

A C D E

Basic Pedestal



# Self Priming Centrifugal Pump

## Models 13A2-B and 13A20-B

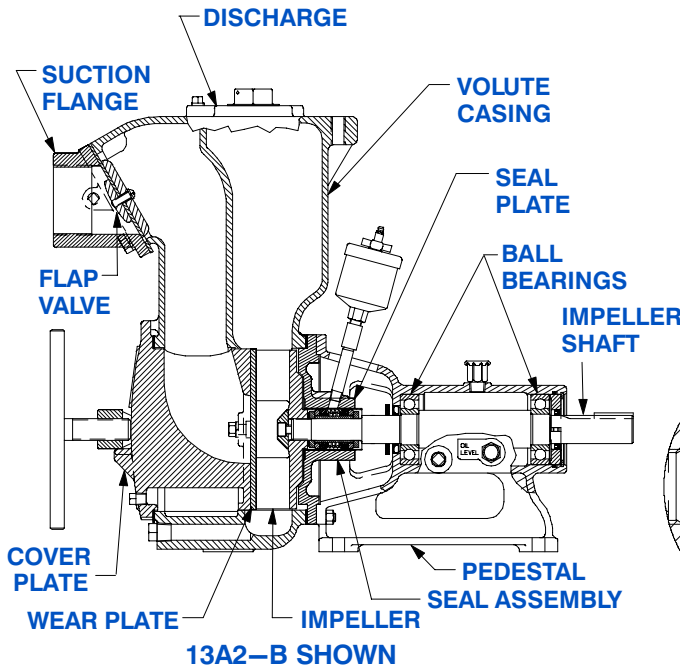
### Size 3" x 3"

**PUMP SPECIFICATIONS**

- Size:** 3" x 3" (76 mm x 76 mm) NPT - Female.
- Casing:** Gray Iron No. 30.  
Maximum Operating Pressure 66 psi (455 kPa).\*
- Semi-Open, Two Vane Impeller:** Ductile Iron No. 65-45-12.  
Handles 1 1/2" (38,1 mm) Diameter Spherical Solids.
- Impeller Shaft:** Carbon Steel No. 1045/1046.
- Replaceable Wear Plate:** Carbon Steel 1015.
- Removable Cover Plate:** Gray Iron No. 30. Weight 15 lbs. (7 kg).
- Pedestal:** Gray Iron No. 30.
- Seal Plate:** Gray Iron No. 30.
- Flap Valve:** Buna-N <sup>w</sup>/Nylon Reinforcing; Gray Iron No. 30.
- Seal Liner: (13A2-B)** Copper Alloy C26000.
- Shaft Sleeve: (13A20-B)** Alloy Steel No. 4150.
- Radial and Thrust Bearings:** Open Single Row Ball.  
**Bearing Lubrication:** SAE No. 30 Non-Detergent Oil.
- Flange:** Gray Iron No. 30.
- Gaskets:** Vegetable Fiber and Rubber.
- Hardware:** Standard Plated Steel.
- Optional Equipment:** Strainer. Gray Iron No. 30, 3" ASA Discharge Flanges. Casing Heater 120 / 240 Volt. High Temp Shut Down Kit.

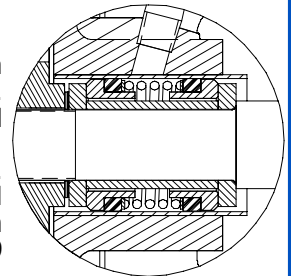


*\*Consult Factory for Applications Exceeding Maximum Pressure and/or Temperature Indicated.*



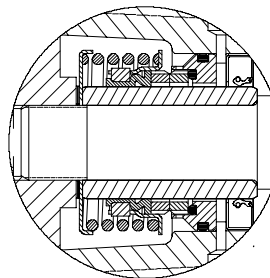
**13A2-B SEAL DETAIL**

Double, Grease-Lubricated with Spring-Loaded Grease Cup. Sintered Bronze Stationary Seal Seats. Steel Rotating Faces. Neoprene Packing Rings. Maximum Temperature of Liquid Pumped, 110°F (43°C). Maximum Suction Pressure 10 PSI (0,69 kPa).\*



**13A20-B SEAL DETAIL**

Mechanical, Oil-Lubricated, Double Floating, Self-Aligning. Tungsten Titanium Carbide Rotating and Stationary Faces. Stainless Steel No. 316 Stationary Seat. Fluorocarbon Elastomers (DuPont Viton<sup>®</sup> or Equivalent). Stainless Steel No. 18-8 Cage and Spring. Maximum Temperature of Liquid Pumped, 160°F (71°C).\*



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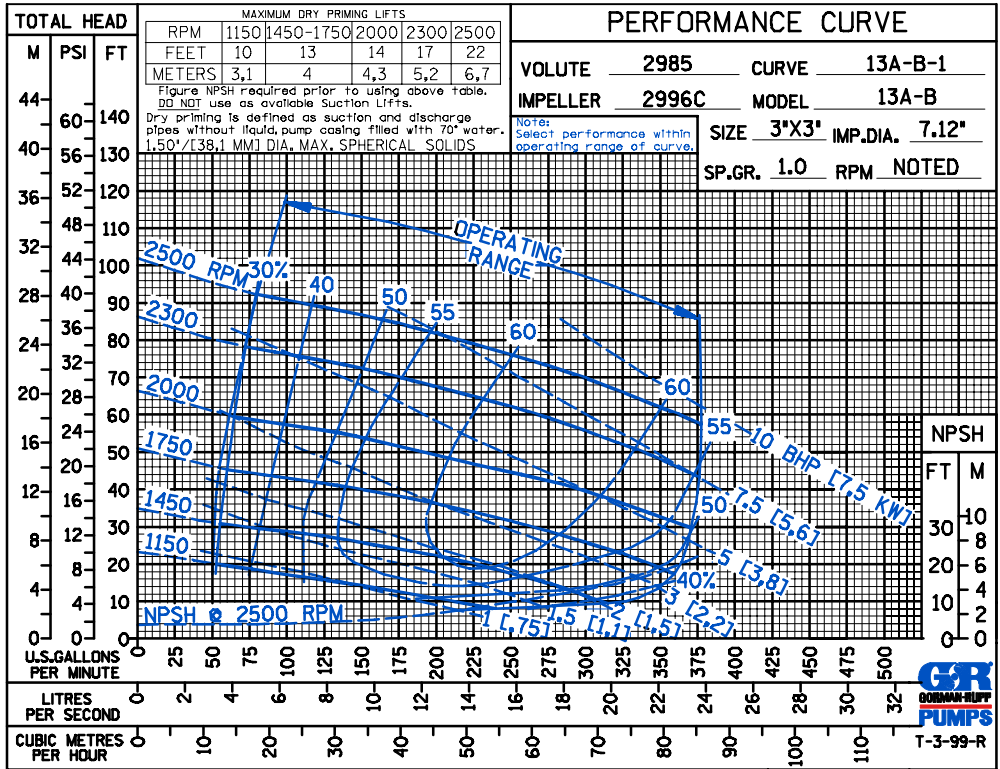
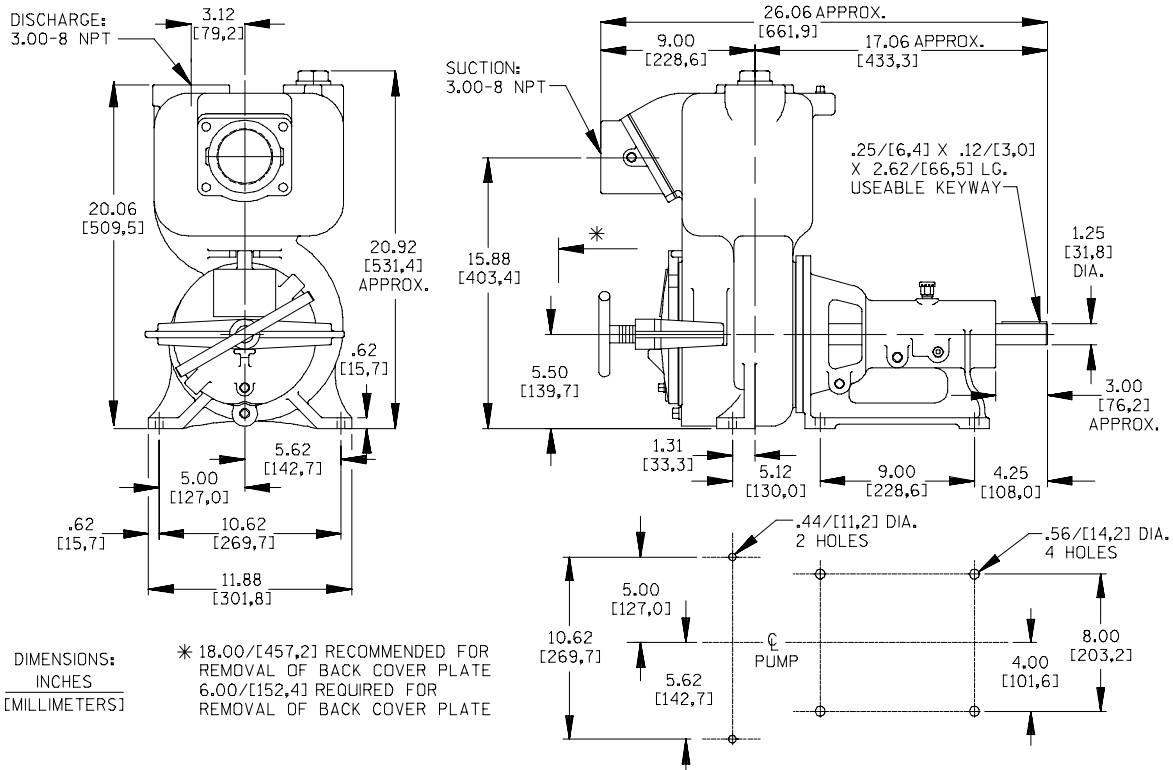
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**Specification Data**

**SECTION 55, PAGE 400**

APPROXIMATE  
DIMENSIONS and WEIGHTS

**NET WEIGHT: 180 LBS. (82 KG.)**  
**SHIPPING WEIGHT: 190 LBS. (86 KG.)**  
**EXPORT CRATE SIZE: 8.2 CU. FT. (0,23 CU. M.)**



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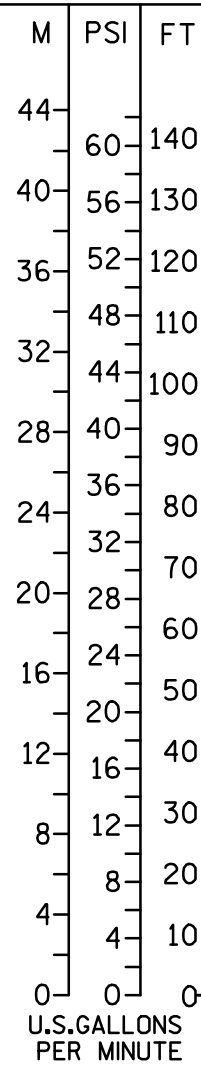
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TOTAL HEAD



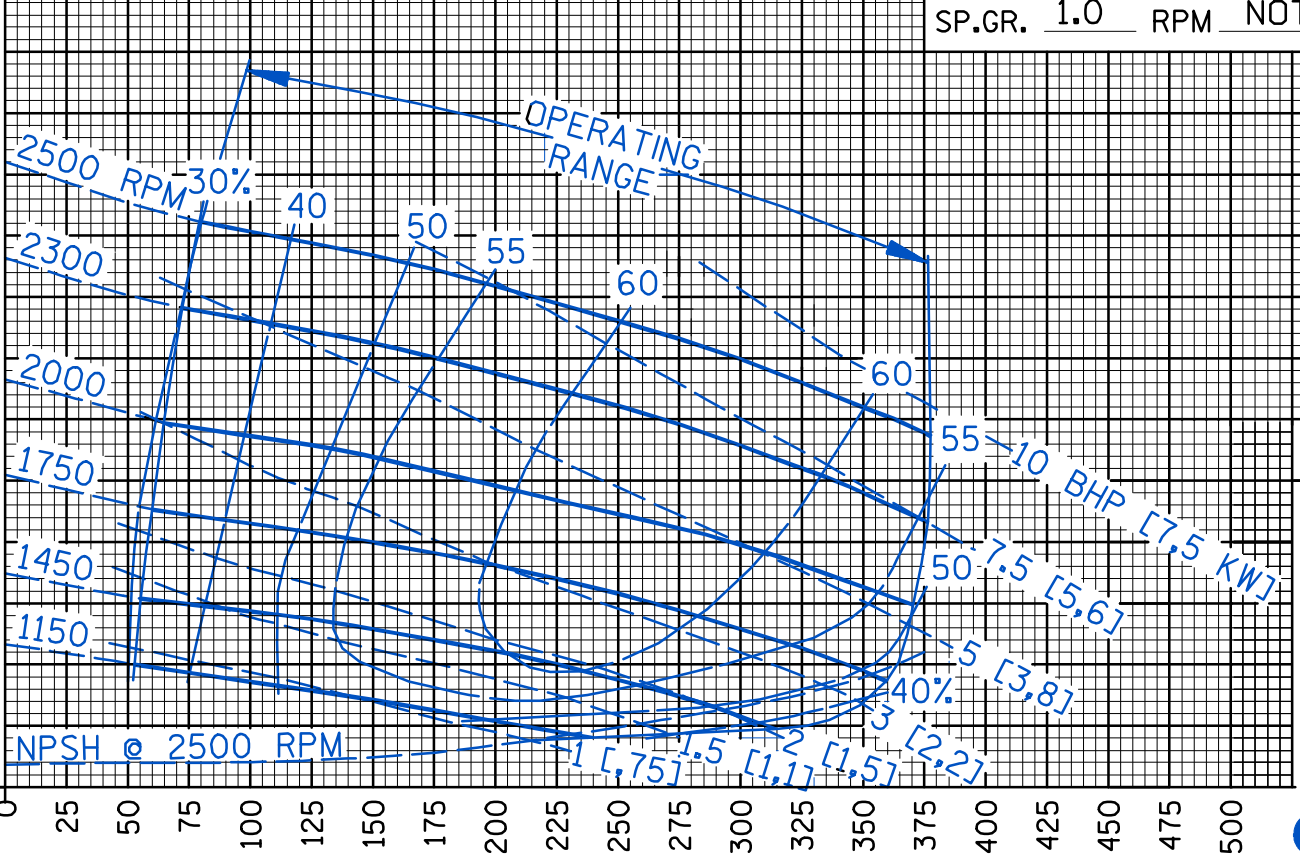
MAXIMUM DRY PRIMING LIFTS					
RPM	1150	1450-1750	2000	2300	2500
FEET	10	13	14	17	22
METERS	3,1	4	4,3	5,2	6,7

Figure NPSH required prior to using above table.  
 DO NOT use as available Suction Lifts.  
 Dry priming is defined as suction and discharge pipes without liquid, pump casing filled with 70° water.  
 1.50"/[38,1 MM] DIA. MAX. SPHERICAL SOLIDS

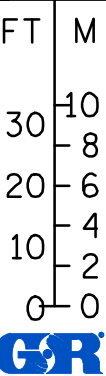
PERFORMANCE CURVE

VOLUTE 2985 CURVE 13A-B-1  
 IMPELLER 2996C MODEL 13A-B  
 SIZE 3"X3" IMP.DIA. 7.12"  
 SP.GR. 1.0 RPM NOTED

Note:  
 Select performance within operating range of curve.



NPSH



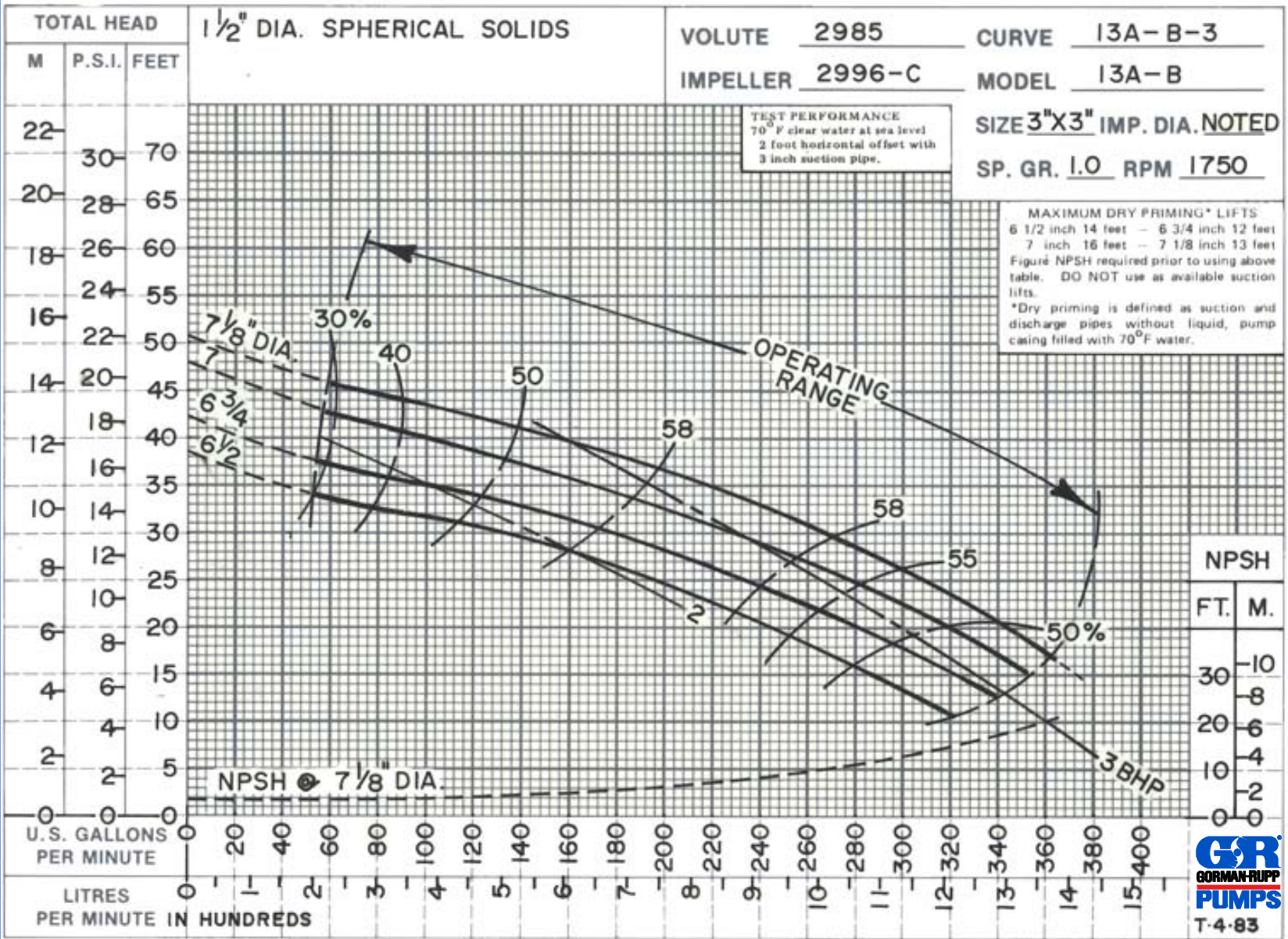
T-3-99-R

ACDE

Curve Data

Sec. 55

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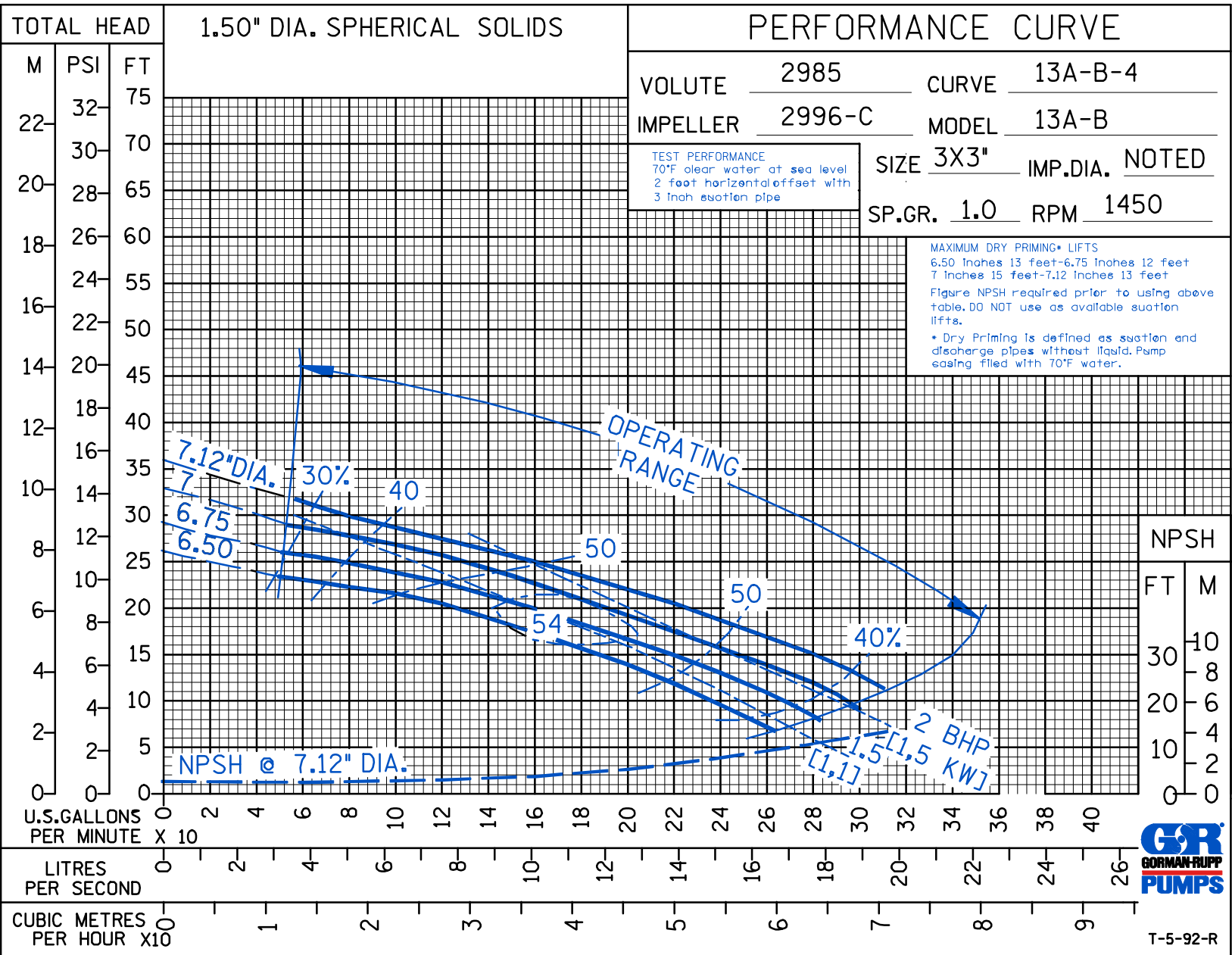
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PERFORMANCE CURVE

VOLUTE 2985 CURVE 13A-B-4  
 IMPELLER 2996-C MODEL 13A-B  
 SIZE 3X3" IMP.DIA. NOTED  
 SP.GR. 1.0 RPM 1450

TEST PERFORMANCE  
 70°F clear water at sea level  
 2 foot horizontal offset with  
 3 inch suction pipe

MAXIMUM DRY PRIMING\* LIFTS  
 6.50 inches 13 feet-6.75 inches 12 feet  
 7 inches 15 feet-7.12 inches 13 feet  
 Figure NPSH required prior to using above  
 table, DO NOT use as available suction  
 lifts.  
 \* Dry Priming is defined as suction and  
 discharge pipes without liquid. Pump  
 casing filled with 70°F water.



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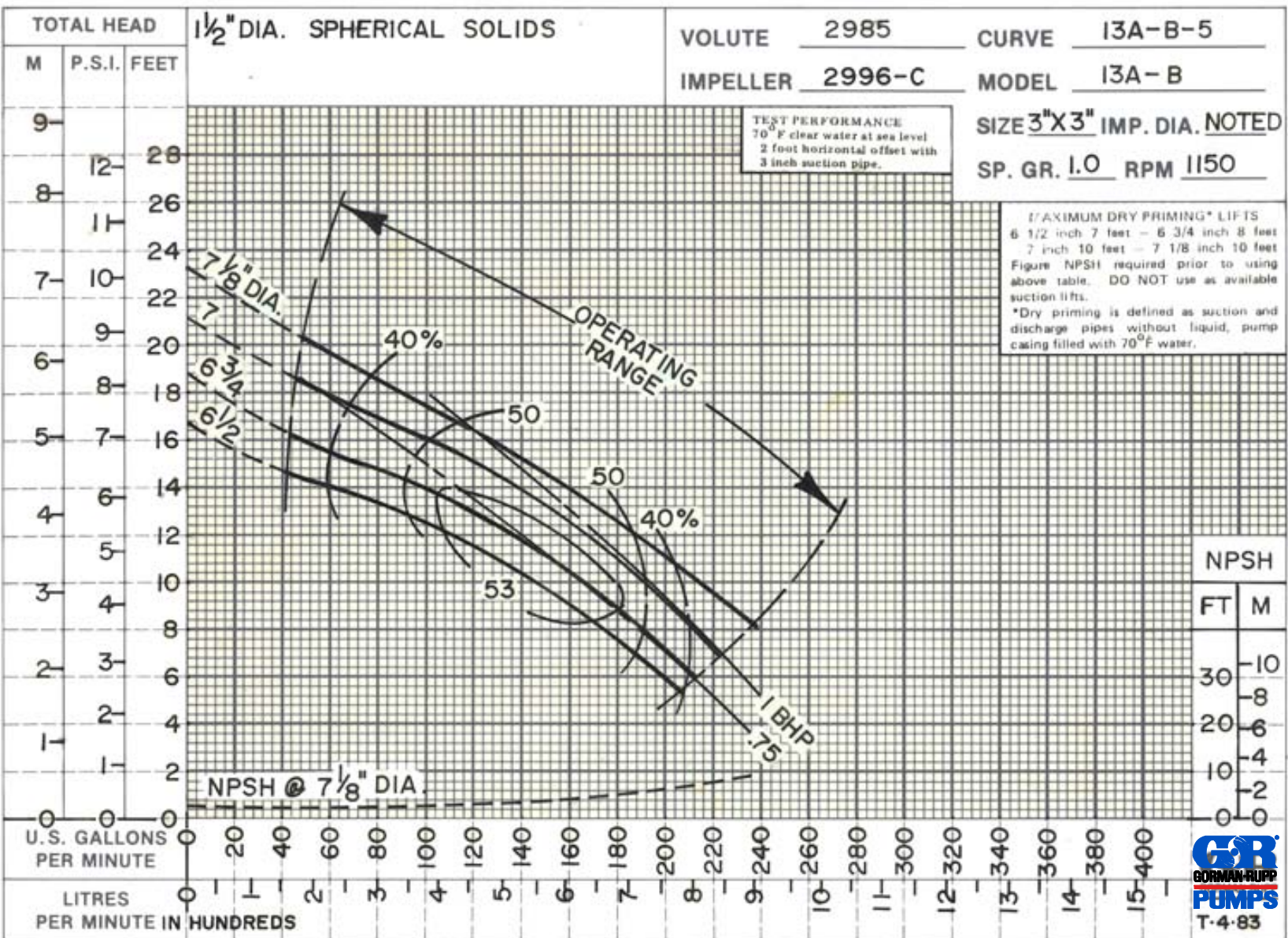
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ACE



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