

# ULTRAV<sup>TM</sup>

## SERIES



Patent Pending

## High Performance Self-Priming Centrifugal Trash Pumps



[www.gormanrupp.com](http://www.gormanrupp.com)

# A History of Innovation



Gorman-Rupp has been revolutionizing the pumping industry since 1933. Many of the innovations introduced by Gorman-Rupp over the years have become industry standards. More than ever, we continue to update our factories, processes, research and development, and engineering to ensure that our pumps and systems are among the most reliable and efficient in the world.



One of our most successful and innovative lines of pumps has been our self-priming models. Revolutionary improvements were made in 1963 with the introduction of our T Series self-priming pumps. Since then, continuous improvements to head, flow and efficiency have been made. In 2000 we introduced our Super T Series® with many added maintenance features to enhance serviceability.



Today, Gorman-Rupp self-priming pumps are the world's leading choice for waste handling applications in industries such as steel and paper mills, mining operations, food processing plants, power plants, automotive factories, tanneries and wineries. They are also the pump of choice in many sewage-handling applications worldwide.

Gorman-Rupp's commitment to our original philosophy of innovation, continuous improvement, unparalleled quality and customer service continues to set us apart from others.



## ULTRA<sup>TM</sup> SERIES

Patent Pending

### Superior Performance Self-Priming Centrifugal Trash Pumps

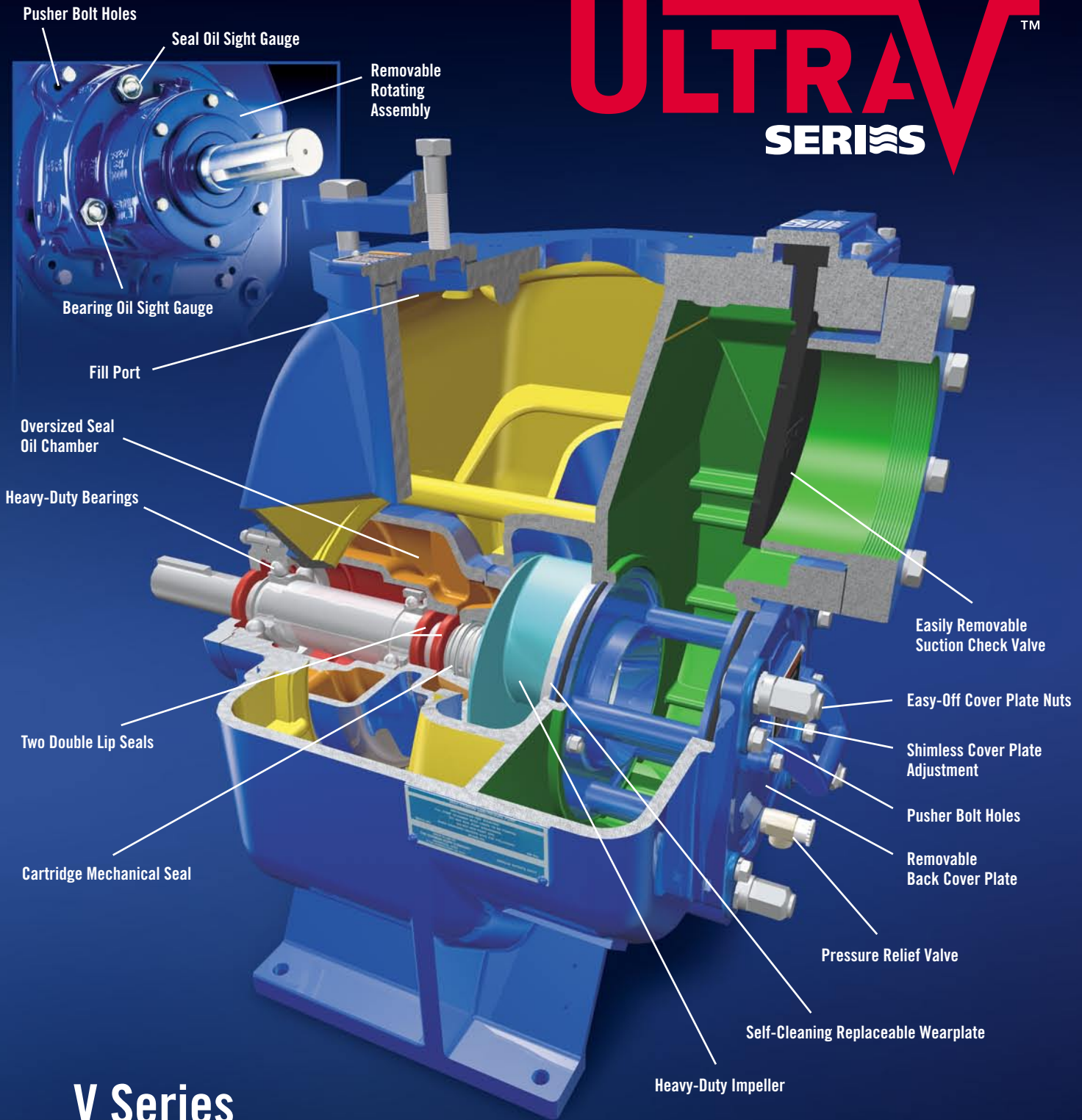
The next generation of solids-handling, self-priming, centrifugal trash pumps offers:

- **Up to 300% increased pressure**
- **Up to 40% increased flow**
- **Greater efficiencies**
- **Self-cleaning features**
- **Reduced footprint**
- **Unique configuration capabilities**

In addition to the above advanced features and benefits, the **Ultra V** also incorporates all the industry leading innovations from the leader in self-priming, centrifugal trash pumps... **Gorman-Rupp.**

# ULTRAV™

## SERIES



## V Series

Patent Pending

### Optional Accessories

- Automatic Air Release Valve
- Discharge Check Valve
- Suction and Discharge Flange Kits
- Volute Casing Heater
- Suction and Discharge Gauge Kit
- Complete Replacement Rotating Assembly
- Pump Spare Parts Kit
- Pump Easy Drain Kit
- Custom Seal Options
- Optional Elastomers and Suction Check Valve Materials (EPDM, Neoprene, AFLAS-TFE, Viton®\*)

\*Viton® is a registered trademark of Dupont-Dow Elastomers, LLC.



All Ultra V pumps are standard with an industry leading 5 year warranty

visit [www.gormanrupp.com](http://www.gormanrupp.com) for additional details

## Extended Versatility for Enhanced Performance...

Removable Rotating Assembly  
(Interchangeable with Ultra V)

Removable Back  
Cover Plate  
(Interchangeable  
with Ultra V)

Transition Chamber

Interchangeable  
Rotating Assembly  
and Back Cover Plate

Patent Pending

### 300% Increased Pressure!

The “VS” version can be used when system requirements exceed the **Ultra V Series’** exceptional performance range. By adding the **UltraMate** unit directly to the **Ultra V** through an innovative transition chamber, maximum pressure is increased up to 300% over traditional solids-handling, self-priming, single stage pumps. Losses associated with conventional series-connected pumps are also reduced, resulting in increased efficiencies.

Smart Scroll  
Volute

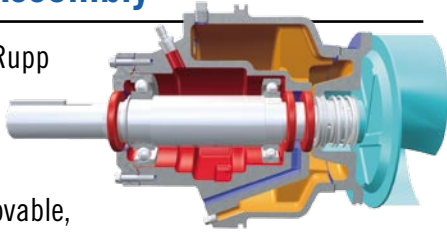
The **UltraMate** unit allows for a variety of discharge positions. This “smart scroll” feature offers installation flexibility, while reducing the footprint required with conventional staging configurations.

In addition, The rotating assembly and the back cover plate are interchangeable between the **Ultra V** and the **UltraMate**, reducing spare parts inventory.

# Features

## Rotating Assembly

Each Gorman-Rupp **Ultra V Series** pump is equipped with our easily-removable, rotating assembly. Replacement is accomplished without disturbing the pump casing or piping, resulting in less downtime. Pusher bolt holes are provided to assist with removal. Additionally, the rotating assemblies are interchangeable between the **Ultra V** and **UltraMate** units.



## Solids Handling Impeller

The heavy-duty, balanced, two-vane, semi-open ductile iron impeller provides maximum life. Pump out vanes on the back shroud reduce foreign material buildup behind the impeller, minimizing pressure on the seal and maximizing bearing life.



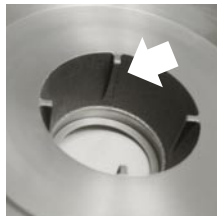
## Patented Cartridge Seal

Gorman-Rupp's double-floating, self-aligning, oil-lubricated mechanical seal is specifically designed for abrasive and/or trash handling applications. The silicon carbide faces and extra large seal oil chamber provide superior dry-run capability. This patented cartridge design allows for accurate and easy installation.



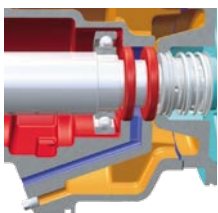
## Anti-Rotation Ribs

All **Ultra V Series** pumps come standard with anti-rotation ribs within the seal chamber area, reducing internal wear, maximizing seal and seal plate life.



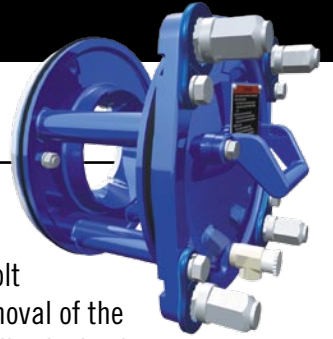
## Patented Bearing Protection

A patented atmospheric isolation barrier, along with two lip seals, provides maximum bearing protection. This unique design also provides for external monitoring.



## Back Cover Plate

A large back cover plate allows for easy access to the pump interior. Pusher bolt capability assists in the removal of the back cover plate. Additionally, the back cover plates are interchangeable between the **Ultra V** and **UltraMate** units.



## Replaceable Wearplate

A replaceable wearplate, matched to the cover plate, has Gorman-Rupp's patent-pending, self-cleaning design to ensure debris is cleared away and does not collect on the impeller vanes. This innovative design reduces the overall life cycle costs by minimizing blockage.



## Patented External Shimless Adjustment System

The shimless back cover plate adjustment allows for accurate maintenance of the clearance between the impeller and wearplate, without realigning belts, couplings or other drive components.



Once adjustments have been made, the unique lock collar and adjusting screw maintains the clearance setting even if the cover plate is removed.

Peak pump efficiency is maintained, while doubling the life of the impeller and wearplate.

The life of the wearplate is maximized with the combination of the shimless back cover adjustment and additional rotating assembly spacers.

## Check Valve

A positive sealing, externally removable suction check valve is standard, eliminating the need to disconnect any piping for inspection or replacement. The check valve has a blow-out center that limits excessive volute pressure, protecting the pump.



# Available Models



V3



V4



V6

## V Series Sizes

	Suction/Discharge	Maximum Capacity	Maximum Head	Maximum Solids
V3	4" (100 mm)	700 gpm	158'	2.5"
	3" (75 mm)	44 lps	48 m	63.5 mm
V4	6" (150 mm)	1150 gpm	158'	3"
	4" (100 mm)	72.5 lps	48 m	76.2 mm
V6	8" (200 mm)	1900 gpm	168'	3"
	6" (150 mm)	123 lps	51 m	76.2 mm

## Materials of Construction

Cast Iron, Stainless Steel fitted, CD4MCu fitted, G-R Hard Iron fitted



VS3



VS4



VS6

## VS Series Sizes

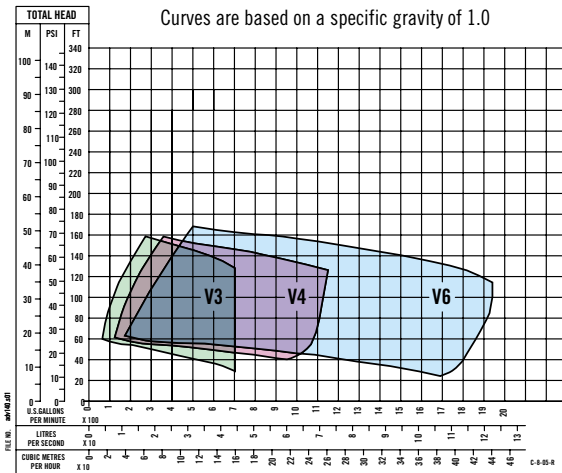
	Suction/Discharge	Maximum Capacity	Maximum Head	Maximum Solids
VS3	4" (100 mm)	700 gpm	315'	2.5"
	3" (75 mm)	44 lps	96 m	63.5 mm
VS4	6" (150 mm)	1150 gpm	310'	3"
	4" (100 mm)	72.5 lps	94.5 m	76.2 mm
VS6	8" (200 mm)	1900 gpm	325'	3"
	6" (150 mm)	123 lps	99 m	76.2 mm

## Materials of Construction

Cast Iron, Stainless Steel fitted, CD4MCu fitted, G-R Hard Iron fitted

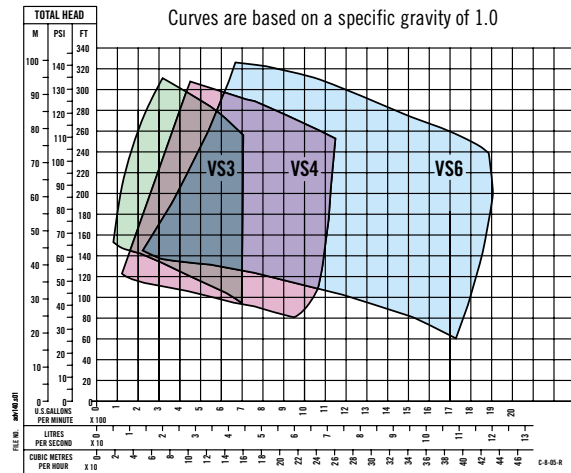
## V Series – Composite of Performance Curves

Curves are based on a specific gravity of 1.0



## VS Series – Composite of Performance Curves

Curves are based on a specific gravity of 1.0



The Gorman-Rupp Company  
P.O. Box 1217  
Mansfield, Ohio 44901-1217  
Tel: 419-755-1011  
Fax: 419-755-1251  
E-mail: grsales@gormanrupp.com

The Gorman-Rupp International Company  
P.O. Box 1217  
Mansfield, Ohio 44901-1217  
Tel: 419-755-1011  
Fax: 419-755-1266  
E-mail: intsales@gormanrupp.com

Gorman-Rupp of Canada, Ltd.  
70 Burwell Road  
St. Thomas, Ontario N5P 3R7, Canada  
Tel: 519-631-2870  
Fax: 519-631-4624  
E-mail: grcanada@grcanada.com

