



SF SERIES®

*Submersible,
Solids-Handling Pumps*

GR
GORMAN-RUPP
PUMPS

The Pump People®



A HISTORY OF INNOVATION

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 SF Series® 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.

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 pump, you'll have it fast. With tens of thousands of genuine Gorman-Rupp parts on hand, we fill and ship most 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 warranties, we guarantee every part and working component of an SF Series pump, when part of a ReliaSource® packaged system or a municipal installation*, for five years. With Gorman-Rupp, reliable performance is always guaranteed.

*All SF Series® pumps operating in industrial, construction, mining or agricultural applications come standard with a one-year warranty.

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.

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.



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.

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 either pass a 3” spherical solid or are equipped with solids-reduction technology. 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.



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



Wet Pit Installations

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.

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**

ERADICATOR PLUS

For those extreme-duty applications where trash bags, wipes, hair, industrial by-products and agricultural wastes are present, SFSC models are equipped with Gorman-Rupp's new Eradicator Plus™ solids-reduction technology. These

models are ideal when cutting and tearing of organic solids entering pump is required.

Eradicator Plus models come standard with a rugged, heavy-duty continuous vane impeller for the most aggressive waste-handling applications.



The wearplate incorporated into SFSC models is constructed of extra-thick G-R Hard Iron. It utilizes notches, grooves and an oversized lacerating tooth that is designed to cut and shred debris before entering the interior of the pump.



Packaged System



SF Series®

ReliaSource® Above-Ground Submersible Valve Package (ASVP)

Optional Accessories

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

GORMAN-RUPP SF SERIES®

The Right Pump For The Job

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, ADI

Horsepower: 2.5 HP to 75 HP

SF Series® Pumps

- 01** | Stainless Steel Lifting Bail
- 02** | Field Replaceable Terminal Housing & Motor Cable
- 03** | Patented Heat-Extracting Motor Housing
- 04** | NEMA Premium Efficiency (IEC IE3) Motor
- 05** | Heavy-Duty Ball Bearings
- 06** | Dual Chamber Moisture Detection
- 07** | Mechanical Seals
- 08** | ANSI 125# Flange *Metric Is Available*
- 09** | Externally Adjustable Wearplate*

Impeller Options

- 10** | 3" Solids-Handling Vortex Impeller
- 11** | 3" Solids-Handling Enclosed Impeller
- 12** | 3" Solids-Handling Semi-Open, Two-Vane Impeller *SFS Models Only*
- 13** | Eradicator Plus™ Continuous Vane Impeller *SFSC Models Only*



**Available on enclosed, semi-open and continuous vane impeller models only.*

SF Series® Channel Pumps

Specifications

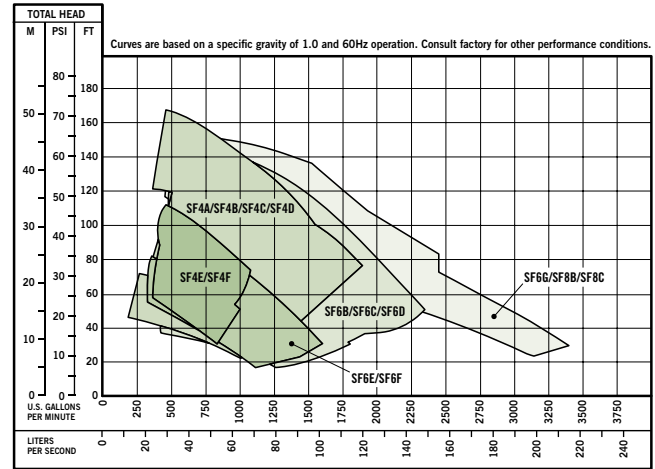
Pump Size: 4" (100 mm),
6" (150 mm), 8" (200 mm)
Horsepower: 10 HP to 75 HP
Max. Capacity: 3400 GPM (214.5 lps)
Max. Solids: 3" (76.2 mm)
Max. Head: 168' (51.2 m)
Materials of Construction:
Cast Iron, Ductile Iron, ADI



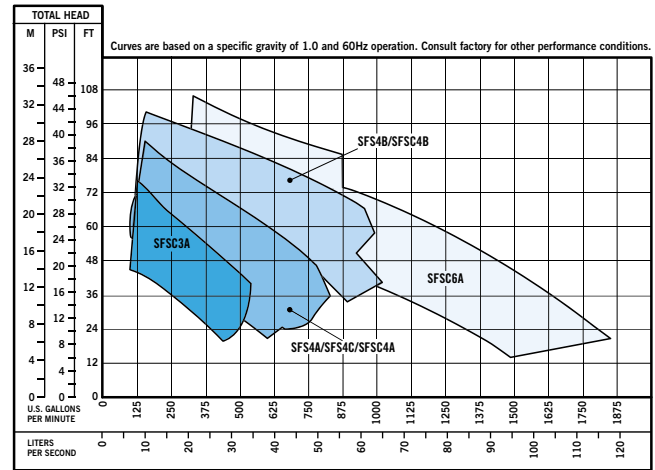
Model SF8B pictured

Pump Performance Data

SF Series® Enclosed



SF Series® Semi-Open, Two-Vane and Continuous Vane, Eradicator Plus™



OPERATING RANGES

| MODEL | PUMP SIZE (SUC. X DIS.) | HORSEPOWER | MAX. CAPACITY | MAX. HEAD | MAX. SOLIDS | CONSTRUCTION |
|--|-------------------------|------------------------------------|----------------------|---------------|-----------------|-----------------------|
| ENCLOSED | | | | | | |
| SF4A | 4" (100 mm) | 15 HP (11.2 kW) to 24 HP (17.9 kW) | 1240 GPM (78.2 lps) | 70' (21.3 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF4B | 4" (100 mm) | 30 HP (22.4 kW) | 1440 GPM (90.9 lps) | 82' (25.0 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF4C | 4" (100 mm) | 50 HP (37.3 kW) | 1800 GPM (113.6 lps) | 132' (40.2 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF4D | 4" (100 mm) | 75 HP (55.9 kW) | 1640 GPM (103.5 lps) | 168' (51.2 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF4E | 4" (100 mm) | 15 HP (11.2 kW) to 24 HP (17.9 kW) | 1000 GPM (63.1 lps) | 88' (26.8 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF4F | 4" (100 mm) | 30 HP (22.4 kW) | 1050 GPM (66.2 lps) | 108' (32.9 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6B | 6" (150 mm) | 75 HP (55.9 kW) | 2350 GPM (148.3 lps) | 152' (46.3 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6C | 6" (150 mm) | 30 HP (22.4 kW) | 1760 GPM (111.0 lps) | 76' (23.2 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6D | 6" (150 mm) | 50 HP (37.3 kW) | 2250 GPM (142.0 lps) | 128' (39.0 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6E | 6" (150 mm) | 15 HP (11.2 kW) to 24 HP (17.9 kW) | 1440 GPM (90.9 lps) | 82' (25.0 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6F | 6" (150 mm) | 30 HP (22.4 kW) | 1580 GPM (99.7 lps) | 104' (31.7 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF6G | 6" (150 mm) | 75 HP (55.9 kW) | 2350 GPM (148.3 lps) | 165' (39.0 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF8B | 8" (200 mm) | 75 HP (55.9 kW) | 3400 GPM (214.5 lps) | 136' (41.5 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SF8C | 8" (200 mm) | 75 HP (55.9 kW) | 2450 GPM (154.6 lps) | 156' (47.5 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SEMI-OPEN, TWO-VANE | | | | | | |
| SFS4A | 4" (100 mm) | 10 HP (7.5 kW) to 14 HP (10.4 kW) | 820 GPM (51.7 lps) | 68' (20.7 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SFS4B | 4" (100 mm) | 15 HP (11.2 kW) to 24 HP (17.9 kW) | 1020 GPM (64.4 lps) | 100' (30.5 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| SFS4C | 4" (100 mm) | 10 HP (7.5 kW) to 14 HP (10.4 kW) | 820 GPM (51.7 lps) | 88' (26.8 m) | 3" (76.2 mm) | Cast and Ductile Iron |
| CONTINUOUS VANE, ERADICATOR PLUS™ | | | | | | |
| SFSC3A | 3" (75 mm) | 7.5 HP (5.6 kW) to 10 HP (7.5 kW) | 540 GPM (34.1 lps) | 76' (23.2 m) | 1.75" (44.5 mm) | Ductile Iron and ADI |
| SFSC4A | 4" (100 mm) | 10 HP (7.5 kW) to 14 HP (10.4 kW) | 820 GPM (51.7 lps) | 78' (23.8 m) | 2.25" (57.2 mm) | Ductile Iron and ADI |
| SFSC4B | 4" (100 mm) | 15 HP (11.2 kW) to 24 HP (17.9 kW) | 1020 GPM (64.4 lps) | 98' (29.9 m) | 2.25" (57.2 mm) | Ductile Iron and ADI |
| SFSC6A | 6" (150 mm) | 30 HP (22.4 kW) | 1850 GPM (116.7 lps) | 106' (32.3 m) | 2.25" (57.2 mm) | Ductile Iron and ADI |

SF Series® Vortex Pumps

Specifications

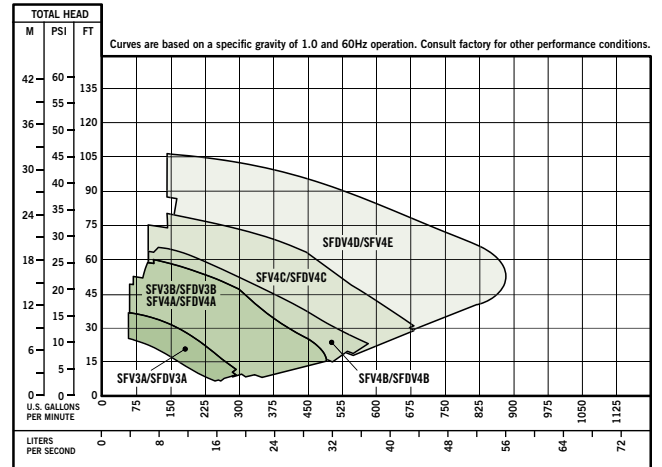
Pump Size: 3" (75 mm), 4" (100 mm)
Horsepower: 2.5 HP to 30 HP
Max. Capacity: 940 GPM (59.3 lps)
Max. Solids: 3" (76.2 mm)
Max. Head: 108' (32.9 m)
Materials of Construction:
Cast Iron, Ductile Iron



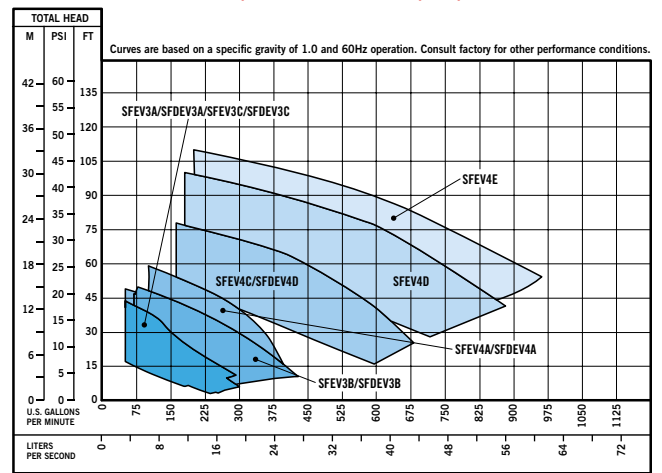
Model SFV4E pictured

Pump Performance Data

SF Series® Standard-Duty and Standard-Duty Dry Pit Vortex



SF Series® Extreme-Duty and Extreme-Duty Dry Pit Vortex



OPERATING RANGES

| MODEL | PUMP SIZE (SUC. X DIS.) | HORSEPOWER | MAX. CAPACITY | MAX. HEAD | MAX. SOLIDS | CONSTRUCTION |
|-------------------------------------|-------------------------|-------------------------------------|--------------------|---------------|--------------|-----------------------|
| STANDARD-DUTY VORTEX | | | | | | |
| SFV3A | 3" (75 mm) | 3 HP (2.2 kW) | 295 GPM (18.6 lps) | 37' (11.3 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV3B | 3" (75 mm) | 4 HP (3.0 kW) to 7 HP (5.2 kW) | 450 GPM (28.4 lps) | 56' (17.1 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV4A | 4" (100 mm) | 4 HP (3.0 kW) to 7 HP (5.2 kW) | 490 GPM (30.9 lps) | 60' (18.3 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV4B | 4" (100 mm) | 7.5 HP (5.6 kW) to 10 HP (7.5 kW) | 600 GPM (37.9 lps) | 65' (19.8 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV4C | 4" (100 mm) | 12.5 HP (9.3 kW) to 14 HP (10.4 kW) | 670 GPM (42.3 lps) | 78' (23.8 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV4D | 4" (100 mm) | 24 HP (17.9 kW) | 800 GPM (50.5 lps) | 98' (29.9 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFV4E | 4" (100 mm) | 30 HP (22.4 kW) | 860 GPM (54.3 lps) | 106' (32.3 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| STANDARD-DUTY DRY PIT VORTEX | | | | | | |
| SFDV3A | 3" (75 mm) | 2.5 HP (1.9 kW) to 3 HP (2.2 kW) | 295 GPM (18.6 lps) | 37' (11.3 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDV3B | 3" (75 mm) | 5 HP (3.7 kW) | 390 GPM (24.6 lps) | 48' (14.6 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDV4A | 4" (100 mm) | 5 HP (3.7 kW) | 450 GPM (28.4 lps) | 48' (14.6 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDV4B | 4" (100 mm) | 7 HP (5.2 kW) to 7.5 HP (5.6 kW) | 510 GPM (32.2 lps) | 62' (19.0 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDV4D | 4" (100 mm) | 10 HP (7.5 kW) to 14 HP (10.4 kW) | 670 GPM (42.3 lps) | 74' (22.6 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| EXTREME-DUTY VORTEX | | | | | | |
| SFEV3A | 3" (75 mm) | 3 HP (2.2 kW) | 290 GPM (18.3 lps) | 40' (12.2 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV3B | 3" (75 mm) | 4 HP (3.0 kW) to 7 HP (5.2 kW) | 418 GPM (26.4 lps) | 53' (16.2 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV3C | 3" (75 mm) | 3 HP (2.2 kW) | 290 GPM (18.3 lps) | 44' (13.4 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV4A | 4" (100 mm) | 4 HP (3.0 kW) to 7 HP (5.2 kW) | 390 GPM (24.6 lps) | 59' (18.0 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV4C | 4" (100 mm) | 12.5 HP (9.3 kW) to 14 HP (10.4 kW) | 660 GPM (41.6 lps) | 78' (23.8 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV4D | 4" (100 mm) | 24 HP (17.9 kW) | 860 GPM (54.3 lps) | 100' (30.5 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFEV4E | 4" (100 mm) | 30 HP (22.4 kW) | 940 GPM (59.3 lps) | 108' (32.9 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| EXTREME-DUTY DRY PIT VORTEX | | | | | | |
| SFDEV3A | 3" (75 mm) | 2.5 HP (1.9 kW) to 3 HP (2.2 kW) | 290 GPM (18.3 lps) | 40' (12.2 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDEV3B | 3" (75 mm) | 5 HP (3.7 kW) | 370 GPM (23.3 lps) | 50' (15.2 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDEV3C | 3" (75 mm) | 2.5 HP (1.9 kW) to 3 HP (2.2 kW) | 370 GPM (23.3 lps) | 44' (13.4 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDEV4A | 4" (100 mm) | 5 HP (3.7 kW) | 280 GPM (17.7 lps) | 48' (14.6 m) | 3" (76.2 mm) | Ductile and Cast Iron |
| SFDEV4D | 4" (100 mm) | 10 HP (7.5 kW) to 14 HP (10.4 kW) | 680 GPM (42.9 lps) | 78' (23.8 m) | 3" (76.2 mm) | Ductile and Cast Iron |

FLUID-HANDLING EQUIPMENT DESIGNED WITH YOUR NEEDS IN MIND



★ Manufacturing Facilities
● Distribution Center

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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The Pump People®

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