POSITIVE DISPLACEMENT

ROTARY GEAR PUMPS

GORMAN-RUPP G SERIES™

GRpumps.com
LONGER LASTING
All Gorman-Rupp G Series pumps are designed with numerous features that are available only on Gorman-Rupp’s line of robust gear pumps, providing you the rugged testing, highest performing gear pump on the market.

Rigid Rotating Elements
Optimum bushing locations provide high pressure operation while reducing overhung loads. On both packed box and mechanical seal models, the bushings are located as close as possible to the applied loads, providing maximum shaft support.

High strength gear material eliminates the need for special steel fittings traditionally required for viscous applications.

Automatic Idler Pin Lubrication System
Unique internal pressure lubricated idler pin reduces wear by continuously cooling and lubricating the idler pin and bushing.

Internal Seal Vent
Seal cavity venting provides continuous flow of liquid through seal cavity, ensuring cooling. Seal cavity is maintained at low pressure, reducing seal face load and increasing seal life.

Deep End Feed Area
Deep end feed area offers superior priming performance under low inlet pressure conditions and/or high viscosity liquids.

FLEXIBLE SEAL DESIGN
Flexible Sealing
G Series intelligent design makes installing standard O-ring seals, compression packing seals, or standard component mechanical seals easy.

FLEXIBLE SEAL DESIGN
Flexible Sealing

EASY TO SERVICE
A Series intelligent design makes servicing fast, easy and more cost effective with unique features that are common to all of our medium-, heavy- and extreme-duty gear pumps.

Back Pullout Design
Back pullout design allows service and maintenance without disconnecting pump housing from piping.

Adjustable No-Leak Pressure Relief Valve
O-ring design on relief valve allows for adjustment during operation, without disassembling.

FULLY ADAPTABLE
G Series gear pumps are designed for maximum application flexibility and contain innovative design features that make them fully interchangeable with other gear pump manufacturers.

Rigid Pump Support
Foot brackets are centrally located under pump ports, providing pump and piping support. Pumps can be configured to fit any piping configuration, making Gorman-Rupp rotary gear pumps an extremely versatile choice.

Multiple Port Positioning and Configurations
Multiple port positioning and configurations make it easy to install G Series pumps in preplanned/standardized piping configurations.

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Flexible Sealing
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G SERIES™ PUMPS
GORMAN-RUPP G SERIES™ PUMPS
POSITIVE DISPLACEMENT
Gorman-Rupp G Series™ Medium-Duty pumps are designed for general intermittent applications. Available in two styles—the compact, close-coupled GMC and the shaft-driven GMS. Medium-Duty G Series pumps offer all the quality features found on all G Series pumps, as well as performance and adaptability features that are unique to our medium-duty line.*

*GMS available in flexible coupling and v-belt configurations.

**Note:** Shown with optional head jacket and extended shaft.

### Typical Medium-Duty Applications

**Hydrocarbons, Petro-chemicals and Similar:**
- Oils
- Fats
- FueS

**Viscous Liquids and Polymers:**
- Grease
- Asphalt

**Thermosensitive Liquids:**
- Resins
- Tar

### Gorman-Rupp G Series™ Rotary Gear Pumps

**Models:**
- GMC
- GMS

**Operating Range**

<table>
<thead>
<tr>
<th>Size (in.)</th>
<th>1-6&quot;</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Max Capacity (gpm)</td>
<td>38</td>
<td>600</td>
</tr>
<tr>
<td>Max Capacity (lpm)</td>
<td>144</td>
<td>(2271)</td>
</tr>
<tr>
<td>Max Pressure (psi)</td>
<td>200</td>
<td>150</td>
</tr>
<tr>
<td>Max Pressure (barg)</td>
<td>13.8</td>
<td>10.3</td>
</tr>
<tr>
<td>Max Viscosity (SSU)</td>
<td>250,000</td>
<td>250,000</td>
</tr>
<tr>
<td>Max Viscosity (cSt)</td>
<td>(54,000)</td>
<td>(54,000)</td>
</tr>
<tr>
<td>Temperature (°F)</td>
<td>–60° to 300°</td>
<td>–60° to 450°</td>
</tr>
</tbody>
</table>

**High Strength Thrust Washer**
Large, replaceable thrust washer supports higher loads and extends pump life.

**Compact, C-Face Mounted GMC**
For high performance in a small package, the GMC can be close-coupled to motors up to the NEMA 215TC frame.
HEAVY-DUTY GEAR PUMPS

THE MOST CAPABLE, VERSATILE GEAR PUMP IN THE INDUSTRY.

TYPICAL HEAVY-DUTY APPLICATIONS

Hydrocarbons, Petrochemicals and Similar:
• Oils
• Fuels
• Fats
• LPG
Viscous Liquids and Polymers:
• Glue, Adhesives
• Varnish
• Grease
• Styrenes
• Asphalt
Thermosensitive Liquids:
• Resins
• Tar
Acids:
• Aetic
• Phosphoric
Solvents:
• Ketones
• Acetone
Salts and Caustics:
• Soda Ash
• Viscose
Papermill Liquids:
• Black Liquor
• Tall Oil
• Kaolin

HEAVY-DUTY GEAR PUMPS

Designed for the most demanding clean liquid applications, Gorman-Rupp® Heavy-Duty pumps combine high performance materials and innovative design to outperform all other pumps of their type.

Available in two styles - the stub shaft GHC and the compact stub shaft GHS. GHC – Heavy-Duty G Series are available in cast iron, shock-resistant cast steel (used) corrosion-resistant SS3 stainless steel to provide superior performance in demanding pumping applications. They offer the precision quality features found on all G Series pumps, as well as specifications that suit a wide range of customers for an unpaid to our heavy-duty line.

Simple and Precise Rotor Adjustment

Externally adjustable clearance, three piece design provides easy precise rotor adjustment. Sealed double row bearings are maintenance-free and provide thrust control.

Engineered Sealing Solutions

Gorman-Rupp offers the widest range of sealing solutions available. For example, we offer minimum-leak and abrasive resistant packing, cartridge single seal, cartridge double seal, or triple lip cartridge seal.

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Designed to survive the severe challenge of liquids containing abrasives, the Gorman-Rupp GHA Extreme-Duty pump combines proven gear pump technology with state-of-the-art wear-resistance processes, making it the world’s strongest, longest-lasting gear pump.

Available in cast iron with capacities to 325 gpm, pressures to 200 psi and viscosities to 250,000 SSU, the extreme-duty pump offers many of the performance features found on all G Series™ pumps, as well as innovative and unique abrasion-resistant features that provide the best service life possible under many extreme wear applications.

THE MOST RUGGED, WEAR-RESISTANT GEAR PUMP IN THE WORLD.

TYPICAL EXTREME-DUTY APPLICATIONS

- Paint, Enamels
- Printing ink
- Titanium Dioxide, Iron Oxide, Zinc Oxide
- Diatomaceous Earth
- Paper Coatings
- Pitch
- Fish Solubles
- Barium Sulfate
- Wax
- Waste Oils
- Filled Asphalt

Wear-Resistant Rotor and Idler
Hard, austempered ductile iron gears resist abrasive wear, extending pump life.

Wear-Resistant Pump Head and Housing
Critical wear areas of both the head and housing are hardened to resist wear and maintain structure.

Carbide Idler Pin and Idler Bushing
Extremely hard carbide pin and bushing provide excellent wear resistance under the most severe abrasive applications.

Needle Bearing or Carbide Shaft Bushing Support
Depending on seal configuration, Extreme-Duty pumps are available with carbide shaft bushing or our unique, precision needle bearing bushing which provides excellent, reliable high load shaft support and better rotor shaft stability, extending the seal life and operational life of the pump.

Flexible Seal
Flexible seal gear pumps are engineered to allow installation of industry-standard cartridge seals, compression packing seals, or hard face mechanical seals.

Silicone carbide seal faces are mounted in a highly engineered mechanical seal ensure maximum life and reliability with minimal wear for high-abrasive viscosity applications up to 250,000 SSU (22,000 cSt).

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MEASURED DUTY GEAR PUMPS

HEAVY-DUTY GEAR PUMPS

EXTREME-DUTY GEAR PUMPS

MODEL GHA

OPERATING RANGE

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<tr>
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<td>–60° to 500°</td>
<td>–51° to 260°</td>
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<td>2</td>
<td>220</td>
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<td>3</td>
<td>325</td>
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<td>4</td>
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GORMAN-RUPP G SERIES™ ROTARY GEAR PUMPS

MODEL GHA

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Focusing on the Specialized Needs of the Rotary Gear Market

When you specify Gorman-Rupp® you benefit from available service centers, knowledgeable engineers and assistance. Gorman-Rupp has long been manufacturing pumps, pumping systems and providing superior field handling capability. It is this tradition of the innovation introduced by Gorman-Rupp that has become industry standard.

Pumps include rotary gear, and positive displacement. Standards include iron, stainless, and expertly fabricated to your specifications. Gorman-Rupp produces leading-edge manufacturing and maintaining facilities found throughout the world.

As we continue to provide pumping systems and field handling solutions to customers around the globe, we never lose sight of the original philosophy that started our company.

Designed and Built for Longevity, Serviceability and Adaptability.

The Gorman-Rupp G Series™ line of self-priming positive displacement rotary gear pumps is designed to provide performance in other gear pumps can match.

Available in Medium-Duty, Heavy-Duty and Extreme-Duty models – in cast iron, cast steel and stainless steel. G Series pumps are versatile enough to handle virtually any pumping application and liquid type. They come in a variety of drive arrangements, including close-coupled, flex-coupled, gear reducer and v-belt drive.

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