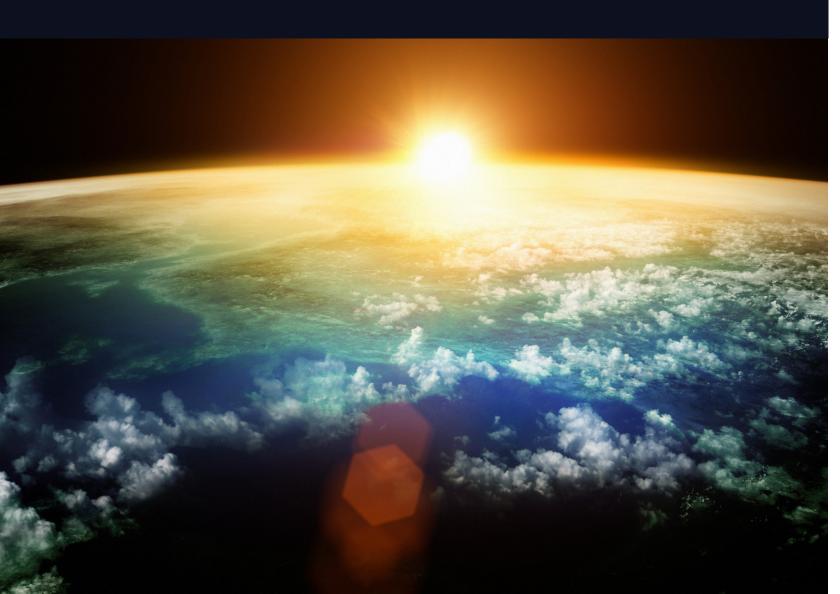




Cone Drive is a world leader in precision motion control technology. We work with our customers every step of the way – from design specs to the final solution – to create highly precise, highly specific products that keep our customers' technology at the forefront of their industry. Cone Drive offers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



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### **RIGHT ANGLE SOLUTIONS**

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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 18000:1 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





Worm gear units with double-enveloping worm gearing. Available in single, double and triple reductions.















### **HIGH PERFORMANCE GEAR SETS**

### **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

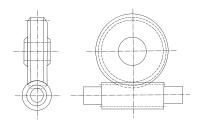
MATERIAL OPTIONS Gears available in standard tin bronze or aluminum

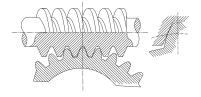
bronze. Worms are hardened steel or optional

stainless.



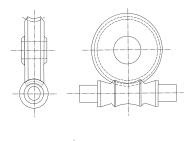
### Cylindrical worm gearing

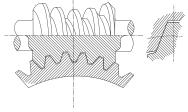




The mesh of common straight worm gearing provides one to 1½ gear teeth in contact with the worm.

#### Double-enveloping worm gearing





The Cone Drive double-enveloping design provides more tooth contact - up to **eight times** more than straight worms.



### **UNIVERSAL RIGHT ANGLE DRIVE**

### **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.









## PRECISION RIGHT ANGLE DRIVE

FEATURES	SPECS	
DOUBLE ENVELOPING     WORM GEARING	SIZES	38, 51, 64, 76, 89mm
	OUTPUT TORQUE	Up to 7,800 lb-in
DOUBLE SEALS THROUGHOUT	GEAR RATIOS	Up to 60:1 in a single reduction
• 5 YEAR WARRANTY	GEAR RATIOS	
• IP-65 RATED	INPUT OPTIONS	Solid Shaft, Servo Motor Mount
<ul> <li>VENT-FREE AND SEALED FOR LIFE</li> </ul>		
ALUMINUM CONSTRUCTION	OUTPUT OPTIONS	Single or Double Extended Solid, Hollow, Shrink Discs or End Mount Shaft
	BACKLASH OPTIONS	Standard, Low, Absolute Zero



## MIDRANGE RIGHT ANGLE DRIVE

FEATURES	SPECS	
DOUBLE ENVELOPING WORM GEARING	SIZES	1.50", 2.00", 2.50", 3.00", 3.50"
• 5 YEAR WARRANTY	OUTPUT TORQUE	Up to 7,800 lb-in
DOUBLE SEALS THROUGHOUT	GEAR RATIOS	Up to 60:1 in a single
<ul> <li>VENT-FREE AND SEALED FOR LIFE</li> </ul>		reduction
• FLANGE MOUNT • CAST IRON CONSTRUCTION	INPUT OPTIONS	Reducer, NEMA or Servo
	OUTPUT OPTIONS	Single or Double Extended Solid, Hollow or Shrink Disc



**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

# (C)

### **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)

Servo



**SERIES B** 

Industrial duty worm gear unit featuring Conex gearing.



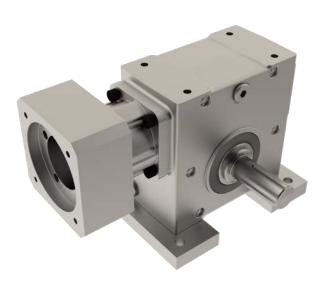












**SERIES S** 

Value engineered right angle servo gearboxes.

## STAINLESS STEEL RIGHT ANGLE DRIVE

### **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

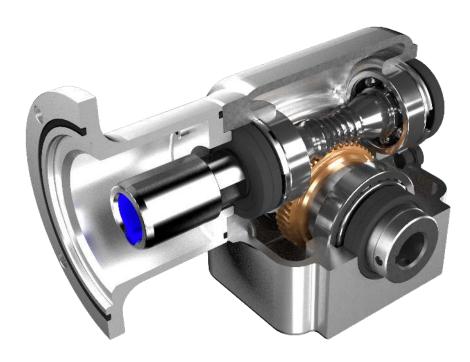
GEAR RATIOS From 5:1 to 60:1, single reduction and

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.







# DUO DRIVE

### **FEATURES**

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

- 300% SHOCK LOAD
- FAN OR WATER COOLING OPTIONS

### **SPECS**

CENTER DISTANCES 2" - 24"

OUTPUT TORQUE Up to 52,000 lb-in

GEAR RATIOS Up to 4,900:1

Unequal ratio Pinch Roll available

INPUT OPTIONS Solid shaft (single or double extended),

NEMA flange (56C - 256TC)

OUTPUT OPTIONS Solid or Hollow Shaft in inch or metric sizes



Dual gears on parallel output shafts.







# HELICAL WORM & GEARMOTOR

### **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











### **HARMONIC COMPONENT SETS**

### **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





Cone Drive Harmonic Solutions® offer the ultimate in precision motion control technology.

















#### **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**

SIZES (TYPE S) 60, 90, 115, 140, 180, 220

(TYPE N) 60, 75, 100, 140, 180, 210, 240

**OUTPUT TORQUE** 

(TYPE S) Up to 13,275 lb-in

(TYPE N) Up to 21,240 lb-in

GEAR RATIOS Up to 100:1 in two stages

INPUT OPTIONS Fits any servo motor or

stepper motor

OUTPUT OPTIONS Output with or without keyway



### **INLINE DRIVE**

#### **FEATURES**

- UNIVERSAL HOUSING
- QUIET & SMOOTH
- FAST AND ERROR FREE MOTOR ASSEMBLY
- 5 ARC-MINUTE BACKLASH
- 5 YEAR WARRANTY

#### **SPECS**

SIZES 50, 70, 90, 120, 155,

205, 235

OUTPUT TORQUE Up to 13,275 lb-in

GEAR RATIOS From 3:1 in a single

stage to 100:1 in two

stages

INPUT OPTIONS Fits Servo or Stepper

motors



**SERIES P**Precision planetary servo gearboxes.















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

# C 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"
3.223	, , 5 , 12 , 11 , 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



### **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 BEARING**

Versatile bearing solutions featuring external, internal and without teeth options.

# C CUSTOM ASSEMBLY

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



### **CUSTOM GEAR SETS**

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.







NORTH AMERICA | EUROPE | ASIA

