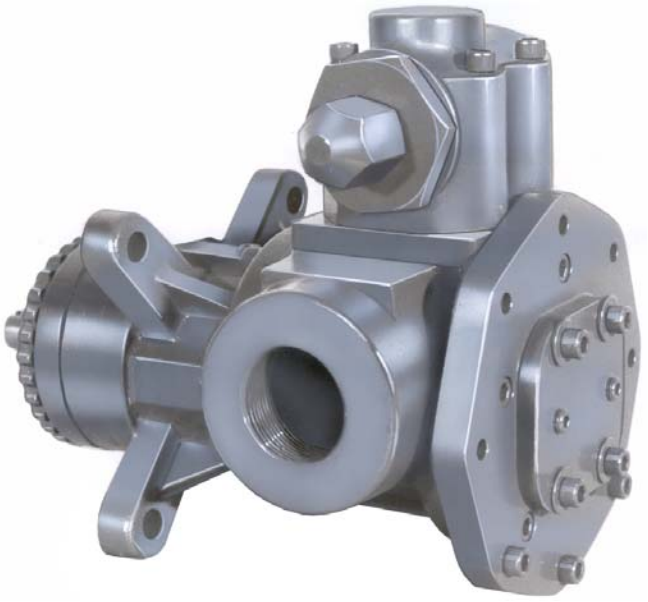
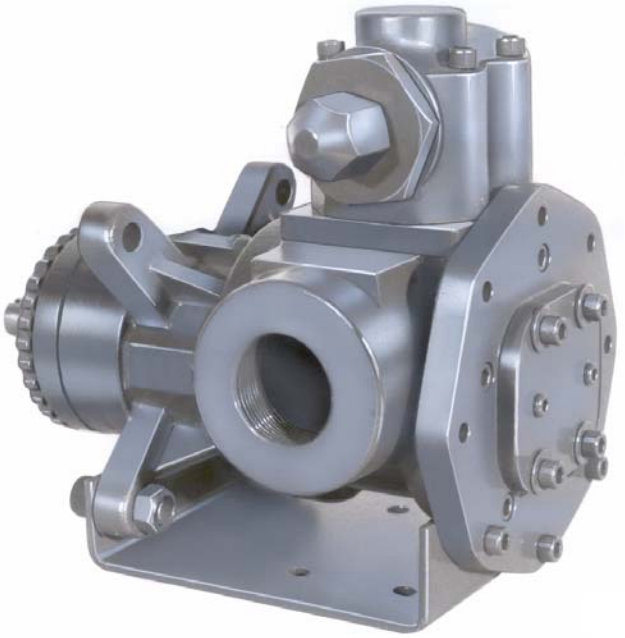
GORMAN-RUPP
ROTARY GEAR PUMPS

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

SUPERSEDES ALL PREVIOUS ISSUES
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Standard Construction

EXTERIOR	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

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

MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE-PSI [BAR]			TEMP.		
	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]	Weight LBS [KG]	Volume CU. FT.
GHC 1DC 3-B ● ① / GHC 1DC 4-B ■	9 [28]	1750 [1460]	6 [19]	1150 [960]	100 [7]	150 [10]	300 [21]	● 350 [177] / ■ 225 [107]	29 [13,2]	0.6
GHC 1DE 3-B ● ① / GHC 1DE 4-B ■	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 ■									58 [26,4]	2.9
GHC 1-1/2 GF 3-B ● / GHC 1-1/2 GF 4-B ■	23 [73]		15 [47]						58 [26,4]	2.9
GHC 2 GF 3-B ● / GHC 2 GF 4-B ■									58 [26,4]	2.9
GHC 1-1/2 GH 3-B ● / GHC 1-1/2 GH 4-B ■	31 [98]		20 [63]						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 ■	38 [120]		25 [79]				200 [14]		58 [26,4]	2.9
GHC 2 GJ 3-B ● ② / GHC 2 GJ 4-B ■									58 [26,4]	2.9
GHC 2 JG 3-B ● / GHC 2 JG 4-B ■	40 [126]	1150 [960]	30 [95]	870 [725]			300 [21]		128 [58,2]	5.3
GHC 2-1/2 JG 3-B ● / GHC 2-1/2 JG 4-B ■									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.

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Standard Models Cont'd

MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE-PSI [BAR]			TEMP.		
	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]	Weight LBS [KG]	Volume CU. FT.
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]		58 [183]						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 ■								■ 225 [107]	132 [60]	5.3
GHC 2 JP 3-B ● ① GHC 2 JP 4-B ■	107 [338]		81 [256]				200 [14]		132 [60]	5.3
GHC 2-1/2 JP 3-B ● ① GHC 2-1/2 JP 4-B ■									132 [60]	5.3
GHC 3 JP 3-B ● ① GHC 3 JP 4-B ■									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.

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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.

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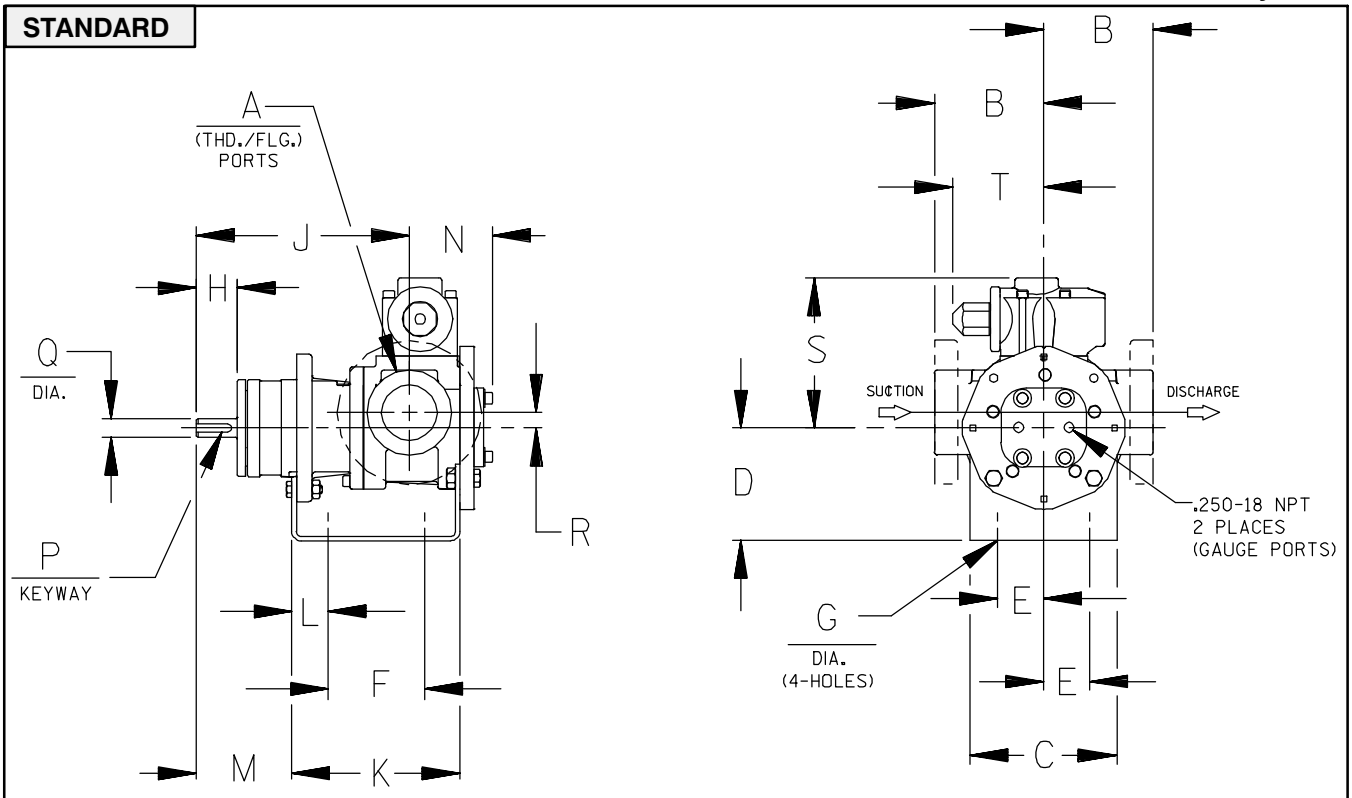
Basic Pump Dimensions

STANDARD



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] † 2.75 [70] ✳ 3.19 [81] † 4.00 [102] ⊢	4.00 [102]	3.50 ✳ [89] 4.50 [114] 5.25 [133]	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] × .75 [19]	.50 [13]	.62 [16]	5.19 [132]	3.58 [91]
GHC G	1-1/2"	3.50 [89] † 3.75 [95] ✳	5.88 [149]	3.50 ✳ [89] 4.50 [114] 5.25 [133]	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] × 1.25 [32]	.75 [19]	.62 [16]	6.00 [152]	3.62 [92]
	2"	4.00 [102] ⊢		6.25 [159]														
GHC J	2"	4.50 [114] †	6.88 [175]	4.50 [114] 5.25 [133] ✳	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] × 2.00 [51]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]
	2-1/2"	5.00 ✳ [127] † 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# ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

Continued –

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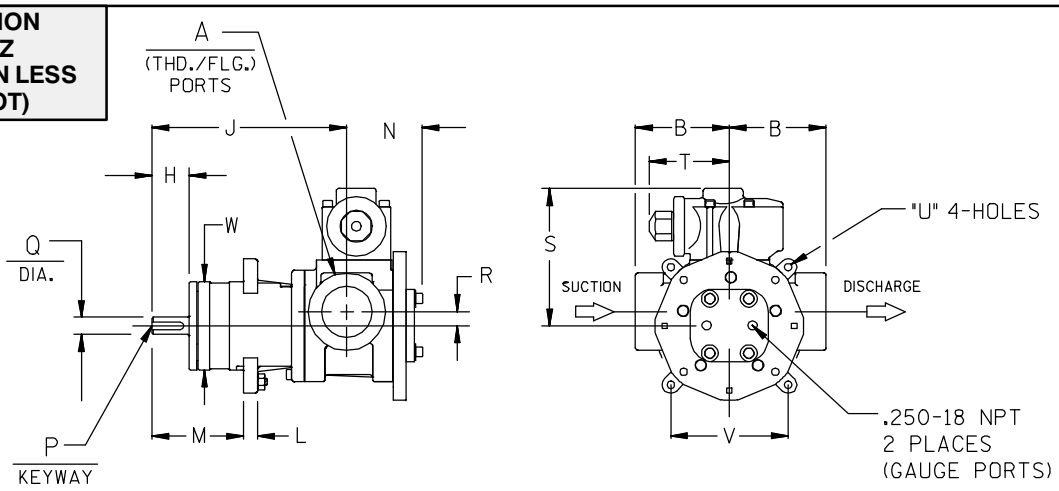
Basic Pump Dimensions

OPTION 80Z (SHOWN LESS FOOT)



CAD FILE NO.: 16458C

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] † 2.75 [70] ✳ 3.19 [81] ⊢ 4.00 [102] ⊢	1.16 [30]	6.19 [157]	.44 [11]	2.80 [71]	2.74 [70]	.12 [3] × .75 [19]	.50 [13]	.62 [16]	5.19 [132]	3.58 [91]	.41 [10]	3.00 [76]	2.85 [72]
GHC G	1-1/2"	3.50 [89] †	1.62 [41]	8.50 [216]	.62 [16]	4.00 [102]	3.35 [85]	.19 [5] × 1.25 [32]	.75 [19]	.62 [16]	6.00 [152]	3.62 [92]	.53 [13]	4.75 [121]	3.85 [98]
	2"	3.75 [95] ✳ 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] × 2.00 [51]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]	.53 [13]	4.75 [121]	4.85 [123]
	2-1/2"	5.00 [127] ✳ 6.00 [152] ⊢													
	3"	6.31 [160] ⊢ †													

✳ STANDARD DIMENSION

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

† 90° HOUSING

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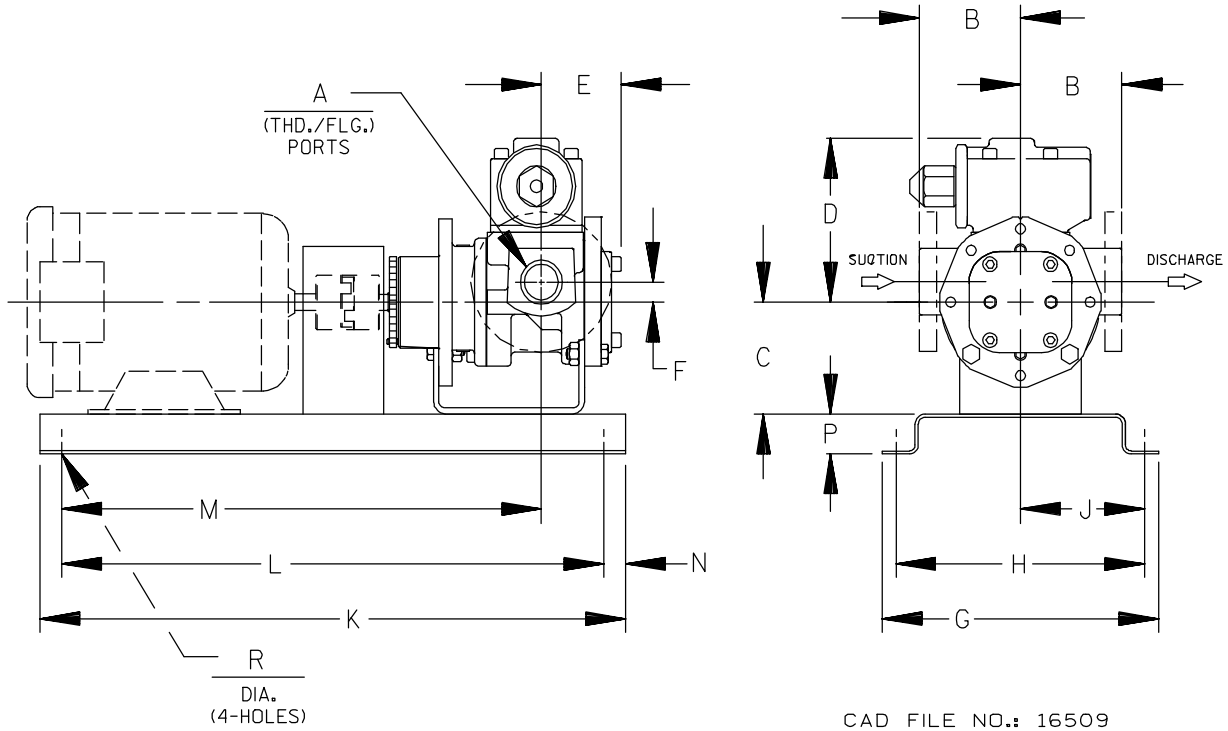
GHC

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]	5.19 [132]	2.73 [68]	.62 [16]	10.14 [258]	8.88 [226]	4.44 [113]	25.25 [641]	19.25 [489]	20.50 [521]	3.00 [76]	2.00 [51]	.50 [14]
		143T/145T	2.75 ✳ [70]													
		182T/184T	3.19 ⊢† [81]	4.50 [114]				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 ⊢ [82]	5.25 [133]												
GHC G	1- ½"	50/50H	3.50 † [89]	3.50 ✳ [89]	6.00 [152]	3.35 [85]	.62 [16]	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]												
		213T/215T	4.00 ⊢ [102]	5.25 [133]						7.75 [197]	33.50 [851]	23.50 [597]	26.75 [679]	5.00 [127]	4.00 [102]	
	2"	254T/256T		6.25 [159]				17.50 [445]	15.50 [394]							
GHC J	2"	182T/184T	4.50 † [114]	4.50 [114]	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]	.69 [18]
		213T/215T	5.00 ✳ [127]	5.25 [133] ✳												
	2- ½"	254T/256T		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# ANSI CAST 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

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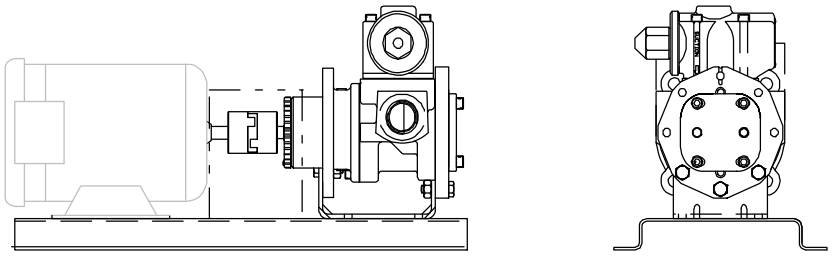
GHC

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

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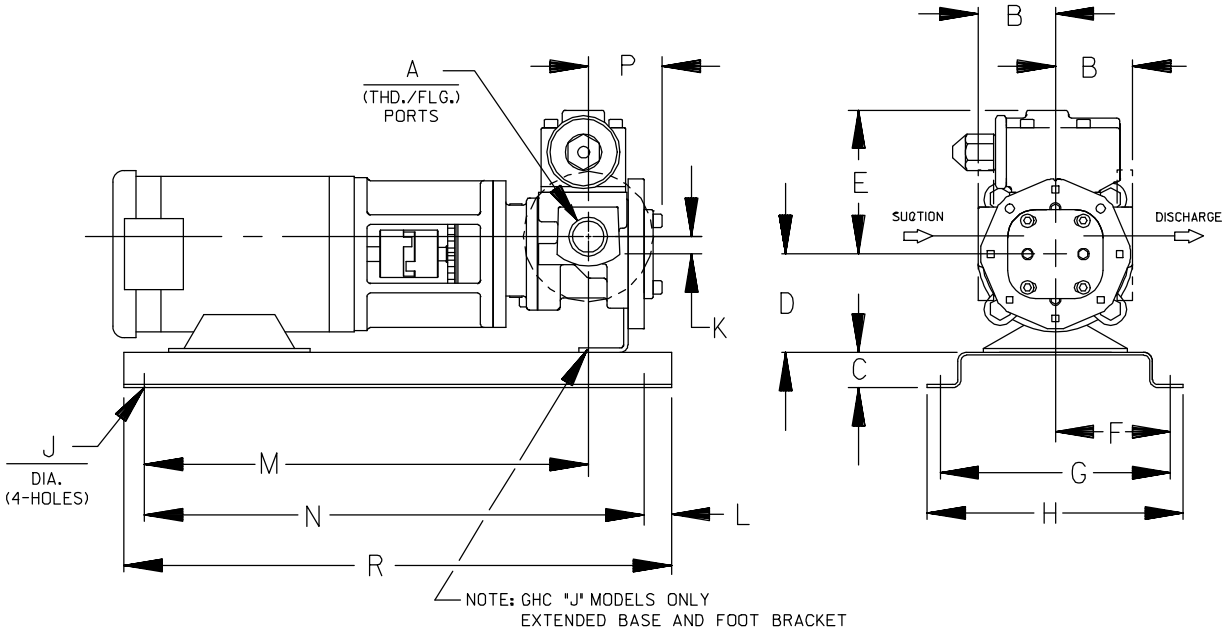
GHC

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]			
			3.12 ⊢ † [79]													
		182C/184C	4.00 ⊢ [82]		4.50 [114]								18.80 [478]			
GHC G	1- ½"	56C	3.50 † [89]	2.00 [51]	3.50 [89]	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														
		182TC/184TC	3.75 ✳ [95]		4.50 [114]								19.73 [501]			
	2"	182C/184C														
		213TC/215TC	4.00 ⊢ [102]		5.25 [133]								21.86 [555]			
GHC J	2"	182TC/184TC	4.50 † [114]	4.00 [102]	4.50 [114]	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]
	2- ½"	213TC/215TC	5.00 ✳ [127]		5.25 [133]								27.75 [705]			
			6.00 ⊢ [152]													
	3"	254TC/256TC	6.31 ⊢ † [160]		6.25 [159]								33.74 [857]			

✳ STANDARD DIMENSION

⊢ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. 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

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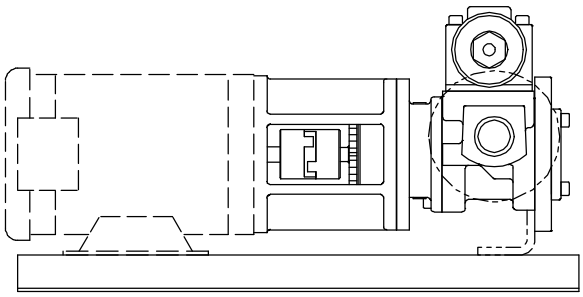
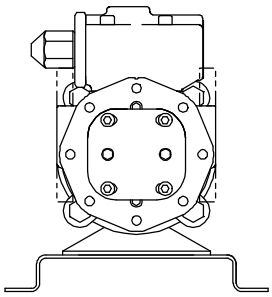
DIRECT FLEX C-FLANGE DRIVE OPTIONS

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





PUMP MODEL NUMBER	60Hz RPM	FRAME	MTG. FT. OPTION REQ.	DRIVE ASSY NO.
GHC D	3450 1750 1150 850	56C	80Y	90351–540
		143TC	80Y	90351–541
		145TC	80Y	90351–544
		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

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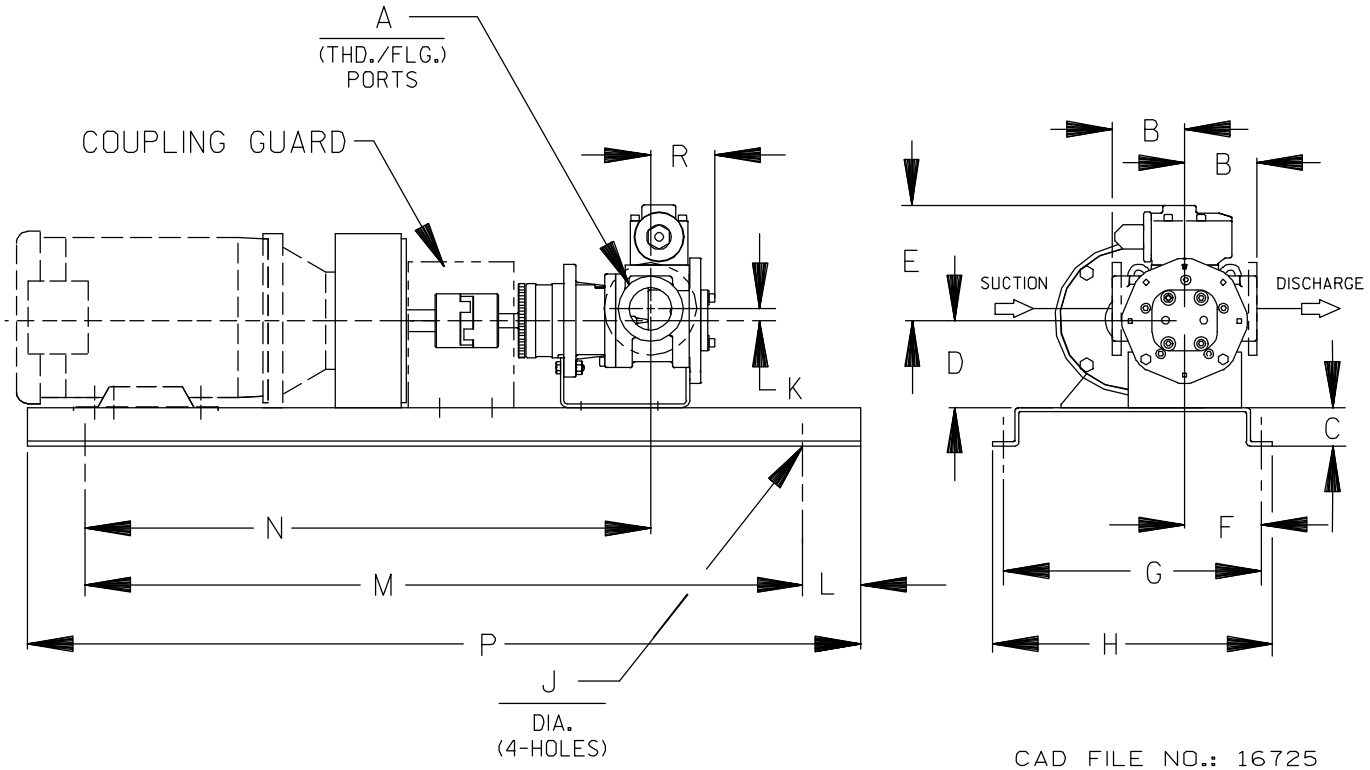
GHC

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 [1321]	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] ⊢ †		4.50 [114]		5.50 [140]	14.63 [372]	16.63 [422]	.56 [14]	.62 [16]	3.00 [76]	37.25 [946]	27.05 [687]	43.25 [1099]	
		213TC/215TC	4.00 [82] ⊢													
GHC G	1- ½"	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														
		182TC/184TC	3.75 [95] ✳		4.50 [114]											
	2"	213TC/215TC	4.00 [102] ⊢		3.25 [83]		5.50 [140]	14.63 [372]	16.63 [422]	.56 [14]	.62 [16]	3.00 [76]	37.25 [946]	29.35 [735]	43.25 [1099]	
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- ½"		5.00 [127] ✳													
	3"	213TC/215TC	6.00 [152] ⊢		5.25 [133] ✳											
			6.31 [160] ⊢ †													

✳ STANDARD DIMENSION

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

† 90° HOUSING

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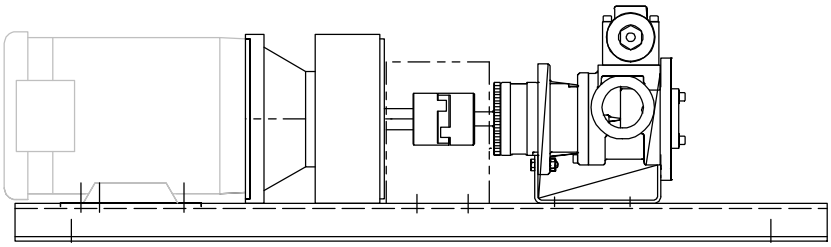
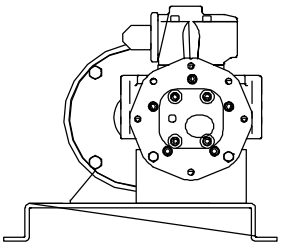
GHC

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 RATIO	REDUCER ① MAX HP @ 1750	REDUCER ① MAX HP @ 1150	FRAME	MTG.FT. OPTION REQ.	DRIVE ASSY NO.
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
				12.98	8.57	182TC/184TC	80F	90353–546
	440	288	4.00:1	3.63	2.39	56C	STD	90353–550
				5.90	3.89	143TC/145TC	STD	90353–556
				5.90	3.89	182C/184C	80F	90353–564
				11.35	7.49	56C	STD	90353–568
	350	230	5.00:1	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

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GHC

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) RATIO	REDUCER (1) MAX HP @ 1750	REDUCER (1) MAX HP @ 1150	FRAME	MTG.FT. OPTION REQ.	DRIVE ASSY NO.
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

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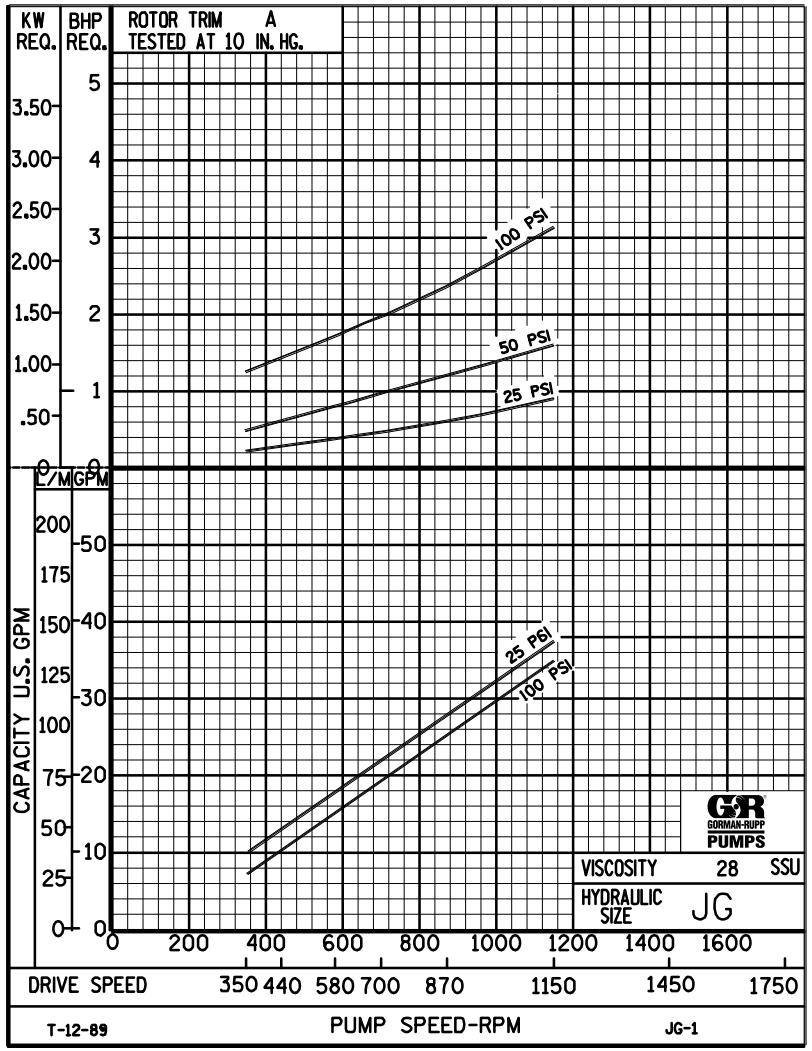
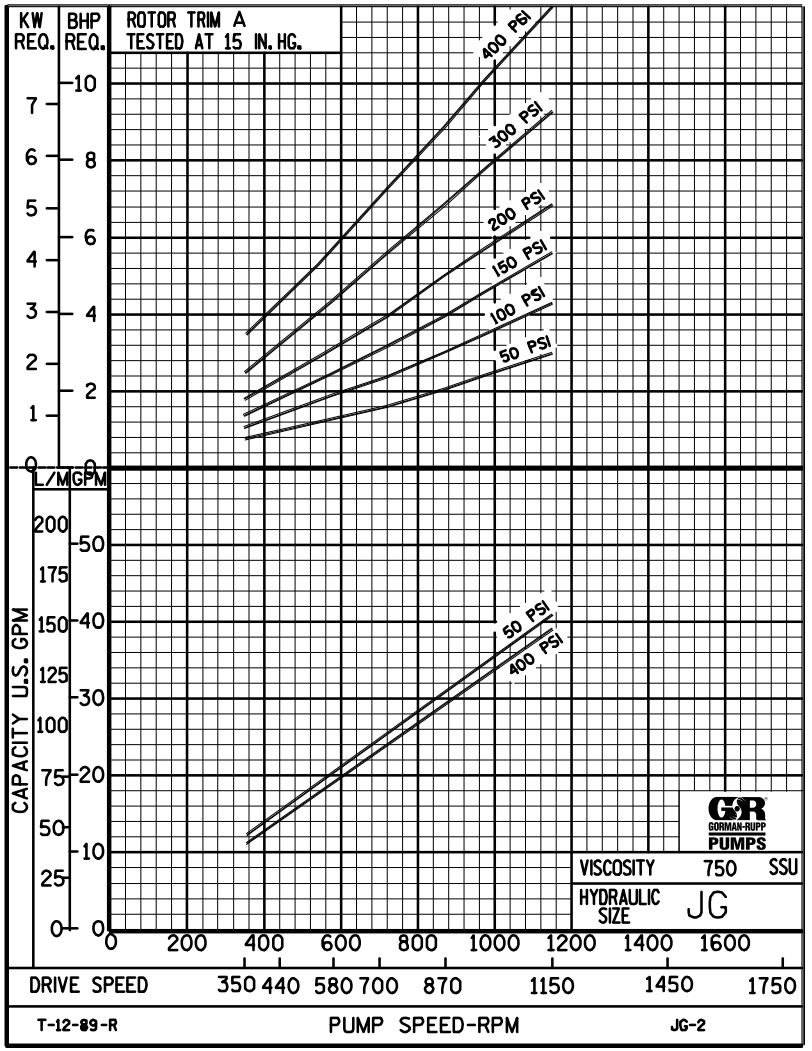
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

JG Hydraulic Size





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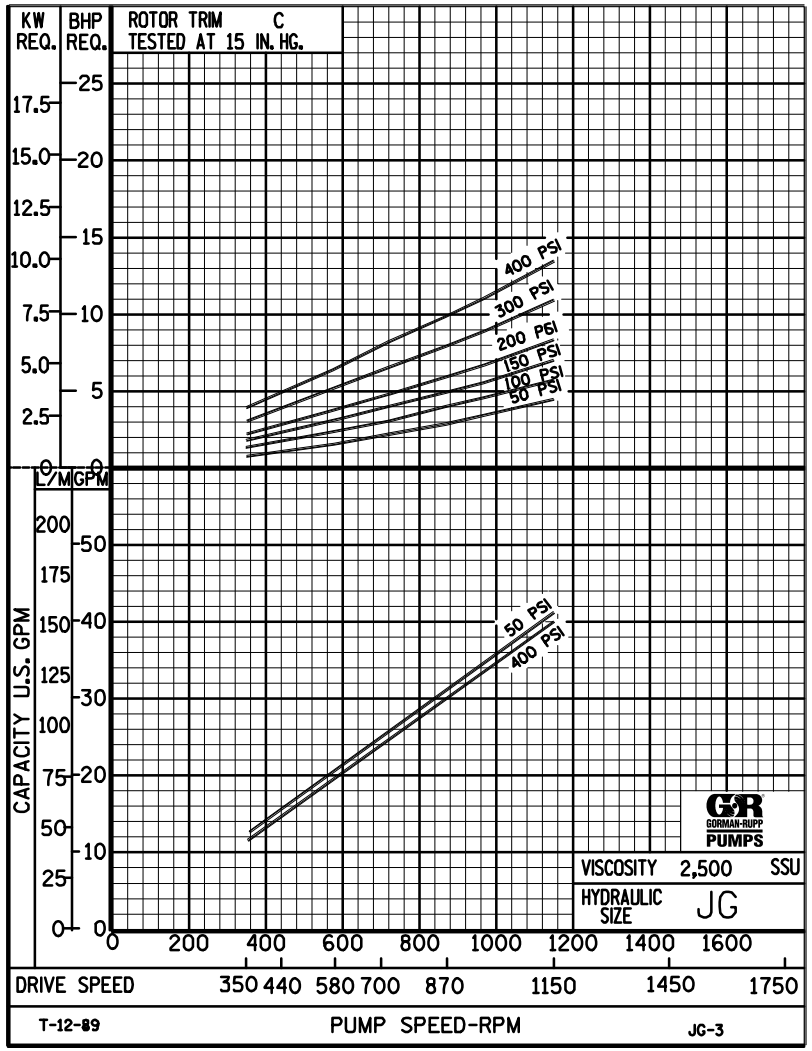
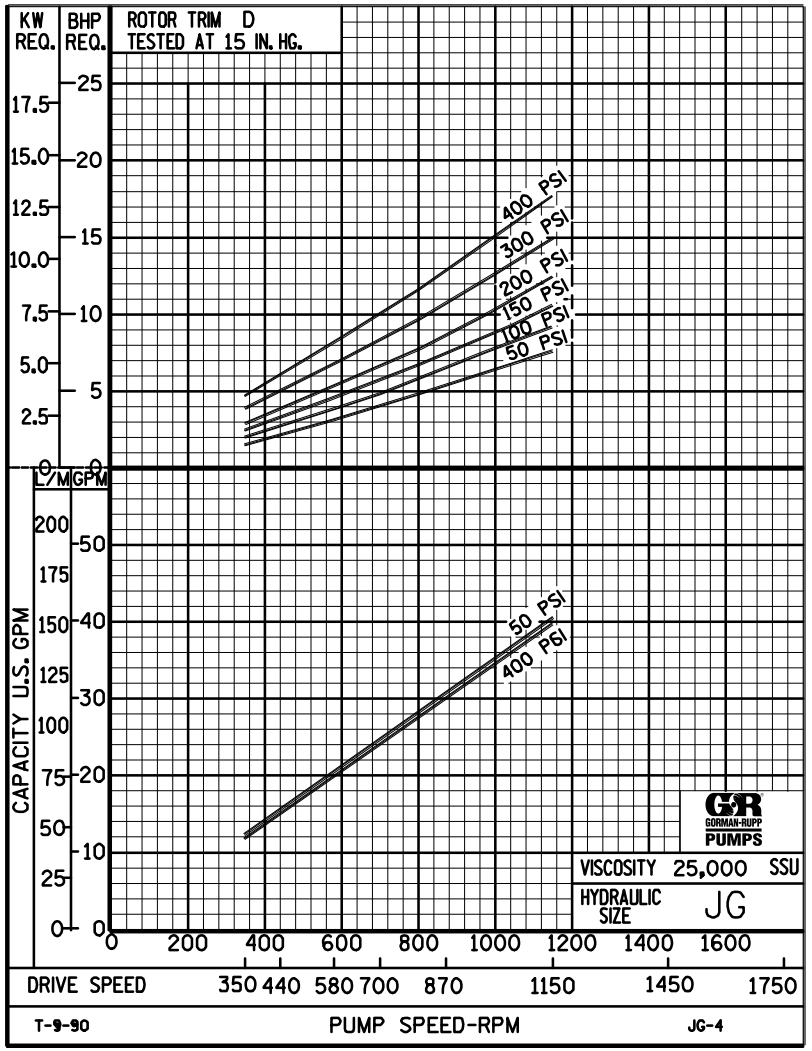
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

JG Hydraulic Size





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GORMAN-RUPP
ROTARY GEAR PUMPS

JG

PUMP HYDRAULIC SIZE CHART

40 GPM
1150 RPM

NOMINAL CAP. GPM	NOMINAL SPEED RPM	ROTOR TRIM	VISCOSITY (SSU)	N.I.P.R. (PSIA)	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe) PIPE DIAMETER 1½"	2"	2½"	3"	4"	FULL BYPASS RELIEF VALVE PRESSURE (PSI) CRACKING PRESS. (PSI) LOW PRES R/V 50	75	100	HI PRES R/V 150	200	CAPACITY (GPM) / H.P. REQUIRED DIFFERENTIAL PRESSURE (PSI) 25	50	75	100	150	200	300	400
															HEAVY DUTY							
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
		"C"	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
		"D"	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.

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GORMAN-RUPP
ROTARY GEAR PUMPS

JG

PUMP HYDRAULIC SIZE CHART

30 GPM
870 RPM

NOMINAL		ROTOR TRIM	VISCOSITY	N.I.P.R.	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					FULL BYPASS RELIEF VALVE PRESSURE (PSI)					CAPACITY (GPM) / H.P. REQUIRED								
															DIFFERENTIAL PRESSURE (PSI)								
CAP. GPM	SPEED RPM		(SSU)	(PSIA)	PIPE DIAMETER					CRACKING PRESS. (PSI)					25	50	75	100	150	200	300	400
										LOW PRES R/V			HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY					HEAVY DUTY ONLY		
					1½"	2"	2½"	3"	4"	50	75	100	150	200								
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
		"C"	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
		"D"	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.

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GORMAN-RUPP
ROTARY GEAR PUMPS

JG

PUMP HYDRAULIC SIZE CHART

20 GPM
580 RPM

NOMINAL		ROTOR TRIM	VISCOSITY	N.I.P.R.	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					FULL BYPASS RELIEF VALVE PRESSURE (PSI)					CAPACITY (GPM) / H.P. REQUIRED							
															DIFFERENTIAL PRESSURE (PSI)							
CAP. GPM	SPEED RPM		(SSU)	(PSIA)	PIPE DIAMETER					CRACKING PRESS. (PSI)					25	50	75	100	150	200	300	400
										LOW PRES R/V			HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY					HEAVY DUTY ONLY		
					1½"	2"	2½"	3"	4"	50	75	100	150	200								
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	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	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	19	19
		"C"	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	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
			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
		"D"	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
			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
			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
			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.

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GORMAN-RUPP
ROTARY GEAR PUMPS

JG

PUMP HYDRAULIC SIZE CHART

12 GPM
350 RPM

NOMINAL		ROTOR TRIM	VISCOSITY	N.I.P.R.	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					FULL BYPASS RELIEF VALVE PRESSURE (PSI)					CAPACITY (GPM) / H.P. REQUIRED							
															DIFFERENTIAL PRESSURE (PSI)							
CAP. GPM	SPEED RPM		(SSU)	(PSIA)	PIPE DIAMETER					CRACKING PRESS. (PSI)					25	50	75	100	150	200	300	400
										LOW PRES R/V			HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY					HEAVY DUTY ONLY		
					1½"	2"	2½"	3"	4"	50	75	100	150	200								
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
			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	11
		"C"	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	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
			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
		"D"	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	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	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	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.

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5 GPM
150 RPM

NOMINAL		VISCOSITY		N.I.P.R	FRICTION PIPE LOSS (PSI/FT) (Schedule 40 Steel Pipe)					CAPACITY (GPM) / H.P. REQUIRED							
										MEDIUM-DUTY & HEAVY-DUTY				HEAVY-DUTY ONLY			
					PIPE DIAMETER					DIFFERENTIAL PRESSURE (PSI)							
GPM	RPM	ROTOR TRIM	(SSU)	(PSIa)	2"	2½"	3"	4"	5"	25	50	75	100	150	200	300	400
5	150	STD															
		"D"	200,000	2.9	3.2	1.6	0.66	0.2	0.1	5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2
			399,999		6.45	3.2	1.3	0.45	0.2	1.4	1.5	1.6	1.7	2.0	2.2	2.4	2.7
			400,000	3.3						5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2
			599,999		9.7	4.8	2	0.7	0.3	1.5	1.6	1.7	1.8	2.1	2.3	2.6	2.9
			600,000	4						5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2
			799,999		12.9	6.3	2.7	0.9	0.36	1.7	1.8	1.9	2.0	2.3	2.5	2.8	3.1
			800,000	4.4						5.4	5.4	5.3	5.3	5.3	5.3	5.2	5.2
			1M		16.1	7.9	3.3	1.1	0.45	1.9	2.0	2.1	2.2	2.5	2.7	3.0	3.3

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