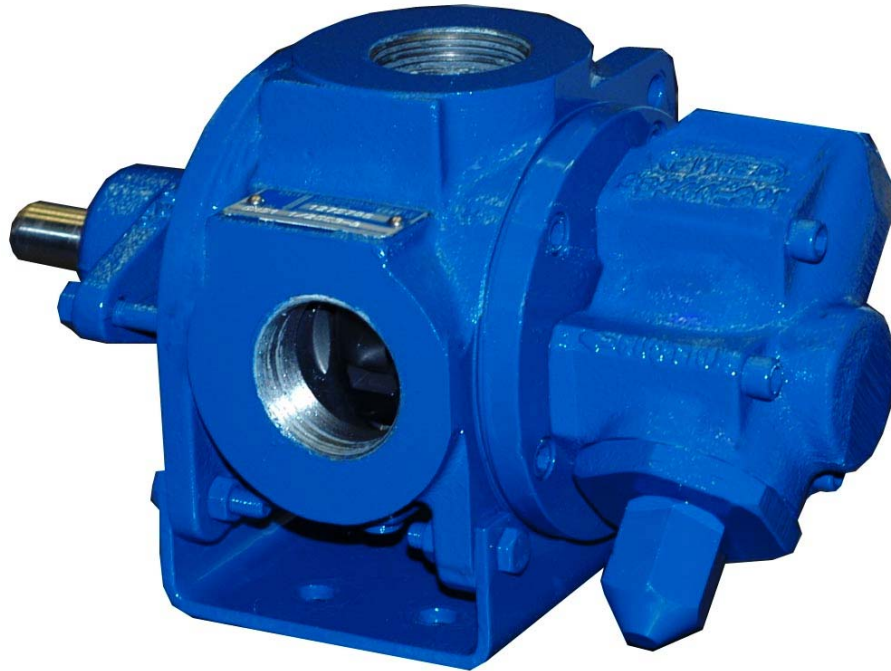


**MEDIUM DUTY STANDARD;
 D, G, J, N & R SIZE
 ROTARY GEAR PUMP**



The GMS series is designed for applications in the operating ranges noted below. These units are available with head and backhead jackets (R size only) for temperature control, carbon graphite bushings for low viscosity liquids, silicon carbide bushings for wear resistance, and carbide, positive drive or packing seals for viscous sealing.

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

For belt driven applications, select an extended shaft option and consult factory for availability of drive assembly. A pedestal bearing is required for belt driven applications.

FEATURES

- 150 PSI CAPABILITY
- SELF-CONTAINED, NO EXTERNAL BEARING REQUIRED (UNLESS BELT DRIVEN)
- HIGH STRENGTH, COMPUTER PROFILED GEARING FOR QUIET OPERATION
- THRUST CONTROLLED PUMP ELEMENTS
- EXCEPTIONAL SEAL VERSATILITY

OPERATING RANGE

- CAPACITY (GPM) : (3 TO 265)
 [LPM] : [11 TO 930]
- PRESSURE (PSI) : (0 TO 150)
 [BAR] : [0 TO 10.3]
- VISCOSITY (SSU) : (28 TO 250,000)
 [cSt] : [1 TO 55,000]
- TEMPERATURE (F) : (-60° TO 450°)
 [C] : [-51° TO 230°]

APPLICATIONS

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

| EXT. | ROTOR & IDLER | HOUSING PORTS | BUSHINGS | IDLER PIN | SHAFT | SHAFT SEALING | | ROT. | INTERNAL RELIEF VALVE | |
|-----------|--------------------|---------------|----------|----------------|-------|---------------------------------------|-----------------------------|------|-----------------------|----------------|
| | | | | | | MECH. SEAL ● | PACKING ■ | | MATERIAL | SETTING |
| CAST IRON | HIGH STRENGTH IRON | 90° TAPPED | BRONZE | HARDENED STEEL | | FLUORO ^① CARBON, NI-RESIST | PTFE, ^② GRAPHITE | C.W. | DUCTILE IRON | 75 PSI [5 BAR] |

Standard Models

G M S 1 DC 3 - B
 GEAR DUTY DESIGN PORT SIZE HYDRAULIC SEAL STYLE

| MODEL NUMBER | NOM. CAPACITY - SPEED | | | | MAXIMUM | | | | SHIPPING DATA | |
|--|-----------------------|----------------|-------------|---------------|---------------------------------|------------------|--------------------------|--------------|---------------|---------|
| | MAXIMUM | | ALTERNATIVE | | DIFFERENTIAL PRESSURE-PSI [BAR] | | | TEMP. | Weight | Volume |
| | GPM | RPM | GPM | RPM | BELOW | 38 TO | 100 TO | °F | LBS | CU. FT. |
| | [LPM] | 60 Hz [50 Hz] | [LPM] | 60 Hz [50 Hz] | 38 SSU [4 cSt] | 100 SSU [21 cSt] | 250,000 SSU [55,000 cSt] | [°C] | [KG] | FT. |
| GMS 1DC 3-B ● GMS 1DC 4-B ■ | 9 [28] | | 6 [19] | | | | | | 19 [8,6] | 0.6 |
| GMS 1DE 3-B ● GMS 1DE 4-B ■ | 11 [35] | | 7 [22] | | | | | | 19 [8,6] | 0.6 |
| GMS 1-1/2 GC 3-B ● GMS 1-1/2 GC 4-B ■ | 16 [50] | | 10 [32] | | | | | | 32 [14,5] | 2.9 |
| GMS 2 GC 3-B ● GMS 2 GC 4-B ■ | | | | | | | | | 32 [14,5] | 2.9 |
| GMS 1-1/2 GF 3-B ● GMS 1-1/2 GF 4-B ■ | 23 [73] | 1750 [1460] | 15 [47] | 1150 [960] | | | | 400 [205] | 32 [14,5] | 2.9 |
| GMS 2 GF 3-B ● GMS 2 GF 4-B ■ | | | | | 50 [3] | 75 [5] | 150 [10.3] | | 32 [14,5] | 2.9 |
| GMS 1-1/2 GH 3-B ● GMS 1-1/2 GH 4-B ■ | 31 [98] | | 20 [63] | | | | | | 32 [14,5] | 2.9 |
| GMS 2 GH 3-B ● GMS 2 GH 4-B ■ | | | | | | | | 450 [230] | 32 [14,5] | 2.9 |
| GMS 1-1/2 GJ 3-B ● GMS 1-1/2 GJ 4-B ■ | 38 [120] | | 25 [79] | | | | | | 32 [14,5] | 2.9 |
| GMS 2 GJ 3-B ● GMS 2 GJ 4-B ■ | | | | | | | | | 32 [14,5] | 2.9 |
| GMS 2 JG 3-B ● GMS 2 JG 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 2-1/2 JG 3-B ● GMS 2-1/2 JG 4-B ■ | 33 [126] | 960 [960] | 30 [95] | 870 [725] | | | | | 83 [37,6] | 2.9 |
| GMS 3 JG 3-B ● GMS 3 JG 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| STANDARD MODELS CONT. | | | | | | | | | | |

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ3-B**

● MECHANICAL SEAL

■ PACKING/LIPSEAL

① DUPONT VITON[®] OR EQUIVALENT

② DUPONT TEFLON[®] OR EQUIVALENT

THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO

GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

Standard Models Cont'd

| MODEL NUMBER | NOM. CAPACITY - SPEED | | | | MAXIMUM | | | | SHIPPING DATA | |
|--|-----------------------|-------------------------|--------------|-------------------------|---------------------------------|------------------------------|---------------------------------------|-------------------|---------------|--------|
| | MAXIMUM | | ALTERNATIVE | | DIFFERENTIAL PRESSURE-PSI [BAR] | | | TEMP. | Weight | Volume |
| | GPM [LPM] | RPM 60 Hz [50 Hz] | GPM [LPM] | RPM 60 Hz [50 Hz] | BELOW 38 SSU [4 cSt] | 38 TO 100 SSU [21 cSt] | 100 TO 250,000 SSU [55,000 cSt] | °F [°C] | | |
| GMS 2 JJ 3-B ● GMS 2 JJ 4-B ■ | 47 [177] | 960 [960] | 42 [133] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ● 400 [205] | 83 | 2.9 |
| GMS 2-1/2 JJ 3-B ● GMS 2-1/2 JJ 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 3 JJ 3-B ● GMS 3 JJ 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 2 JL 3-B ● GMS 2 JL 4-B ■ | 64 [243] | 960 [960] | 58 [183] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ● 400 [205] | 83 | 2.9 |
| GMS 2-1/2 JL 3-B ● GMS 2-1/2 JL 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 3 JL 3-B ● GMS 3 JL 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 2 JP 3-B ● GMS 2 JP 4-B ■ | 89 [338] | 960 [960] | 81 [256] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ● 400 [205] | 83 | 2.9 |
| GMS 2-1/2 JP 3-B ● GMS 2-1/2 JP 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 3 JP 3-B ● GMS 3 JP 4-B ■ | | | | | | | | | 83 [37,6] | 2.9 |
| GMS 1-1/2 NK 3-B ● GMS 1-1/2 NK 4-B ■ | 90 [283] | 960 [960] | 60 [189] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ■ 450 [230] | 109 | 2.9 |
| GMS 2 NK 3-B ● GMS 2 NK 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 2-1/2 NK 3-B ● GMS 2-1/2 NK 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 3 NK 3-B ● GMS 3 NK 4-B ■ | 120 [378] | 960 [960] | 80 [252] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ■ 450 [230] | 109 | 2.9 |
| GMS 2 NM 3-B ● GMS 2 NM 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 2-1/2 NM 3-B ● GMS 2-1/2 NM 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 3 NM 3-B ● GMS 3 NM 4-B ■ | 150 [473] | 960 [960] | 99 [312] | 870 [725] | 50 [3] | 75 [5] | 150 [10.3] | ■ 450 [230] | 109 | 2.9 |
| GMS 2 NP 3-B ● GMS 2 NP 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 2-1/2 NP 3-B ● GMS 2-1/2 NP 4-B ■ | | | | | | | | | 109 [49] | 2.9 |
| GMS 3 NP 3-B ● GMS 3 NP 4-B ■ | | | | | | | | | 109 | 2.9 |

STANDARD MODELS CONT.

- MECHANICAL SEAL
- PACKING/LIPSEAL

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ 3-B**

THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO
 GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

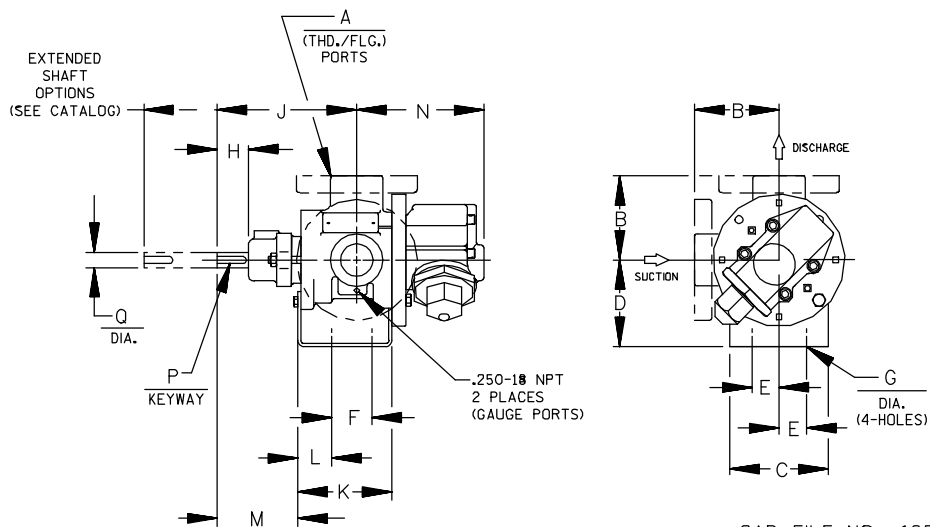
| MODEL NUMBER | NOM. CAPACITY - SPEED | | | | MAXIMUM | | | | SHIPPING DATA | | | | | | | |
|--|-----------------------|-------------------------|--------------|-------------------------|-----------------------------------|------------------------------|---------------------------------------|-------------------|--------------------|-------------------|--|--|--|-------------------|--------------|------|
| | MAXIMUM | | ALTERNATIVE | | DIFFERENTIAL PRESSURE - PSI [BAR] | | | TEMP. | Weight LBS [KG] | Volume CU. FT. | | | | | | |
| | GPM [LPM] | RPM 60 Hz [50 Hz] | GPM [LPM] | RPM 60 Hz [50 Hz] | BELOW 38 SSU [4 cSt] | 38 TO 100 SSU [21 cSt] | 100 TO 250,000 SSU [55,000 cSt] | °F [°C] | | | | | | | | |
| GMS 2 RM 3-B ● GMS 2 RM 4-B ■ | 153 [542] | 640 [600] | 115 [362] | 480 [400] | | | | ● 400 [205] | 233 [106] | 10.7 | | | | | | |
| GMS 2-1/2 RM 3-B ● † GMS 2-1/2 RM 4-B ■ † | | | | | | | | | 233 [106] | 10.7 | | | | | | |
| GMS 3 RM 3-B ● † GMS 3 RM 4-B ■ † | | | | | | | | | 233 [106] | 10.7 | | | | | | |
| GMS 4 RM 3-B ● † GMS 4 RM 4-B ■ † | | | | | | | | | 233 [106] | 10.7 | | | | | | |
| GMS 2-1/2 RP 3-B ● † GMS 2-1/2 RP 4-B ■ † | | | | | | | | | 233 [106] | 10.7 | | | | | | |
| GMS 3 RP 3-B ● † GMS 3 RP 4-B ■ † | 190 [678] | 640 [600] | 143 [451] | | 50 [3] | 75 [5] | 150 [10.3] | ● 400 [205] | 233 [106] | 10.7 | | | | | | |
| GMS 4 RP 3-B ● † GMS 4 RP 4-B ■ † | 233 [106] | | | | | | | | 10.7 | | | | | | | |
| GMS 2-1/2 RR 3-B ● † GMS 2-1/2 RR 4-B ■ † | 228 [804] | | | | | | | | 170 [536] | | | | | ■ 450 [230] | 233 [106] | 10.7 |
| GMS 3 RR 3-B ● † GMS 3 RR 4-B ■ † | | | | | | | | | | | | | | | 233 [106] | 10.7 |
| GMS 4 RR 3-B ● † GMS 4 RR 4-B ■ † | | | | | | | | | | | | | | | 233 [106] | 10.7 |
| GMS 3 RS 3-B ● † GMS 3 RS 4-B ■ † | 265 [930] | 196 [618] | | | | | | 233 [106] | 10.7 | | | | | | | |
| GMS 4 RS 3-B ● † GMS 4 RS 4-B ■ † | | | | | | | | 233 [106] | 10.7 | | | | | | | |

NOTE: RECOMMENDED SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ 3-B**

† PORTS ARE COMPATIBLE WITH 125# ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO
GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

Basic Pump Dimensions



CAD FILE NO.: 16530

| MODEL NUMBERS | PUMP DIMENSIONS - INCHES [MILLIMETERS] | | | | | | | | | | | | | | | |
|---------------|--|----------------|----------------|----------------|--------------|---------------|-------------|--------------|----------------|---------------|--------------|---------------|----------------|----------------------------------|--------------|----------------|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | |
| GMS D | 1" | 2.50* [64] | 4.00 [102] | 3.50* [89] | 1.62 [41] | 1.62 [41] | .41 [10] | 1.44 [36] | 5.81 [148] | 3.24 [82] | .89 [23] | 3.99 [101] | 4.97 [126] | .19 [5] x 1.00 [25] | .62 [16] | |
| | | 2.75† [70] | | 4.50 [114] | | | | | | | | | | | | 5.25 [133] |
| | | 3.19 [81] | | | | | | | | | | | | | | |
| | | 4.00† [102] | | | | | | | | | | | | | | |
| GMS G | 1-1/2" | 3.50* [89] | 4.88 [124] | 3.50* [89] | 1.62 [41] | 1.62 [41] | .41 [10] | 1.64 [42] | 5.96 [151] | 3.85 [98] | .76 [19] | 4.14 [105] | 5.70 [145] | .19 [5] x 1.25 [32] | .75 [19] | |
| | | 3.75† [95] | | 4.50 [114] | | | | | | | | | | | | 5.25 [133] |
| | 2" | 4.00 [102] | 6.25 [159] | 6.25 [159] | | | | | | | | | | | | |
| | | 4.00† [102] | | | | | | | | | | | | | | |
| GMS J | 2" | 4.50* [114] | 6.88 [175] | 5.25* [133] | 2.88 [73] | 3.00 [76] | .44 [11] | 2.50 [64] | 9.91 [252] | 5.71 [145] | 1.18 [30] | 7.31 [186] | 8.50 [216] | .25 [6] x 2.00 [51] | 1.00 [25] | |
| | | 5.00† [127] | | 6.25 [159] | | | | | | | | | | | | 7.00 [178] |
| | 6.00† [152] | 7.00 [178] | | 8.00 [203] | | | | | | | | | | | | |
| | 6.31† [160] | 8.00 [203] | | | | | | | | | | | | | | |
| GMS N | 1-1/2" | 5.12* [130] | 8.00 [203] | 4.50 [114] | 2.88 [73] | 4.25 [108] | .44 [11] | 2.50 [64] | 9.20 [234] | 6.42 [163] | 1.12 [28] | 6.12 [155] | 7.59 [193] | .25 [6] x 2.00 [51] | 1.25 [32] | |
| | | | | 5.25* [133] | | | | | | | | | | | | 6.25 [159] |
| | 7.19† [183] | | | 7.00 [178] | | | | | | | | | | | | 8.00 [203] |
| | | | | 8.00 [203] | | | | | | | | | | | | |
| GMS R | 2" | 8.50* [216] | 10.25 [260] | 7.00* [178] | 3.75 [95] | 5.75 [146] | .53 [13] | 3.03 [77] | 12.50 [318] | 8.43 [214] | 1.38 [35] | 8.35 [212] | 11.31 [287] | .38 [10] x 2.25 [57] | 1.50 [38] | |
| | | | | 7.19† [183] | | | | | | | | | | | | 7.00* [178] |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

* STANDARD DIMENSION

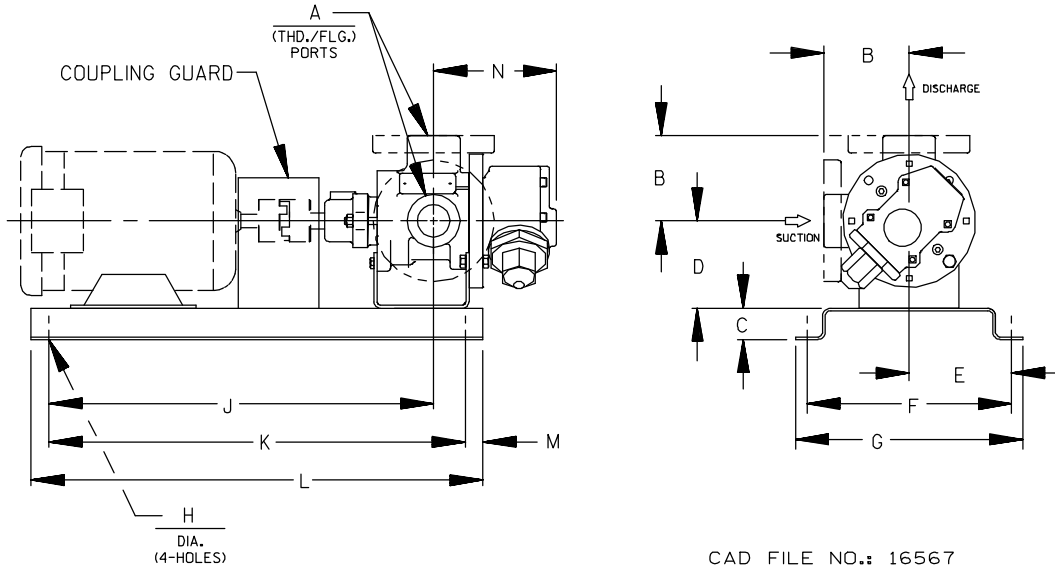
† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO
GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA



DIRECT FLEX DRIVE OPTION DIMENSIONS



CAD FILE NO.: 16567

| PUMP MODEL | PUMP DIMENSIONS - INCHES[MILLIMETERS] | | | | | | | | | | | | | | |
|------------|---------------------------------------|-----------|-------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|---------|--------|
| | A | B | MOTOR FRAME | C | D | E | F | G | H | J | K | L | M | N | |
| GMS D | 1" | 2.50* | 56 (H) | 2.00 | 3.50* | 4.44 | 8.88 | 10.14 | .56 | 20.04 | 19.25 | 25.25 | 3.00 | 4.97 | |
| | | [64] | 143T/145T | [51] | [89] | [113] | [228] | [258] | | [509] | [489] | [841] | [78] | | |
| | | 2.75 † | 182T/184T | 4.00 | 4.50 | 7.75 | 15.50 | 17.50 | | 26.41 | 23.50 | 33.50 | 5.00 | | [126] |
| | | [70] | 213T/215T | [102] | [114] | [197] | [394] | [445] | | [671] | [597] | [851] | [127] | | |
| GMS G | 1- 1/2" | 3.50* | 56 (H) | 2.00 | 3.50* | 4.44 | 8.88 | 10.14 | .56 | 20.20 | 19.25 | 25.25 | 3.00 | 5.71 | |
| | | [89] | 143T/145T | [51] | [89] | [113] | [228] | [258] | | [513] | [489] | [841] | [76] | | |
| | 3.75 † | 182T/184T | 4.00 | 4.50 | 7.75 | 15.50 | 17.50 | 26.57 | 23.50 | 33.50 | 5.00 | [145] | | | |
| | [95] | 213T/215T | [102] | [114] | [197] | [394] | [445] | [675] | [597] | [851] | [127] | | | | |
| GMS J | 2" | 4.00 | 182T/184T | 4.00 | 4.50 | 9.50 | 19.00 | 21.00 | .69 | 36.16 | 35.50 | 45.50 | 5.00 | 8.49 | |
| | | [102] | 213T/215T | | [114] | | | | | | | | | | [5.25] |
| | 4.00 † | 254T/256T | 5.25* | 6.25 | 9.50 | 19.00 | 21.00 | .69 | 36.16 | 35.50 | 45.50 | 5.00 | [216] | | |
| | [102] | 284T/286T | [133] | [159] | [241] | [483] | [533] | [18] | [918] | [902] | [1156] | [127] | | | |
| GMS N | 1- 1/2" | 4.50* | 182T/184T | 4.00 | 4.50 | 9.50 | 19.00 | 21.00 | .69 | 35.44 | 35.50 | 45.50 | 5.00 | 7.59 | |
| | | [114] | 213T/215T | | [114] | | | | | | | | | | [5.25] |
| | 5.00 † | 254T/256T | 6.25* | 6.25 | 9.50 | 19.00 | 21.00 | .69 | 35.44 | 35.50 | 45.50 | 5.00 | [193] | | |
| | [127] | 284T/286T | [159] | [159] | [241] | [483] | [533] | [18] | [900] | [902] | [1158] | [127] | | | |
| 2- 1/2" | 6.00 † | 324T/326T | 8.00 | 7.00 | 9.50 | 19.00 | 21.00 | .69 | 35.44 | 35.50 | 45.50 | 5.00 | 8.70 | | |
| | [152] | 324T/326T | [203] | [178] | | | | | | | | | | | |
| 3" | 6.31 † | 324T/326T | 8.00 | 8.00 | 9.50 | 19.00 | 21.00 | .69 | 35.44 | 35.50 | 45.50 | 5.00 | | * [221] | |
| | [160] | 324T/326T | [203] | [203] | | | | | | | | | | | |

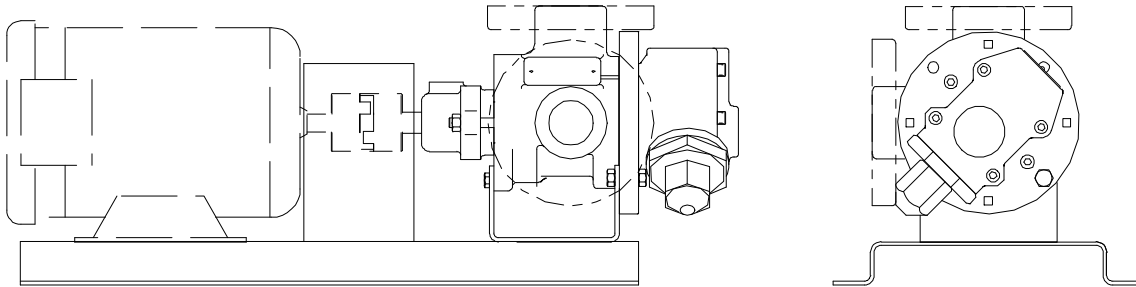
* STANDARD DIMENSION

† 180° HOUSING

┆ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

DIRECT FLEX DRIVE OPTIONS

Drive Assembly Number Includes Base, Coupling & Guard, But **Not** the Motor



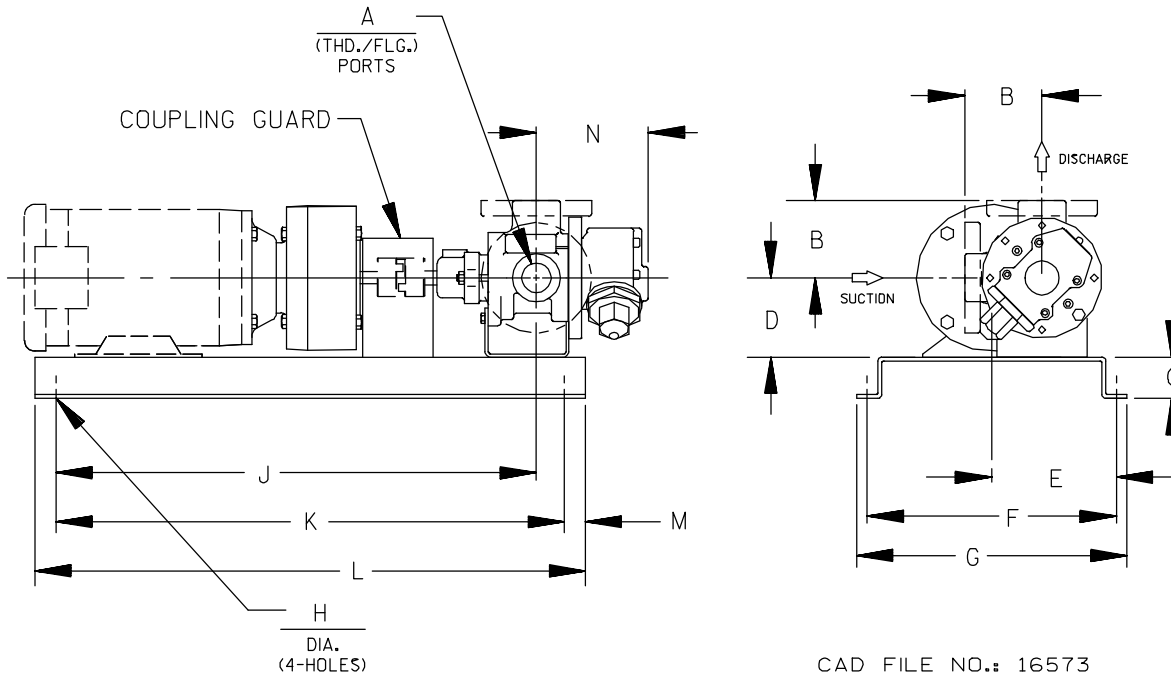
CAD FILE NO.: 16567

| PUMP MODEL NUMBER | 60 HZ. RPM | FRAME | MTG. FT. OPTION REQ. | DRIVE ASSY NO. |
|-------------------|---------------------|-----------|----------------------|----------------|
| GMS D | 1750 1150 850 | 56/56H | STD | 90251-082 |
| | | 143T/145T | STD | 90251-084 |
| | | 182T/184T | 80F | 90251-090 |
| | | 213T/215T | 80J | 90251-094 |
| GMS G | 1750 1150 850 | 56/56H | STD | 90251-160 |
| | | 143T/145T | STD | 90251-162 |
| | | 184 | 80F | 90221-156 |
| | | 182T/184T | 80F | 90251-168 |
| | | 213T/215T | 80J | 90251-176 |
| GMS J | 850 | 254T | 80P | 90251-180 |
| | | 182T/184T | 80F | 90251-310 |
| | | 213T/215T | STD | 90251-318 |
| | | 254T/256T | 80P | 90251-330 |
| GMS N | 850 | 284T/286T | 80S | 90251-338 |
| | | 254T/256T | 80P | 90251-394 |
| | | 284T/286T | 80S | 90251-402 |
| | | 324T/326T | 80V | 90251-410 |

NOTE: CONSULT FACTORY FOR OPTIONS NOT SHOWN.



GRR REDUCER C-FLANGE FLEX DRIVE OPTION DIMENSIONS (56C - 215TC Frame Size Range)



CAD FILE NO.: 16573

| PUMP MODEL | PUMP DIMENSIONS | | | | | | | | | | | | | | | |
|------------|-----------------|-----------------|-----------------|--------------|----------------|---------------|----------------|----------------|-------------|---------------------|-----------------|-----------------|--------------|---------------|--|--|
| | A | B | MOTOR FRAME | C | D | E | F | G | H | J | K | L | M | N | | |
| GMS D | 1" | 2.50 * [64] | 56C | 2.00 [51] | 3.50 * [89] | 6.50 [165] | 13.00 [330] | 15.00 [381] | .56 [14] | 19.98 [507] | 25.50 [648] | 31.50 [800] | 3.00 [76] | 4.98 [126] | | |
| | | 2.75 † [70] | 184C | | | 7.31 [186] | 14.62 [371] | 16.62 [422] | | 26.68 [678] | 37.25 [946] | 43.25 [1098] | | | | |
| | | 3.19 † [61] | 143TC/145TC | | | | | | | | | | | | | |
| | | 4.00 † [102] | 182TC/184TC | | | | | | | | | | | | | |
| | | | 213TC/215TC | | | | | | | | | | | | | |
| GMS G | 1-1/2" | 3.50 * [89] | 56C | 2.00 [51] | 3.50 * [89] | 6.50 [165] | 13.00 [330] | 15.00 [381] | .58 [14] | 20.11 [511] | 25.50 [648] | 31.50 [800] | 3.00 [76] | 5.72 [145] | | |
| | | 3.75 † [95] | 184C | | | 7.31 [186] | 14.62 [371] | 16.62 [422] | | 26.81 [681] | 37.25 [946] | 43.25 [1098] | | | | |
| | 4.00 † [102] | 143TC/145TC | | | | | | | | | | | | | | |
| | 4.00 † [102] | 182TC/184TC | 4.50 [114] | | | | | | | | | | | | | |
| | | | 213TC/215TC | | 5.25 [133] | | | | | | | | | | | |
| GMS J | 2" | 4.50 * [114] | 182TC/184TC | 2.00 [51] | 4.50 [114] | 7.31 [186] | 14.62 [371] | 16.62 [422] | .56 [14] | 30.20 [767] | 32.00 [813] | 38.00 [965] | 3.00 [76] | 8.50 [216] | | |
| | 2-1/2" | 5.00 † [127] | | | | | | | | | | | | | | |
| | | 6.00 † [152] | 213TC/215TC | | | | | | | | 5.25 * [133] | | | | | |
| | 3" | 6.31 † [160] | | | | | | | | | | | | | | |
| GMS N | 1-1/2" | | 182TC/184TC | 2.00 [51] | 4.50 [114] | 7.31 [186] | 14.62 [371] | 16.62 [422] | .56 [14] | * 29.48 [749] | | | 3.00 [76] | 7.59 [193] | | |
| | 2" | 5.12 * [130] | | | | | | | | | | | | | | |
| | | 2-1/2" | | | | | | | | 213TC/215TC | 5.25 * [133] | | | | | |
| | 3" | | 7.19 † [183] | | | | | | | | | | | | | |

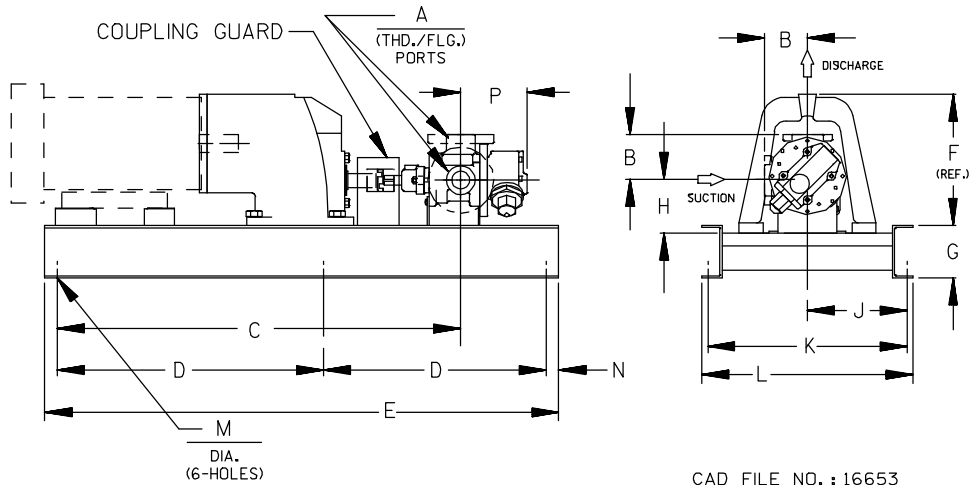
* STANDARD DIMENSION

† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSI/AST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.



GRR REDUCER C-FLANGE FLEX DRIVE OPTION DIMENSIONS (213TC - 326TC Frame Size Range)



CAD FILE NO. : 16653

| PUMP MODEL | PUMP DIMENSIONS | | | | | | | | | | | | | | |
|------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|----------------|---------------|----------------|----------------|----------------|----------------|---------------|----------------|
| | A | B | MOTOR FRAME | C | D | E | F | G | H | J | K | L | M | N | P |
| GMS J | 2" | 4.50 * [114] | 213TC/215TC | 41.57 [1056] | 23.00 [584] | 56.00 [1422] | 12.14 [308] | | | | | | | | |
| | 2 1/2" | 5.00 † [127] | 254TC/256TC | 42.03 [1068] | | | | 8.00 [203] | 6.25 [159] | 10.12 [257] | 20.25 [514] | 22.50 [572] | .69 [18] | 5.00 [127] | 8.49 [216] |
| | | 6.00 † [152] | 254TC/256TC | 44.76 [1137] | 24.12 [613] | 58.25 [1480] | | | | | | | | | |
| | 3" | 6.31 † [160] | 284TC/286TC | 46.98 [1183] | 25.75 [654] | 61.50 [1562] | 14.91 [378] | | | | | | | | |
| GMS N | 1 1/2" | | 213TC/215TC | 41.98 [1066] | | | | | | | | | | | |
| | 2" | 5.12 * [130] | 213TC/215TC | 40.85 [1038] | 23.00 [584] | 56.00 [1422] | 12.14 [308] | | | | | | | | |
| | | | | 254TC/256TC | 42.42 [1077] | | | | 8.00 [152] | 6.25 [159] | 10.12 [257] | 20.25 [514] | 22.50 [572] | .69 [18] | 5.00 [127] |
| | 2 1/2" | 7.19 † [183] | 254TC/256TC | 41.31 [1049] | 24.12 [613] | 58.25 [1480] | | | | | | | | | 8.70 [221] |
| 3" | | 284TC/286TC | 45.15 [1147] | 25.75 [654] | 61.50 [1562] | 14.91 [379] | | | | | | | | * | |
| GMS R | 2" | | 184TC | 38.50 [978] | 22.62 [575] | 55.25 [11403] | 10.80 [274] | | | | | | | | |
| | 2 1/2" | 6.50 * [165] | 213TC/215TC | 43.80 [1112] | 25.28 [642] | 60.56 [1538] | 12.26 [311] | 8.00 [203] | 7.00 [178] | 10.38 [264] | 20.75 [527] | 23.00 [584] | .69 [18] | 5.00 [127] | 11.31 [287] |
| | | | | 213TC/215TC | 43.80 [1112] | 25.28 [642] | 60.56 [1538] | 12.26 [311] | | | | | | | |
| | 3" | 7.19 † [183] | 254TC/256TC | 48.75 [1238] | 27.75 [705] | 65.50 [1664] | 16.04 [407] | | | | | | | | |
| 4" | | 284TC/286TC | | | | | | | | | | | | | |

* STANDARD DIMENSION

† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125* OR 250* ANSI/AST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

CROSS REFERENCE OF MOTOR FRAMES TO GEARBOX RATIOS:

- Ⓐ 2:1, 3.15:1 (15 hp Only), 2.5:1
- Ⓑ 3.15:1 (20 hp Only), 4:1, 5:1
- Ⓒ 2.5:1, 4:1
- Ⓓ 3.15:1, 5:1

REFERENCE: PUMP FOOT BRACKET OPTIONS

| MOTOR FRAME | CENTER HEIGHT | PUMP OPTION |
|------------------|---------------|---------------------------|
| 213TC thru 286TC | 6.25" | 80P ("J" & "N" Size Only) |
| 182TC thru 326TC | 7.00" | STD ("R" Size Only) |



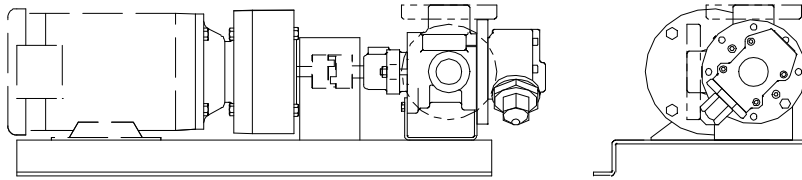
GMS

SEC. 525

PAGE 19
January 2010

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 D | 875 | 575 | 2.00:1 | 5.65 | 3.73 | 56C | STD | 90253-510 | |
| | | | | 11.70 | 7.72 | 143TC/145TC | STD | 90253-516 | |
| | | | | 11.70 | 7.72 | 182C/184C | 80F | 90253-519 | |
| | | | | 13.01 | 8.59 | 182TC/184TC | 80F | 90253-526 | |
| | 580 | 383 | 3.00:1 | 3.76 | 2.48 | 56C | STD | 90253-530 | |
| | | | | 8.10 | 5.35 | 143TC/145TC | STD | 90253-533 | |
| | | | | 8.10 | 5.35 | 182C/184C | 80F | 90253-539 | |
| | 440 | 288 | 4.00:1 | 10.62 | 7.01 | 182TC/184TC | 80F | 90253-546 | |
| | | | | 2.82 | 1.86 | 56C | STD | 90253-550 | |
| | | | | 5.90 | 3.89 | 143TC/145TC | STD | 90253-553 | |
| | 350 | 230 | 5.00:1 | 5.90 | 3.89 | 182C/184C | 80F | 90253-562 | |
| | | | | 7.24 | 4.78 | 182TC/184TC | 80F | 90253-566 | |
| | | | | 2.26 | 1.49 | 56C | STD | 90253-570 | |
| | | | | 5.20 | 3.43 | 143TC/145TC | STD | 90253-573 | |
| | GMS G | 875 | 575 | 2.00:1 | 5.20 | 3.43 | 182C/182C | 80F | 90253-582 |
| | | | | | 5.98 | 3.95 | 182TC/184TC | 80F | 90253-586 |
| 5.65 | | | | | 3.73 | 56C | STD | 90253-610 | |
| 11.70 | | | | | 7.72 | 143TC/145TC | STD | 90253-616 | |
| 11.70 | | | | | 7.72 | 182C/184C | 80F | 90253-624 | |
| 580 | | 383 | 3.00:1 | 13.01 | 8.59 | 182TC/184TC | 80F | 90253-626 | |
| | | | | 13.01 | 8.59 | 213TC/213TC | 80J | 90253-628 | |
| | | | | 3.76 | 2.48 | 56C | STD | 90253-630 | |
| | | | | 8.10 | 5.35 | 143TC/145TC | STD | 90253-639 | |
| 440 | | 288 | 4.00:1 | 8.10 | 5.35 | 182C/184C | 80F | 90223-639 | |
| | 10.62 | | | 7.01 | 182TC/184TC | 80F | 90253-646 | | |
| | 10.62 | | | 7.01 | 213TC/215TC | 80J | 90253-648 | | |
| | 2.82 | | | 1.86 | 56C | STD | 90253-660 | | |
| 350 | 230 | 5.00:1 | 5.90 | 3.89 | 143TC/145TC | STD | 90253-663 | | |
| | | | 5.90 | 3.89 | 182C/184C | 80F | 90253-672 | | |
| | | | 7.24 | 4.78 | 182TC/184TC | 80F | 90253-675 | | |
| | | | 7.24 | 4.78 | 213TC | 80J | 90253-677 | | |
| | | | 2.26 | 1.49 | 56C | STD | 90253-690 | | |
| 350 | 230 | 5.00:1 | 5.20 | 3.43 | 143TC/145TC | STD | 90253-693 | | |
| | | | 5.20 | 3.43 | 182C/184C | 80F | 90253-702 | | |
| | | | 5.89 | 3.95 | 182TC/184TC | 80F | 90253-705 | | |
| | | | 5.89 | 3.95 | 213TC | 80J | 90253-707 | | |

(CONT'D)

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.



GMS

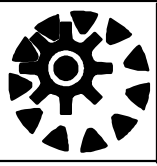
GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

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

| PUMP MODEL | RPM @ 1750 | RPM @ 1150 | REDUCER ^① | | FRAME | MTG.FT. OPTION REQ. | DRIVE ASSY NO. | |
|------------|------------|------------|----------------------|---------------|-------------|---------------------|----------------|-----------|
| | | | MAX HP @ 1750 | MAX HP @ 1150 | | | | |
| GMS J | 875 | 575 | 2.00:1 | 13.01 | 8.59 | 182TC/184TC | 80F | 90253-722 |
| | | | | 13.01 | 8.59 | 213TC/215TC | STD | 90253-724 |
| | | | | 36.29 | 23.95 | 254TC/256TC | 80P | 90253-728 |
| | | | | 36.29 | 23.95 | 284TC/286TC | 80P | 90253-732 |
| | 580 | 383 | 3.00:1 | 10.62 | 7.01 | 182TC/184TC | 80F | 90253-735 |
| | | | | 10.62 | 7.01 | 213TC/215TC | 80J | 90253-741 |
| | 550 | 365 | 3.15:1 | 25.76 | 17.00 | 254TC/256TC | 80P | 90253-743 |
| | | | | 25.76 | 17.00 | 284TC | 80P | 90253-746 |
| | | | | 42.96 | 28.35 | 286TC | 80P | 90253-747 |
| | 440 | 288 | 4.00:1 | 7.24 | 4.78 | 182TC/184TC | 80F | 90253-750 |
| | | | | 7.24 | 4.78 | 213TC | 80J | 90253-754 |
| | 350 | 230 | 5.00:1 | 5.98 | 3.95 | 182TC/184TC | 80F | 90253-767 |
| | | | | 5.98 | 3.95 | 213TC | STD | 90253-769 |
| | | | | 16.01 | 10.57 | 215TC | 80P | 90253-774 |
| | | | | 30.49 | 20.12 | 254TC/256TC | 80J | 90253-778 |
| | GMS N | 875 | 575 | 2.00:1 | 13.01 | 8.59 | 213TC/215TC | STD |
| 36.29 | | | | | 23.95 | 254TC/256TC | 80P | 90253-801 |
| 36.29 | | | | | 23.95 | 284TC/286TC | 80P | 90253-805 |
| 580 | | 383 | 3.00:1 | 10.62 | 7.01 | 213TC/215TC | STD | 90253-814 |
| | | | | 25.76 | 17.00 | 254TC/256TC | 80P | 90253-819 |
| 550 | | 365 | 3.15:1 | 42.96 | 28.35 | 284TC/286TC | 80P | 90253-820 |
| | | | | 7.24 | 4.78 | 213TC | STD | 90253-827 |
| 350 | | 230 | 5.00:1 | 5.98 | 3.95 | 213TC | STD | 90253-842 |
| | | | | 16.01 | 10.57 | 215TC | 80P | 90253-845 |
| | | | | 30.49 | 20.12 | 254TC/256TC | 80P | 90253-847 |
| GMS R | 640 | 417 | 2.76:1 | 80.20 | 52.93 | 324TC | STD | 90253-874 |
| | | | | 80.20 | 52.93 | 364TC | STD | 90253-878 |
| | 555 | 365 | 3.15:1 | 10.10 | 6.66 | 213TC/215TC | STD | 90253-881 |
| | | | | 25.76 | 17.00 | 254TC/256TC | STD | 90253-886 |
| | | | | 42.96 | 28.35 | 284TC/286TC | STD | 90253-891 |
| | 520 | 340 | 3.38:1 | 66.20 | 43.69 | 324TC | STD | 90253-896 |
| | | | | 66.20 | 43.69 | 326TC | STD | 90253-898 |
| | 440 | 288 | 4.00:1 | 9.42 | 6.22 | 184TC | STD | 90253-901 |
| | | | | 20.00 | 13.20 | 213TC/215TC | STD | 90253-904 |
| | | | | 38.16 | 25.18 | 254TC/256TC | STD | 90253-909 |
| | | | | 38.16 | 25.18 | 284TC | STD | 90253-913 |
| | 420 | 278 | 4.13:1 | 40.40 | 26.40 | 286TC | STD | 90253-916 |
| | | | | 54.40 | 35.90 | 324TC | STD | 90253-918 |
| | 350 | 230 | 5.00:1 | 6.10 | 4.03 | 184TC | STD | 90253-921 |
| | | | | 16.01 | 10.57 | 213TC/215TC | STD | 90253-924 |
| 30.49 | | | | 20.12 | 254TC/256TC | STD | 90253-929 | |
| 30.49 | | | | 20.12 | 284TC/286TC | STD | 90253-933 | |

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.

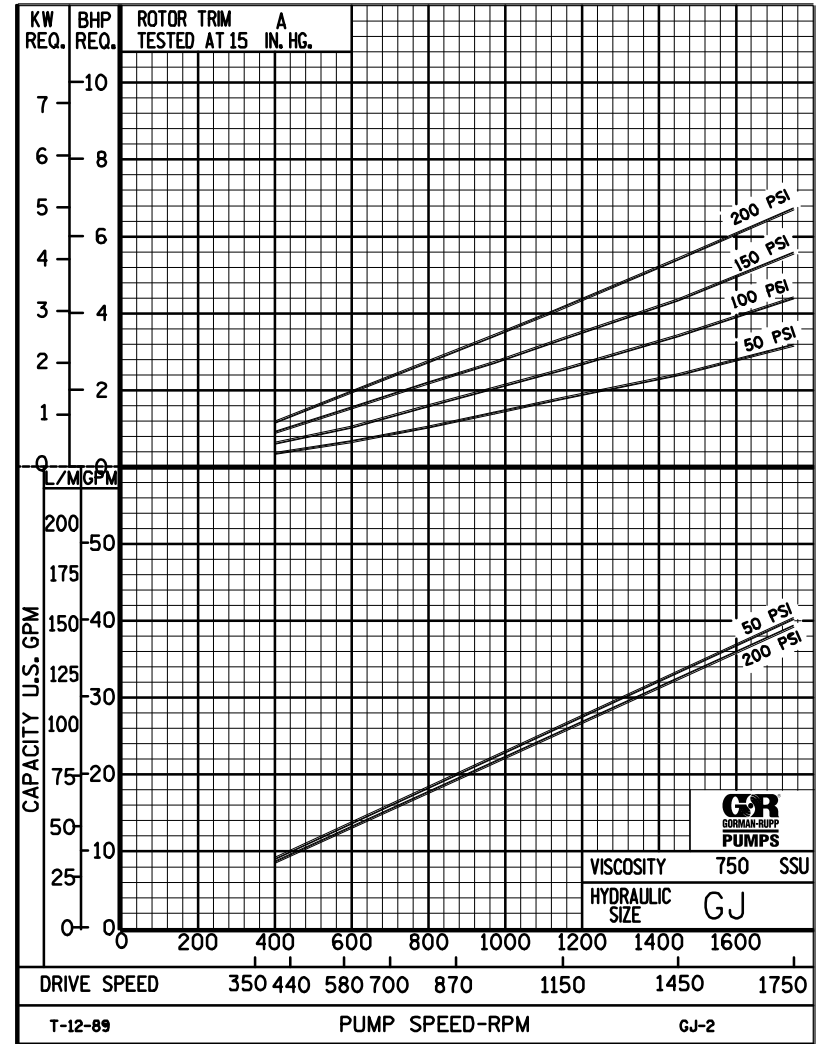
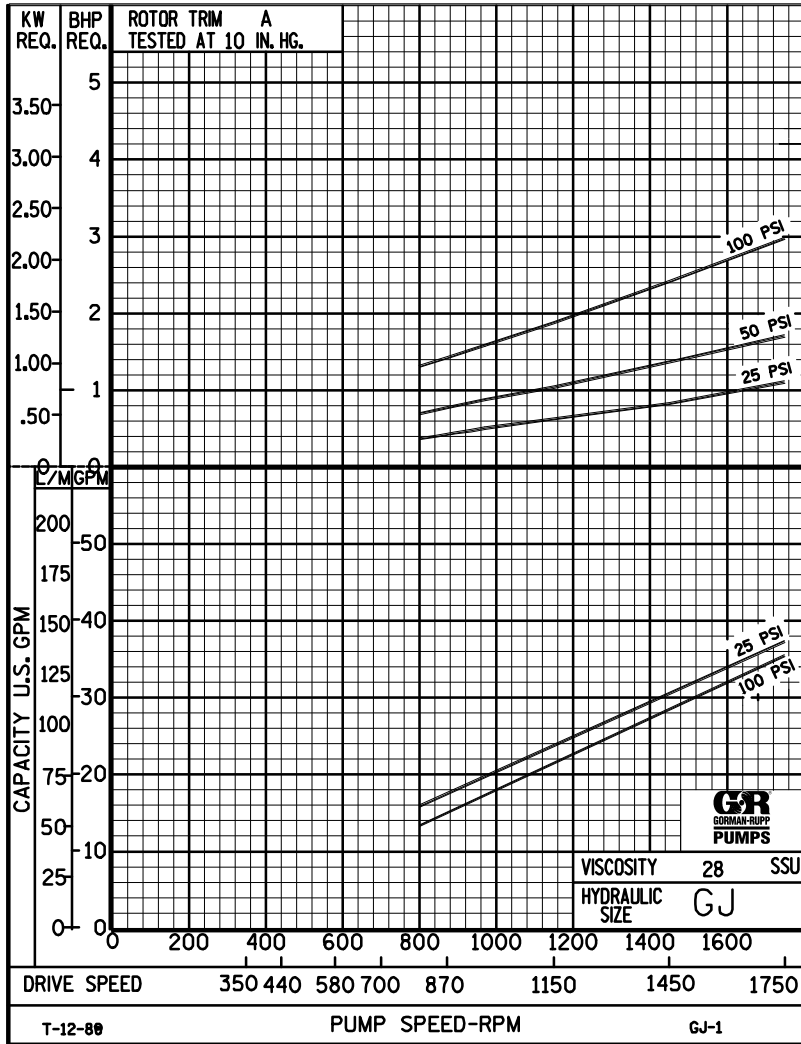


PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GJ

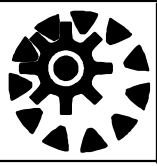
Hydraulic Size



THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO

GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

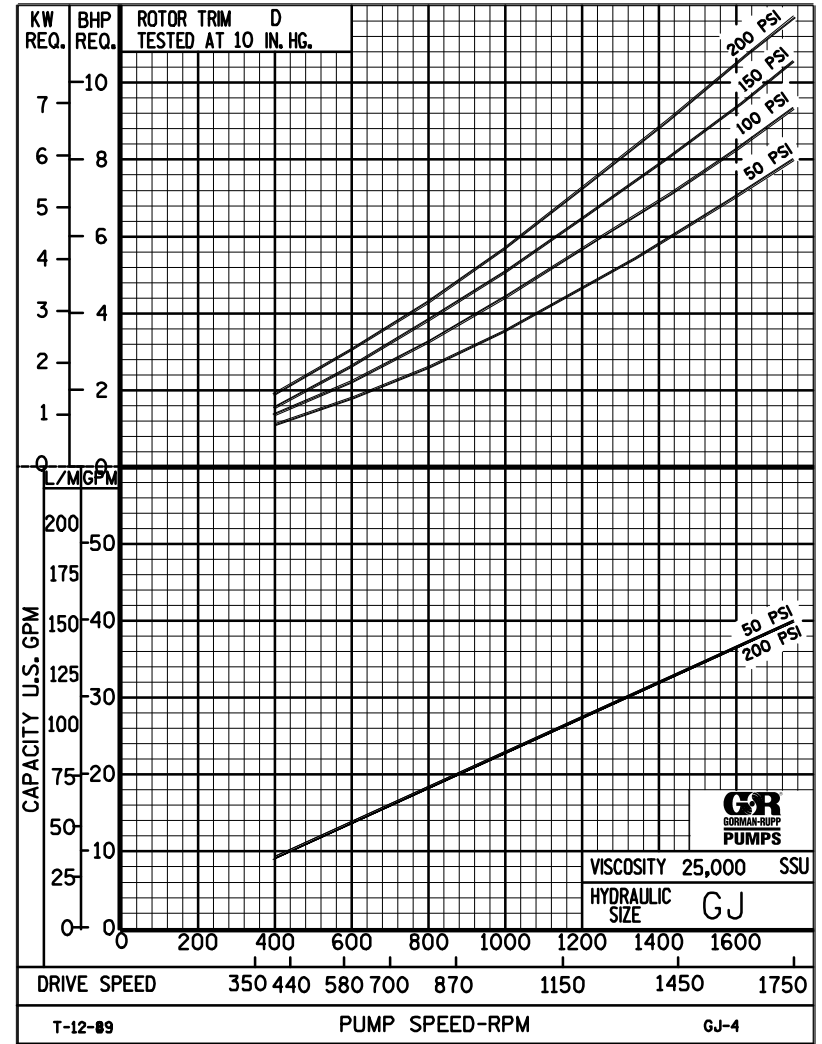
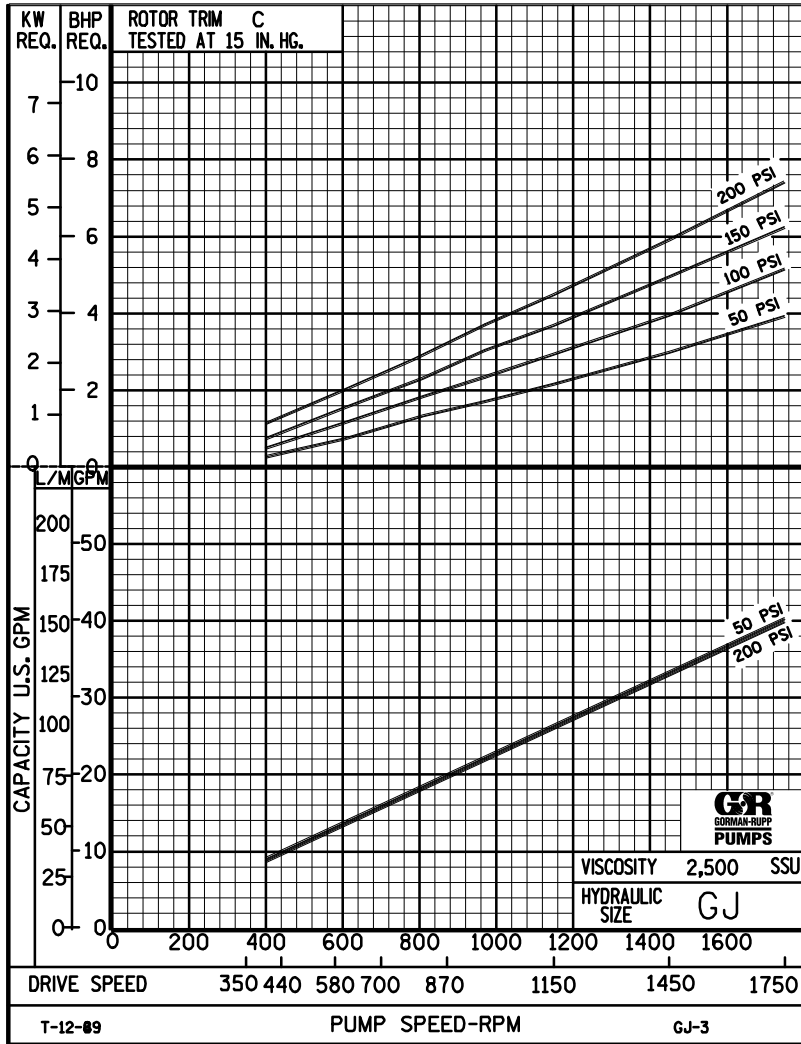
Printed in U.S.A.



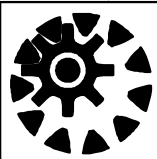
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GJ Hydraulic Size



THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO
 GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA



GJ

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 58

January 2010

**38 GPM
1750 RPM**

| NOMINAL | | ROTOR TRIM | VISCOSITY (SSU) | N.I.P.R. (PSIA) | FRICTION PIPE LOSS (PSI/FT) <small>(Based on Sch 40 Steel Pipe)</small> | | | | | FULL BYPASS RELIEF VALVE PRESSURE (PSI) | | | | | CAPACITY (GPM) / H.P. REQUIRED | | | | | | | | | | | |
|----------|-----------|------------|-----------------|-----------------|--|------|--------|--------|-----|---|-----|-----|-------------|-----|--------------------------------|-----|-----|-----|-----------------|-----|-----|-----|--|--|--|--|
| CAP. GPM | SPEED RPM | | | | PIPE DIAMETER | | | | | CRACKING PRESS. (PSI) | | | | | DIFFERENTIAL PRESSURE (PSI) | | | | | | | | | | | |
| | | | | | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | | | | |
| 38 | 1750 | STD | 28 | 4.5 | .02 | .01 | .01 | .01 | .01 | 74 | 100 | 127 | | | | 37 | 36 | 36 | 35 | | | | | | | |
| | | | 32 | | .88 | .28 | .08 | .04 | .01 | | | | | | | 1.1 | 1.7 | 2.4 | 3.0 | | | | | | | |
| | | | 38 | 4.5 | 1.12 | .35 | .10 | .05 | .02 | 74 | 100 | 128 | 180 | | | | 38 | 37 | 37 | 37 | 36 | | | | | |
| | | | 50 | | 1.33 | .44 | .12 | .06 | .02 | | | | | | | | 1.5 | 2.0 | 2.6 | 3.2 | 4.5 | | | | | |
| | | | 70 | 4.5 | 1.45 | .46 | .13 | .06 | .02 | 76 | 101 | 128 | 182 | 240 | | | 39 | 38 | 38 | 38 | 37 | 36 | | | | |
| | | | 100 | | 1.74 | .56 | .16 | .08 | .03 | | | | | | | | 1.5 | 2.1 | 2.8 | 3.4 | 4.7 | 6.0 | | | | |
| | | | 150 | 4.5 | 1.91 | .63 | .17 | .08 | .03 | 78 | 103 | 130 | 184 | 242 | | | 39 | 39 | 39 | 38 | 38 | 38 | | | | |
| | | | 200 | | 2.26 | .72 | .18 | .09 | .03 | | | | | | | | 1.9 | 2.5 | 3.1 | 3.7 | 4.9 | 6.1 | | | | |
| | | | 300 | 4.5 | 2.45 | .81 | .19 | .10 | .04 | 78 | 103 | 132 | 184 | 244 | | | 40 | 40 | 39 | 39 | 39 | 38 | | | | |
| | | | 500 | | 2.82 | .92 | .31 | .17 | .06 | | | | | | | | 2.1 | 2.8 | 3.6 | 4.3 | 5.4 | 6.5 | | | | |
| | | 750 | 4.5 | 3.64 | 1.39 | .46 | .25 | .09 | 80 | 105 | 134 | 186 | 246 | | | 40 | 40 | 40 | 40 | 39 | 39 | | | | | |
| | | 1,000 | | 4.85 | 1.85 | .62 | .33 | .12 | | | | | | | | 2.3 | 3.2 | 3.8 | 4.4 | 5.6 | 6.7 | | | | | |
| | | 2,000 | 5.9 | 9.69 | 3.69 | 1.23 | .67 | .25 | 80 | 105 | 136 | 186 | 247 | | | 40 | 40 | 40 | 40 | 39 | 39 | | | | | |
| | | 3,500 | | 17.0 | 6.46 | 2.16 | 1.17 | .43 | | | | | | | | 3.3 | 3.9 | 4.6 | 5.1 | 6.3 | 7.4 | | | | | |
| | | 5,000 | 6.8 | 24.3 | 9.23 | 3.08 | 1.66 | .61 | 86 | 106 | 136 | 186 | 247 | | | 40 | 40 | 40 | 40 | 40 | 40 | | | | | |
| | | 7,500 | | 36.4 | 13.9 | 4.62 | 2.50 | .92 | | | | | | | | 4.8 | 5.3 | 5.9 | 6.5 | 7.6 | 8.8 | | | | | |
| | | 10,000 | 7.7 | 48.5 | 18.5 | 6.16 | 3.33 | 1.23 | 92 | 117 | 142 | 192 | 247 | | | 40 | 40 | 40 | 40 | 40 | 40 | | | | | |
| | | 15,000 | | 72.7 | 27.7 | 9.24 | 4.99 | 1.84 | | | | | | | | 6.0 | 6.7 | 7.2 | 7.8 | 9.0 | 10 | | | | | |
| | | 20,000 | 8.5 | 97.0 | 36.9 | 12.3 | 6.65 | 2.45 | 98 | 123 | 148 | 198 | 248 | | | 40 | 40 | 40 | 40 | 40 | 40 | | | | | |
| | | 25,000 | | 121 | 46.1 | 15.4 | 8.31 | 3.06 | | | | | | | | 7.4 | 8.0 | 8.7 | 9.4 | 11 | 12 | | | | | |
| 50,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 75,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |

(NOTE) For speeds not shown on the pump hydraulic charts, consult factory.



GJ

PUMP HYDRAULIC SIZE CHART

SEC. 500

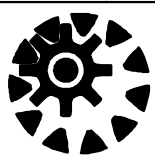
Page 59

January 2010

**25 GPM
1150 RPM**

| NOMINAL | | ROTOR TRIM | VISCOSITY (SSU) | N.I.P.R. (PSIA) | FRICTION PIPE LOSS (PSI/FT) <small>(Based on Sch 40 Steel Pipe)</small> | | | | | FULL BYPASS RELIEF VALVE PRESSURE (PSI) | | | | | CAPACITY (GPM) / H.P. REQUIRED | | | | | | | | | | | |
|----------|-----------|------------|-----------------|-----------------|--|------|--------|--------|-----|---|-----|-----|-------------|-----|--------------------------------|-----|-----|-----|-----------------|-----|-----|-----|--|--|--|--|
| CAP. GPM | SPEED RPM | | | | PIPE DIAMETER | | | | | CRACKING PRESS. (PSI) | | | | | DIFFERENTIAL PRESSURE (PSI) | | | | | | | | | | | |
| | | | | | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | | | | |
| 25 | 1150 | STD | 28 | 2.5 | .01 | .01 | .01 | .01 | .01 | 66 | 92 | 118 | | | 23 | 23 | 22 | 21 | | | | | | | | |
| | | | 32 | | .42 | .13 | .04 | .02 | .01 | | | | | | .63 | 1.0 | 1.5 | 1.9 | | | | | | | | |
| | | | 38 | 2.5 | .53 | .17 | .05 | .02 | .01 | 66 | 92 | 118 | 170 | | | 24 | 24 | 23 | 22 | 21 | | | | | | |
| | | | 50 | | .64 | .21 | .06 | .03 | .01 | | | | | | | .95 | 1.2 | 1.6 | 2.0 | 2.6 | | | | | | |
| | | | 70 | 2.5 | .70 | .23 | .06 | .03 | .01 | 67 | 93 | 120 | 170 | 230 | | | 25 | 25 | 24 | 23 | 23 | 22 | | | | |
| | | | 100 | | .85 | .27 | .08 | .04 | .01 | | | | | | | | 1.2 | 1.4 | 1.7 | 2.1 | 3.0 | 3.7 | | | | |
| | | | 150 | 2.5 | .94 | .32 | .08 | .04 | .01 | 67 | 93 | 122 | 172 | 232 | | | 26 | 26 | 25 | 24 | 24 | 22 | | | | |
| | | | 200 | | .97 | .35 | .10 | .06 | .02 | | | | | | | | 1.3 | 1.5 | 1.9 | 2.3 | 3.1 | 3.8 | | | | |
| | | | 300 | 2.5 | .99 | .37 | .13 | .07 | .03 | 68 | 95 | 122 | 174 | 234 | | | 26 | 26 | 25 | 25 | 25 | 24 | | | | |
| | | | 500 | | 1.60 | .61 | .21 | .11 | .04 | | | | | | | | 1.3 | 1.7 | 2.3 | 2.5 | 3.5 | 4.0 | | | | |
| | | 750 | 2.5 | 2.39 | .91 | .31 | .17 | .06 | 68 | 95 | 124 | 174 | 235 | | | 26 | 26 | 26 | 26 | 25 | 25 | | | | | |
| | | 1,000 | | 3.19 | 1.22 | .41 | .22 | .08 | | | | | | | | 1.3 | 1.8 | 2.2 | 2.5 | 3.3 | 4.2 | | | | | |
| | | 2,000 | 3.4 | 6.38 | 2.43 | .81 | .44 | .16 | 69 | 98 | 125 | 175 | 235 | | | 26 | 26 | 26 | 26 | 26 | 26 | | | | | |
| | | 3,500 | | 11.2 | 4.25 | 1.42 | .77 | .28 | | | | | | | | 1.8 | 2.3 | 2.8 | 3.2 | 3.9 | 4.7 | | | | | |
| | | 5,000 | 4.0 | 16.0 | 6.07 | 2.03 | 1.09 | .41 | 78 | 105 | 130 | 180 | 237 | | | 26 | 26 | 26 | 26 | 26 | 26 | | | | | |
| | | 7,500 | | 23.9 | 9.10 | 3.04 | 1.64 | .61 | | | | | | | | 2.4 | 2.9 | 3.4 | 3.7 | 4.7 | 5.2 | | | | | |
| | | 10,000 | 4.7 | 31.9 | 12.2 | 4.06 | 2.19 | .81 | 87 | 112 | 137 | 187 | 237 | | | 26 | 26 | 26 | 26 | 26 | 26 | | | | | |
| | | 15,000 | | 47.8 | 18.2 | 6.08 | 3.28 | 1.21 | | | | | | | | 2.9 | 3.7 | 4.2 | 4.5 | 5.4 | 6.0 | | | | | |
| | | 20,000 | 5.2 | 63.8 | 24.3 | 8.11 | 4.38 | 1.61 | 87 | 112 | 137 | 187 | 237 | | | 26 | 26 | 26 | 26 | 26 | 26 | | | | | |
| | | 25,000 | | 79.7 | 30.4 | 10.2 | 5.47 | 2.02 | | | | | | | | 4.0 | 4.5 | 4.9 | 5.3 | 6.1 | 6.8 | | | | | |
| 50,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 75,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 100,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |

(NOTE) For speeds not shown on the pump hydraulic charts, consult factory.



GJ

PUMP HYDRAULIC SIZE CHART

SEC. 500

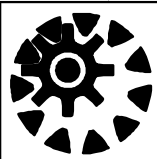
Page 60

January 2010

**19 GPM
870 RPM**

| NOMINAL | | ROTOR TRIM | VISCOSITY (SSU) | N.I.P.R. (PSIA) | FRICTION PIPE LOSS (PSI/FT) <small>(Based on Sch 40 Steel Pipe)</small> | | | | | FULL BYPASS RELIEF VALVE PRESSURE (PSI) | | | | | CAPACITY (GPM) / H.P. REQUIRED | | | | | | | | |
|----------|-----------|------------|-----------------|-----------------|--|------|--------|--------|------|---|-----|-----|-------------|-----|--------------------------------|-----|-----|-----|-----------------|-----|-----|--|--|
| CAP. GPM | SPEED RPM | | | | PIPE DIAMETER | | | | | CRACKING PRESS. (PSI) | | | | | DIFFERENTIAL PRESSURE (PSI) | | | | | | | | |
| | | | | | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | |
| | | | | | | | 50 | 75 | 100 | 150 | 200 | 25 | 50 | 75 | 100 | 150 | 200 | 300 | 400 | | | | |
| 19 | 870 | STD | 28 | 1.7 | .01 | .01 | .01 | .01 | .01 | 64 | 90 | 116 | | | 17 | 16 | 16 | 15 | | | | | |
| | | | 32 | | .26 | .08 | .02 | .01 | .01 | | | | | | .45 | .79 | 1.1 | 1.4 | | | | | |
| | | | 38 | 1.7 | .33 | .11 | .03 | .02 | .01 | 64 | 90 | 116 | 168 | | 18 | 17 | 17 | 16 | 15 | | | | |
| | | | 50 | | .40 | .13 | .04 | .02 | .01 | | | | | | .58 | .81 | 1.1 | 1.5 | 2.2 | | | | |
| | | | 70 | 1.7 | .44 | .14 | .04 | .02 | .01 | 65 | 91 | 118 | 168 | 228 | 19 | 18 | 18 | 17 | 17 | 16 | | | |
| | | | 100 | | .53 | .17 | .05 | .02 | .01 | | | | | | .61 | .85 | 1.3 | 1.6 | 2.4 | 2.7 | | | |
| | | | 150 | 1.7 | .58 | .19 | .06 | .03 | .01 | 65 | 91 | 120 | 170 | 230 | 19 | 19 | 18 | 18 | 18 | 17 | | | |
| | | | 200 | | .62 | .23 | .08 | .04 | .01 | | | | | | .65 | .90 | 1.4 | 1.6 | 2.6 | 3.0 | | | |
| | | | 300 | 1.7 | .74 | .28 | .10 | .05 | .02 | 66 | 93 | 120 | 172 | 232 | 19 | 19 | 19 | 19 | 18 | 18 | | | |
| | | | 500 | | 1.21 | .46 | .16 | .09 | .03 | | | | | | .77 | 1.1 | 1.4 | 1.7 | 2.7 | 3.1 | | | |
| | | 750 | 1.7 | 1.82 | .69 | .23 | .13 | .05 | 66 | 93 | 122 | 172 | 233 | 20 | 20 | 19 | 19 | 19 | 19 | | | | |
| | | 1,000 | | 2.43 | .92 | .31 | .17 | .06 | | | | | | .81 | 1.3 | 1.6 | 1.9 | 2.9 | 3.3 | | | | |
| | | | | 2,000 | 2.5 | 4.85 | 1.85 | .62 | .33 | .12 | 67 | 96 | 123 | 173 | 233 | 20 | 20 | 20 | 19 | 19 | 19 | | |
| | | | | | | 8.48 | 3.23 | 1.08 | .58 | .22 | | | | | | 1.2 | 1.5 | 1.9 | 2.1 | 3.1 | 3.4 | | |
| | | | | 5,000 | 3.1 | 12.1 | 4.61 | 1.54 | .83 | .31 | 76 | 103 | 128 | 178 | 235 | 20 | 20 | 20 | 20 | 19 | 19 | | |
| | | | | | | 18.2 | 6.92 | 2.31 | 1.25 | .46 | | | | | | 1.6 | 2.0 | 2.3 | 2.6 | 3.5 | 3.8 | | |
| | | | | 10,000 | 3.7 | 24.3 | 9.23 | 3.08 | 1.66 | .61 | 85 | 110 | 135 | 185 | 235 | 20 | 20 | 20 | 20 | 19 | 19 | | |
| | | | | | | 36.4 | 13.9 | 4.62 | 2.50 | .92 | | | | | | 2.1 | 2.5 | 2.9 | 3.3 | 3.9 | 4.4 | | |
| | | | | 20,000 | 4.1 | 48.5 | 18.5 | 6.16 | 3.33 | 1.23 | 85 | 110 | 135 | 185 | 235 | 19 | 19 | 19 | 19 | 19 | 19 | | |
| | | | | | | 60.6 | 23.1 | 7.70 | 4.16 | 1.53 | | | | | | 2.8 | 2.9 | 3.2 | 3.6 | 4.1 | 5.0 | | |
| | | 50,000 | 4.5 | 121 | 46.2 | 15.4 | 8.32 | 3.06 | 85 | 114 | 141 | 193 | 246 | 19 | 19 | 19 | 19 | 19 | 19 | | | | |
| | | | | - | - | - | - | - | | | | | | 3.7 | 4.1 | 4.5 | 4.9 | 5.2 | 5.6 | | | | |
| | | 100,000 | | | | | | | | | | | | | | | | | | | | | |
| | | 150,000 | | | | | | | | | | | | | | | | | | | | | |
| | | 200,000 | | | | | | | | | | | | | | | | | | | | | |
| | | 250,000 | | | | | | | | | | | | | | | | | | | | | |

(NOTE) For speeds not shown on the pump hydraulic charts, consult factory.



GJ

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 61

January 2010

**13 GPM
580 RPM**

| NOMINAL | | ROTOR TRIM | VISCOSITY (SSU) | N.I.P.R. (PSIA) | FRICTION PIPE LOSS (PSI/FT) <small>(Based on Sch 40 Steel Pipe)</small> | | | | | FULL BYPASS RELIEF VALVE PRESSURE (PSI) | | | | | CAPACITY (GPM) / H.P. REQUIRED | | | | | | | | | | | |
|----------|-----------|------------|-----------------|-----------------|--|------|--------|--------|-----|---|-----|-----|-------------|-----|--------------------------------|-----|-----|-----|-----------------|------|-----|-----|--|--|--|--|
| CAP. GPM | SPEED RPM | | | | PIPE DIAMETER | | | | | CRACKING PRESS. (PSI) | | | | | DIFFERENTIAL PRESSURE (PSI) | | | | | | | | | | | |
| | | | | | 3/4" | 1" | 1 1/4" | 1 1/2" | 2" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | | | | |
| 13 | 580 | STD | 28 | 1.2 | .01 | .01 | .01 | .01 | .01 | 58 | 84 | 109 | | | 11 | 11 | 10 | 10 | | | | | | | | |
| | | | 32 | | .13 | .04 | .01 | .01 | .01 | | | | | | .36 | .60 | .81 | 1.0 | | | | | | | | |
| | | | 38 | 1.2 | .17 | .06 | .02 | .01 | .01 | 58 | 84 | 109 | 159 | | | 12 | 11 | 11 | 11 | 10 | | | | | | |
| | | | 50 | | .21 | .07 | .02 | .01 | .01 | | | | | | | .47 | .63 | .93 | 1.2 | 1.7 | | | | | | |
| | | | 70 | 1.2 | .23 | .08 | .03 | .01 | .01 | 60 | 86 | 111 | 161 | 219 | | | 12 | 12 | 12 | 11 | 11 | 10 | | | | |
| | | | 100 | | .28 | .09 | .03 | .01 | .01 | | | | | | | | .50 | .69 | .99 | 1.3 | 1.8 | 2.0 | | | | |
| | | | 150 | 1.2 | .34 | .11 | .04 | .02 | .01 | 60 | 86 | 111 | 162 | 220 | | | 13 | 12 | 12 | 12 | 12 | 11 | | | | |
| | | | 200 | | .43 | .15 | .06 | .03 | .01 | | | | | | | | .57 | .80 | 1.1 | 1.3 | 1.8 | 2.1 | | | | |
| | | | 300 | 1.2 | .52 | .20 | .07 | .04 | .01 | 62 | 88 | 113 | 164 | 222 | | | 13 | 13 | 13 | 12 | 12 | 12 | | | | |
| | | | 500 | | .83 | .34 | .11 | .06 | .02 | | | | | | | | .66 | .92 | 1.2 | 1.4 | 1.8 | 2.2 | | | | |
| | | 750 | 1.2 | 1.26 | .49 | .16 | .09 | .03 | 62 | 88 | 113 | 164 | 222 | | | 13 | 13 | 13 | 13 | 12.9 | 12 | | | | | |
| | | 1,000 | | 1.68 | .65 | .21 | .12 | .05 | | | | | | | | .74 | 1.1 | 1.3 | 1.5 | 1.9 | 2.2 | | | | | |
| | | 2,000 | 1.9 | 3.23 | 1.32 | .44 | .24 | .09 | 63 | 90 | 115 | 165 | 223 | | | 13 | 13 | 13 | 13 | 12 | 12 | | | | | |
| | | 3,500 | | 6.10 | 2.31 | .77 | .42 | .16 | | | | | | | | .92 | 1.3 | 1.5 | 1.7 | 2.1 | 2.2 | | | | | |
| | | 5,000 | 2.4 | 8.25 | 3.28 | 1.11 | .58 | .23 | 67 | 92 | 117 | 165 | 223 | | | 13 | 13 | 13 | 13 | 13 | 13 | | | | | |
| | | 7,500 | | 13.1 | 5.01 | 1.61 | .89 | .33 | | | | | | | | 1.2 | 1.7 | 1.9 | 2.1 | 2.5 | 2.9 | | | | | |
| | | 10,000 | 2.9 | 17.8 | 6.85 | 2.22 | 1.21 | .45 | 70 | 96 | 120 | 166 | 224 | | | 13 | 13 | 13 | 13 | 13 | 13 | | | | | |
| | | 15,000 | | 25.2 | 9.90 | 3.41 | 1.83 | .68 | | | | | | | | 1.4 | 1.7 | 2.0 | 2.2 | 2.6 | 3.0 | | | | | |
| | | 20,000 | 3.3 | 34.4 | 13.0 | 4.33 | 2.28 | .91 | 74 | 99 | 122 | 166 | 224 | | | 13 | 13 | 13 | 13 | 13 | 13 | | | | | |
| | | 25,000 | | 45.3 | 16.8 | 5.54 | 3.01 | 1.11 | | | | | | | | 1.6 | 1.8 | 2.1 | 2.3 | 2.7 | 3.1 | | | | | |
| 50,000 | 5.5 | 85.2 | 32.6 | 11.2 | 6.22 | 2.21 | 84 | 109 | 132 | 176 | 234 | | | 13 | 13 | 13 | 13 | 13 | 13 | | | | | | | |
| 75,000 | | 132 | 48.8 | 16.9 | 9.31 | 3.28 | | | | | | | | 2.4 | 2.6 | 2.9 | 3.1 | 3.6 | 3.9 | | | | | | | |
| 100,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250,000 | | | | | | | | | | | | | | | | | | | | | | | | | | |

(NOTE) For speeds not shown on the pump hydraulic charts, consult factory.