

- MUNICIPAL
- INDUSTRIAL
- CONSTRUCTION / RENTAL
- AGRICULTURE



*SF Series<sup>®</sup> Submersible  
Solids-Handling Pumps*



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# A HISTORY OF INNOVATION



*Gorman-Rupp has been revolutionizing the pumping industry since 1933. Over the years, we have introduced many innovations that 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.

While much of Gorman-Rupp's reputation has been built on the success of our self-priming pumps, we have been producing high-quality, long-lasting submersible pumps since 1960.

The Infinity® line of submersible pumps continues the tradition of excellence.

SF Series® submersible solids-handling pumps optimize pumping efficiencies and include multiple features to help ease the maintenance process. Built to last, these pumps offer the versatility to be used in most applications that require a submersible pump with solids-handling capabilities.

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 PERFORMANCE AND VALUE

*Gorman-Rupp is committed to meeting your fluid-handling requirements long after installation. The quality manufacturing and testing that go into every SF Series® pump guarantee long-lasting, trouble-free operation. And we provide industry-leading warranty and service to support our products and ensure your peace of mind.*

*Make Gorman-Rupp  
Your Single Source For:*

## Value

SF Series® pumps are designed to minimize your energy utilization. Additionally, with 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 SF Series, you'll have it fast. With tens of thousands of genuine Gorman-Rupp parts on hand, we fill and ship 99% of parts orders within 24 hours. Should your SF Series pump or ReliaSource® pump package 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, 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 an SF Series pump for five years. With Gorman-Rupp, reliable performance is always guaranteed.



# SF SERIES®

## Submersible Solids-Handling Pumps

*Built to the same exacting standards you've come to expect from Gorman-Rupp, SF Series® pumps are designed for easy maintenance and constructed for long life.*

### Optimal Performance

Gorman-Rupp SF Series® pumps are designed and built using the latest technologies, resulting in a product that provides optimal performance.

All SF Series pump models feature NEMA Premium Efficiency motors and wet end designs that minimize your energy utilization. Additionally, SF Series Vortex pumps provide industry-leading pumping efficiencies by using Staggerwing® impeller technology.

While energy consumption and pumping efficiency are critical in evaluating performance, these are not the only factors considered in the design of the SF Series. A pump needs to consistently provide the required liquid movement in a variety of applications, so we also focused on designing a product that will provide long-lasting, reliable operation. While some competitors use gimmicks to “handle” solids, all SF Series pumps pass a 3” spherical solid. The motors are press-fit into our patented finned motor housing, to provide superior cooling, and combined with standard Class H insulation result in increased motor life.

### Easy To Maintain

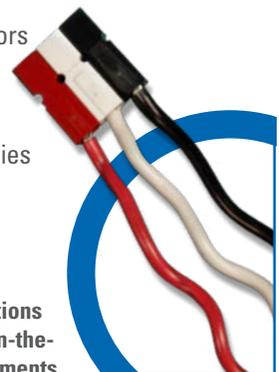
Eventually, all mechanical equipment requires maintenance, whether it is preventative or repair. Gorman-Rupp has designed the SF Series with this in mind.

Channel pumps incorporate externally-adjustable face clearances to quickly maintain optimal pumping efficiency.

All models include moisture and temperature sensors on each motor phase to minimize the risk of costly motor damage.

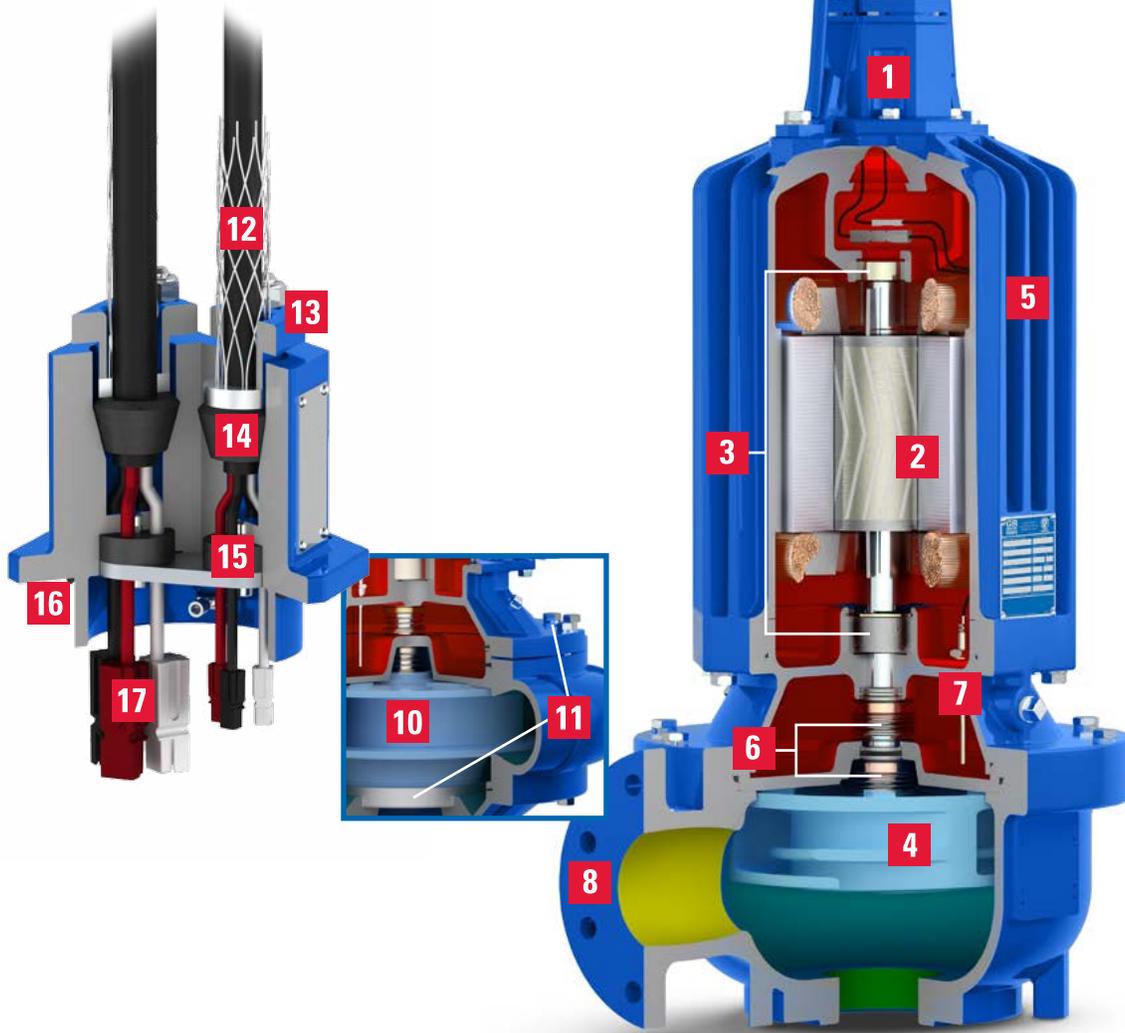
Patent-pending terminal housing and cable assemblies are designed with color-coded, snap-together connections for easy in-the-field cable changes.

Terminal housing and cable connections are specifically designed for easy in-the-field cable replacements.





# INFINITY®



All SF Series® pumps feature a standard five-year warranty.



### SF Series® Vortex Pumps

- 1–Field Replaceable Terminal Housing & Motor Cable**
- 2–NEMA Premium Efficiency (IEC IE3) Motor**
- 3–Heavy Duty Ball Bearings**
- 4–Staggerwing® Vortex Impeller**
- 5–Heat-Extracting Motor Housing (Patented)**
- 6–Mechanical Seals**
- 7–Dual Chamber Moisture Detection**
- 8–ANSI 125# Flange (Metric Is Available)**
- 9–Stainless Steel Lifting Bail**

### SF Series® Channel Pumps\*

- 10–3" Solids-Handling Enclosed Impeller**
- 11–Externally Adjustable Wearplate**
- Field Replacement Terminal Housing & Motor Cable**
- 12–Strain-Relieving Cord Grip**
- 13–Terminal Gland To Compress Cable Bushing**
- 14–Cable Bushing Seals For Leaks External To The Cable**
- 15–Lead Bushing Seals Each Lead Individually, Preventing Wicking**
- 16–O-Ring To Seal Terminal To Motor Housing**
- 17– Snap-Together Cable Connectors**

### Specifications

Pump Size: 3" (75 mm), 4" (100 mm), 6" (150 mm), 8" (200 mm)  
 Max. Capacity: 3400 GPM (214.5 lps)  
 Max. Solids: 3" (76.2 mm)  
 Max. Head: 170' (51.8 m)  
 Materials of Construction: Cast Iron, Ductile Iron  
 Horsepower: 3 HP to 75 HP

\*All noted Vortex Pump features are also included in the Channel Pump

# CONFIGURED TO YOUR PERFORMANCE REQUIREMENTS

*Each SF Series® pump is built-to-order. You select the impeller trim to meet your specific condition point. Then the motor is sized to match the impeller trim.*

## Installed Where You Need It

Whether your pump installation requires permanent, semi-permanent, or portable placement, SF Series® pumps will fit the bill. All SF Series pumps come standard with either ANSI 125# or DIN flanges on both the suction and discharge sides, ready to fit up to your permanent pipe configuration or to match up to most manufacturers' guide shoes for replacement installation.



Wet Pit Installations

For semi-permanent slide rail installations, Gorman-Rupp offers an easy-to-install base elbow. Guide shoes include a rubber seal that directs all flow into the discharge piping

without relying on a flush metal-to-metal fit-up that can wear and allow leaks. All SF Series guide rail systems use 2" rail as standard, maintaining consistency when used in multiple stations.

When portability is required, SF Series pumps can be attached to a rugged stand that maintains clearances for solids passage. In addition, we offer an optional tight-radius flanged elbow for easy connection to discharge hose or piping.



Portable / Construction Configuration

## Agency Approvals



Most SF Series pump models are available with CSA C-US approval for standard locations and FM and CSA C-US approval for hazardous (Class I, Division 1, Groups C & D) locations.

## Staggerwing® Technology

SFV vortex pump models feature the Staggerwing® impeller. The impeller provides industry-leading pump efficiencies and allows for passage of 3" spherical solids, even in 3" discharge pumps.



# GORMAN-RUPP SF SERIES® SUBMERSIBLE SOLIDS-HANDLING PUMPS

While much of Gorman-Rupp's reputation has been built on the success of our self-priming pumps, we have been producing high-quality, long-lasting submersible pumps since 1960. With over 80 years of manufacturing experience, hundreds of thousands of pump installations worldwide and one of the leading distribution networks in the world, you'll find a wealth of knowledge and expertise behind every Gorman-Rupp pump.

## SF Series® Vortex Pumps



**SFV3A/SFV3B**  
Size: 3" (75 mm)  
SFV3A Pictured



**SFV4A/SFV4B**  
Size: 4" (100 mm)  
SFV4B Pictured



**SFV4C/SFV4D/SFV4E**  
Size: 4" (100 mm)  
SFV4E Pictured

## SF Series® Channel Pumps



**SF4A/SF4B/SF4C/SF4D**  
Size: 4" (100 mm)  
SF4C Pictured



**SF6B/SF6C/SF6D**  
Size: 6" (150 mm)  
SF6B Pictured



**SF8B**  
Size: 8" (200 mm)

## Packaged System



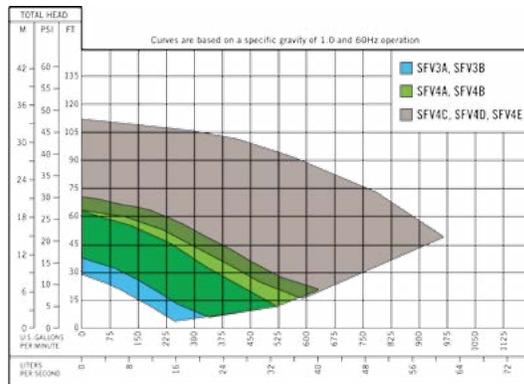
**SF Series®**  
ReliaSource® above-ground submersible valve package (ASVP)

## Optional Accessories

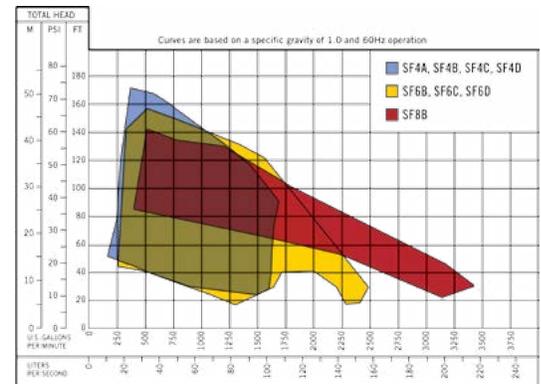
- Industrial & Municipal ReliaSource® Packages With Integrinex™ Controls
- Control Panels & Complete Stations

## Pump Performance Data

### SF Series® Vortex



### SF Series® Channel



**NOTE:** Consult factory for other performance conditions.

# FLUID HANDLING EQUIPMENT DESIGNED WITH YOUR NEEDS IN MIND



★ **Manufacturing Facilities**

● **Distribution Centers**

**The Gorman-Rupp Company**  
Mansfield, Ohio, USA

**Mansfield Division**  
Mansfield, Ohio, USA

**Gorman-Rupp International**  
Mansfield, Ohio, USA

**Gorman-Rupp Industries**  
Bellville, Ohio, USA

**Patterson Pump Company**

Toccoa, Georgia, USA

**American Machine and  
Tool Co., Inc. of Pennsylvania**  
Royersford, Pennsylvania, USA

**National Pump Company**  
Fresno, California, USA  
Glendale, Arizona, USA (Headquarters)

Lubbock, Texas, USA  
Olive Branch, Mississippi, USA  
Vienna, Georgia, USA  
Zolfo Springs, Florida, USA

**Gorman-Rupp Africa**

Cape Town, South Africa  
Durban, South Africa  
Johannesburg, South Africa (Headquarters)

**Gorman-Rupp Europe**  
Leeuwarden, Netherlands

**Patterson Pump Ireland Limited**  
County Westmeath, Ireland

**Gorman-Rupp of Canada Limited**  
St. Thomas, Ontario, Canada

**Distribution Centers**

Bangkok, Thailand  
Dubai, United Arab Emirates  
Grand Prairie, Texas, USA  
Leeuwarden, Netherlands  
Sparks, Nevada, 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.



**GRPUMPS.COM**



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