

SF Series[®]
VARIOUS PATENTS APPLY

**Solids Handling Electric Motor Driven
Submersible Pump
Models
SF8C & SF8C-X
Size 8"**



APPROVED
X-PROOF MOTORS FOR CLASS I,
DIV. 1, GROUPS C&D LOCATIONS
(X-Proof Version Only)

The Gorman-Rupp SF Series[®] channel pumps provide superior pumping efficiency while maintaining a 3-inch (76,2 mm) spherical solids passage.

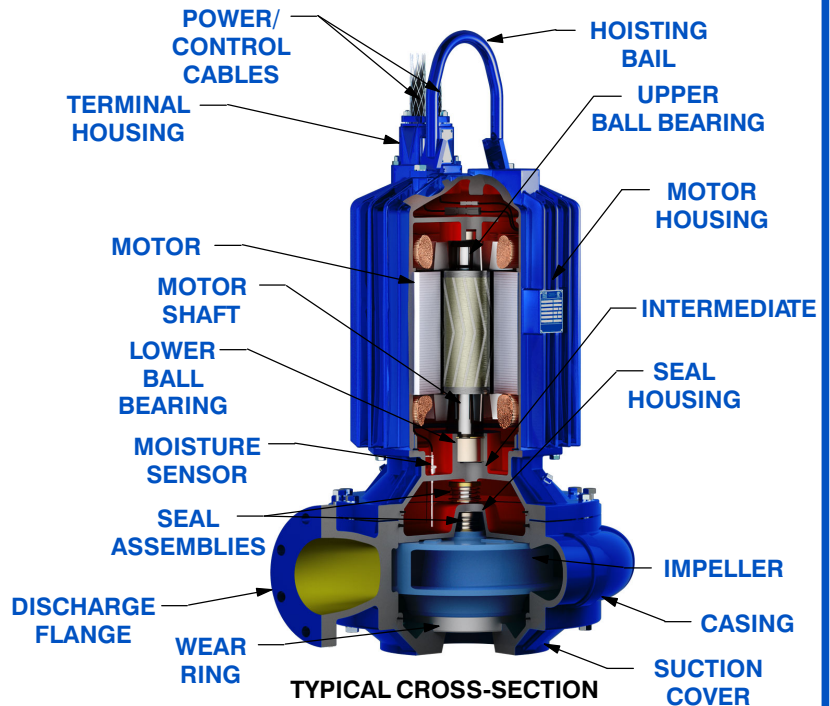
Key Features:

- NEMA premium efficiency motors
- Externally adjustable face clearance
- Press-fit motor with finned motor housing provides superior motor cooling, even in a submersed state, resulting in increased motor life
- NEMA Class H motor insulation
- Direct wired power cable leads
- Standard moisture detection in both the seal and motor chambers
- Factory Mutual (FM) Approved for Class I, Division I, Group C and D Haz Loc Applications (X-Proof Model)



Optional Accessories:

- G-R Hard Iron Impeller
- Control Panel (Consult [SF Series Motor Data Reference](#) for Customer-Supplied Control Panel)
- Submersible Transducer or Ball Type Float Switches
- Slide Rail Installation Components
 - Guide shoe w/Rubber Seal
 - Base Elbow and Rail Brackets
- Trash Stand Installation Components
 - Trash Stand
 - Discharge Elbow



GORMAN-RUPP PUMPS

www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.

PUMP DETAILS

| | | |
|---|---|---------------------------------------|
| Pump Model | SF8C & SF8C-X | |
| Agency Approvals | Consult Factory | |
| Discharge Flange | 8" ANSI w/ Flat Face | |
| Impeller Type / Material | Two Vane Enclosed/ Ductile Iron | |
| Wear Ring Material | Ductile Iron | |
| Spherical Solids Handling | 3" (76 mm) Non-Deformable Diameter | |
| Motor Housing (Including Seal Plate and Intermediate) | Gray Iron 30 | |
| Pump Casing | Ductile Iron | |
| Motor Shaft | 17-4 PH Stainless Steel | |
| O-Rings | Buna-N and Fluorocarbon (DuPont Viton® or Equivalent) | |
| Bearings: Type/Lubrication | Upper | Single Row Ball/Permanent Lubrication |
| | Lower | Double Row Ball/Permanent Lubrication |
| External Hardware | 303/304 Stainless Steel | |
| External Surface Protection | Epoxy Paint | |
| Seal Type | Tandem, Mechanical, Oil Lubricated Upper, Self-Lubricated Lower | |
| Sealing Faces: Rotating/Stationary | Upper | Carbon/Ceramic |
| | Lower | Silicon Carbide/Silicon Carbide |
| Seal Elastomers | Buna-N Upper, Fluorocarbon (DuPont Viton® or Equivalent) Lower | |
| Max. Liquid Temperature | 104°F (40°C) | |

MOTOR DETAILS

| | | |
|---|---|--------------|
| Speed | 60 Hz, 1750 RPM | |
| Motor Design | Inverter-Duty Rated, Air-Filled Enclosure, Squirrel Cage, Induction Start | |
| Motor Efficiency Rating | NEMA Premium Efficiency (IEC IE3) | |
| Insulation | Class H, Rated 356°F (180°C) | |
| Max. Submergence | 65 Feet (20 Meters) | |
| Min. Submergence | 1/2 Motor Covered | |
| Max. Starts per Hour | 10 | |
| Max. Rated Output Power | 75.0 HP (55.9 kW) | |
| Amp Draw @ Max. Rated Power: Full Load/ Locked Rotor | | |
| | 460V/3P | 86.0 / 542.0 |
| | 575V/3P | 69.0 / 434.0 |
| NEMA Motor Code | G | |
| Service Factor | 1.15 | |
| Efficiency: 100%/75%/50% Load | 94%/96%/94% | |
| Power Factor: 100%/75%/50% Load | 0.85/0.81/0.73 | |
| Field Connection | Across-the-Line | |
| Moisture Sensor | Single Probe Monitoring Both Seal and Motor Chambers | |
| Thermal Overload | One Thermostat per Phase, Self-Resetting | |

CABLE DETAILS

| | | | |
|---------------|--|----------------------------------|----------------------------------|
| Power Cable | Voltage | 460V | 575V |
| | No. Cables/Conductors per | 1/6 | 1/6 |
| | Gauge | (3) 1 AWG PWR & (3) 6 AWG GND/GC | (3) 1 AWG PWR & (3) 6 AWG GND/GC |
| | Type/Material | GGC | GGC |
| Control Cable | Nominal Cable O.D. | 1.51" (38,4mm) | 1.51" (38,4 mm) |
| | No. Cables/Conductors per | 1/4 | |
| | Gauge | 14 AWG | |
| | Type/Material | SOOW/CPE | |
| | Nominal Cable O.D. | 0.61" (15,5 mm) | |
| Length | 32 Feet (10 Meters) Standard, 164 Feet (50 Meters) Maximum | | |



GORMAN-RUPP PUMPS

www.grpumps.com

Specifications Subject to Change Without Notice

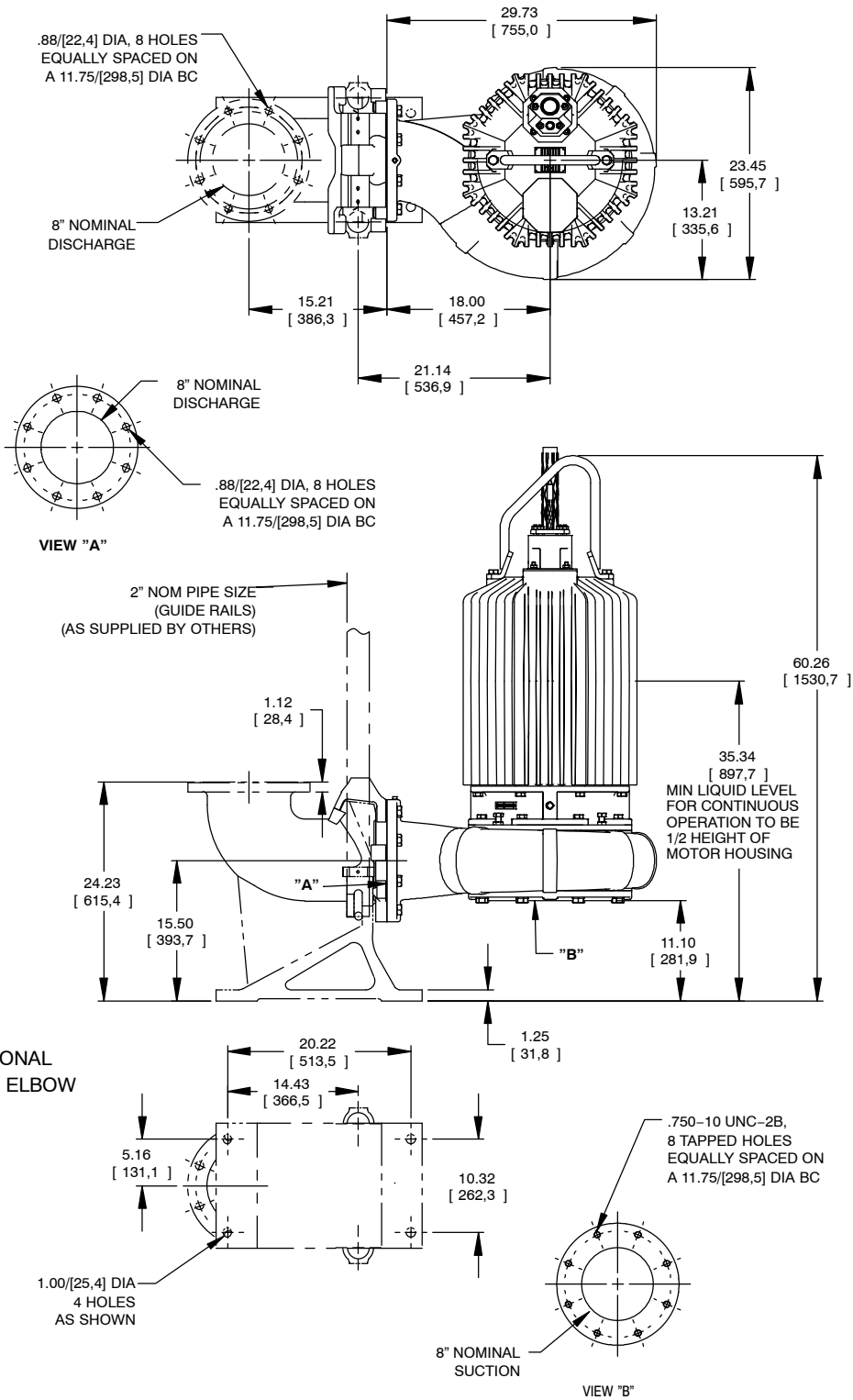
Printed in U.S.A.

Specification Data

SECTION 133, PAGE 430.2

**MODEL SF8C & SF8C-X
SLIDE RAIL VERSION
APPROXIMATE
DIMENSIONS and WEIGHTS**

NET WT: (pump only) **670 LBS.** [303 KG.]
(comb. cable wt. per meter [3.2 ft.]) **3.4 LBS.** [1,54 KG.]
SHIPPING WT: (pump only) **710 LBS.** [322,1 KG.]
CRATE SIZE: **25.1 CU. FT.** [0,71 CU. M.]



SHOWN WITH OPTIONAL
RAIL KIT AND BASE ELBOW

DIMENSIONS:
INCHES
[MILLIMETERS]



GORMAN-RUPP PUMPS

www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.

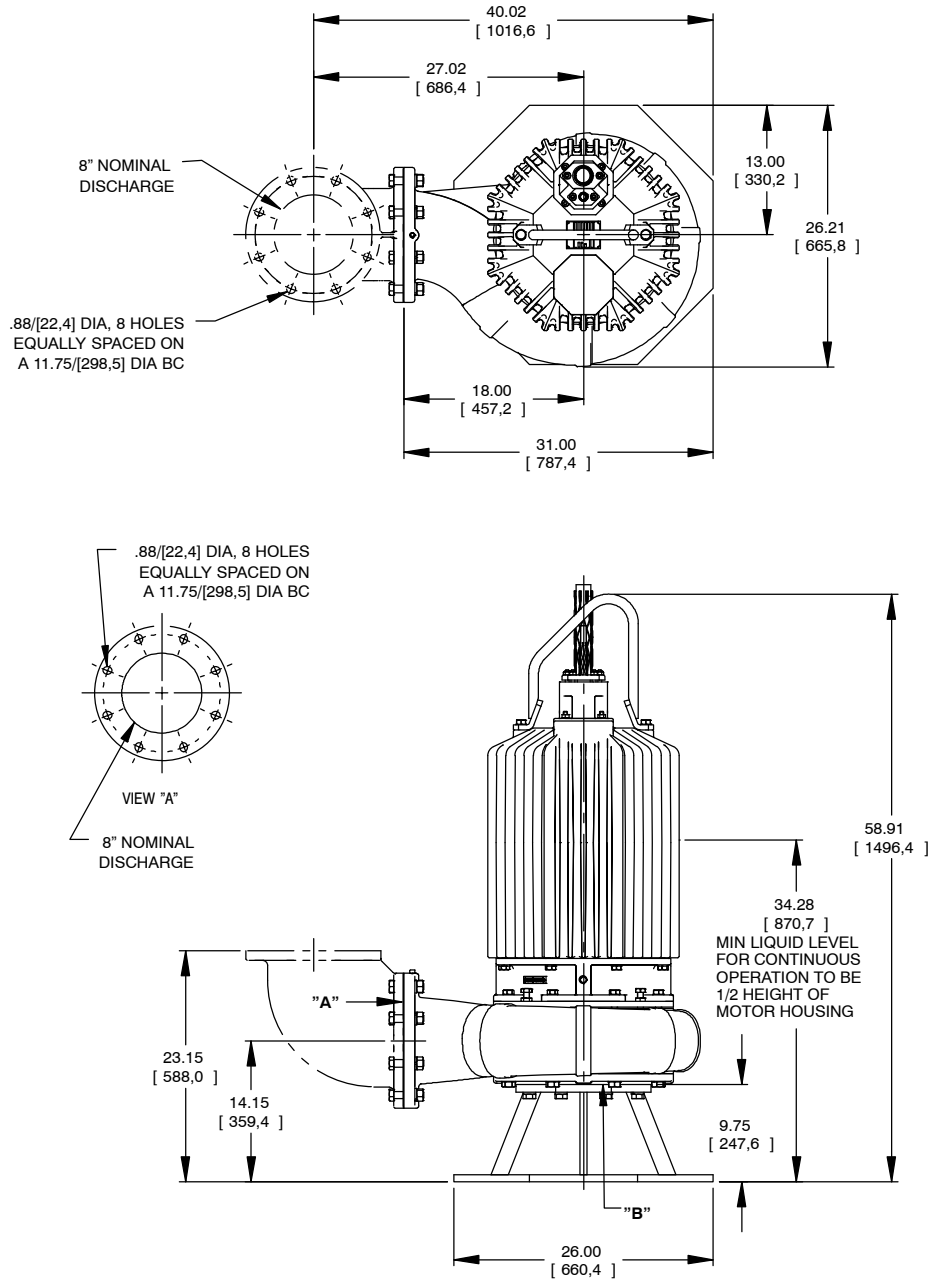
Specification Data

SECTION 133, PAGE 430.3

**MODEL SF8C & SF8C-X
TRASH VERSION
APPROXIMATE
DIMENSIONS and WEIGHTS**

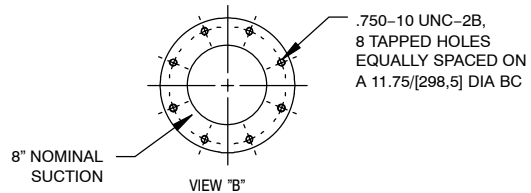
NET WT: (pump only)
(comb. cable wt. per meter [3.2 ft.])
SHIPPING WT: (pump only)
CRATE SIZE:

720 LBS. [326,6 KG.]
3.4 LBS. [1,54 KG.]
760 LBS. [344,7 KG.]
26.8 CU. FT. [0,76 CU. M.]



PUMP WITH TRASH STAND
SHOWN WITH OPTIONAL
DISCHARGE ELBOW

DIMENSIONS:
INCHES
[MILLIMETERS]



GORMAN-RUPP PUMPS

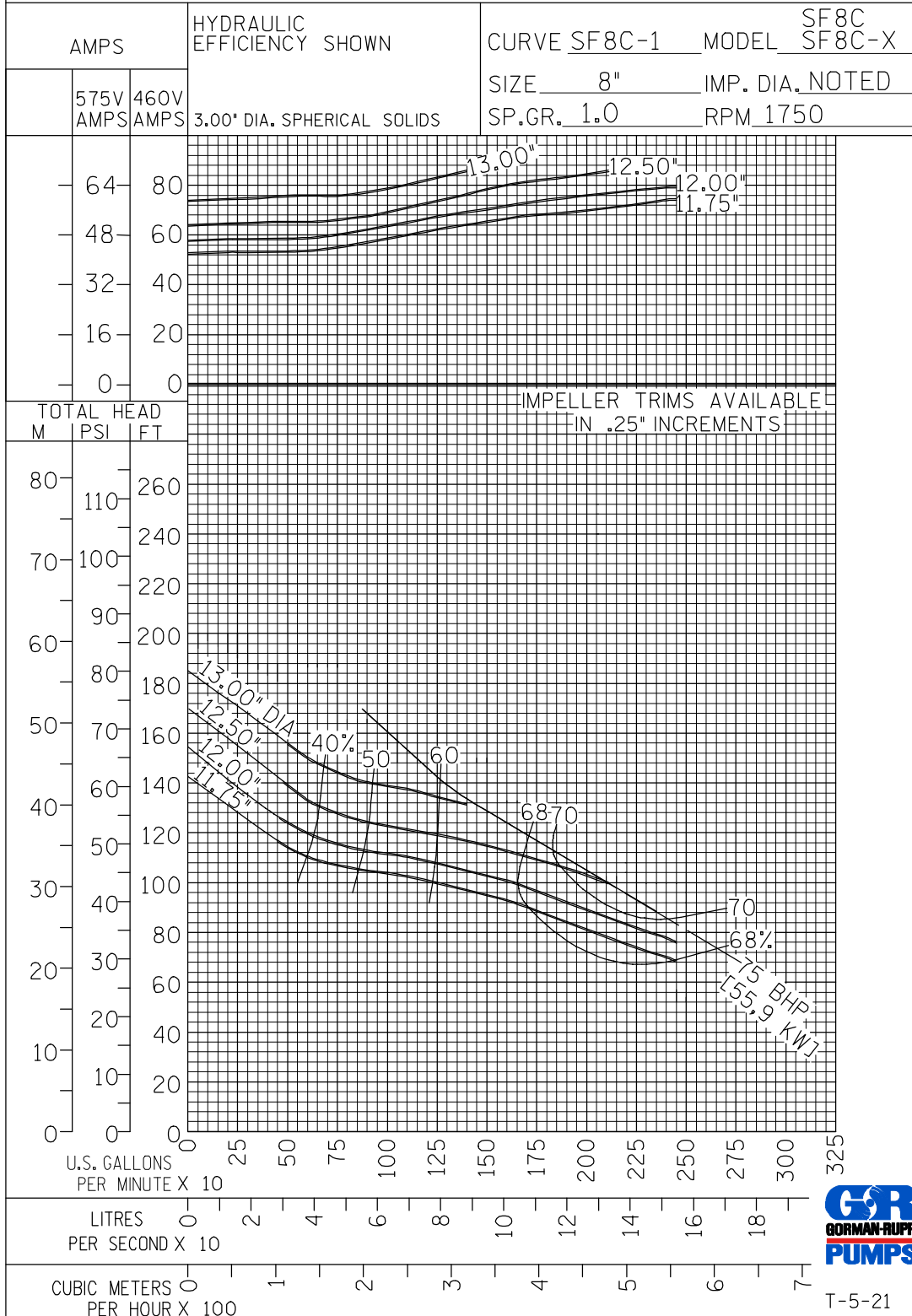
www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.



PERFORMANCE CURVE



GORMAN-RUPP PUMPS

www.grpumps.com

Specifications Subject to Change Without Notice

Printed in U.S.A.