

SF Series[®]
VARIOUS PATENTS APPLY

Submersible Pumps
Models
SFEV3C & SFEV3C-X
Size 3"



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

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

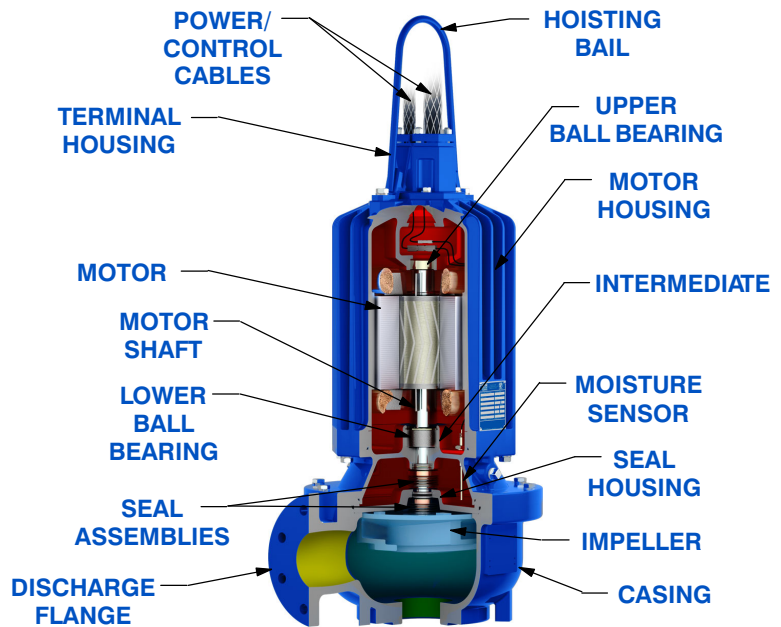
Key Features:

- NEMA premium efficiency motors
- Vortex pump technology
- 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
- Easy, in-the-field cable changes
- Standard moisture detection in both the seal and motor chambers
- CSA-C/US and 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



TYPICAL VORTEX CROSS-SECTION



GORMAN-RUPP PUMPS

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PUMP DETAILS

Pump Models	SFEV3C & SFEV3C-X		
Agency Approvals	FM/CSA-C/US		
Discharge Flange	3" ANSI w/ Flat Face		
Impeller Type	Vortex		
Impeller Material	Ductile Iron		
Spherical Solids Handling	3" (76 mm) Non-Deformable Diameter		
Motor Housing (Including Seal Plate and Intermediate)	Gray Iron 30		
Pump Casing	Gray Iron 30		
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	Single 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/Ni-Resist	
	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	3.0 HP (2,2 kW)	3.0 HP (2,2 kW)	3.0 HP (2,2 kW)
Amp Draw @ Max. Rated Power: Full Load/ Locked Rotor	230V/1P	13.3/19.3	
	208V/3P	8.62/55.3	
	230V/3P	7.80/50.0	
	460V/3P	3.90/25.0	
	575V/3P	3.12/20.0	
NEMA Motor Code	A	H	H
Service Factor	1.15	1.0	1.15
Efficiency: 100%/75%/50% Load	74%/74%/70%	86%/84%/83%	86%/84%/83%
Power Factor: 100%/75%/50% Load	0.98/0.99/0.99	0.83/0.79/0.67	0.83/0.79/0.67
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

Voltage		ALL
Power Cable	No. Cables/Conductors per	1/4
	Gauge	10 AWG
	Type/Material	SOOW
	Nominal Cable O.D.	0.75" (19,0 mm)
Control Cable	No. Cables/Conductors per	1/4
	Gauge	14 AWG
	Type/Material	CPE
	Nominal Cable O.D.	0.61" (15,5 mm)
Length		32 Feet (10 Meters) Standard, 164 Feet (50 Meters) Maximum



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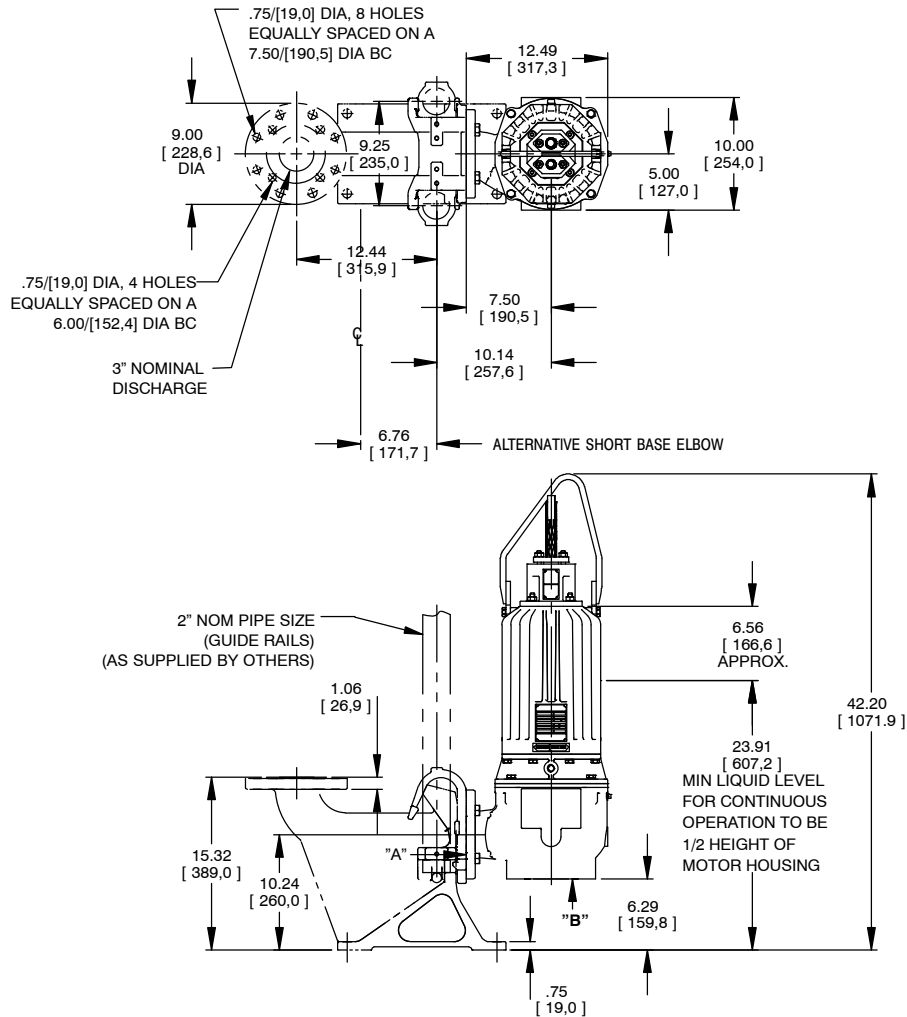
Specification Data

**MODELS SFEV3C & SFEV3C-X
SLIDE RAIL VERSION
APPROXIMATE
DIMENSIONS and WEIGHTS**

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

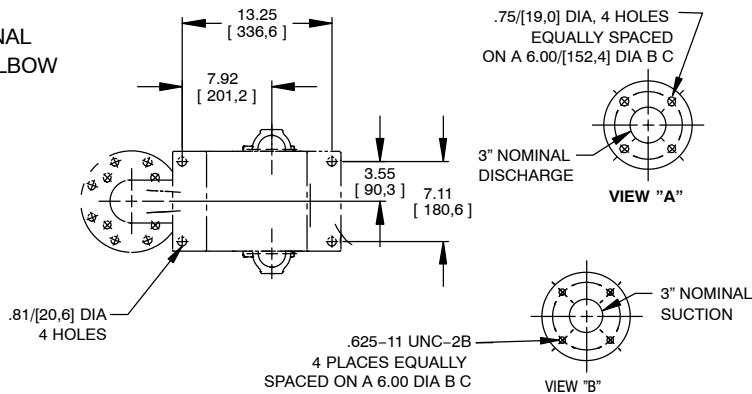
227 LBS. [103 KG.]
1.97 LBS. [0,89 KG.]
257 LBS. [116,5 KG.]
7.2 CU. FT. [0,20 CU. M.]

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SHOWN WITH OPTIONAL RAIL KIT AND BASE ELBOW

DIMENSIONS:
INCHES
[MILLIMETERS]



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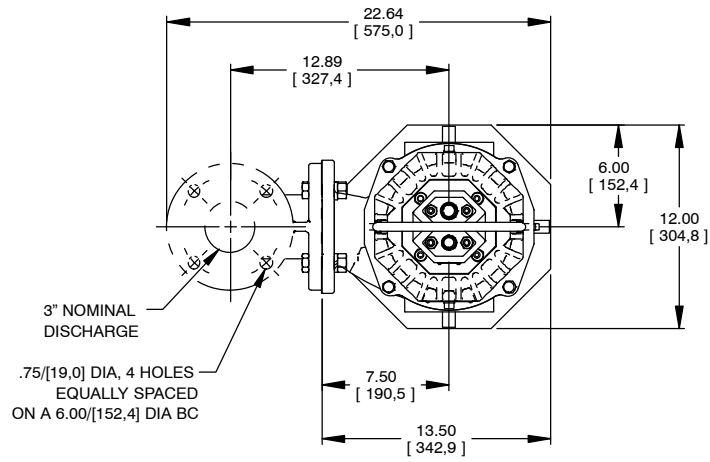
Specification Data

**MODELS SFEV3C & SFEV3C-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:

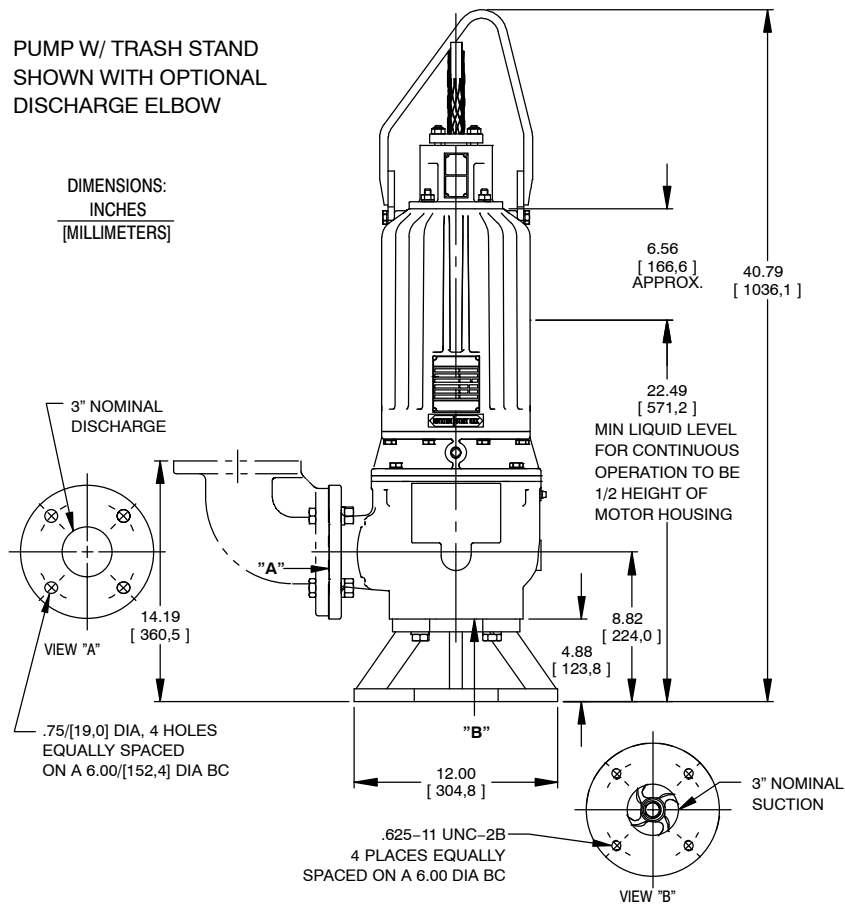
540 LBS. [245 KG.]
2.9 LBS. [1,3 KG.]
570 LBS. [258,5 KG.]
17.3 CU. FT. [0,49 CU. M.]

SECTION 133, PAGE 112.3



PUMP W/ TRASH STAND
SHOWN WITH OPTIONAL
DISCHARGE ELBOW

DIMENSIONS:
INCHES
[MILLIMETERS]



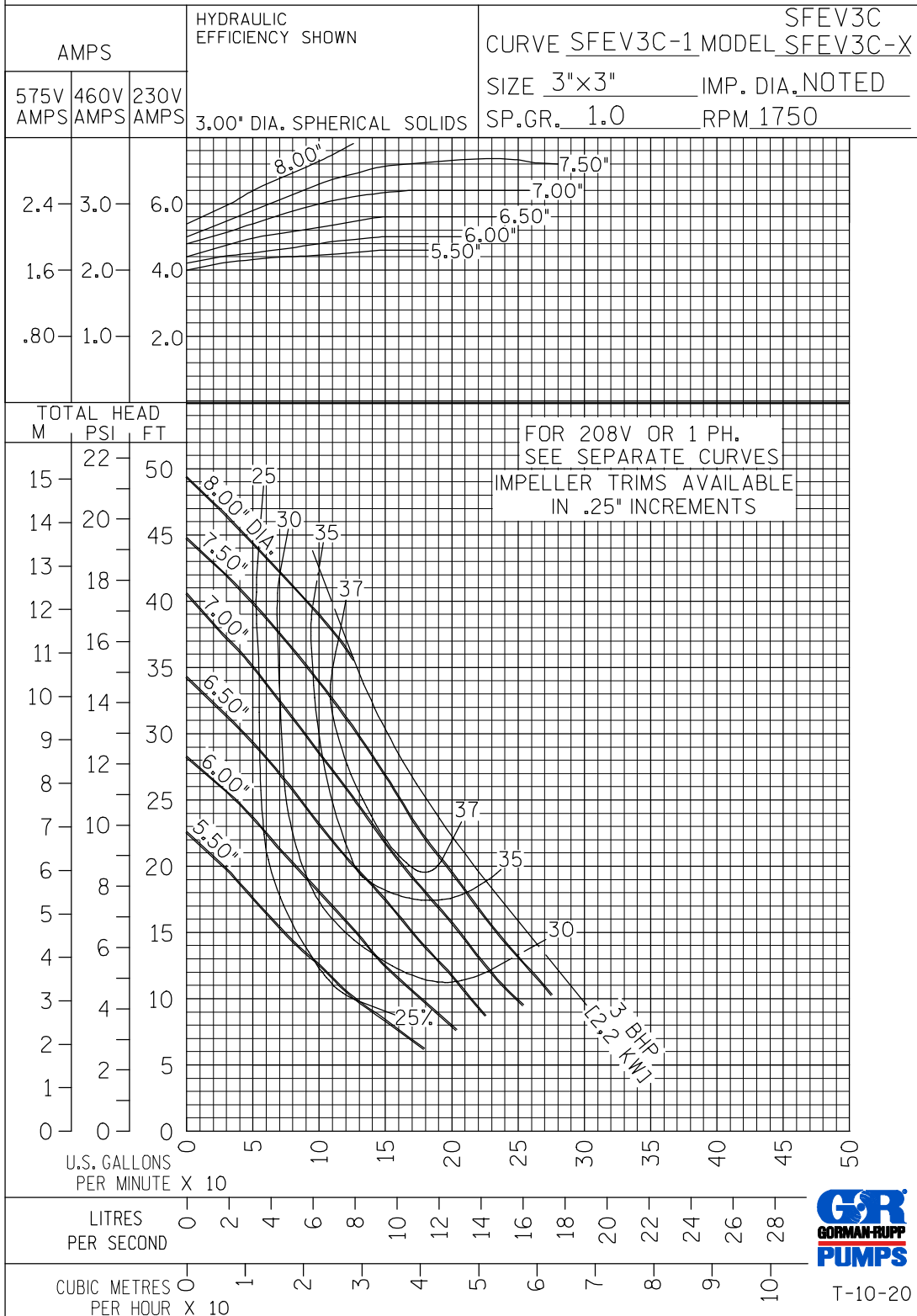
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PERFORMANCE CURVE



T-10-20



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PERFORMANCE CURVE

HYDRAULIC EFFICIENCY SHOWN

208 VOLT CURVE

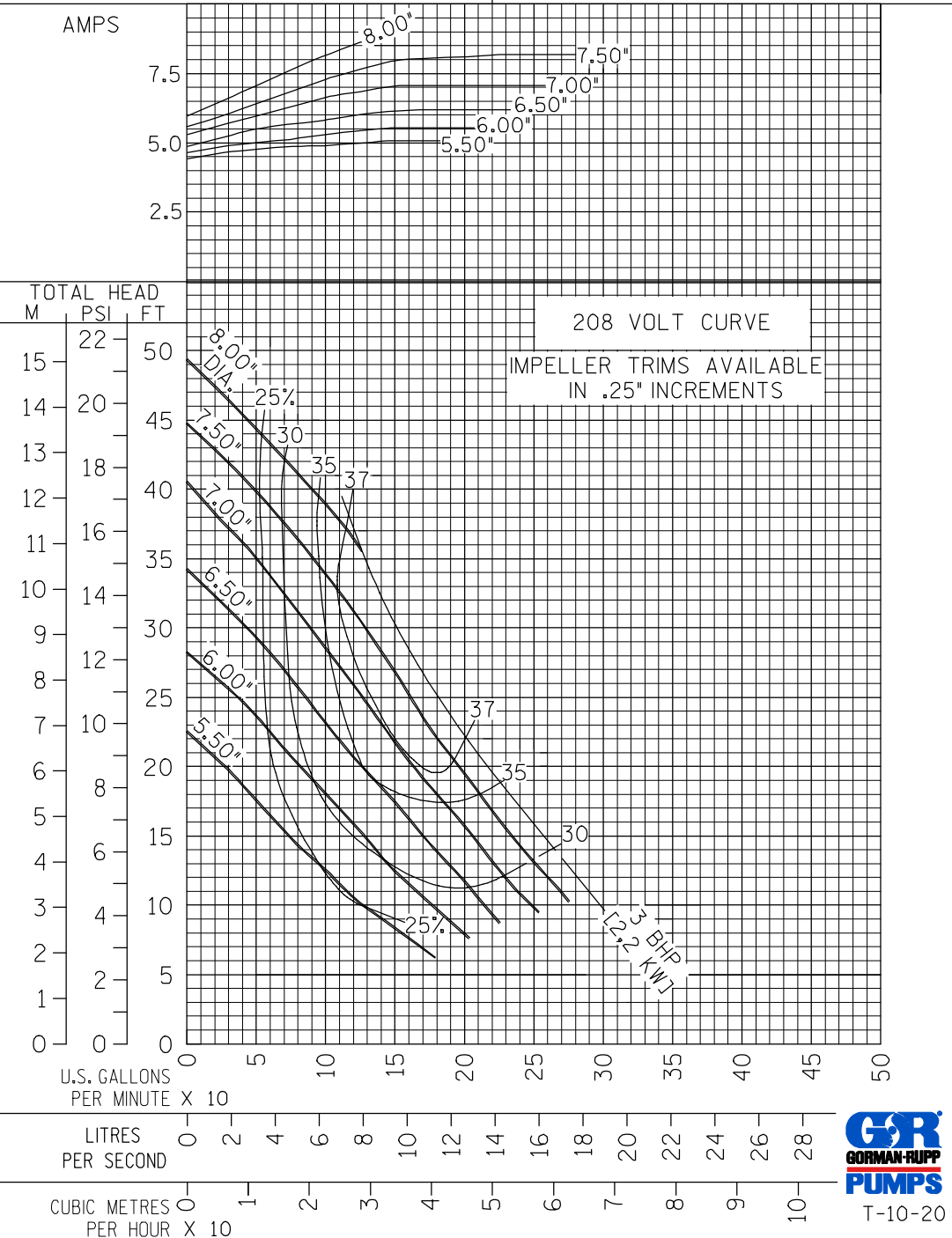
3.00" DIA. SPHERICAL SOLIDS

SFEV3C

CURVE SFEV3C-2 MODEL SFEV3C-X

SIZE 3"×3" IMP. DIA. NOTED

SP.GR. 1.0 RPM 1750



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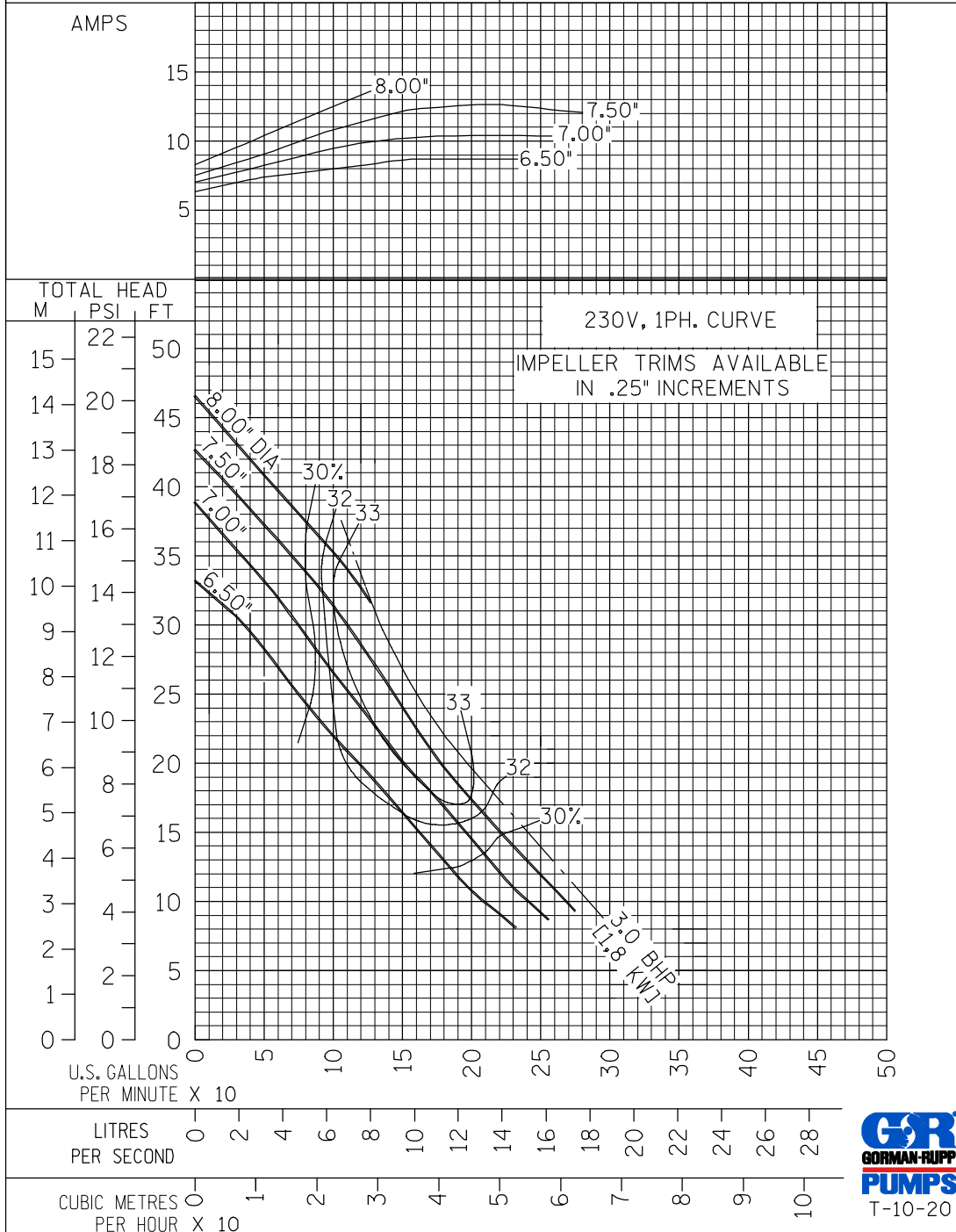
PERFORMANCE CURVE

HYDRAULIC EFFICIENCY SHOWN

230V, 1PH. CURVE

3.00" DIA. SPHERICAL SOLIDS

SFEV3C
CURVE SFEV3C-3 MODEL SFEV3C-X
SIZE 3"×3" IMP. DIA. NOTED
SP.GR. 1.0 RPM 1750



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