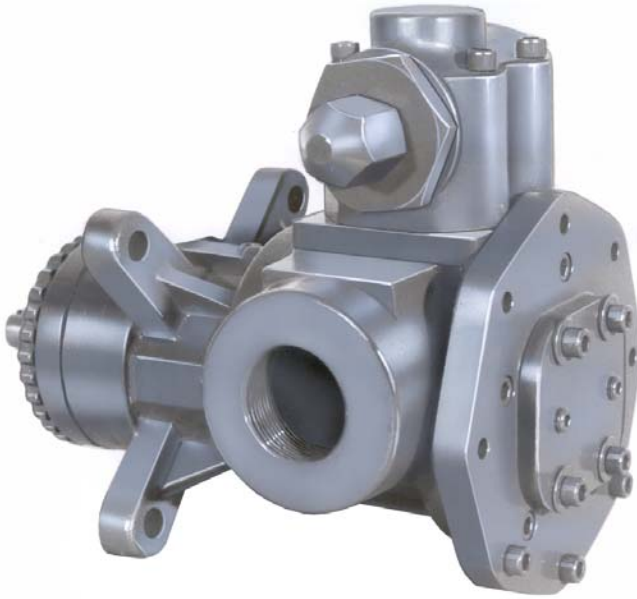


GHC SERIES HEAVY DUTY COMPACT ROTARY GEAR PUMP



SHOWN AS FLANGE MOUNT



SHOWN WITH FOOT BRACKET

The GHC iron series is designed for applications in the operating ranges noted below. These units are available with head jackets for temperature control, carbon graphite bushings for low viscosity liquids, silicon carbide bushings for wear resistance, and numerous shaft seal options described on the following pages.

These units may be foot mounted or, by using a motor adaptor, direct connected to NEMA "C" flange motors.

This heavy duty series provides superior rotor shaft support and an integral, maintenance-free radial/ thrust bearing for reduced deflection and wear.

FEATURES

*300 PSI CAPABILITY
 BALL BEARING THRUST CONTROL
 ROTOR END CLEARANCE EXTERNALLY
 ADJUSTABLE
 HIGH STRENGTH, COMPUTER
 PROFILED GEARING FOR QUIET
 OPERATION
 C-FLANGE MOTOR ADAPTATION
 MULTIPLE PORT POSITIONS*

OPERATING RANGE

CAPACITY (GPM): (3 TO 107)
 [LPM]: [11 TO 405]

PRESSURE (PSI) : [0 TO 300]
 [BAR]: [0 TO 21]

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

TEMPERATURE (F) : (-60° TO 350°)
 [C] : [-51° TO 177°]

APPLICATIONS

USE WITH ANY CLEAN LIQUID
 COMPATIBLE WITH CAST
 IRON

- ★ BOOSTER SERVICE
- ★ CIRCULATING
- ★ FILTERING
- ★ LUBRICATING
- ★ TRANSFERRING
- ★ LOW PRESSURE
 FLUID POWER

| EXTER- IOR | ROTOR & IDLER | HOUSING PORTS | BUSHINGS | IDLER PIN | SHAFT | SHAFT SEALING | | ROTATION | INTERNAL RELIEF VALVE | |
|---------------|--------------------------|------------------|----------|-------------------|-------|-----------------|--------------|----------|--------------------------|-------------------|
| | | | | | | MECH. SEAL ● | LIPSEAL ■ | | MATERIAL | SETTING |
| CAST IRON | HIGH STRENGTH IRON | 180° TAPPED | BRONZE | HARDENED STEEL | STEEL | VITON | BUNA-N | C.W. | DUCTILE IRON | 75 PSI [5 BAR] |

Standard Models

G H C 1 DC 3 - B
 GEAR DUTY DESIGN PORT SIZE HYDRAULIC SIZE SEAL STYLE

| 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 ^③ 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] | | |
| GHC 1DC 3-B ● ① GHC 1DC 4-B ■ ① | 9 [28] | | 6 [19] | | | | | | 29 [13,2] | 0.6 |
| GHC 1DE 3-B ● ① GHC 1DE 4-B ■ ① | 11 [35] | | 7 [22] | | | | | | 30 [13,6] | 0.6 |
| GHC 1-1/2 GC 3-B ● GHC 1-1/2 GC 4-B ■ | 16 [50] | | 10 [32] | | | | | | 58 [26,4] | 2.9 |
| GHC 2 GC 3-B ● GHC 2 GC 4-B ■ | | | | | | | 300 [21] | | 58 [26,4] | 2.9 |
| GHC 1-1/2 GF 3-B ● GHC 1-1/2 GF 4-B ■ | 23 [73] | 1750 [1460] | 15 [47] | 1150 [960] | | | | 350 [177] | 58 [26,4] | 2.9 |
| GHC 2 GF 3-B ● GHC 2 GF 4-B ■ | | | | | 100 [7] | 150 [10] | | | 58 [26,4] | 2.9 |
| GHC 1-1/2 GH 3-B ● GHC 1-1/2 GH 4-B ■ | 31 [98] | | 20 [63] | | | | | 225 [107] | 58 [26,4] | 2.9 |
| GHC 2 GH 3-B ● GHC 2 GH 4-B ■ | | | | | | | | | 58 [26,4] | 2.9 |
| GHC 1-1/2 GJ 3-B ● ② GHC 1-1/2 GJ 4-B ■ ② | 38 [120] | | 25 [79] | | | | | | 58 [26,4] | 2.9 |
| GHC 2 GJ 3-B ● ② GHC 2 GJ 4-B ■ ② | | | | | | | 200 [14] | | 58 [26,4] | 2.9 |
| GHC 2 JG 3-B ● GHC 2 JG 4-B ■ | | | | | | | | | 128 [58,2] | 5.3 |
| GHC 2-1/2 JG 3-B ● GHC 2-1/2 JG 4-B ■ | 40 [126] | 1150 [960] | 30 [95] | 870 [725] | | | 300 [21] | | 128 [58,2] | 5.3 |
| GHC 3 JG 3-B ● GHC 3 JG 4-B ■ | | | | | | | | | 128 [58,2] | 5.3 |

STANDARD MODELS
CONTINUED

● MECHANICAL SEAL ■ LIPSEAL

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GHC 1 DC 3-B**

- ① 3450 [2875] RPM PERMISSIBLE TO 1,000 SSU [220 cSt] AND 100 PSI [7 BAR]
- ② PUMP LIMITED TO 200 PSI MAXIMUM PRESSURE.
- ③ MAXIMUM SPEED FOR AMMONIA MODELS.

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 | Volume |
| | GPM [LPM] | RPM 60 Hz [50 HZ] | GPM [LPM] | RPM ^② 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] | | |
| GHC 2 JJ 3-B ● GHC 2 JJ 4-B ■ | 56 [177] | 1150 [960] | 42 [133] | 870 [725] | 100 [7] | 150 [10] | 300 [21] | 350 [177] | 132 [60] | 5.3 |
| GHC 2-1/2 JJ 3-B ● GHC 2-1/2 JJ 4-B ■ | | | | | | | | | 132 [60] | 5.3 |
| GHC 3 JJ 3-B ● GHC 3 JJ 4-B ■ | | | | | | | | | 132 [60] | 5.3 |
| GHC 2 JL 3-B ● GHC 2 JL 4-B ■ | 77 [243] | 1150 [960] | 58 [183] | 870 [725] | 100 [7] | 150 [10] | 300 [21] | 350 [177] | 132 [60] | 5.3 |
| GHC 2-1/2 JL 3-B ● GHC 2-1/2 JL 4-B ■ | | | | | | | | | 132 [60] | 5.3 |
| GHC 3 JL 3-B ● GHC 3 JL 4-B ■ | | | | | | | | | 132 [60] | 5.3 |
| GHC 2 JP 3-B ● ① GHC 2 JP 4-B ■ ① | 107 [338] | 1150 [960] | 81 [256] | 870 [725] | 100 [7] | 150 [10] | 200 [14] | 225 [107] | 132 [60] | 5.3 |
| GHC 2-1/2 JP 3-B ● ① GHC 2-1/2 JP 4-B ■ ① | | | | | | | | | 132 [60] | 5.3 |
| GHC 3 JP 3-B ● ① GHC 3 JP 4-B ■ ① | | | | | | | | | 132 [60] | 5.3 |

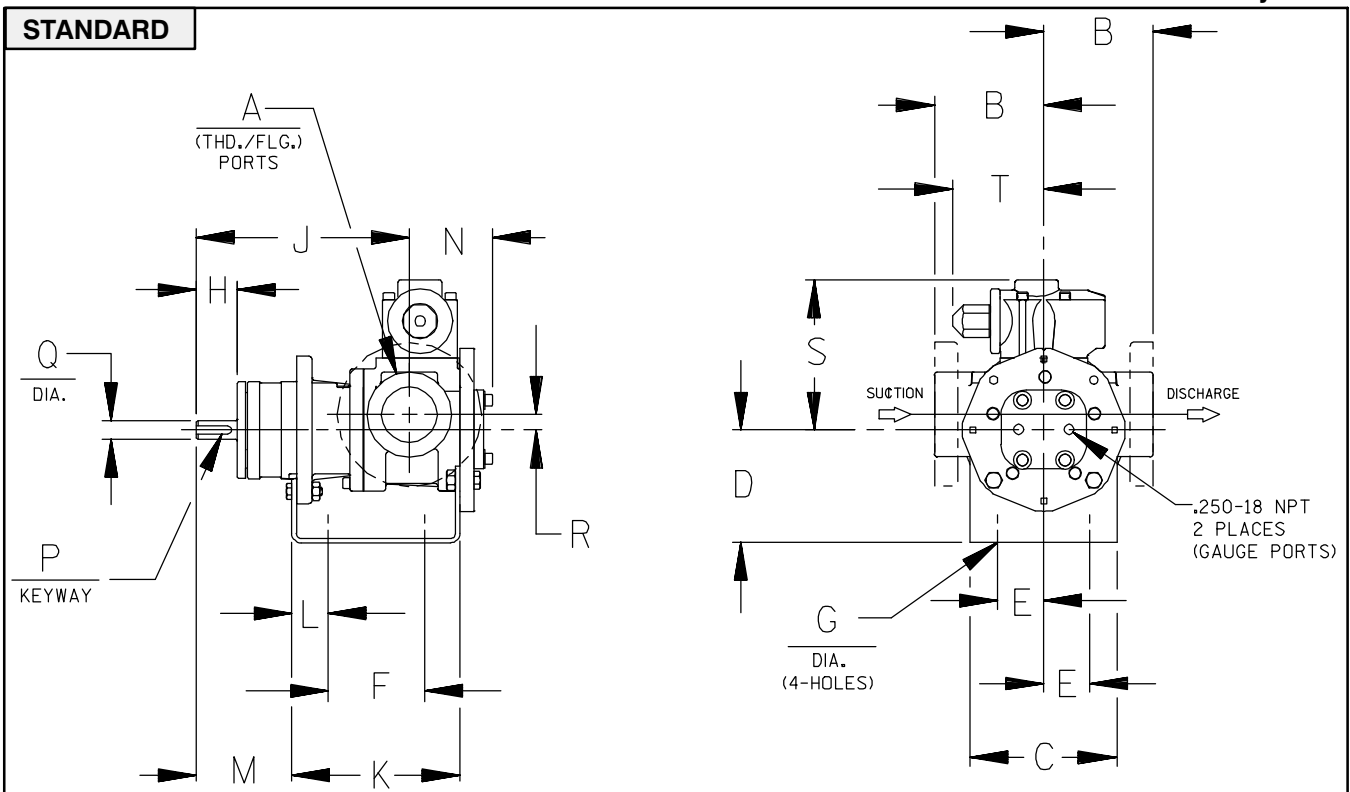
NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GHC 1 DC 3-B**

- ① PUMP LIMITED TO 200 PSI MAXIMUM PRESSURE.
- ② MAXIMUM SPEED FOR AMMONIA MODELS.

| APPLICATION RECOMMENDATIONS: | | |
|-------------------------------------|--|--|
| APPLICATION | OPTIONS REQUIRED (Select One from Each Row) | OPERATING LIMITATIONS |
| AMMONIA | 25G, 25H, 25R, 25S, 25T 40N 60K 70E 90A | PRESSURE: 200 PSI MAX. 2/3 RATED SPEED. 4 FEET NPSHr |
| LP GAS | 25G OR 25H 40F OR 40N 70D OR 70E | PRESSURE: 200 PSI MAX. 3 FEET NPSHr |

NOTE: PROPER PUMP APPLICATION REQUIRES CONSIDERATION OF ADDITIONAL FACTORS. PLEASE REVIEW APPLICATION GUIDE IN SECTION 500 OR CONSULT THE FACTORY.

Basic Pump Dimensions



CAD FILE NO.: 16458

| MODEL NUMBERS | PUMP DIMENSIONS - INCHES [MILLIMETERS] | | | | | | | | | | | | | | | | | |
|---------------|--|-----------------|---------------|----------------|--------------|---------------|-------------|--------------|----------------|---------------|--------------|---------------|---------------|---------------|--------------|--------------|---------------|---------------|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S | T |
| GHC D | 1" | 2.50 [64] † | 4.00 [102] | 3.50* [89] | 1.62 [41] | 3.12 [79] | .41 [10] | 1.16 [30] | 6.19 [157] | 5.04 [128] | .76 [19] | 2.62 [66] | 2.74 [70] | .12 [3] | .50 [13] | .62 [16] | 5.19 [132] | 3.58 [91] |
| | | 2.75* [70] | | 4.50 [114] | | | | | | | | | | 5.25 [133] | | | | |
| GHC G | 1-1/2" | 3.50 [89] † | 5.88 [149] | 3.50* [89] | 1.62 [41] | 4.00 [102] | .41 [10] | 1.62 | 8.50 [216] | 6.71 [170] | 1.06 [27] | 3.82 [97] | 3.35 [85] | .19 [5] | .75 [19] | .62 [16] | 6.00 [152] | 3.62 [92] |
| | | 3.75* [95] | | 4.50 [114] | | | | | | | | | | 5.25 [133] | | | | |
| GHC J | 2-1/2" | 4.50 [114] † | 6.88 [175] | 4.50 [114] | 2.88 [73] | 4.25 [108] | .44 [11] | 2.50 [64] | 12.12 [308] | 9.75 [248] | 1.75 [44] | 5.50 [140] | 4.66 [118] | .25 [6] | 1.00 [25] | 1.12 [28] | 9.06 [230] | 6.75 [171] |
| | | 5.00* [127] | | 5.25* [133] | | | | | | | | | | 2.00 [51] | | | | |
| | | 6.00 [152] † | | 6.25 [159] | | | | | | | | | | 7.00 [178] | | | | |
| | 3" | 6.31 † [160] | | 8.00 [203] | | | | | | | | | | | | | | |

* STANDARD DIMENSION

† 90° HOUSING

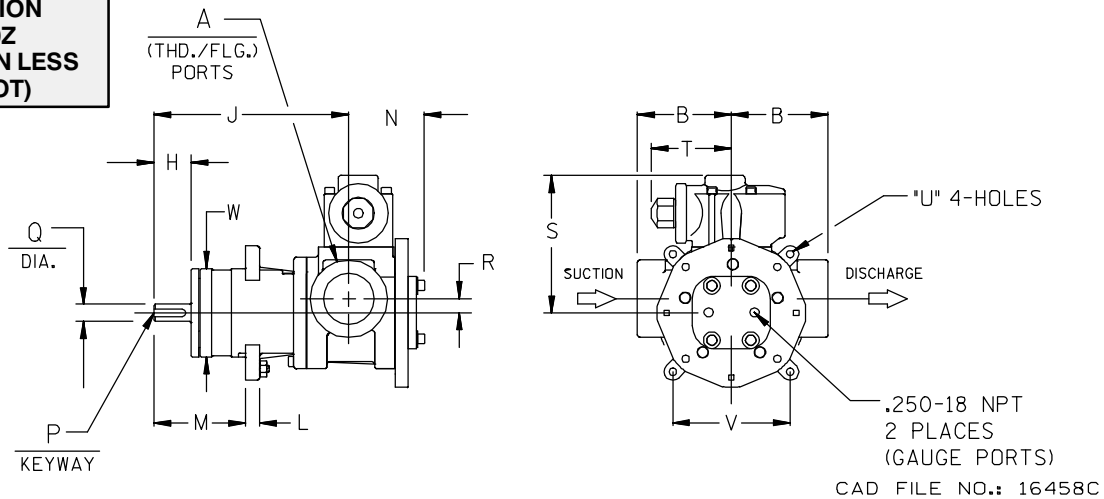
‡ PORTS ARE COMPATIBLE WITH 125* OR 250* ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

Continued —

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

Basic Pump Dimensions

**OPTION
80Z
(SHOWN LESS
FOOT)**



| MODEL NUMBERS | PUMP DIMENSIONS - INCHES [MILLIMETERS] | | | | | | | | | | | | | | |
|---------------|--|-----------------|--------------|----------------|-------------|---------------|---------------|---------------------------------|--------------|--------------|---------------|---------------|-------------|---------------|---------------|
| | A | B | H | J | L | M | N | P | Q | R | S | T | U | V | W |
| GHC D | 1" | 2.50 [64] † | 1.16 [30] | 6.19 [157] | .44 [11] | 2.80 [71] | 2.74 [70] | .12 [3] x .75 [19] | .50 [13] | .62 [16] | 5.19 [132] | 3.58 [91] | .41 [10] | 3.00 [76] | 2.85 [72] |
| | | 2.75* [70] | | | | | | | | | | | | | |
| | | 3.19 † [81] | | | | | | | | | | | | | |
| | | 4.00 † [102] | | | | | | | | | | | | | |
| GHC G | 1-1/2" | 3.50 [89] † | 1.62 [41] | 8.50 [216] | .62 [16] | 4.00 [102] | 3.35 [85] | .19 [5] x 1.25 [32] | .75 [19] | .62 [16] | 6.00 [152] | 3.62 [92] | .53 [13] | 4.75 [121] | 3.85 [98] |
| | | 3.75* [95] | | | | | | | | | | | | | |
| | 2" | 4.00 [102] † | | | | | | | | | | | | | |
| GHC J | 2" | 4.50 [114] † | 2.50 [64] | 12.12 [308] | .62 [16] | 5.75 [146] | 4.66 [118] | .25 [6] x 2.00 [51] | 1.00 [25] | 1.12 [28] | 9.06 [230] | 6.75 [171] | .53 [13] | 4.75 [121] | 4.85 [123] |
| | | 5.00* [127] | | | | | | | | | | | | | |
| | 2-1/2" | 6.00 † [152] | | | | | | | | | | | | | |
| | 3" | 6.31 † [160] | | | | | | | | | | | | | |

* STANDARD DIMENSION

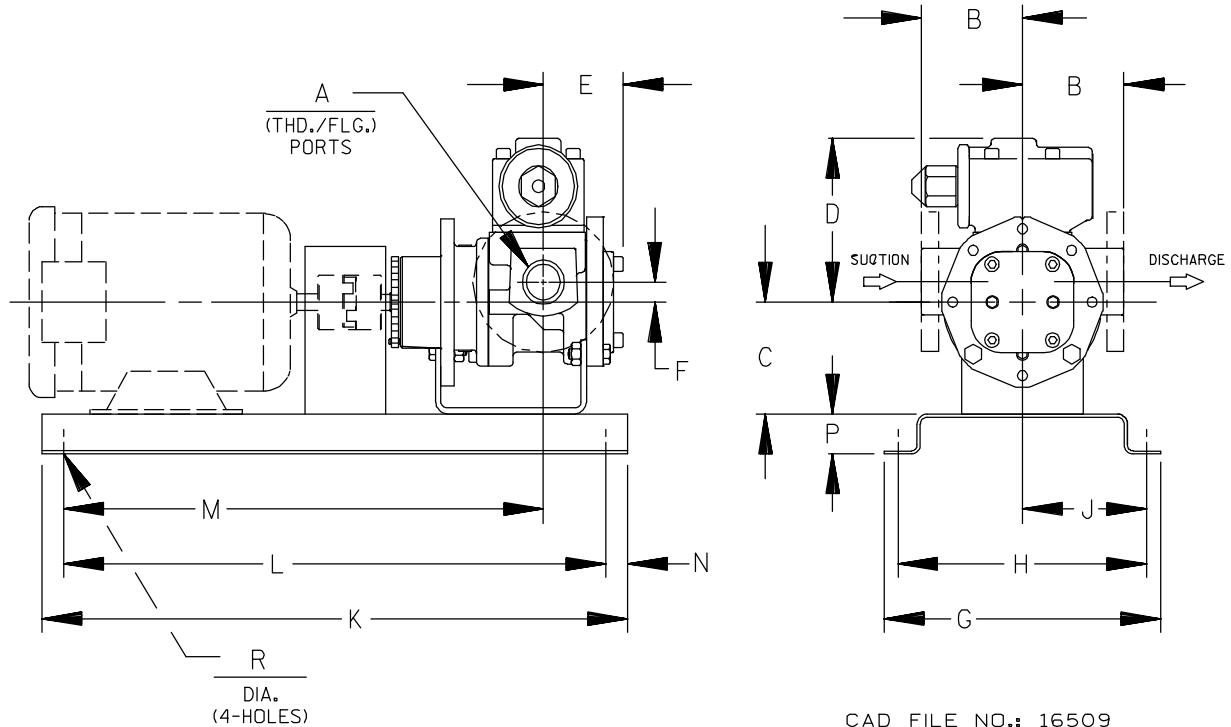
† PORTS ARE COMPATIBLE WITH 125# OR 250# ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE, OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 90° HOUSING



GHC

DIRECT FLEX DRIVE OPTION DIMENSIONS



CAD FILE NO.: 16509

| PUMP MODEL | PUMP DIMENSIONS - INCHES[MILLIMETERS] | | | | | | | | | | | | | | | | |
|------------|---------------------------------------|-----------------|-----------------|----------------|---------------|---------------|--------------|----------------|----------------|---------------|-----------------|----------------|----------------|---------------|---------------|-------------|--|
| | A | MOTOR FRAME | B | C | D | E | F | G | H | J | K | L | M | N | P | R | |
| GHC D | 1' | 56/56 H | 2.50 † [64] | 3.50 * [89] | | | | 10.14 [258] | 8.88 [226] | 4.44 [113] | 25.25 [641] | 19.25 [489] | 20.50 [521] | 3.00 [76] | 2.00 [51] | .56 [14] | |
| | | 143T/145T | 2.75 * [70] | | | | | | | | | | | | | | |
| | | 182T/184T | 3.19 † [81] | 4.50 [114] | 5.19 [132] | 2.73 [68] | .62 [16] | 17.50 [445] | 15.50 [394] | 7.75 [197] | 33.50 [851] | 23.50 [597] | 26.87 [682] | 5.00 [127] | 4.00 [102] | | |
| | | 213T/215T | 4.00 † [102] | 5.25 [133] | | | | | | | | | | | | | |
| GHC G | 1- 1/2" | 56/56H | 3.50 † [89] | 3.50 * [89] | | | | 10.14 [258] | 8.88 [226] | 4.44 [113] | 25.25 [641] | 19.25 [489] | 20.38 [518] | 3.00 [76] | 2.00 [51] | .56 [14] | |
| | | 182T/184T | 3.75 * [95] | 4.50 [114] | 6.00 [152] | 3.35 [85] | .62 [16] | 17.50 [445] | 15.50 [394] | 7.75 [197] | 33.50 [851] | 23.50 [597] | 26.75 [679] | 5.00 [127] | 4.00 [102] | | |
| | 213T/215T | 4.00 † [102] | 5.25 [133] | | | | | | | | | | | | | | |
| | 254T/256T | 6.25 † [159] | | | | | | | | | | | | | | | |
| GHC J | 2" | 182T/184T | 4.50 † [114] | 4.50 [114] | | | | | | | | | | | | .69 [18] | |
| | | 213T/215T | 5.25 * [133] | 6.25 [159] | 9.06 [230] | 4.66 [118] | 1.12 [28] | 21.00 [533] | 19.00 [483] | 9.50 [241] | 45.50 [1156] | 35.50 [902] | 38.38 [975] | 5.00 [127] | 4.00 [102] | | |
| | 254T/256T | 5.00 * [127] | 6.25 [159] | | | | | | | | | | | | | | |
| | 284T/286T | 6.00 † [152] | 7.00 [178] | | | | | | | | | | | | | | |
| 3" | 324T/326T | 6.31 † [160] | 8.00 † [203] | | | | | | | | | | | | | | |

* STANDARD DIMENSION

† 90° 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.

NOTE: CONSULT FACTORY FOR;
 1. HORSEPOWERS & FRAMES NOT SHOWN
 2. DRIP PAN BASES

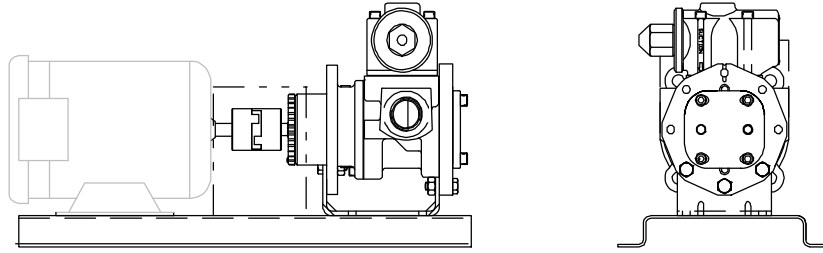
REFERENCE: PUMP FOOT BRACKET OPTIONS

| MOTOR FRAME | CENTER HEIGHT | PUMP OPTION |
|------------------------|---------------|------------------|
| 56, 143T, 145T | 3.50" | 80C (STD. "D/G") |
| 182, 182T, 184, 184T | 4.50" | 80F |
| 213, 213T, 215, 215T | 5.25" | 80J (STD. "J") |
| 254T, 254U, 256T, 256U | 6.25" | 80P |
| 284T, 284U, 286T, 286U | 7.00" | 80S |

GHC

DIRECT FLEX DRIVE OPTIONS

(Drive Assembly Number Includes Base, Coupling & Guard, But **NOT** the Motor)



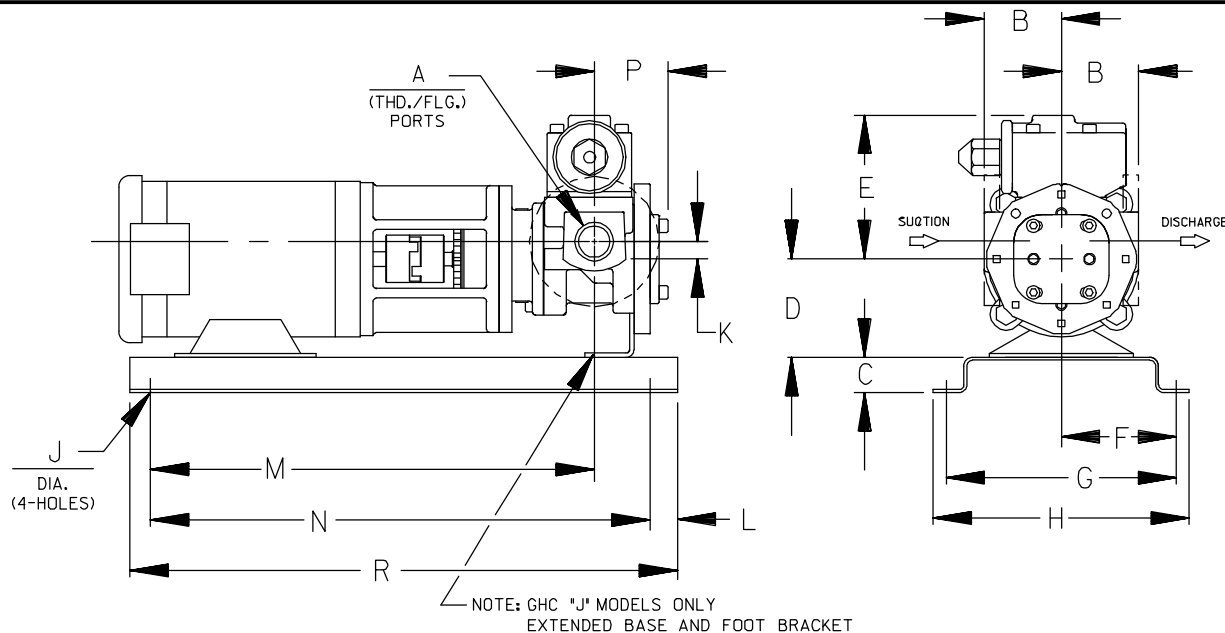
| PUMP MODEL NUMBER | 60 Hz RPM | 50 Hz RPM | FRAME | MTG. FT. OPTION REQ. | DRIVE ASSY NO. |
|-------------------|-----------------------------|----------------------------|-----------|----------------------|----------------|
| GHC D | 3450 1750 1150 850 | 2900 1450 950 700 | 56/56H | STD | 90351-086 |
| | | | 143T/145T | STD | 90351-052 |
| | | | 184 | 80F | 90351-089 |
| | | | 182T/184T | 80F | 90351-090 |
| | | | 213T/215T | 80J | 90351-094 |
| GHC G | 1750 1150 850 | 1450 950 700 | 56/56H | STD | 90351-156 |
| | | | 143T/145T | STD | 90351-162 |
| | | | 182T/184T | 80F | 90351-168 |
| | | | 213T/215T | 80J | 90351-206 |
| | | | 213T/215T | 80J | 90351-172 |
| | | | 254T | 80P | 90351-180 |
| GHC J | 1150 850 | 950 700 | 182T/184T | 80F | 90351-260 |
| | | | 213T/215T | STD | 90351-268 |
| | | | 254T/256T | 80P | 90351-276 |
| | | | 284T/286T | 80S | 90351-280 |

**NOTE: CONSULT FACTORY FOR;
HORSEPOWERS & FRAMES NOT SHOWN
DRIP PAN BASES**



GHC

DIRECT FLEX C-FLANGE DRIVE OPTION DIMENSIONS



CAD FILE NO.: 16652

| PUMP MODEL | PUMP DIMENSIONS - INCHES[MILLIMETERS] | | | | | | | | | | | | | | | |
|------------|---------------------------------------|-------------|-----------------|---------------|----------------|---------------|---------------|----------------|----------------|-------------|--------------|---------------|----------------|----------------|---------------|-----------------|
| | A | MOTOR FRAME | B | C | D | E | F | G | H | J | K | L | M | N | P | R |
| GHC D | 1" | 56C | 2.50 † [64] | 2.00 [51] | 3.50 [89] | 5.19 [132] | 6.25 [159] | 12.50 [318] | 14.50 [368] | .56 [14] | .62 [16] | 2.00 [51] | 17.24 [438] | 12.75 [324] | 2.73 [69] | 16.75 [425] |
| | | 143TC/145TC | 2.75 * [70] | | | | | | | | | | 17.55 [446] | | | |
| | | 182C/184C | 3.12 † [79] | | | | | | | | | | 18.80 [478] | | | |
| GHC G | 1- 1/2" | 56C | 3.50 † [89] | 2.00 [51] | 4.50 [114] | 6.00 [152] | 6.25 [159] | 12.50 [318] | 14.50 [368] | .56 [14] | .62 [16] | 2.00 [51] | 19.42 [493] | 12.75 [324] | 3.35 [85] | 16.75 [425] |
| | | 143TC/145TC | 3.75 * [95] | | | | | | | | | | 19.73 [501] | | | |
| | 2" | 182C/184C | 4.00 † [102] | 5.25 [133] | 21.86 [555] | | | | | | | | | | | |
| | | 213TC/215TC | 5.00 * [127] | | | | | | | | | | | | | |
| GHC J | 2" | 182TC/184TC | 4.50 † [114] | 4.00 [102] | 5.25 [133] | 9.06 [230] | 9.50 [241] | 19.00 [483] | 21.00 [533] | .69 [18] | 1.12 [28] | 5.00 [127] | 26.86 [682] | 35.50 [902] | 4.66 [118] | 45.50 [1156] |
| | | 213TC/215TC | 5.00 * [127] | | | | | | | | | | 27.75 [705] | | | |
| | 2- 1/2" | 213TC/215TC | 6.00 † [152] | 6.25 [159] | 33.74 [857] | | | | | | | | | | | |
| | | 254TC/256TC | 6.31 † [160] | | | | | | | | | | | | | |

* STANDARD DIMENSION

† 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.

† 90° HOUSING

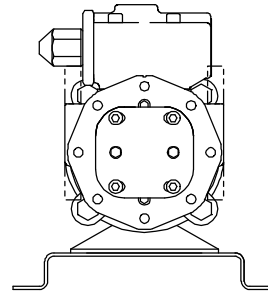
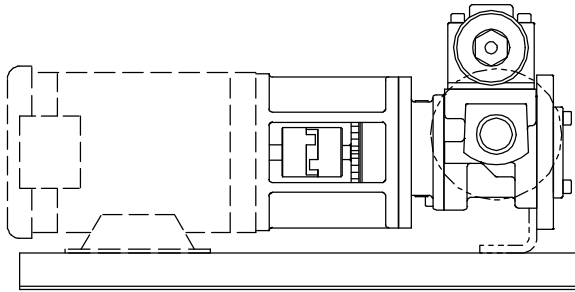
NOTE: CONSULT FACTORY FOR;
1. HORSEPOWERS & FRAMES NOT SHOWN
2. DRIP PAN BASES

REFERENCE: PUMP FOOT BRACKET OPTIONS

| HYDRAULIC SIZE | MOTOR FRAME | PUMP OPTION |
|----------------|-------------------------------|-------------|
| D | 56C, 143TC, 145TC, 182C, 184C | 80Y |
| G | 56C, 143TC, 145TC, 182C, 184C | 80Y |
| J | 213TC, 215TC 254TC, 256TC | 80X 80W |

DIRECT FLEX C-FLANGE DRIVE OPTIONS

(Drive Assembly Number Includes Base & Coupling, But **NOT** the Motor)



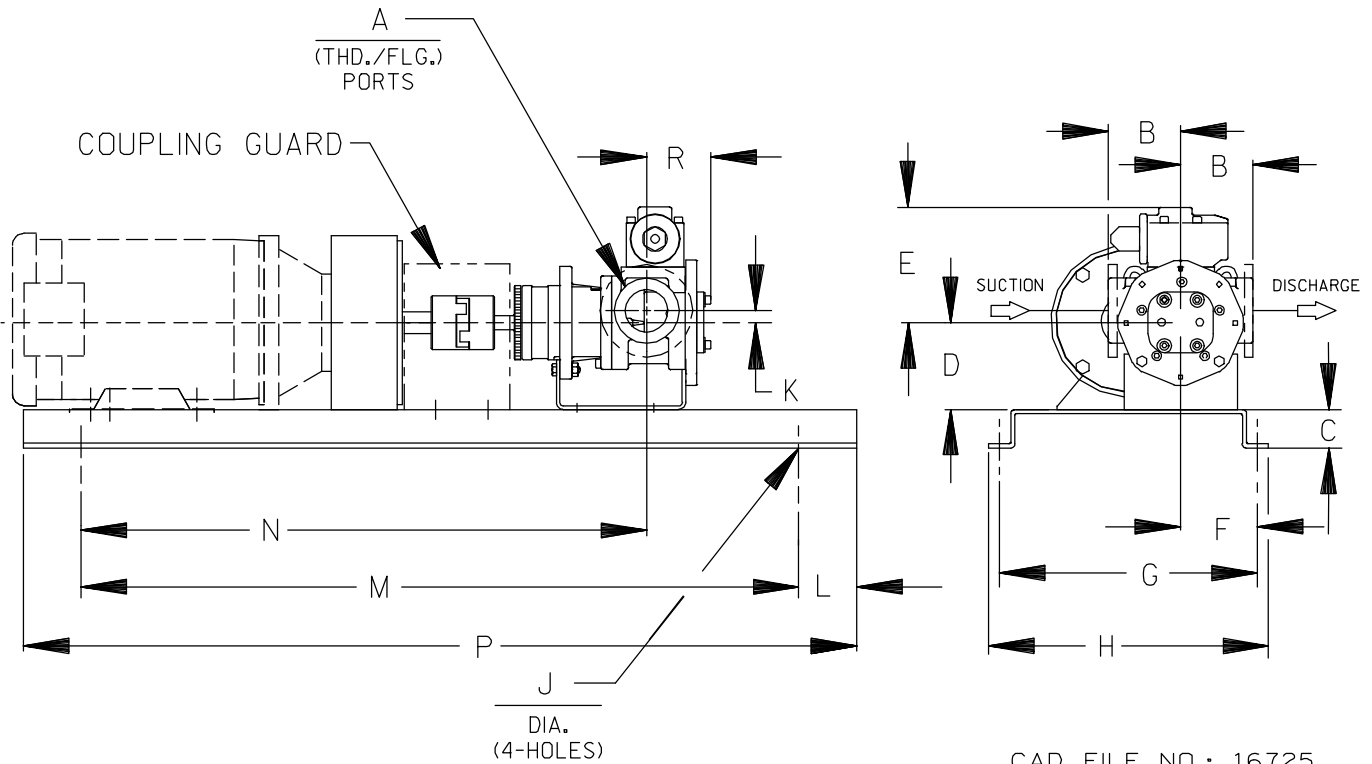
| PUMP MODEL NUMBER | 60Hz RPM | FRAME | MTG. FT. OPTION REQ. | DRIVE ASSY NO. |
|-------------------|---------------------|-------|----------------------|----------------|
| GHC D | 3450 | 56C | 80Y | 90351-540 |
| | 1750 | 143TC | 80Y | 90351-541 |
| | 1150 | 145TC | 80Y | 90351-544 |
| | 850 | 184C | 80Y | 90351-590 |
| GHC G | 1750 1150 850 | 56C | 80Y | 90351-656 |
| | | 143TC | 80Y | 90351-659 |
| | | 145TC | 80Y | 90351-660 |
| | | 184C | 80Y | 90351-668 |
| | | 182TC | 80X | 90351-672 |
| | | 184TC | 80X | 90351-674 |
| GHC J | 1150 850 | 213TC | 80X | 90351-764 |
| | | 215TC | 80X | 90351-768 |
| | | 254TC | 80W | 90351-772 |
| | | 256TC | 80W | 90351-776 |
| | | 184TC | 80X | 90351-814 |

**NOTE: CONSULT FACTORY FOR;
HORSEPOWERS & FRAMES NOT SHOWN
DRIP PAN BASES**



GHC

GRR REDUCER C-FLANGE FLEX DRIVE OPTION DIMENSIONS



CAD FILE NO.: 16725

| PUMP MODEL | PUMP DIMENSIONS - INCHES[MILLIMETERS] | | | | | | | | | | | | | | | |
|------------|---------------------------------------|-------------|-----------------|--------------|----------------|---------------|---------------|----------------|----------------|-------------|--------------|--------------|----------------|----------------|-----------------|---------------|
| | A | MOTOR FRAME | B | C | D | E | F | G | H | J | K | L | M | N | P | R |
| GHC D | 1" | 56C | 2.50 † [64] | 2.00 [51] | 3.50 [89] * | 5.19 [132] | 4.41 [112] | 13.00 [330] | 15.00 [381] | .56 [14] | .62 [16] | 3.00 [76] | 25.50 [648] | 20.35 [517] | 31.50 [800] | 2.66 [68] |
| | | 143TC/145TC | 2.75 * [70] | | | | | | | | | | | | | |
| | | 182TC/184TC | 3.19 † [81] | | | | | | | | | | | | | |
| | | 213TC/215TC | 4.00 † [102] | | | | | | | | | | | | | |
| GHC G | 1- 1/2" | 56C | 3.50 † [89] | 2.00 [51] | 3.50 [89] * | 6.00 [152] | 4.41 [112] | 13.00 [330] | 15.00 [381] | .56 [14] | .62 [16] | 3.00 [76] | 25.50 [648] | 22.66 [576] | 31.50 [800] | 3.27 [83] |
| | | 143TC/145TC | 3.75 * [95] | | | | | | | | | | | | | |
| | 2" | 182TC/184TC | 4.00 † [102] | | | | | | | | | | | | | |
| | | 213TC/215TC | 4.00 † [102] | | | | | | | | | | | | | |
| GHC J | 2" | 182TC/184TC | 4.50 † [114] | 2.00 [51] | 4.50 [114] | 9.06 [230] | 5.50 [140] | 14.63 [372] | 16.63 [422] | .69 [18] | 1.12 [28] | 3.00 [76] | 37.25 [946] | 32.42 [823] | 43.25 [1099] | 4.56 [116] |
| | 2- 1/2" | | 5.00 * [127] | | | | | | | | | | | | | |
| | | 3" | 213TC/215TC | | | | | | | | | | | | | |

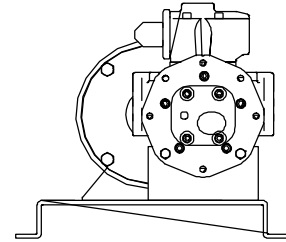
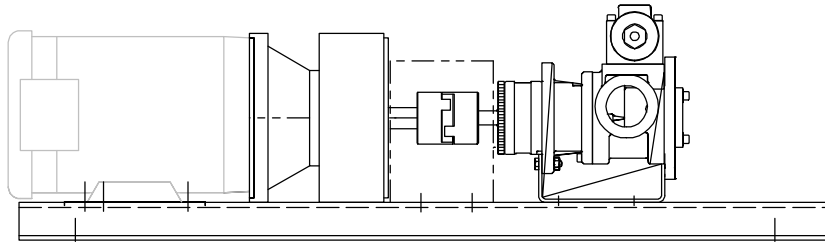
* STANDARD DIMENSION

† 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.

† 90° HOUSING

GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

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



| PUMP MODEL | RPM @ 1750 | RPM @ 1150 | REDUCER ① | | FRAME | MTG.FT. OPTION REQ. | DRIVE ASSY NO. | |
|--------------|------------|------------|-----------|---------------|-------|---------------------|----------------|---------------|
| | | | RATIO | MAX HP @ 1750 | | | | MAX HP @ 1150 |
| GHC D | 875 | 575 | 2.00:1 | 6.00 | 3.96 | 56C | STD | 90353-510 |
| | | | | 6.00 | 3.96 | 143TC/145TC | STD | 90353-516 |
| | | | | 6.00 | 3.96 | 182C/184C | 80F | 90353-519 |
| | | | | 20.00 | 13.2 | 182TC/184TC | 80F | 90353-526 |
| | 580 | 383 | 3.00:1 | 4.21 | 2.78 | 56C | STD | 90353-530 |
| | | | | 8.10 | 5.35 | 143TC/145TC | STD | 90353-536 |
| | | | | 8.10 | 5.35 | 182C/184C | 80F | 90353-539 |
| | 440 | 288 | 4.00:1 | 12.98 | 8.57 | 182TC/184TC | 80F | 90353-546 |
| | | | | 3.63 | 2.39 | 56C | STD | 90353-550 |
| | | | | 5.90 | 3.89 | 143TC/145TC | STD | 90353-556 |
| | 350 | 230 | 5.00:1 | 5.90 | 3.89 | 182C/184C | 80F | 90353-564 |
| | | | | 11.35 | 7.49 | 56C | STD | 90353-568 |
| | | | | 3.00 | 1.98 | 143TC/145TC | STD | 90353-570 |
| | | | | 3.00 | 1.98 | 182C/182C | 80F | 90353-573 |
| | | | | 5.90 | 3.89 | 182TC/184TC | 80F | 90353-579 |
| | | | | 10.07 | 6.65 | 182TC/184TC | 80F | 90353-586 |

(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;
HORSEPOWERS & FRAMES NOT SHOWN
DRIP PAN BASES**



GHC

SEC. 540

PAGE 22

January 2010

GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

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

| PUMP MODEL | RPM @ 1750 | RPM @ 1150 | REDUCER ^① | | FRAME | MTG.FT. OPTION REQ. | DRIVE ASSY NO. | |
|--------------|------------|------------|----------------------|---------------|-------|---------------------|----------------|---------------|
| | | | RATIO | MAX HP @ 1750 | | | | MAX HP @ 1150 |
| GHC G | 875 | 575 | 2.00:1 | 5.65 | 3.73 | 56C | STD | 90353-610 |
| | | | | 11.70 | 7.72 | 143TC/145TC | STD | 90353-619 |
| | | | | 11.70 | 7.72 | 182C/184C | 80F | 90353-622 |
| | | | | 13.01 | 8.59 | 182TC/184TC | 80F | 90353-625 |
| | | | | 13.01 | 8.59 | 213TC/215TC | 80J | 90353-627 |
| | 580 | 383 | 3.00:1 | 3.76 | 2.48 | 56C | STD | 90353-630 |
| | | | | 8.10 | 5.35 | 143TC/145TC | STD | 90353-633 |
| | | | | 8.10 | 5.35 | 182C/184C | 80F | 90353-642 |
| | | | | 10.62 | 7.01 | 182TC/184TC | 80F | 90353-646 |
| | | | | 10.62 | 7.01 | 213TC/215TC | 80J | 90353-648 |
| | 440 | 288 | 4.00:1 | 2.82 | 1.86 | 56C | STD | 90353-660 |
| | | | | 5.90 | 3.89 | 143TC/145TC | STD | 90353-663 |
| | | | | 5.90 | 3.89 | 182C/184C | 80F | 90353-672 |
| | | | | 7.24 | 4.78 | 182TC/184TC | 80F | 90353-675 |
| | | | | 7.24 | 4.78 | 213TC | 80J | 90353-677 |
| | 350 | 230 | 5.00:1 | 2.26 | 1.49 | 56C | STD | 90353-690 |
| | | | | 5.20 | 3.43 | 143TC/145TC | STD | 90353-699 |
| | | | | 5.20 | 3.43 | 182C/184C | 80F | 90353-702 |
| | | | | 5.98 | 3.95 | 182TC/184TC | 80F | 90353-706 |
| | | | | 5.98 | 3.95 | 213TC | 80J | 90353-708 |
| GHC J | 875 | 575 | 2.00:1 | 13.01 | 8.59 | 182TC/184TC | 80F | 90353-720 |
| | | | | 13.01 | 8.59 | 213TC/215TC | 80J | 90353-724 |
| | | | | 36.29 | 23.95 | 254TC/256TC | 80P | 90353-728 |
| | | | | 36.29 | 23.95 | 284TC/286TC | 80P | 90353-732 |
| | 580 | 383 | 3.00:1 | 10.62 | 7.01 | 182TC/184TC | 80F | 90353-735 |
| | | | | 10.62 | 7.01 | 213TC/215TC | 80J | 90353-739 |
| | 555 | 365 | 3.15:1 | 25.76 | 17.00 | 254TC/256TC | 80P | 90353-743 |
| | | | | 25.76 | 17.00 | 284TC | 80P | 90353-746 |
| | | | | 42.96 | 28.35 | 286TC | 80P | 90353-747 |
| | 440 | 288 | 4.00:1 | 7.24 | 4.78 | 182TC/184TC | 80F | 90353-750 |
| | | | | 7.24 | 4.78 | 213TC | 80J | 90353-754 |
| | 350 | 230 | 5.00:1 | 5.98 | 3.95 | 182TC/184TC | 80F | 90353-765 |
| | | | | 5.98 | 3.95 | 213TC | 80J | 90353-769 |
| | | | | 16.01 | 10.57 | 215TC | 80P | 90353-774 |
| | | | | 16.01 | 10.57 | 254TC | 80P | 90353-778 |
| | | | 30.49 | 20.12 | 356TC | 80P | 90353-780 | |

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;
HORSEPOWERS & FRAMES NOT SHOWN
DRIP PAN BASES**

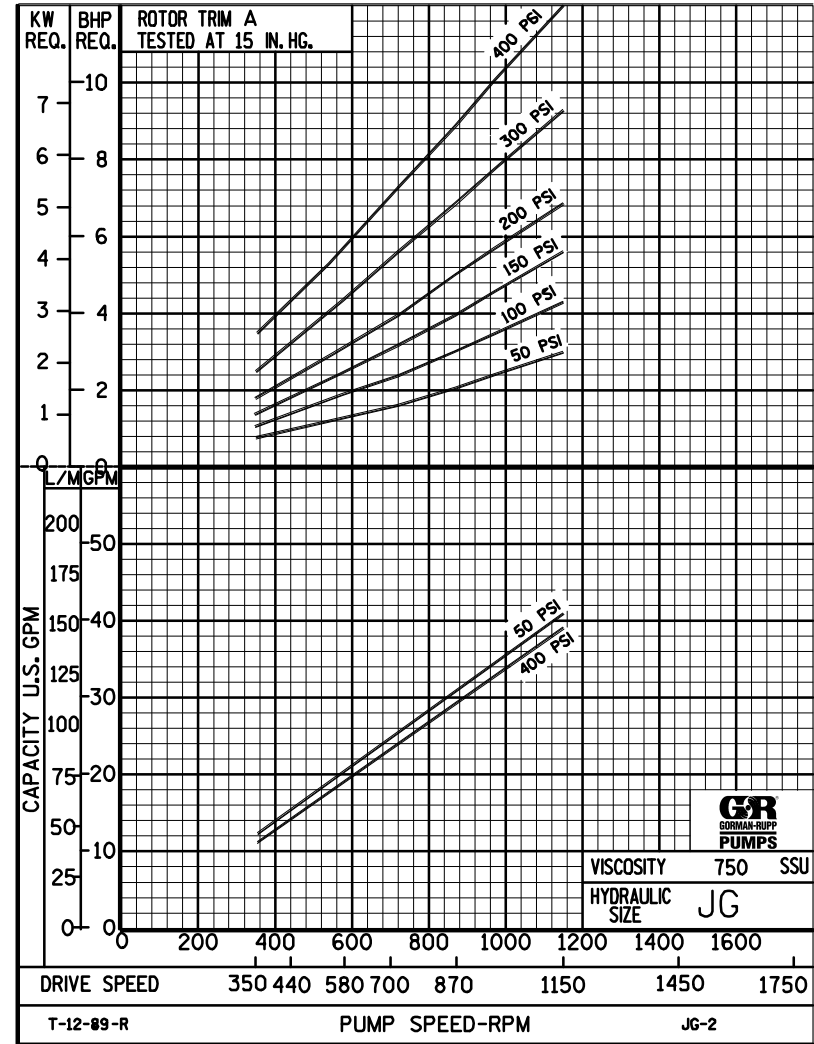
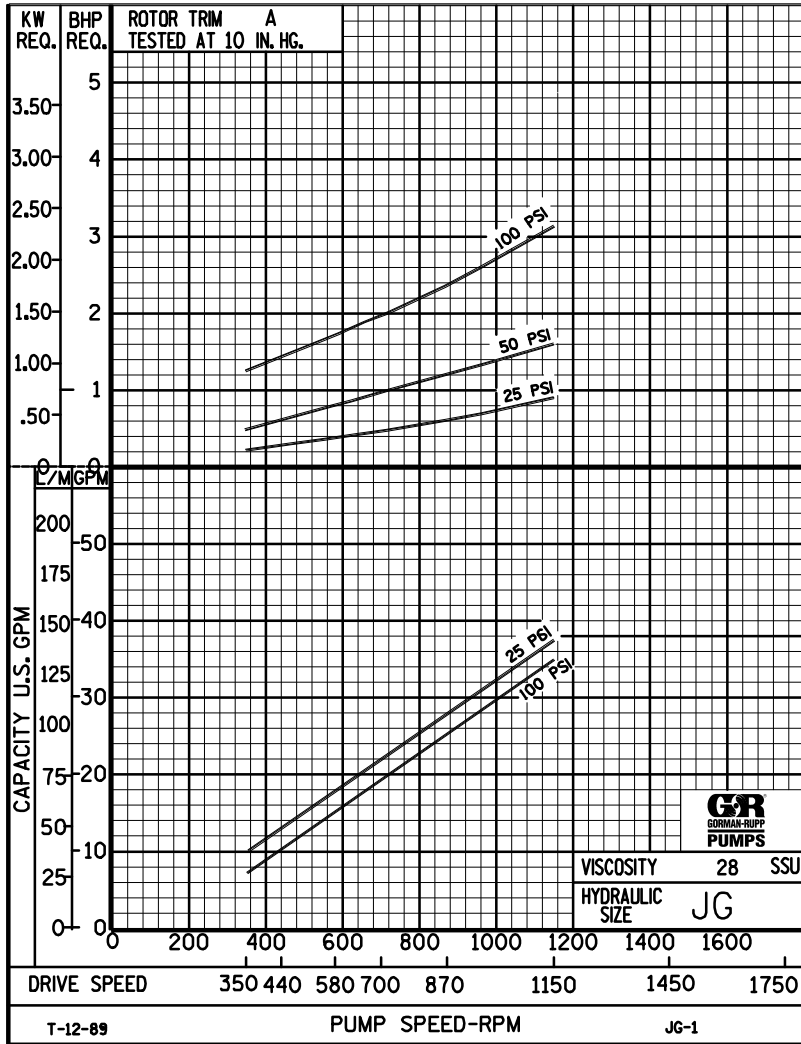


PERFORMANCE CURVES

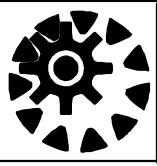
SPEED VS. CAPACITY/HORSEPOWER

JG

Hydraulic Size



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



PERFORMANCE CURVES

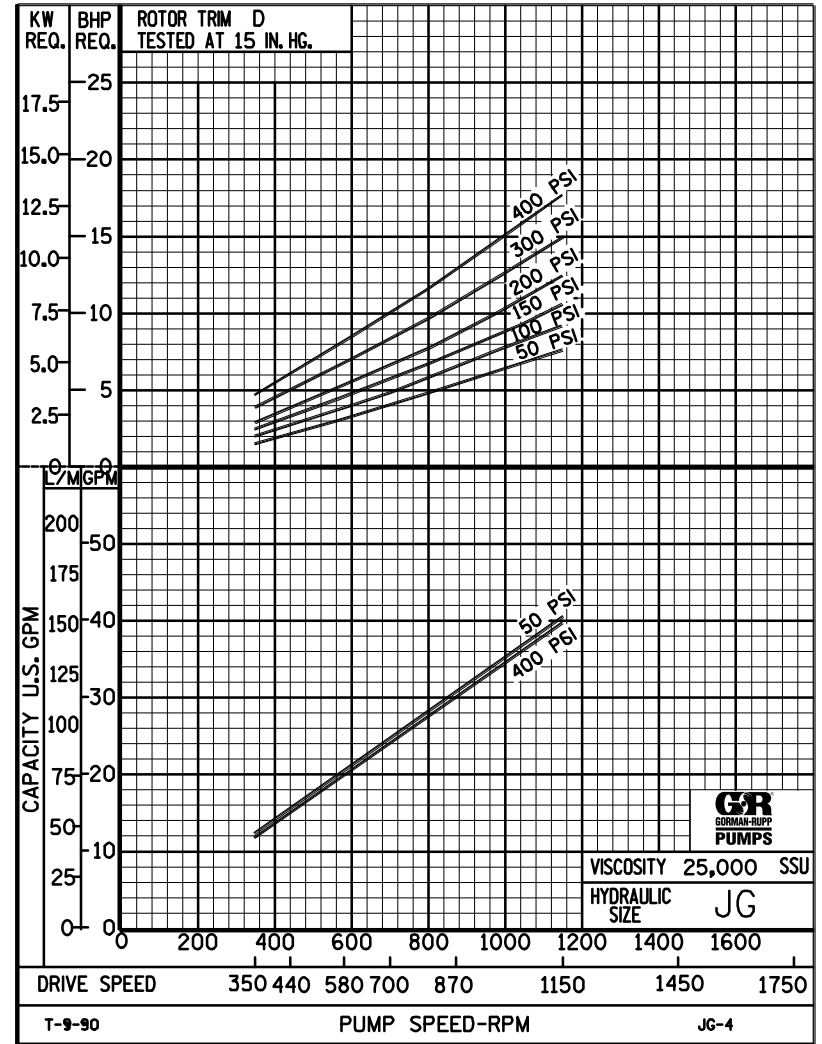
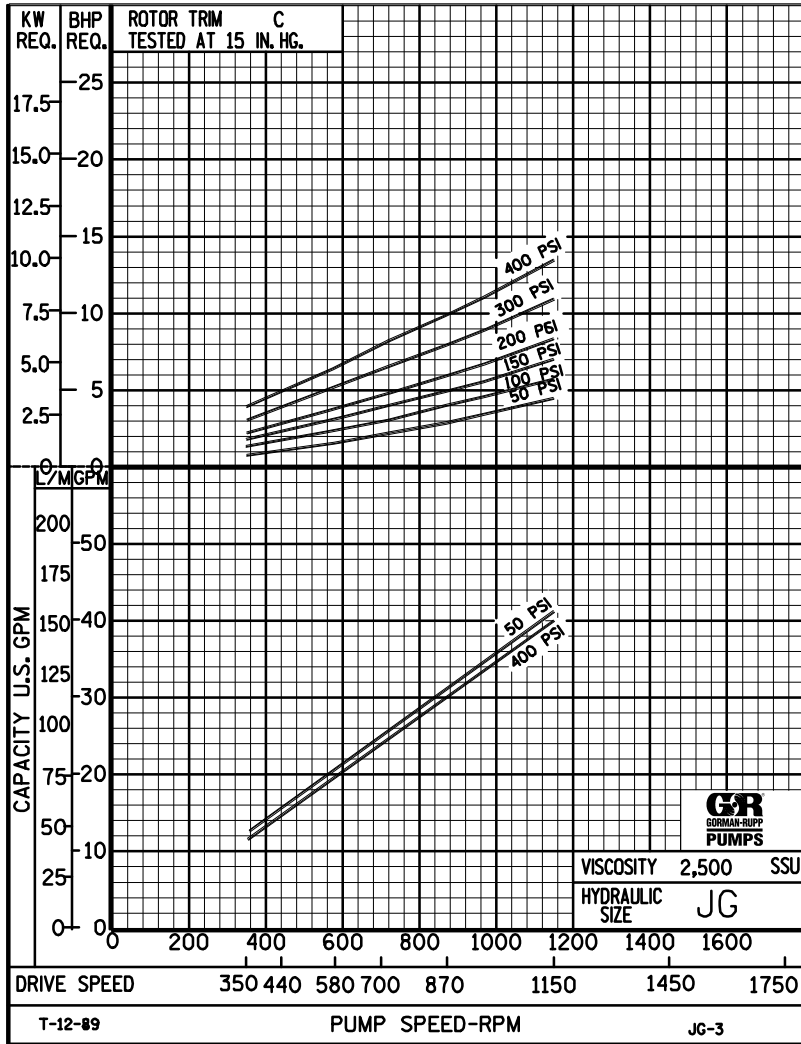
SPEED VS. CAPACITY/HORSEPOWER

JG Hydraulic Size

SEC. 500

Page 63

January 2010



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

Printed in U.S.A.



JG

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 64

January 2010

**40 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) | | | | | | | | | | | | | | | | |
| | | | | | 1½" | 2" | 2½" | 3" | 4" | LOW PRES R/V | | | HI PRES R/V | | 25 | 50 | 75 | 100 | 150 | 200 | 300 | 400 | | | | | | | | | |
| 40 | 1150 | STD | 28 | 3.9 | .01 | .01 | .01 | .01 | .01 | 59 | 84 | 116 | | | | 37 | 36 | 35 | 35 | | | | | | | | | | | | |
| | | | 32 | | .04 | .01 | .01 | .01 | .01 | | | | | | | .91 | 1.6 | 2.4 | 3.1 | | | | | | | | | | | | |
| | | | 38 | 3.9 | .05 | .02 | .01 | .01 | .01 | 59 | 84 | 116 | 160 | | | | 38 | 37 | 37 | 36 | 35 | | | | | | | | | | |
| | | | 50 | | .06 | .02 | .01 | .01 | .01 | | | | | | | | 1.1 | 1.8 | 2.4 | 3.2 | 4.8 | | | | | | | | | | |
| | | | 70 | 3.9 | .07 | .02 | .01 | .01 | .01 | 59 | 84 | 116 | 160 | 212 | | | 39 | 38 | 38 | 37 | 37 | 36 | | | | | | | | | |
| | | | 100 | | .08 | .03 | .01 | .01 | .01 | | | | | | | | 1.4 | 2.0 | 2.6 | 3.3 | 4.8 | 6.2 | | | | | | | | | |
| | | | 150 | 3.9 | .09 | .03 | .01 | .01 | .01 | 60 | 85 | 118 | 160 | 212 | | | 40 | 39 | 39 | 39 | 38 | 38 | 37 | 36 | | | | | | | |
| | | | 200 | | .10 | .03 | .01 | .01 | .01 | | | | | | | | 1.8 | 2.3 | 2.8 | 3.5 | 5.4 | 6.7 | 8.7 | 12 | | | | | | | |
| | | | 300 | 3.9 | .10 | .04 | .02 | .01 | .01 | 60 | 87 | 118 | 160 | 212 | | | 40 | 40 | 40 | 39 | 39 | 39 | 38 | 37 | | | | | | | |
| | | | 500 | | .18 | .06 | .03 | .01 | .01 | | | | | | | | 2.3 | 2.8 | 3.4 | 3.9 | 5.5 | 6.7 | 9.1 | 12 | | | | | | | |
| | | | 750 | 3.9 | .26 | .10 | .05 | .02 | .01 | 60 | 87 | 118 | 160 | 212 | | | 41 | 41 | 40 | 40 | 40 | 40 | 39 | 39 | | | | | | | |
| | | | 1,000 | | .35 | .13 | .06 | .03 | .01 | | | | | | | | 2.6 | 3.0 | 3.6 | 4.3 | 5.6 | 6.9 | 9.3 | 12 | | | | | | | |
| | | 2,000 | 3.9 | .70 | .26 | .13 | .05 | .02 | 62 | 89 | 120 | 162 | 214 | | | 41 | 41.1 | 41 | 41 | 40 | 40 | 40 | 40 | | | | | | | | |
| | | 3,500 | | 1.23 | .45 | .22 | .09 | .03 | | | | | | | | 3.9 | 4.5 | 5.1 | 5.7 | 7.0 | 8.4 | 11 | 14 | | | | | | | | |
| | | 5,000 | 3.9 | 1.75 | .65 | .32 | .13 | .05 | 64 | 91 | 122 | 162 | 214 | | | 41 | 41 | 41 | 41 | 40 | 40 | 40 | 40 | | | | | | | | |
| | | 7,500 | | 2.63 | .97 | .48 | .20 | .07 | | | | | | | | 4.4 | 5.7 | 6.2 | 7.0 | 8.3 | 9.6 | 12 | 15 | | | | | | | | |
| | | 10,000 | 3.9 | 3.50 | 1.29 | .63 | .27 | .09 | 66 | 93 | 125 | 162 | 216 | | | 41 | 41 | 41 | 40 | 40 | 40 | 40 | 40 | | | | | | | | |
| | | 15,000 | | 5.25 | 1.93 | .95 | .40 | .14 | | | | | | | | 5.8 | 7.0 | 7.4 | 8.3 | 9.6 | 11 | 14 | 14 | | | | | | | | |
| | | 20,000 | 4.0 | 7.00 | 2.58 | 1.27 | .53 | .18 | 68 | 95 | 128 | 162 | 216 | | | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 39 | | | | | | | | |
| | | 25,000 | | 8.75 | 3.22 | 1.58 | .67 | .23 | | | | | | | | 7.2 | 7.8 | 8.5 | 9.2 | 11 | 12 | 15 | 18 | | | | | | | | |
| | | 50,000 | 5.3 | 17.5 | 6.44 | 3.17 | 1.33 | .45 | 72 | 99 | 132 | 166 | 220 | | | 40 | 40 | 40 | 40 | 40 | 40 | 40 | 39 | | | | | | | | |
| | | 75,000 | | - | - | - | - | - | | | | | | | | 11 | 12 | 12 | 13 | 15 | 17 | 20 | 24 | | | | | | | | |
| | | 100,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 150,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 200,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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



JG

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 65

January 2010

**30 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) | | | | | | | | | | | | | |
| | | | | | 1½" | 2" | 2½" | 3" | 4" | 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 | | | | | | | | | |
| 30 | 870 | STD | 28 | 2.5 | .01 | .01 | .01 | .01 | .01 | 55 | 81 | 112 | | | 27 | 27 | 26 | 25 | | | | | | | | | | |
| | | | 32 | | .02 | .01 | .01 | .01 | .01 | | | | | | .63 | 1.2 | 1.7 | 2.4 | | | | | | | | | | |
| | | | 38 | 2.5 | .03 | .01 | .01 | .01 | .01 | 55 | 81 | 112 | 158 | | | 28 | 28 | 27 | 27 | 26 | | | | | | | | |
| | | | 50 | | .04 | .01 | .01 | .01 | .01 | | | | | | | .69 | 1.3 | 2.0 | 2.6 | 3.6 | | | | | | | | |
| | | | 70 | 2.5 | .04 | .01 | .01 | .01 | .01 | 55 | 82 | 112 | 158 | 210 | | | 29 | 29 | 28 | 28 | 27 | 27 | | | | | | |
| | | | 100 | | .05 | .02 | .01 | .01 | .01 | | | | | | | | .75 | 1.4 | 2.2 | 2.7 | 3.7 | 4.8 | | | | | | |
| | | | 150 | 2.5 | .05 | .02 | .01 | .01 | .01 | 55 | 82 | 112 | 158 | 210 | | | 30 | 30 | 29 | 29 | 28 | 28 | 28 | 26 | | | | |
| | | | 200 | | .05 | .02 | .01 | .01 | .01 | | | | | | | | .84 | 1.5 | 2.4 | 2.8 | 3.8 | 4.9 | 6.8 | 8.8 | | | | |
| | | | 300 | 2.5 | .08 | .03 | .02 | .01 | .01 | 56 | 83 | 112 | 158 | 210 | | | 30 | 30 | 30 | 30 | 29 | 29 | 29 | 28 | | | | |
| | | | 500 | | .13 | .05 | .03 | .01 | .01 | | | | | | | | 1.2 | 1.8 | 2.5 | 3.0 | 3.9 | 5.0 | 6.9 | 8.8 | | | | |
| | | 750 | 2.5 | .20 | .07 | .04 | .02 | .01 | 56 | 83 | 112 | 158 | 210 | | | 31 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | | | | | |
| | | 1,000 | | .26 | .10 | .05 | .02 | .01 | | | | | | | | 1.7 | 2.1 | 2.5 | 3.0 | 4.0 | 5.0 | 6.9 | 8.9 | | | | | |
| | | 2,000 | 2.6 | .53 | .19 | .10 | .04 | .01 | 58 | 85 | 114 | 158 | 210 | | | 31 | 31 | 31 | 30 | 30 | 30 | 30 | 30 | | | | | |
| | | 3,500 | | .92 | .34 | .17 | .07 | .02 | | | | | | | | 2.5 | 2.9 | 3.4 | 4.0 | 4.9 | 6.0 | 8.0 | 9.8 | | | | | |
| | | 5,000 | 2.7 | 1.31 | .48 | .24 | .10 | .04 | 60 | 87 | 116 | 159 | 211 | | | 31 | 31 | 30 | 30 | 30 | 30 | 30 | 30 | | | | | |
| | | 7,500 | | 1.97 | .73 | .36 | .15 | .05 | | | | | | | | 3.2 | 4.0 | 4.7 | 5.1 | 6.0 | 7.0 | 9.1 | 11 | | | | | |
| | | 10,000 | 2.8 | 2.63 | .97 | .48 | .20 | .07 | 62 | 89 | 119 | 160 | 212 | | | 31 | 31 | 30 | 30 | 30 | 30 | 30 | 30 | | | | | |
| | | 15,000 | | 3.93 | 1.45 | .71 | .30 | .10 | | | | | | | | 4.0 | 4.8 | 5.6 | 6.0 | 6.8 | 7.9 | 10 | 12 | | | | | |
| | | 20,000 | 2.9 | 5.25 | 1.93 | .95 | .40 | .14 | 65 | 92 | 122 | 160 | 212 | | | 31 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | | | | | |
| | | 25,000 | | 6.56 | 2.42 | 1.19 | .50 | .17 | | | | | | | | 5.0 | 5.4 | 5.9 | 6.3 | 7.4 | 8.5 | 11 | 13 | | | | | |
| 50,000 | 4.1 | 13.1 | 4.83 | 2.37 | 1.00 | .34 | 68 | 95 | 125 | 163 | 215 | | | 31 | 30 | 30 | 30 | 30 | 30 | 30 | 29 | | | | | | | |
| 75,000 | | 19.7 | 7.25 | 3.56 | 1.49 | .50 | | | | | | | | 7.6 | 8.2 | 8.5 | 9.2 | 11 | 11 | 13 | 16 | | | | | | | |
| 100,000 | 5.6 | 26.3 | 9.66 | 4.75 | 1.99 | .67 | 72 | 99 | 129 | 167 | 219 | | | 31 | 30 | 30.5 | 30 | 30 | 30 | 30 | 29 | | | | | | | |
| 150,000 | | - | - | - | - | - | | | | | | | | 9.4 | 10 | 11 | 12 | 14 | 14 | 15 | 18 | | | | | | | |
| 200,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 250,000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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



JG

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 66

January 2010

**20 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) | | | | | | | | | | | | | | |
| | | | | | 1½" | 2" | 2½" | 3" | 4" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 20 | 580 | STD | 28 | 1.5 | .01 | .01 | .01 | .01 | .01 | 54 | 80 | 110 | | | 18 | 17 | 16 | 16 | | | | | | | | | | | |
| | | | 32 | | .01 | .01 | .01 | .01 | .01 | | | | | | .41 | .82 | 1.2 | 1.6 | | | | | | | | | | | |
| | | | 38 | 1.5 | .02 | .01 | .01 | .01 | .01 | 54 | 80 | 110 | 157 | | | 18 | 18 | 17 | 17 | 16 | | | | | | | | | |
| | | | 50 | | .02 | .01 | .01 | .01 | .01 | | | | | | | .44 | .89 | 1.2 | 1.7 | 2.4 | | | | | | | | | |
| | | | 70 | 1.5 | .02 | .01 | .01 | .01 | .01 | 54 | 80 | 110 | 157 | 208 | | | 19 | 18 | 18 | 18 | 17 | 17 | | | | | | | |
| | | | 100 | | .02 | .01 | .01 | .01 | .01 | | | | | | | | .50 | .98 | 1.3 | 1.7 | 2.5 | 3.1 | | | | | | | |
| | | | 150 | 1.5 | .03 | .01 | .01 | .01 | .01 | 55 | 81 | 110 | 157 | 208 | | | 19 | 19 | 19 | 19 | 18 | 18 | 18 | 17 | | | | | |
| | | | 200 | | .04 | .01 | .01 | .01 | .01 | | | | | | | | .58 | 1.1 | 1.4 | 1.8 | 2.5 | 3.2 | 4.4 | 5.9 | | | | | |
| | | | 300 | 1.5 | .05 | .02 | .01 | .01 | .01 | 55 | 81 | 110 | 157 | 208 | | | 20 | 20 | 19 | 19 | 19 | 19 | 19 | 18 | 18 | | | | |
| | | | 500 | | .09 | .03 | .02 | .01 | .01 | | | | | | | | .65 | 1.2 | 1.6 | 1.9 | 2.5 | 3.2 | 4.5 | 5.9 | | | | | |
| | | 750 | 1.5 | .13 | .05 | .03 | .01 | .01 | 55 | 81 | 110 | 157 | 208 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | | | | | |
| | | 1,000 | | .18 | .07 | .03 | .01 | .01 | | | | | | | | .83 | 1.4 | 1.7 | 2.1 | 2.7 | 3.3 | 4.6 | 6.0 | | | | | | |
| | | 2,000 | 1.7 | .35 | .13 | .06 | .02 | .01 | 56 | 82 | 111 | 158 | 209 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | | | | | |
| | | 3,500 | | .61 | .23 | .11 | .05 | .02 | | | | | | | | 1.5 | 1.9 | 2.3 | 2.7 | 3.4 | 4.1 | 5.4 | 6.8 | | | | | | |
| | | 5,000 | 1.8 | .88 | .32 | .16 | .07 | .02 | 57 | 83 | 112 | 159 | 210 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | | | | | |
| | | 7,500 | | 1.31 | .48 | .24 | .10 | .04 | | | | | | | | 1.9 | 2.3 | 2.7 | 3.1 | 3.8 | 4.5 | 5.9 | 7.2 | | | | | | |
| | | 10,000 | 2.0 | 1.75 | .65 | .32 | .13 | .05 | 58 | 85 | 113 | 160 | 211 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | |
| | | 15,000 | | 2.63 | .97 | .48 | .20 | .07 | | | | | | | | 2.4 | 2.8 | 3.2 | 3.6 | 4.3 | 5.0 | 6.4 | 6.7 | | | | | | |
| | | 20,000 | 2.1 | 3.50 | 1.29 | .63 | .27 | .09 | 60 | 87 | 114 | 160 | 211 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | |
| | | 25,000 | | 4.38 | 1.61 | .79 | .33 | .11 | | | | | | | | 2.8 | 3.1 | 3.5 | 3.9 | 4.6 | 5.3 | 6.8 | 8.2 | | | | | | |
| 50,000 | 3.3 | 8.75 | 3.22 | 1.58 | .67 | .23 | 62 | 89 | 116 | 162 | 213 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | |
| 75,000 | | 13.1 | 4.83 | 2.37 | 1.00 | .34 | | | | | | | | 4.2 | 4.7 | 5.1 | 5.6 | 6.7 | 7.2 | 8.5 | 10 | | | | | | | | |
| 100,000 | 4.7 | 17.5 | 6.44 | 3.17 | 1.33 | .45 | 65 | 92 | 119 | 165 | 216 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | |
| 150,000 | | 26.3 | 9.66 | 4.75 | 1.99 | .67 | | | | | | | | 5.3 | 5.9 | 6.4 | 7.0 | 8.3 | 8.6 | 9.9 | 12 | | | | | | | | |
| 200,000 | 8.6 | 35.0 | 12.9 | 6.33 | 2.65 | .90 | 68 | 95 | 122 | 168 | 219 | | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | | | | | |
| 250,000 | | - | - | - | - | - | | | | | | | | 6.3 | 7.0 | 7.4 | 8.2 | 9.8 | 9.9 | 11 | 13 | | | | | | | | |

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



JG

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 67

January 2010

**12 GPM
350 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) | | | | | | | | | | | | | | |
| | | | | | 1½" | 2" | 2½" | 3" | 4" | LOW PRES R/V | | | HI PRES R/V | | MEDIUM DUTY AND HEAVY DUTY | | | | HEAVY DUTY ONLY | | | | | | | | | | |
| 12 | 350 | STD | 28 | 1.1 | .01 | .01 | .01 | .01 | .01 | 53 | 79 | 105 | | | 11 | 10 | 10 | 9.5 | | | | | | | | | | | |
| | | | 32 | | .01 | .01 | .01 | .01 | .01 | | | | | | .26 | .52 | .73 | .98 | | | | | | | | | | | |
| | | | 38 | 1.1 | .01 | .01 | .01 | .01 | .01 | 53 | 79 | 105 | 154 | | | 11 | 10 | 10 | 10 | 9.5 | | | | | | | | | |
| | | | 50 | | .01 | .01 | .01 | .01 | .01 | | | | | | | .29 | .55 | .78 | .99 | 1.5 | | | | | | | | | |
| | | | 70 | 1.1 | .01 | .01 | .01 | .01 | .01 | 53 | 79 | 105 | 154 | 204 | | | 11 | 11 | 11 | 11 | 10 | 10 | | | | | | | |
| | | | 100 | | .01 | .01 | .01 | .01 | .01 | | | | | | | | .32 | .58 | .80 | 1.0 | 1.5 | 1.9 | | | | | | | |
| | | | 150 | 1.1 | .02 | .01 | .01 | .01 | .01 | 54 | 80 | 106 | 155 | 205 | | | 12 | 11 | 11 | 11 | 11 | 11 | 10 | 10 | | | | | |
| | | | 200 | | .02 | .01 | .01 | .01 | .01 | | | | | | | | .37 | .62 | .84 | 1.1 | 1.6 | 1.9 | 2.7 | 3.5 | | | | | |
| | | | 300 | 1.1 | .03 | .01 | .01 | .01 | .01 | 54 | 80 | 106 | 155 | 205 | | | 12 | 12 | 12 | 11 | 11 | 11 | 11 | 11 | 11 | | | | |
| | | | 500 | | .05 | .02 | .01 | .01 | .01 | | | | | | | | .43 | .69 | .93 | 1.1 | 1.6 | 2.0 | 2.8 | 3.6 | | | | | |
| | | 750 | 1.1 | .08 | .03 | .02 | .01 | .01 | 54 | 80 | 106 | 155 | 205 | | | 12 | 12 | 12 | 12 | 12 | 12 | 11 | 11 | | | | | | |
| | | 1,000 | | .11 | .04 | .02 | .01 | .01 | | | | | | | | .59 | .80 | 1.0 | 1.2 | 1.7 | 2.1 | 2.9 | 3.7 | | | | | | |
| | | 2,000 | 1.3 | .21 | .08 | .04 | .02 | .01 | 54 | 80 | 106 | 155 | 205 | | | 12. | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | |
| | | 3,500 | | .37 | .14 | .07 | .03 | .01 | | | | | | | | .82 | 1.1 | 1.3 | 1.6 | 2.0 | 2.4 | 3.2 | 4.0 | | | | | | |
| | | 5,000 | 1.5 | .53 | .19 | .10 | .04 | .01 | 55 | 80 | 106 | 155 | 205 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | |
| | | 7,500 | | .79 | .29 | .14 | .06 | .02 | | | | | | | | .96 | 1.2 | 1.4 | 1.7 | 2.2 | 2.6 | 3.4 | 4.3 | | | | | | |
| | | 10,000 | 1.7 | 1.05 | .39 | .19 | .08 | .03 | 56 | 81 | 107 | 156 | 206 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | |
| | | 15,000 | | 1.58 | .58 | .29 | .12 | .04 | | | | | | | | 1.1 | 1.4 | 1.6 | 1.9 | 2.4 | 2.8 | 3.7 | 4.6 | | | | | | |
| | | 20,000 | 1.8 | 2.10 | .77 | .38 | .16 | .06 | 56 | 82 | 108 | 156 | 206 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | | | | | |
| | | 25,000 | | 2.63 | .97 | .48 | .20 | .08 | | | | | | | | 1.3 | 1.5 | 1.8 | 2.5 | 2.9 | 3.0 | 3.9 | 4.7 | | | | | | |
| 50,000 | 3.0 | 5.25 | 1.93 | .95 | .40 | .14 | 58 | 84 | 110 | 158 | 208 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | | | |
| 75,000 | | 7.88 | 2.90 | 1.43 | .60 | .20 | | | | | | | | 2.0 | 2.3 | 2.6 | 2.9 | 3.4 | 4.0 | 4.8 | 5.9 | | | | | | | | |
| 100,000 | 4.5 | 10.5 | 3.87 | 1.90 | .80 | .27 | 60 | 86 | 112 | 160 | 210 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | | | |
| 150,000 | | 15.8 | 5.80 | 2.85 | 1.20 | .40 | | | | | | | | 2.5 | 2.9 | 3.2 | 3.7 | 4.0 | 4.8 | 5.6 | 6.7 | | | | | | | | |
| 200,000 | 7.0 | 21.0 | 7.73 | 3.80 | 1.59 | .54 | 62 | 88 | 114 | 162 | 212 | | | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 11 | | | | | | | |
| 250,000 | | 26.3 | 9.66 | 4.75 | 1.99 | .67 | | | | | | | | 3.0 | 3.5 | 3.8 | 4.3 | 4.6 | 5.5 | 6.3 | 7.4 | | | | | | | | |

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