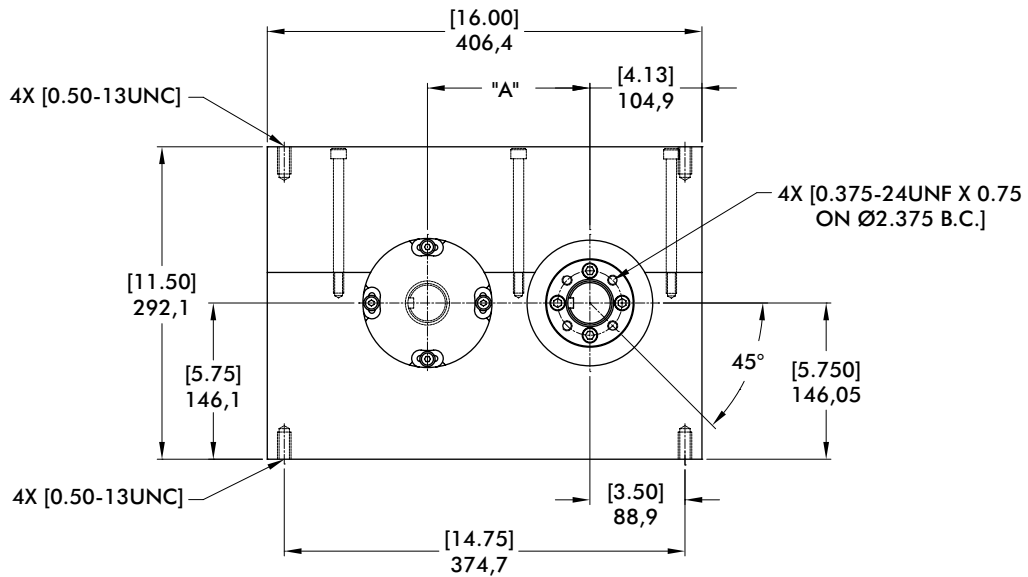
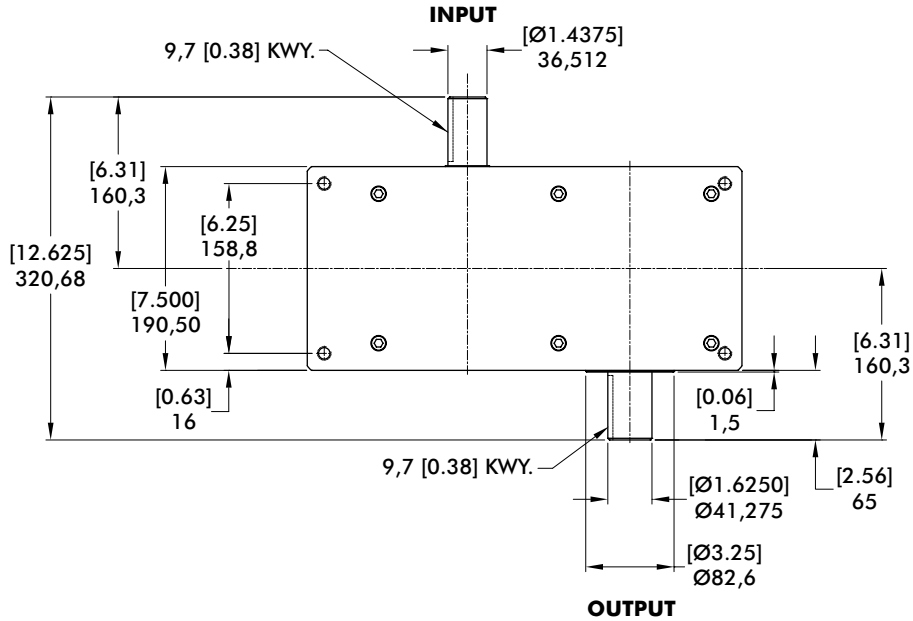
±12 arcsec / ±0,005 mm [±.0002 in] at 76,2 mm [3 in] Radius

Optional Accessories

- 1 hp DC motor
- Varipak DC Motor Control (up to 30 cpm)
- R260 Reducer (ratios from 5:1 to 60:1)
 - 1 hp AC or DC drive package
 - 56C Motor Adapter and Coupling
- Output Overload Clutch Models: 2.3F, 2.3FC, 2.3S and 2.3C, 2.3C-SD, 2.3FC-SD, 2.3S-SD
 - Available Settings (in-lb): 400, 600, 700, 850, 1000, 1300, 1800, 2000, 2300
- Dual Cycle Cam and Limit Switch
- Oscillating motion
- Double Input Shaft
- Double Output Shaft
- Output and Input Vertical Mounting

512P SERIES

Parallel Shaft/Flange Drives | Dimensions



| 512P Indexer Capacities | | | | | | |
|-------------------------|--------------|--------|---|---|--------------------|--------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | "A" Center mm [in] |
| 1 | 330 | msc.75 | 728 [6441] | 184,4 [63] | 512P1H48-330 | 151,87 [5.979] |
| 1.33 | 330 | msc.33 | 557 [4928] | 178,5 [61] | 512P1.33H48-330 | 151,87 [5.979] |
| 1.5 | 330 | ms | 549 [4860] | 184,4 [63] | 512P1.5H48-330 | 151,87 [5.979] |
| | 270 | msc.33 | 494 [4373] | 178,5 [61] | 512P2H40-270 | 151,87 [5.979] |
| 2 | 180 | msc.50 | 612 [5416] | 178,5 [61] | 512P2H40-180 | 151,87 [5.979] |
| | 120 | msc.50 | 467 [4131] | 178,5 [61] | 512P2H40-120 | 151,87 [5.979] |
| 3 | 300 | msc.33 | 804 [7116] | 178,5 [61] | 512P2.67H40-300 II | 151,87 [5.979] |
| | 180 | ms | 617 [5462] | 163,9 [56] | 512P3H40-180 | 151,87 [5.979] |
| 4 | 270 | ms | 635 [5619] | 178,5 [61] | 512P4H40-270 | 123,39 [4.858] |
| | 120 | ms | 706 [6252] | 178,5 [61] | 512P4H40-120 | 151,87 [5.979] |
| 6 | 270 | ms | 939 [8315] | 163,9 [56] | 512P6H40-270 II | 123,39 [4.858] |
| | 180 | ms | 933 [8261] | 163,9 [56] | 512P6H40-180 II | 151,87 [5.979] |
| 8 | 270 | ms | 948 [8387] | 178,5 [61] | 512P8H40-270 II | 123,39 [4.858] |
| | 180 | ms | 892 [7894] | 178,5 [61] | 512P8H40-180 II | 151,87 [5.979] |

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

Features

- Single Input Shaft and Single Output Shaft
- Output horizontal even with input Mounting
- R225 Reducer (ratios from 10:1 to 60:1)
 - 56C Motor Adapter and Coupling
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Single Cycle Cam and Limit Switch

Output Load Capacity (loads carried during index):

| | |
|--------------|----------------------|
| Radial | 12077 N [2715 lbs] |
| Thrust/Axial | 6112 N [1374 lbs] |
| Moment | 785 N-m [6951 in-lb] |

Accuracy

±37 arcsec / ±0,013 mm [±.0005 in] at 76,2 mm [3 in] Radius

Repeatability

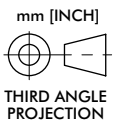
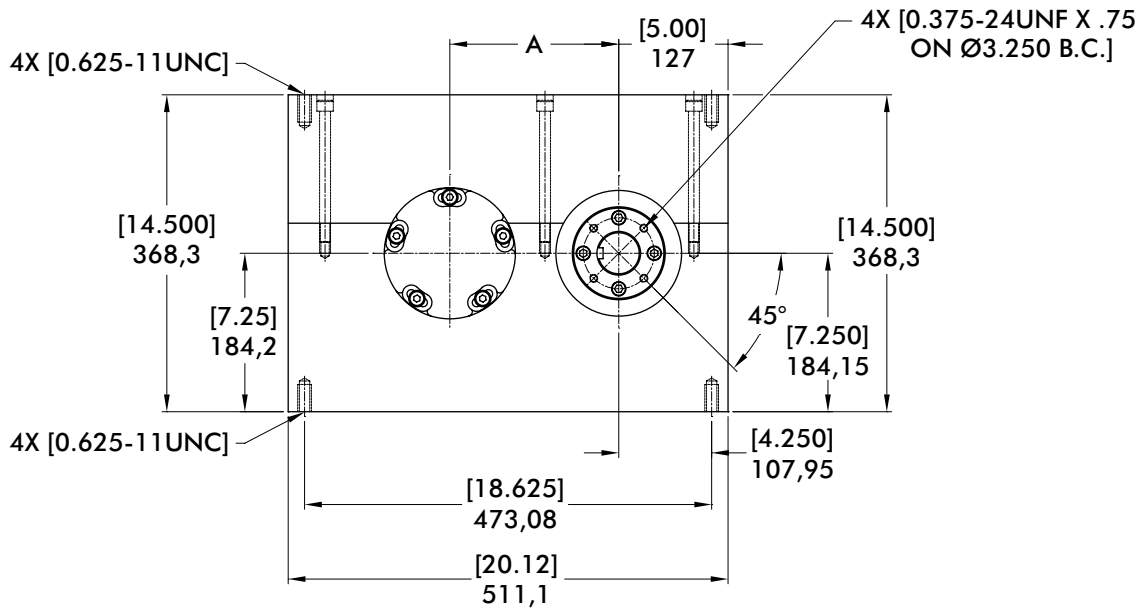
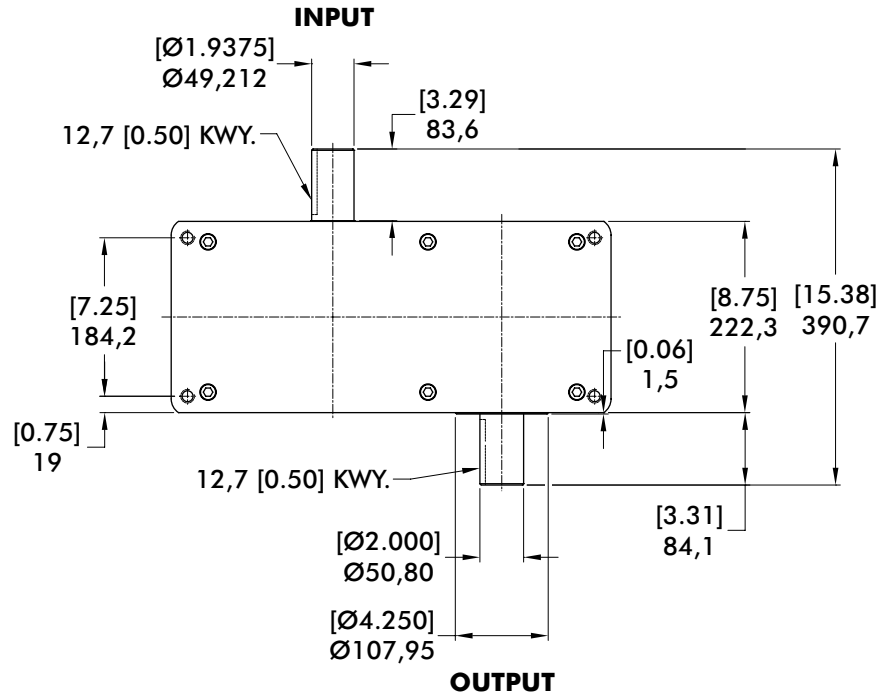
±9 arcsec / ±0,003 mm [±.0001 in] at 76,2 mm [3 in] Radius

Optional Accessories

- 1 hp DC motor
- Varipak DC Motor Control (up to 30 cpm)
- R260 Reducer (ratios from 5:1 to 60:1)
 - 1 hp AC or DC drive package
 - 56C Motor Adapter and Coupling
- 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
- Oscillating motion
- Double Input Shaft
- Double Output Shaft
- Output and Input Vertical Mounting

662P SERIES

Parallel Shaft/Flange Drives | Dimensions



| 662P Indexer Capacities | | | | | | |
|-------------------------|--------------|--------|---|---|-----------------|--------------------|
| Stops | Index Period | Motion | B ₀ Capacity at 50 RPM N-m [in-lb] | Internal Inertia kg-cm ² [lb-in ²] | Model | "A" Center mm [in] |
| 1 | 330 | msc.50 | 658 [5824] | 403,8 [138] | 662P1H48-330 | 196,32 [7.729] |
| 1.33 | 330 | msc.20 | 1171 [10368] | 971,6 [332] | 662P1.33H64-330 | 196,32 [7.729] |
| 1.5 | 270 | msc.33 | 1425 [12617] | 895,5 [306] | 662P1.5H64-270 | 196,32 [7.729] |
| 2 | 270 | msc.33 | 770 [6811] | 529,7 [181] | 662P2H48-270 | 196,32 [7.729] |
| | 180 | msc.50 | 1329 [11760] | 597,0 [204] | 662P2H56-180 | 196,32 [7.729] |
| 3 | 270 | ms | 954 [8446] | 485,8 [166] | 662P3H48-270 | 168,35 [6.628] |
| | 180 | ms | 961 [8506] | 485,8 [166] | 662P3H48-180 | 196,32 [7.729] |
| 4 | 270 | ms | 989 [8752] | 529,7 [181] | 662P4H48-270 | 168,35 [6.628] |
| | 120 | ms | 1100 [9738] | 529,7 [181] | 662P4H48-120 | 196,32 [7.729] |
| 6 | 270 | ms | 1463 [12946] | 485,8 [166] | 662P6H48-270 II | 168,35 [6.628] |
| | 180 | ms | 1453 [12863] | 485,8 [166] | 662P6H48-180 II | 196,32 [7.729] |
| 8 | 270 | ms | 1476 [13060] | 529,7 [181] | 662P8H48-270 II | 168,35 [6.628] |
| | 120 | msc.33 | 1783 [15780] | 529,7 [181] | 662P8H48-120 | 196,32 [7.729] |

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

Features

- Single Input Shaft and Single Output Shaft
- Output horizontal even with input Mounting
- R225 Reducer (ratios from 10:1 to 60:1)
 - 56C Motor Adapter and Coupling
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)
- Single Cycle Cam and Limit Switch

Output Load Capacity (loads carried during index):

| | |
|--------------|------------------------|
| Radial | 17415 N [3915 lbs] |
| Thrust/Axial | 9083 N [2042 lbs] |
| Moment | 1464 N-m [12959 in-lb] |

Accuracy

±36 arcsec / ±0,025 mm [±.001 in] at 76,2 mm [3 in] Radius

Repeatability

±9 arcsec / ±0,008 mm [±.0003 in] at 152,4 mm [6 in] Radius

Optional Accessories

- 7350C or 7400C Reducer (ratios from 5:1 to 60:1) with Motor Adapter and Coupling
- 1 hp DC Motor
- Output Overload Clutch Models: 11F, 11FC, 11FC-SD
 - Available Settings (in-lb): 2300, 4000, 6000, 8500, 11000
- Dual Cycle Cam and Limit Switch
- Electric Clutch-Brake
- Air Clutch-Brake
- Oscillating motion
- Double Input Shaft
- Double Output Shaft
- Output and Input Vertical Mounting

PRECISION INDEXING SOLUTIONS

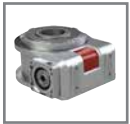
Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



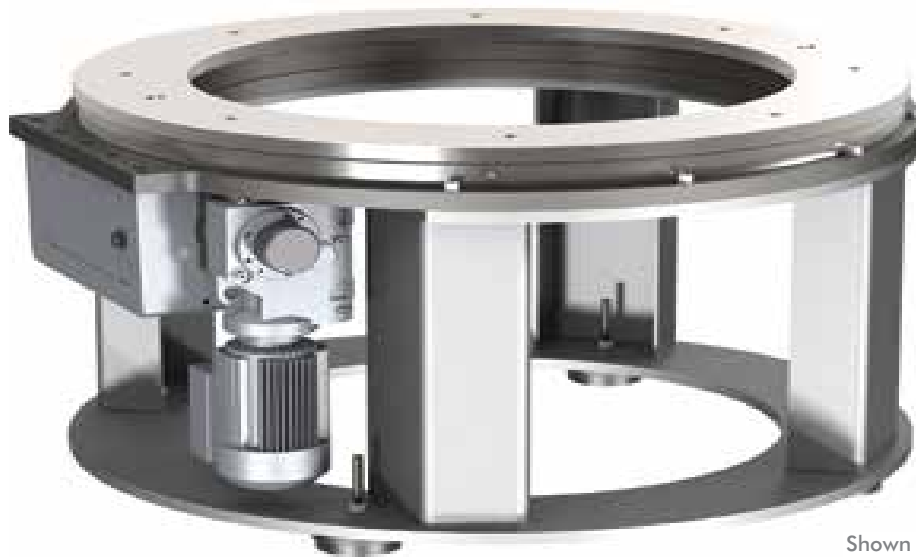
LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

RING DRIVE DIAL INDEXER

Features | How To Order



Shown with optional base

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

Table of Contents

| | |
|--------------------|---|
| How to Order | 3 |
| 750RNG | 5 |
| 1100RNG | 7 |
| 1550RNG | 9 |

Licensed under U.S. Patent No. 5,950,503

RNG SERIES

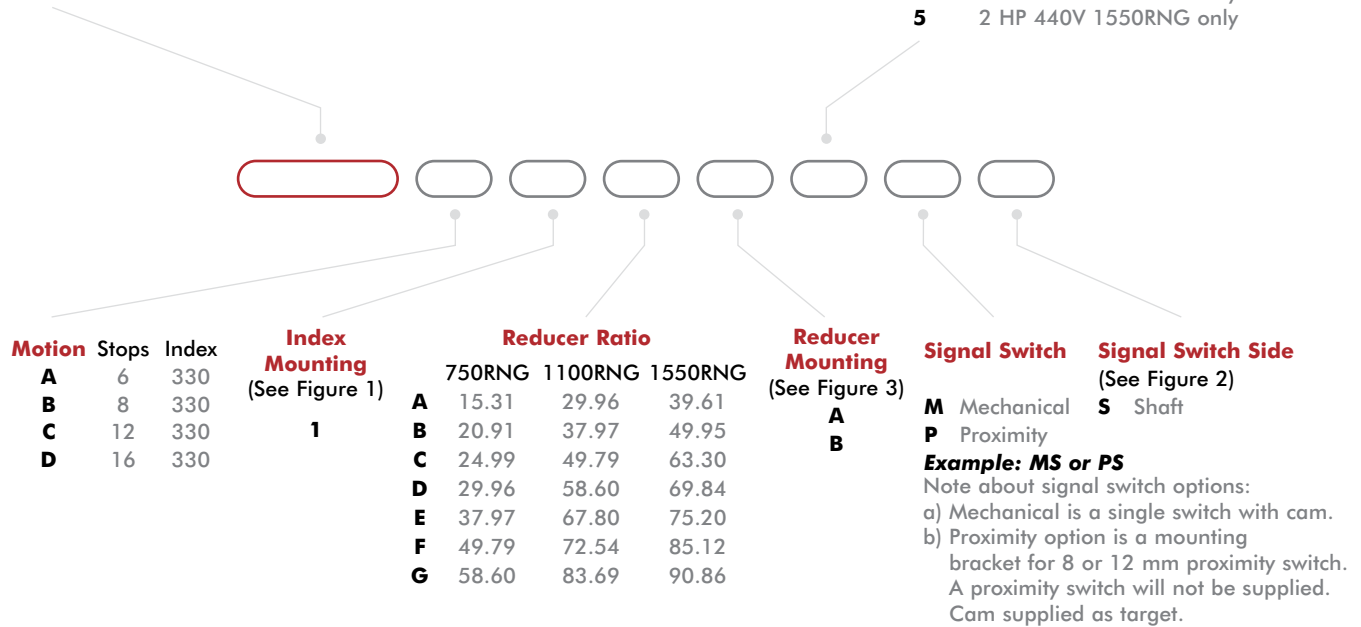
Ring Drive Dial Indexer | Features and Benefits | How to Order

Base Model Description

- 750RNG** w/ KH37 reducer & 1 HP AC motor (220/440V)
- 1100RNG** w/ KH37 reducer & 1 HP AC motor (220/440V)
- 1550RNG** w/ KH37 reducer & 1-1/2 HP AC motor (220/440V)

Control Description

- 1** 1 HP 120V 750RNG & 1100RNG only
- 2** 1 HP 240V 750RNG & 1100RNG only
- 3** 1 HP 440V 750RNG & 1100RNG only
- 4** 2 HP 240V 1550RNG only
- 5** 2 HP 440V 1550RNG only



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

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

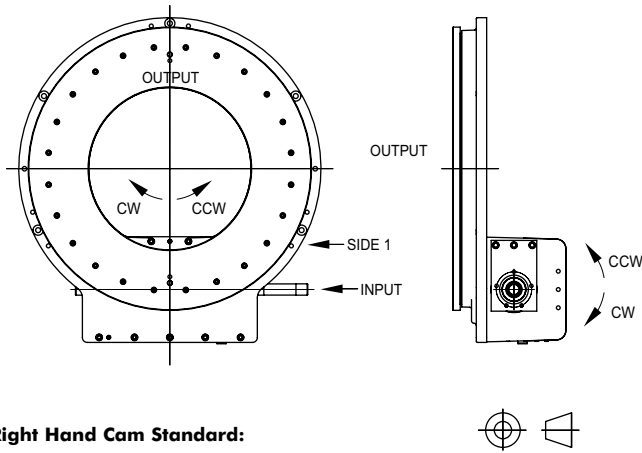
Sealed 4-point contact output bearing and large cam followers for superior accuracy and load capability (models 750RNG, 1100RNG and 1550RNG)

Modular shaft-mounted reducers for application flexibility and easy maintenance

Access to cam followers for easy inspection and replacement

Tapered roller bearings on camshaft

Input Shaft Configuration/Rotations (Figure 1)



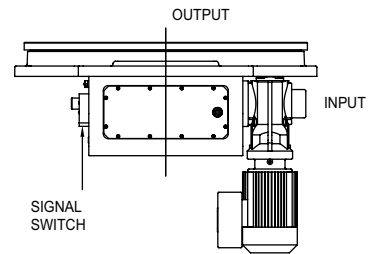
Right Hand Cam Standard:

CW Input Side 1, CCW Output

CCW Input Side 1, CW Output

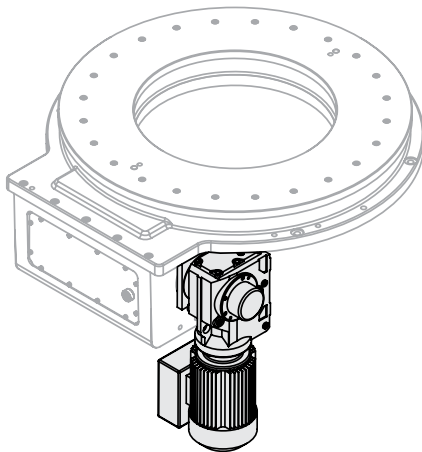
NOTE: Input can be driven in either direction

Signal Switch Mounting Position (Figure 2)

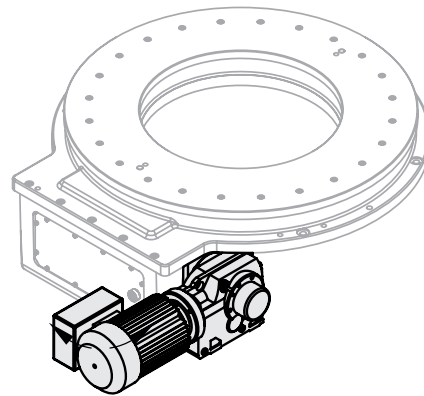


Gear Reducer Mounting Positions (Figure 3)

MOUNTING "A"

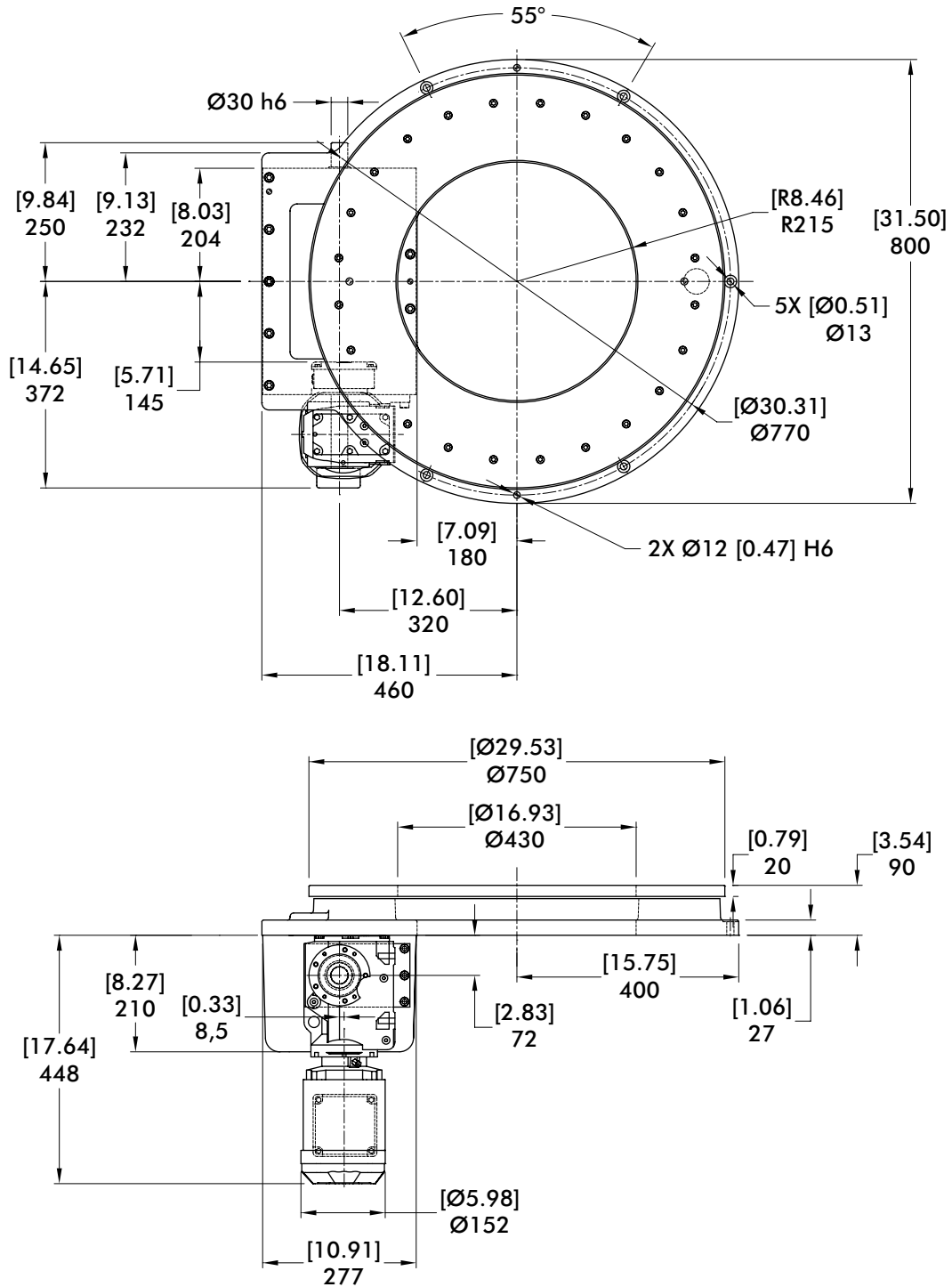


MOUNTING "B"

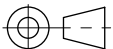


750RNG SERIES

Ring Drive Dial Indexer | Dimensions



mm [INCH]



THIRD ANGLE
PROJECTION

| Maximum Inertia x 1000 kg-cm ² [lb-in ²] for standard package | | | | | | | |
|--|-----------------------|-----------|------------|-------------|-------------|--------------|--------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 0.468 | 0.617 | 0.764 | 0.915 | 1.160 | 1.521 | 1.791 |
| 6 | 0 [0] | 50 [17] | 170 [58] | 363 [124] | 855 [292] | 1653 [565] | 2315 [791] |
| 8 | 9 [3] | 138 [47] | 354 [121] | 696 [238] | 1571 [537] | 2991 [1022] | 4167 [1424] |
| 12 | 105 [36] | 392 [134] | 878 [300] | 1650 [564] | 3620 [1237] | 6813 [2328] | 9461 [3233] |
| 16 | 237 [81] | 746 [255] | 1610 [550] | 2982 [1019] | 6488 [2217] | 12162 [4156] | 16871 [5765] |
| 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

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

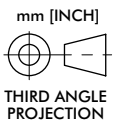
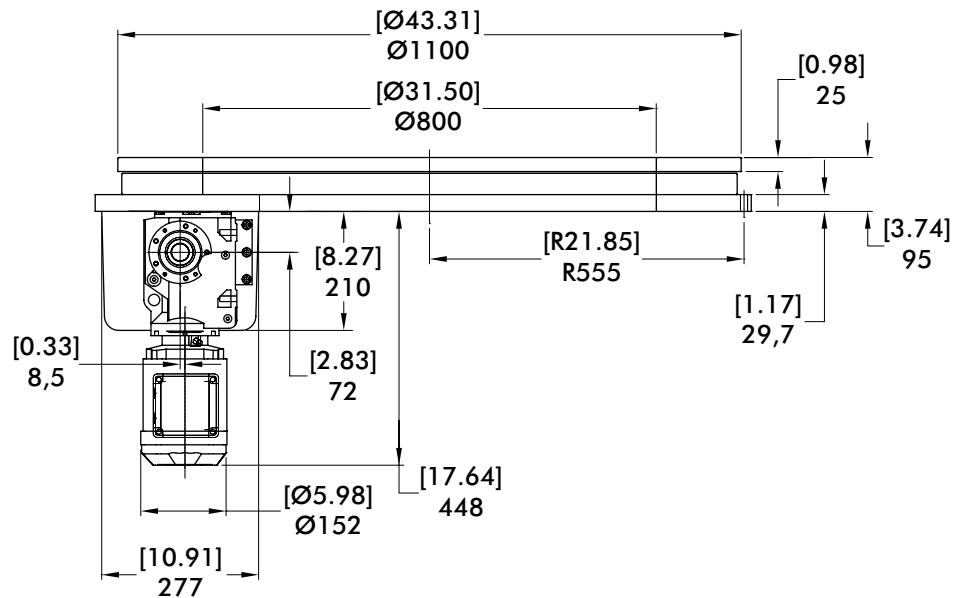
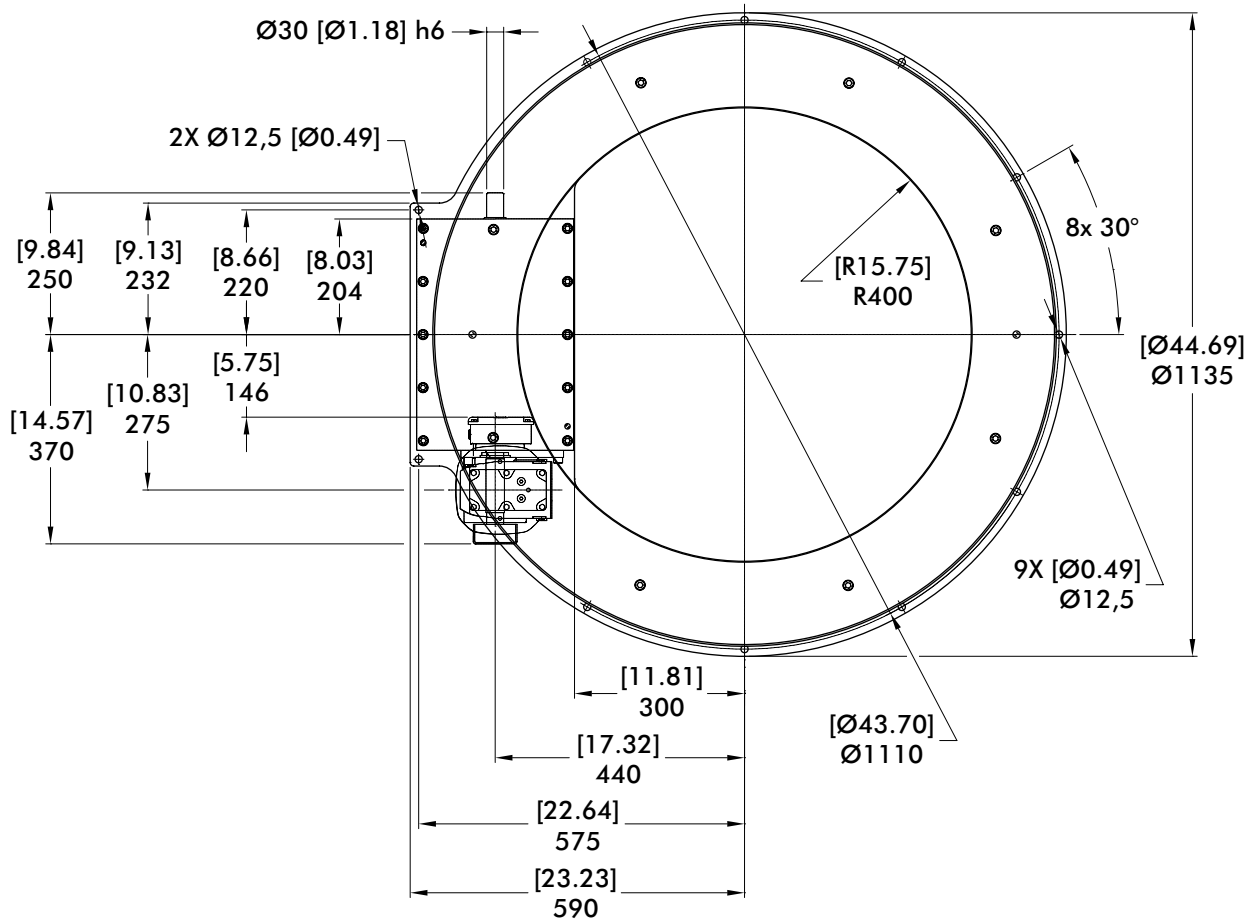
Repeatability ±15 arcsec / ±0,012 mm [±.0005 in] at 324 mm [12.75 in] Radius

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)

1100RNG SERIES

Ring Drive Dial Indexer | Dimensions



| Maximum Inertia x 1000 kg-cm ² [lb-in ²] for standard package | | | | | | | |
|--|-----------------------|-------------|--------------|--------------|--------------|--------------|---------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 0.915 | 1.359 | 1.521 | 1.791 | 2.072 | 2.217 | 2.557 |
| 6 | 164 [56] | 1106 [378] | 1454 [497] | 2119 [724] | 2923 [999] | 3386 [1157] | 4594 [1570] |
| 8 | 497 [170] | 2174 [743] | 2792 [954] | 3971 [1357] | 5405 [1847] | 6224 [2127] | 8372 [2861] |
| 12 | 1451 [496] | 5221 [1784] | 6614 [2260] | 9262 [3165] | 12490 [4268] | 14336 [4899] | 19168 [6550] |
| 16 | 2783 [951] | 9484 [3241] | 11963 [4088] | 16672 [5697] | 22407 [7657] | 25688 [8778] | 34280 [11714] |
| 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

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

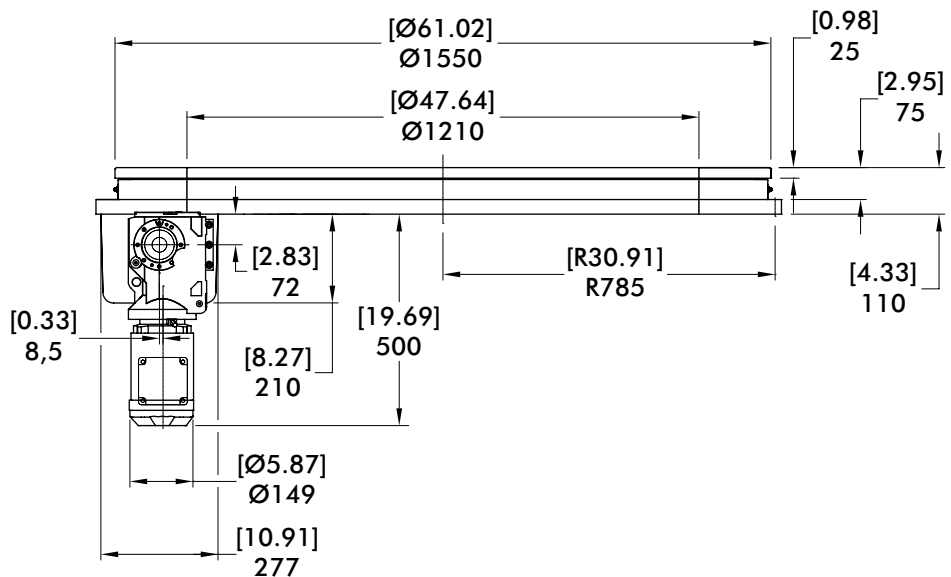
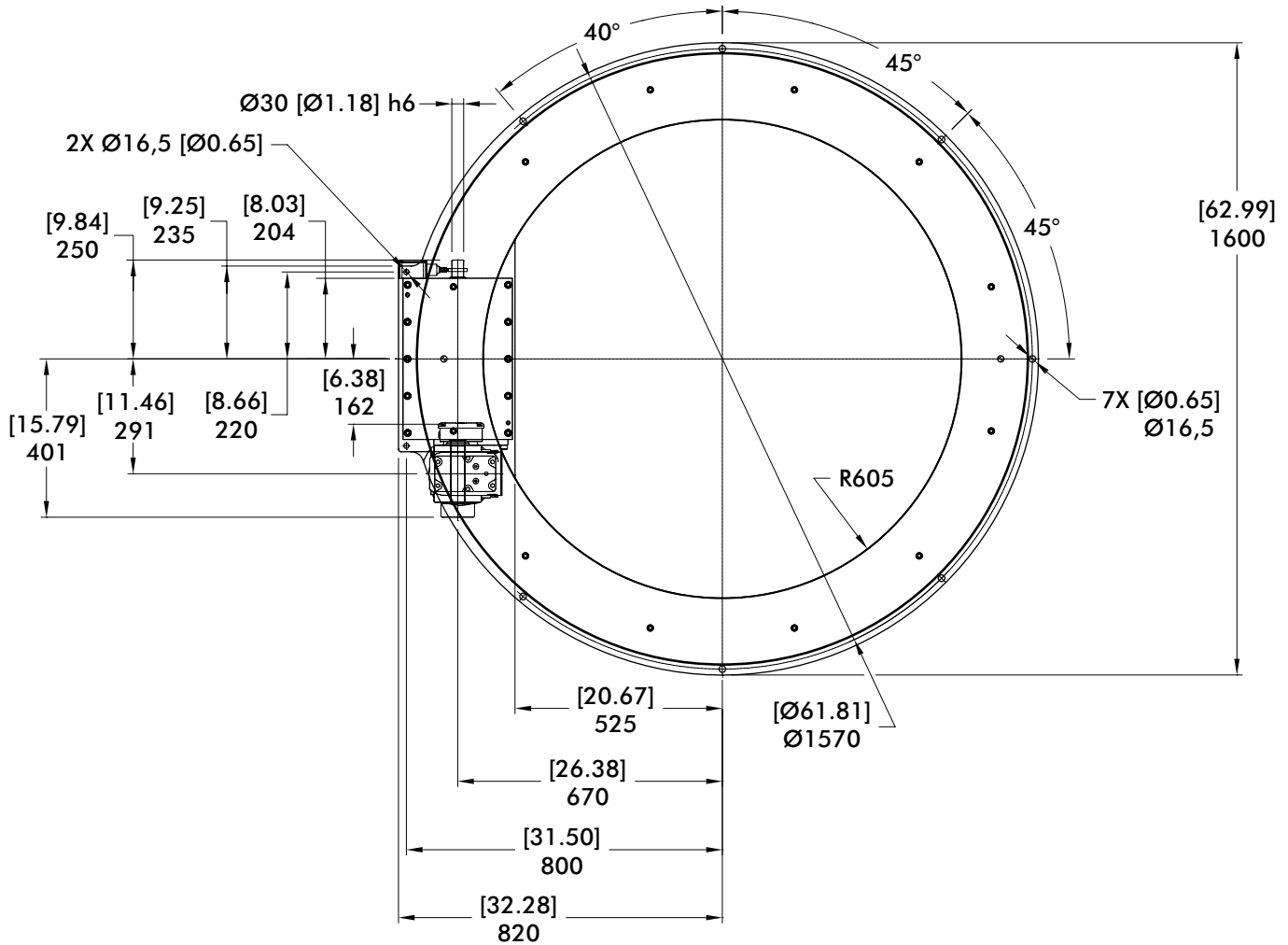
Repeatability ±9 arcsec / ±0,010 mm [±.0004 in] at 448 mm [17.65 in] Radius

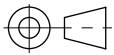
Optional Accessories

- 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)

1550RNG SERIES

Ring Drive Dial Indexer | Dimensions



mm [INCH]

 THIRD ANGLE
 PROJECTION

| Maximum Inertia x 1000 kg-cm ² [lb-in ²] for standard package | | | | | | | |
|--|-----------------------|--------------|---------------|---------------|---------------|---------------|---------------|
| Stops | Motion Time [seconds] | | | | | | |
| | 1.210 | 1.496 | 1.934 | 2.134 | 2.298 | 2.601 | 2.776 |
| 6 | 679 [232] | 2242 [766] | 5063 [1730] | 6380 [2180] | 7556 [2582] | 9964 [3405] | 11495 [3928] |
| 8 | 1984 [678] | 4764 [1628] | 9780 [3342] | 12121 [4142] | 14214 [4857] | 18495 [6320] | 21211 [7248] |
| 12 | 5718 [1954] | 11972 [4091] | 23253 [7946] | 28527 [9748] | 33232 [11356] | 42863 [14647] | 48979 [16737] |
| 16 | 10954 [3743] | 22071 [7542] | 42125 [14395] | 51499 [17598] | 59868 [20458] | 76985 [26307] | 87859 [30023] |
| 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

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

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)

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

OVERLOAD CLUTCHES

Features | Table of Contents



Features:

CAMCO Output Overload Clutches are designed to protect your indexing equipment from costly downtime due to overload or jam conditions by quickly disengaging the drive system.

Easily Mounted to CAMCO index drives

Single Position reset to maintain accuracy and machine timing

Precision hardened and ground plungers and drive plate

Overload Detector plate provides actuation for overload detector switch

Variety of Models for all applications

Standard & custom torque settings

Table of Contents

| | |
|----------------|----|
| Overview | 3 |
| D | 5 |
| F | 6 |
| S | 7 |
| F | 8 |
| C | 9 |
| S-SD | 10 |
| FC-SD | 11 |
| C-SD | 12 |

OVERLOAD CLUTCHES

Mounting Overview

CAMCO Output Overload Clutches quickly disengage the drive system in overload or jam conditions, protecting indexers from costly downtime. A variety of models are available in standard and custom torque settings. An overload detector plate provides actuation for the overload detector switch, and the clutch's single-position reset function maintains accuracy and machine timing.

- Standard and custom torque settings
- Single-position reset maintains timing, accuracy
- Range of models for all applications
- Rigid, backlash-free design

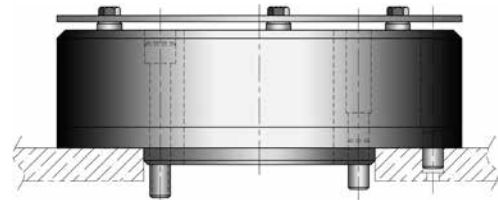


| Indexer Type | Clutch Type |
|--|---|
| RDM RD | D (Flange Mounted Body) |
| | F (Flange to Flange) |
| Roller Gear (RGS / RGD) Parallel (P) Right Angle (RA) | FC (Flange to Shaft) |
| | FC-SD (Flange to Shaft, Shrink-Disk) |
| | S (Shaft to Flange) |
| | S-SD (Shaft to Flange, Shrink-Disk) |
| | C (Shaft to Shaft Mounting) |
| | C-SD (Shaft to Shaft, Shrink-Disk) |

CAMCO Output Overload Clutches

D Clutch: Flange-Mounted Body

For CAMCO Index Drives with large dial mounting surfaces. The dial plate rests directly on the index drive output flange, providing stability and accuracy.



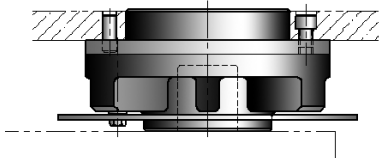
CAMCO Output Overload Clutches

F Clutch: Flange-Mounted Body

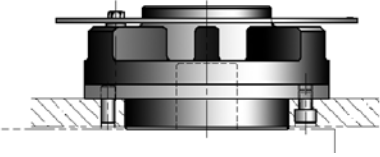
F clutches are designed to mount a dial/sprocket/flanged component to a shaft output CAMCO index drive. These clutches will flange mount to the output shaft, providing a rigid, compact, and accurate connection with the driven member.

F clutches may be mounted in two positions, "A" (right, top) or "B" (right, bottom). Mounting "B" provides greater rigidity and overhung loading and should be used whenever high loads are exerted on driven members.

A Mounting



B Mounting



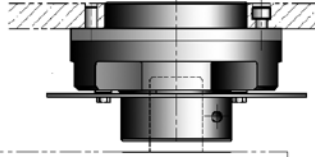
S & S-SD Clutch: Shaft to Flange

S clutches are designed to mount on CAMCO index drives without output flanges. The combination of key and clamped hub design provides a rigid and backlash-free connection.

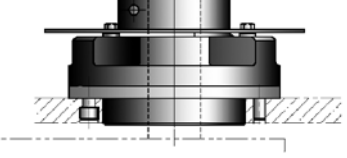
S clutches may be mounted two positions, "A" or "B." Mounting "B" provides greater rigidity and overhung loading and should be used whenever high loads are exerted on driven members.

The S-SD clutch employs a shrink disk to connect to the shaft.

A Mounting

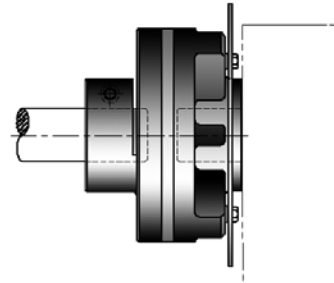


B Mounting



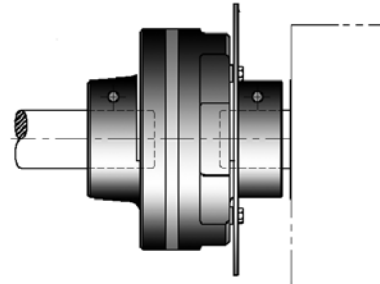
FC & FC-SD Clutch: Flange to Shaft

FC clutches are designed to mount on CAMCO index drives with flanged output shafts. These clutches will flange mount to the output shaft, providing a rigid, compact and accurate connection. The FC-SD clutch employs a shrink disk to connect to the shaft.



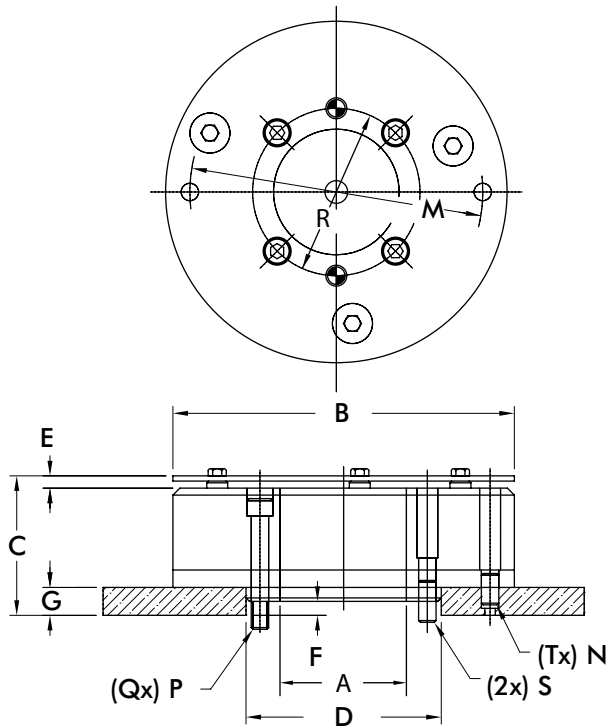
C Clutch: Shaft to Shaft

C clutches are designed to mount on CAMCO index drives without output flanges. These clutches are used whenever a positive connection is required between two shafts. The C-SD clutch employs shrink disks at both ends to connect to the shafts.



D TYPE FLANGE-MOUNTED BODY

Overload Clutches | Dimensions and Technical Information



"D" Type clutches are designed to mount on CAMCO Index Drives with large dial mounting surfaces. The dial plate rests directly on the index drive output flange, providing stability and accuracy.

D Type Dimensions

| Model | A | B | C | D | E | F | G | M | N | P | Q | R | S | T |
|-----------------|------|-------|------|--------|--------|-------|-------|--------|-------|---------|---|-------|----------|---|
| 2.8D | 1.00 | 5.12 | 2.50 | 2.500 | 0.22 | 0.250 | 0.500 | 4.250 | 0.312 | .312-18 | 4 | 2.00 | 0.31 | 2 |
| 4.0D | 2.25 | 6.12 | 2.50 | 3.500 | 0.22 | 0.250 | 0.500 | 5.250 | 0.312 | .312-18 | 4 | 3.00 | 0.31 | 2 |
| 7.8D | 3.41 | 8.50 | 2.88 | 5.000 | 0.25 | 0.188 | 0.750 | 6.750 | 0.500 | .500-20 | 4 | 4.25 | 0.50 | 2 |
| 18D | 2.62 | 10.25 | 4.53 | 5.000 | 0.31 | 0.188 | 1.000 | 8.250 | 0.625 | .500-20 | 4 | 4.25 | 0.50 | 2 |
| 31D | 5.25 | 14.50 | 4.03 | 9.000 | 0.34 | - | 1.000 | 11.750 | 0.750 | .500-20 | 6 | 8.25 | 0.50 | 4 |
| 32D | 5.25 | 14.50 | 4.03 | 9.000 | 0.34 | - | 1.000 | 11.750 | 0.750 | .500-13 | 6 | 8.25 | 0.50 | 4 |
| 33D (mm) | 133 | 368 | 102 | 228.6 | 8.4*** | - | 25 | 298.5 | 20 | M12 | 6 | 210 | 12 | 4 |
| 61D | 7.25 | 18.38 | 5.40 | 11.000 | 0.34 | - | 1.250 | 16.000 | 0.750 | .625-11 | 8 | 10.00 | .625 (4) | 4 |

* Dimension increases .06 during overload

** Dimension increases .09 during overload

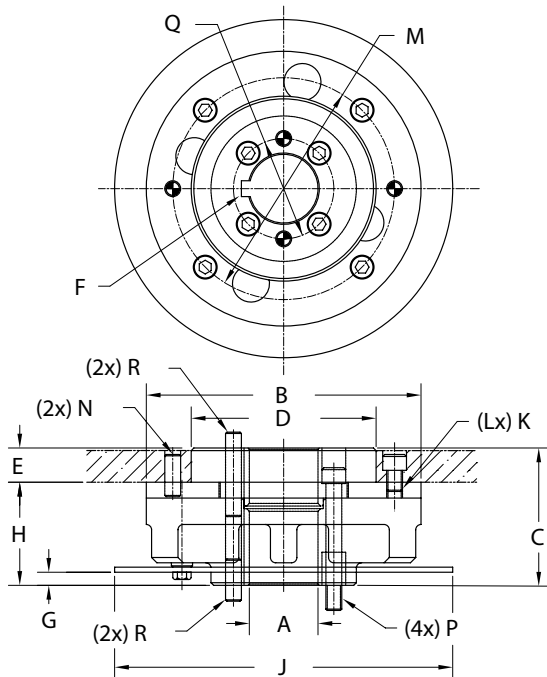
*** Dimension increases .12 during overload

D Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|-------------|------------------|---|----------------------|
| 2.8D | 29 | 400 480 700 850 1100 1300 1800 2200 3100 | 425RD |
| 4.0D | 69 | 420 620 750 1150 1750 2950 4000 | 601RDM |
| 7.8D | 266 | 1400 1700 2600 3200 4200 5000 7200 10000 | 902RDM 663RAD 900RAD |
| 18D | 743 | 5000 7000 7800 10,000 13000 15000 20000 25000 | 900RAD |
| 31D | 2910 | 8500 13000 20000 31000 | 1200RAD |
| 32D | 2910 | 8500 13000 20000 31000 | 1305RDM |
| 33D | 2910 | 8500 13000 20000 25500 | 1100RDM |
| 61D | 4900 | 23000 36000 44000 50000 60000 | 1800RDM |

F TYPE SHAFT TO FLANGE MOUNTING

Overload Clutches | Dimensions and Technical Information



IMC "F" type clutches are designed to mount on IMC index drives. These clutches will flange mount to the output shaft, providing a rigid, compact, and accurate connection with the driven member.

F Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R |
|-------|--------|-------|------|-------|------|--------|--------|------|------|---------|---|-------|-------|---------|------|------|
| .39F | 0.625 | 3.38 | 2.19 | 2.375 | 0.41 | 0.1875 | .22† | 1.78 | 4.75 | 10-32 | 4 | 2.875 | 0.25 | 10-32 | 1.25 | 0.25 |
| 2.3F | 1.000* | 5.12 | 2.78 | 3.5 | 0.56 | 0.25 | .22† | 2.22 | 6.5 | 5/16-24 | 4 | 4.25 | 0.312 | 5/16-24 | 2 | 0.31 |
| 6.0F | 1.625 | 6.5 | 3.25 | 4.375 | 0.81 | 0.375 | .31†† | 2.44 | 8 | 3/8-24 | 4 | 5.25 | 0.375 | 3/8-24 | 2.38 | 0.38 |
| 11F | 2 | 8.5 | 3.72 | 5.75 | 0.81 | 0.5 | .38†† | 2.91 | 10 | 3/8-24 | 4 | 6.75 | 0.5 | 3/8-24 | 3.25 | 0.5 |
| 25F | 2.75 | 10.25 | 4.97 | 7.125 | 1.06 | 0.625 | .38††† | 3.91 | 12 | 1/2-13 | 6 | 8.25 | 0.625 | 1/2-20 | 4.25 | 0.63 |

* Also 1.250

† Dimension decreases .06 during overload
 †† Dimension decreases .09 during overload
 ††† Dimension decreases .12 during overload
 †††† Dimension decreases 1.5 mm during overload

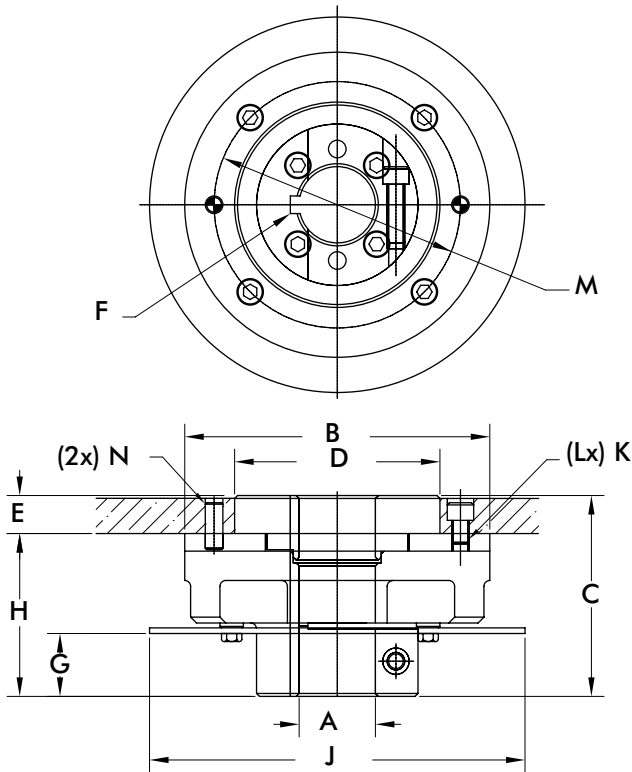
F Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|-------|------------------|--|--------------------------|
| .39F | 5 | 160 210 270 320 390 | 250P |
| 2.3F | 32 | 400 600 700 850 1000 1300 1800 2000 230 | 387P 350RGS/RGD 400RA |
| 6.0F | 87 | 670 825 1100 1400 1700 2000 2300 2 500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11F | 340 | 2300 4000 6000 8500 11000 | 662P 662RA |
| 25F | 842 | 5000 7000 10000 13000 15000 20000 25000 | 900P |

S TYPE SHAFT TO FLANGE MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information

IMC "S" type clutches are designed to mount on CAMCO index drives without output flanges. The combination of key and clamped hub design provides a rigid and backlash-free connection.



S Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | K | L | M | N |
|-------|----------|-------|------|-------|------|-------|---------|------|-------|---------|---|------|-------|
| .39S | 0.6250 | 3.38 | 2.63 | 2.375 | 0.40 | 0.187 | .66† | 2.22 | 4.75 | 10-32 | 4 | 2.88 | 0.250 |
| 2.3S | 1.0000** | 5.12 | 3.31 | 3.500 | 0.56 | 0.250 | .75† | 2.75 | 6.50 | 5/16-24 | 4 | 4.25 | 0.312 |
| 6.0S | 1.6250 | 6.50 | 4.28 | 4.375 | 0.81 | 0.375 | 1.34†† | 3.47 | 8.00 | 3/8-24 | 4 | 5.25 | 0.375 |
| 11S | 2.0000 | 8.50 | 5.00 | 5.750 | 0.81 | 0.500 | 1.69†† | 4.19 | 10.00 | 3/8-24 | 4 | 6.75 | 0.500 |
| 25S | 2.5000 | 10.25 | 6.25 | 7.125 | 1.06 | 0.625 | 1.66††† | 5.19 | 12.00 | 1/2-13 | 6 | 8.25 | 0.625 |

* Dimensions in millimeters

** Also 1.2500

† Dimension decreases .06 during overload

†† Dimension decreases .09 during overload

††† Dimension decreases .12 during overload

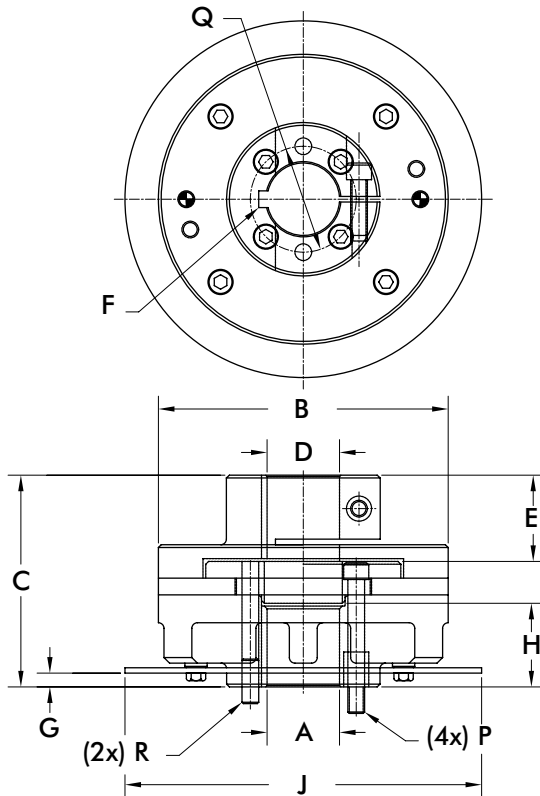
†††† Dimension decreases 1.5 mm during overload

S Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|-------|------------------|---|-----------------------|
| .39S | 5 | 160 210 270 320 390 | 250P |
| 2.3S | 31 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0S | 83 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11S | 320 | 2300 4000 6000 8500 11000 | 500RGD/RGS 662RA 662P |
| 25S | 803 | 5000 7000 10000 13000 15000 20000 25000 | 700RGS |

FC TYPE FLANGE TO SHAFT MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information



"FC" type clutches are designed to mount on CAMCO index drives. These clutches will flange mount to the output shaft, providing a rigid, compact and accurate connection.

FC Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | P | Q | R |
|-------|----------|------|------|-------|------|-------|-------|------|-------|---------|------|------|
| .39FC | 0.6250 | 3.38 | 3.03 | 0.625 | 1.06 | 0.187 | .22† | 1.41 | 4.75 | 10-32 | 1.25 | 0.25 |
| 2.3FC | 1.0000** | 5.12 | 3.81 | 1.000 | 1.28 | 0.250 | .22† | 1.75 | 6.50 | 5/16-24 | 2.00 | 0.31 |
| 6.0FC | 1.6250 | 6.50 | 4.75 | 1.625 | 1.94 | 0.375 | .31†† | 1.88 | 8.00 | 3/8-24 | 2.38 | 0.38 |
| 11FC | 2.0000 | 8.50 | 5.72 | 2.000 | 2.38 | 0.500 | .38†† | 2.25 | 10.00 | 3/8-24 | 3.25 | 0.38 |

* Dimensions in millimeters

** Also 1.2500

† Dimension decreases .06 during overload

†† Dimension decreases .09 during overload

††† Dimension decreases .12 during overload

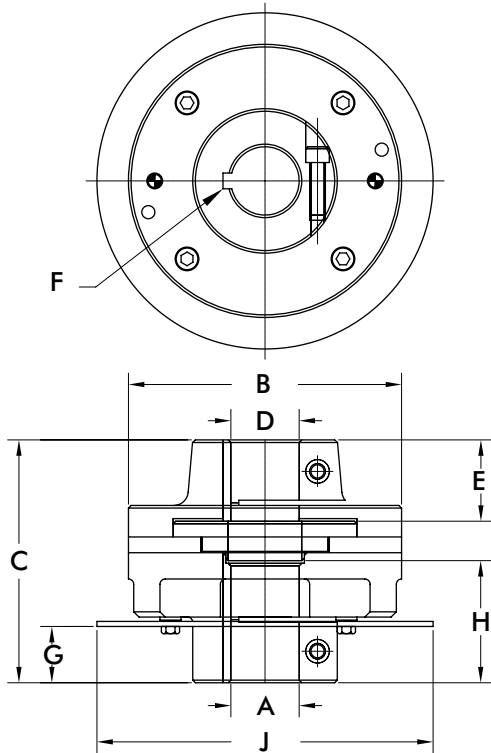
†††† Dimension decreases 1.5 mm during overload

FC Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|-------|------------------|---|-----------------------|
| .39FC | 7 | 160 210 270 320 390 | 250P |
| 2.3FC | 43 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0FC | 118 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11FC | 456 | 2300 4000 6000 8500 11000 | 662P 662RA |

C TYPE SHAFT TO SHAFT MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information



"C" type clutches are designed to mount on CAMCO index drives without output flanges. These clutches are used whenever a positive connection is required between two shafts.

C Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | P | Q | R |
|-------|----------|------|------|-------|------|-------|-------|------|-------|---------|------|------|
| .39C | 0.6250 | 3.38 | 3.03 | 0.625 | 1.06 | 0.187 | .22† | 1.41 | 4.75 | 10-32 | 1.25 | 0.25 |
| 2.3C | 1.0000** | 5.12 | 3.81 | 1.000 | 1.28 | 0.250 | .22† | 1.75 | 6.50 | 5/16-24 | 2.00 | 0.31 |
| 6.0C | 1.6250 | 6.50 | 4.75 | 1.625 | 1.94 | 0.375 | .31†† | 1.88 | 8.00 | 3/8-24 | 2.38 | 0.38 |
| 11C | 2.0000 | 8.50 | 5.72 | 2.000 | 2.38 | 0.500 | .38†† | 2.25 | 10.00 | 3/8-24 | 3.25 | 0.38 |

* Dimensions in millimeters
 ** Also 1.2500

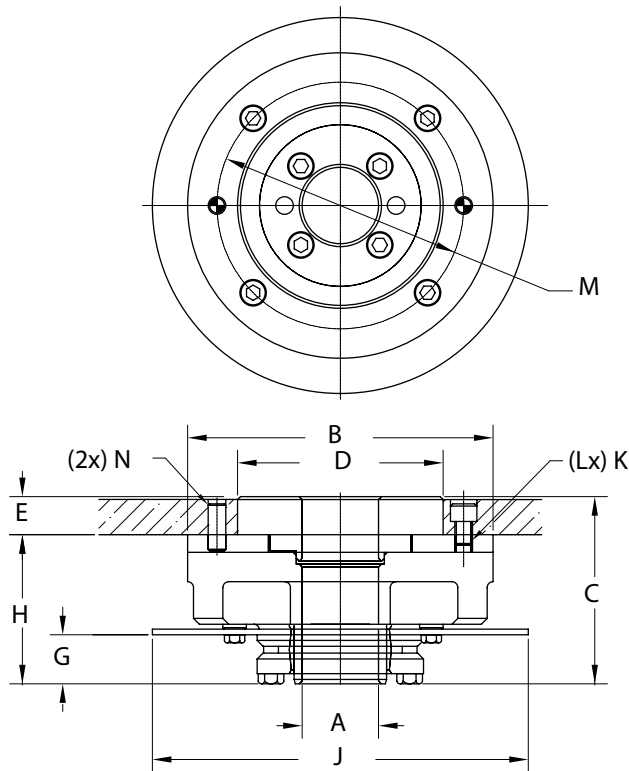
† Dimension decreases .06 during overload
 †† Dimension decreases .09 during overload
 ††† Dimension decreases .12 during overload
 †††† Dimension decreases 1.5 mm during overload

C Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|-------|------------------|---|-----------------------|
| .39C | 7 | 160 210 270 320 390 | 250P |
| 2.3C | 44 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0C | 122 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11C | 476 | 2300 4000 6000 8500 11000 | 500RGD/RGS 662P |

S-SD TYPE SHAFT TO FLANGE, SHRINK-DISK MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information



“S-SD” type clutches are designed to mount on CAMCO index drives without output flanges. The shrink disk design converts clamp loads from multiple high strength locking screws to radial gripping force through the use of circular wedges, providing the highest capacity mechanical interference connection available.

S-SD Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | K | L | N |
|--------|--------|------|------|-------|------|--------|------|-------|---------|---|------|-------|
| .39-SD | 0.6250 | 3.38 | 2.62 | 2.375 | 0.40 | .66† | 2.22 | 4.75 | 10-32 | 4 | 2.88 | 0.250 |
| 2.3-SD | 1.0000 | 5.12 | 3.31 | 3.500 | 0.56 | .75† | 2.75 | 6.50 | 5/16-24 | 4 | 4.25 | 0.312 |
| 6.0-SD | 1.6250 | 6.50 | 3.98 | 4.375 | 0.81 | 1.04†† | 3.17 | 8.00 | 3/8-24 | 4 | 5.25 | 0.375 |
| 11-SD | 2.0000 | 8.50 | 4.38 | 5.750 | 0.82 | 1.06†† | 3.56 | 10.00 | 3/8-24 | 4 | 6.75 | 0.500 |

* Dimensions in millimeters

† Dimension decreases .06 during overload

†† Dimension decreases .09 during overload

††† Dimension decreases .12 during overload

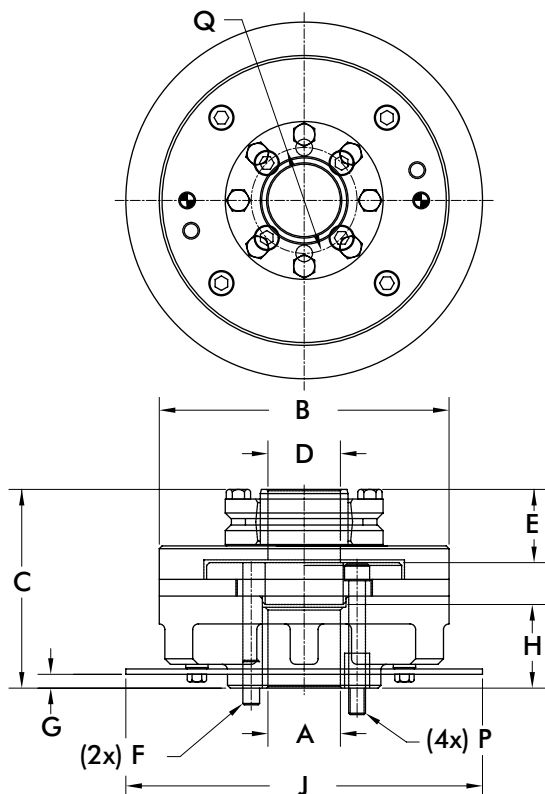
†††† Dimension decreases 1.5 mm during overload

S-SD Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|--------|------------------|---|-----------------------|
| .39-SD | 5 | 160 210 270 320 390 | 250P |
| 2.3-SD | 32 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0-SD | 87 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11-SD | 340 | 2300 4000 6000 8500 11000 | 500RGD/RGS 662P |

FC-SD TYPE FLANGE TO SHAFT, SHRINK-DISK MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information



“FC-SD” type clutches are designed to mount on CAMCO index drives with output flanges. The shrink disk design converts clamp loads from multiple high strength locking screws to radial gripping force through the use of circular wedges, providing the highest capacity mechanical interference connection available.

FC-SD Type Dimensions

| Model | A | B | C | D | E | F | G | H | J | P | Q |
|----------|--------|------|------|-------|------|------|-------|------|-------|---------|------|
| .39FC-SD | 0.6250 | 3.38 | 3.00 | 0.625 | 1.03 | 0.25 | .22† | 1.41 | 4.75 | 10-32 | 1.25 |
| 2.3FC-SD | 1.0000 | 5.12 | 3.81 | 1.000 | 1.27 | 0.31 | .22† | 1.75 | 6.50 | 5/16-24 | 2.00 |
| 6.0FC-SD | 1.6250 | 6.50 | 4.46 | 1.625 | 1.64 | 0.38 | .31†† | 1.88 | 8.00 | 3/8-24 | 2.38 |
| 11FC-SD | 2.0000 | 8.50 | 5.06 | 2.000 | 1.75 | 0.38 | .38†† | 2.25 | 10.00 | 3/8-24 | 3.25 |

* Dimensions in millimeters

† Dimension decreases .06 during overload

†† Dimension decreases .09 during overload

††† Dimension decreases .12 during overload

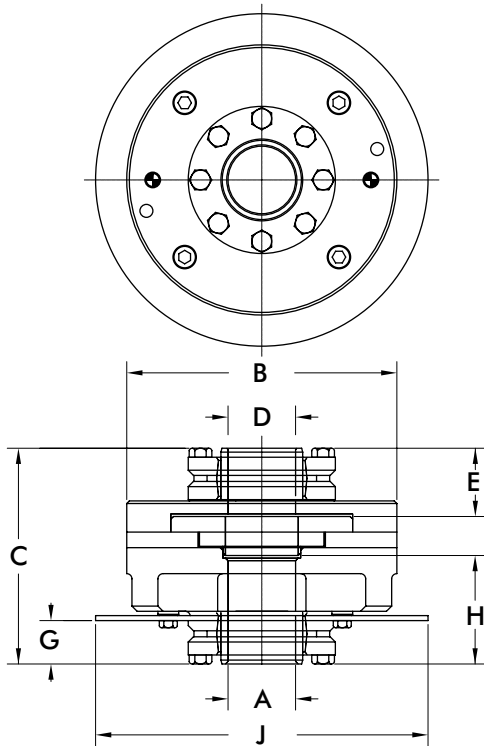
†††† Dimension decreases 1.5 mm during overload

FC-SD Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|----------|------------------|---|-----------------------|
| .39FC-SD | 7 | 160 210 270 320 390 | 250P |
| 2.3FC-SD | 34 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0FC-SD | 118 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11FC-SD | 456 | 2300 4000 6000 8500 11000 | 500RGD/RGS 662P 662RA |

C-SD TYPE SHAFT TO SHAFT, SHRINK-DISK MOUNTING SERIES

Overload Clutches | Dimensions and Technical Information



“C-SD” type clutches are designed to mount on CAMCO index drives without output flanges. The shrink disk design converts clamp loads from multiple high strength locking screws to radial gripping force through the use of circular wedges, providing the highest capacity mechanical interference connection available.

C-SD Type Dimensions

| Model | A | B | C | D | E | G | H | J |
|----------------|--------|------|------|-------|------|--------|------|-------|
| .39C-SD | 0.6250 | 3.38 | 3.44 | 0.625 | 1.03 | .66† | 1.84 | 4.75 |
| 2.3C-SD | 1.0000 | 5.12 | 4.34 | 1.000 | 1.28 | .75† | 2.28 | 6.50 |
| 6.0C-SD | 1.6250 | 6.50 | 5.19 | 1.625 | 1.64 | 1.04†† | 2.61 | 8.00 |
| 11C-SD | 2.0000 | 8.50 | 5.75 | 2.000 | 1.75 | 1.06†† | 2.93 | 10.00 |

* Dimensions in millimeters

† Dimension decreases .06 during overload

†† Dimension decreases .09 during overload

††† Dimension decreases .12 during overload

†††† Dimension decreases 1.5 mm during overload

C-SD Type Specifications

| Model | Internal Inertia | Torque Setting | Index Drive |
|----------------|------------------|---|-----------------------|
| .39C-SD | 7 | 160 210 270 320 390 | 250P |
| 2.3C-SD | 44 | 400 600 700 850 1000 1300 1800 2000 2300 | 387P 350RGS/RGD 400RA |
| 6.0C-SD | 122 | 670 825 1100 1400 1700 2000 2300 2500 3000 3800 4000 5000 6000 | 512P 512RA |
| 11C-SD | 476 | 2300 4000 6000 8500 11000 | 500RGD/RGS 662P 662RA |

CUSTOM CAMS

Product Overview








CAMCO Custom Cams serve as an economical alternative to “in house” cam design, engineering and manufacturing. Backed by over 100 years of experience, we offer cams in a comprehensive range of configurations, tolerances and materials.

Our designers employ the most advanced computer technology available for detailed kinematic studies and dynamic analysis. In addition to common dimensional inspection, we perform computerized contour measurements with sophisticated, unique inspection equipment in both 2D and 3D.

Our commitment to applied engineering allows us to respond quickly to complicated manufacturing issues with specialized solutions that are precise, economical and engineered to your exacting specifications. Alternative materials, milling, and grinding techniques are explored to provide the best solution for your application at the most economical price.

To assist in your in-house cam design, you can download Clyde H. Moon’s “Cam Design Manual for Engineers, Designers, and Draftsman” from the DESTACO website, www.destaco.com.

Custom Cams are available in a variety of styles:

| | |
|--|--|
| <p>Plate Cams Popular, economical design used in low speed applications.</p> |  |
| <p>Globoidal Cams Complex, tapered rib globoidal cams, commonly known as roller gear cams, are the heart of IMC's indexers. Controlled follower preloads increase follower life, speeds and accuracy for the ultimate solution in motion control.</p> |  |
| <p>Face-Grooved Cams Medium speed cams using a groove slightly larger than the follower diameter providing minimal running clearance and reduced backlash.</p> |  |
| <p>Conjugate Cams Dual cams controlling preloaded followers which provide higher speed capabilities and better accuracy.</p> |  |
| <p>Barrel Cams Cylindrical cams which can be provided as an end cam, grooved type with minimal follower clearance or as a ribbed type utilizing preloaded followers for increased life and accuracy.</p> |  |

RITE-LINK SERIES

Features and Benefits

Right Sized Conveying

The **CAMCO Rite-Link Conveyor** is a thin-profile, preassembled, precision link system offering maintenance free accuracy and durability for industrial conveying applications.

Precision positioning requiring higher precision or speed than roller chain can provide

Material conveying (industrial or medical): for example, narrow cleat or bucket conveyor for constant speed applications. The conveyor can be mounted for either over/under or carousel operation

Features:

Assembly

- Fully designed, assembled and tested for your application
- Can be used in an over/under or carousel configuration

Size

- Slim, compact design with narrow links accommodates oversized tooling
- Easy to integrate
- Servo-friendly for flexible indexing with CAMCO RSD rotary servo drive

Accuracy

- Precision motion from the trusted industry leader
- More accurate and stable than roller chain

Operation

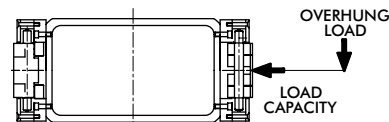
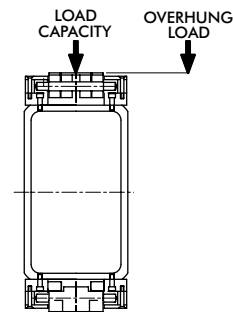
- High operation speeds
- No lubrication needed
- Energy efficient
- Cost Effective

NEW



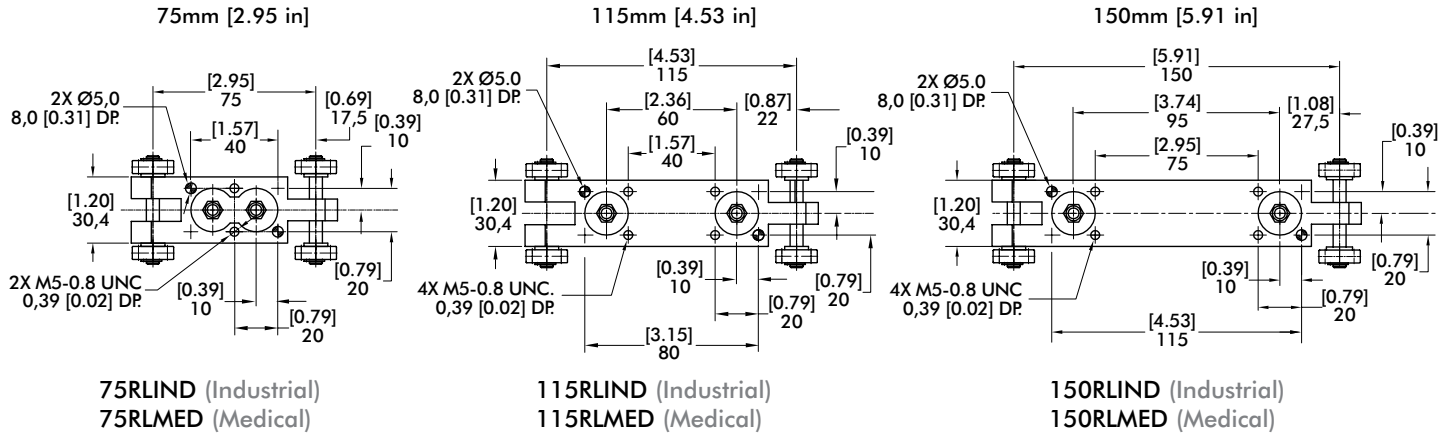
| Maximum Load | Units | 75RL... | 115RL... | 150RL... |
|----------------------------|-------------|---------|----------|----------|
| Max Load per Link | kg [lbm] | | 4 [8.82] | |
| Max Overhung Load per Link | N-m [in-lb] | | 0,57 [5] | |

* shipping/clearance dimensions

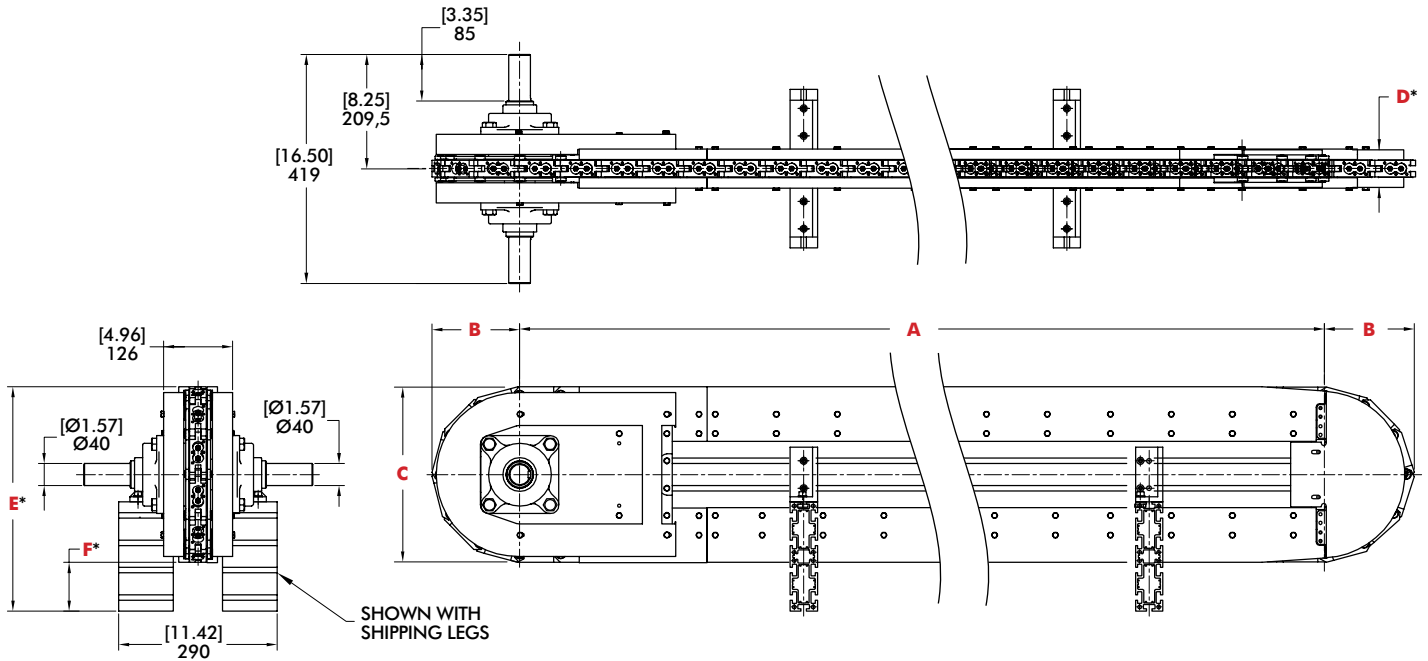


RITE-LINK SERIES

Link Dimensions



Standard Centers Dimensions



Technical Information

| Dimensions | Units | 75RL... | 115RL... | 150RL... |
|------------------------------------|---------|--------------|---------------|--------------|
| A Standard Center Distances | | | | |
| Option 1 | m [ft] | 1,2 [3.94] | 1,38 [4.53] | 1,2 [3.94] |
| Option 2 | | 2,1 [6.89] | 2,30 [7.55] | 2,1 [6.89] |
| Option 3 | | 3 [9.84] | 3,22 [10.56] | 3 [9.84] |
| Option 4 | | 3,9 [12.80] | 4,14 [13.58] | 3,9 [12.80] |
| Option 5 | | 4,8 [15.75] | 5,06 [16.60] | 4,8 [15.75] |
| B | mm [in] | 162,5 [6.40] | 166 [6.54] | 162,5 [6.40] |
| C | mm [in] | 320 [12.60] | 332 [13.07] | 332 [13.07] |
| D* | mm [in] | 78,1 [3.07] | 78,1 [3.07] | 78,1 [3.07] |
| E* | mm [in] | 411 [16.18] | 466,2 [18.35] | 416 [16.38] |
| F* | mm [in] | 89 [3.50] | 133,8 [5.27] | 84 [3.31] |

* shipping/clearance dimensions

PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



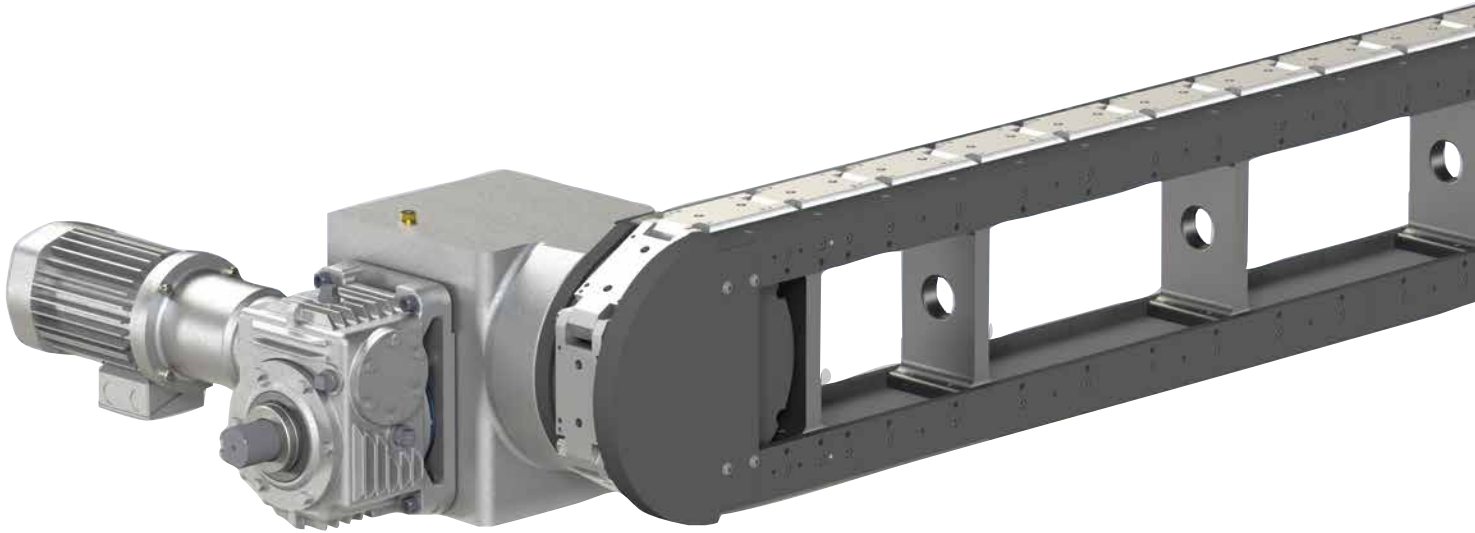
LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

TABLE-TOP MODULAR CONVEYORS

Features | How To Order



Features:

CAMCO Modular Table Top Precision Link Conveyors are ideal for linear transfer applications with features including:

Modular frame design in fixed increment lengths facilitates quick assembly and delivery.

Table-Top or Base mounted

Available in carousel or over-under style

Precision positioning of parts for assembly or manufacturing processes

High-speed station-to-station parts transfer

Precision links with roller bearing cam followers for smooth transfer and long life.

Link lengths of 3.0", 4.5", and 6.0" meet most application requirements

Open frame design for pass-through of belting, linkages, electric and air supply components.

Optional bases, line shafts & tooling plates

Complete with motorized index drive system including overload protection.

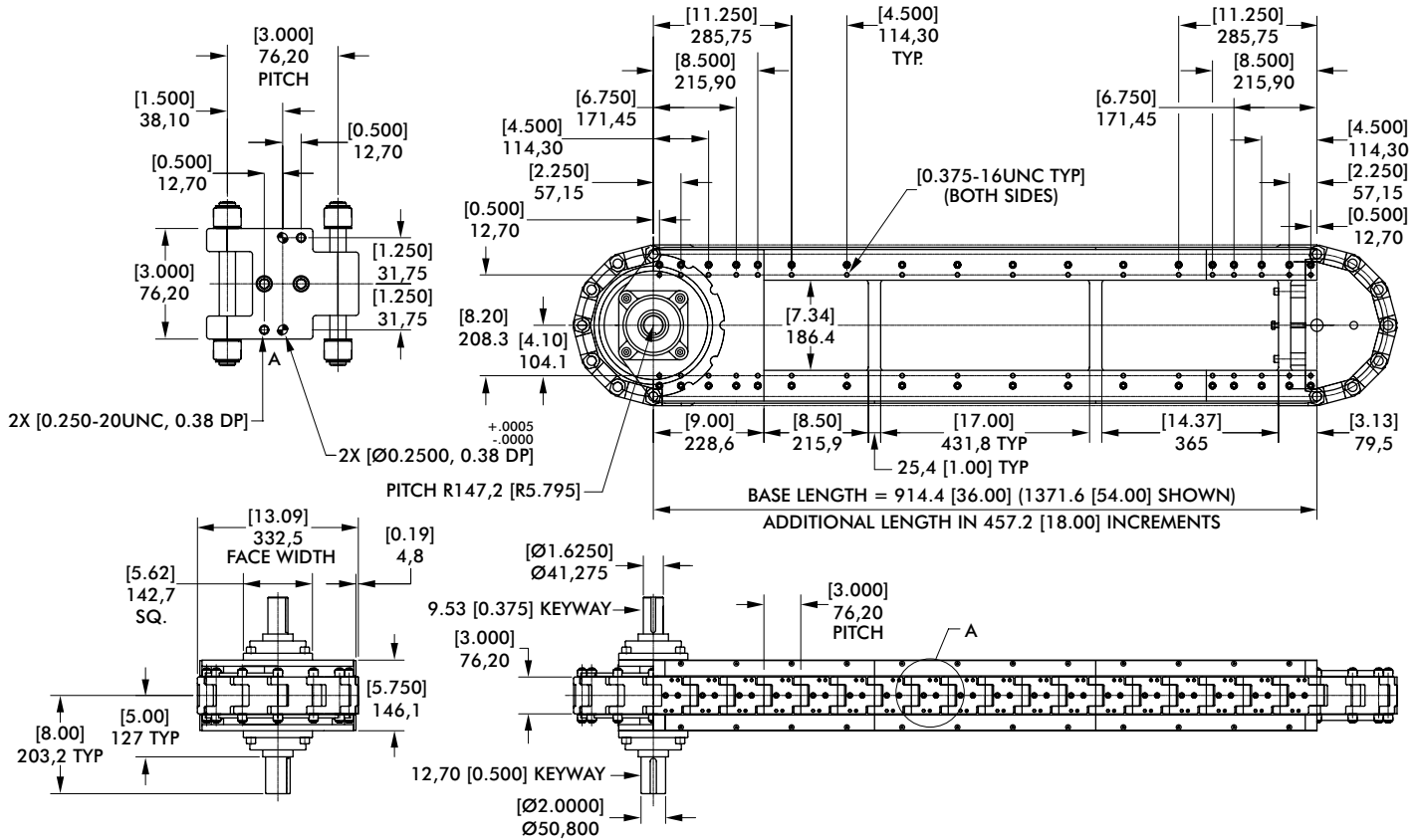
Table of Contents

| | |
|------------------------|---|
| 3.0 Inch | 3 |
| 4.5 Inch | 5 |
| 6.0 Inch | 7 |
| Conveyor Options | 9 |

3.0 INCH SERIES

Table-Top Modular Conveyors | Dimensions and Configurations

Modular Conveyor (module only)



Modular Conveyor (drive package)

Standard Drive Package

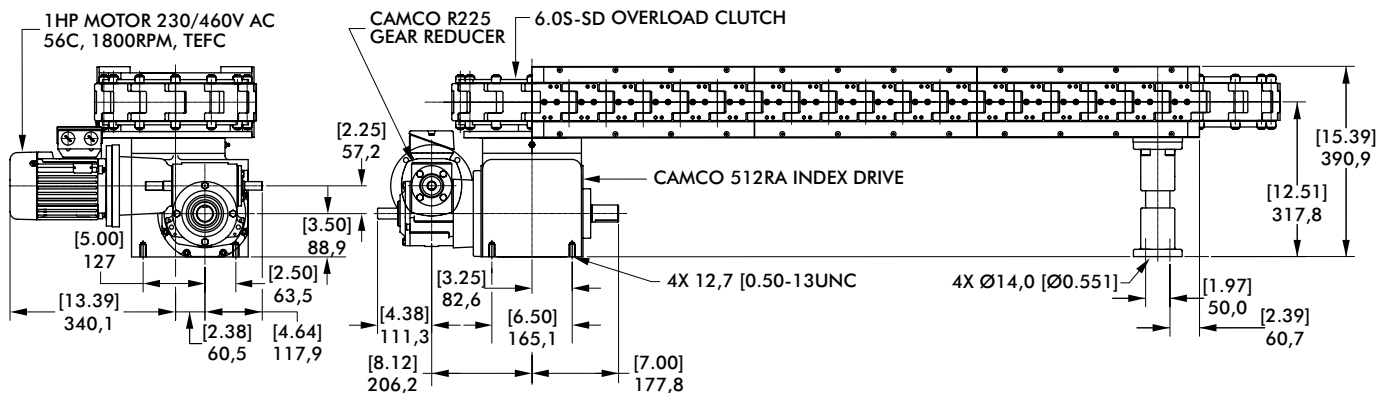
- 512RA Index Drive
- R225 Gear Reducer
- 6.0FC-SD Overload Clutch (Shaft Drive)
- 6.0S-SD Overload Clutch (Direct Drive)
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

Heavy-Duty Drive Package

- 662RA Index Drive
- 7300C Gear Reducer
- 11FC-SD Overload Clutch (Shaft Drive)
- 6.0-SD Overload Clutch (Direct Drive)
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

| Index Distance mm [in] | Indexer Stops |
|---------------------------|------------------|
| 76,2 [3.00] | 12 |
| 152,4 [6.00] | 6 |
| 228,6 [9.00] | 4 |
| 304,8 [12.00] | 3 |

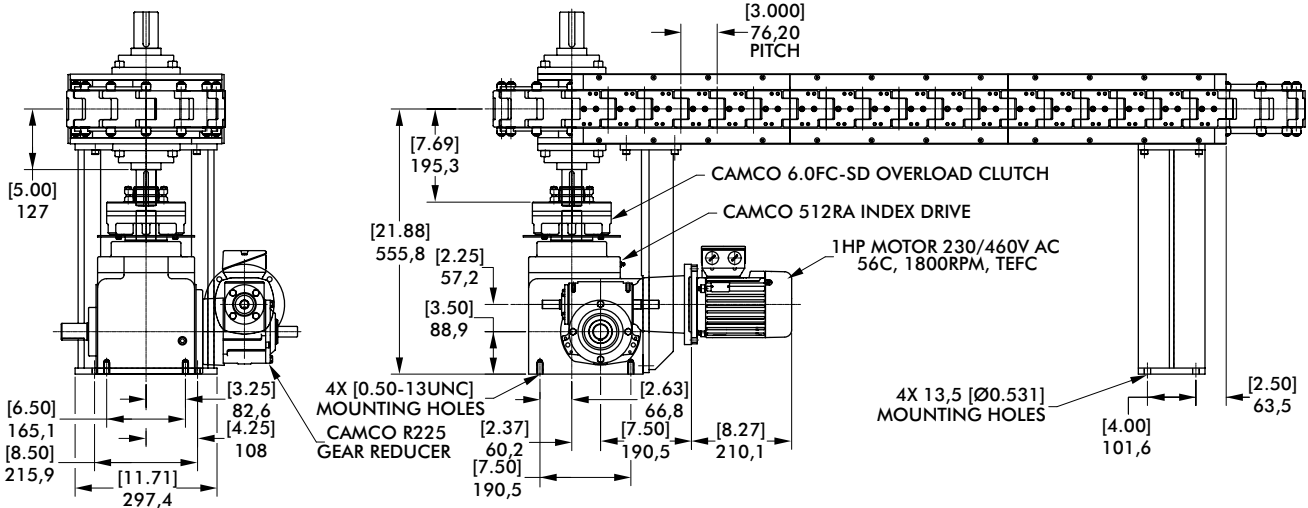
Direct Drive Carousel



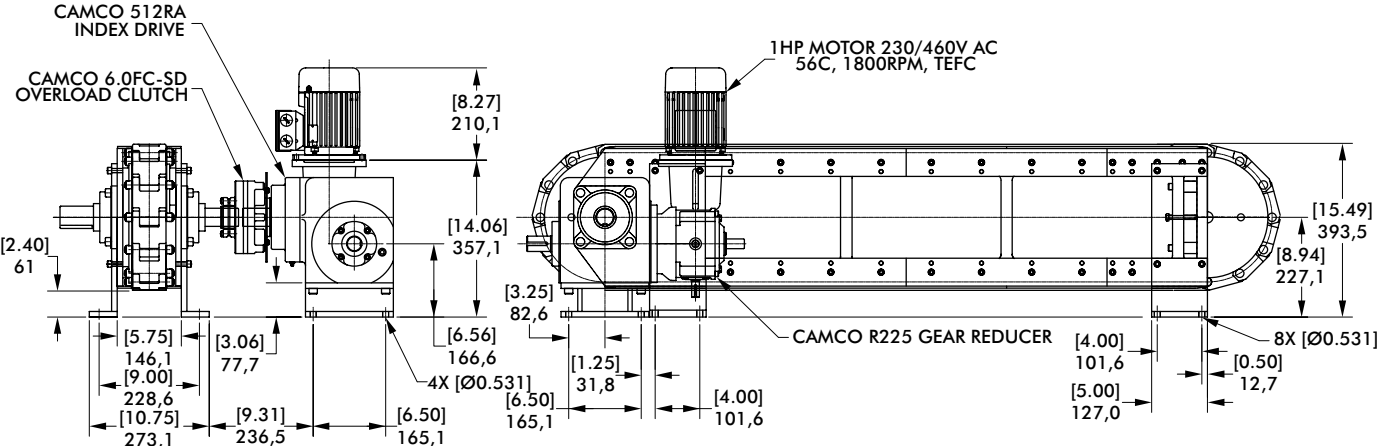
3.0 INCH SERIES

Table-Top Modular Conveyors | Configurations

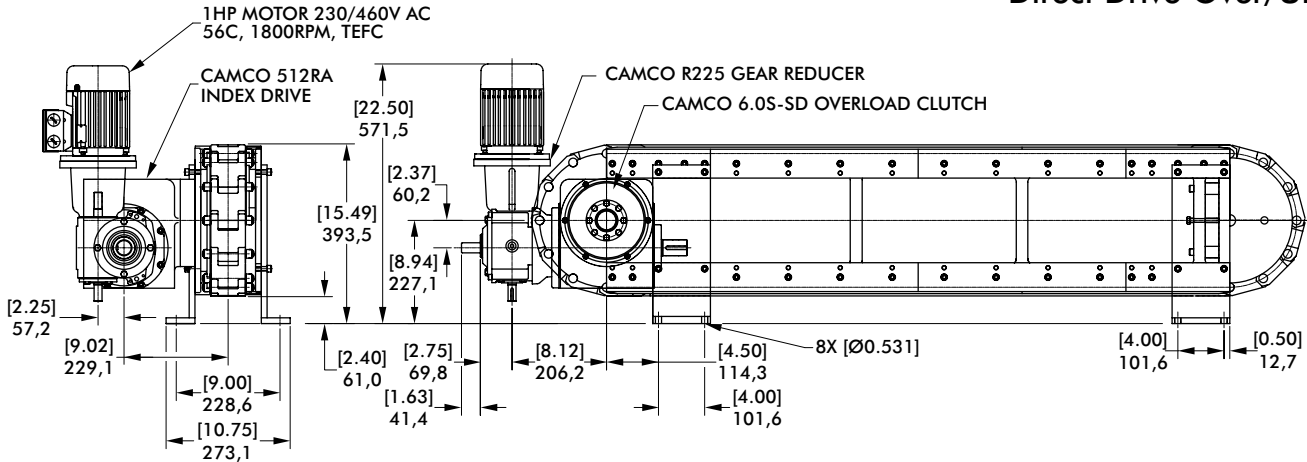
Shaft Drive Carousel



Shaft Drive Over/Under



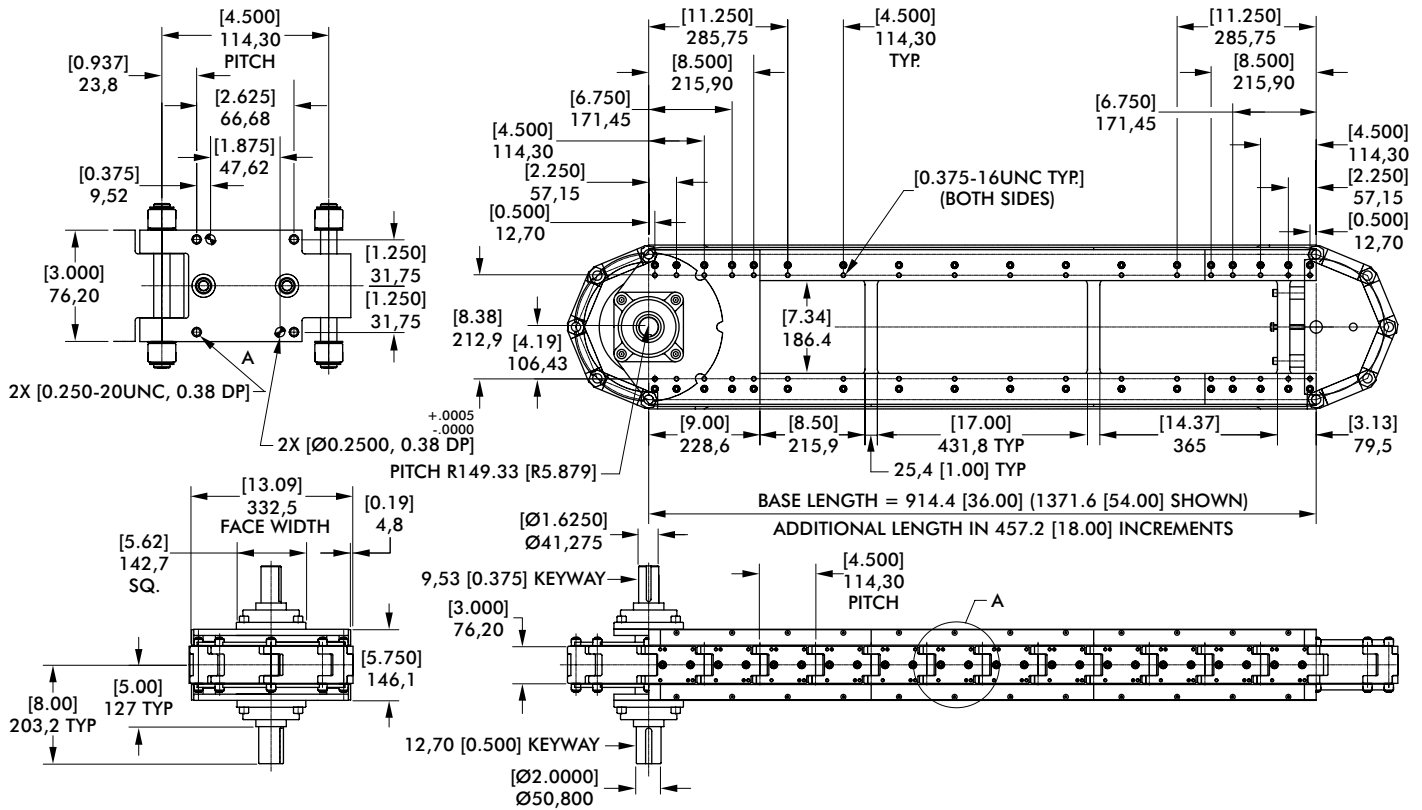
Direct Drive Over/Under



4.5 INCH SERIES

Table-Top Modular Conveyors | Dimensions and Configurations

Modular Conveyor (module only)



Modular Conveyor (drive package)

Standard Drive Package

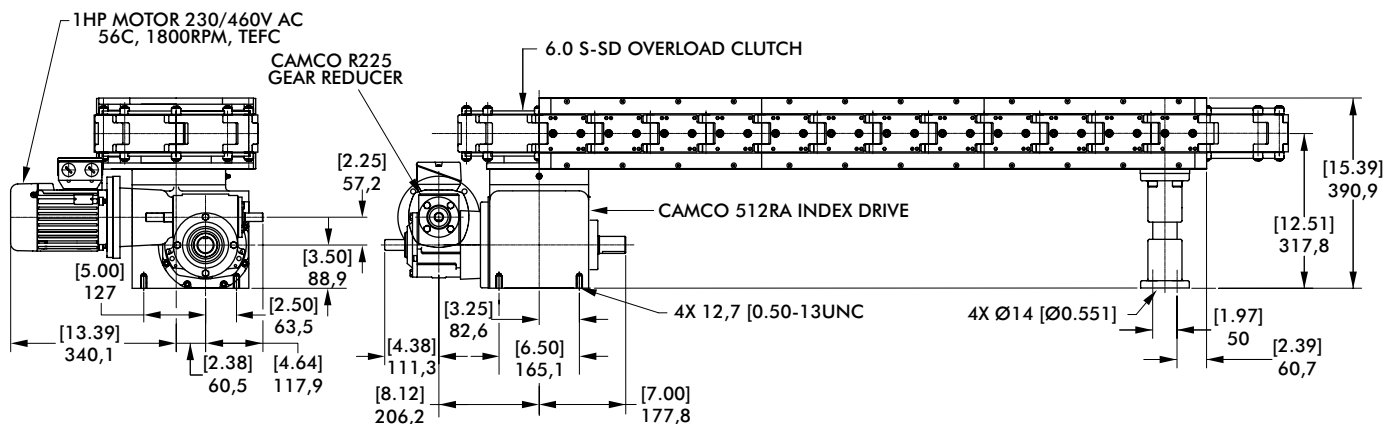
- 512RA Index Drive
- R225 Gear Reducer
- 6.0FC-SD Overload Clutch (Shaft Drive)
- 6.0S-SD Overload Clutch (Direct Drive)
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

Heavy-Duty Drive Package

- 662RA Index Drive
- 7300C Gear Reducer
- 11FC-SD Overload Clutch (Shaft Drive)
- 6.0-SD Overload Clutch (Direct Drive)
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

| Index Distance mm [in] | Indexer Stops |
|---------------------------|------------------|
| 76,2 [4.50] | 8 |
| 228,6 [9.00] | 4 |
| 457,2 [18.00] | 2 |

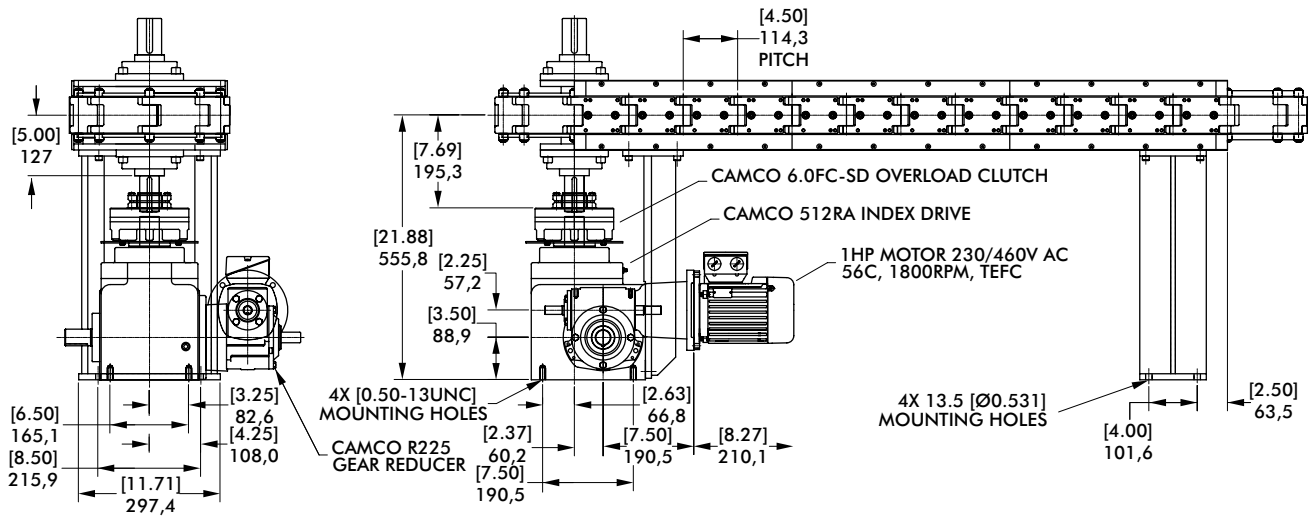
Direct Drive Carousel



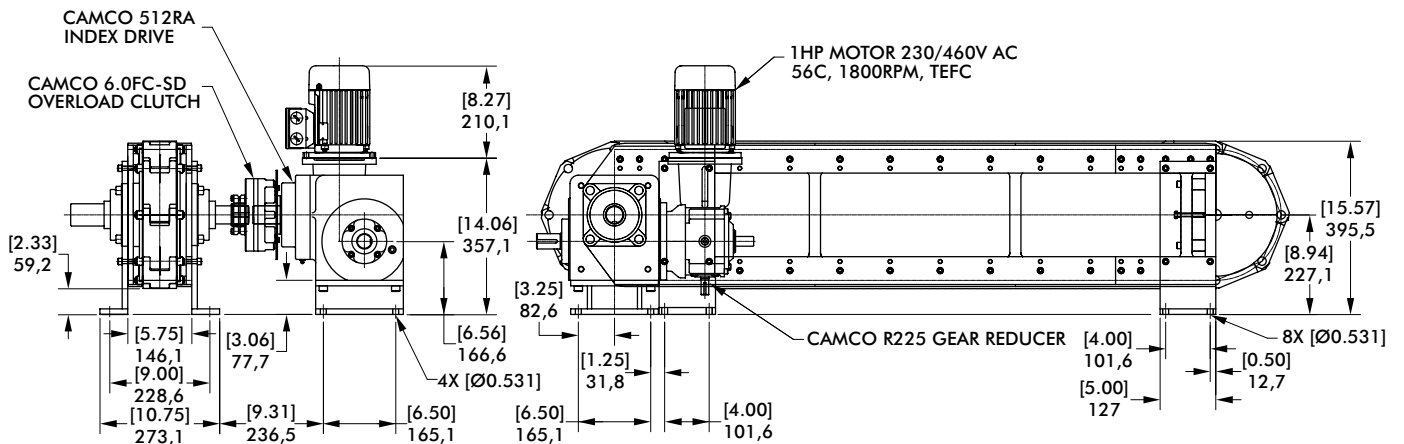
4.5 INCH SERIES

Table-Top Modular Conveyors | Configurations

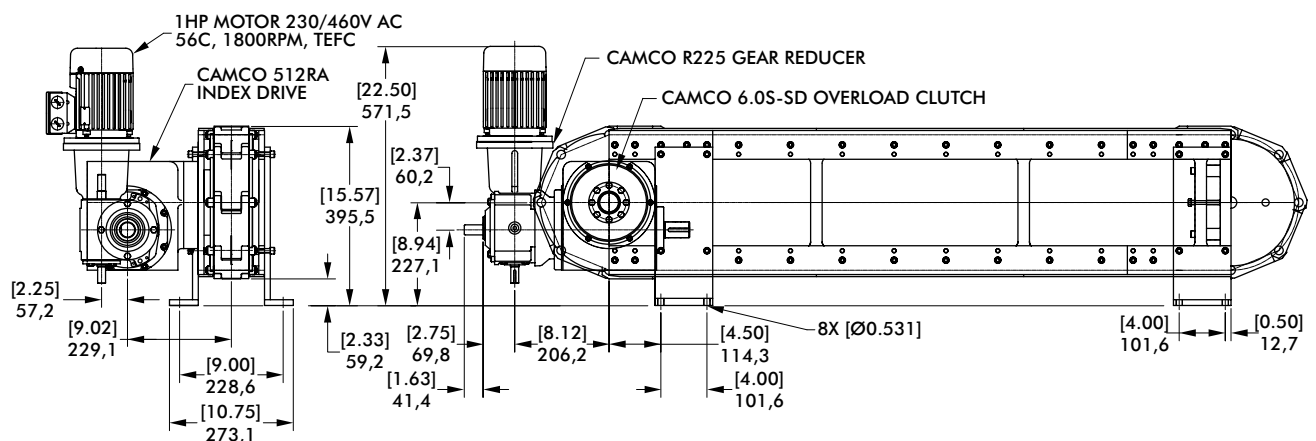
Shaft Drive Carousel



Shaft Drive Over/Under



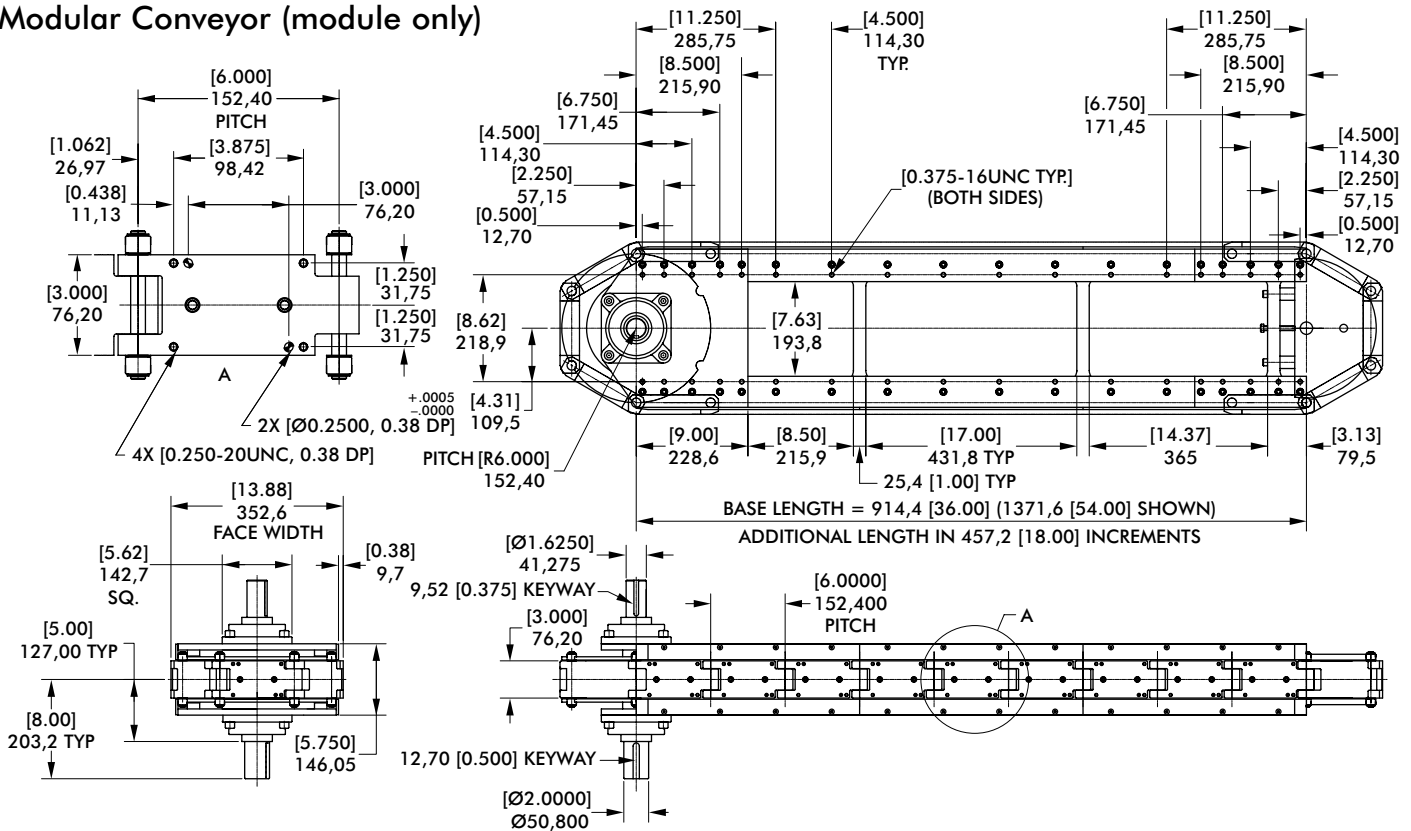
Direct Drive Over/Under



6.0 INCH SERIES

Table-Top Modular Conveyors | Dimensions and Configurations

Modular Conveyor (module only)



Modular Conveyor (drive package)

Standard Drive Package

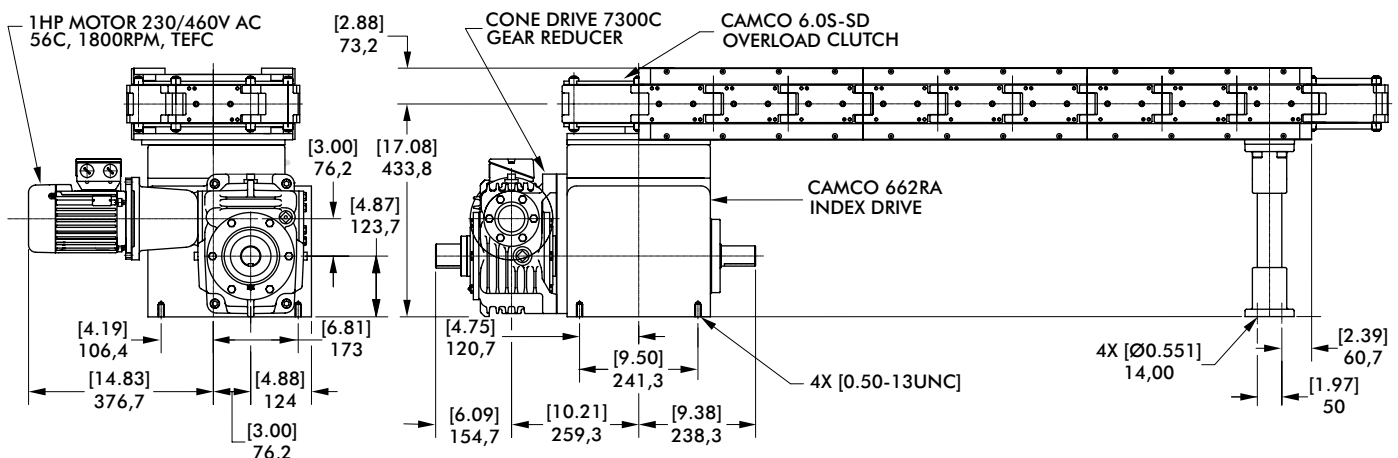
- 662RA Index Drive
- 7300C Gear Reducer
- 11FC-SD Overload Clutch (Shaft Drive)
- 6.0S-SD Overload Clutch (Direct Drive)
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

Heavy-Duty Drive Package

- 800RD Index Drive
- 7300C Gear Reducer
- 25FC-SD Overload Clutch
- 1 HP high-cycling, performance AC Motor
- IM-pAC Motor Control

| Index Distance mm [in] | Indexer Stops |
|---------------------------|------------------|
| 152,4 [6.00] | 6 |
| 304,8 [12.00] | 3 |
| 457,2 [18.00] | 2 |

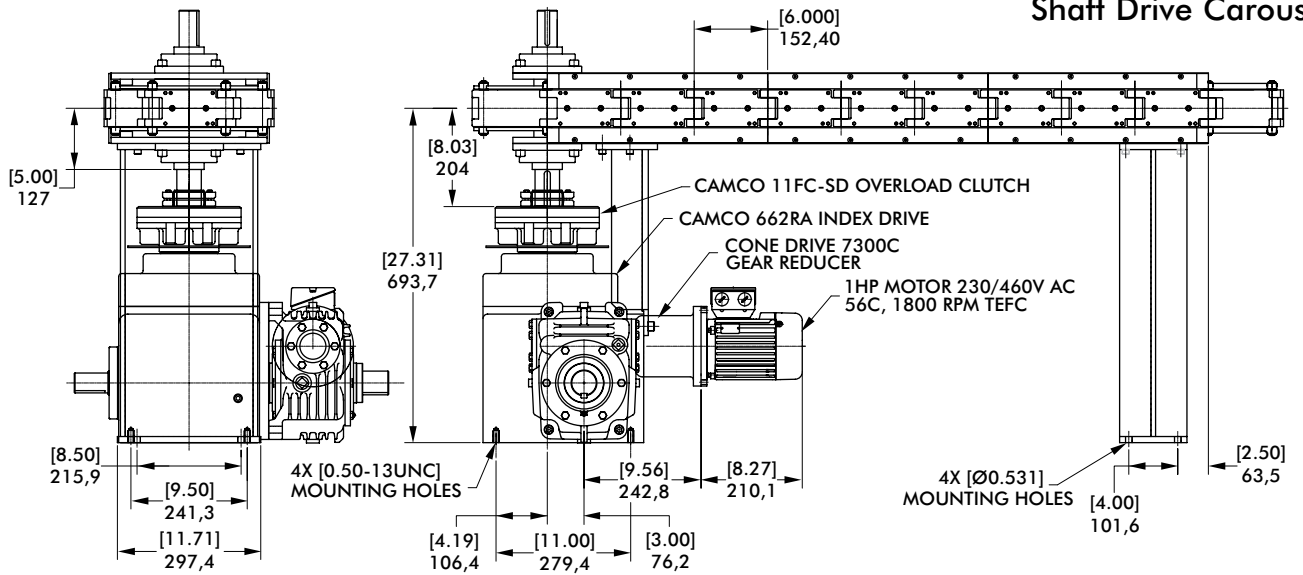
Direct Drive Carousel



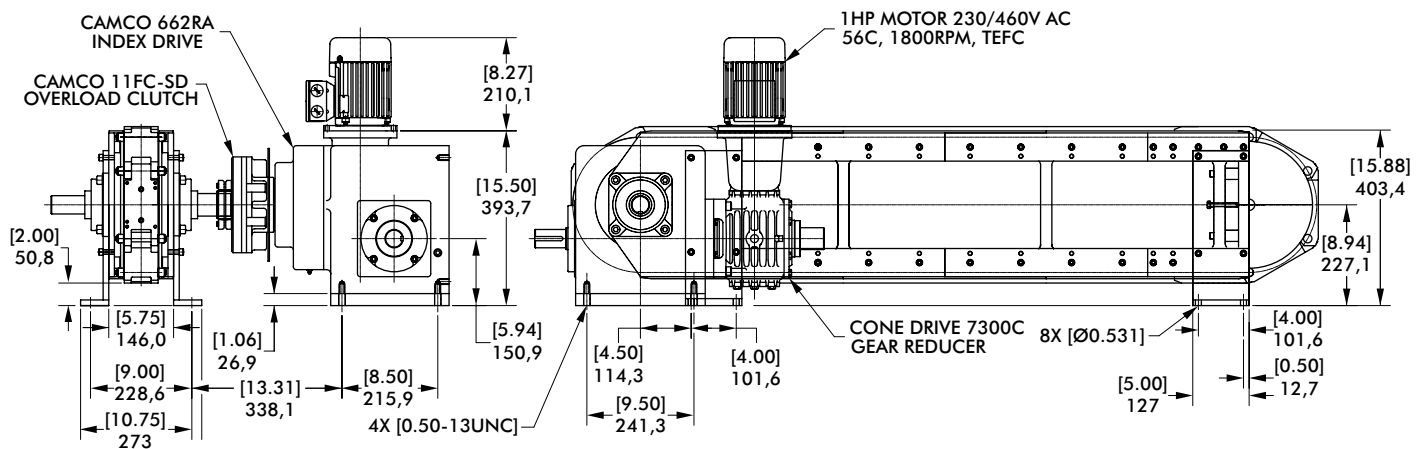
6.0 INCH SERIES

Table-Top Modular Conveyors | Configurations

Shaft Drive Carousel



Shaft Drive Over/Under



Direct Drive Over/Under

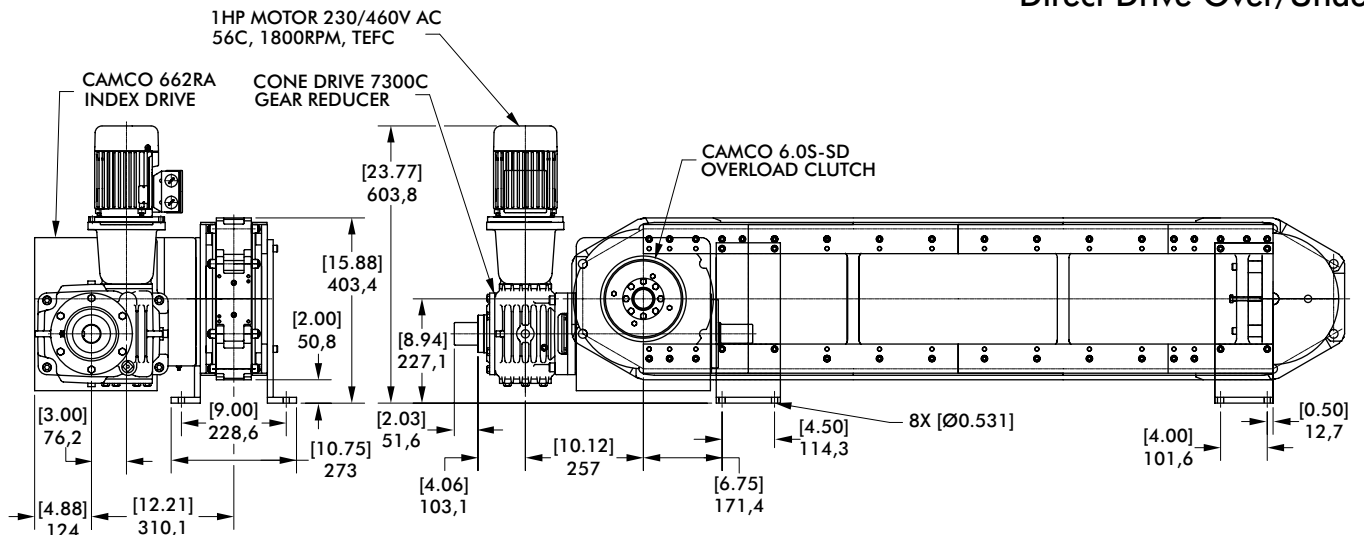
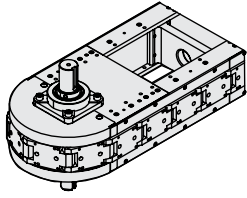
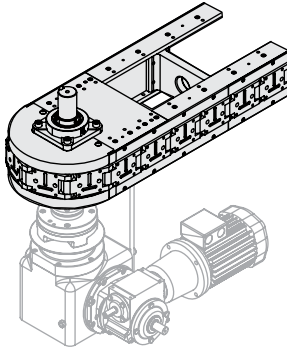


TABLE-TOP MODULAR CONVEYORS

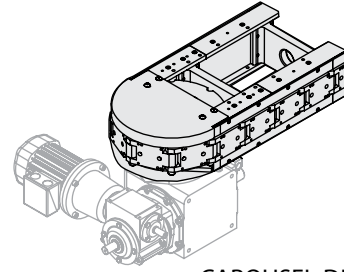
Conveyor Types



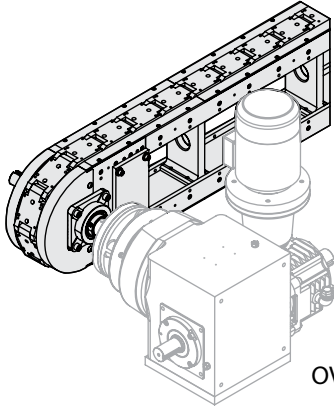
MODULE ONLY



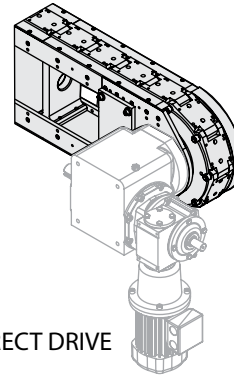
CAROUSEL-SHAFT DRIVEN



CAROUSEL-DIRECT DRIVEN

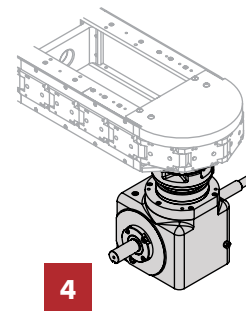
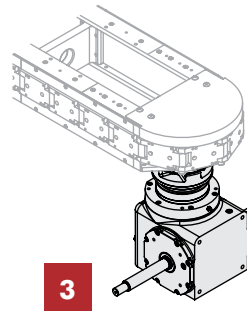
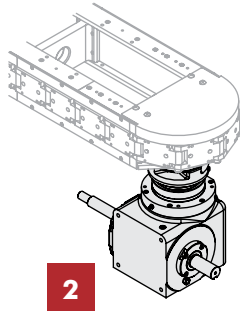
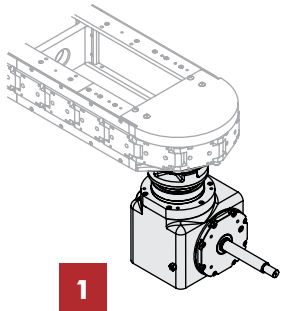


OVER-UNDER SHAFT DRIVEN



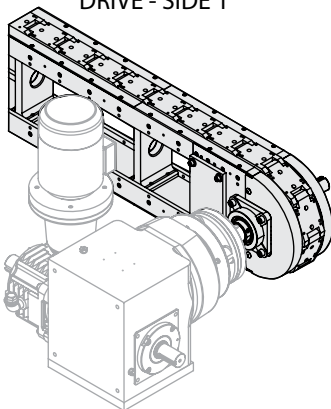
OVER-UNDER DIRECT DRIVE

Carousel Indexer Position



Over/Under Side

DRIVE - SIDE 1



DRIVE - SIDE 2

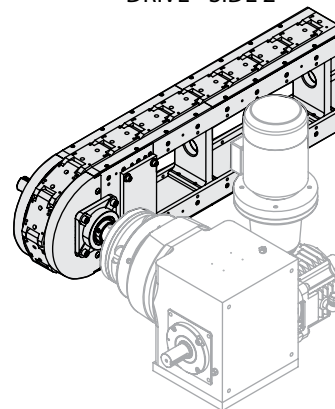
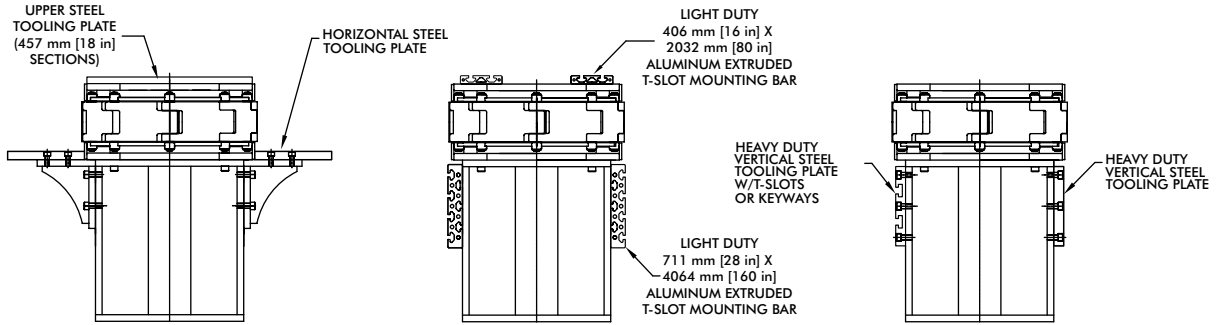


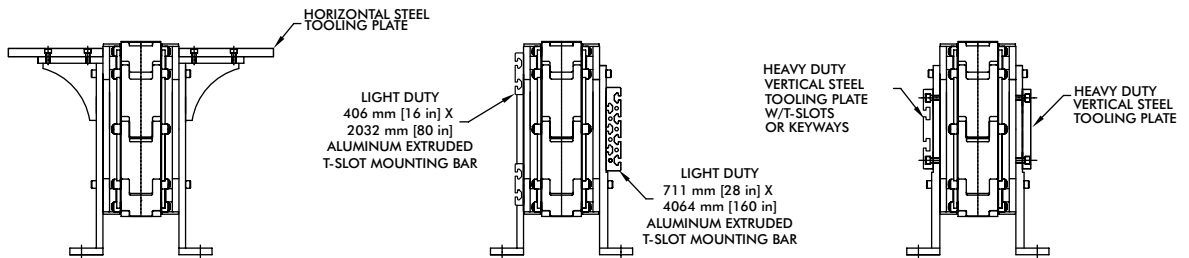
TABLE-TOP MODULAR CONVEYORS

Options

Tooling Plate Options Carousel



Tooling Plate Options Over/Under



Support Leg Options

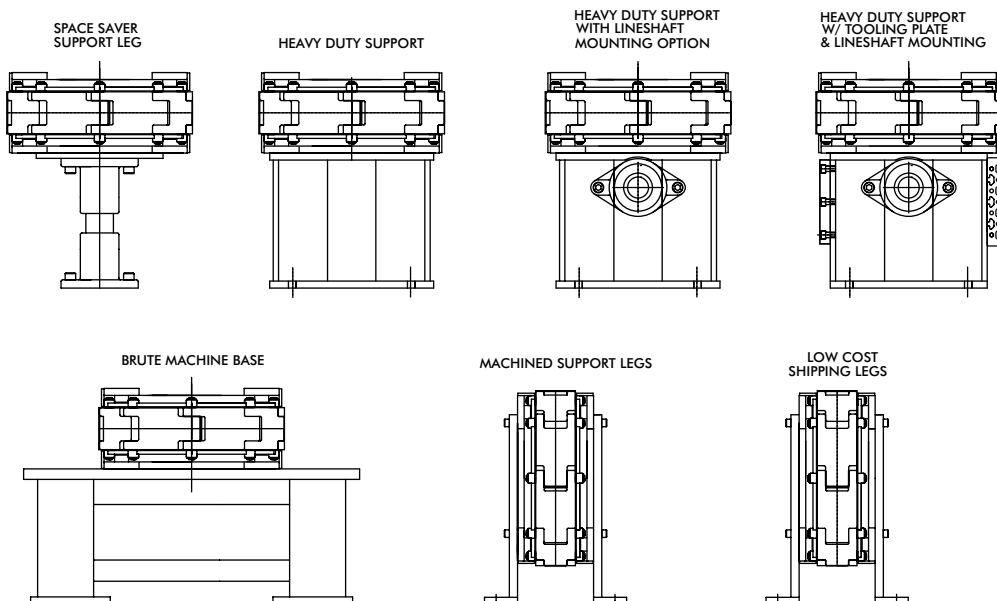
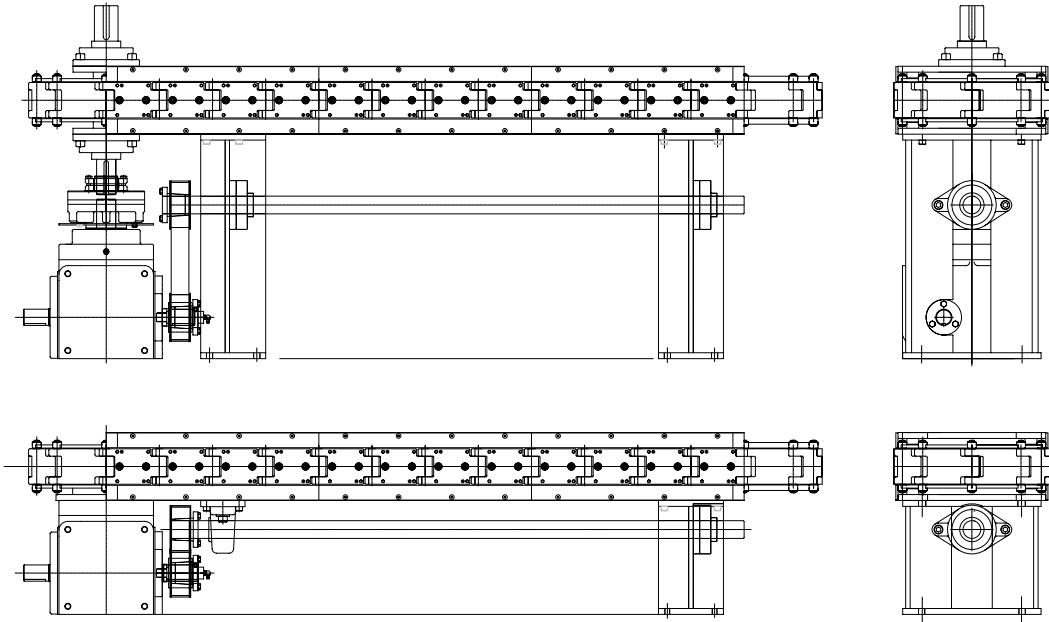


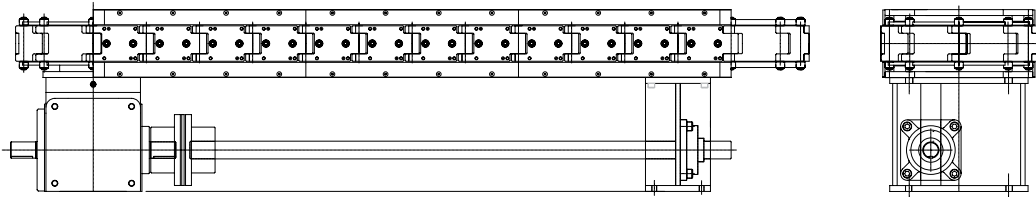
TABLE-TOP MODULAR CONVEYORS

Options

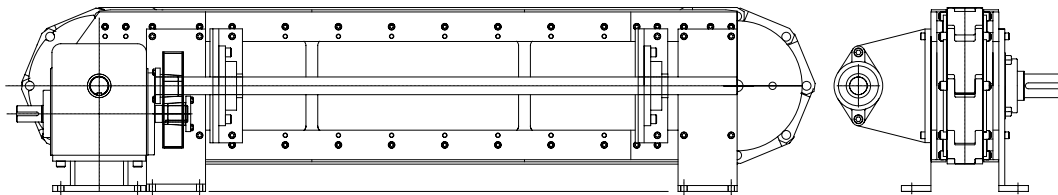
Lower Lineshaft Options Belt Driven



Lower Lineshaft Options Direct Driven



Drive Side Lineshaft Options Belt Driven



Drive Side Lineshaft Options Direct Driven

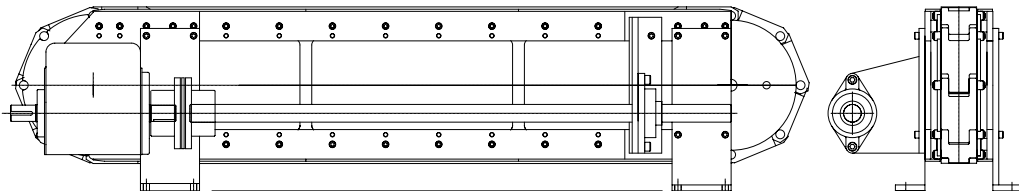


TABLE-TOP MODULAR CONVEYORS



PRECISION INDEXING SOLUTIONS

Table of Contents

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



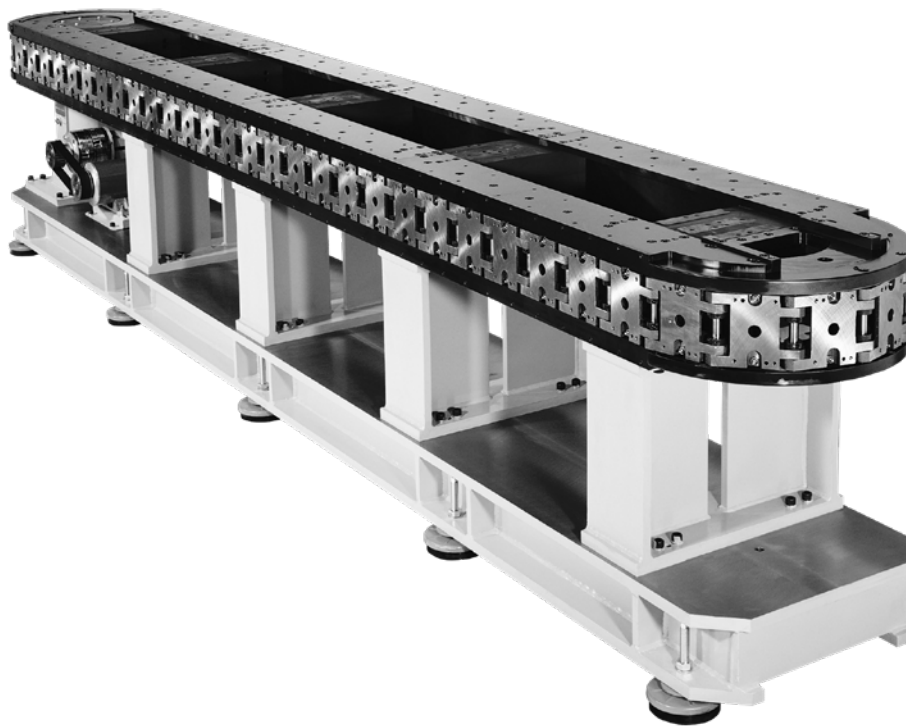
LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

HEAVY DUTY MODULAR CONVEYORS

Features | Table of Contents



Features:

CAMCO Heavy Duty Precision Link Conveyors combine excellent accuracy with high load capacity to provide the versatility needed to meet virtually any automated assembly or manufacturing challenge.

Standard link lengths of 6.0", 9.0" and 12"

Over/Under and Carousel configurations

Precision links with roller bearing cam followers for smooth transfer and long life

Provided with heavy-duty legs and a precision machined base designed to hold large loads and maintain system accuracy

Available with adjustable soft machine mounts to accommodate inconsistent on-site flooring

Customize length and height and add optional line shafts or tooling plates to fit your application

Table of Contents

| | |
|----------------------------|---|
| How to Order | 3 |
| Conveyor Options | 4 |
| 6.0 Inch Heavy Duty | 5 |
| 9.0 Inch Heavy Duty | 7 |
| 12.0 Inch Heavy Duty | 9 |

HEAVY DUTY MODULAR CONVEYORS

How To Order

Required Information

- **Link Size:** 1.5, 2.0, 3.0, 4.5, 6.0, 9.0 or 12.0 inch
- **Type:** Table Top or Heavy Duty
- **Style:** Over/Under or Carousel
- **Length:** Standard per catalog or Custom, expressed as center distance, in inches
- **Height:** Standard per catalog or Custom, in inches

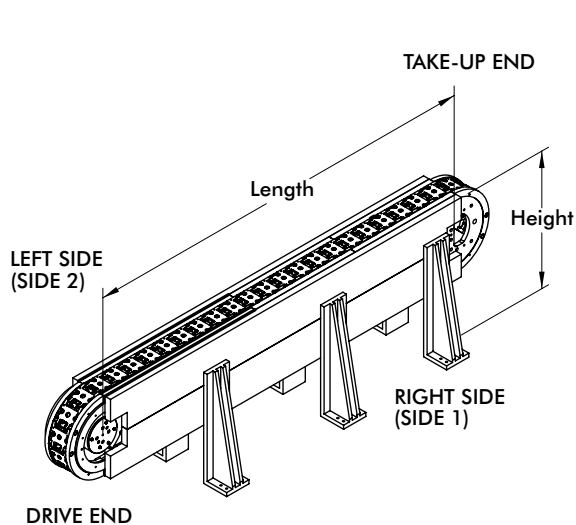
Required Information when ordering Drive Package

- **Type:** Standard, Alternate, Heavy-Duty or Special
- **Drive Side:** 1 or 2 (for Over/Under)
- **Index Distance:** In inches
- **Indexer Model:** Specific model number or special

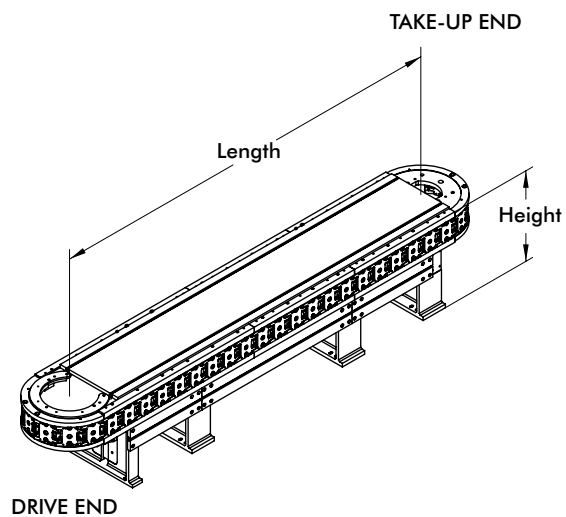
Technical Assistance

All Precision Link Conveyor applications are verified by a CAMCO sales agent using the CAMCO Sizing Program.

Your CAMCO agent is available to make all sizing calculations for you.



OVER/UNDER

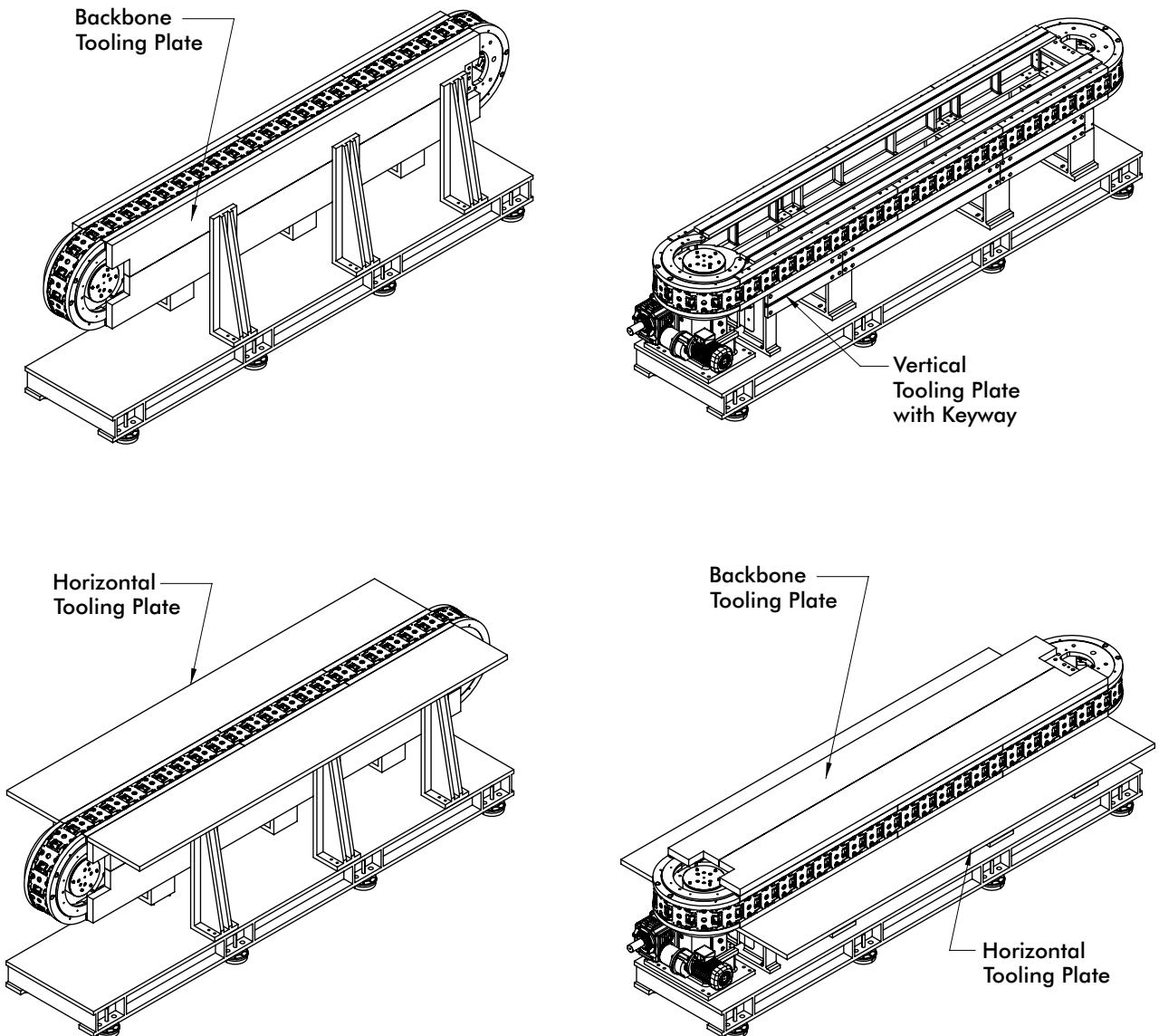


CAROUSEL

HEAVY DUTY MODULAR CONVEYORS

Options

CAMCO offers a wide variety of standard and custom options on all precision link conveyors. Tooling plates and conveyor mainframes can be ordered with custom hole configurations or burnouts. Other standard options include timing chains, timing belts and extended lineshafts. Standard drive package options include CAMCO indexers with AC motors and clutch-brakes, DC motors or servo motors. CAMCO's special Indexer output overload clutches are highly recommended to protect the indexer, link assembly and tooling.



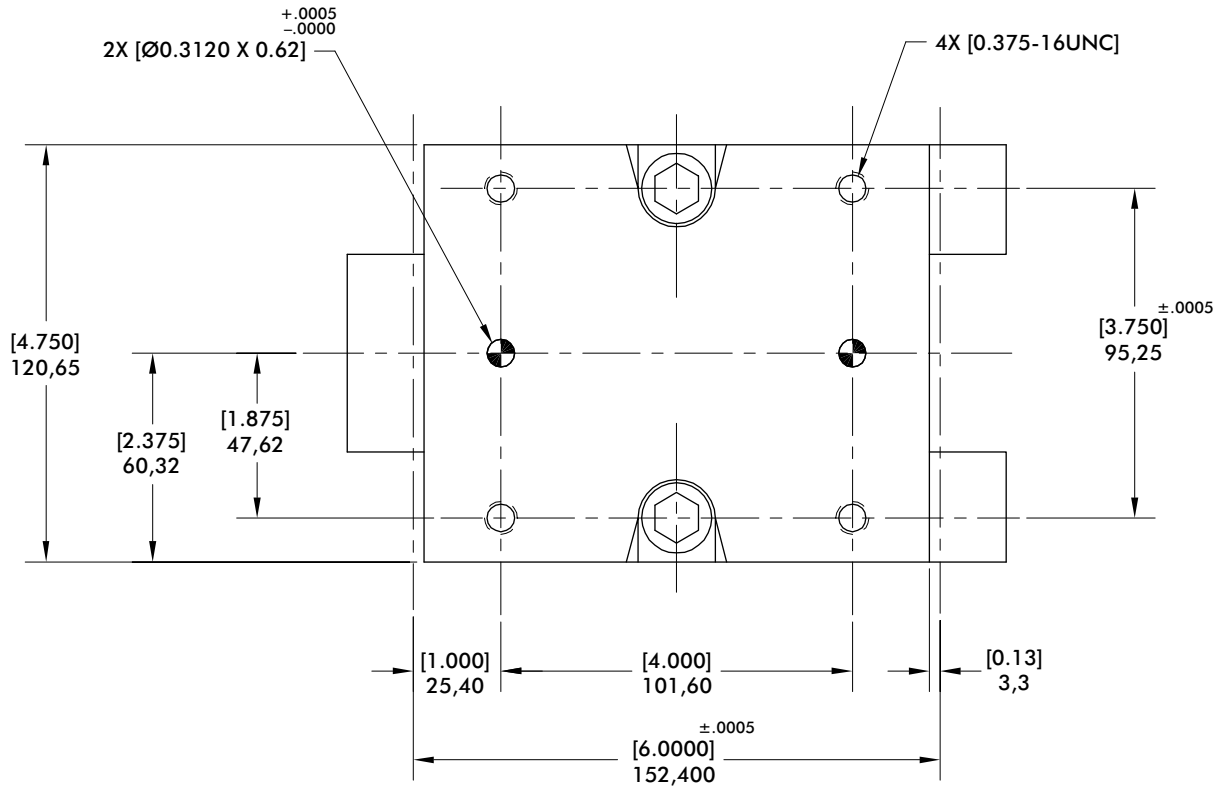
Using Cambot Parts Handlers with Precision Link Conveyors

Cambot linear pick-and-place parts handlers have custom cam motions incorporated into each unit, providing complex synchronize timings for your application. They can be mounted onto the backbone tooling plates of the conveyor. Cambot linear pick-and-place parts handlers can be belt driven off a common line shaft for perfect synchronization. See the Rotary Parts Handler section (page IN-RPP-2) for other possible configurations, such as a rotary pick-and-place device loading parts from a continuous line conveyor to a CAMCO index drive conveyor.

6.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Dimension

Link



Modular Conveyor (drive package)

Standard Drive Package

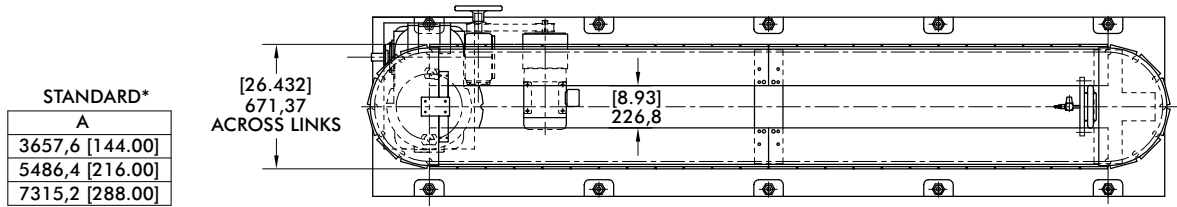
- 1301RD Intermittor
- 73500C Reducer
- 5 HP AC Motor
- MDB-1125 Air Clutch-Brake
- Cycle Cam & Limit Switch

| Index Distance mm [in] | Indexer Stops |
|---------------------------|------------------|
| 152,4 [6.00] | 12 |
| 304,8 [12.00] | 6 |
| 457,2 [18.00] | 4 |
| 609,6 [24.00] | 3 |

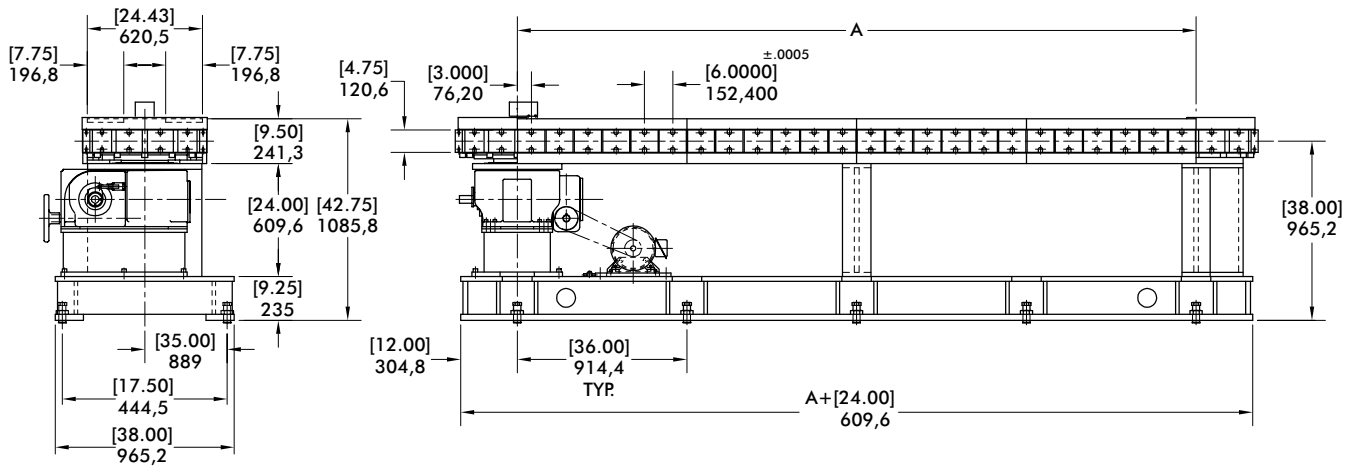
6.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Configurations

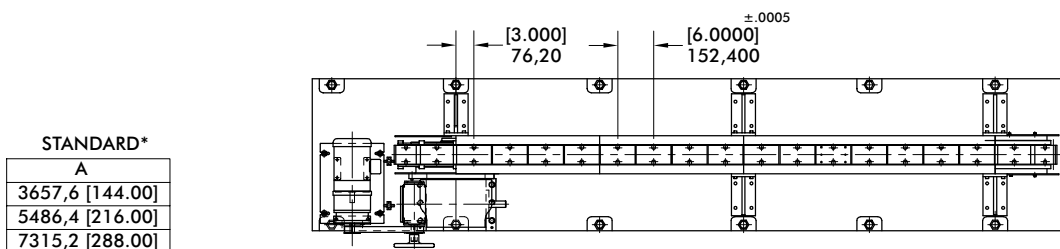
Carousel



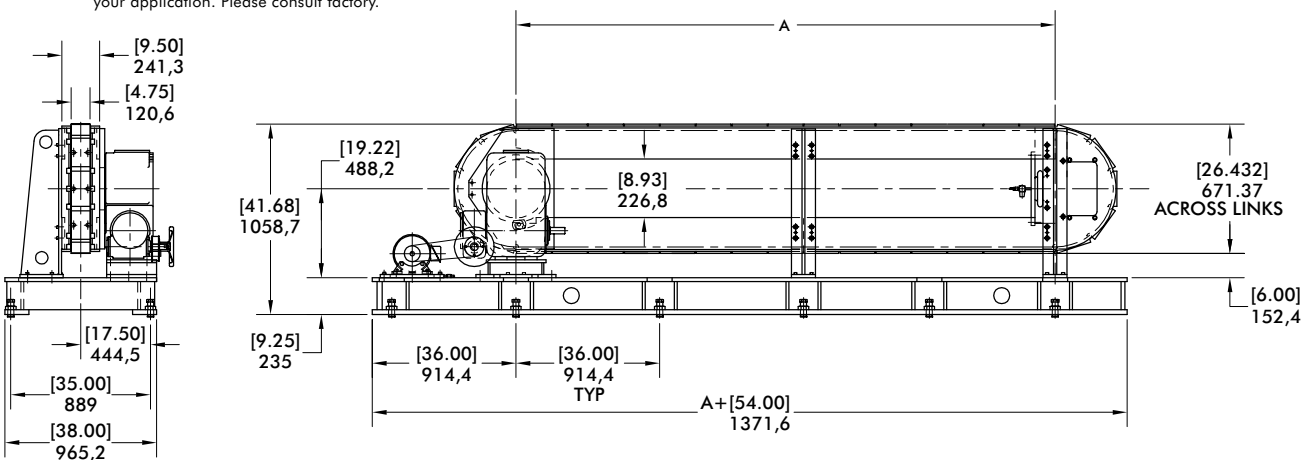
*Conveyor lengths can be customized for your application. Please consult factory.



Over/Under



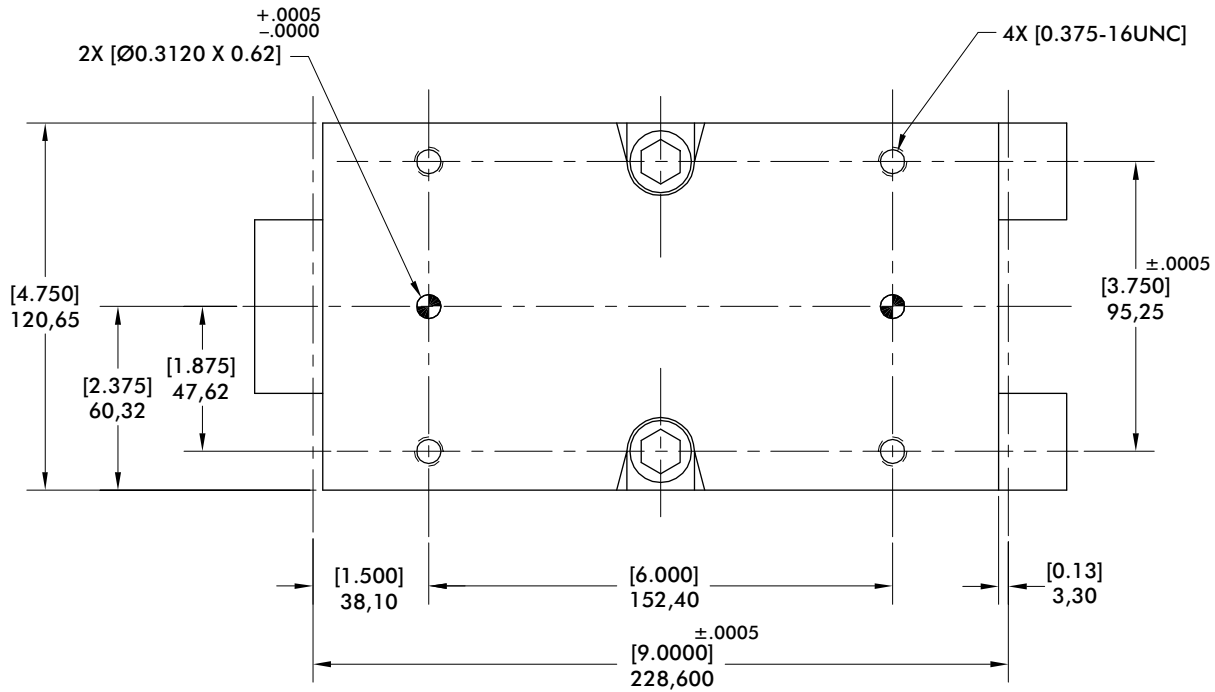
*Conveyor lengths can be customized for your application. Please consult factory.



9.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Dimensions

Link



Modular Conveyor (drive package)

Standard Drive Package

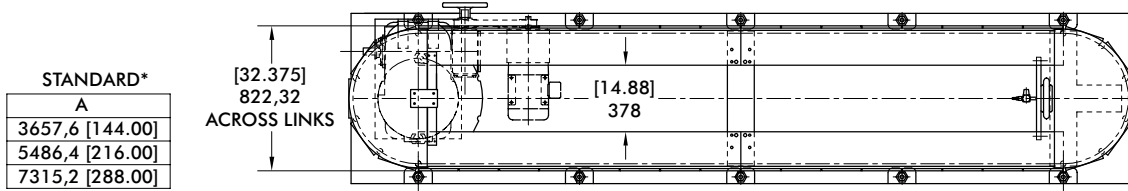
- 1301RD Intermittor
- 73500C Reducer
- 5 HP AC Motor
- MDB-1125 Air Clutch-Brake
- Cycle Cam & Limit Switch

| Index Distance mm [in] | Indexer Stops |
|---------------------------|------------------|
| 228,6 [9.00] | 12 |
| 457,2 [18.00] | 6 |
| 914,4 [27.00] | 4 |
| 609,6 [36.00] | 3 |

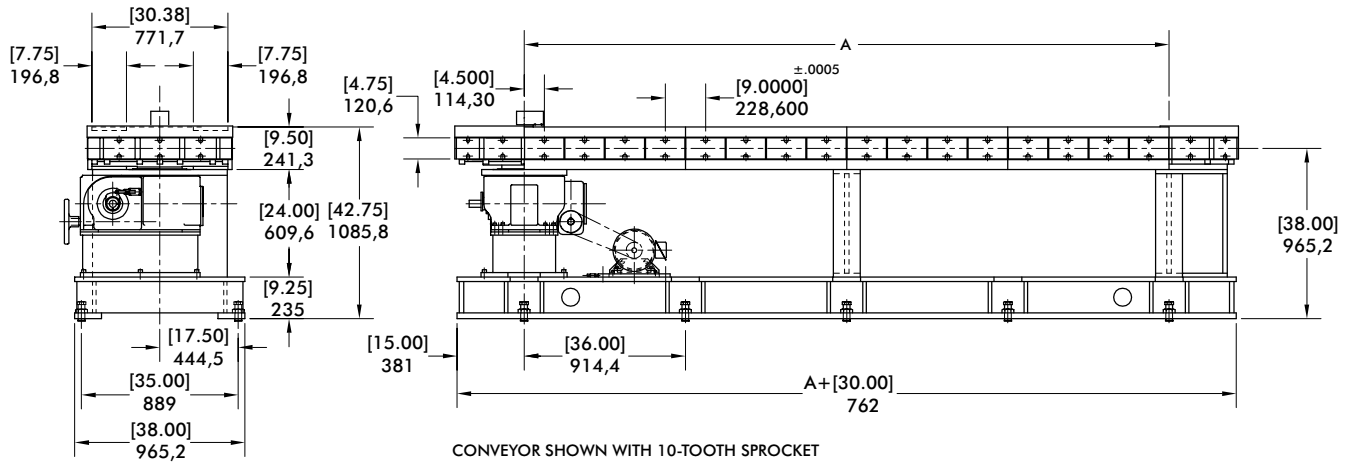
9.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Configurations

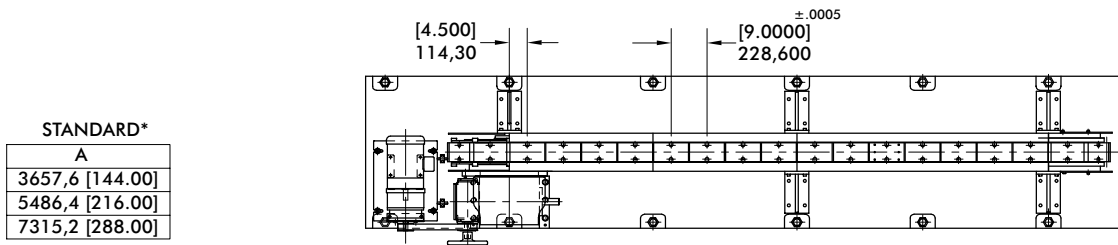
Carousel



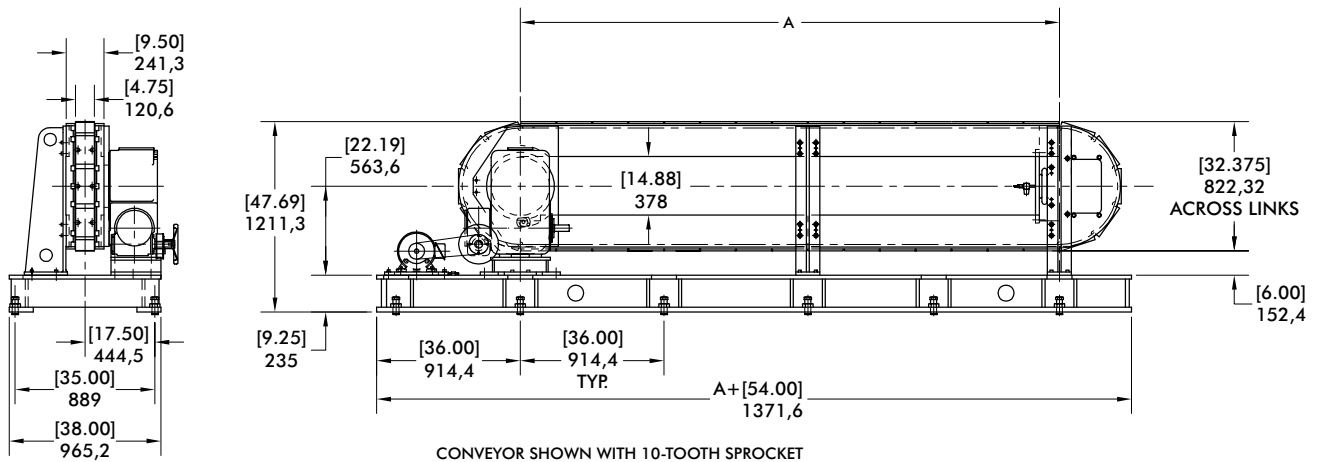
*Conveyor lengths can be customized for your application. Please consult factory.



Over/Under



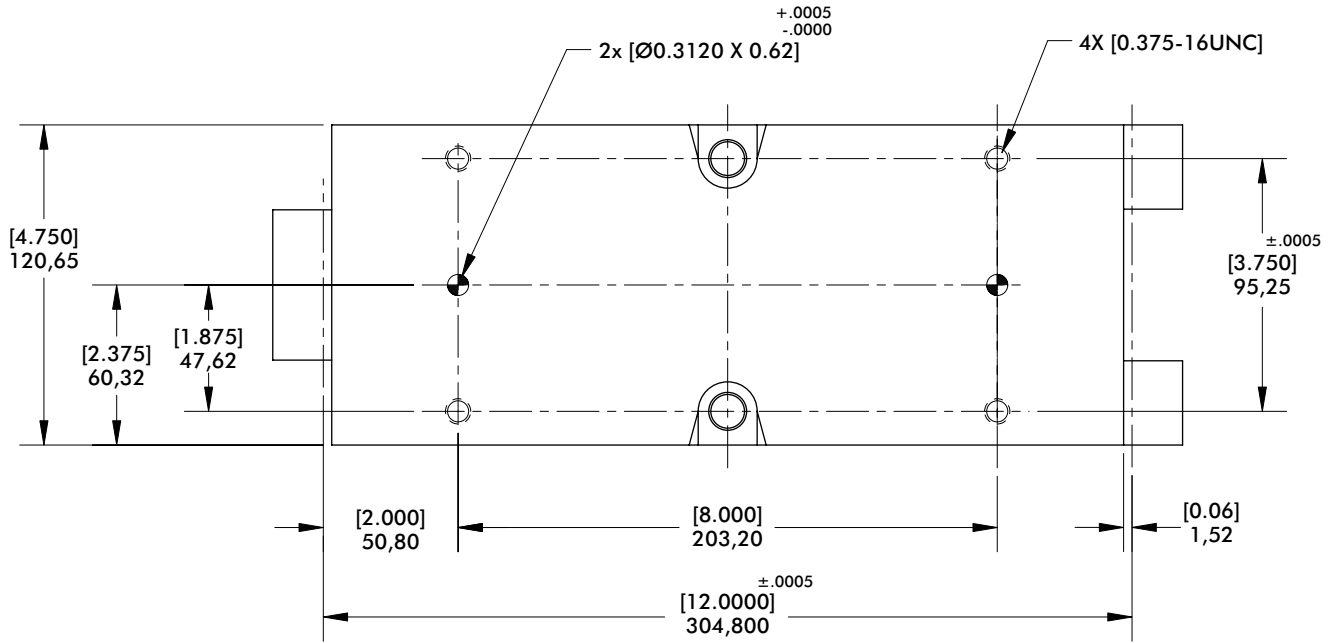
*Conveyor lengths can be customized for your application. Please consult factory.



12.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Dimensions

Link



Modular Conveyor (drive package)

Standard Drive Package

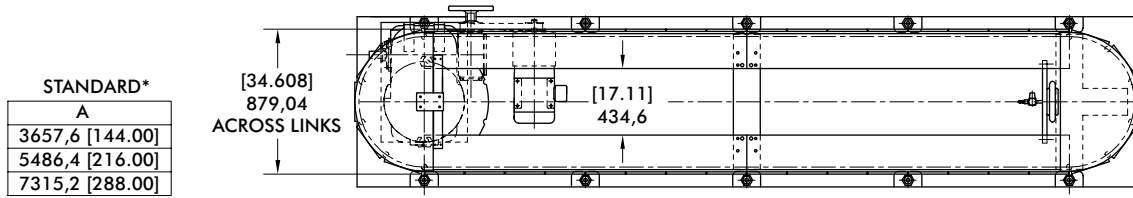
- 1301RD Intermittor
- 7500C Reducer
- 5 HP AC Motor
- MDB-1125 Air Clutch-Brake
- Cycle Cam & Limit Switch

| Index Distance mm [in] | Indexer Stops | Sprocket |
|---------------------------|------------------|--------------|
| 304,8 [12] | 8, 10, 12 | 8T, 10T, 12T |
| 609,6 [24] | 4, 5, 6 | 8T, 10T, 12T |
| 914,4 [36] | 4 | 12T |
| 1219,2 [48] | 2, 3 | 8T, 12T |

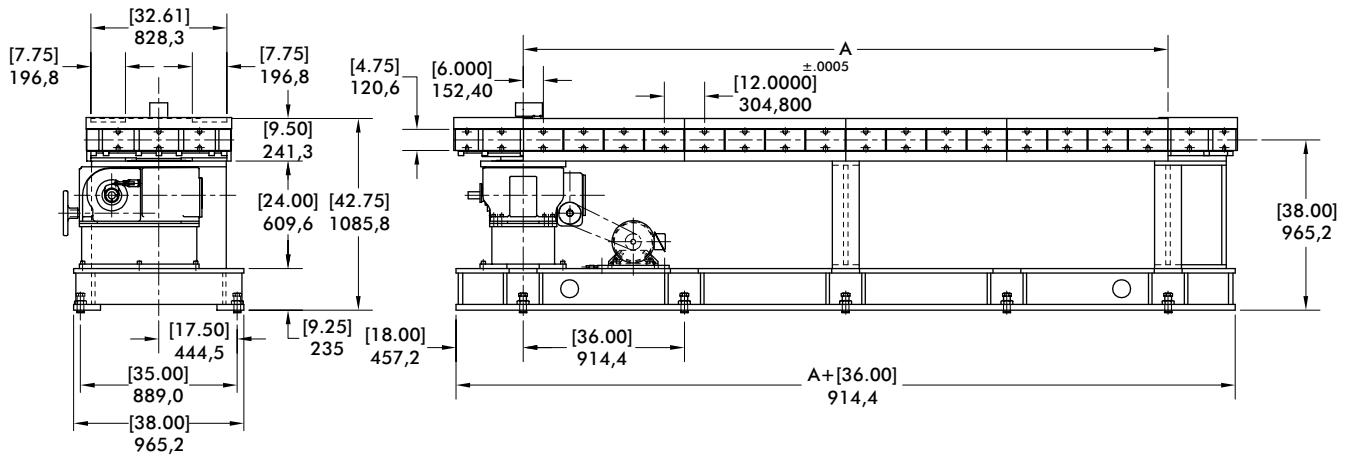
12.0 INCH HEAVY DUTY SERIES

Heavy Duty Modular Conveyors | Configurations

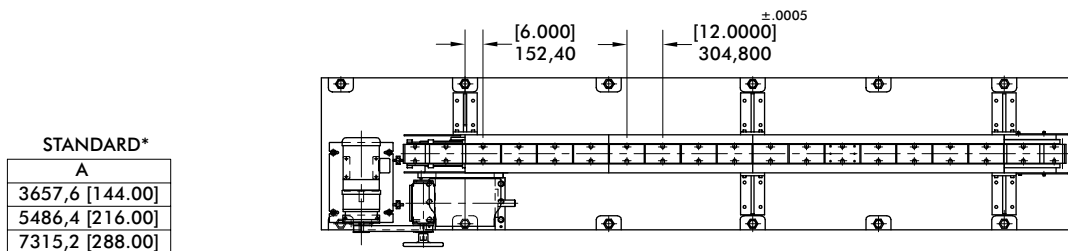
Carousel



*Conveyor lengths can be customized for your application. Please consult factory.

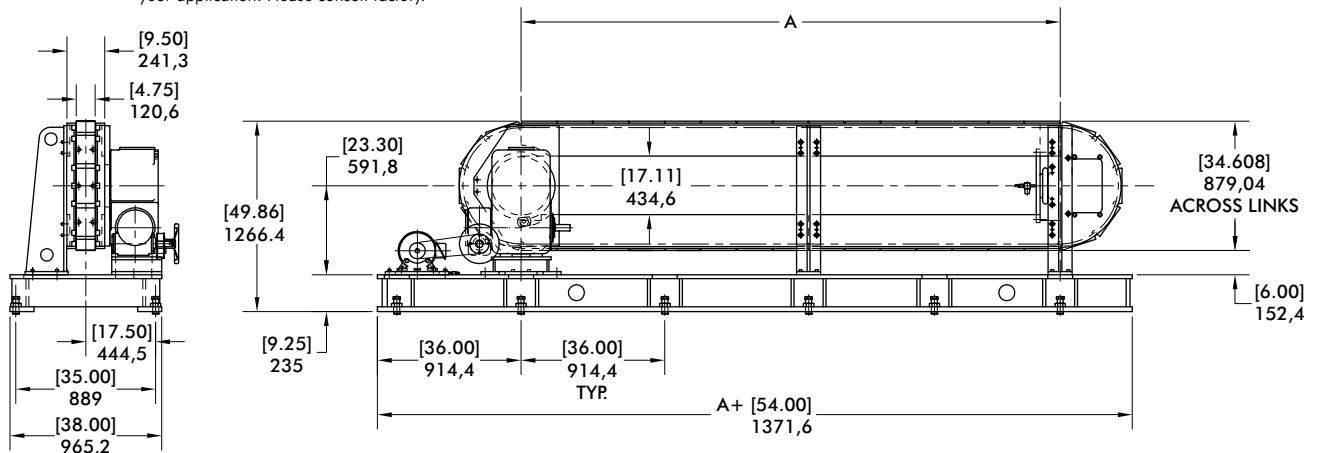


Over/Under



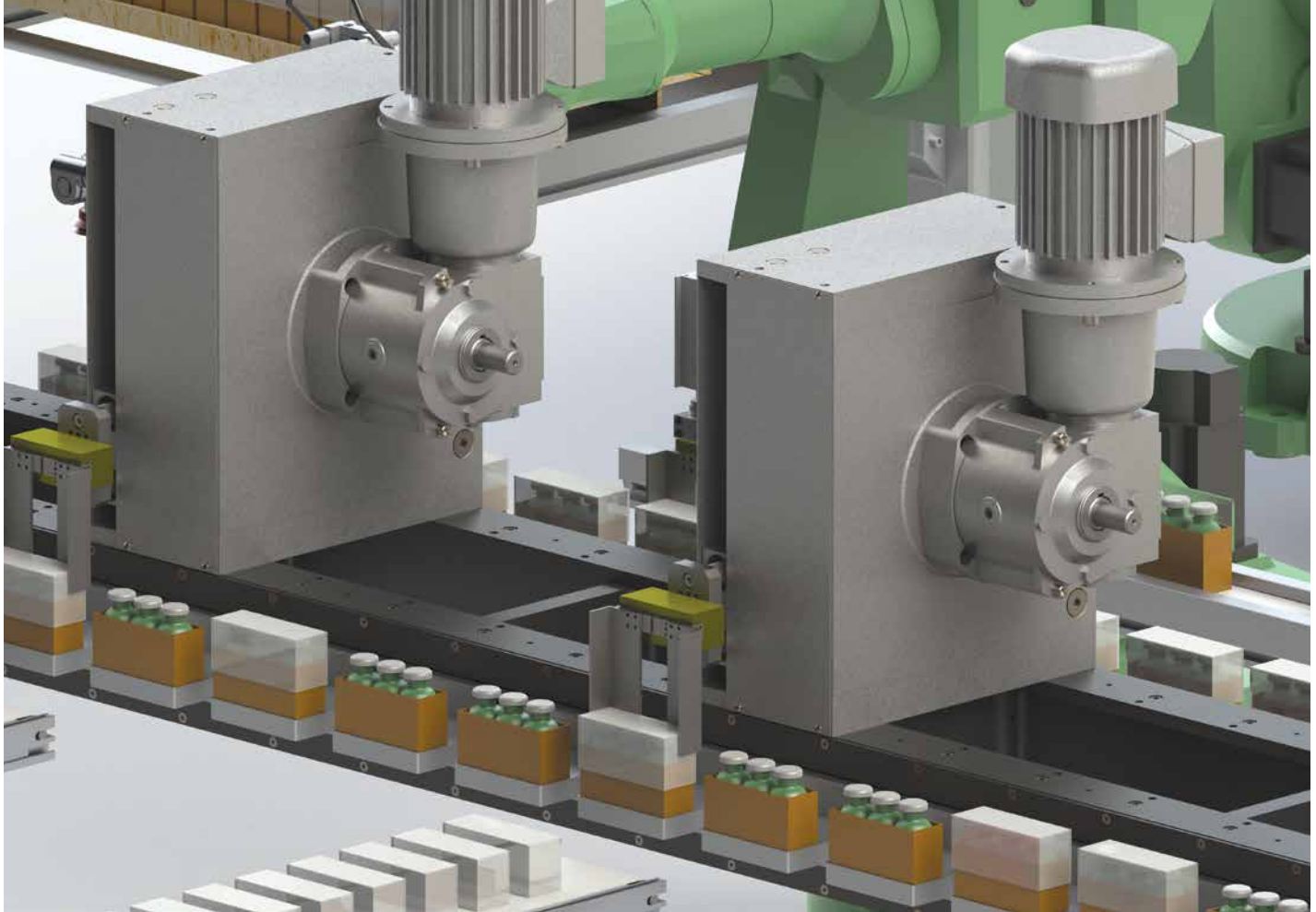
| STANDARD* | |
|-----------|----------|
| A | |
| 3657,6 | [144.00] |
| 5486,4 | [216.00] |
| 7315,2 | [288.00] |

*Conveyor lengths can be customized for your application. Please consult factory.



LINEAR PART HANDLER

Gripper Mounting Accessory



Indexer driving a conveyor and Linear Part Handlers

- Operation can be asynchronous (cycle on demand) – a single index followed by a variable dwell time, or the operation can be continuous.
- Index motion time is changed by changing the motion profile of the servo motor.
- Dwell time is variable. Single axis servo or multiple axis servo controllers can be used.
- More than 60 cycles per minute – maximum cycle rate can be determined by your application engineer.

LINEAR PART HANDLER

Features | Table of Contents



Features:

CAMCO Cambot® Linear Parts Handlers, combined with other DESTACO products, offer a low maintenance, cost-effective solution for a complete parts handling package.

Cost effective design for low-cost operation

- Reliable CAMCO mechanical cam design
- Lubed for Life

Easy integration with other DESTACO products for one-stop shopping

- Camco Modular Precision Link Conveyors and Ring Drives
- DESTACO Vacuum products
- Robohand Direct Connect™ Grippers (no adapter plates) and E-Gripper

Customized for your application

- Input shaft available on either side for ease of integration
- Line shaft drive or gear reducer and motor drive package for synchronous or asynchronous operation

Standard or custom strokes and timing designed for your specific requirements

Applications:

Automated production systems with small parts transfer such as consumer products, electronics, and medical device assembly and test.

Table of Contents

| | |
|------------------------------|---|
| How to Order | 3 |
| M100/M150 | 5 |
| Gripper Mounting Block | 6 |

LINEAR PART HANDLER

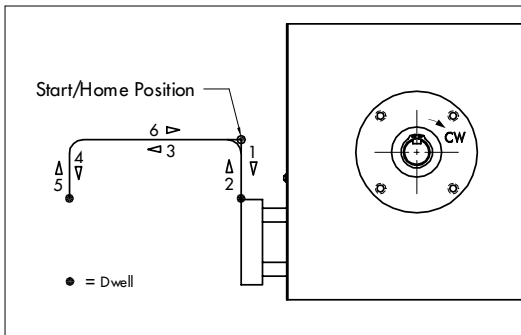
How To Order

LPP Ordering Procedure

1. Model
2. Lift (Vertical) Stroke
3. Transfer (Horizontal) Stroke

| Standard Strokes: Lift x Transfer mm [in] | |
|---|------------------------|
| M100 | M150 |
| 15.0 [0.59] x 100 [3.94] | 15 [0.59] x 150 [5.91] |
| 45 [1.77] x 100 [3.94] | 45 [1.77] x 150 [5.91] |
| 65 [2.56] x 20 [0.79] | 75 [2.95] x 50 [1.97] |
| 65 [2.56] x 60 [2.36] | 75 [2.95] x 110 [4.33] |
| 65 [2.56] x 100 [3.94] | 75 [2.95] x 150 [5.91] |

4. Output Sequence (Standard or Custom)

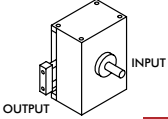
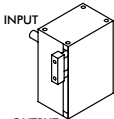
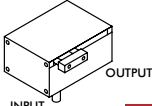
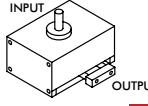
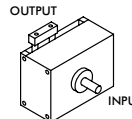
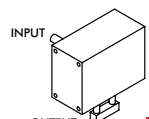


5. Drive Page including Gear Reducer, Motor, and AC Drive

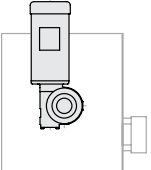
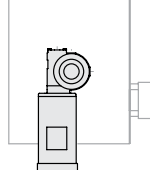
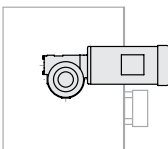
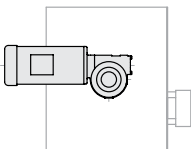
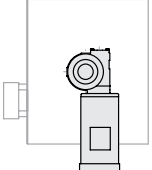
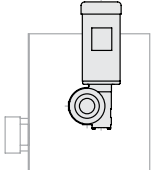
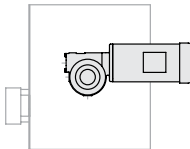
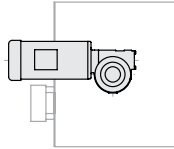
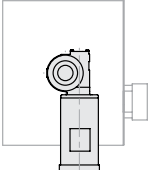
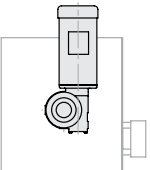
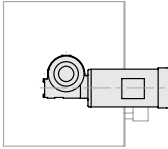
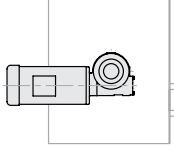
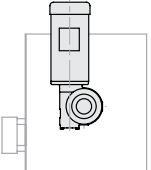
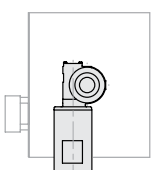
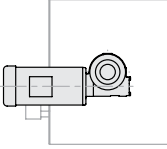
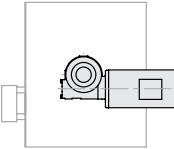
| Model | Gear Reducer | AC Motor | 1 hp AC Drive Input Voltage (select 1) | | |
|-------|--------------|----------|--|---------|---------|
| M100 | R180 | 1/3 hp | 120 VAC | 240 VAC | 480 VAC |
| M150 | R225 | 3/4 hp | 120 VAC | 240 VAC | 480 VAC |

LINEAR PART HANDLER

Mounting Position

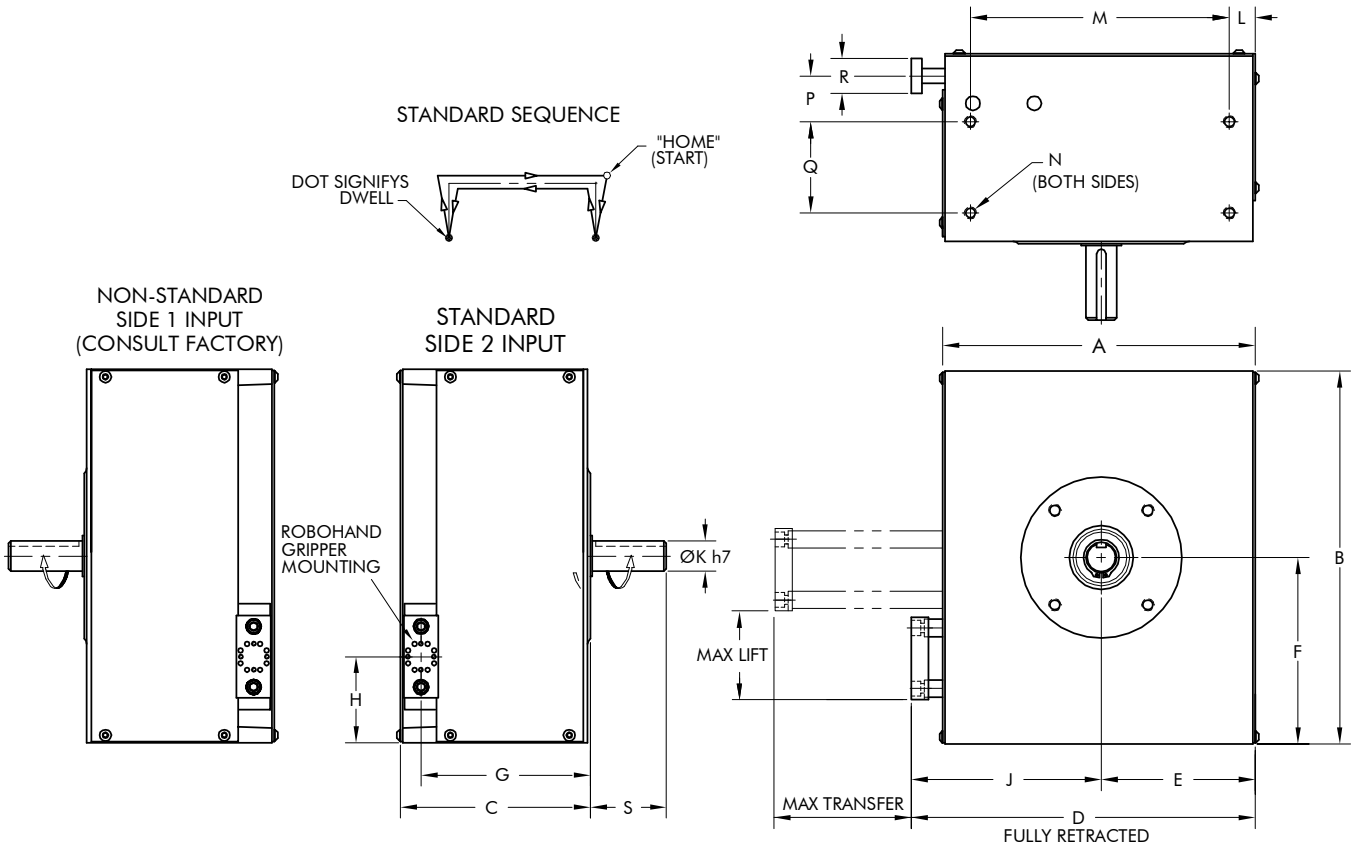
| OHUI (output horizontal, under input) | OHOI (output horizontal, over input) | OHID (output horizontal, input down) | OHIU (output horizontal, input up) | VU (output vertical up) | VD (output vertical down) |
|--|--|--|---|--|--|
|  1 |  2 |  3 |  4 |  5 |  6 |

Gear Reducer Mounting Positions

| | | Mounting "A" | | Mounting "B" | |
|--------|--|--|---|--|--|
| | | RH | LH | RH | LH |
| SIDE 1 |  A |  B |  C |  D | |
| | SIDE 2 |  E |  F |  G |  H |
| | | Mounting "C" | | Mounting "D" | |
| | | RH | LH | RH | LH |
| SIDE 1 |  J |  K |  L |  M | |
| | SIDE 2 |  N |  P |  R |  S |

M100/M150 SERIES

Linear Part Handler | Dimensions and Technical Information



| Model | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S |
|-------------|------------------|------------------|-----------------|------------------|-----------------|-----------------|-----------------|----------------|-----------------|----------------|----------------|------------------|---------|----------------|----------------|----------------|----------------|
| M100 | [9.88] 251.0 | [11.42] 290.0 | [5.71] 145.0 | [11.01] 279.7 | [4.84] 123.0 | [5.71] 145.0 | [5.12] 130.0 | [2.56] 65.0 | [6.18] 157.0 | [0.98] 25.0 | [0.47] 12.0 | [8.86] 225.0 | 4 x M8 | [1.57] 40.0 | [2.56] 65.0 | [1.00] 25.4 | [1.97] 50.0 |
| M150 | [13.07] 332.0 | [15.75] 400.0 | [6.69] 170.0 | [14.41] 366.0 | [6.30] 160.0 | [7.87] 200.0 | [5.83] 148.0 | [3.54] 90.0 | [8.11] 206.0 | [1.18] 30.0 | [0.59] 15.0 | [11.81] 300.0 | 4 x M10 | [1.57] 40.0 | [3.15] 80.0 | [2.01] 51.0 | [2.17] 55.0 |

Technical Specifications

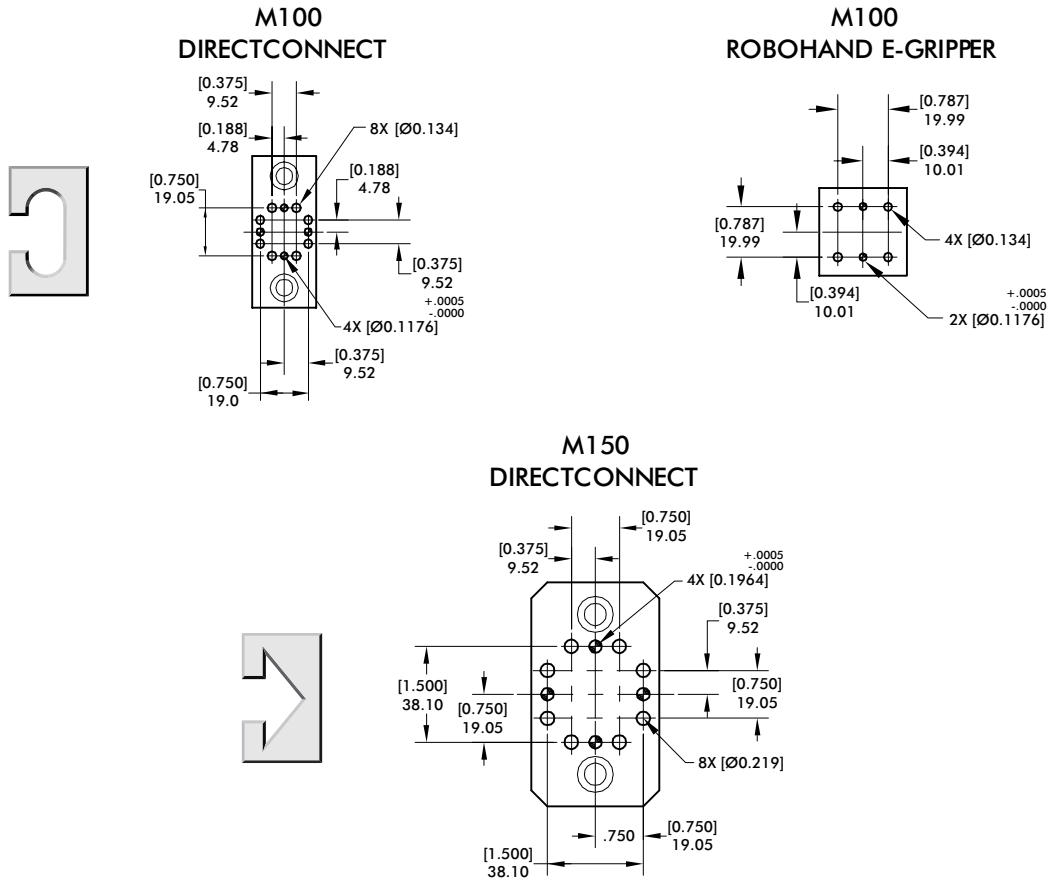
| Model | Maximum Lift mm [in] | Maximum Transfer mm [in] | Capacity at 30 rpm kg [lb] | Capacity at 60 rpm kg [lb] |
|-------------|-------------------------|-----------------------------|-------------------------------|-------------------------------|
| M100 | 65.0 [2.56] | 100.0 [3.94] | 8 [18] | 3.6 [8] |
| M150 | 75.0 [2.95] | 150.0 [5.91] | 18 [40] | 9 [20] |

| Model | Lift | | Transfer | |
|-------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | Accuracy | Repeatability | Accuracy | Repeatability |
| M100 | ±.13 mm [±.005 in] | ±.03 mm [±.001 in] | ±.08 mm [±.003 in] | ±.03 mm [±.001 in] |
| M150 | ±.20 mm [±.008 in] | ±.08 mm [±.003 in] | ±.08 mm [±.003 in] | ±.03 mm [±.001 in] |

M100/M150 SERIES

Linear Part Handler | Accessories

Gripper Mounting Block



RoboHand DirectConnect Grippers & Rotaries

Consult the DESTACO Automation Catalog or your local sales representative for information about these items.

| Model | E-Gripper | DPDS/DPDL | DPG | DPP | DPW | DCT | DRF |
|-------------|----------------------|--|--|--|--|-------------------------------|--|
| M100 | RPE-100M RPE-101M | DPDS-047M DPDS-056M DPDL-047M DPDL-056M | N/A | DPP-10M-06 DPP-10M-12 DPP-14M-15 DPP-14M-25 | DPW-250M-1 DPW-250M-2 | DCT-12M DCT-16M DCT-20M | N/A |
| M150 | N/A | DPDS-088M DPDS-125M DPDL-088M DPDL-125M | DPG-10M-1 DPG-10M-2 DPG-10M-3 DPG-10M-4 | DPP-20M-25 DPP-20M-28 DPP-28M-31 DPP-28M-50 | DPW-375M-1 DPW-375M-2 DPW-500M-1 DPW-500M-2 | DCT-25M | DRF/DRG-075M DRF/DRG-094M DRF/DRG-106M |

ROTARY PART HANDLER

Product Overview

INDEXERS

Servo Positioners



GTB Series
Globoidal (Roller Gear)
Servo Positioner.....IN-SRV-1



RSD Series
Rotary Servo Drives.....IN-SRV-39

Mechanical Indexers



RDM Series
Rotary Index Drive IN-MCH-2



RD Series
Roller Dial Index Drive..... IN-MCH-18



E Series
Heavy-Duty Index Drive IN-MCH-30



RA Series
Right Angle Index Drive IN-MCH-42



RGD/RGS Series
Roller Gear Index Drive IN-MCH-52



P Series
Parallel Shaft/Flange Drive.... IN-MCH-72



RNG Series
Ring Drive Dial Indexer.....IN-MCH-84

OVERLOAD CLUTCHES



Overload Clutches
Output Overload..... IN-CLU-1

CUSTOM CAMS



Custom Cams
Cam Design Solutions IN-CAM-1

CONVEYORS



Rite-Link Series
Thin-Profile.....IN-CNV-1



Precision Link Series
Table-TopIN-CNV-4



Precision Link Series
Heavy-Duty IN-CNV-16

PARTS HANDLERS



LPP Series
Linear Part Handlers IN-PRT-2



RPP Series
Rotary Part Handlers IN-PRT-8

ROTARY PART HANDLER

Features | Table of Contents



Features:

The **CAMCO RPP Cambot® Rotary Parts Handler** is designed for high precision and high capacity. This proven design can be used in a wide variety of industries including automotive, packaging and electronics among others. The RPP can be combined with other CAMCO products such as index drives and precision conveyors for a complete, automated system. The RPP is ideal for pick and place applications with features including:

Rugged and precise cam operated mechanisms engineered for a minimum of 8000 hours of maintenance-free life.

Hardened and ground cams drive both the lift and rotary axes.

Preloaded precision cam followers eliminate backlash and ensure smooth movement.

Preloaded taper roller bearings on the camshaft (Input Shaft).

Four-point contact preloaded roller bearing on the rotary axis.

All bearings are lubricated by an oil bath.

One-piece lift arm.

Ball bushings (recirculating-ball type) support the main lift shaft and turn the large output surface and ride on hardened shafts for stability and stiffness.

Manufactured in a fully integrated application, design, manufacturing and inspection environment.

Table of Contents

| | |
|----------------------|---|
| How to Order | 3 |
| 300RPP | 5 |
| 500RPP | 7 |
| Timing Diagrams..... | 9 |

ROTARY PART HANDLER

How to Order

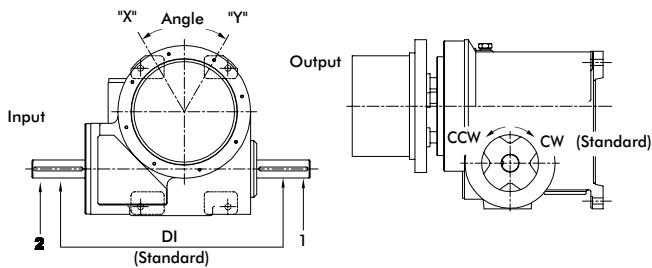
RPP Ordering Procedure

1. Model
2. Rotary Motion (degrees)
 - Oscillator or indexer
 - Oscillator: Home at X or Y
 - Indexer: CW or CCW index
3. Lift (inches)
4. Input Shaft: Side 1, Side 2 or Double Input (DI)
5. Mounting Position: 1-6

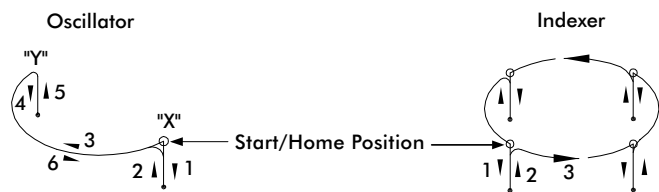
Reducer Ordering Procedure

1. Reducer Model, Ratio and Mounting Position
2. Motor Adaptor Model
3. Motor size

Input Shaft Configuration

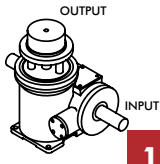
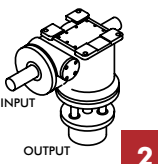
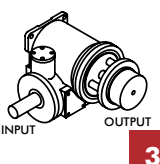
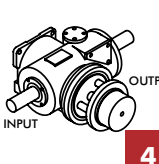
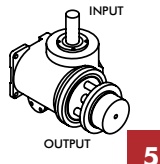
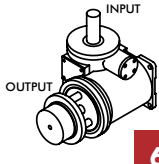


Standard Output Sequence

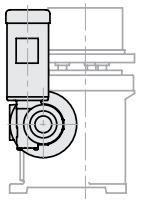
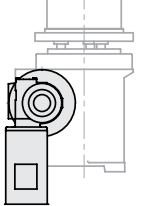
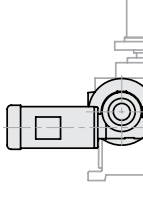
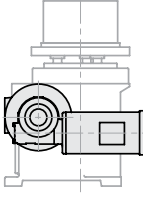
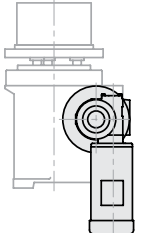
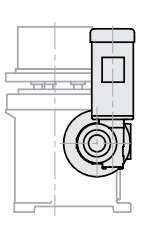
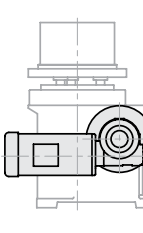
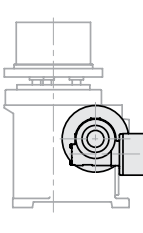
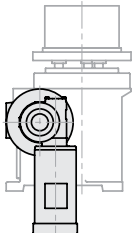
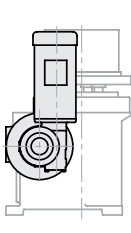
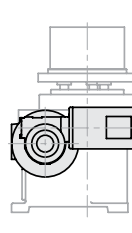
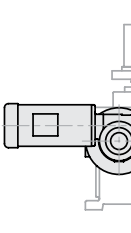
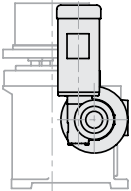
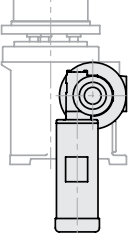
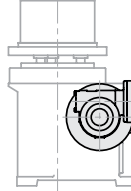
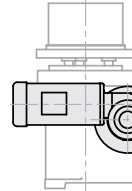


ROTARY PART HANDLER

Mounting Position

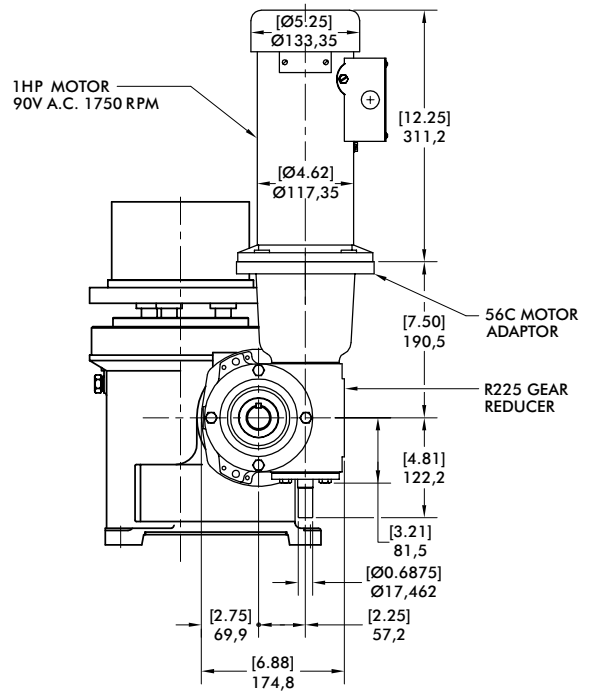
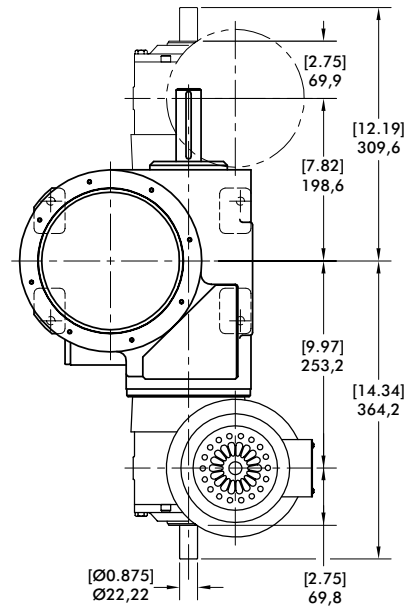
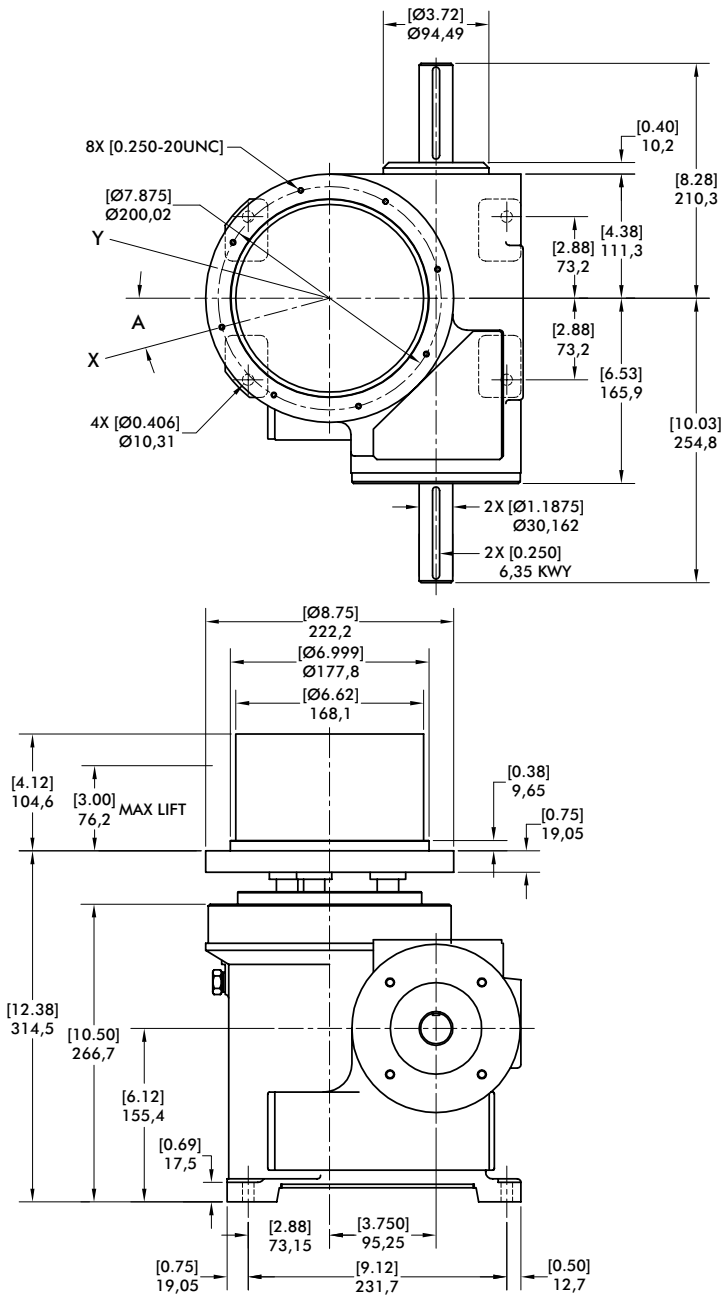
| OVOI (output vertical, over input) | OVUI (output vertical, under input) | OHOI (output horizontal, over input) | OHUI (output horizontal, under input) | H-S1-UP (output horizontal, side 1 up) | H-S2-UP (output horizontal, side 2 up) |
|--|--|--|---|--|--|
|  1 |  2 |  3 |  4 |  5 |  6 |

Gear Reducer Mounting Positions

| | | Mounting "A" | | Mounting "B" | |
|---------------|--|--|---|--|--|
| | | RH | LH | RH | LH |
| SIDE 1 |  A |  B |  C |  D | |
| | SIDE 2 |  E |  F |  G |  H |
| | | Mounting "C" | | Mounting "D" | |
| | | RH | LH | RH | LH |
| SIDE 1 |  J |  K |  L |  M | |
| | SIDE 2 |  N |  P |  R |  S |

300RPP SERIES

Rotary Part Handler | Configurations



| Indexing Motion | | | |
|-----------------|---------|--------------|-------------------|
| Rotation | Angle A | Lift mm [in] | Model |
| 120° | 0° | 25,4 [1] | 300RPP120H24-1H24 |
| | | 50,8 [2] | 300RPP120H24-2H24 |
| 90° | 15° | 25,4 [1] | 300RPP90H24-1H24 |
| | | 50,8 [2] | 300RPP90H24-2H24 |
| | | 76,2 [3] | 300RPP90H24-3H24 |
| 60° | 0° | 25,4 [1] | 300RPP60H24-1H24 |
| | | 50,8 [2] | 300RPP60H24-2H24 |
| | | 76,2 [3] | 300RPP60H24-3H24 |
| 45° | 22.5° | 25,4 [1] | 300RPP45H24-1H24 |
| | | 50,8 [2] | 300RPP45H24-2H24 |
| | | 76,2 [3] | 300RPP45H24-3H24 |

| Oscillating Motion | | | |
|--------------------|---------|--------------|-----------------|
| Rotation | Angle A | Lift mm [in] | Model |
| 180° | 0° | 25,4 [1] | 300RPP2H24-1H24 |
| | | 50,8 [2] | 300RPP2H24-2H24 |
| | | 76,2 [3] | 300RPP2H24-3H24 |
| 120° | 0° | 25,4 [1] | 300RPP3H24-1H24 |
| | | 50,8 [2] | 300RPP3H24-2H24 |
| | | 76,2 [3] | 300RPP3H24-3H24 |
| 90° | 0° | 25,4 [1] | 300RPP4H24-1H24 |
| | | 50,8 [2] | 300RPP4H24-2H24 |
| | | 76,2 [3] | 300RPP4H24-3H24 |
| 60° | 0° | 25,4 [1] | 300RPP6H24-1H24 |
| | | 50,8 [2] | 300RPP6H24-2H24 |

Features

- Standard Indexing or Oscillating Motion
- R225 Reducer (Ratios from 5:1 to 60:1)
— 56C Motor Adapter and Coupling
- 1 HP AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)

Optional Accessories

- 1 HP DC Motor
- Varipak DC Motor Control (up to 30 cpm)

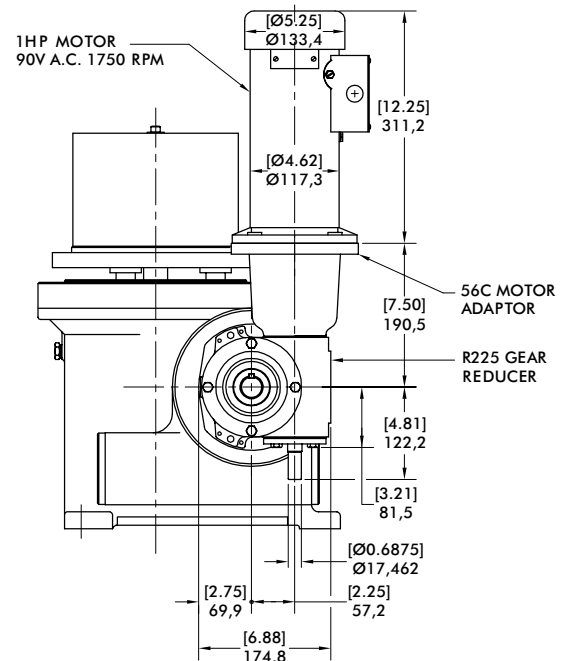
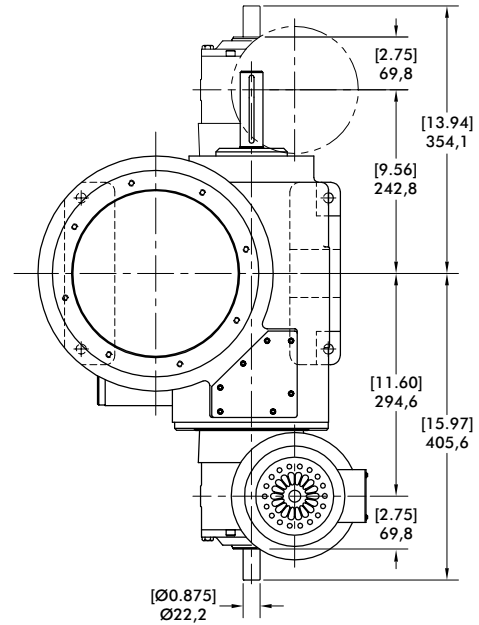
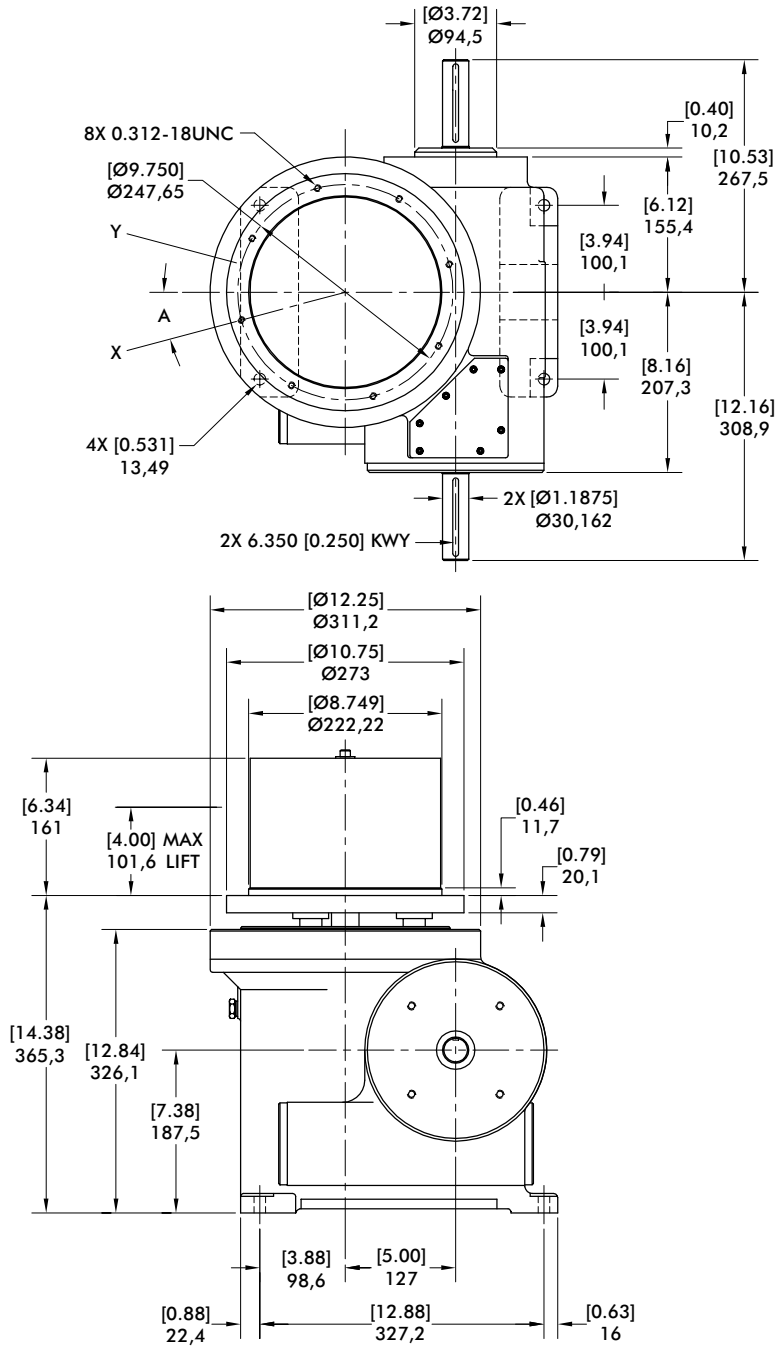
Capacity:*

| | |
|-----------------|--|
| Maximum Mass | 68,04 kg [150 lbm] |
| Maximum Inertia | 4975 kg-cm ² [1700 lb-in ²] |

* Note: These values are for speeds of less than 30 rpm, the minimum cam time for rise and rotation, and are for reference only. Each application must be reviewed and approved by CAMCO Engineering.

500RPP SERIES

Rotary Part Handler | Configurations



| Indexing Motion | | | |
|-----------------|---------|--------------|-----------------|
| Rotation | Angle A | Lift mm [in] | Model |
| 180° | 0° | 50,8 [2] | 500RPP2H32-2H32 |
| | | 76,2 [3] | 500RPP2H32-3H32 |
| | | 101,6 [4] | 500RPP2H32-4H32 |
| 120° | 0° | 50,8 [2] | 500RPP3H32-2H32 |
| | | 76,2 [3] | 500RPP3H32-3H32 |
| | | 101,6 [4] | 500RPP3H32-4H32 |
| 90° | 0° | 50,8 [2] | 500RPP4H32-2H32 |
| | | 76,2 [3] | 500RPP4H32-3H32 |
| | | 101,6 [4] | 500RPP4H32-4H32 |
| 60° | 0° | 50,8 [2] | 500RPP6H32-2H32 |
| | | 76,2 [3] | 500RPP6H32-3H32 |
| | | 101,6 [4] | 500RPP6H32-4H32 |

| Oscillating Motion | | | |
|--------------------|---------|--------------|-------------------|
| Rotation | Angle A | Lift mm [in] | Model |
| 120° | 0° | 50,8 [2] | 500RPP120H32-2H32 |
| | | 76,2 [3] | 500RPP120H32-3H32 |
| 90° | 15° | 50,8 [2] | 500RPP90H32-2H32 |
| | | 76,2 [3] | 500RPP90H32-3H32 |
| | | 101,6 [4] | 500RPP90H32-4H32 |
| 60° | 0° | 50,8 [2] | 500RPP60H32-2H32 |
| | | 76,2 [3] | 500RPP60H32-3H32 |
| | | 101,6 [4] | 500RPP60H32-4H32 |
| 45° | 22.5° | 50,8 [2] | 500RPP45H32-2H32 |
| | | 76,2 [3] | 500RPP45H32-3H32 |
| | | 101,6 [4] | 500RPP45H32-4H32 |

Features

- Standard Indexing or Oscillating Motion
- R225 Reducer (Ratios from 5:1 to 60:1)
— 56C Motor Adapter and Coupling
- 1 hp AC Drive Package with Inverter Duty Motor and Inverter Drive (up to 60 cpm)

Optional Accessories

- 1 hp DC Motor
- Varipak DC Motor Control (up to 30 cpm)

Capacity:*

| | |
|-----------------|--|
| Maximum Mass | 81,65 kg [180 lbm] |
| Maximum Inertia | 9204 kg-cm ² [3145 lb-in ²] |

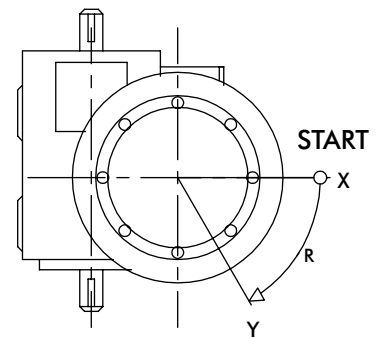
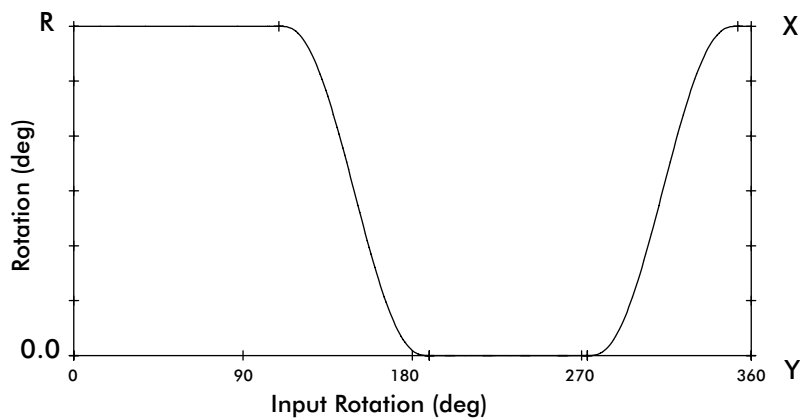
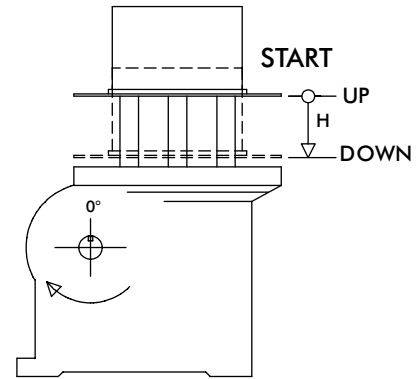
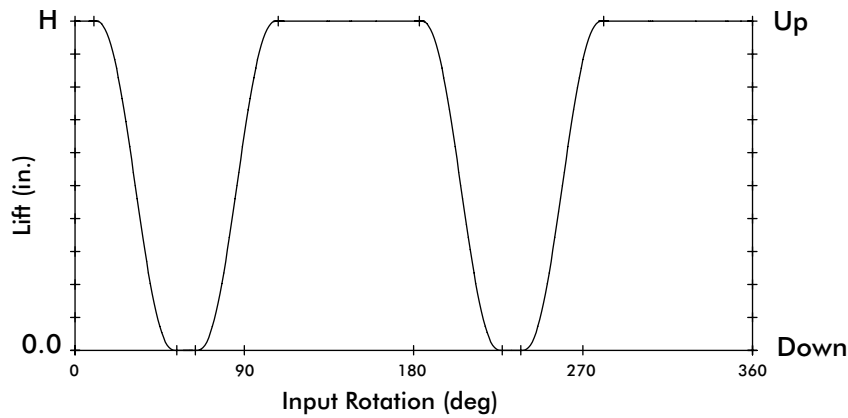
Capacity:*

| | |
|-----------------|-------------------------|
| Maximum Mass | 180 lbs |
| Maximum Inertia | 3415 lb-in ² |

* Note: These values are for speeds of less than 30 rpm, the minimum cam time for rise and rotation, and are for reference only. Each application must be reviewed and approved by CAMCO Engineering.

ROTARY PART HANDLER

Oscillator Timing Diagram

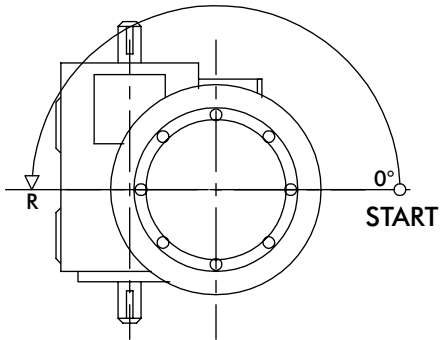
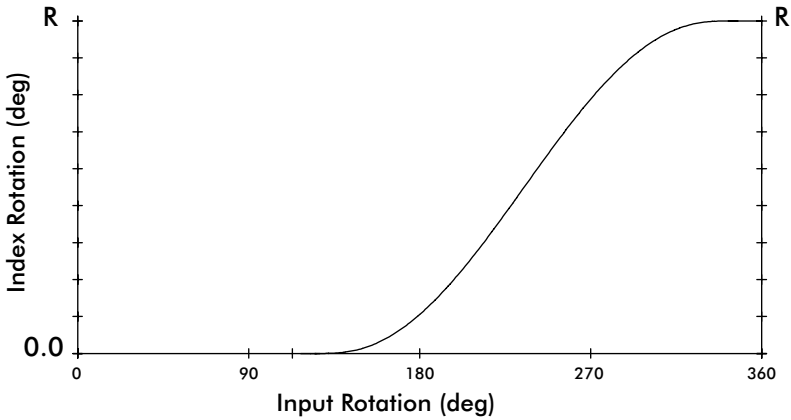
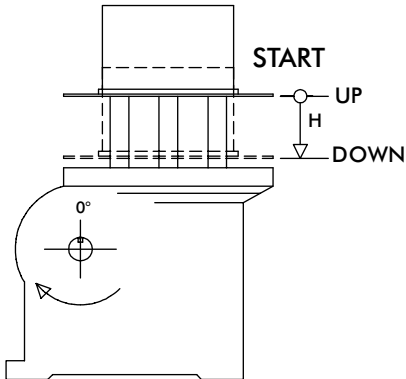
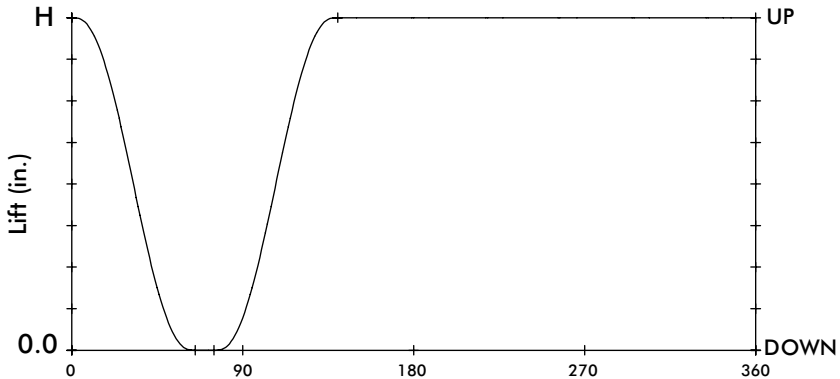


Motion Options

- Standard starting position (home) at time 0 is at maximum rise (up) and at the X rotary position.
- The standard sequence can be mirrored in either the lift, rotary or both:
 - The mirrored lift starts in the zero elevation or down position
 - The mirrored rotary motion starts at Y.
- Custom motion times are also available – consult your Sales Agent for more information.

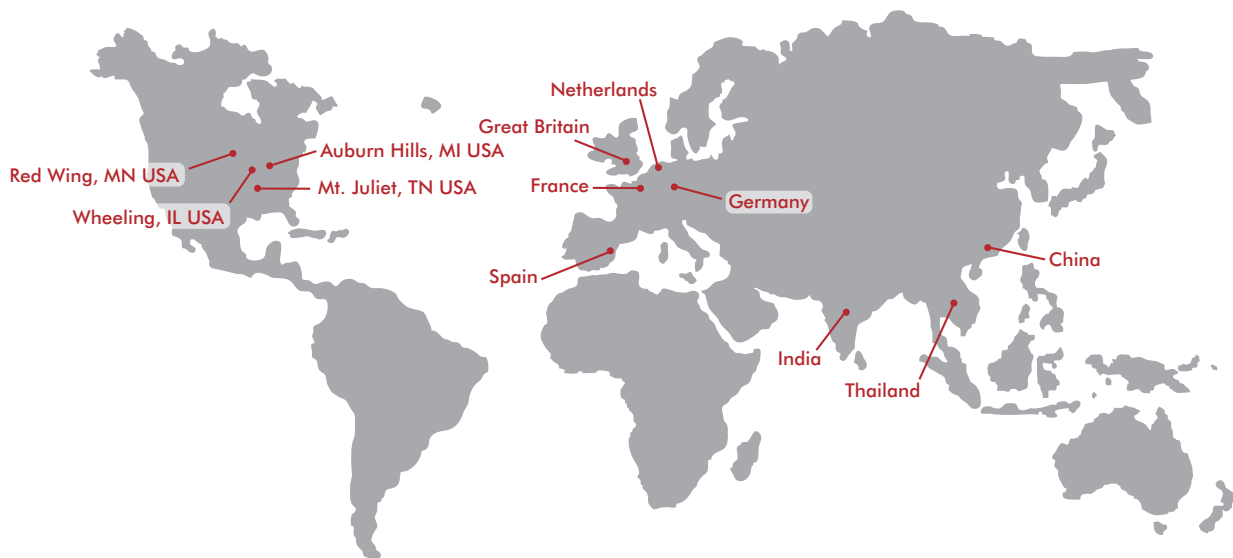
ROTARY PART HANDLER

Indexer Timing Diagram



Motion Options

- Standard starting position (home) at time 0 is at maximum rise (up) and at the start of a counter-clockwise index (right-hand cam helix).
- The standard sequence can be mirrored in either the lift, rotary or both:
 - The mirrored lift starts in the zero elevation or down position
 - The mirrored rotary motion is a clockwise index (left-hand helix)
- Custom motion times are also available – consult your Sales Agent for more information.



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