

**ULTRA**  
SERIES



# ULTRA V SERIES®

*High-Head, High-Performance,  
Self-Priming Trash Pumps*

**GR**  
GORMAN-RUPP  
PUMPS

*The Pump People®*



# 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. And, in 2005, Gorman-Rupp introduced the revolutionary Ultra V Series®

which offers industry-leading performance for self-priming applications.

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.

# OUR PUMPS DELIVER DECADES OF PERFORMANCE AND VALUE

*Gorman-Rupp is committed to meeting your fluid-handling requirements long after installation. The quality manufacturing and testing that goes into every Ultra V Series® pump guarantee long-lasting, trouble-free operation. And we provide a five-year warranty and fast parts service to back up our products and ensure your peace of mind.*

## Value

Ultra V Series® pumps boast some of the lowest lifecycle costs in the industry. Because of the quality manufacturing and testing that goes into every Gorman-Rupp product, you benefit from minimal service interruptions and some of the lowest maintenance in the industry. Gorman-Rupp delivers the best ROI by ensuring low operating costs for decades.

## Parts And Service

When you need a replacement part for your Ultra V Series, you'll have it fast. With tens of thousands of genuine Gorman-Rupp parts and pumps at our disposal, we fill and ship 99% of parts orders within 24 hours. Should your Ultra V Series pump or ReliaSource® pump package ever require service, our worldwide network of factory-trained distributors is ready to quickly respond to your needs. With just one number to call for parts and service for your entire lift station, it's easy and convenient to keep your equipment performing as it should.

## Peace Of Mind

At Gorman-Rupp, we don't just say our pumps are reliable. Unlike standard 90-day or one-year warranties, we guarantee every part and working component of a Ultra V Series pump for a full five years. With Gorman-Rupp, reliable performance is always guaranteed.



Ultra V Series® pumps are available in a variety of drive variations including basic units, trailer mounted engine-driven units, or as part of an engineered ReliaSource® packaged pump station.

# ULTRA V SERIES® & VS SERIES

*High-Head, High Performance Self-Priming, Solids-Handling Trash Pumps*



## Deal With Tough Solids Applications

New challenges for solids-handling pumps are presented with the rise of stringy solids such as flushable, nonwoven wipes which are increasingly present in sewage. This, along with other clog-prone solids such as feathers in poultry processing applications, can be dealt with effectively with the Gorman-Rupp Eradicator® Solids Management System. The system is available for all Ultra V Series® pumps.

## Design Features

The Eradicator system features an aggressive self-cleaning wearplate incorporating a number of notches and grooves, as well as a lacerating tooth, that helps break up stringy materials and pass them through the pump without impacting performance or interrupting service. A special back cover includes a patented lightweight inspection cover that can easily be removed if it is necessary to inspect the impeller. The innovative design greatly reduces troublesome clogging and expensive downtime.



## System Benefits

Easier access to the impeller, increased uptime, improved operational efficiency, reduced maintenance costs and lower life-cycle costs are major benefits of the Eradicator system. No longer does the entire back cover assembly have to be removed to gain access to the impeller, and Eradicator-equipped pumps do not require expensive chopper blades that need periodic replacement. The system can be factory-equipped in new pumps or purchased as a retrofit kit that is interchangeable with Ultra V Series pumps currently operating in the field.



## Superior Performance

The Ultra V Series® and VS Series solids-handling, self-priming centrifugal trash pumps offer up to three times the pressure and up to 60% more flow.

Available in a variety of pump station configurations or stand-alone in 3", 4" and 6" sizes. The superior solids-handling and increased pressure capabilities of the Ultra V Series pumps make them ideally suited for a variety of industrial and sewage applications.

## Ultra V Series® Pumps Feature:

- Up to three times the pressure
- Up to 60% increased flow
- Greater efficiencies
- Self-cleaning features
- Reduced footprint
- Unique configuration capabilities
- Improved solids-handling
- Externally removable suction check valve

## Three Times The Pressure

The patented UltraMate® can be paired with the Ultra V Series pump when system requirements exceed the Ultra V's exceptional performance range. By adding the UltraMate unit directly to the Ultra V through an innovative transition chamber, maximum pressure is increased up to three times the pressure of traditional solids-handling, self-priming, single stage pumps. Losses associated with conventional series connected pumps are also reduced, resulting in increased efficiencies.



## Smart Scroll® Discharge Locator

The patented Smart Scroll® can be rotated to fit your specific piping system. It can be ordered in vertical or horizontal facing, left or right positions.

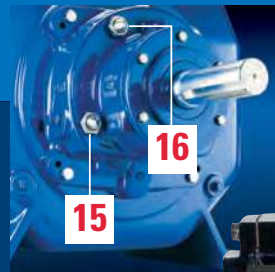


The Eradicator® Solids Management System is available for all sizes of Gorman-Rupp Ultra V Series® pumps.



# ULTRA V<sup>®</sup>

## SERIES



### Specifications

Pump Size: 3" (75 mm),  
4" (100 mm), 6" (150 mm)  
Max. Capacity: 1900 GPM  
(119.9 lps)  
Max. Solids: 3" (76.2 mm)  
Max. Head: 325' (99.1 m)  
Materials of Construction:  
Cast Iron, 316 Stainless  
Steel Fitted, CD4MCu, G-R  
Hard Iron Fitted



All Ultra V Series<sup>®</sup> pumps come standard with a five-year warranty.

### ULTRAMATE

- 01** | Removable Suction Check Valve
- 02** | Easy-Off Cover Nuts
- 03** | Pusher Bolt Holes
- 04** | Removable Back Coverplate
- 05** | Pressure Release Valve
- 06** | Shimless Coverplate Adjustment
- 07** | Self-Cleaning Replaceable Wearplate
- 08** | Heavy-Duty Impeller
- 09** | Cartridge Mechanical Seal
- 10** | Atmospheric Bearing Isolation
- 11** | Two Double Lip Seals
- 12** | Heavy-Duty Bearings
- 13** | Oversized Seal Oil Chamber
- 14** | Removable Rotating Assembly
- 15** | Bearing Oil Sight Gauge
- 16** | Seal Oil Sight Gauge
- 17** | Removable Rotating Assembly\*
- 18** | Removable Back Coverplate\*
- 19** | Smart Scroll<sup>®</sup>
- 20** | Transition Chamber
- 21** | Fill Port

### Eradicator<sup>®</sup> Solids Management System

- 22** | Lightweight Inspection Cover  
The design allows for easy access to the impeller for routine maintenance and clearing blockages.
- 23** | Aggressive Self-Cleaning Wearplate  
Incorporates grooves, notches and tooth to shred stringy materials to further reduce clogging.

*\*Interchangeable with Ultra V Series<sup>®</sup> rotating assembly*

# ECONOMICAL OPERATION & EASY TO SERVICE

*Gorman-Rupp's patented external shimless adjustment design doubles the life of the impeller and wearplate.*

The external shimless coverplate allows for easy adjustment of the clearance between the impeller and the wearplate. This process eliminates the need to realign belts, couplings or other drive components. In turn, the working height of the seal assembly and impeller back clearance are not disturbed. The unique collar and adjusting screw allow for incremental adjustments of the wearplate clearance.

Once adjustments have been made, the collar locks in place, maintaining the clearance setting even if the coverplate is removed. This design feature doubles the life of the impeller and wearplate while maintaining peak operating efficiency.



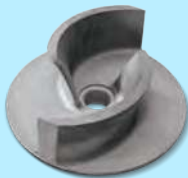
## Easily Removable Coverplate

The removable coverplate with easy-grip handle and pusher bolt capability provides quick and easy access to the pump interior.



## Solids-Handling Impeller

The two-vane, semi-open solids handling impeller handles up to 3" (76.2 mm) diameter solids, depending on pump model. Pump out vanes on the impeller shroud reduce foreign material buildup behind the impeller and reduce pressure on the seal and bearings.



## Replaceable Wearplate

A replaceable self-cleaning wearplate ensures debris is cleared away and does not collect on the impeller vanes. This innovative design reduces the overall life cycle costs by minimizing blockage within the pump.



## Gorman-Rupp Cartridge Seal

The exclusive double-floating, self-aligning, oil lubricated mechanical cartridge seal with silicon carbide stationary and rotating faces is specifically designed for abrasive and/or trash handling service. Consult the factory for additional seal configurations.



## Dual Bearing Protection

An atmospheric barrier along with two lip seals provide additional protection of the pump bearings. This unique design also allows for quick and easy external monitoring of the bearing cavity.



## Removable Rotating Assembly

The entire rotating assembly can be removed without disturbing the pump volute or piping. Pusher bolt holes are provided to assist with removal. This allows for quick and easy installation of a spare rotating assembly, resulting in less downtime.

## Check Valve

A positive sealing, externally removable suction check valve is standard on Ultra V Series® models. This eliminates the need to disconnect any piping for inspection or replacement. The check valve has a blowout center that limits excessive volute pressure, protecting the pump.



# GORMAN-RUPP ULTRA V SERIES®

The Right Pump For The Job

## Basic Pumps



**Ultra V Series®**  
Size: 3" (75 mm)



**Ultra V Series®**  
Size: 4" (100 mm)



**Ultra V Series®**  
Size: 6" (150 mm)



**VS Series**  
Size: 3" (75 mm)



**VS Series**  
Size: 4" (100 mm)



**VS Series**  
Size: 6" (150 mm)

## Optional Accessories

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

\*Viton® is a registered trademark of DuPont Performance Elastomers. All rights reserved.

## Drive Variations



**Ultra V Series®**  
Engine driven  
Shown with optional wheel kit



**Ultra V Series®**  
ReliaSource® packaged pumping stations



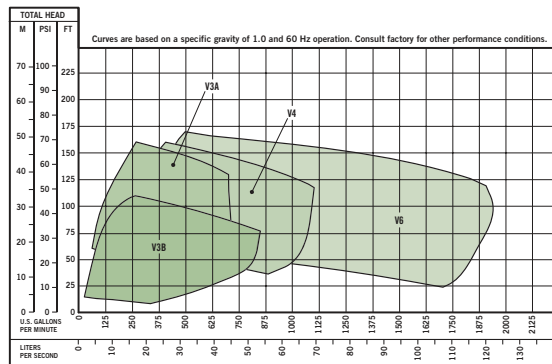
**Ultra V Series®**  
ReliaPrime® sound-attenuated back-up system

Built upon the foundation of the Super T Series®, Gorman-Rupp Ultra V Series® pumps excel in high-head applications where traditional self-priming trash pumps fall short. Available in three sizes, these pumps can be configured as a trailer mounted engine-driven unit or be part of an engineered ReliaSource® pump station that is factory assembled, tested, shipped, and ready for installation.

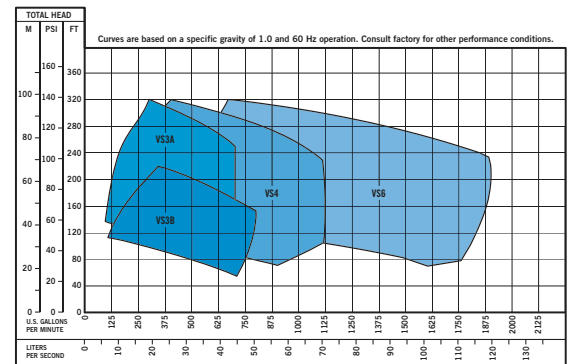
The V3B and VS3B models offer an optional hydraulic design developed to meet three inch solids-handling requirements in a three-inch pump.

## Pump Performance Data

### Ultra V Series®



### VS Series



# FLUID-HANDLING EQUIPMENT DESIGNED WITH YOUR NEEDS IN MIND



★ Manufacturing Facilities  
● Distribution Centers

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 Centers  
Dubai, United Arab Emirates  
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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*The Pump People®*