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700 Series Features

- Precision ground worm threads maximize gearbox efficiency. At low ratio's efficiencies of 90 to 95% are common.
- The 700 Series' large oil reservoir provides efficient heat dissipation and lubrication for longer operating life.
- Its multi-position mounting flexibility allows for installation in virtually any position.
- Housings are straddle-milled, top and bottom, for precise alignment of horizontal and vertical bases.
- Internal baffles assure positive, leak-free venting.
- The 700 Series' rugged housing, fabricated of fine-grained, gear-quality cast iron, provides maximum strength for maximum durability, as well as greater precision during worm and gear alignment.
- Boston Gear's 700 Series high-strength bronze worm gear is straddle mounted between heavy-duty tapered roller bearings to increase thrust and overhung load capacities, sizes 713-760.
- Our 700 Series' high strength steel output shaft assures capacity for high torque and overhung loads.
- Pipe plugs allow easy fill, level, and drain in any mounting position
- The 700 Series' super-finished oil-seal diameters on both input and output shafts extend seal life.
- Both 2D and 3D CAD drawings are available from ECatalog/3D Drawings at www.bostongear.com
- Their availability via Reducer Express™, Boston Gear's innovative guaranteed delivery program, means never having to wait.

200 Series Optimount™ Features

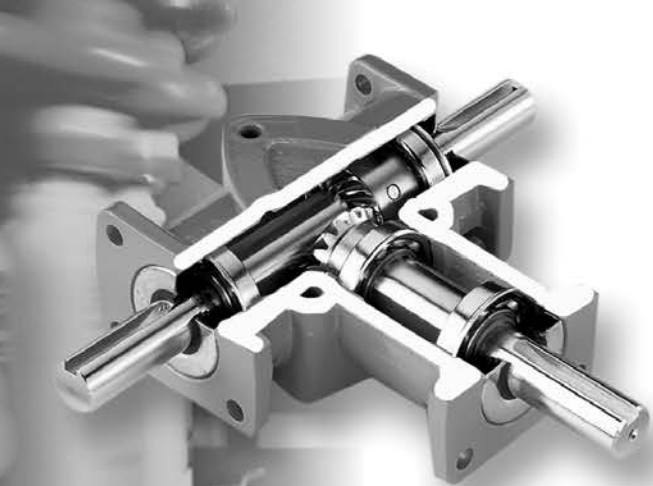
- Superior machining affords highly accurate alignment for exceptional performance - an especially important consideration when purchasing a speed reducer for use as an integral part in OEM equipment.
- Standard hollow output shafts allow gear drives to be connected directly to the drive train, increasing overall efficiency.
- Optional shaft and base kits allow conversion of the reducer to a stand-alone gear drive for greater flexibility.
- Washdown units are available in white or stainless steel epoxy coatings, both USDA certified and approved.
- Horizontal and vertical base mounted configurations make the Optimount™ series extremely versatile.
- Their availability via Reducer Express™, Boston Gear's innovative guaranteed delivery program, means never having to wait.
- CAD drawings are available from ECatalog/3D Drawings at www.bostongear.com

800 Series Features

- Because the 800 Series is dimensionally interchangeable with many U.S. and European in-line helical gear drives, it offers maximum flexibility.
- The standard NEMA C-face design will accept any standard NEMA motor, making it exceptionally versatile.
- Ratios up to 70:1 in just two stages means increased efficiency and reduced case size.
- Accessible oil seals simplify routine product maintenance.
- 800 Series drives come pre-filled with synthetic lubrication for your specific mounting position. Sizes 3 and 4 are lubricated for life which promotes trouble-free operation.
- An original Boston Gear design available from our ISO 9001:2015 certified speed reducer facility.
- Washdown duty units in white or stainless steel epoxy coatings make these gear drives ideal for the most severe washdown environments.
- CAD drawings are available from ECatalog/3D Drawings at www.bostongear.com
- Their availability via Reducer Express™, Boston Gear's innovative guaranteed delivery program, means never having to wait.

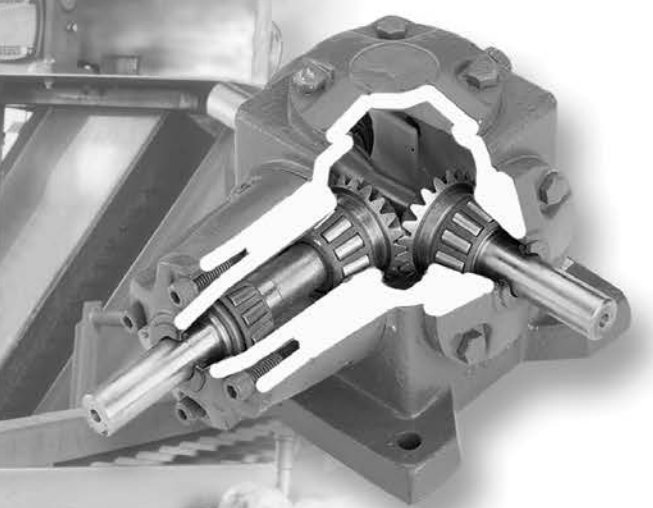
600 Series Features

- A selection comprising six common sizes permits use in many different applications.
- All Models are a more compact quill style
- Single, double, and triple reduction models provide a wide array of ratios for increased versatility.
- Base-mount and output-flange-mount models further increases versatility.
- The 600 Series is assembled in Boston Gear's ISO 9001:2015-certified facility to ensure precise quality control.
- Available in White BK and Stainless Steel Bost-Kleen™ options.



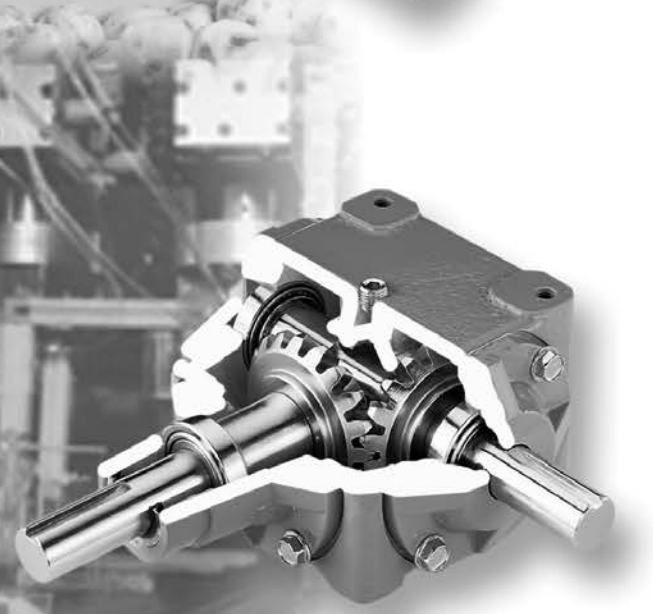
Right 90 Series Features

- Our spiral-bevel gear drives are designed for performance that's reliable, efficient, and as noise-free as possible.
- Input and output shaft flanges simplify mounting and installation.
- These gear drives can be used to either reduce or increase speed.
- Single and double-projecting output shafts for application flexibility.
- Ground alloy steel shafts are mounted on precision ball bearings for smooth operation.
- Pre-lubrication designed to last for the life of the drive improves performance and reduces maintenance.
- Boston Gear's Guaranteed Same Day Shipment Program ensures that you get what you need when you need it.



R100/R200 Series Features

- These spiral-bevel gear drives are designed for operation that's as reliable as it is quiet.
- Their shafts are heat treated and alloy-steel mounted on heavy-duty, tapered roller bearings for smoother operation.
- Their housings are made of precision-machined cast iron to ensure accurate, permanent alignment of the gears for superior performance.
- Double-bearing input support extends horsepower capacity and increases durability.
- Because the R-VR Series is available through Boston Gear's Guaranteed Same Day Shipment Program, it's the one you can count on to be there when you need it.



R1000 Series Features

- Straight-tooth bevel gears have teeth that are made from precision-forged alloy steel for maximum strength, as well a case hardened for increased durability.
- Input and output shafts are constructed from ground and polished heat-treated alloy steel to further enhance the overall toughness of these drives.
- Precision-machined, one-piece, quality cast-iron housings mean less maintenance and greater reliability.
- For greater support and rigidity, all shafts are supported by two tapered-roller bearings, while several models offer a straddle design with the gears supported on both sides.
- Flush-types vented-filler plugs with sintered-bronze breather inserts further reduce contamination.
- Boston Gear's Guaranteed Same Day Shipment Program ensures that you get what you need when you need it.

Our Quality Policy

Driven by the voice of the customer and total associate involvement, Boston Gear will strive, through continuous improvement, to provide products and services that meet or exceed customer expectations.

www.bostongear.com

Boston Gear's new, easy to navigate web site offers a variety of tools designed to simplify the selection and ordering process. Powered by advanced Internet XML technology, www.bostongear.com offers 24 hour access to the industry's premier source for power transmission information:

- **ECatalog/3D Drawings – Boston Gear's award winning open and enclosed gearing configurator. Based upon your applications requirements, select from over 84,000 parts, view specifications, even download CAD drawings**
- **Products – get the most current product information, features, benefits, or application data**
- **Literature – all of Boston Gear's catalogs, brochures, specification sheets, and installation manuals are available for immediate down loading**
- **Distributor Locator – find your local stocking Boston Gear distributor**

Whether you're looking to design a worm gear speed reducer to fit your application, get information on Boston Gear's newest products, or receive the latest news about the company, www.bostongear.com is your answer.

The Second Century of Service

Started in 1877 as a machine shop making gear cutting machines, Boston Gear has led the growth of the power transmission industry for more than a century. In its early years, Boston Gear introduced the concepts of gear standardization and stock gears – innovations of enormous benefit to power transmission system designers, specifiers and users.

Boston Gear was the early pioneer in enclosed drives, a category it still dominates with dependable, high-performance products like Worm, Helical and Bevel Gear Drives.

Today, Boston Gear provides the widest range of integrated motion control products from one source. The convenience of this single-source capability is yours when you deal with Boston Gear.

Engineering Services

The Boston Gear Engineering Group can satisfy your technical needs through skillful application of standard products or development of custom designs. Creating specials is an important aspect of customer service. It is supported by R & D personnel who use microprocessor-controlled equipment to collect and monitor data on materials and product performance.

Computer-Aided-Design (CAD) systems help Boston Gear engineers create new approaches to broad industrial challenges or specific customer needs. Computer simulation and testing at critical stages ensure that their designs are practical.

Manufacturing Excellence

Boston Gear manufactures more than 50,000 products in-house at our operations in Charlotte, North Carolina. Production is efficiently organized into manufacturing cells under group technology. For example, turning and grinding are combined under the control of a single operator in each cell. This approach encourages a sense of responsibility and pride of workmanship, to gain consistently high-quality output.

Computerized production control provides close supervision over scheduling and resource planning, coupled with the flexibility to fit your requirements smoothly into the master schedule. Other dedicated computer controls within the production department govern the ordering and delivery functions to keep operations lean and efficient.



Product Selection / Reference Guide

700 Series Single Reduction Flanged & Non-Flanged Reducers

Ordering Information – Page 14-15

Lubrication – Pages 15, 20-33

Selection/Rating Information – Page 21

Motor Selection – Pages 340 and 348



F700 BASIC
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QC700 BASIC
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F/QC700B
Pages 35



F/QC700BRB
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F/QC700C/D
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HF/HQC 700
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HF700R/L
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SF700
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700 BASIC
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700B
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700A
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700C/D
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H700
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700 Series Double Reduction Flanged & Non-Flanged Reducers

Ordering Information – Pages 68-69

Lubrication – Pages 71, 76-81

Selection/Rating Information – Page 71

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H700R/L
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S700
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S700V/W
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SSF/SSH 700
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FWA/QCWA700 BASIC
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HFWA/HQCWA700
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SFWA 700 BASIC
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FWC/QCWC700 BASIC
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WA700 BASIC
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HWA OR HWC
Page 92 & 98



WC700 BASIC
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SWC700 BASIC
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700 Series Accessories And Options Posivent®

Ordering Information – Pages 128-131



309 & TW113A Sub-Fractional HP Reducers

Ordering Information – Pages 142-143

Lubrication – Pages 144-148

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F309B
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TW113A
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Motor Multiplier®



FSP Series
Pages 329-332

HMF Helical Multiplier Series



HMF Series
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Optimount® F200 Series Hollow Shaft Helical Gear Flanged Input

Selection Pages 250-251



Basic Model
Hollow Output Shaft
Dimensions - Page 259



F200H Series Horizontal
Base Model Flange Input
Dimensions - Page 260



F200V Series Vertical
Base Model Flange Input
Dimensions - Page 260

Optimount® 200 Series Hollow Shaft Helical Gear Non-Flanged Input

Selection Pages 253-258



Basic Model
Hollow Output Shaft
Dimensions - Pages 261



200H Series
Horizontal Base Model
Dimensions - Page 262



200V Series
Vertical Base Model
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Optimount® 200 Series Accessories and Options



Shaft Kits/Reaction Rods
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Base Kits
Vertical/Horizontal
Dimensions - Page 265

F800B Series In-Line Helical Gear Flanged Input

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Double Reduction
Foot Mounted, Flange Input
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Triple Reduction
Foot Mounted, Flange Input
Dimensions-Page 187



Double Reduction
Output Flange Mount,
Flange Input
Dimensions-Page 188



Triple Reduction
Output Flange Mount,
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