PRODUCT RANGE

Precision, Motion Control, Technology.
Cone Drive is a world leader in precision motion control technology. We work with our customers every step of the way – from design specs to the final solution – to create highly precise, highly specific products that keep our customers’ technology at the forefront of their industry. Cone Drive offers engineering support, unique solutions, and innovative technology across a breadth of markets and products to drive your company forward.
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### High Performance Right Angle Drive - NEMA

#### Features
- Double Enveloping Worm Gearing
- 5 Year Warranty
- 300% Overload
- Fan and Water Cooling Options

#### Specs
- **Center Distances**: 1.5” – 28”
- **Output Torque**: Up to 2.9 million lb-in
- **Gear Ratios**:
  - 5:1 to 70:1 in single reduction
  - Up to 4200:1 in double reduction
  - Up to 180000:1 in triple reduction
- **Input Options**: Solid, Single or Double Extended, NEMA Adaptor
- **Output Options**: Single or Double Extended Solid, Hollow or Shrink Disc
- **Backlash Options**: Standard, Low, Absolute Zero

### High Performance Right Angle Drive - Servo

#### Features
- Double Enveloping Worm Gearing
- 5 Year Warranty
- 300% Overload
- Exact Ratios
- Fan Cooling

#### Specs
- **Center Distances**: 3.00”, 3.50”, 4.00”, 5.00”, 6.00”, 7.00”, 8.00”
- **Output Torque**: Up to 120,000 lb-in
- **Gear Ratios**: 5:1 to 70:1 in single reduction
- **Input Options**: Fits any servo motor
- **Output Options**: Single or Double Extended Solid, Hollow or Shrink Disc
- **Backlash Options**: 2-19 arc minutes
MODEL HP
Worm gear units with double-enveloping worm gearing. Available in single, double and triple reductions.
FEATURES

• SUPPLIED IN MATCHING SETS
• GREATER DURABILITY AND RELIABILITY
• 300% SHOCK LOAD

• 1 YEAR WARRANTY
• CUSTOM RATIOS AVAILABLE
• INCH OR METRIC SIZES

SPECS

SIZES From 1.50” - 54”
GEAR RATIOS From 5:1 to 70:1
INPUT OPTIONS Single or Double Extended and Custom Designed
OUTPUT OPTIONS Solid, Hollow, or Flange Type
MATERIAL OPTIONS Gears available in standard tin bronze or aluminum bronze. Worms are hardened steel or optional stainless.
The Cone Drive double-enveloping design provides more tooth contact—up to eight times more than straight worms.

The mesh of common straight worm gearing provides one to 1½ gear teeth in contact with the worm.
FEATURES

• NEMA AND REDUCER ADAPTATION
• NO LEAK DRY WELL DESIGN
• DIRECT DIMENSIONAL REPLACEMENT AGAINST RENOLD, RADICON, AND FLENDER

• 5 YEAR WARRANTY
• FAN COOLING
• FLANGE MOUNT

SPECS

CENTER DISTANCES 100, 125, 160, 200
OUTPUT TORQUE Up to 129,000 lb-in
GEAR RATIOS 5:1 to 70:1 in single reduction,
INPUT OPTIONS Single or Double Extended Solid or NEMA
OUTPUT OPTIONS Single or double extended solid, Hollow or Flange with or without drywell
MODEL HP-A
Universal metric housing featuring double-enveloping gearing & drywell feature.
**FEATURES**

**PRECISION RIGHT ANGLE DRIVE**
- Double Enveloping Worm Gearing
- Double Seals Throughout
- 5 Year Warranty
- IP-65 Rated
- Vent-Free and Sealed for Life
- Aluminum Construction

**MIDRANGE RIGHT ANGLE DRIVE**
- Double Enveloping Worm Gearing
- 5 Year Warranty
- Double Seals Throughout
- Vent-Free and Sealed for Life
- Flange Mount
- Cast Iron Construction

**SPECs**

**PRECISION RIGHT ANGLE DRIVE**
- **Sizes**: 38, 51, 64, 76, 89mm
- **Output Torque**: Up to 7,800 lb-in
- **Gear Ratios**: Up to 60:1 in a single reduction
- **Input Options**: Solid Shaft, Servo Motor Mount
- **Output Options**: Single or Double Extended Solid, Hollow, Shrink Discs or End Mount Shaft
- **Backlash Options**: Standard, Low, Absolute Zero

**MIDRANGE RIGHT ANGLE DRIVE**
- **Sizes**: 1.50”, 2.00”, 2.50”, 3.00”, 3.50”
- **Output Torque**: Up to 7,800 lb-in
- **Gear Ratios**: Up to 60:1 in a single reduction
- **Input Options**: Reducer, NEMA or Servo
- **Output Options**: Single or Double Extended Solid, Hollow or Shrink Disc
- **Backlash Options**: Standard or Low
SERIES W
Precision right angle servo gearboxes.

MODEL RG
Moderate precision right angle servo gearboxes.
RIGHT ANGLE DRIVE - NEMA

FEATURES
- Modular components for maximum flexibility
- Guarantee motor removal with patented fret free motor bushing
- Complete mounting accessories
- Dimensionally interchangeable with other manufacturers
- Lightweight aluminum construction
- Conex® worm gearing
- 2 year warranty

SPECS
- Sizes: 1.33” - 3.54”
- Output torque: Up to 8,000 lb-in
- Gear ratios: Up to 3600:1 in double reduction
- Input options: Solid shaft, NEMA
- Output options: Solid or hollow shaft

RIGHT ANGLE DRIVE - SERVO

FEATURES
- Lightweight aluminum construction
- Versatile mounting options
- Trouble-free servo motor mounting
- Double sealed input
- 2 year warranty
- Conex® gearing

SPECS
- Center distances: 1.33”, 1.54”, 1.97”, 2.38”, 3.00”, 3.54”
- Output torque: Up to 6,300 lb-in
- Gear ratios: Up to 60:1
- Output options: Solid or hollow shaft (single or double)
SERIES B
Industrial duty worm gear unit featuring Conex gearing.

SERIES S
Value engineered right angle servo gearboxes.
FEATURES

- IP-69K RATED
- LIFE-TIME LUBRICATION WITH FOOD-GRADE OIL
- DOUBLE-ENVELOPING WORM GEARING
- INCH OR METRIC SHAFTS
- DOUBLE INPUT & OUTPUT SEALS
- ASEPTIC DESIGN
- GUARANTEE MOTOR REMOVAL WITH PATENTED FRET-FREE MOTOR BUSHING
- DOUBLE WORM BEARINGS
- NSF & A3 CERTIFIED
- 5 YEAR WARRANTY
- LASER ETCHED NAMEPLATE

SPECS

CENTER DISTANCES 1.54”, 1.75”, 1.97”, 2.38”, 3.00”
NEMA FRAMES Up to 184TC frame
OUTPUT TORQUE Up to 6,300 lb-in
GEAR RATIOS From 5:1 to 60:1, single reduction and 40:1 to 600:1 double reduction
OUTPUT OPTIONS Solid or Hollow Shaft in inch or metric sizes and Shrink Discs
MATERIAL 316 Stainless Steel
STAINLESS
Right angle, IP-69K rated for the food processing market.
FEATURES

- HIGH TORQUE CAPACITY WITH NO INCREASE IN SIZE
- ABILITY TO WITHSTAND HIGH STARTING AND STOPPING LOADS
- 5 YEAR WARRANTY

SPECs

<table>
<thead>
<tr>
<th>CENTER DISTANCES</th>
<th>2” – 24”</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTPUT TORQUE</td>
<td>Up to 52,000 lb-in</td>
</tr>
<tr>
<td>GEAR RATIOS</td>
<td>Up to 4,900:1</td>
</tr>
<tr>
<td></td>
<td>Unequal ratio Pinch Roll available</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Solid shaft (single or double extended), NEMA flange (56C - 256TC)</td>
</tr>
<tr>
<td>OUTPUT OPTIONS</td>
<td>Solid or Hollow Shaft in inch or metric sizes</td>
</tr>
</tbody>
</table>
DUO DRIVE
Dual gears on parallel output shafts.
FEATURES

• DOUBLE ENVELOPING WORM GEARING
• 5 YEAR WARRANTY
• 300% OVERLOAD
• WATER COOLING OPTION

SPECs

CENTER DISTANCES  2.50” - 10”
OUTPUT TORQUE    Up to 175,000 lb-in
GEAR RATIOS       From 5:1 up to 280:1
INPUT OPTIONS     Solid shaft, Standard NEMA C-face, D-flange, or Sugar Scoop
OUTPUT OPTIONS    Solid or Hollow Shaft, Shrink Disc, Flange Mount, Foot Brackets and Torque Arm
FEATURES

• MOTOR ADAPTATION
• ULTRA-LOW TO ZERO BACKLASH
• STANDARD & CUSTOM RATIOS
• CONE DRIVE OPTIMIZED TOOTH PROFILES
• HIGH EFFICIENCY/ HIGH RATIOS
• BACK-DRIVEABLE
• DIRECT DIMENSIONAL REPLACEMENT AGAINST INDUSTRY STANDARDS
• MADE IN THE USA
• 2 YEAR WARRANTY
• MADE IN THE USA

SPECS

SIZES 11-45, Custom
INPUT ADAPTERS Servo, Stepper, AC, Air, Hydraulic, Manual
GEAR RATIOS 50, 80, 100, 120, 160, Custom
OUTPUT OPTIONS Solid, Hollow, or Custom
HARMONIC
Cone Drive Harmonic Solutions® offer the ultimate in precision motion control technology.
## Precision Inline Drive

### Features
- Compact design & universal housing
- Precision bearings and precision ground gearing
- 3 arc-minute backlash
- 5 year warranty

### SPECS

<table>
<thead>
<tr>
<th>SIZES (TYPE S)</th>
<th>60, 90, 115, 140, 180, 220</th>
</tr>
</thead>
<tbody>
<tr>
<td>(TYPE N)</td>
<td>60, 75, 100, 140, 180, 210, 240</td>
</tr>
<tr>
<td>OUTPUT TORQUE</td>
<td>Up to 13,275 lb-in</td>
</tr>
<tr>
<td>(TYPE S)</td>
<td>Up to 21,240 lb-in</td>
</tr>
<tr>
<td>(TYPE N)</td>
<td>Up to 100:1 in two stages</td>
</tr>
<tr>
<td>GEAR RATIOS</td>
<td>Fits any servo motor or stepper motor</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Output with or without keyway</td>
</tr>
</tbody>
</table>
| OUTPUT OPTIONS |}

## Inline Drive

### Features
- Universal housing
- Quiet & smooth
- Fast and error free motor assembly
- 5 arc-minute backlash
- 5 year warranty

### SPECS

<table>
<thead>
<tr>
<th>SIZES</th>
<th>50, 70, 90, 120, 155, 205, 235</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTPUT TORQUE</td>
<td>Up to 13,275 lb-in</td>
</tr>
<tr>
<td>GEAR RATIOS</td>
<td>From 3:1 in a single stage to 100:1 in two stages</td>
</tr>
<tr>
<td>INPUT OPTIONS</td>
<td>Fits Servo or Stepper motors</td>
</tr>
</tbody>
</table>
SERIES P
Precision planetary servo gearboxes.

SERIES LE
In-line helical geared motors and reducers.
**SLEW DRIVE**

**FEATURES**
- LOW PROFILE DESIGN
- CAPABLE OF COMBINED TILTING, RADIAL AND AXIAL LOADS
- STRONG SHOCK RESISTANCE, LONG LIFE PERFORMANCE
- SMOOTH ROTATION, HIGHLY ADAPTABLE
- COST EFFICIENT & RELIABLE
- SEALED DRIVE OPTIONS
- 2 YEAR WARRANTY

**SPECs**
- **SIZES**
  - 7”, 9”, 12”, 14”, 17”, 21”, 25”
- **RATIO**
  - 47, 62, 79, 86, 104, 90, 104
- **OUTPUT TORQUE**
  - Up to 60 kNm (44,220 lb-ft)
- **HOLDING TORQUE**
  - Up to 158 kNm (116,535 lb-ft)
- **OVERTURNING MOMENT**
  - Up to 310 kNm (228,644 lb-ft)
- **OUTPUT OPTIONS**
  - Standard bolt circle diameters published for each size
- **HOUSING OPTIONS**
  - Open, Closed, Sealed

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**SLEW BEARING**

**FEATURES**
- LOW PROFILE DESIGN
- CAPABLE OF COMBINED TILTING, RADIAL, AND AXIAL LOADS
- SMOOTH ROTATION
- COST EFFICIENT & RELIABLE
- PROTECTED BEARING
- OPTIONAL WORM GEAR DRIVEN SPUR DRIVE
- 2 YEAR WARRANTY

**SPECs**
- **SIZES**
  - 224mm (8.82”) - 800mm (31.5”) ball pitch diameter bearing
- **STYLES**
  - Slew Ring, Slew Ring External Teeth, Slew Ring Internal Teeth
SLEW DRIVE
High radial, axial and moment loads in a low profile ready-to-install solution.

SLEW BEARING
Versatile bearing solutions featuring external, internal and without teeth options.
We recognize that ready-made products are not always the best solution. Our product range is engineered to enable a high degree of flexibility. From product modifications to full customization services, our experienced engineering and application support teams are available to work with you. Our engineers can recommend the best possible gearing solution to minimize the total cost of ownership.

Customizable Options Include:
- Ratio
- Shaft Diameters
- Shaft Lengths
- Materials
- Bearings
- Housings
- Design to Specification

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**CUSTOM GEAR SETS**

**Capabilities**

**SIZES**
Custom sizes ranging from 1.25” CD - 54” CD

**GEAR RATIOS**
Custom ratios available from 3:1 to 300:1 in a single stage

**BACKLASH**
As low as Absolute Zero

**MATERIALS**
Gears available in tin bronze, aluminum bronze, or ductile iron. Worms available carbon steel, stainless, and plastics.