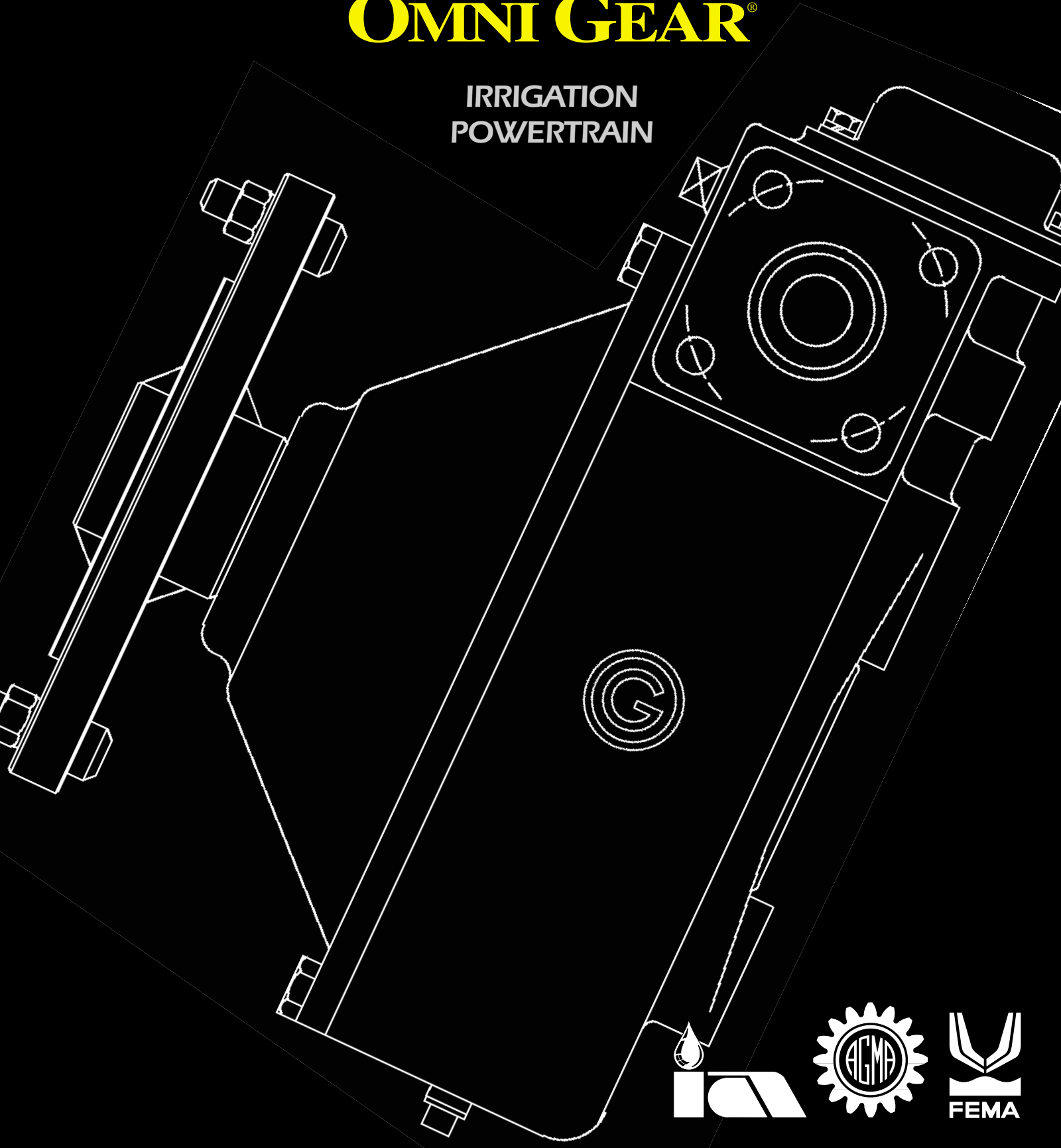




# OMNI GEAR®

IRRIGATION  
POWERTRAIN



**Omni Builds The Best Wheel Drives in the Business!**

**External V-Ring Seals**

Provide Additional Barrier against Debris and Corrosion

**Input Shaft Seals**

Triple Lip for maximum Protection

**Thrust Bearings**

On Input Shaft have Highest Load Rating

**Input Caps**

High Tensile Castings with Water Drainage System and Tapped Holes for Easy Installation of DPS-100 Drivetrain Protection System

**Surface Finish**

Worms are either Precision Ground to 32 Ra or Precision Finished to 125 Ra for Higher Efficiency Rating

**Input Shaft Protector**

Gold Zinc Dichromate plated for Maximum Corrosion Resistance

**Worm Shafts**

Made from either High Carbon Hardened Steel or Alloy Heat Treated and Ground Steel

**Bull Gears**

Made from either High Tensile Castings or are Centrifugally Cast Aluminum Bronze

**Expansion Camber**

Internal Bellows 12 cu.in. or Big Chamber™ 39 Cu.in. units available

**Smooth Surface**

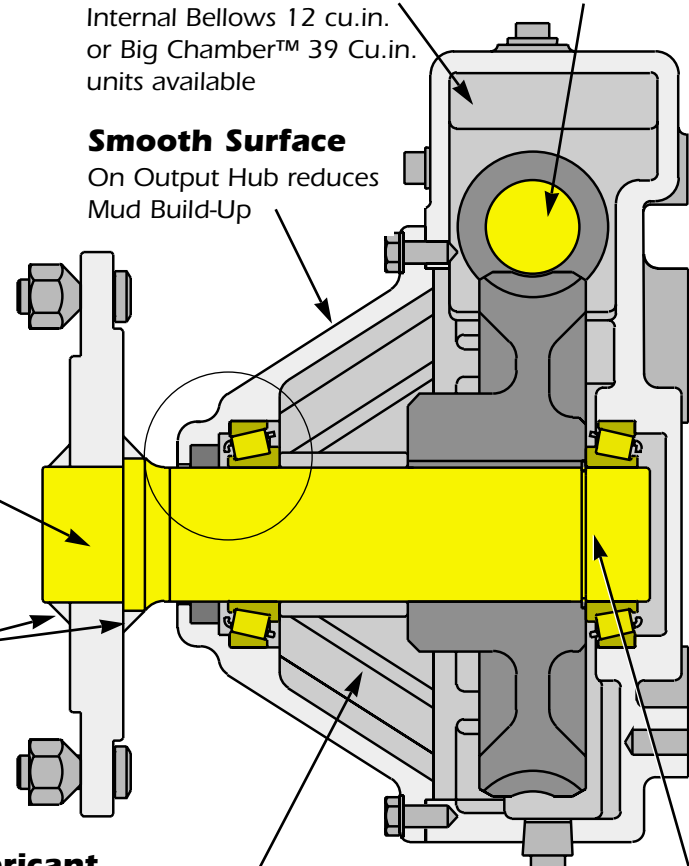
On Output Hub reduces Mud Build-Up

**Large Face Width**

High Contact, Large Pitch Gear Set gives Higher Torque Loads than Competition

**Universal Bolt Pattern**

Allows Usage on Virtually All Pivots



**Steel Output Shaft**

Takes Highest Axial & Torsional Loads

**Double Welded**

Output Shaft & Flange enables usage of the largest Tires & Wheels

**Custom Blended Lubricant**

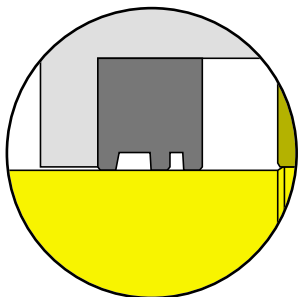
Continuously Coats Gears during Off-Season to Reduce Internal Corrosion and provide Long-Wear under Extreme Use Conditions

**Internal Ribs**

On Output Hub provide Overhung Load Strength

**Retaining Ring**

Locked In Place between Gear & Bearing can not push off Shaft under Highest Loads



**Mud & Debris Excluder**

Labyrinth Design provides for Debris Exclusion and Internally Installed Oil Seal with Triple Lips Eliminate Debris from Penetrating Gear Case

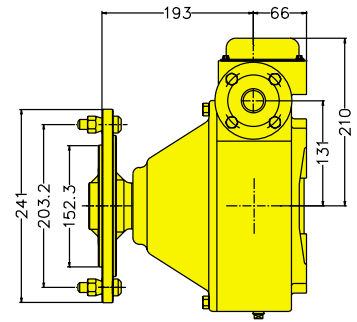
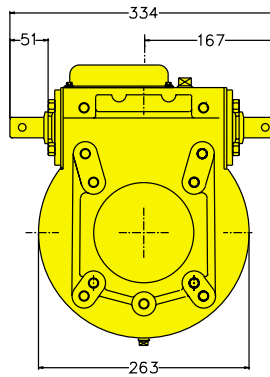
# OFD-50 Series

Standard

# Worm Gear Wheel Drives

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm.)  
 Ratio: 50:1 (Others Available)  
 Shaft Size: 2" 2.25" 2.5"  
 (51 mm) (57 mm) (65 mm)  
 Weight: 104 lbs. 108 lbs. 120 lbs.  
 (47.2 kg) (49.0 kg) (54.4 kg)  
 Oil Capacity: 133 fl.oz. 126 fl.oz. 104 fl.oz.  
 (3.9 L) (3.7 L) (3.1 L)  
 Expansion Chamber: Bellows Type  
 • Multiple Mount Pattern Fits Most Pivots.

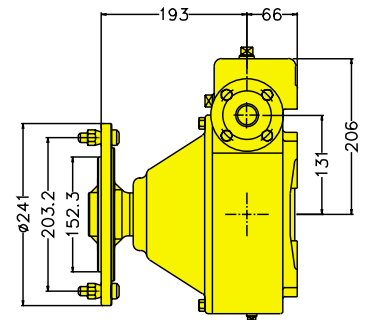
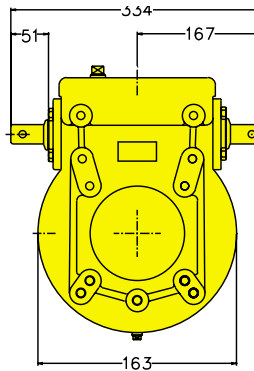


# OFD-50D Series

Big Chamber™

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm)  
 Ratio: 50:1 (Others Available)  
 Shaft Size: 2.25" (57 mm)  
 Weight: 110 lbs. (49.0 kg)  
 Oil Capacity: 126 fl.oz. (3.7 L)  
 Expansion Chamber: Big Chamber™  
 • DPS-100 Gearbox Guard mounts easily.  
 • 39 Cubic Inch Expansion Area  
 • Oil Level Plug Eliminates Over-Filling  
 • Replaces Durst® and Zimmatic® Drives

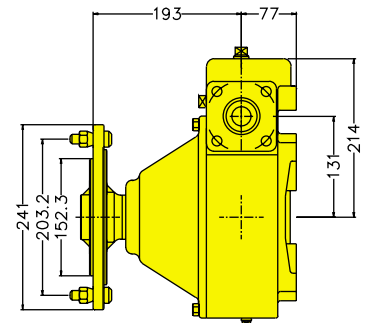
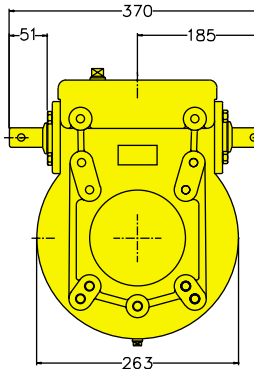


# OFD-50EHT Series

Extra Heavy

### Specifications

Torque Capacity: 80,000 lb.-in. (9,040 Nm)  
 Ratio: 50:1 (Others Available)  
 Shaft Size: 2.25" (57 mm)  
 Weight: 120 lbs. (54.4 kg)  
 Oil Capacity: 134 fl.oz. (3.9 L)  
 Expansion Chamber: Big Chamber™  
 • High Capacity Thrust Bearings on Worm.  
 • 2" Face Width, High Contact Bull Gear.  
 • Precision Finished Worm to 125 Ra.  
 • 5.1" (131 mm) Gear Center Distance.

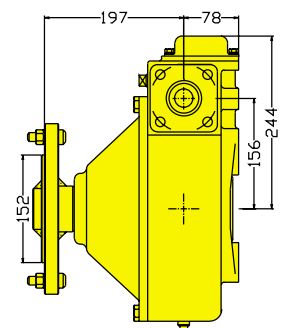
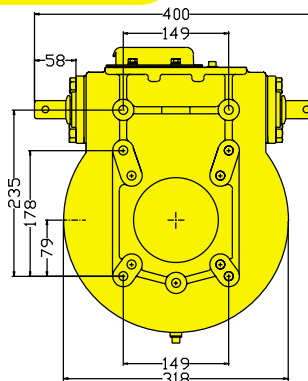


# OFD-50HD Series

Heavy Duty

### Specifications

Torque Capacity: 90,000 lb.-in. (10,170 Nm)  
 Ratio: 50:1 (Others Available)  
 Shaft Size: 2.5" (65 mm)  
 Weight: 164 lbs. (74.4 kg)  
 Oil Capacity: 215 fl.oz. (6.3 L)  
 Expansion Chamber: Bellows Type  
 • 6.1" (156 mm) Gear Center Distance.  
 • Highest Torque Wheel Drive Available.  
 • Ideal for Hose Drag Linear Carts.  
 • High Capacity Thrust Bearings on Worm.



**Power:** Different conditions for various applications may result in a higher or lower power capacity.  
**Oil Seals:** Single, double and triple lip nitrile as well as Viton seals available.  
**Bearings:** Gear drives available with various bearing life options.  
**Lubrication:** Drives available with various lubes depending on operating characteristics.

# OFD-50AB Series

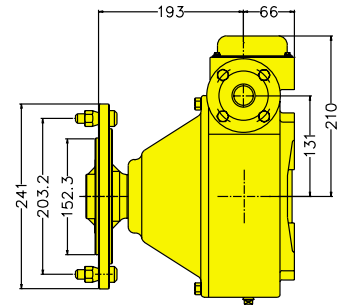
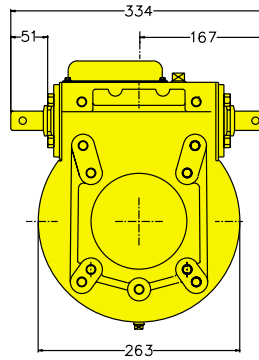
High Speed  
Aluminum Bronze

# Worm Gear Wheel Drives

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm)  
Ratio: 50:1 (Others Available)  
Shaft Size: 2.25" (57 mm)  
Weight: 108 lbs. (49.0 kg)  
Oil Capacity: 126 fl.oz. (3.7 L)

- Precision Ground Worm to 32 Ra. Finish.
- External Expansion or Big Chamber™ Housing.
- Extends Drivetrain Life on High Speed Systems.
- Centrifugally Cast Bull Gear Eliminates Impurities.

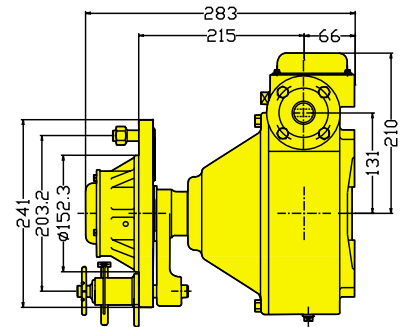
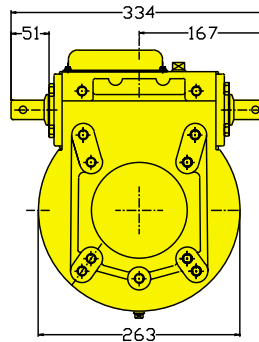


# OFD-50T Series True-Tow Towable

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm)  
Ratio: 50:1 (Others Available)  
Shaft Size: 2.25" (57 mm)  
Weight: 130 lbs. (58.9 kg)  
Oil Capacity: 126 fl.oz. (3.7 L)

- External Expansion or Big Chamber™ Housing.
- True Towable Design Eliminates Add-on Kits.
- Relief Plug Protects from Over-Greasing.
- Adjustable Bearing Lock Nut Eliminates Shims.
- Cross Drilled Pin easily Stows while Towing.

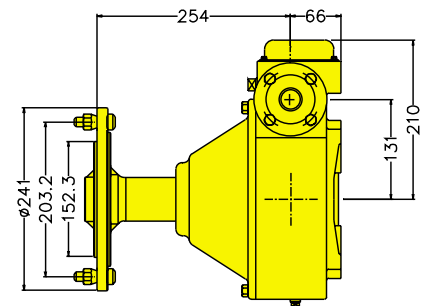
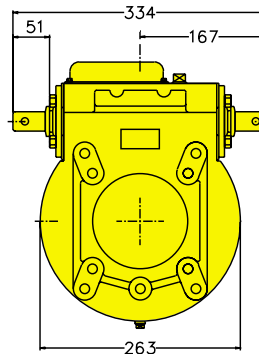


# OFD-52V Series Valley® Type

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm)  
Ratio: 52:1 (Others Available)  
Shaft Size: 2.25" (57 mm)  
Weight: 112 lbs. (50.8 kg)  
Oil Capacity: 126 fl.oz. (3.7 L)  
Expansion Chamber: Bellows Type

- 12 Cubic Inch Expansion Area.
- Replaces Valley® Drives.
- Dual Inputs for Left or Right Mounting.
- Class A Hobbed and Hardened Steel Worm.

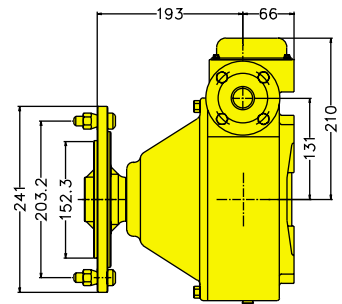
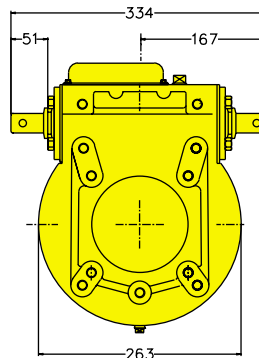


# OFD-50GW Series Extended Life Ground Worm

### Specifications

Torque Capacity: 70,000 lb.-in. (7,909 Nm)  
Ratio: 50:1 (Others Available)  
Shaft Size: 2.25" (57 mm)  
Weight: 108 lbs. (49.0 kg)  
Oil Capacity: 126 fl.oz. (3.7 L)  
Expansion Chamber: Bellows Type

- Precision Ground Worm to 32 Ra. Finish.
- Ideal for Extending Drive Train Life.
- DPS-100 Gearbox Guard Mounts Easily.
- Multiple Mount Pattern Fits Most Pivots.



**Power:** Different conditions for various applications may result in a higher or lower power capacity.

**Oil Seals:** Single, double and triple lip nitrile as well as Viton seals available.

**Bearings:** Geardrives available with various bearing life options.

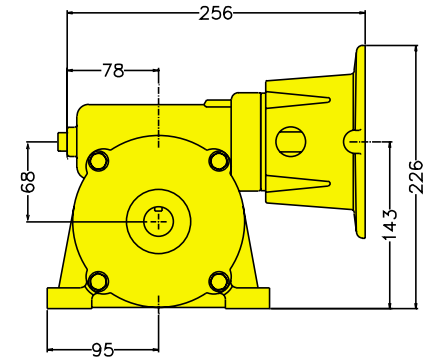
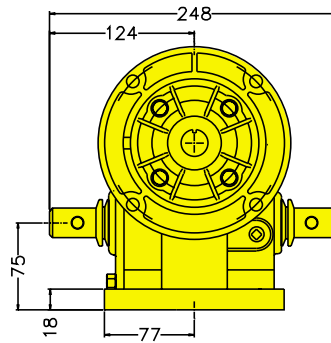
**Lubrication:** Drives available with various lubes depending on operating characteristics.

## IR-15 Series

### Specifications

Torque Capacity: 4,500 lb.-in. (133 Nm.)  
 Ratio: 50:1 and 30:1 (Others Available)  
 Shaft Size: 1.0" (25.4 mm)  
 Weight: 16 lbs. (7.3 kg)  
 Oil Capacity: 11 fl.oz. (1.2 L)  
 Motor Mount: NEMA 56C

- Multi Mount Bolt Pattern fits All Pivots.
- Heavy Duty Unit for Severe Conditions.
- Lovejoy® Type Jaw Coupler included.
- Low Distortion Nitrited Worm Shaft
- 2.7" (68 mm) Gear Distance

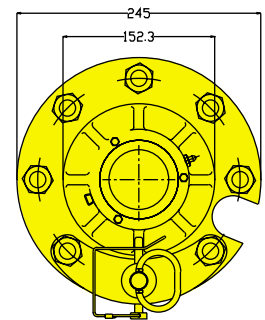
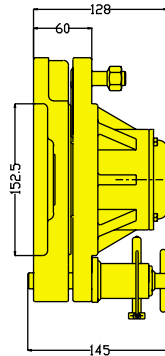


## Worm Gear Center Drives

## CK-50 Series

### Specifications

- Converts Standard Drive to Towable Drive.
- Adjustable Bearing Locknut eliminates Shims.
- Cross Drilled Pin easily stows while Towing.
- Unique Triple Lip Spindle Seal Design.
- High Carbon Steel Tow Pin and Bracket will not Bend Under Load.
- Relief Plug protects from Over Greasing.
- Large Bearings for Improved Load Capacity.
- Easy Repairability with Bolt-on Dust Cover.

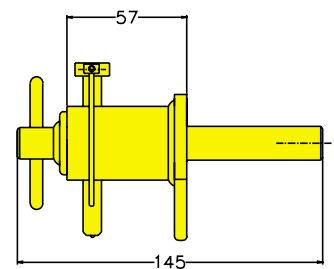
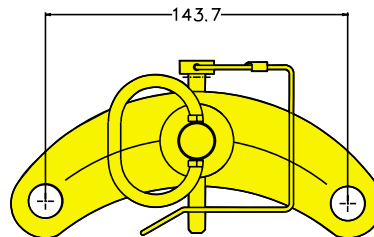


## Towable Conversion Kits

## PB-50 Series

### Specifications

- Cross Drilled Pin easily stows while Towing.
- High Carbon Steel Tow Pin and Bracket will not Bend Under Load.
- PTO Clip-Pin with Tab is easy to remove.
- Usable on all Towable Gearboxes and Conversion Kits.
- Anti-Corrosion Zinc Plated Pin.



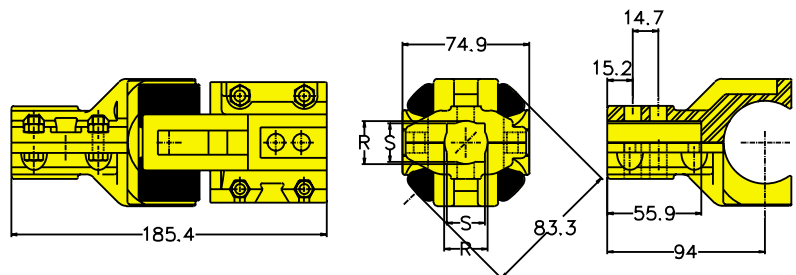
## Pin & Bracket Assemblies

## HTC Series

### Specifications

Square:  $\frac{3}{4}$ ",  $\frac{7}{8}$ ", 1"  
 Round:  $\frac{7}{8}$ ", 1", 1" w/  $\frac{1}{4}$ " Keyway

- High Strength Die Cast Coupler Jaws.
- Bead Blasted for Higher Torque & Strength.
- Dissipates Shock Loads to Other Components.
- Design provides Automatic Re-alignment.
- All Hardware included for Quick Installation.
- Fertilizer, Weather and UV Resistant.
- Complete Coupler Individually Poly Bagged.



## Drive Line Couplers

## Omni Gear sets the New World Standard!

### Carburized Rotor Shaft

Rotor Shaft is Carburized & Ground minimizing Distortion and Noise while Maximizing Life.

### Internal Motor Cooling Fins

For Rapid Heat Dissipation

### Low Amp Draw Balanced Motor

Extra Copper and Laminated Material require less Power Consumption

### High Purity Copper & Insulation System

Makes Motor Run Cool Extending Motor Life

### 2-Stage Shaved Helical Gearing

Provides the most Efficient, Silent, and Largest Torque Drive in the Industry

### Sealed Large Dia. Ball Bearing

Keeps Rotor Shaft Firmly Meshed with Intermediate Gear

### Sealant Filled Joints

Eliminate Moisture Penetration.

### Low Speed Gear

Massive Gear Provides Largest Torque Capacity in the Industry. Industrial Design allows use of up to 2.5 Hp Motors for Tough Applications

### Corrosion Resistant Bolts

Have Anti-Seize on Threads to allow for Independent Removal of Stator

### Double Oil Seals

Keeps Debris and Crop Wrappage from causing Oil Leaks

### Pre-Drilled Holes

Provide for Easy Installation of the DPS-100 Shaft Protection System

### Conduit Box

Sealed Against Moisture while Allowing Drainage

### Extra Thick Casting

Strongest Gear Casing in the Industry keeps Gears from Separating Under Load

### Motor Housing

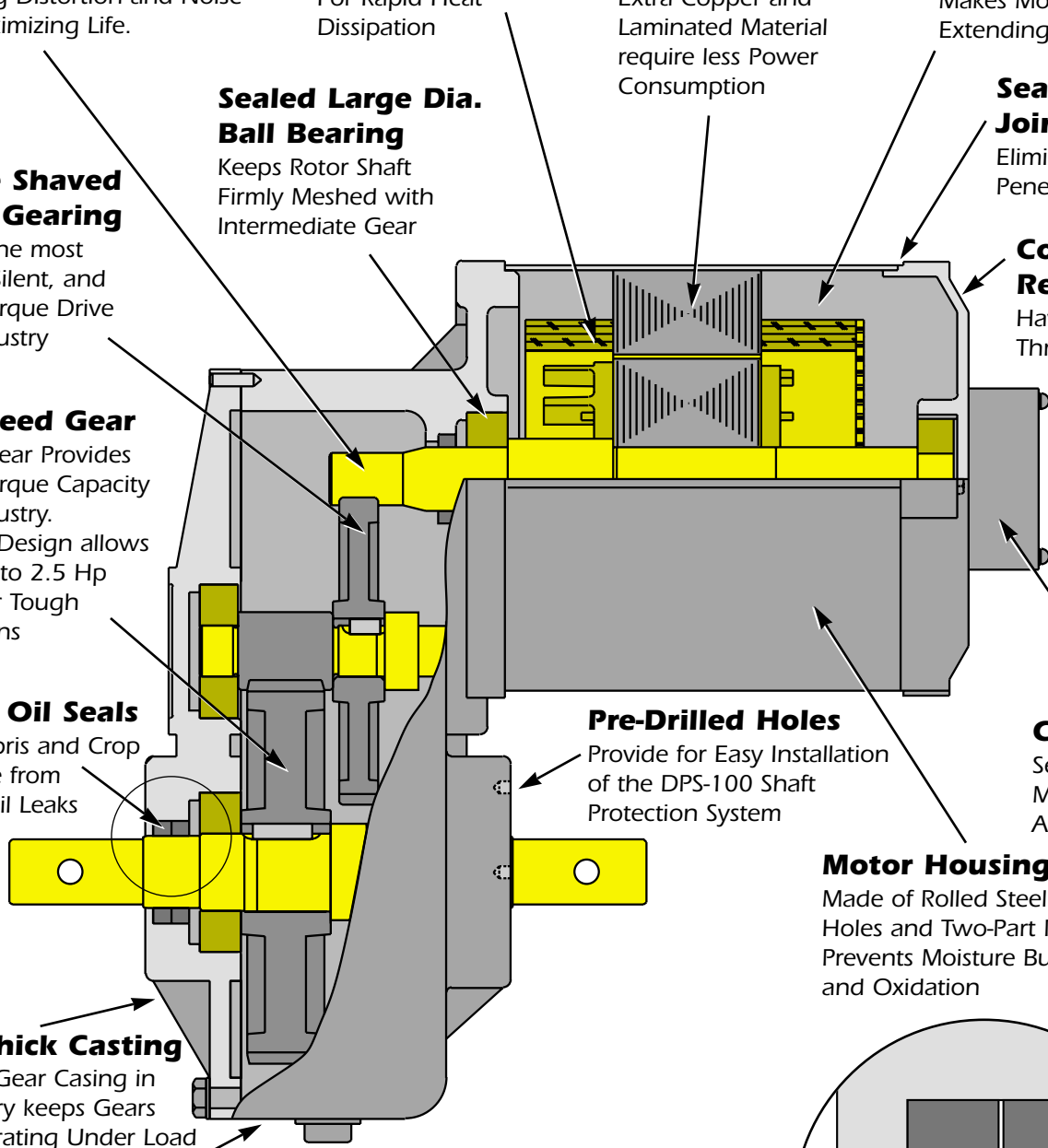
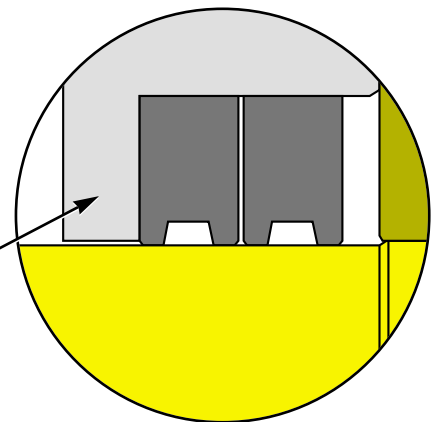
Made of Rolled Steel w/ Drain Holes and Two-Part Painted Prevents Moisture Build-Up and Oxidation

### Gear Case

Made from Heat Treated Aluminum Alloy and CNC Precision Machined Provides Maximum Rigidity under torque

### Mud & Debris Excluder

Labyrinth Design provides for Debris Exclusion and Internally Installed Dual Oil Seals with Double Lips Eliminate Debris from Penetrating Gear Case

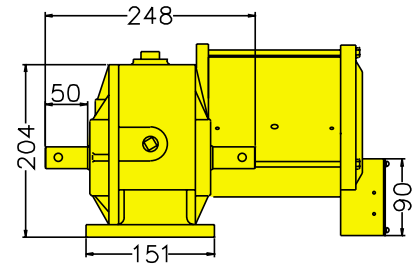
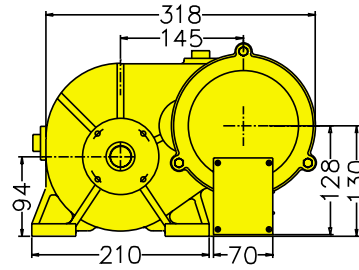


# Irri-Torq™ Series

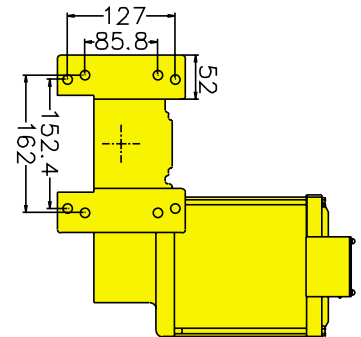
# Helical Gear Center Drives

## Specifications

- Highest torque center drive available.
- Carburized gears for higher strength.
- 2 stage efficient helical gear reduction.
- Large low speed gear for higher torque.
- TI® Klixon® thermal protector.
- CSA & CE approved motor.
- Universal Mounting Pattern



Speed Range:	Low	Medium	Medium-High	High
Gearbox Output Shaft Speed				
460 Volts AC:	28 rpm	43 rpm	56 rpm	86 rpm
380 Volts AC:	23 rpm	35 rpm	47 rpm	72 rpm
Gearbox Ratio:	40:1	40:1	30:1	40:1
Motor Horsepower:	.5 HP	.75 HP	1.0 HP	1.5 HP
Poles in Motor:	6	4	4	2
Motor RPM				
460 Volts AC:	1,150 rpm	1,725 rpm	1,725 rpm	3,490 rpm
380 Volts AC:	930 rpm	1,425 rpm	1,425 rpm	2,850 rpm
Service Factor:	1.0	1.0	1.0	1.0
Oil Capacity:	56 fl.oz.	56 fl.oz.	56 fl.oz.	56 fl.oz.
	1.6 L	1.6 L	1.6 L	1.6 L
Weight:	64 lbs.	63 lbs.	64 lbs.	65 lbs.
	29 kg	28.5 kg	29 kg	29.5 kg

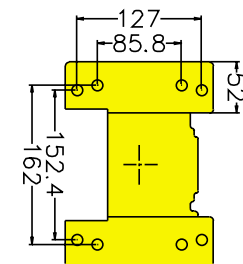
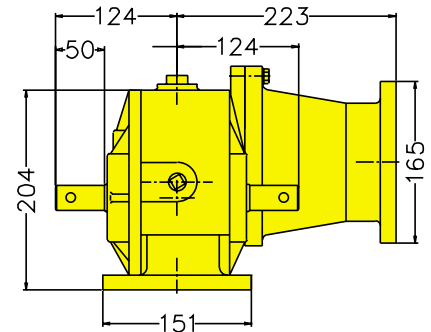
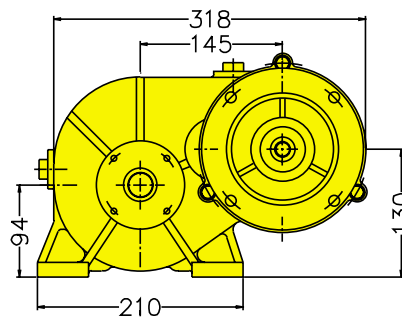


# Irri-Torq™ Series NEMA Center Drive

## Specifications

- NEMA 56 Frame Mount allows usage of Wide Variety of Motors
- 30:1 and 40:1 are Standard Ratios.
- Highest torque center drive available.
- Carburized gears for higher strength.
- 2 stage efficient helical gear reduction.
- Other Ratios Available upon Request.
- Multi-mount bolt pattern fits all pivots.
- DPS-100 Gearbox Guard mounts easily.

Gearbox Ratio:	30:1	40:1
Oil Capacity:	56 fl.oz.	56 fl.oz.
	1.6 L	1.6 L
Weight:	35 lbs.	35 lbs.
	15.9 kg	15.9 kg
Torque Capacity:	8,700 lb.-in.	10,000 lb.-in.
	983 Nm	1,130 Nm



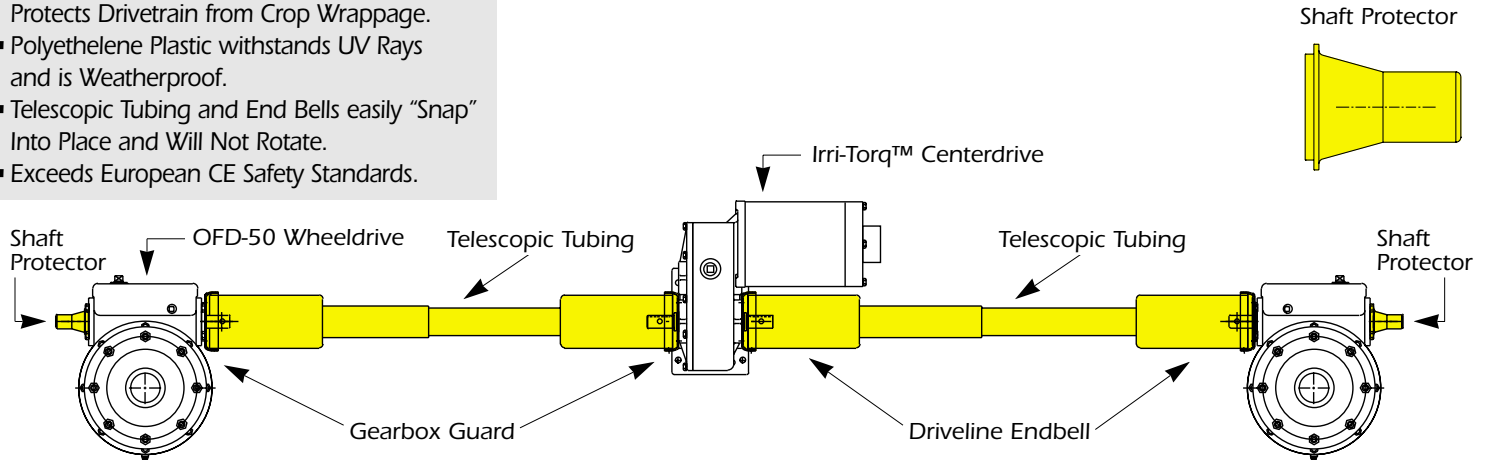
## DPS-100

## Driveline Shields

### Specifications

- The Only System Available that Completely Protects Drivetrain from Crop Wrappage.
- Polyethelene Plastic withstands UV Rays and is Weatherproof.
- Telescopic Tubing and End Bells easily "Snap" Into Place and Will Not Rotate.
- Exceeds European CE Safety Standards.

Patent Pending

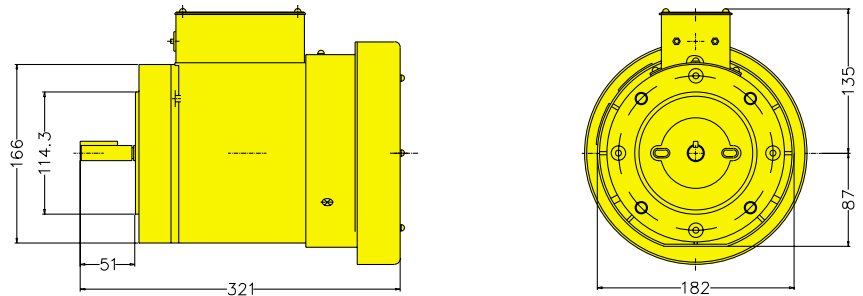


## IM Series

## Electric Motors

### Specifications

- NEMA 56C face motor mount.
- 360/480 volts AC 50/60 Hz multiphase.
- 1.5 True rated horsepower.
- CSA and CE approved.
- Removable Drain Plugs for either Vertical or Horizontal Mounting.
- TI® Klixon® thermal protector.
- Fan Cooled w/Steel Fan Guard & Drip Cover.
- Motor by Leeson® Electric.



## Warranty

Omni Gears' Enclosed Gear Drives are warranted to be free of defects in material or workmanship and to meet Omni Gears specifications at the time of sale. For a copy of our warranty please contact Omni Gear.

## Product Information

The data presented in this catalog is for general information and preliminary layout purposes only. Omni Gear, through its policy of continuous improvement reserves the right to change specifications without notice. For specific application and dimensional information, please contact Omni Gear.

The different conditions for various applications may result in higher or lower power capacity. For these reasons, the ratings contained herein cannot be guaranteed for any application. Prototype testing should be conducted for each application before production.



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