



CATALOG CONFIGURATION & PUMP MODEL IDENTIFICATION

Understanding Gorman-Rupp Products & Uses



The Pump People®



Catalog Configuration

With thousands of pump models offered, our catalog(s) are arranged to assure you choose the right pump for the job. Configured by the market where the pump is utilized, a pump may be presented in Construction, Industrial, Municipal, Petroleum or a combination of catalogs.

The interior of the Gorman-Rupp catalogs are divided into a variety of sections with similar types of pumps and accessories grouped together. The following table details each catalog section and the products found within. Some sections may be omitted from your specific catalog depending on the market products they may serve.

Section Tab	Product Type	Commercial Market Segment
Section 10	Accessories and Options	All Markets
Section 20	Self-Priming — High-Head Engine-Driven Pumps	Agriculture, Aircraft Fueling, Construction, Industrial, Municipal
Section 30	Self-Priming — High-Head Motor- or Belt-Driven Pumps	Industrial
Section 35	Priming-Assisted — Roto-Prime® Motor-Driven Pumps	Aircraft Fueling, Petroleum
Section 40	Self-Priming — Medium-Head Engine-Driven Pumps	Construction, Industrial
Section 42	Priming-Assisted (PA Series*) — Engine- or Electric-Driven Pumps	Construction, Industrial, Municipal, Mining
Section 43	Priming-Assisted (PAH Series*) — Engine- or Electric-Driven Pumps	Construction, Industrial, Municipal, Mining
Section 45	Trash Self-Priming — Medium-Head Engine-Driven Pumps	Construction, Industrial, Municipal
Section 46	Positive Displacement — SludgeKat® (HSK Series) Engine-Driven Pumps	Construction, Rental, Mining
Section 50	Self-Priming — Medium-Head Motor- or Belt-Driven Pumps	Agriculture, Construction, Industrial
Section 55	Trash Self-Priming — Medium-Head Motor- or Belt-Driven Pumps	Industrial, Municipal
Section 60	Standard Centrifugal — High-Head Motor- or Belt-Driven Pumps	Agriculture, Construction, Industrial, Petroleum
Section 65	Standard Centrifugal — (6400 Series™ & 6500 Series*) Motor- or Belt-Driven Pumps	Industrial, Municipal
Section 70	Standard Centrifugal — Motor- or Belt-Driven Pumps	Agriculture, Aircraft Fueling, Construction, Industrial
Section 110	Centrifugal — Power Take-Off-Driven Pumps	Aircraft Fueling, Construction
Section 120	Diaphragm Pumps	Agriculture, Construction, Industrial, Municipal
Section 125	Control Panels	Construction, Industrial, Mining, Municipal
Section 130	Submersible — Motor-Driven Pumps	Construction, Industrial
Section 132	Submersible (Mine Permissible) — Motor-Driven Pumps	Construction, Industrial, Mining
Section 133	Submersible — (Wet Well) Solids-Handling Pumps	Industrial, Municipal
Section 134	Submersible — (Dry Pit) Solids-Handling Pumps	Industrial, Municipal
Section 140	Hydraulic Submersible Pumps	Construction
Section 510	Positive Displacement — Drum Pump, Hand Oscillating (HO Series)	Industrial, Petroleum
Section 520	Positive Displacement — Rotary Gear, Medium-Duty Close-Coupled (GMC Series) — Iron	Industrial, Petroleum
Section 525	Positive Displacement — Rotary Gear, Medium-Duty Standard (GMS Series) — Iron	Industrial, Petroleum
Section 540	Positive Displacement — Rotary Gear, Heavy-Duty Compact (GHC Series) — Iron	Industrial, Petroleum
Section 541	Positive Displacement — Rotary Gear, Heavy-Duty Compact (GHC Series) — Stainless	Industrial, Petroleum
Section 543	Positive Displacement — Rotary Gear, Heavy-Duty Compact (GHC Series) — Steel	Industrial, Petroleum
Section 545	Positive Displacement — Rotary Gear, Heavy-Duty Standard (GHS Series) — Iron	Industrial, Petroleum
Section 546	Positive Displacement — Rotary Gear, Heavy-Duty Standard (GHS Series) — Stainless	Industrial, Petroleum
Section 547	Positive Displacement — Rotary Gear, Heavy-Duty Standard (GHS Series) — Ductile	Industrial, Petroleum
Section 548	Positive Displacement — Rotary Gear, Heavy-Duty Standard (GHS Series) — Steel	Industrial, Petroleum
Section 550	Positive Displacement — Rotary Gear, Heavy-Duty Standard (GHA Series) — Hard Iron	Industrial, Petroleum

Within a given catalog section the specification data sheets are arranged by port size — smallest to largest. Should there be pumps of the same size, they are arranged by the maximum capacity of that model.

Pump Model Identification

Gorman-Rupp pump model numbers are found on every pump's name plate. They are comprised of a series of numbers and letters that identify five main characteristics of each pump.



Series or Type

Drive Configuration

Discharge Port Size

Primary Material & Seal Construction

Hydraulic Performance Design

Drive Configurations

In some unique situations, model numbers may include a special designation following the driver. This designation is used for a specific customer or for a unique configuration beyond a more standard model configuration (for example “-ESP” – Environmental Silent Pump).

Discharge Port Size

A variety of pump port sizes are available on Gorman-Rupp products. The number following the series or type indicates the discharge port size of the model. These ports range from .75” (19 mm) to as large as 16” (400 mm). In general, the larger the port size, the higher the flow. Most models have the same-size inlet/outlet; however, refer to the individual specification data sheet for these details, including size or threaded or flanged (ASA or DIN).

Hydraulic Performance Design

In the case of centrifugal pumps, the parts within the pump determine how much flow and/or pressure a given pump will produce. These are the impeller and the pump casing (volute). Some models utilize a diffuser or vane plate in lieu of an actual volute housing. A letter following the port size indicates the combination of these two in a given pump model. The first configuration would be an “A” followed by B, C and so on. Our G Series (positive displacement pump) hydraulics are determined by the rotor and idler size along with the depth (length) of the tooth. For this reason, two letters are used, first being the rotor size and second the tooth depth (e.g., DC or DE).

Pump Series And Types

Gorman-Rupp products are well known around the world by their product series or trade name. The table below can be used to assist in understanding series identifiers more clearly.

Series Classification	Pump Type	Trade Name	Model Example
0 Series*	Self-Priming Centrifugal, High-Head, No Check Valve, Straight-In Suction	N/A	03H1-GR
10 Series*	Self-Priming Centrifugal, Heavy-Duty, Solids-Handling or Trash Type, Medium-Head, Check Valve, End Suction	N/A	12B20-B
30 Series	Self-Priming Centrifugal, Medium-Head, End Suction	N/A	31A12-B
50 Series	Standard Centrifugal, High-Head, Side Suction	N/A	54J20-B
60 Series	Standard Centrifugal, Medium- and High-Head, End Suction	N/A	612L20-B
6400 Series™	Standard Centrifugal, Extra Heavy-Duty, High-Head, Clean- and Solids-Handling, End Suction	N/A	6404A-B
6500 Series*	Standard Centrifugal, Extra Heavy-Duty, High-Head, Clean- and Solids-Handling, End Suction	N/A	6504A60-B
80 Series*	Self-Priming Centrifugal, Heavy-Duty, Medium-Head, End Suction	N/A	82H20-B
D Series	Single Diaphragm	N/A	3D-E1.5 1P
GMC Series	Positive Displacement, Internal Gear, Medium-Duty Close-Coupled	N/A	GMC1DE3-B
GMS Series	Positive Displacement, Internal Gear, Medium-Duty Standard	N/A	GMS2JP3-B
GHC Series	Positive Displacement, Internal Gear, Heavy-Duty Compact	N/A	GHC3JJ9-B
GHS Series	Positive Displacement, Internal Gear, Heavy-Duty Standard	N/A	GHS6TU3-B
GHA Series	Positive Displacement, Internal Gear, Heavy-Duty Standard (Abrasive Service)	N/A	GHA4RR4-B
HO Series	Positive Displacement, Drum Pump, Hand Oscillating	N/A	HO3/4A4-H
HS Series*	Hydraulic Submersible	N/A	HSV3A1-HYD
HSK Series	Positive Displacement, Hydraulic Piston	SludgeKat®	HSK4A-KDI1903TCR FT4
PA Series*, PAH Series*	Priming-Assisted Centrifugal, Heavy-Duty, Clean- and Solids-Handling, End Suction	Prime Aire®, Prime Aire Plus®	PA6C60-4045T FT4
RD Series	Priming-Assisted Centrifugal, Double Volute, High-Head, End Suction	Roto-Prime®	RD4A31-B
RS Series	Priming-Assisted Centrifugal, Single Volute, Medium-Head, End Suction	Roto-Prime®	RS2A31-BAR
S Series	Submersible Centrifugal, Heavy-Duty	N/A	S8B1-E100 460/3
SE Series	Submersible Centrifugal, Light-Duty	N/A	SE2D3 115V 1P
SF Series*	Submersible Centrifugal, Heavy-Duty, Solids-Handling	Eradicator® Plus	SFV3B
SM Series	Submersible Centrifugal, Heavy-Duty, Explosion-Proof, Mine Permissible	N/A	SM4G1-X30 460/3
Super T Series*	Self-Priming Centrifugal, Extra Heavy-Duty, Solids- and Sewage-Handling, End Suction	Super T Series®, Eradicator®, Eradicator Plus	T6A60S-B
Super U Series*	Self-Priming Centrifugal, Extra Heavy-Duty, Medium-Head, End Suction	Super U Series®	U3A60S-B
Ultra V Series*, VS Series	Self-Priming Centrifugal, Extra Heavy-Duty, Solids- and Sewage-Handling, High-Head, Single- or Two-Stage, End Suction	Ultra V Series®, UltraMate®, Eradicator®	VS3B60-B
VPA Series	Priming-Assisted Centrifugal, Solids-Handling	ValuPrime®	VPA4A60C-3CH1 FT4
VG, VGH Series	Standard Centrifugal, Medium- and High-Head, End Suction	N/A	VGH8D31-B
Units	Specially Configured Product or Packaged System	N/A	Unit 608

Primary Materials And Seal Construction

Depending on the liquid to be pumped, the material of construction can be a critical factor. Once we understand the pump size and hydraulic characteristics, we need to know what the major material of construction is for the pump. Additionally, the seal used in the pump is also important for keeping liquid from leaking around the shaft. The number following the hydraulic configuration determines the construction of the pump and the sealing arrangement. The table below describes examples of the construction arrangement.

Construction Reference	Primary Pump Material	Seal Type
1	Aluminum	Mechanical Self-Lube
2	Cast Iron	G-R Double Grease
3	Cast Iron	Mechanical Self-Lube
4	Cast Iron	Packing
9	Stainless Steel	Mechanical Self-Lube
10	Stainless Steel	Packing
18	Aluminum - CD4MCu Alloy Fitted	Tungsten Carbide to Tungsten Carbide Faced Mechanical Self-Lube in Oil Cavity
20	Cast Iron	Tungsten Carbide to Tungsten Carbide Faced Mechanical Seal in Oil Cavity
22	Stainless Steel	Tungsten Carbide to Tungsten Carbide Faced Mechanical Self-Lube in Oil Cavity
31	Ductile Iron	Mechanical Self-Lube
32	Cast Steel	Mechanical Self-Lube
47	Thermoplastic, Reinforced	Mechanical Self-Lube
52	Cast Iron	Silicon Carbide Mechanical Seal
60	Cast Iron	Silicon Carbide to Silicon Carbide Faced Mechanical Self-Lube in Oil Cavity
61	Cast Iron - Stainless Steel Fitted	Silicon Carbide to Silicon Carbide Faced Mechanical Self-Lube in Oil Cavity
65	Stainless Steel - CD4MCu Alloy Fitted	Silicon Carbide to Silicon Carbide Faced Mechanical Self-Lube in Oil Cavity
71	Cast Iron - ADI Fitted (G-R Hard Iron)	Silicon Carbide to Silicon Carbide Faced Mechanical Self-Lube in Oil Cavity
75	Aust-Tempered Ductile Iron (ADI/G-R Hard Iron)	Silicon Carbide to Silicon Carbide Faced Mechanical Self-Lube in Oil Cavity

The information on this table is a general guideline. For specific detailed information, consult the individual specification data sheets.

In some cases, a letter may follow directly behind the material of construction designation. This letter describes a unique mechanical design characteristic in the product. Examples include: "S" - Super Classification (extra features benefits) or "C" - compressor mounted over the bearing frame.

Drive Configuration

A letter or combination of letters and numbers following the hyphen indicates the drive or mounting arrangement of the pump model. The following are examples of the drive symbols used:

Drive Symbol	Description	Remark
B	Basic Pump	Bare Shaft, usually pedestal mounted
E	Electric Motor (Close-Coupled)	Letter followed by horsepower rating voltage and/or phase (e.g., E1.5 3P)
X	Electric Motor (Explosion Proof)	Letter followed by Horsepower rating voltage and/or phase (e.g., X2 1P)
G	Gear Driven (Power Take-Off)	Letter followed indicates right- or left-hand rotation (e.g., GL or GR)
HYD	Hydraulic Motor	Close-coupled motor unit
GX160	Engine Driven (Direct-Coupled)	A variety of letters and numbers are used to describe engine manufacturer and displacement
B-C6.6	Engine Driven (Flex-Coupled)	A variety of letters and numbers are used to describe engine manufacturer and displacement
(xxx)	Pump End	Letters and numbers describe mounting configuration (e.g., SAE 3/10)

The information on this table is a general guideline. For specific detailed information, consult individual specification data sheets.

Exceptions

Certain products have many available options. These products are what we refer to as “configured.” While the model number reveals many details about the pump, a unique parts list supplied with the unit fully describes the configuration code and all the components within these pumps.

Regardless of how complete any model number system may be, it cannot account for all unique configurations. To accommodate

special configurations of a given pump, a unique serial number is provided in addition to the model number for a majority of pumps manufactured in our facilities. When contacting us about a specific pump, please make sure you have the model and serial number.



After Sale Support

Gorman-Rupp products stand the test of time due to our quality manufacturing processes, rigorous product testing and extensive after sale support.

Product Support

Every pump manufactured by Gorman-Rupp is supported with reference information. Pump operation and maintenance manuals (including parts lists), specification data sheets, performance curves and outline drawings in PDF and CAD formats are available on our website or through your distributor for every pump.

Warranty

The warranties on Gorman-Rupp products are some of the best in the industry. Gorman-Rupp has you covered with warranties up to 60 months.

Education & Safety

Gorman-Rupp is committed to remaining at the forefront of the industry with technology and safety. Training videos, demos and

in-person training sessions created for our distributors and end-users help to keep everyone up to date on the latest safety tips and pump maintenance.

Parts

When you need a replacement part, you'll have it fast. Gorman-Rupp is fully committed to keeping your equipment running long after installation and ensuring your pump or lift station continues to meet your requirements year after year. We sell parts through our network of distributors. Find a distributor in your area for assistance.

Service

Should your pump or lift station require service, our worldwide network of factory-trained distributors are ready to quickly respond. Our distributors have the expertise to support you and your pump or lift station long after installation.

Manufacturing Facilities

Gorman-Rupp USA
Mansfield, Ohio, USA

Gorman-Rupp Canada
St. Thomas, Ontario, Canada

Gorman-Rupp Europe
Waardenburg, Netherlands
Namur, Belgium

Gorman-Rupp Africa
Cape Town, South Africa
Durban, South Africa
Johannesburg, South Africa (Headquarters)

Distribution Center

Grand Prairie, Texas, USA

Engineering and manufacturing superiority has been the hallmark of Gorman-Rupp since our inception in 1933. Today we bring our products to life in some of the most efficient, modern and state-of-the-art manufacturing facilities in the world. Gorman-Rupp has a selection of nearly 3,000 pump models, and our world-class team of distributors has worked closely with thousands of end users around the world. We have the proven expertise and the resources to specify, manufacture, test and service your pump, and to ensure reliable performance for the long haul.

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