



# Basic Pump

## Self Priming Centrifugal Pump

### Model T8A3-B

Size 8" x 8"

VARIOUS PATENTS APPLY

#### PUMP SPECIFICATIONS

**Size:** 8" x 8" (203 mm x 203 mm) NPT - Female.

**Casing:** Gray Iron 30.

Maximum Operating Pressure 83 psi (572 kPa).\*

**Semi-Open Type, Two Vane Impeller:** Ductile Iron 65-45-12.

Handles 3" (76,2 mm) Diameter Spherical Solids.

**Impeller Shaft:** Alloy Steel 4150.

**Shaft Sleeve:** Alloy Steel 4130.

**Replaceable Wear Plate:** Gray Iron 30.

**Removable Cover Plate:** Gray Iron 30; 79 lbs. (36 kg).

**Seal Plate:** Gray Iron 30.

**Flap Valve:** Neoprene <sup>w/</sup>Steel Reinforcing.

**Bearing Housing:** Gray Iron 30.

**Radial and Thrust Bearings:** Open Double Row Ball.

**Bearing and Seal Cavity Lubrication:** SAE 30 Non-Detergent Oil.

**Flanges:** 125# Gray Iron 30.

**Gaskets:** Buna-N <sup>w/</sup>Compressed Synthetic Fibers, Vegetable Fiber, PTFE, Cork and Rubber.

**O-Rings:** Buna-N.

**Hardware:** Standard Plated Steel.

**Brass Pressure Relief Valve.**

**Bearing Cavity Oil Level Sight Gauge.**

**Optional Equipment:** Stainless Steel 316 Pressure

Relief Valve. Automatic Air Release Valve. G-R Hard Iron

Impeller, Seal Plate and Wear Plate. 120V/240V Casing

Heater. High Pump Temperature Shutdown Kit.

Self-Cleaning Wear Plate.

Gray Iron 30 Suction and Discharge Spool Flanges:

8" ASA.

200 mm DIN 2527 (PN 16).

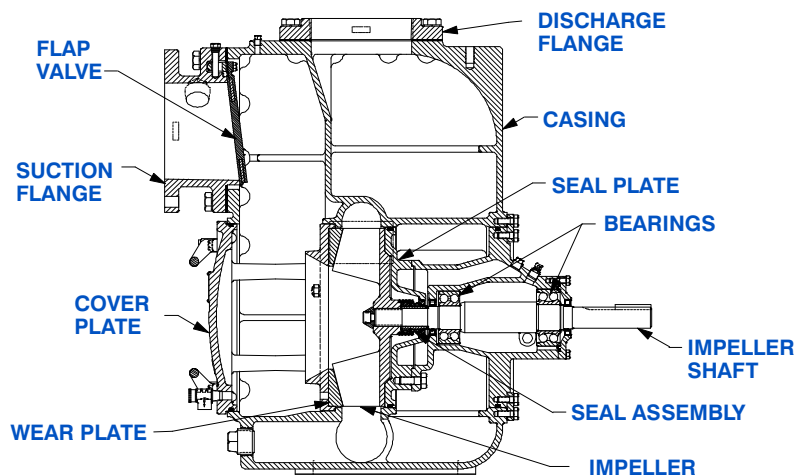
*\*Consult Factory for Applications Exceeding Maximum Pressure and/or Temperature Indicated.*



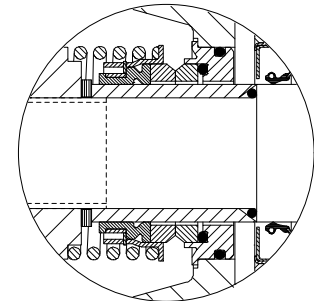
Shown with Optional Discharge Spool Flange (Available in ASA or DIN Standard Sizes).

#### SEAL SPECIFICATIONS

Mechanical, Oil-Lubricated, Double Floating, Self-Aligning. Tungsten Titanium Carbide Rotating and Stationary Faces. Stainless Steel 316 Stationary Seat. Fluorocarbon Elastomers (DuPont Viton<sup>®</sup> or Equivalent). Stainless Steel 18-8 Cage and Spring. Maximum Temperature of Liquid Pumped, 160°F (71°C)\*



#### SEAL DETAIL



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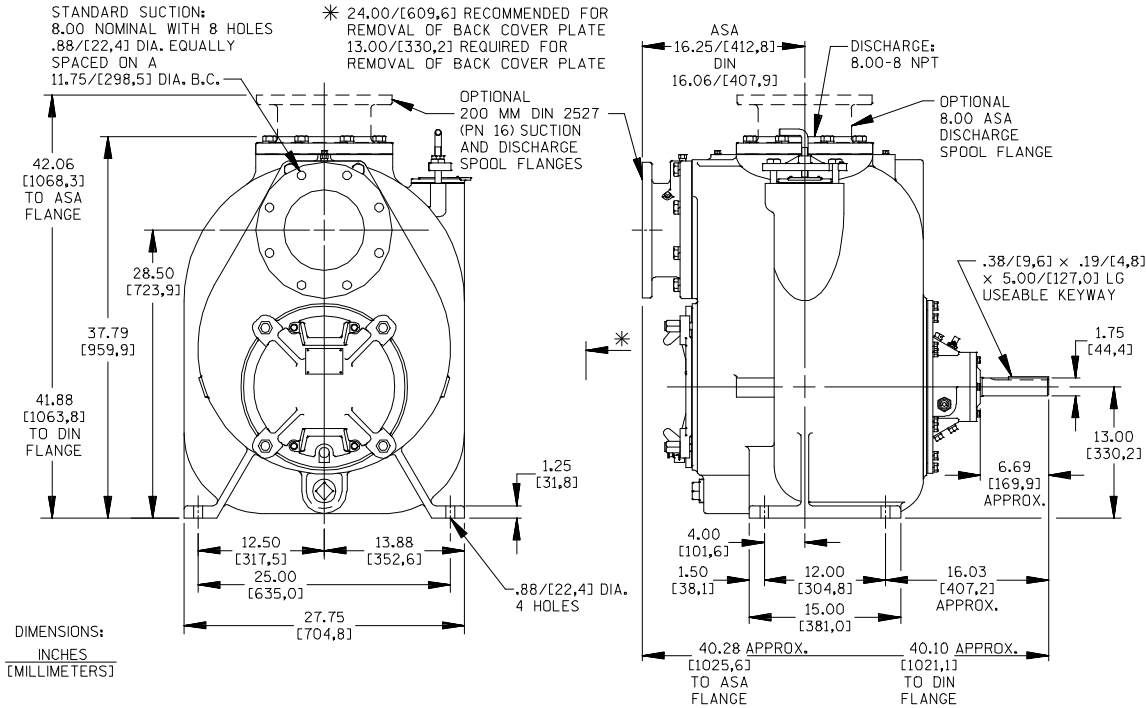
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**Specification Data**

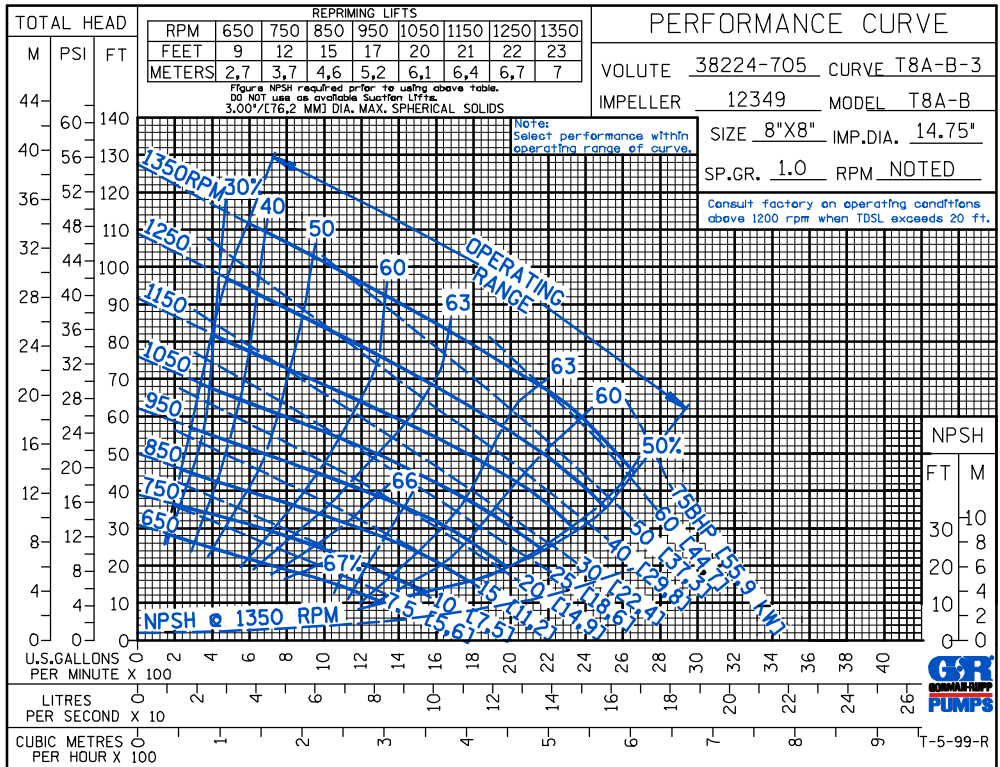
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**APPROXIMATE DIMENSIONS and WEIGHTS**

**NET WEIGHT: 1295 LBS. (587 KG.)\***  
**SHIPPING WEIGHT: 1399 LBS. (635 KG.)\***  
**EXPORT CRATE: 47.9 CU. FT. (1,36 CU. M.)**  
**\*ADD 35 LBS. (15,9 KG.) W/EACH SPOOL FLANGE**



**OPTIONAL ASA OR DIN STANDARD SUCTION & DISCHARGE SPOOL FLANGES AVAILABLE**



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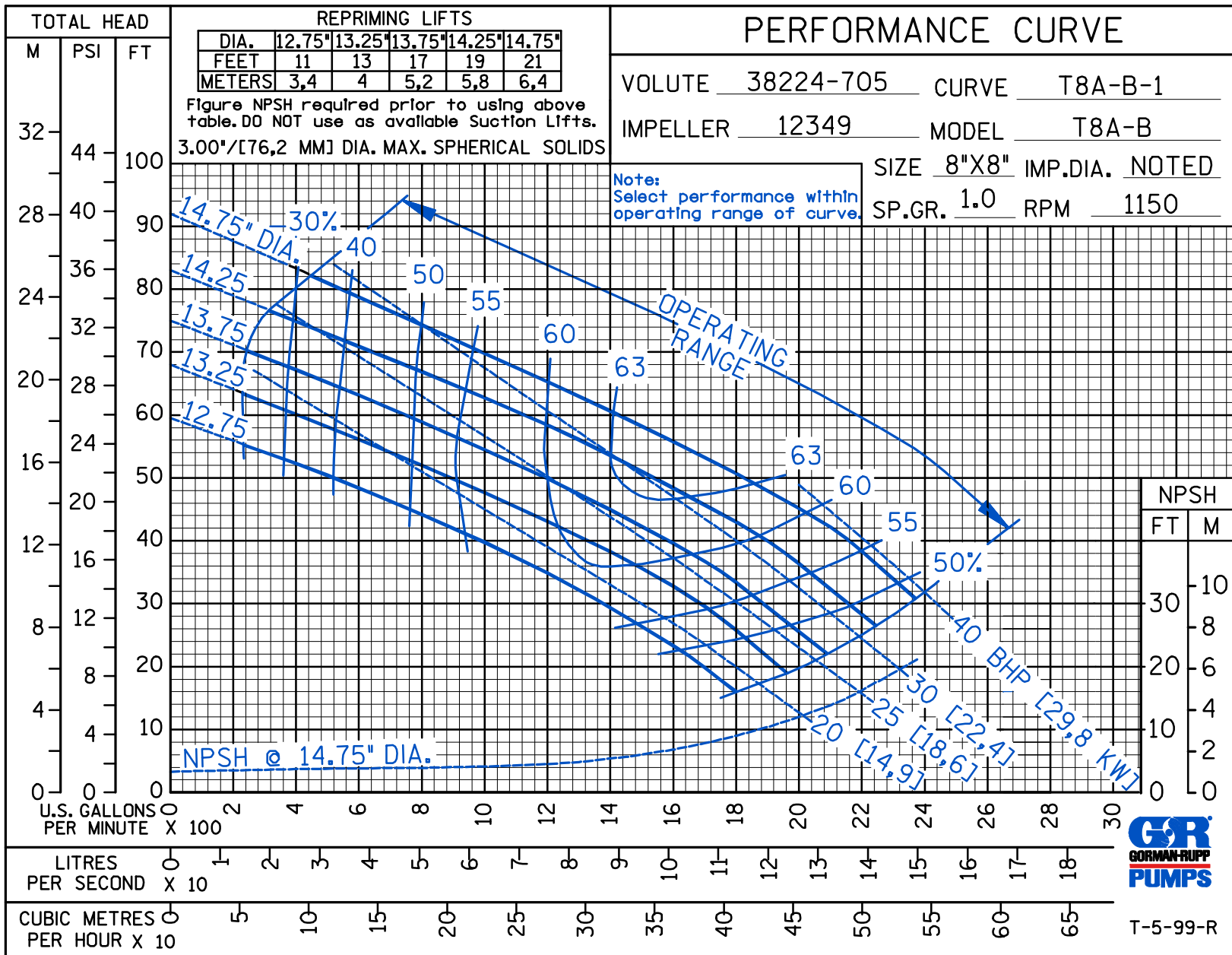


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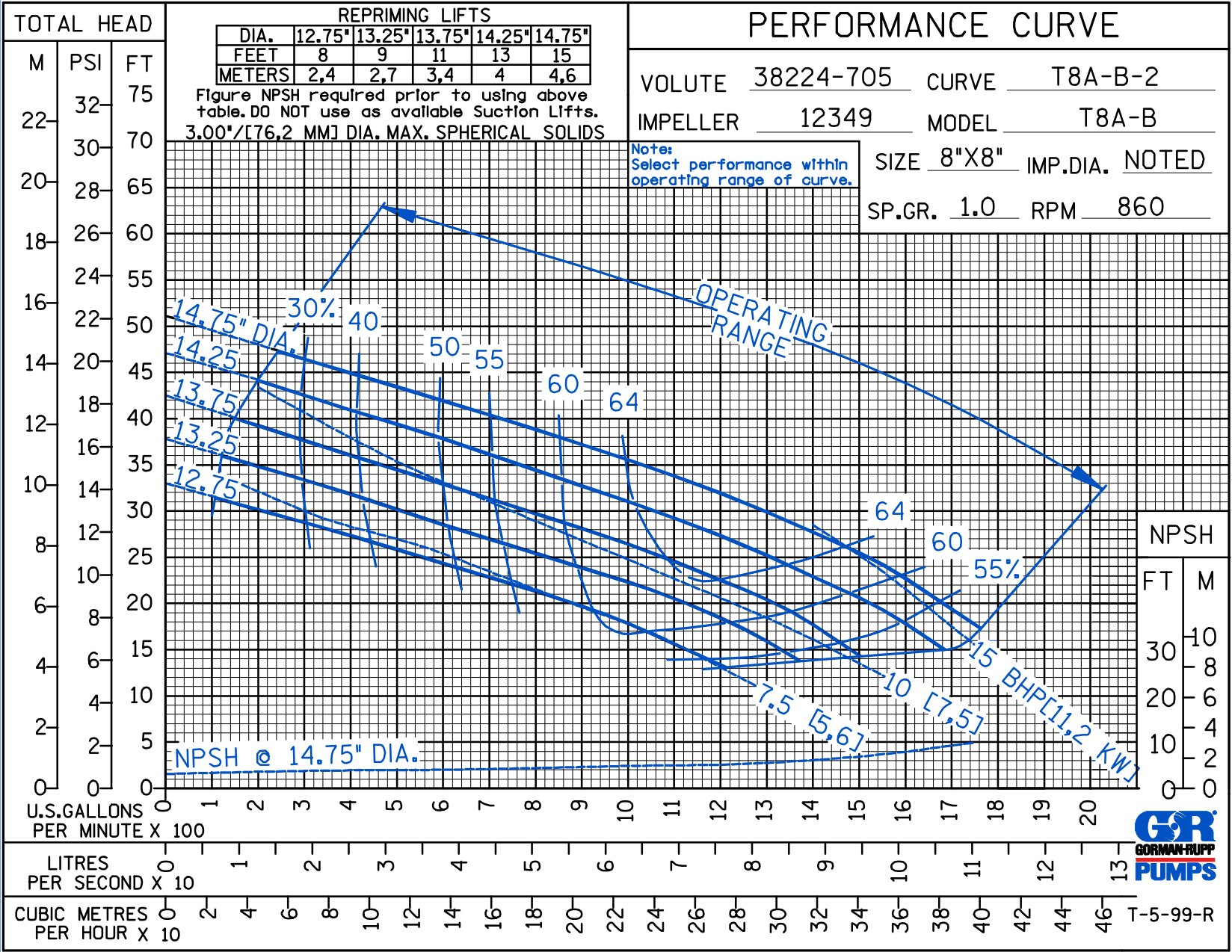


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PERFORMANCE CURVE

VOLUTE 38224-705 CURVE T8A-B-3

IMPELLER 12349 MODEL T8A-B

SIZE 8"X8" IMP.DIA. 14.75"

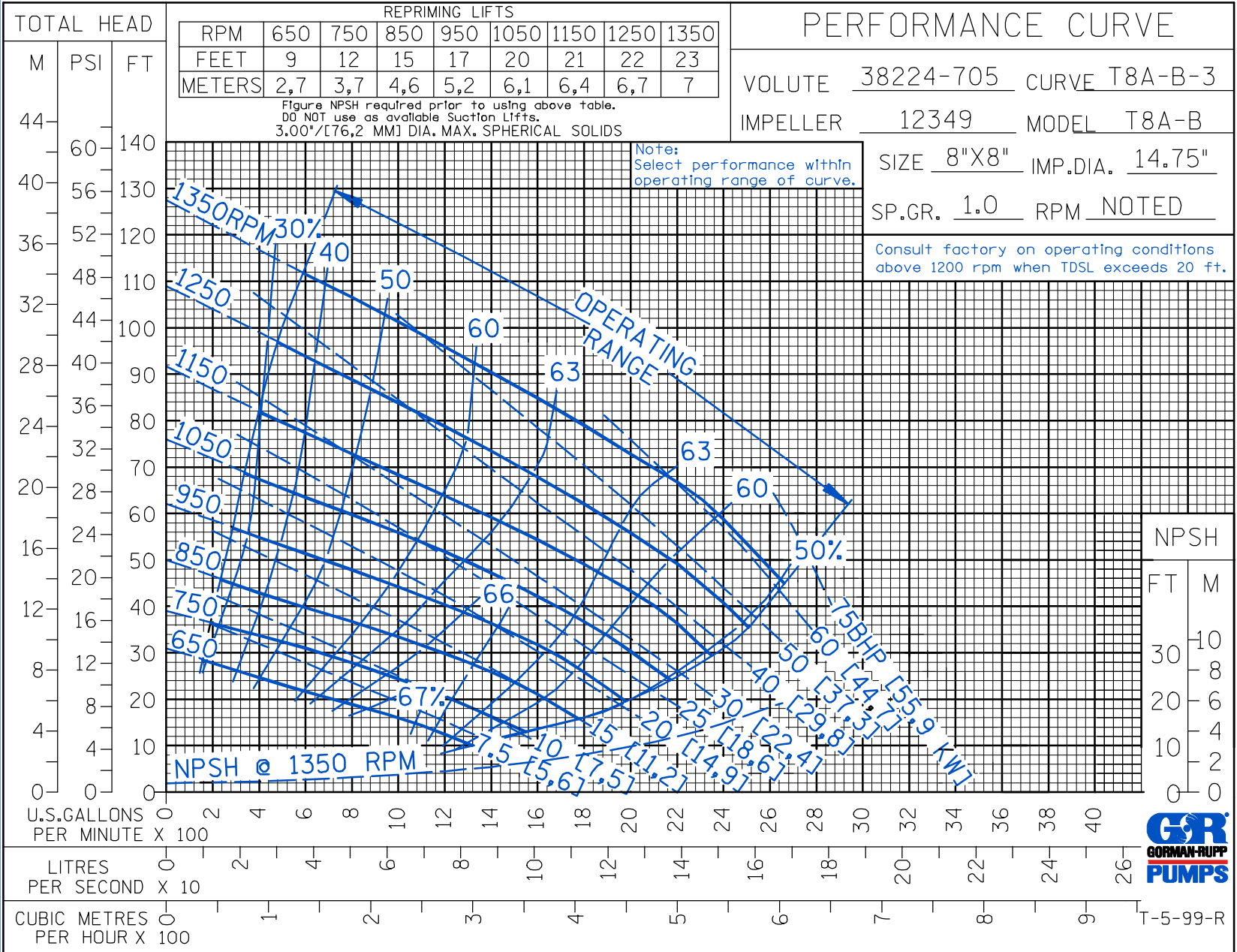
SP.GR. 1.0 RPM NOTED

Consult factory on operating conditions above 1200 rpm when TDSL exceeds 20 ft.

REPRIMING LIFTS								
RPM	650	750	850	950	1050	1150	1250	1350
FEET	9	12	15	17	20	21	22	23
METERS	2,7	3,7	4,6	5,2	6,1	6,4	6,7	7

Figure NPSH required prior to using above table.  
DO NOT use as available Suction Lifts.  
3.00"/[76,2 MM] DIA. MAX. SPHERICAL SOLIDS

Note:  
Select performance within  
operating range of curve.



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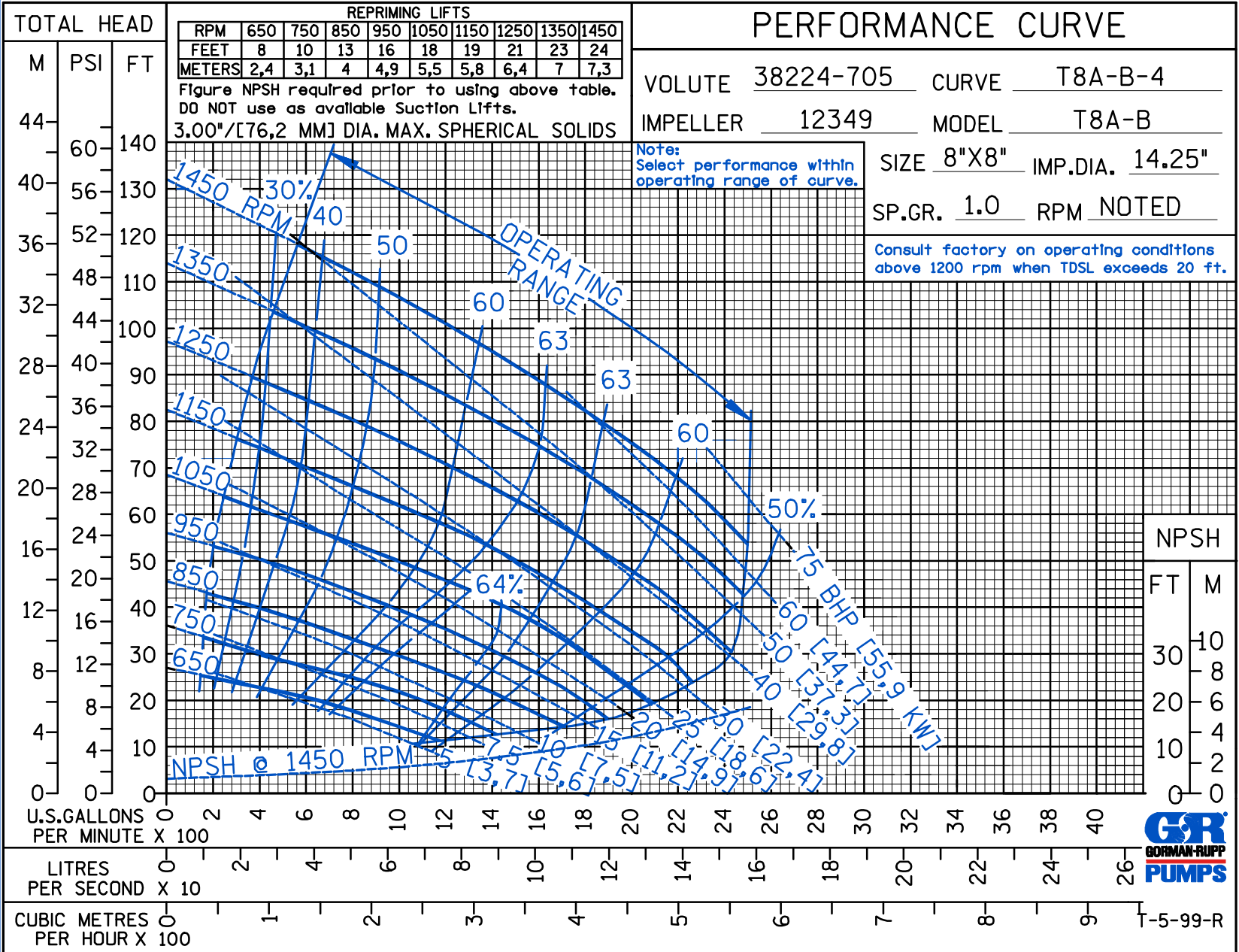
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### PERFORMANCE CURVE

VOLUTE 38224-705 CURVE T8A-B-4  
 IMPELLER 12349 MODEL T8A-B  
 SIZE 8"X8" IMP.DIA. 14.25"  
 SP.GR. 1.0 RPM NOTED  
 Note: Select performance within operating range of curve.  
 Consult factory on operating conditions above 1200 rpm when TDSL exceeds 20 ft.

REPRIMING LIFTS									
RPM	650	750	850	950	1050	1150	1250	1350	1450
FEET	8	10	13	16	18	19	21	23	24
METERS	2,4	3,1	4	4,9	5,5	5,8	6,4	7	7,3

Figure NPSH required prior to using above table.  
 DO NOT use as available Suction Lifts.  
 3.00"/[76,2 MM] DIA. MAX. SPHERICAL SOLIDS



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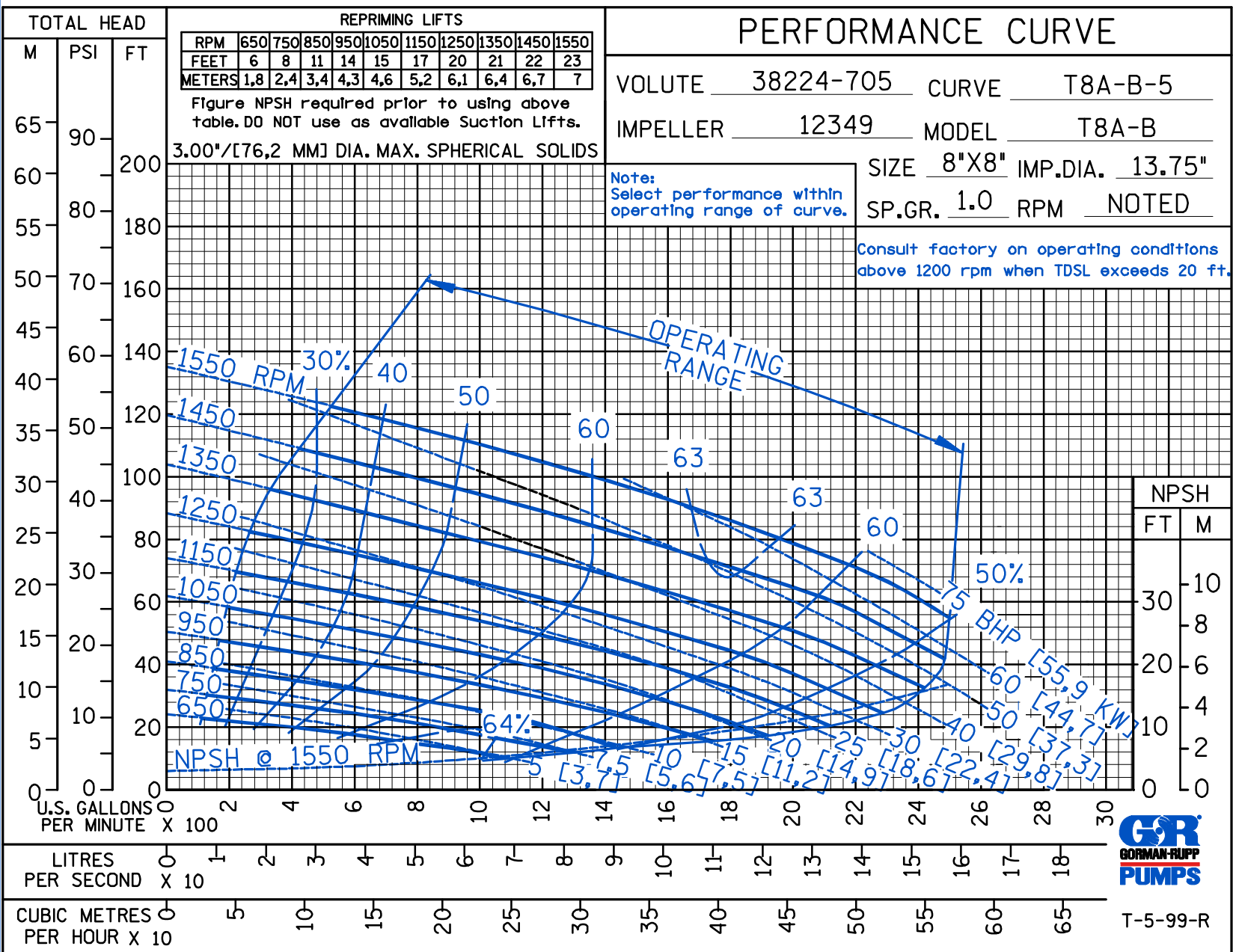


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# PERFORMANCE CURVE

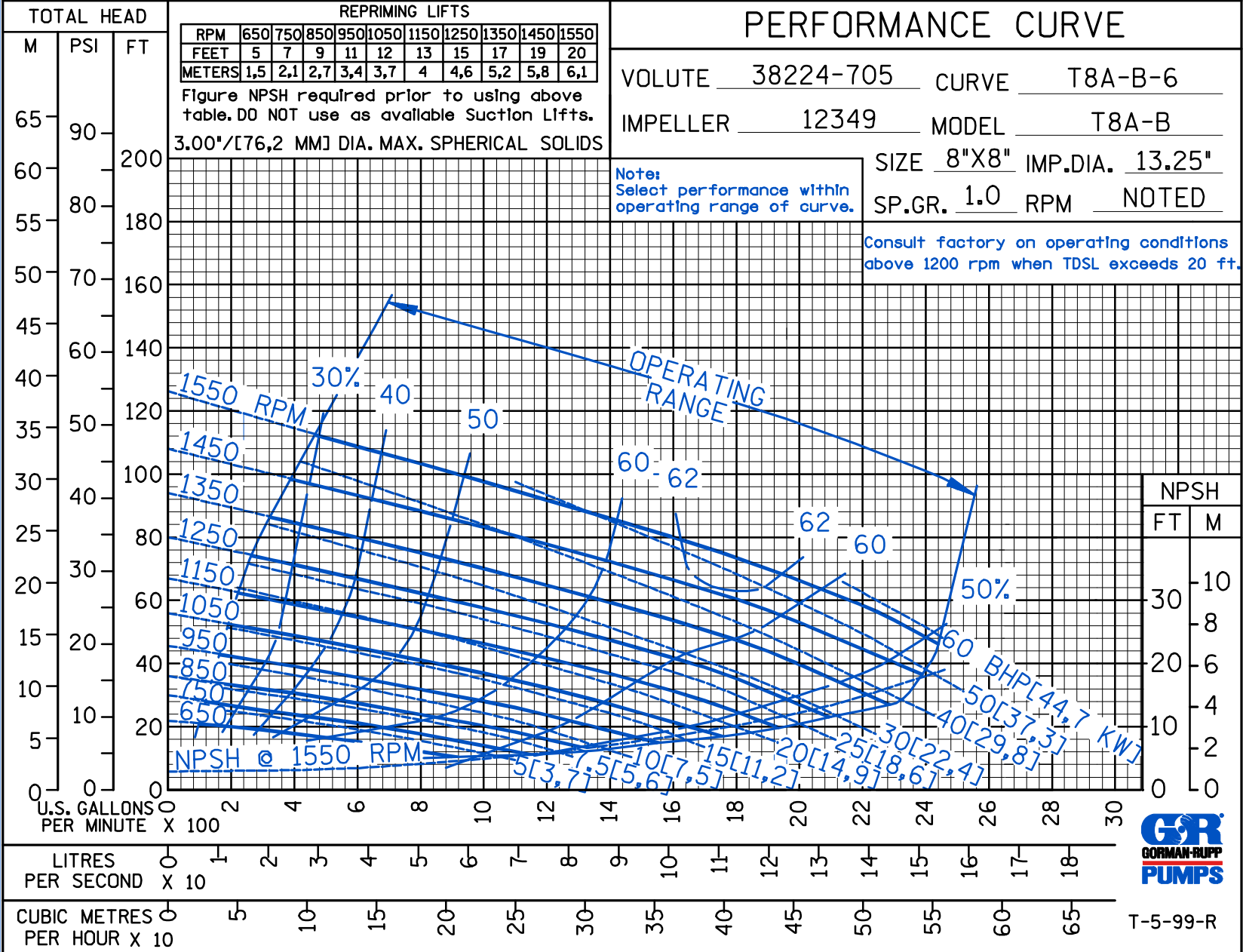
VOLUTE 38224-705 CURVE T8A-B-6  
 IMPELLER 12349 MODEL T8A-B  
 SIZE 8"X8" IMP.DIA. 13.25"  
 SP.GR. 1.0 RPM NOTED

Consult factory on operating conditions above 1200 rpm when TDSL exceeds 20 ft.

Note:  
Select performance within operating range of curve.

REPRIMING LIFTS										
RPM	650	750	850	950	1050	1150	1250	1350	1450	1550
FEET	5	7	9	11	12	13	15	17	19	20
METERS	1,5	2,1	2,7	3,4	3,7	4	4,6	5,2	5,8	6,1

Figure NPSH required prior to using above table. DO NOT use as available Suction Lifts.  
 3.00"/[76,2 MM] DIA. MAX. SPHERICAL SOLIDS



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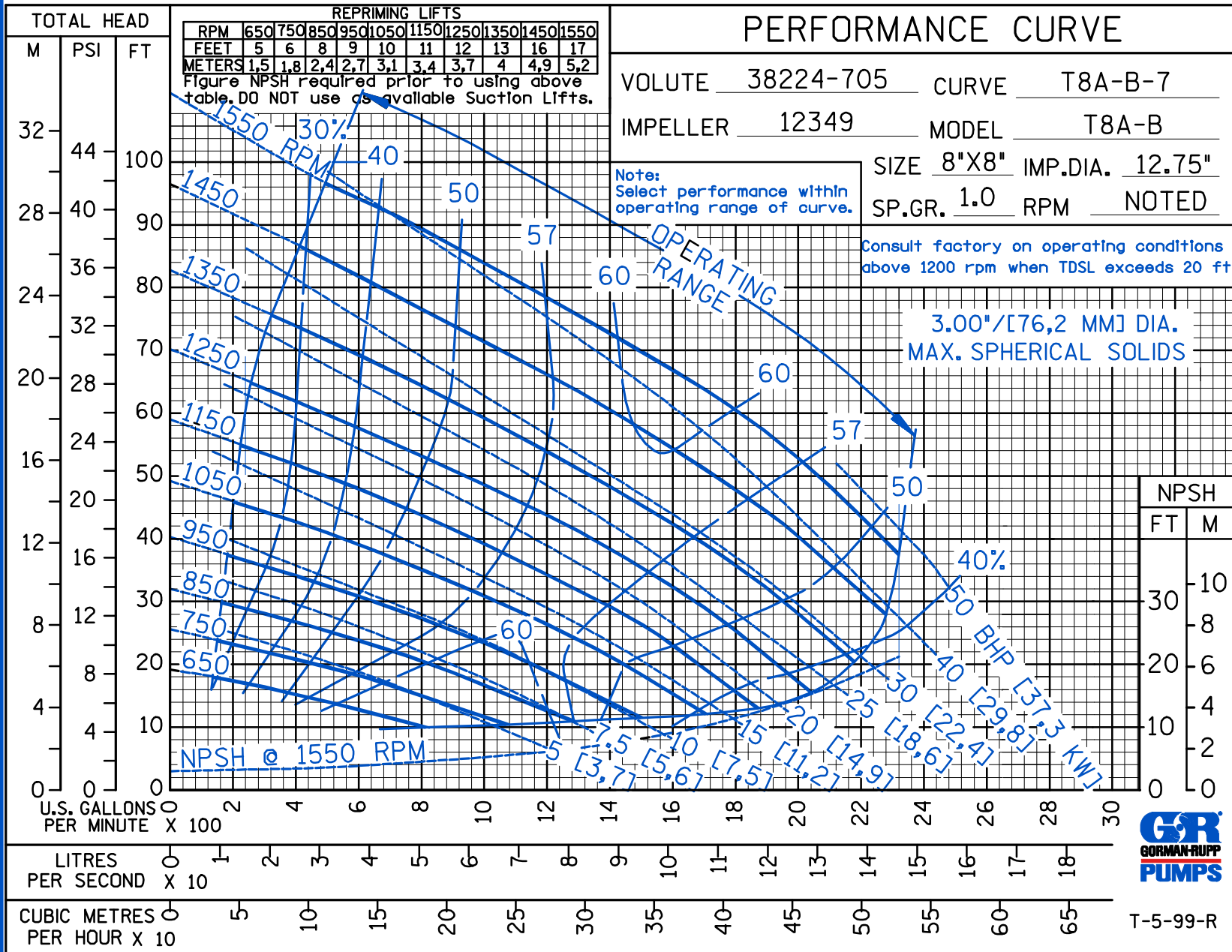
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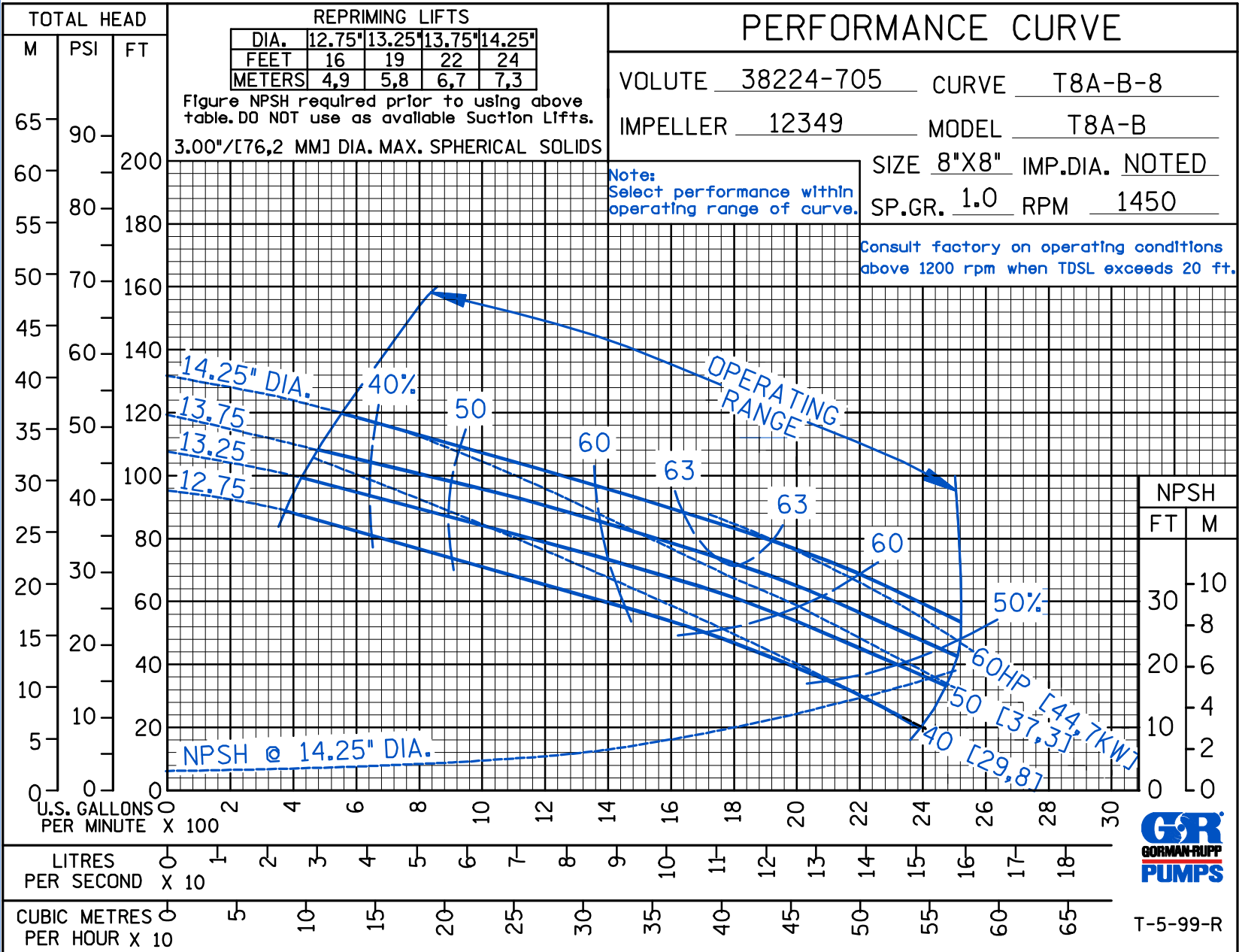


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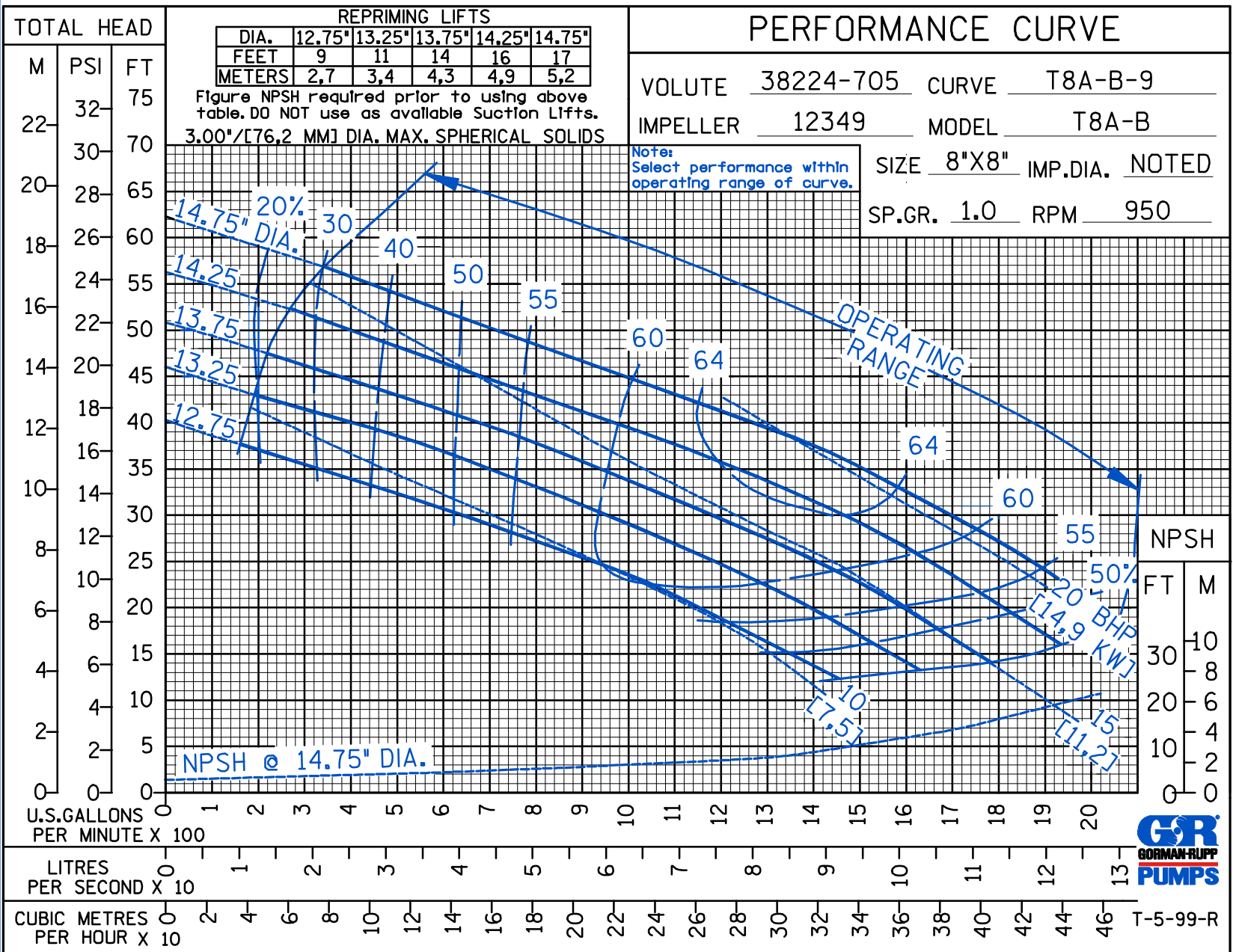
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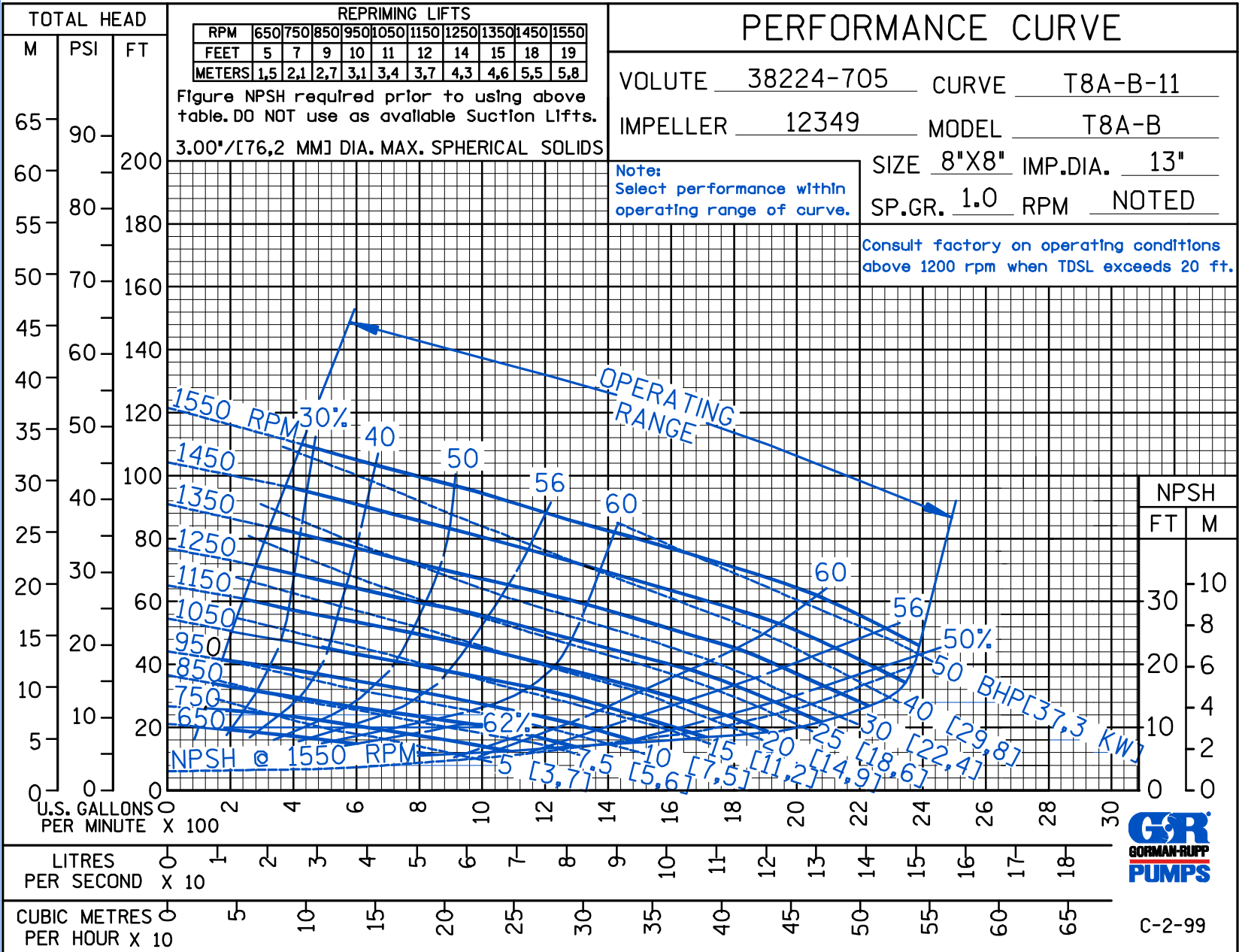


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### PERFORMANCE CURVE

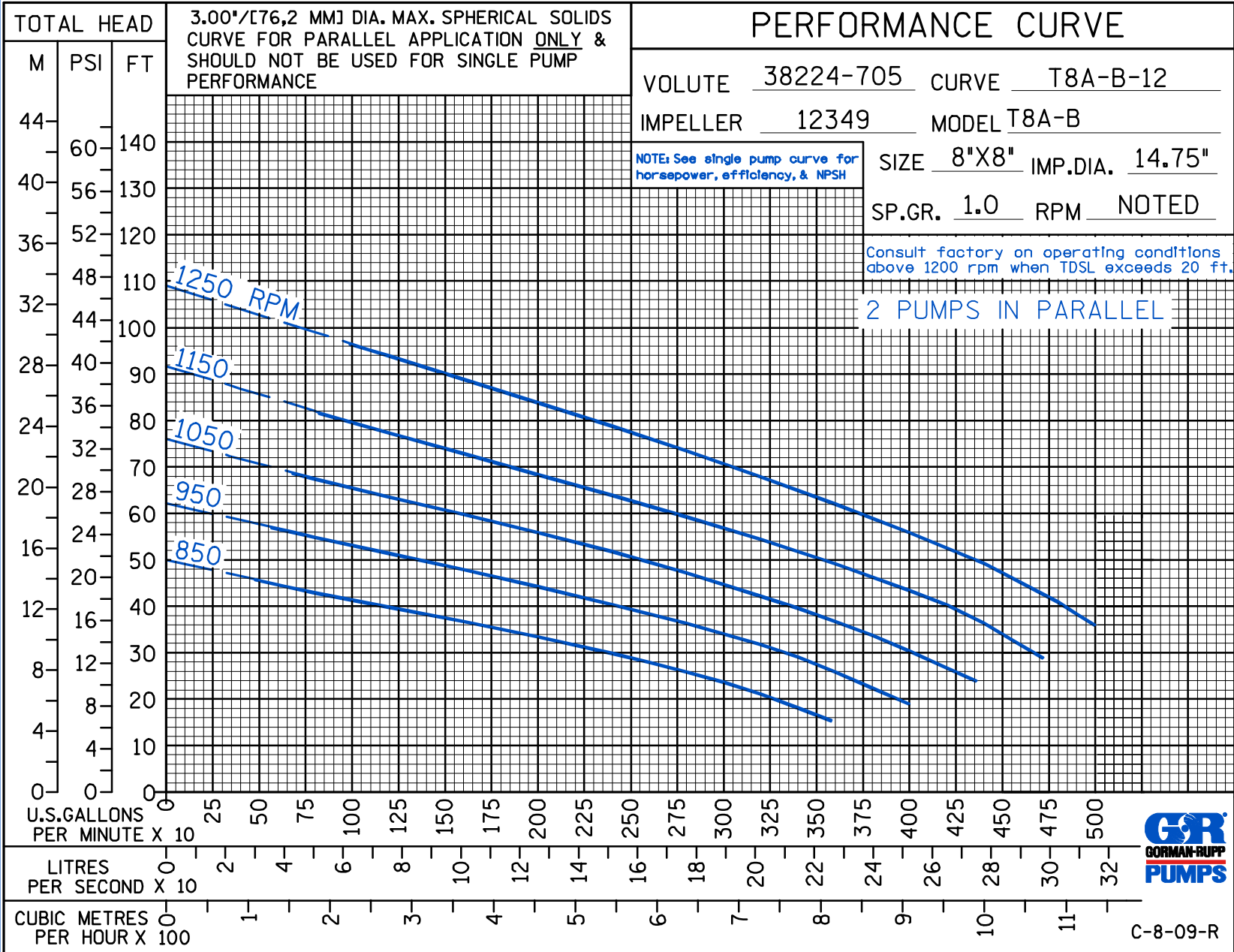
VOLUTE 38224-705 CURVE T8A-B-12  
 IMPELLER 12349 MODEL T8A-B  
 SIZE 8"X8" IMP.DIA. 14.75"  
 SP.GR. 1.0 RPM NOTED

NOTE: See single pump curve for horsepower, efficiency, & NPSH

Consult factory on operating conditions above 1200 rpm when TDSL exceeds 20 ft.

2 PUMPS IN PARALLEL

3.00"/[76,2 MM] DIA. MAX. SPHERICAL SOLIDS CURVE FOR PARALLEL APPLICATION ONLY & SHOULD NOT BE USED FOR SINGLE PUMP PERFORMANCE



C-8-09-R



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# PERFORMANCE CURVE

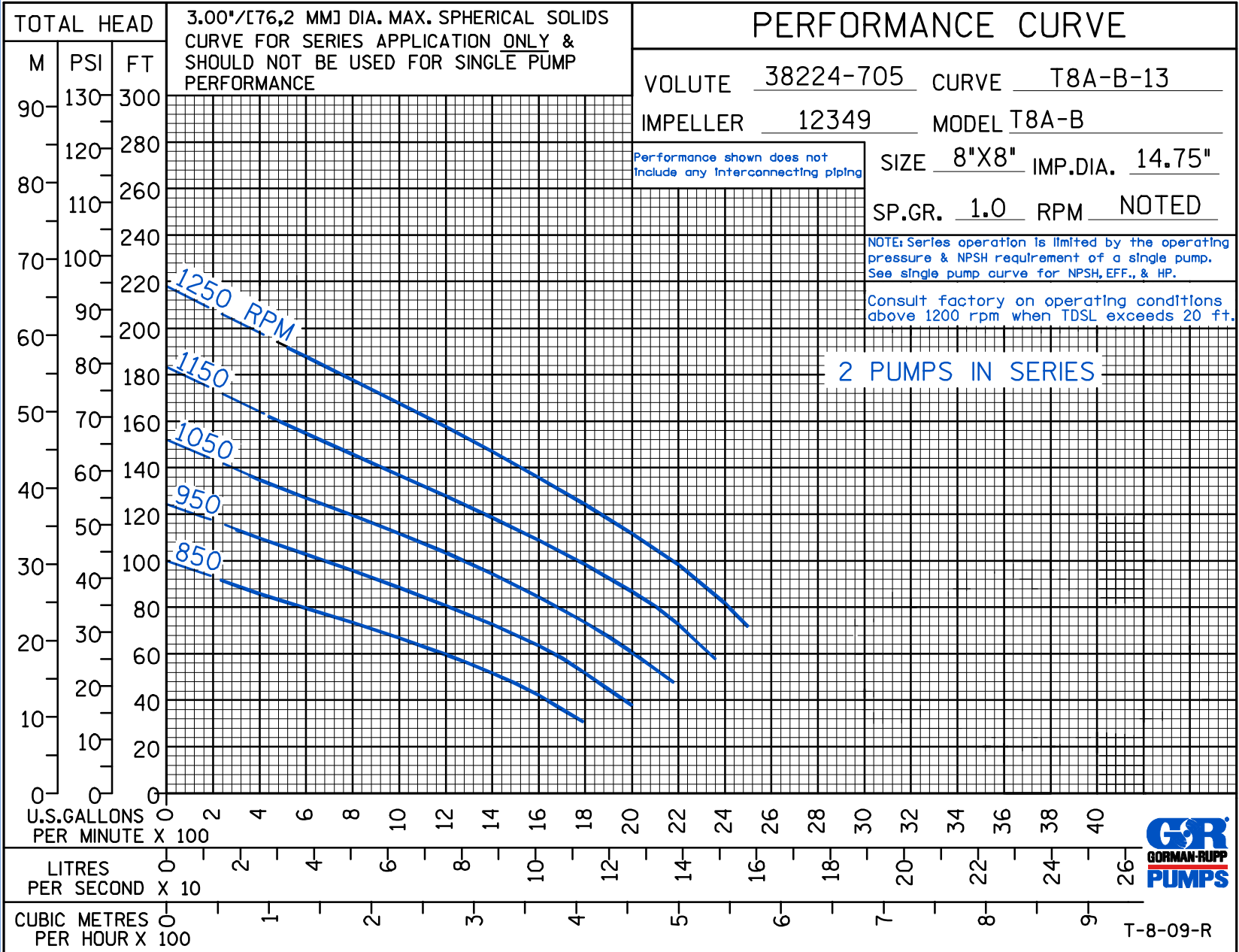
VOLUTE 38224-705 CURVE T8A-B-13  
 IMPELLER 12349 MODEL T8A-B  
 SIZE 8"X8" IMP.DIA. 14.75"  
 SP.GR. 1.0 RPM NOTED

Performance shown does not include any interconnecting piping

NOTE: Series operation is limited by the operating pressure & NPSH requirement of a single pump. See single pump curve for NPSH, EFF., & HP.

Consult factory on operating conditions above 1200 rpm when TDSL exceeds 20 ft.

2 PUMPS IN SERIES



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