



SF Series

VARIOUS PATENTS APPLY

**Submersible Pumps
Models**

**SFDV4A SFDEV4A
SFDV4A-X SFDEV4A-X**

Size 4"



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

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

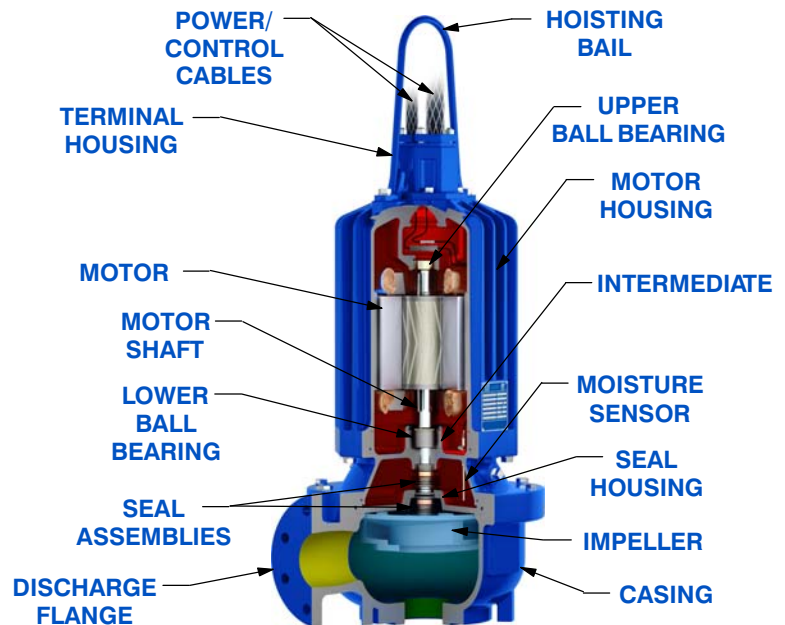
Key Features:

- 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
- Dry Pit Stand Installation Components
 - Dry Pit Stand
 - Discharge Elbow
 - Discharge Increaser



TYPICAL VORTEX CROSS-SECTION



GORMAN-RUPP PUMPS

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Specifications Subject to Change Without Notice

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PUMP DETAILS

Pump Models	SFDV4A SFDEV4A/SFDV4A-X SFDEV4A-X	
Agency Approvals	FM/CSA-C/US	
Discharge Flange	4" 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	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	N/A	
Min. Submergence	N/A	
Max. Starts per Hour	10	
Rated Power	5.0 HP (3,7 kW)	5.0 HP (3,7 kW)
Amp Draw: Max. Full Load / Locked Rotor	208V/3P	13.8/106.1
	230V/3P	13.0/96.0
	460V/3P	6.5/48.0
	575V/3P	5.2/38.4
NEMA Motor Code	J	J
Service Factor	1.0	1.10
Efficiency: 100%/75%/50% Load	88%/87%/86%	88%/87%/86%
Power Factor: 100%/75%/50% Load	0.82/0.76/0.67	0.82/0.76/0.67
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/EPDM
	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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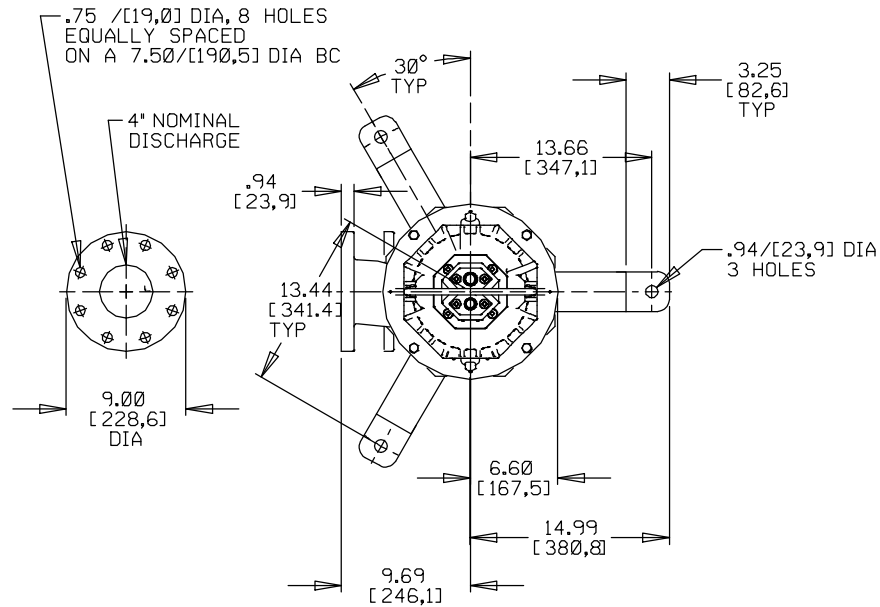
Specification Data

**ALL SFDV4A/SFDEV4A MODELS
DRY PIT VERSION
APPROXIMATE
DIMENSIONS and WEIGHTS**

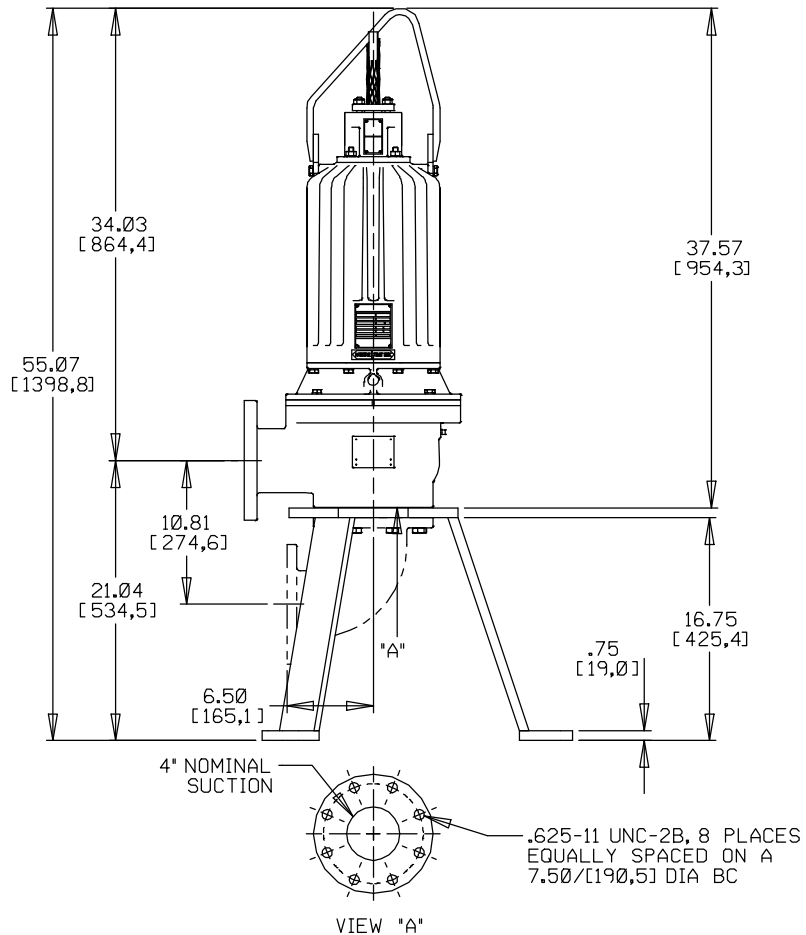
NET WT: (pump only)
(comb. cable wt. per meter [3.2 ft.]
SHIPPING WT: (pump only)
CRATE SIZE:

327 LBS. [148,3 KG.]
1.97 LBS. [0,89 KG.]
357 LBS. [162,0 KG.]
31.8 CU. FT. [0,90 CU. M.]

SECTION 134, PAGE 120.2



SHOWN WITH OPTIONAL
4" FLANGE ELBOW #125



DIMENSIONS:
INCHES
[MILLIMETERS]



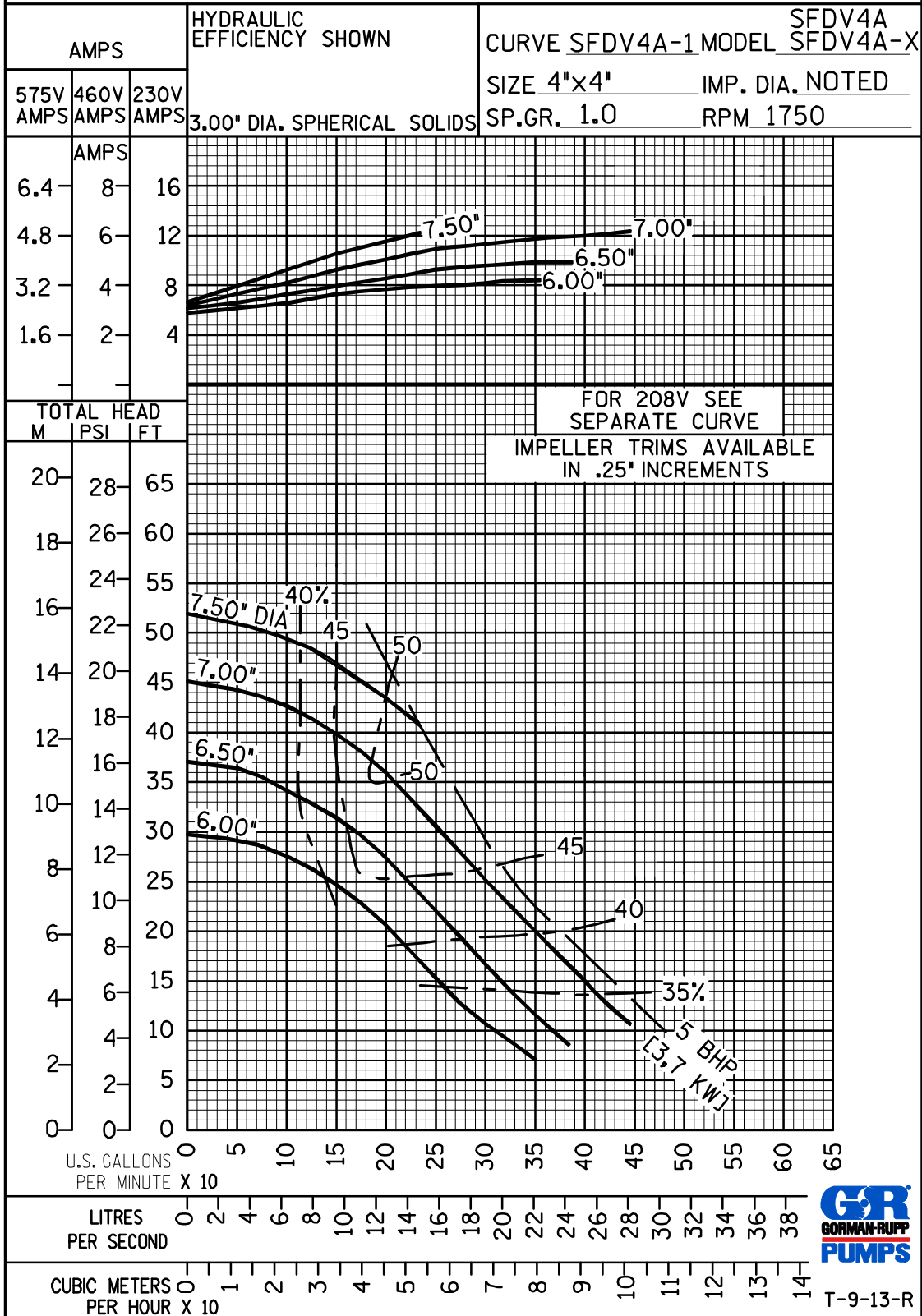
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PERFORMANCE CURVE



T-9-13-R



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PERFORMANCE CURVE

HYDRAULIC EFFICIENCY SHOWN

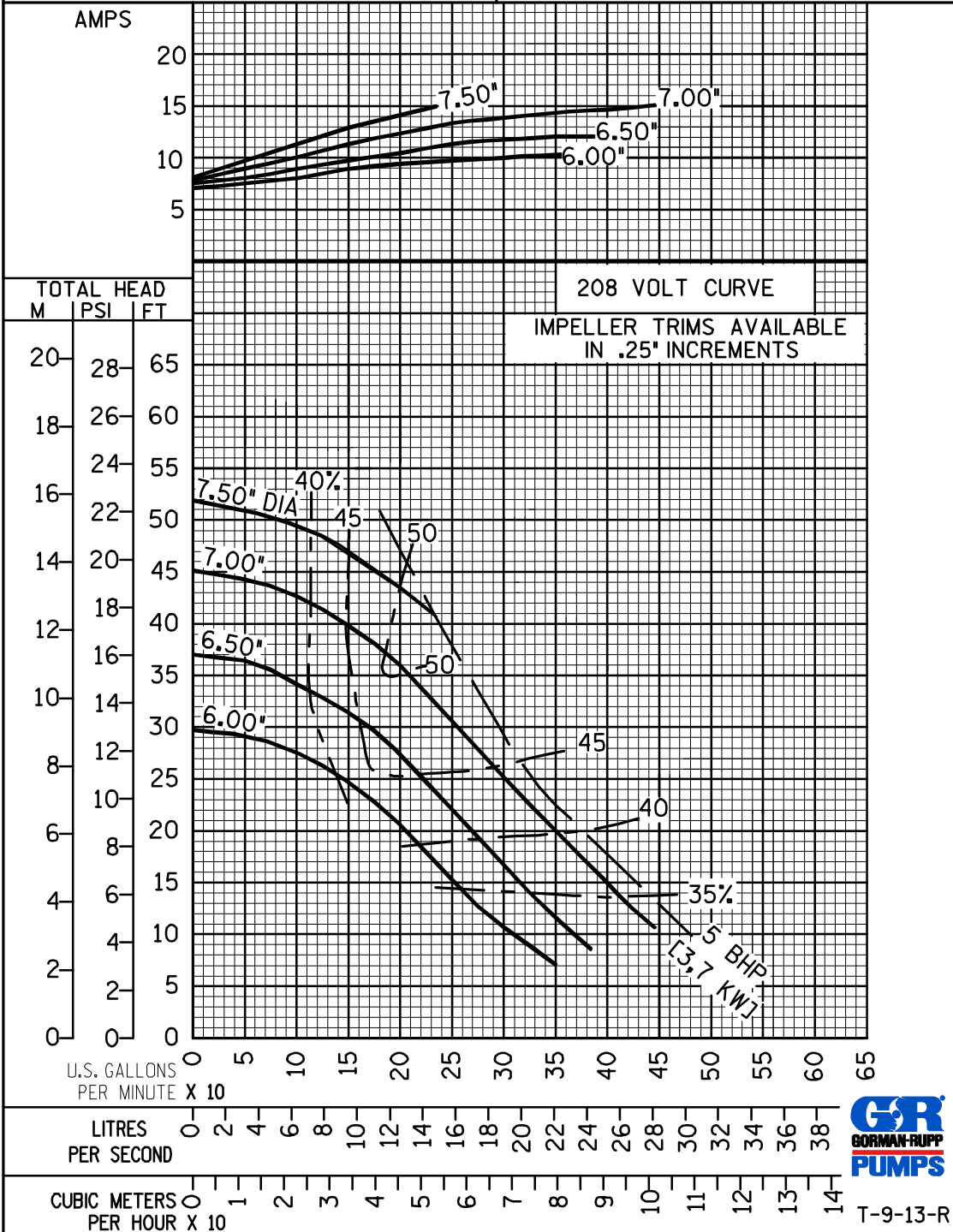
CURVE SFDV4A-2 MODEL SFDV4A
SFDV4A-X

208 VOLT CURVE

SIZE 4"x4" IMP. DIA. NOTED

3.00" DIA. SPHERICAL SOLIDS

SP.GR. 1.0 RPM 1750



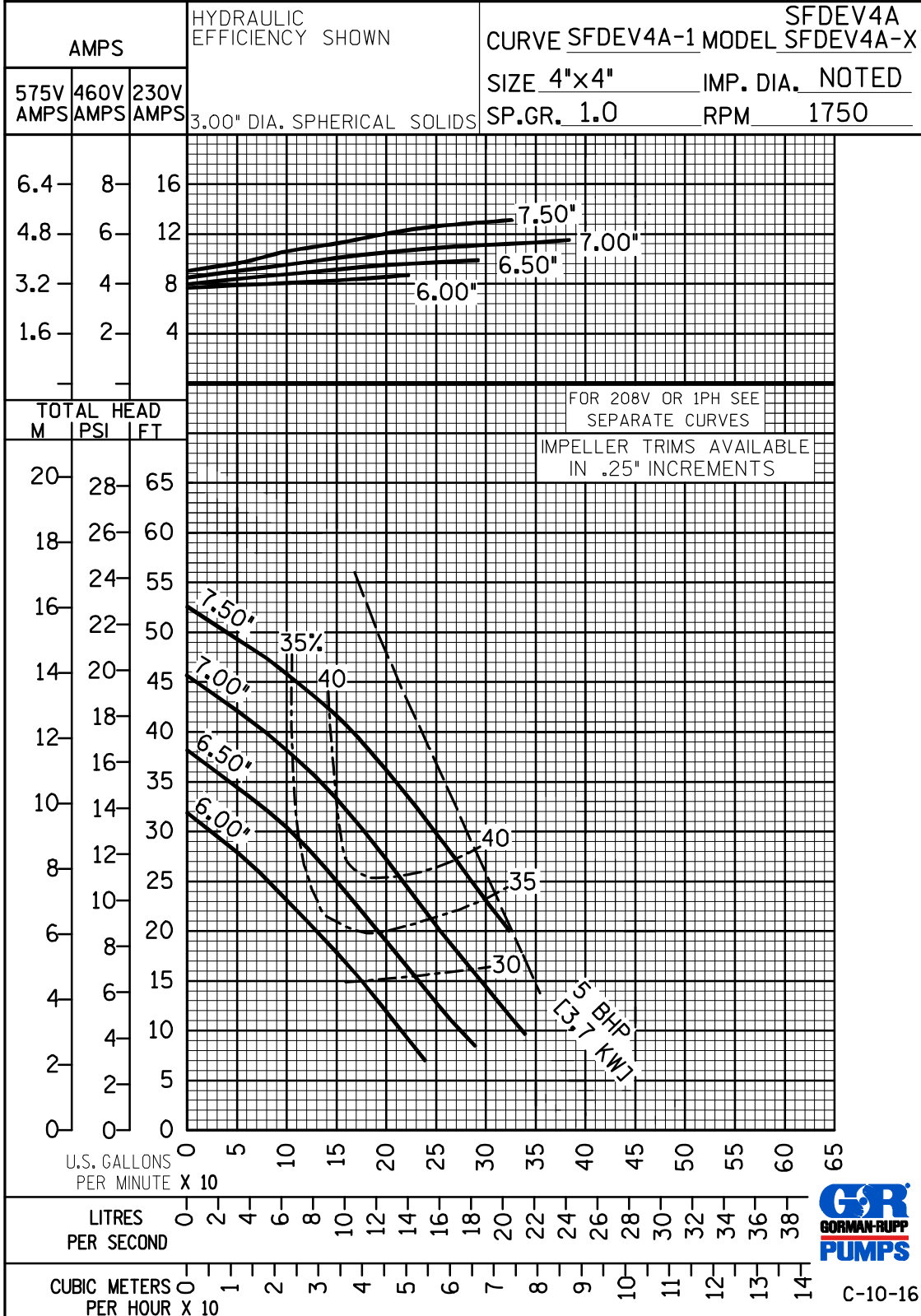
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PERFORMANCE CURVE



C-10-16



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PERFORMANCE CURVE

HYDRAULIC EFFICIENCY SHOWN

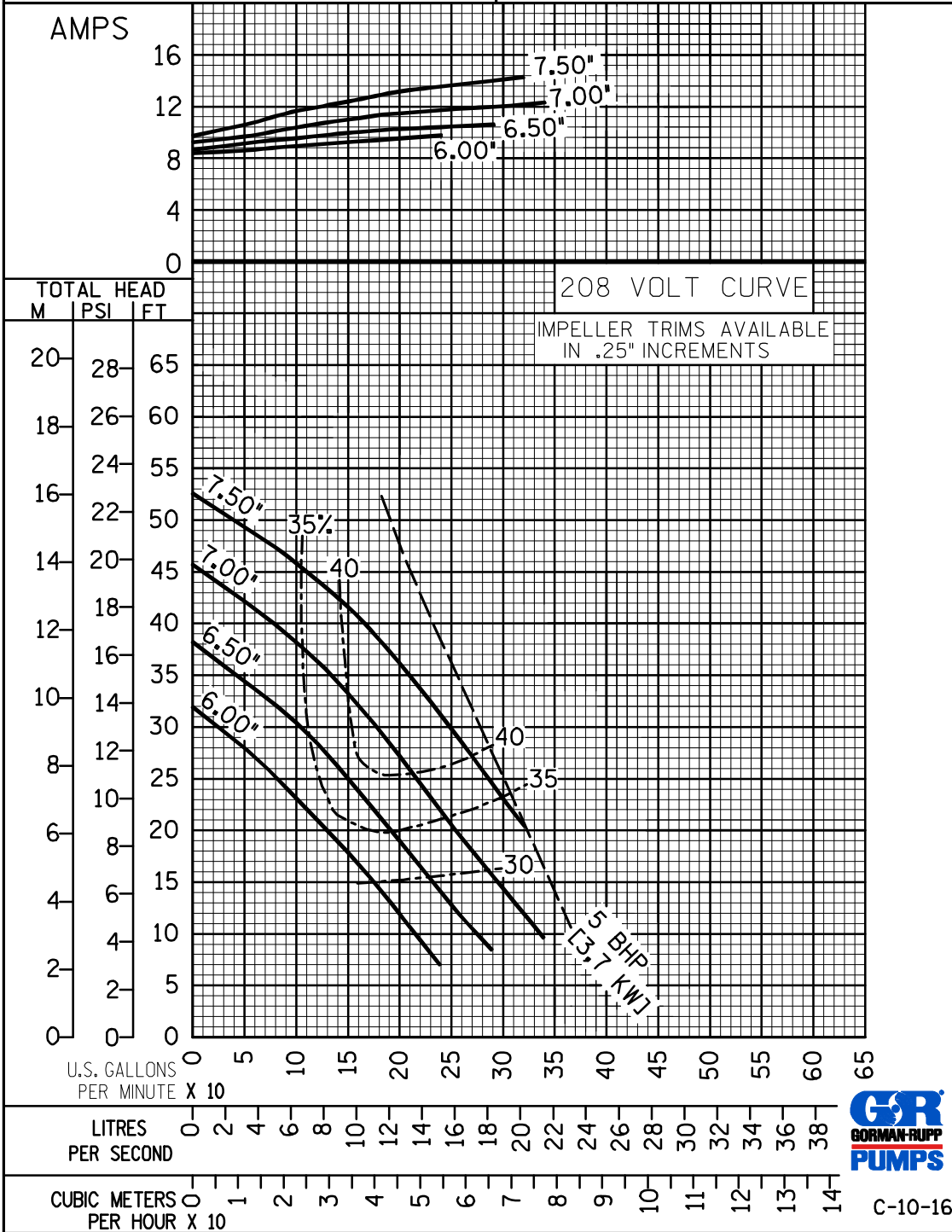
208 VOLT CURVE

3.00" DIA. SPHERICAL SOLIDS

SFDEV4A
CURVE SFDEV4A-2 MODEL SFDEV4A-X

SIZE 4"x4" IMP. DIA. NOTED

SP.GR. 1.0 RPM 1750



C-10-16



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