

**GMS SERIES**  
**MEDIUM DUTY STANDARD**  
**S & T HYDRAULIC SIZE**  
**ROTARY GEAR PUMP**



**MODEL GMS6SU3**  
**SHOWN WITH OPTIONAL**  
**180° HOUSING**

The GMS iron, high capacity series is designed for applications in the operating ranges noted below. These units are ideal for bulk handling of a variety of liquids. For temperature control, backhead and housing jackets are standard; head jackets are available. Also available are carbon graphite bushings for low viscosity liquids, silicon carbide bushings for wear resistance, and carbide or positive drive shaft seals.

For continuous service, or for handling difficult liquids, see the heavy duty GHS section.

For belt drive applications, a pedestal bearing is required.

**FEATURES**

*THRUST CONTROLLED PUMP  
 ELEMENTS*

*HIGH STRENGTH, COMPUTER  
 PROFILED GEARING FOR QUIET  
 OPERATION*

*SEAL AREA FULLY JACKETED FOR  
 TEMPERATURE CONTROL.*

*EXCEPTIONAL SEAL VERSATILITY.*

**OPERATING RANGE**

CAPACITY (GPM) : (40 TO 600)  
 [LPM] : [151 TO 2270]

PRESSURE (PSI) : [0 TO 100]  
 [BAR] : [0 TO 7]

VISCOSITY (SSU) : (28 TO 250,000)  
 [cSt] : [1 TO 55,000]

TEMPERATURE (F) : (-60° TO 500°)  
 [C] : [-51° TO 260°]

**APPLICATIONS**

USE WITH ANY CLEAN LIQUID  
 COMPATIBLE WITH CAST  
 IRON

- ★ BOOSTER SERVICE
- ★ CIRCULATING
- ★ FILTERING
- ★ LUBRICATING
- ★ TRANSFERRING

| EXTER-<br>IOR | ROTOR<br>&<br>IDLER      | HOUSING<br>PORTS | BUSHINGS | IDLER<br>PIN      | SHAFT | SHAFT SEALING                              |                 | ROTATION | INTERNAL<br>RELIEF VALVE |                   |
|---------------|--------------------------|------------------|----------|-------------------|-------|--|-----------------|----------|--------------------------|-------------------|
|               |                          |                  |          |                   |       | MECH. SEAL<br>●                            | PACKING<br>■    |          | MATERIAL                 | SETTING           |
| CAST<br>IRON  | HIGH<br>STRENGTH<br>IRON | 90°<br>125# FLG  | BRONZE   | HARDENED<br>STEEL | STEEL | FLUORO <sup>①</sup><br>CARBON<br>NI-RESIST | CARBON<br>FIBER | C.W.     | CAST<br>IRON             | 75 PSI<br>[5 BAR] |

## Standard Models

**G M S 4 SU 3 - B**  
 | | | | | | | | | | | |  
 GEAR DUTY DESIGN PORT HYDRAULIC SEAL STYLE  
 SIZE SIZE

| MODEL<br>NUMBER                                      | NOM. CAPACITY - SPEED |     | MAXIMUM                         |                              |                                       | TEMP.              | SHIPPING<br>DATA |            |
|--|-----------------------|-----|---------------------------------|------------------------------|---------------------------------------|--------------------|------------------|------------|
|  | MAXIMUM               |     | DIFFERENTIAL PRESSURE-PSI [BAR] |                              |                                       |                    | Weight           | Volume     |
|  | GPM<br>[LPM]          | RPM | BELOW<br>38 SSU<br>14 cSt       | 38 TO<br>100 SSU<br>[21 cSt] | 100 TO<br>250,000 SSU<br>[55,000 cSt] | °F<br>[°C]         | LBS<br>[KG]      | CU.<br>FT. |
| <b>GMS 3 SR3-B</b> ● ■<br><b>GMS 3 SR4-B</b> ■ ■     | 202<br>[765]          | 350 | 50<br>[3.5]                     | 75<br>[5.2]                  | 100<br>[7]                            | ●<br>400°<br>[204] | 515<br>[234]     | 17.3       |
| <b>GMS 4 SR3-B</b> ● ■<br><b>GMS 4 SR4-B</b> ■ ■     |                       |     |                                 |                              |                                       |                    |                  |            |
| <b>GMS 6 SR3-B</b> ● ■ †<br><b>GMS 6 SR4-B</b> ■ ■ † |                       |     |                                 |                              |                                       |                    |                  |            |
| <b>GMS 3 SU3-B</b> ● ■<br><b>GMS 3 SU4-B</b> ■ ■     |                       |     |                                 |                              |                                       |                    |                  |            |
| <b>GMS 4 SU3-B</b> ● ■<br><b>GMS 4 SU4-B</b> ■ ■     | 337<br>[1276]         | 350 | 50<br>[3.5]                     | 75<br>[5.2]                  | 100<br>[7]                            | ■<br>500°<br>[260] | 515<br>[234]     | 17.3       |
| <b>GMS 6 SU3-B</b> ● ■ †<br><b>GMS 6 SU4-B</b> ■ ■ † |                       |     |                                 |                              |                                       |                    |                  |            |
| <b>GMS 5 TU3-B</b> ● ■<br><b>GMS 5 TU4-B</b> ■ ■     |                       |     |                                 |                              |                                       |                    |                  |            |
| <b>GMS 6 TU3-B</b> ● ■<br><b>GMS 6 TU4-B</b> ■ ■     | 600<br>[2270]         | 350 | 50<br>[3.5]                     | 75<br>[5.2]                  | 100<br>[7]                            |                    | 715<br>[324]     | 17.3       |

● MECHANICAL SEAL

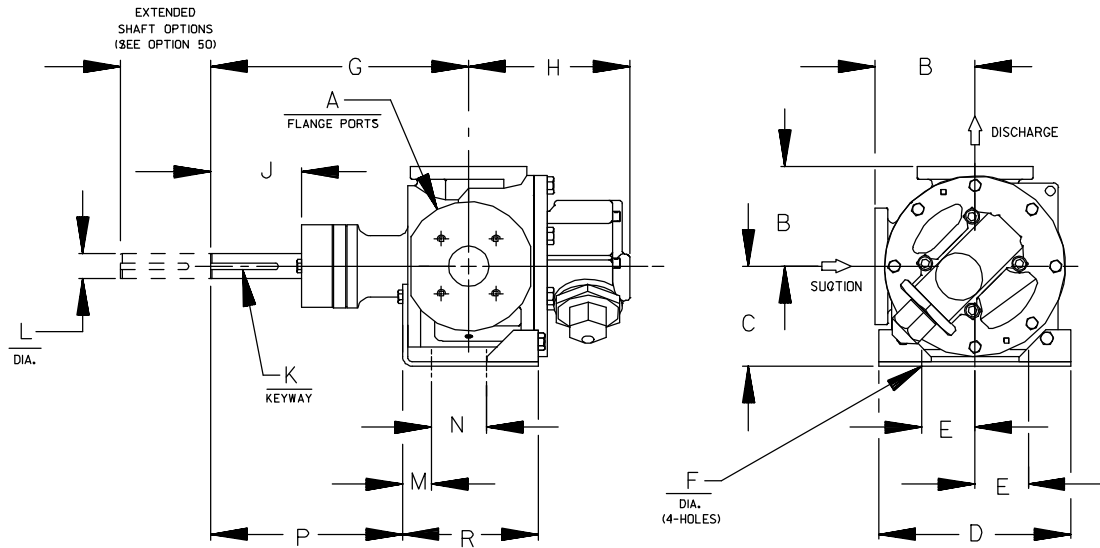
■ PACKING

■ PORTS ARE COMPATIBLE WITH 125# ANSI CAST IRON FLANGES.

† 180° DEGREE HOUSING

\* Note: Verify chemical compatibility

① DUPONT VITON® OR EQUIVALENT



CAD FILE NO.: 17221A

| PUMP MODEL | PUMP DIMENSIONS - INCHES [MILLIMETERS] |              |              |               |            |          |             |             |            |            |           |           |            |             |             |
|------------|--|--------------|--------------|---------------|------------|----------|-------------|-------------|------------|------------|-----------|-----------|------------|-------------|-------------|
|            | A                                      | B            | C            | D             | E          | F        | G           | H           | J          | K          | L         | M         | N          | P           | R           |
| GMS S      | 3.00*                                  | 7.75 [197]   | 7.75 [197] * | 8.25 [210]    | 4.12 [105] | .69 [18] | 20.00 [508] | 12.49 [317] | 6.90 [178] | .50 [13]   | 1.94 [49] | 2.88 [73] | 4.25 [108] | 14.00 [356] | 11.41 [290] |
|            | 4.00*                                  | 8.25 [210]   |              |               |            |          |             |             |            | x          |           |           |            |             |             |
|            | 6.00*                                  | 9.00 [229] † | 8.75 [222]   |               |            |          |             |             |            | 5.00 [127] |           |           |            |             |             |
| GMS T      | 5.00*                                  | 9.56 [243]   | 9.50 [241]   | 12.00 [304,8] | 5.00 [127] | .69 [18] | 20.70 [526] | 12.41 [315] | 7.00 [178] | .62 [16]   | 2.44 [62] | .81 [21]  | 6.25 [159] | 16.45 [418] | 8.50 [216]  |
|            | 6.00*                                  | 9.52 [244]   |              |               |            |          |             |             |            | x          |           |           |            |             |             |
|            | 6.00*                                  | 9.75 [248] † |              |               |            |          |             |             |            | 4.62 [117] |           |           |            |             |             |

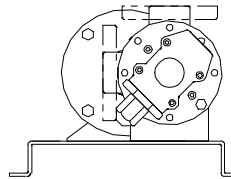
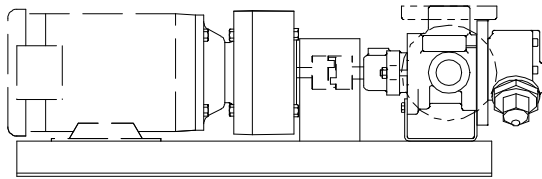
\* STANDARD DIMENSION

† 180° HOUSING

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## GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

(Drive Assembly Number Includes Base, Coupling, Guard and Gear Reducer, But **NOT** the Motor)



CAD FILE NO.: 16573

| PUMP MODEL | RPM @ 1750 | RPM @ 1150 | REDUCER ① |               | FRAME       | MTG.FT. OPTION REQ. | DRIVE ASSY NO. |               |
|------------|------------|------------|-----------|---------------|-------------|---------------------|----------------|---------------|
|            |            |            |           | MAX HP @ 1750 |             |                     |                | MAX HP @ 1150 |
| GMS S      | 343        | 225        | 5.10:1    | 20.00         | 13.20       | 254TC/256TC         | STD            | 90253-004     |
|            | 344        | 226        | 5.08:1    | 30.00         | 19.80       | 284TC/286TC         | STD            | 90253-006     |
|            | 355        | 233        | 4.93:1    | 60.00         | 39.60       | 324TC               | STD            | 90253-008     |
|            | 283        | 186        | 6.19:1    | 20.00         | 13.20       | 254TC/256TC         | STD            | 90253-014     |
|            | 287        | 189        | 6.09:1    | 30.00         | 19.80       | 284TC/286TC         | STD            | 90253-016     |
|            | 276        | 181        | 6.35:1    | 60.00         | 39.60       | 324TC               | STD            | 90253-018     |
|            | 179        | 117        | 9.80:1    | 10.00         | 6.60        | 213TC               | STD            | 90253-024     |
|            | 206        | 135        | 8.50:1    | 20.00         | 13.20       | 254TC               | STD            | 90253-026     |
|            |            |            |           | 20.00         | 13.20       | 256TC               | STD            | 90253-027     |
|            | 198        | 130        | 8.83:1    | 30.00         | 19.80       | 284TC               | STD            | 90253-028     |
|            |            |            |           | 30.00         | 19.80       | 286TC               | STD            | 90253-029     |
|            | 120        | 79         | 14.55:1   | 10.00         | 6.60        | 213TC               | STD            | 90253-034     |
|            | 125        | 82         | 14.00:1   | 30.00         | 19.80       | 254TC               | STD            | 90253-036     |
|            |            |            |           | 30.00         | 19.80       | 256TC               | STD            | 90253-037     |
| 105        | 69         | 16.66:1    | 7.81      | 5.16          | 184TC       | STD                 | 90253-044      |               |
|            |            |            | 17.71:1   | 16.48         | 10.88       | 213TC               | STD            | 90253-046     |
| 99         | 65         | 17.81:1    | 26.41     | 17.43         | 254TC       | STD                 | 90253-048      |               |
|            |            |            |           |               |             |                     |                |               |
| GMS T      | 279        | 186        | 6.19:1    | 20.00         | 13.20       | 254TC/256TC         | STD            | 90253-104     |
|            | 287        | 189        | 6.09:1    | 30.00         | 19.80       | 284TC/286TC         | STD            | 90253-106     |
|            | 276        | 181        | 6.35:1    | 60.00         | 39.60       | 324TC               | STD            | 90253-108     |
|            |            |            |           | 60.00         | 39.60       | 326TC               | STD            | 90253-109     |
|            |            |            |           | 60.00         | 39.60       | 364TC               | STD            | 90253-110     |
|            | 179        | 117        | 9.80:1    | 10.00         | 6.60        | 213TC               | STD            | 90253-114     |
|            | 206        | 135        | 8.50:1    | 20.00         | 13.20       | 254TC/256TC         | STD            | 90253-116     |
|            | 198        | 130        | 8.83:1    | 30.00         | 19.80       | 284TC               | STD            | 90253-118     |
|            |            |            |           | 30.00         | 19.80       | 286TC               | STD            | 90253-119     |
|            | 199        | 131        | 8.78:1    | 60.00         | 39.60       | 324TC               | STD            | 90253-120     |
|            | 119        | 79         | 14.55:1   | 10.00         | 6.60        | 213TC               | STD            | 90253-124     |
|            | 125        | 82         | 14.00:1   | 30.00         | 19.80       | 254TC/256TC         | STD            | 90253-126     |
|            |            |            |           | 30.00         | 19.80       | 284TC               | STD            | 90253-128     |
|            | 104        | 69         | 16.66:1   | 7.81          | 5.16        | 184TC               | STD            | 90253-134     |
| 17.71:1    |            |            |           | 16.48         | 10.88       | 213TC               | STD            | 90253-136     |
| 97         | 65         | 17.81:1    | 26.41     | 17.43         | 254TC/256TC | STD                 | 90253-138      |               |
|            |            |            |           |               |             |                     |                |               |

① Listed reducer horsepower rated for Standard Service (8-10 hrs/day). For Light Service (3-5 hrs/day) multiply maximum rated horsepower by 1.1. For Heavy Service (16-24 hrs/day) multiply maximum rated horsepower by 0.9.

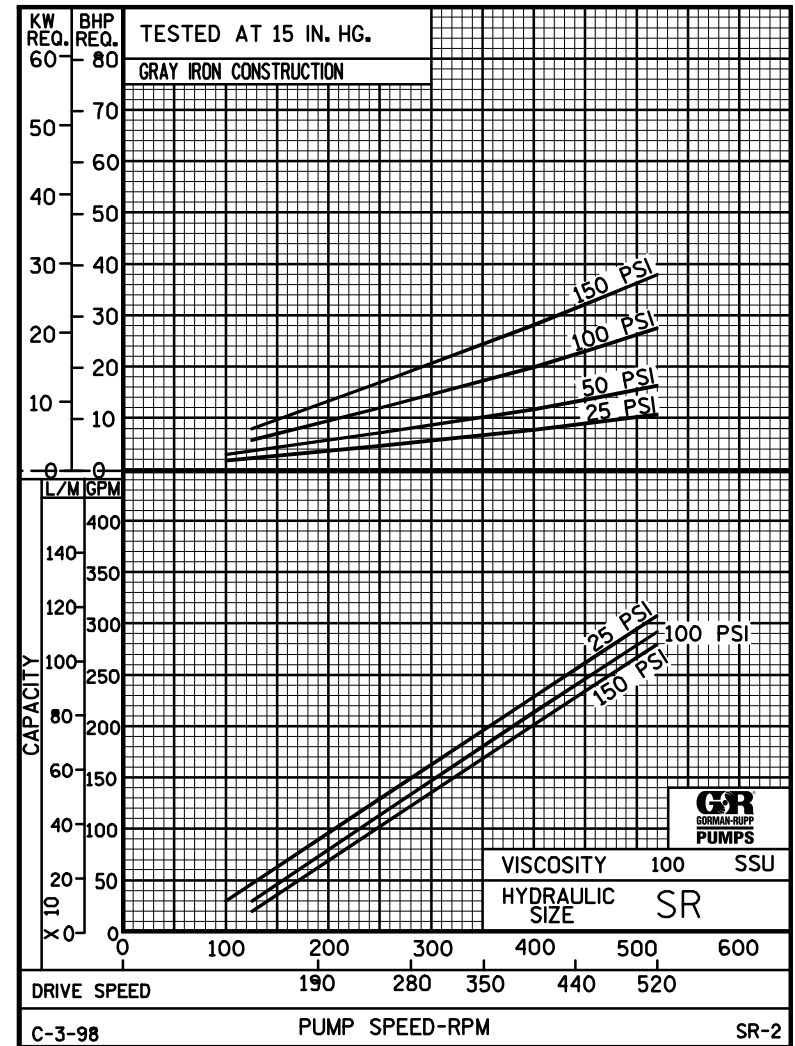
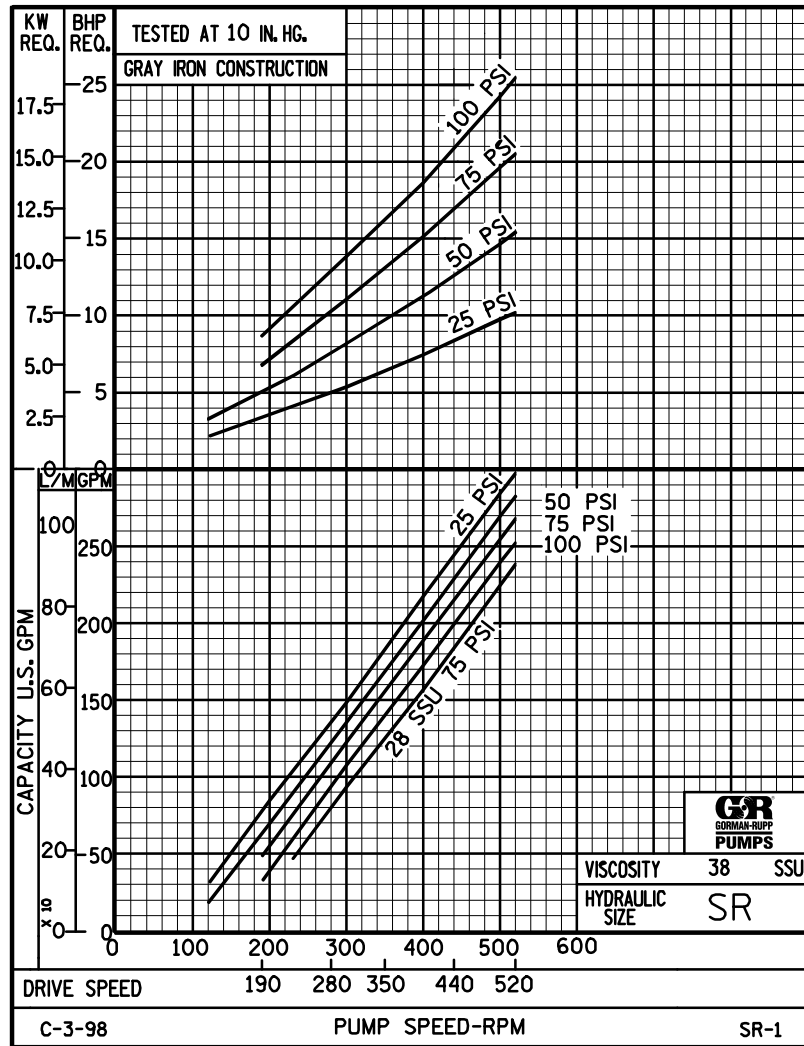
NOTE: CONSULT FACTORY FOR OPTIONS NOT SHOWN.



# PERFORMANCE CURVES

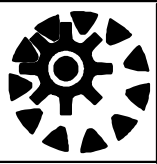
## SPEED VS. CAPACITY/HORSEPOWER

# SR

 Hydraulic Size


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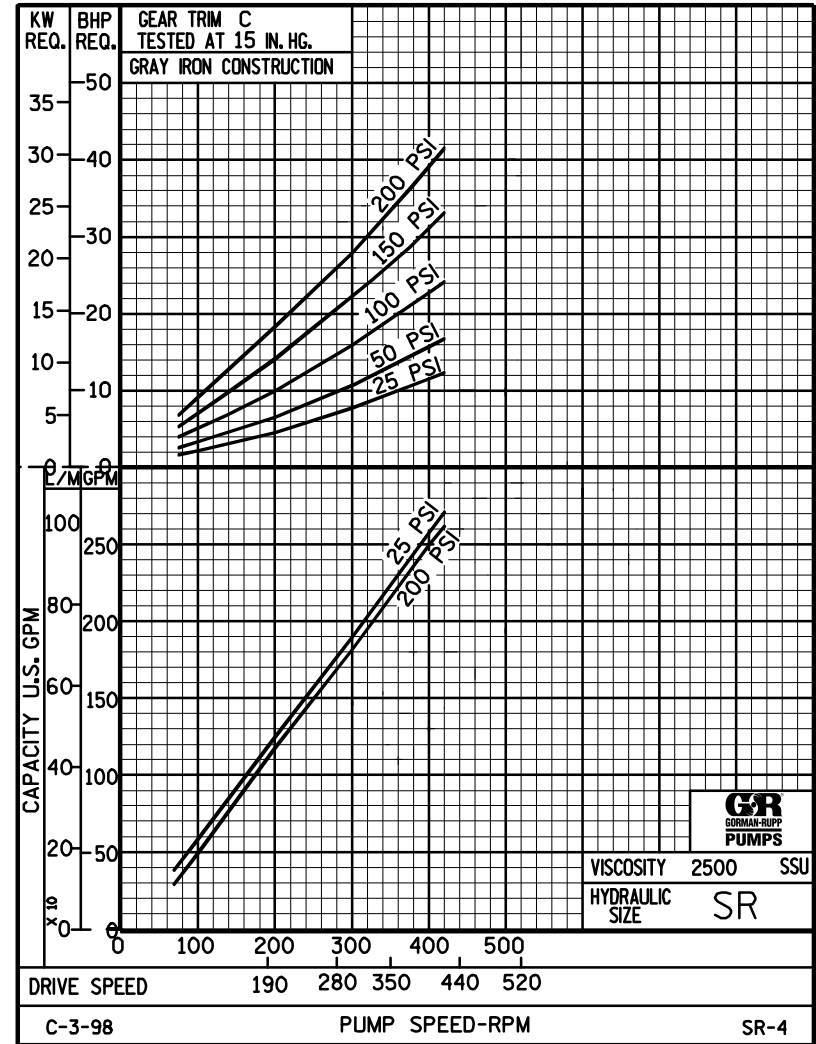
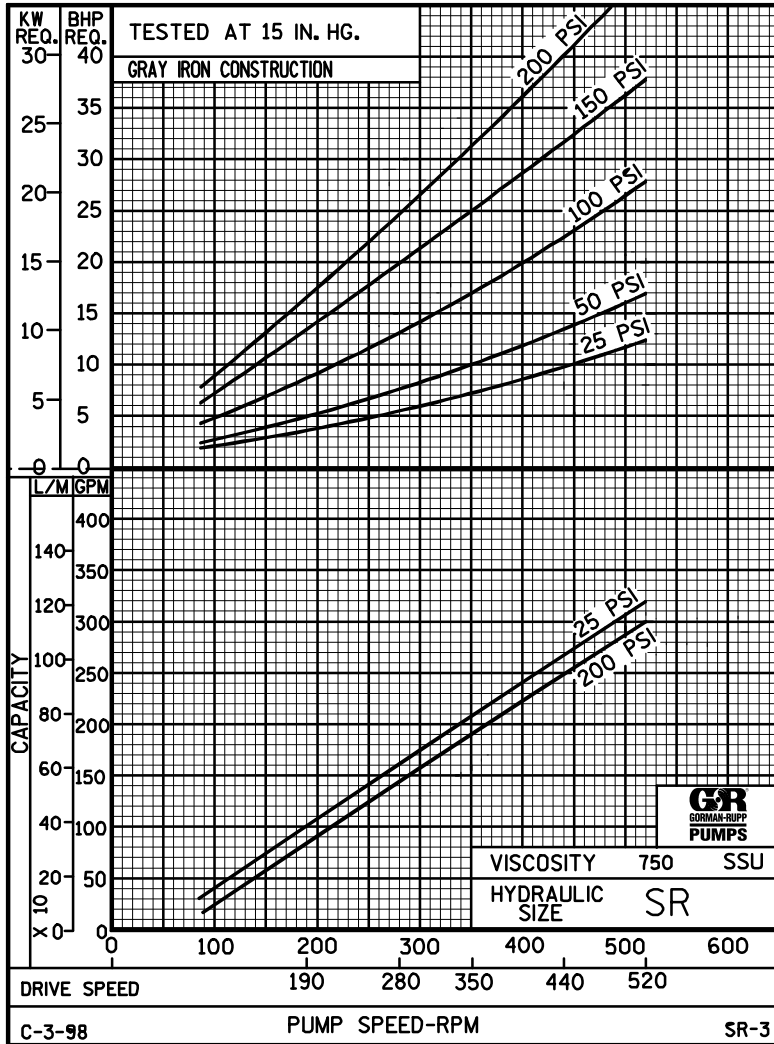
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# PERFORMANCE CURVES

## SPEED VS. CAPACITY/HORSEPOWER

# SR

 Hydraulic Size


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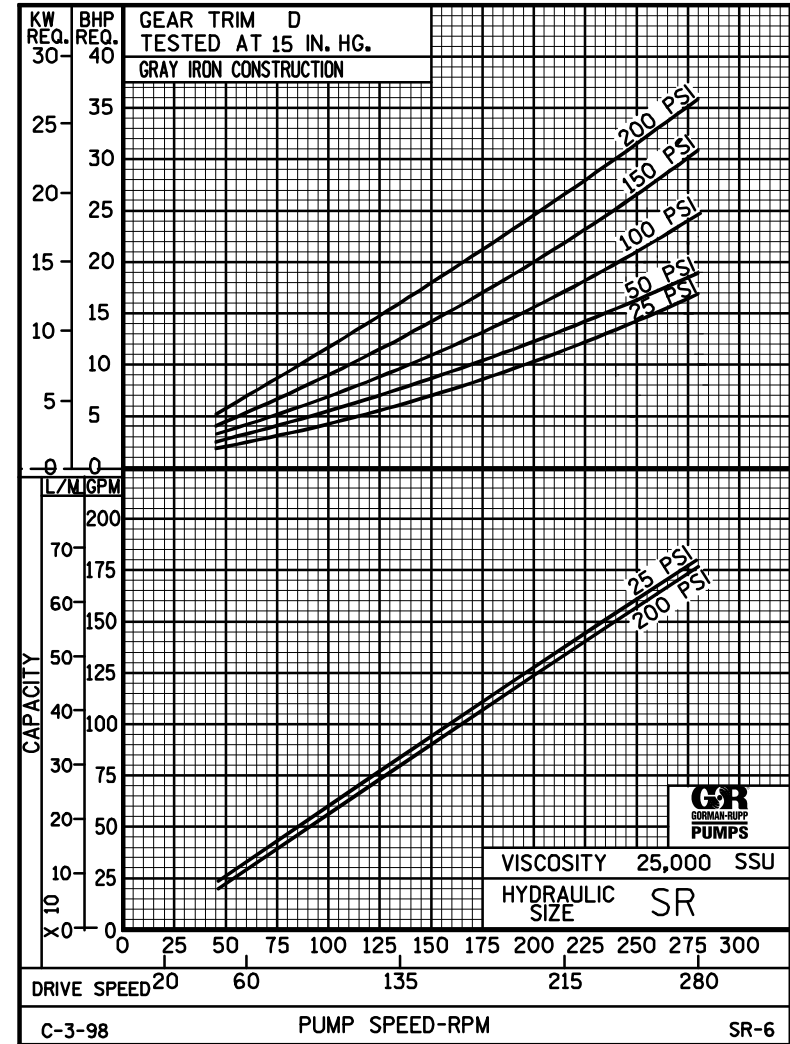
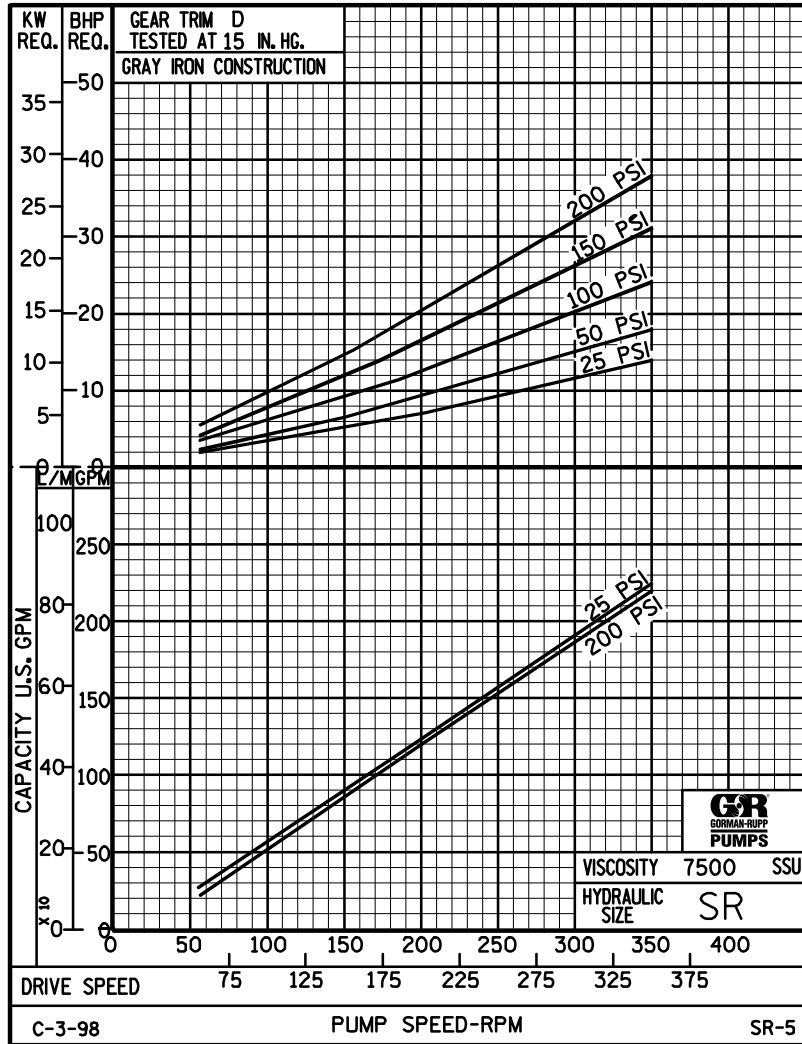
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# PERFORMANCE CURVES

## SPEED VS. CAPACITY/HORSEPOWER

# SR

 Hydraulic Size


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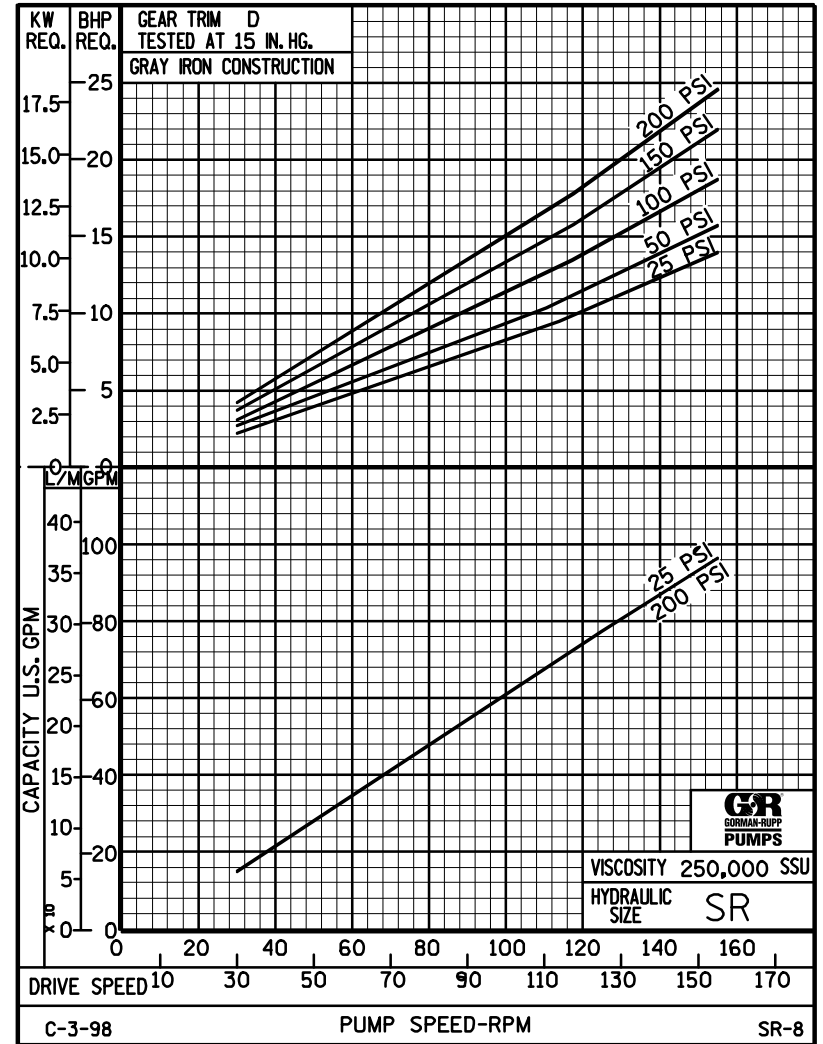
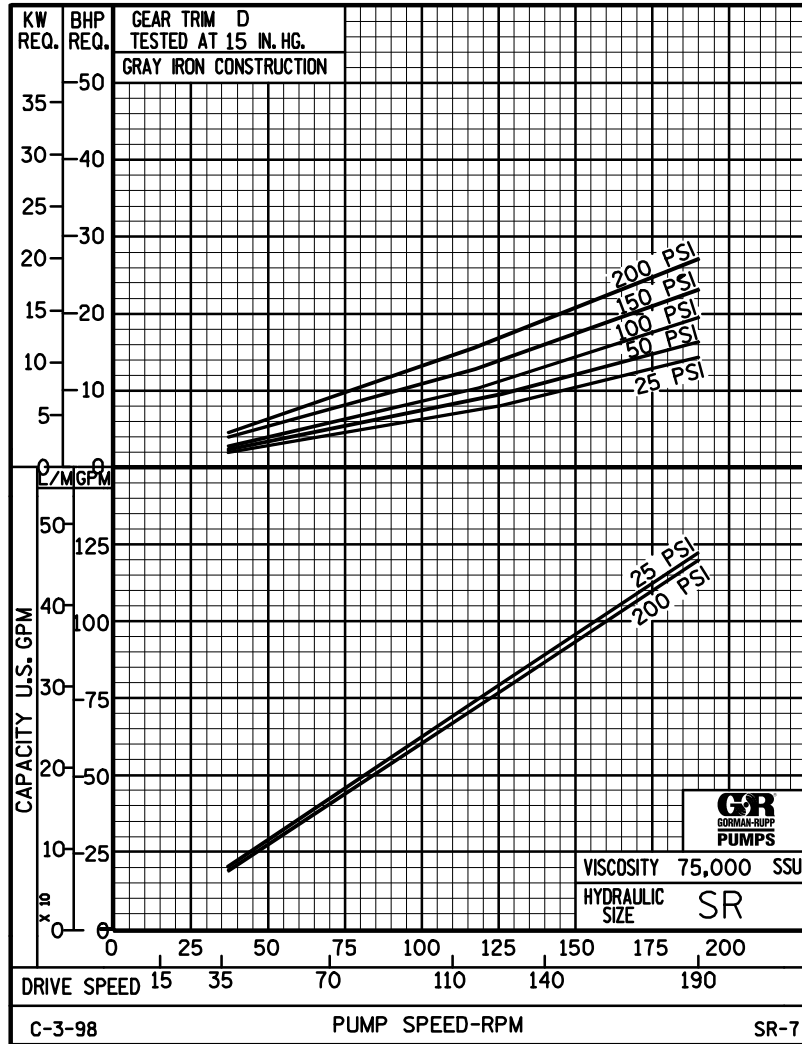


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