

**GHC SERIES
 HEAVY DUTY COMPACT
 STEEL ROTARY GEAR PUMP**

This heavy duty series pump is ideal for refining, petrochemical and applications requiring extra strength or shock resistance. The steel construction conforms to ASTM designation A216 Grade WCB. Superior rotor shaft support and an integral, maintenance-free radial/thrust bearing, reduce deflection and wear.



The GHC steel series is designed for applications in the operating ranges noted on the model pages. 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.

FEATURES

- 400 PSI CAPABILITY
- BALL BEARING THRUST CONTROL
- ROTOR END CLEARANCE EXTERNALLY ADJUSTABLE
- HIGH STRENGTH, COMPUTER PROFILED GEARING FOR QUIET OPERATION
- MULTIPLE PORT POSITIONS
- INTERNAL SEAL VENT

OPERATING RANGE

CAPACITY	(GPM) :	(3 TO 107)
	[LPM] :	[11 TO 405]
PRESSURE	(PSI) :	[0 TO 300]
	[BAR] :	[0 TO 21]
VISCOSITY	(SSU) :	(28 TO 25,000)
	[cSt] :	[1 TO 5417]
TEMPERATURE	(F) :	(-20° TO 350°)
	[C] :	[-29° TO 177°]

APPLICATIONS

- USE WITH ANY CLEAN LIQUID COMPATIBLE WITH IRON/STEEL
- ★ BOOSTER SERVICE
 - ★ CIRCULATING
 - ★ FILTERING
 - ★ LUBRICATING
 - ★ TRANSFERRING

EXTERIOR	BACKHD	ROTOR & IDLER	HOUSING PORTS	BUSHING	IDLER PIN	SHAFT	SHAFT SEALING		ROTA-TION	INTERNAL RELIEF VALVE	
							MECH. SEAL ●	PACKING ■		MATERIAL	SETTING
STEEL ③	DUCTILE IRON	HIGH STRENGTH IRON	150# FLG GHC 180° GHS 90°	BRONZE	HARD STEEL	STEEL	VITON	CARBON FIBER	C.W.	STEEL	75 PSI [5 BAR]

Standard Models

G H C 3 JG 32 - B
G H S 3 JG 32 - B
 | | | | | | | | | | | |
 GEAR DUTY DESIGN PORT SIZE HYDRAULIC SEAL STYLE

MODEL NUMBER		NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA		
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE - PSI [BAR]			TEMP	Wt.	Vol.	
		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]			
GHC	GHS							LBS [KG]	CU. FT.			
GHC 1 DC32-B ① ● †		9 [28]		6 [19]						39 [17,7]	0.6	
GHC 1 DE32-B ① ● †		11 [35]		7 [22]						39 [17,7]	0.6	
GHC 1-1/2 GC32-B ● †	GHS 1-1/2 GC32-B ● † GHS 1-1/2 GC38-B ■ †	16 [50]	1750 [1460]	10 [32]	1150 [960]			300 [21]	GHC ●	71 [32,2]	2.9	
GHC 1-1/2 GF32-B ● †	GHS 1-1/2 GF32-B ● † GHS 1-1/2 GF38-B ■ †	23 [73]		15 [47]						350 [177]	71 [32,2]	2.9
GHC 1-1/2 GH32-B ● †	GHS 1-1/2 GH32-B ● † GHS 1-1/2 GH38-B ■ †	31 [98]		20 [63]						GHS ●	71 [32,2]	2.9
GHC 1-1/2 GJ32-B ② ● †	GHS 1-1/2 GJ32-B ② ● † GHS 1-1/2 GJ38-B ② ■ †	38 [120]		25 [79]				100 [7]	150 [10]	400 [204]	71 [32,2]	2.9
GHC 3 JG32-B ● †	GHS 3 JG32-B ● † GHS 3 JG38-B ■ †	40 [126]	1150 [960]	30 [95]	870 [725]				500 [260]	154 [69,8]	5.3	
GHC 3 JJ32-B ● †	GHS 3 JJ32-B ● † GHS 3 JJ38-B ■ †	56 [177]		36 [114]						300 [21]	154 [69,8]	5.3
GHC 3 JL32-B ● †	GHS 3 JL32-B ● † GHS 3 JL38-B ■ †	77 [243]		58 [183]							154 [69,8]	5.3
GHC 3 JP32-B ② ● †	GHS 3 JP32-B ② ● † GHS 3 JP38-B ② ■ †	107 [338]		81 [256]						200 [14]		154 [69,8]

STANDARD MODELS
CONTINUED

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GHC 3 JG32-B, GHS 3 JG32-B**

- MECHANICAL SEAL
- LIPSEAL/PACKING
- † PORTS ARE COMPATIBLE WITH 150# ANSI FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

- 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 REFER TO REFERENCE SECTION FOR SPECIFIC CONSTRUCTION DETAILS.

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		DIFF. PRESSURE - PSI [BAR]			TEMP.	Wt. LBS [KG]	Vol. 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]			
GHC	GHS											
	GHS 2 NK32-B ● † GHS 2 NK38-B ■ †	99 [375]	960 [960]	60 [189]	580 [480]			300 [21]		200 [90,7]	5.3	
	GHS 3 NK32-B ● † GHS 3 NK38-B ■ †									200 [90,7]		
	GHS 2 NM32-B ● † GHS 2 NM38-B ■ †	132 [500]	960 [960]	80 [252]	580 [480]			300 [21]		200 [90,7]	5.3	
	GHS 3 NM32-B ● † GHS 3 NM38-B ■ †									200 [90,7]		
	GHS 3 NP32-B ① ● † GHS 3 NP38-B ① ■ †	165 [624]	960 [960]	99 [312]	580 [480]			300 [21]		200 [90,7]	5.3	
	GHS 2-1/2 RM32-B ● † GHS 2-1/2 RM38-B ■ †	172 [542]		720 [600]						143 [451]		480 [400]
	GHS 3 RM32-B ● † GHS 3 RM38-B ■ †		302 [136,9]									
	GHS 4 RM32-B ● † GHS 4 RM38-B ■ †	215 [678]	720 [600]	143 [451]	480 [400]	100 [7]	150 [10]	300 [21]		■ 500 [260]	302 [136,9]	10.7
	GHS 3 RP32-B ● † GHS 3 RP38-B ■ †									302 [136,9]		
	GHS 4 RP32-B ● † GHS 4 RP38-B ■ †	255 [804]	720 [600]	170 [536]	480 [400]	100 [7]	150 [10]	300 [21]			302 [136,9]	10.7
	GHS 3 RR32-B ● † GHS 3 RR38-B ■ †									302 [136,9]		
	GHS 4 RR32-B ● † GHS 4 RR38-B ■ †	295 [930]	720 [600]	196 [618]	480 [400]	100 [7]	150 [10]	300 [21]			302 [136,9]	10.7
	GHS 3 RS32-B ① ● † GHS 3 RS38-B ① ■ †									302 [136,9]		
	GHS 4 RS32-B ① ● † GHS 4 RS38-B ① ■ †							200 [14]		302 [136,9]	10.7	

STANDARD MODELS CONTINUED

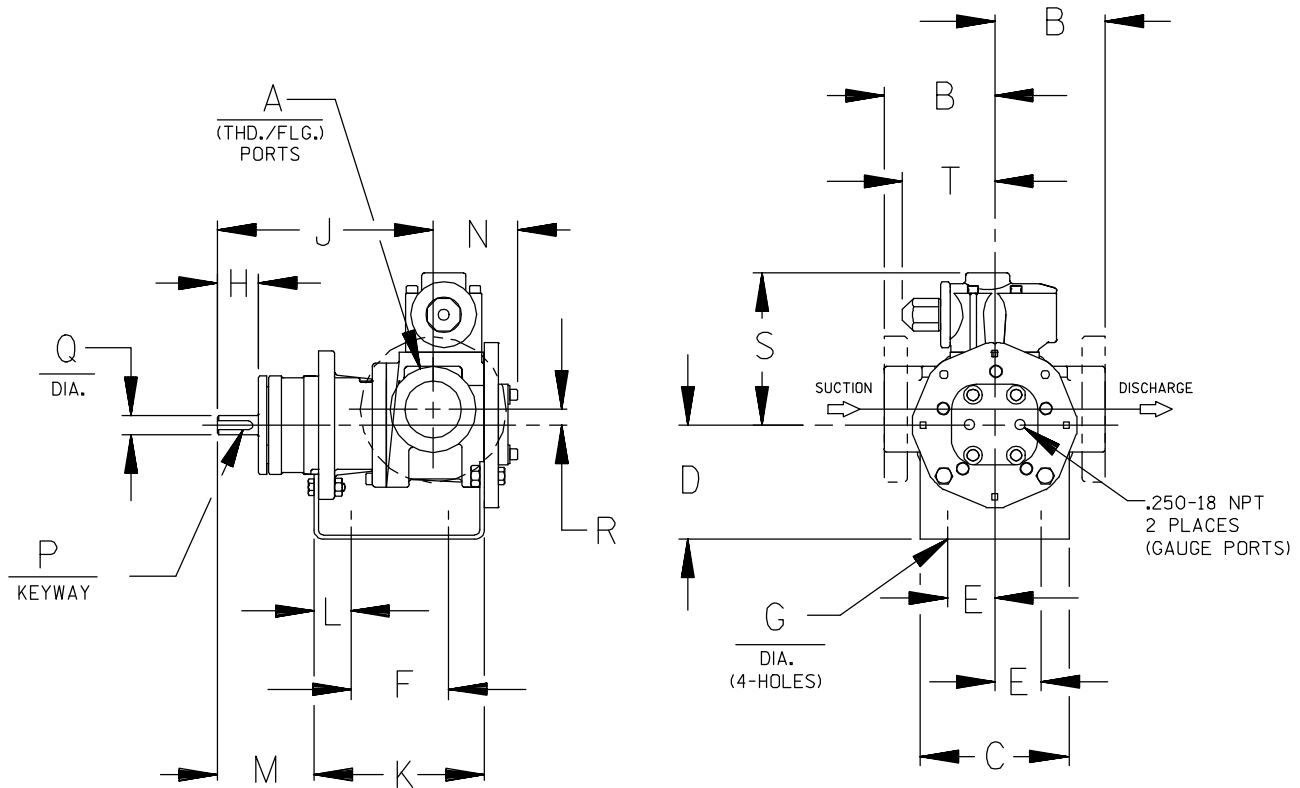
- MECHANICAL SEAL
- LIPSEAL/PACKING
- † PORTS ARE COMPATIBLE WITH 150# ANSI FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

① PUMP LIMITED TO 200 PSI MAXIMUM PRESSURE.

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

APPLICATION RECOMMENDATIONS:		
APPLICATION	OPTIONS REQUIRED (Select One From Each Row)	OPERATING LIMITATIONS
GHS ONLY HIGH TEMPERATURE	25U, 25V, OR 25W 35J – 35M (AS REQ'D) 40M, 40W 61H, OR 65Q 70K	TEMPERATURE: 675° F MAX. PRESSURE: 200 PSI MAX.
ASPHALT	35J–35M (AS REQ'D) 40M, 40W, 40G 41R, 41W 65S 70, 70K, 71K	TEMPERATURE:500° MAX.
JACKETED	40G, 40J, 40K, 40W, 41U, 41W	LIMIT JACKET PRESSURE TO 150 PSIG

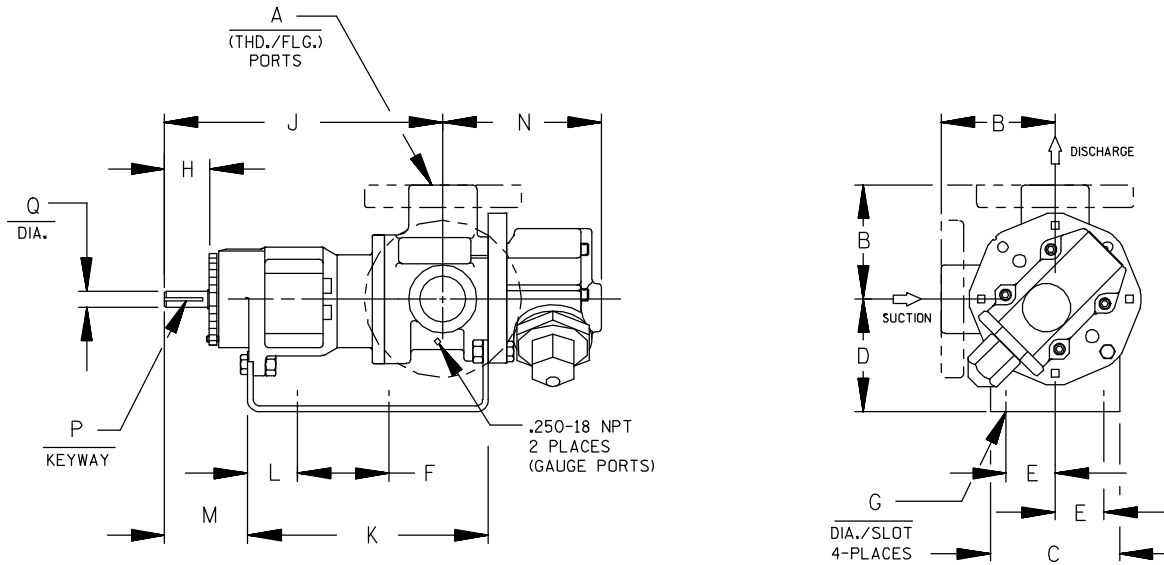
NOTE: PROPER PUMP APPLICATION REQUIRES CONSIDERATION OF ADDITIONAL FACTORS. PLEASE REVIEW APPLICATION GUIDE IN SECTION 500 OR CONSULT THE FACTORY.



CAD FILE NO.: 16458D

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"	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] x .75 [19]	.50 [13]	.62 [16]	5.19 [132]	3.58 [91]
GHC G	1-1/2"	4.00 † [102]	5.88 [149]	3.50* [89] 4.50 [114] 5.25 [133] 6.25 [159]	1.62 [41]	4.00 [102]	.41 [10]	1.62 [41]	8.50 [216]	6.71 [170]	1.06 [27]	3.82 [97]	3.35 [85]	.19 [5] x 1.25 [32]	.75 [19]	.62 [16]	6.00 [152]	3.62 [92]
GHC J	3"	6.00* [152] † 6.31 † [160]	6.88 [175]	4.50 [114] 5.25* [133] 6.25 [159] 7.00 [178] 8.00 [203]	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] x 2.00 [51]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]

* STANDARD DIMENSION
 PORTS ARE COMPATIBLE WITH 150# OR 300# ANSISTEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT
 † FOR ANSIPIPE. OPTIONAL [DIN FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.
 NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.
 ‡ 90° HOUSING



CAD FILE NO.: 16669F

MODEL NUMBERS	PUMP DIMENSIONS - INCHES [MILLIMETERS]														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
GHS G	1-1/2"	4.00 [102]	4.88 [124]	3.50* [89] 4.50 [114] 5.25 [133] 6.25 [159]	1.62 [41]	8.00 [203]	.41 [10]	1.62 [41]	12.06 [306]	10.72 [272]	1.52 [39]	3.35 [85]	5.70 [145]	.19 [5] x 1.25 [32]	.75 [19]
GHS J	3"	6.00 † [152] 6.31 [160]	6.88 [175]	5.25* [133] 6.25 [159] 7.00 [178] 8.00 [203]	2.88 [73]	10.00 [254]	.44 [11]	2.50 [64]	15.68 [398]	14.31 [363]	2.77 [70]	4.48 [114]	8.50 [216]	.25 [6] x 2.00 [51]	1.00 [25]
GHS N	2"	5.25* [133] 5.38 [137]	8.00 [203]	4.50 [114] 5.25* [133]	2.88 [73]	10.00 [254]	.44 [11]	2.58 [66]	16.37 [416]	15.14 [385]	2.69 [68]	4.56 [116]	7.59 [193]	.25 [6] x 2.00 [51]	1.12 [32]
	3"	7.19 [183]		8.72* [221]											
GHS R	2-1/2"	7.19 [183]	10.50 [267]	7.00 [178]	3.75 [95]	13.75 [349]	.52 [13]	2.25 [57]	17.87 [454]	17.36 [441]	1.80 [46]	4.70 [119]	11.31 [287]	.38 [10] x 1.88 [48]	1.44 [37]
	3"														
	4"														

* STANDARD DIMENSION

† PORTS ARE COMPATIBLE WITH 150* OR 300* ANSISTEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 180° HOUSING

GHC/GHS

FOR GHC DRIVE OPTIONS

AND DIMENSIONS

SEE

SECTION 540

FOR GHS DRIVE OPTIONS

AND DIMENSIONS

SEE

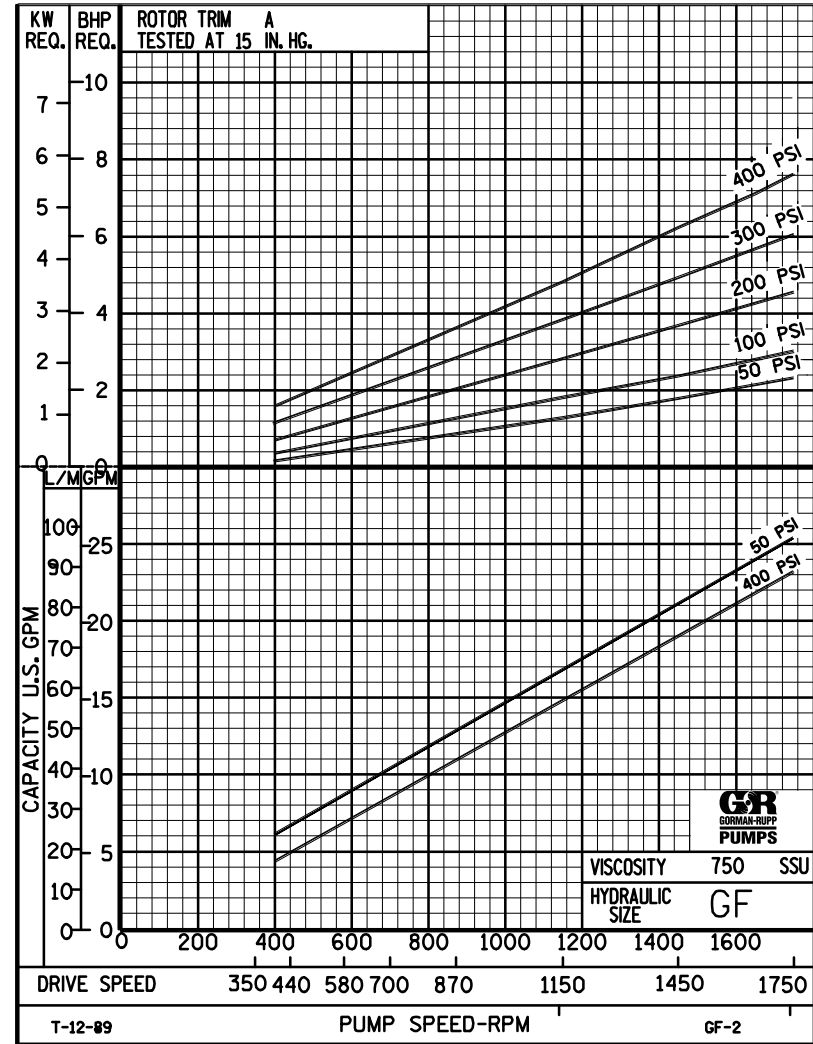
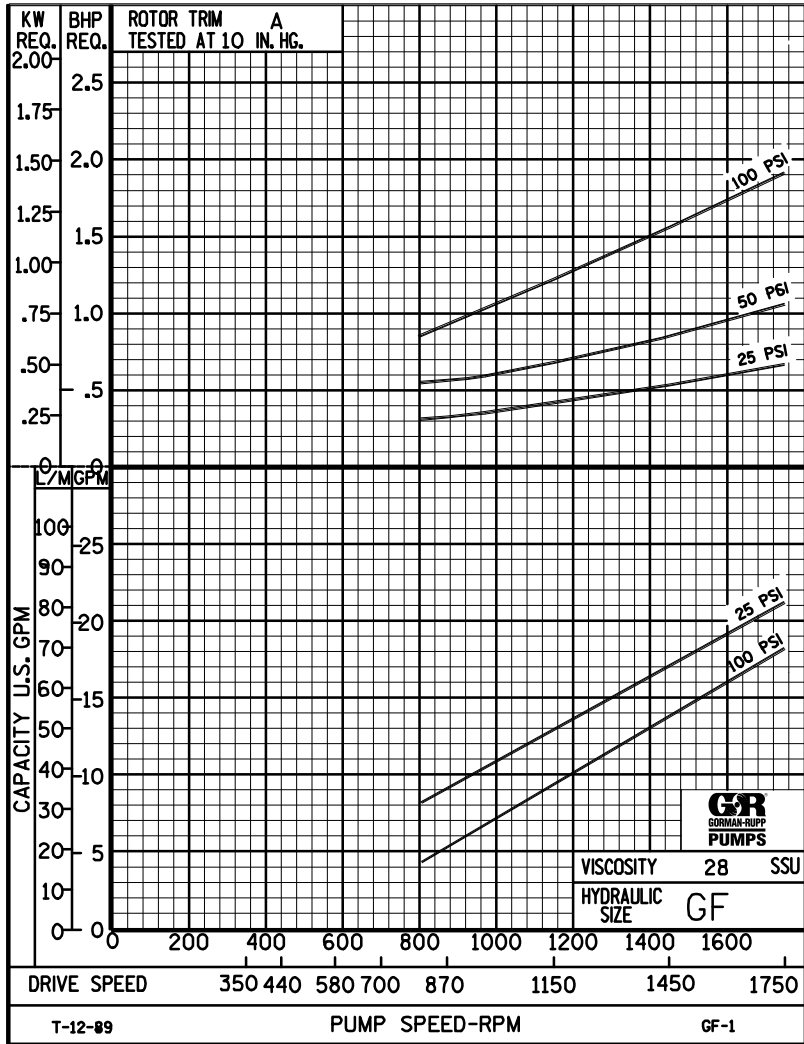
SECTION 545



PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GF Hydraulic Size



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

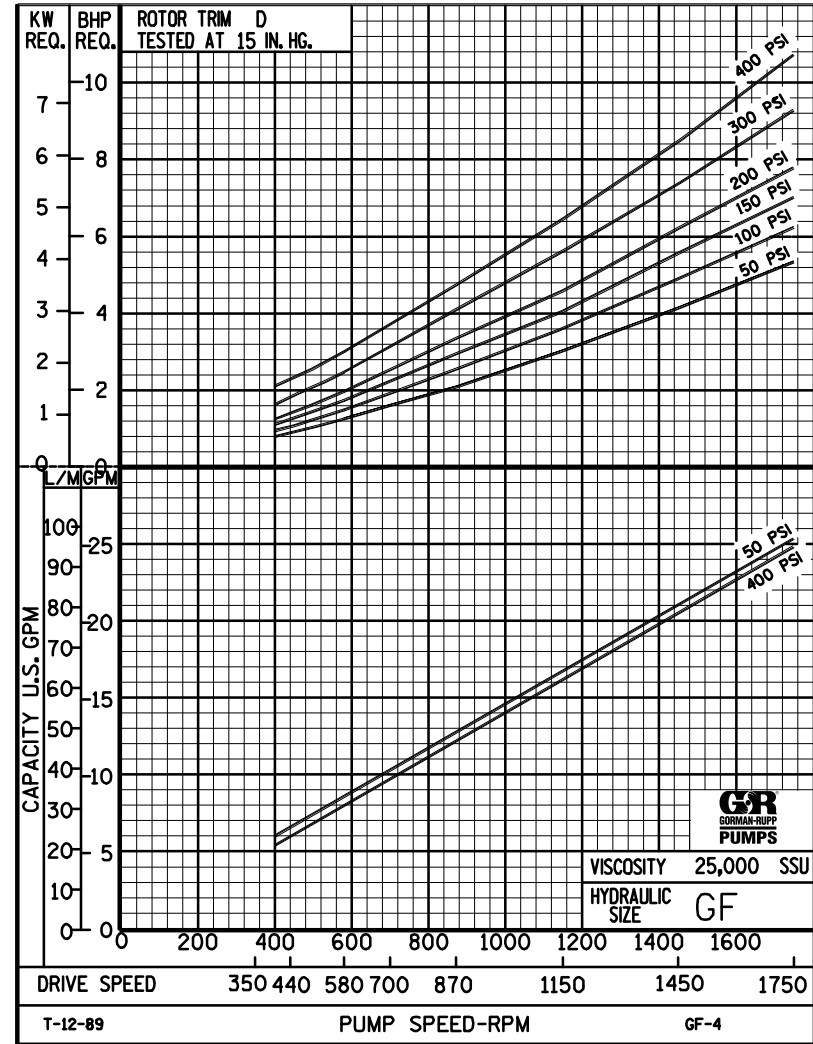
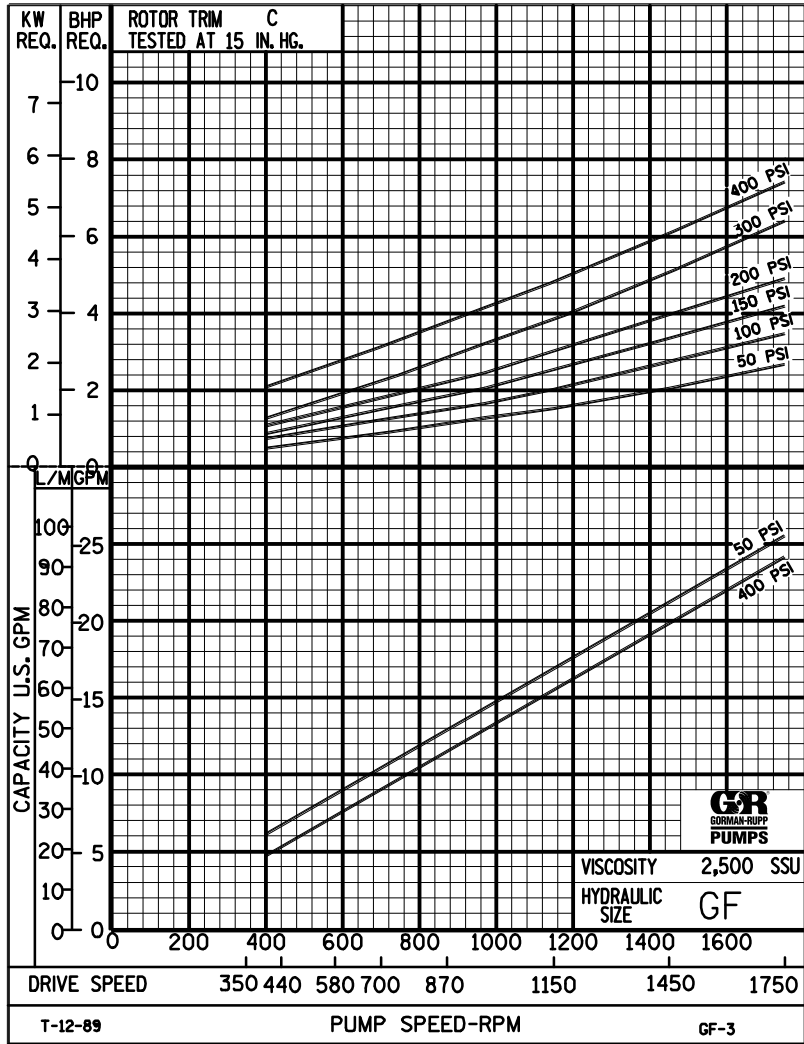
Printed in U.S.A.



PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GF Hydraulic Size



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



GF

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 46

January 2010

**23 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				
							50	75	100	150	200	25	50	75	100	150	200	300	400				
23	1750	STD	28	3.9	.01	.01	.01	.01	.01	63	89	117			21	20	19	18					
			32		.36	.12	.03	.02	.01						.69	1.1	1.5	1.9					
			38	3.9	.46	.15	.04	.02	.01	63	89	117	167			22	21	21	19	18			
			50		.56	.18	.05	.03	.01						.92	1.1	1.7	2.1	2.9				
			70	3.9	.63	.20	.06	.03	.01	64	90	119	167	230		23	23	22	21	20	20		
			100		.74	.24	.07	.03	.01						1.1	1.4	1.8	2.2	3.1	3.8			
			150	3.9	.83	.27	.08	.04	.01	64	90	119	167	230		24	24	23	22	22	22	21	19
			200		.87	.31	.10	.05	.02						1.4	1.6	2.1	2.4	3.2	3.9	5.3	6.6	
			300	3.9	.90	.34	.12	.06	.03	65	91	123	167	230		25	24	24	23	23	23	22	21
			500		1.47	.56	.19	.10	.04						1.6	1.9	2.4	2.7	3.4	4.2	5.6	6.9	
		750	3.9	2.20	.84	.28	.15	.06	65	91	123	167	230		25	25	25	24	24	24	24	23	
		1,000		2.94	1.12	.38	.20	.08						1.8	2.2	2.7	3.0	3.7	4.4	5.8	7.1		
				2,000	5.0	5.87	2.24	.75	.40	.15	69	97	124	168	232	25	25	25	25	25	24	24	24
						3,500	10.3	3.91	1.31	.71	.26						2.4	2.9	3.6	3.7	4.4	4.9	6.4
				5,000	5.8	14.7	5.59	1.87	1.01	.37	74	100	127	170	233	25	25	25	25	25	25	24	24
						7,500	22.0	8.40	2.80	1.51	.56						3.1	3.4	4.1	4.4	5.1	5.8	7.3
				10,000	6.5	29.4	11.2	3.73	2.01	.74	79	104	130	172	233	25	25	25	25	25	25	25	24
						15,000	44.0	16.8	5.60	3.02	1.11						3.7	4.1	4.6	5.2	5.9	6.6	8.2
				20,000	7.1	58.7	22.4	7.46	4.03	1.48	84	109	134	175	234	25	25	25	25	25	25	25	24
				25,000		73.4	28.0	9.32	5.03	1.85						4.2	4.6	5.5	6.2	7.0	7.8	9.3	11
		50,000																					
		75,000																					
		100,000																					
		150,000																					
		200,000																					
		250,000																					

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



GF

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 47

January 2010

**15 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							
						50	75	100	150	200	25	50	75	100	150	200	300	400					
15	1150	STD	28	2.2	.01	.01	.01	.01	.01	59	86	111			13	11	10	9.5					
			32		.17	.06	.02	.01	.01						.56	.72	.96	1.2					
			38	2.2	.22	.07	.02	.01	.01	59	86	111	161			13	13	11	11	9.5			
			50		.27	.09	.03	.01	.01						.62	.78	1.0	1.3	1.8				
			70	2.2	.30	.10	.03	.01	.01	60	87	113	163	215		14	14	13	12	12	11		
			100		.36	.12	.03	.02	.01							.66	.83	1.1	1.4	1.9	2.4		
			150	2.2	.41	.14	.05	.02	.01	60	87	113	163	217		15	15	14	14	13	13	13	
			200		.46	.18	.06	.03	.01							.78	.98	1.2	1.5	1.9	2.4	3.5	4.6
			300	2.2	.58	.22	.08	.04	.02	60	87	115	165	219		16	15	15	15	15	14	14	13
			500		.96	.37	.12	.07	.03							.94	1.2	1.4	1.6	2.1	2.6	3.6	4.7
		750	2.2	1.44	.55	.18	.10	.04	60	87	115	165	222		16	16	16	16	16	15	15	14	
		1,000		1.92	.73	.25	.13	.05							1.1	1.3	1.5	1.7	2.2	2.7	3.7	4.8	
		"C"	2,000	2.8	3.83	1.46	.49	.26	.10	62	90	115	165	222		17	17	16	16	16	16	15	15
			3,500		6.70	2.55	.85	.46	.17						1.4	1.8	2.0	2.1	2.6	3.1	4.1	5.1	
			5,000	3.2	9.57	3.64	1.22	.66	.24	65	92	117	167	224		17	17	16	16	16	16	16	16
			7,500		14.4	5.46	1.83	.99	.36						1.6	2.0	2.2	2.4	2.9	3.5	4.4	5.4	
			10,000	3.6	19.1	7.29	2.43	1.31	.49	68	94	119	169	224		17	17	16	16	16	16	16	16
			15,000		28.7	10.9	3.65	1.97	.73							1.9	2.4	2.7	3.0	3.5	4.0	4.8	5.9
			20,000	3.9	38.3	14.6	4.87	2.63	.97	72	97	122	172	224		17	17	16	16	16	16	16	16
			25,000		47.8	18.2	6.08	3.28	1.21							2.2	2.8	3.2	3.5	4.0	4.5	5.3	6.5
50,000	6.1		95.7	36.4	12.2	6.56	2.42	77	102	127	177	229		17	16	16	16	16	16	16	16		
75,000			144	54.6	18.3	9.85	3.63							3.6	4.5	5.1	5.7	6.3	6.8	7.7	8.8		
"D"	100,000																						
	150,000																						
	200,000																						
	250,000																						

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



GF

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 48

January 2010

**11 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			25	50	75	100	150	200	300	400					
												MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY											
11	870	STD	28	1.5	.01	.01	.01	.01	.01	57	82	107			9	8	7	6									
			32		.10	.03	.01	.01	.01							.32	.53	.71	.91								
			38	1.5	.13	.04	.01	.01	.01	57	82	107	158			10	9	8	7.5	6.5							
			50		.16	.05	.02	.01	.01							.50	.59	.85	1.1	1.4							
			70	1.5	.18	.06	.02	.01	.01	57	82	108	159	210		10	10	9.5	9	8	7						
			100		.21	.06	.02	.01	.01							.54	.63	.88	1.1	1.5	1.8						
			150	1.5	.26	.09	.03	.01	.01	58	83	109	159	212		11	11	10	10	10	9.5	9.5	8				
			200		.33	.12	.05	.02	.01							.61	.71	.94	1.2	1.5	1.8	2.5	3.3				
			300	1.5	.43	.16	.06	.03	.01	58	83	110	160	213		12	12	11	11	11	10	10	9.5				
			500		.70	.27	.09	.05	.02							.69	.81	1.0	1.3	1.6	1.9	2.5	3.5				
			750	1.5	1.05	.40	.14	.07	.03	58	83	112	162	215		12	12	12	12	12	11	11	11				
			1,000		1.41	.54	.18	.10	.04							.79	.93	1.1	1.3	1.7	2.0	2.6	3.6				
		2,000	2.0	2.81	1.07	.36	.19	.07	59	86	113	163	215		13	12	12	12	12	12	11	11					
		3,500		4.91	1.87	.63	.34	.13							.98	1.2	1.3	1.5	1.8	2.2	2.8	3.7					
		5,000	2.4	7.02	2.67	.89	.48	.18	61	86	113	163	215		13	12	12	12	12	12	12	11					
		7,500		10.5	4.00	1.34	.72	.27							1.3	1.5	1.7	1.9	2.2	2.6	3.2	4.1					
		10,000	2.7	14.0	5.34	1.78	.96	.36	64	89	115	167	217		13	12	12	12	12	12	12	12					
		15,000		21.1	8.01	2.68	1.45	.53							1.5	1.8	2.1	2.3	2.6	2.9	3.6	4.4					
		20,000	3.0	28.1	10.7	3.57	1.93	.71	67	92	117	169	219		13	12	12	12	12	12	12	12					
		25,000		35.1	13.4	4.46	2.41	.89							1.9	2.2	2.4	2.5	2.9	3.3	4.1	4.8					
		50,000	4.9	70.2	26.7	8.92	4.81	1.77	70	95	123	173	225		13	12	12	12	12	12	12	12					
		75,000		105	40.1	13.4	7.22	2.66							2.9	3.4	3.6	3.8	4.2	4.6	5.4	6.1					
		100,000	7.1	140	53.4	17.9	9.63	3.55	74	99	127	177	231		12	12	12	12	12	12	12	12					
		150,000		211	80.1	26.8	14.5	5.32							3.6	4.3	4.5	4.7	5.1	5.4	6.2	6.9					
200,000																											
250,000																											

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



GF

PUMP HYDRAULIC SIZE CHART

SEC. 500

Page 49
January 2010

8 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									
8	580	STD	28	1.1	.01	.01	.01	.01	.01	56	81	106			6	5	4.5	4										
			32		.06	.02	.01	.01	.01							.21	.35	.47	.61									
			38	1.1	.07	.03	.01	.01	.01	56	81	106	157			6.5	6	5.5	4.5	4								
			50		.09	.03	.01	.01	.01							.34	.40	.57	.74	.92								
			70	1.1	.10	.04	.01	.01	.01	56	81	107	158	209		7	6.5	6	6	5.5	4.5							
			100		.10	.04	.01	.01	.01							.36	.42	.59	.76	.98	1.2							
			150	1.1	.15	.05	.02	.01	.01	57	82	108	158	211		7.5	7.5	7	6.5	6.5	6	6	6	6	6	5		
			200		.24	.08	.03	.02	.01							.41	.48	.63	.78	1.0	1.2	1.7	2.2					
			300	1.1	.31	.12	.04	.02	.01	57	82	109	159	212		8	8	7.5	7	7	7	6.5	6					
			500		.51	.19	.07	.04	.01							.46	.54	.69	.84	1.1	1.3	1.7	2.3					
		750	1.1	.77	.29	.10	.05	.02	57	82	111	161	214		8.5	8	8	8	8	7	7.5	7						
		1,000		1.02	.39	.14	.07	.03							.53	.62	.76	.89	1.1	1.4	1.7	2.4						
		"C"	2,000	1.5	2.04	.78	.26	.14	.05	58	85	112	162	214		8.5	8.5	8	8	8	8	7.5	7.5					
			3,500		3.57	1.36	.46	.25	.09							.66	.77	.88	.99	1.2	1.5	1.9	2.5					
			5,000	1.9	5.01	1.94	.65	.35	.13	60	85	112	162	214		8.5	8.5	8	8	8	8	8	7.5	7.5				
			7,500		7.65	2.91	.97	.53	.19							.84	.99	1.1	1.3	1.5	1.7	2.1	2.7					
			10,000	2.2	10.2	3.88	1.30	.70	.26	63	88	114	166	216		8.5	8.5	8	8	8	8	8	7.5	7.5				
			15,000		15.3	5.83	1.95	1.05	.39							1.0	1.2	1.3	1.4	1.6	1.9	2.4	2.9					
			20,000	2.5	20.4	7.77	2.59	1.40	.52	66	91	116	168	218		8.5	8.5	8	8	8	8	8	8	8	8			
			25,000		25.5	9.71	3.24	1.75	.65							1.0	1.2	1.4	1.5	1.7	2.0	2.5	3.0					
50,000	4.0		51.1	19.4	6.50	3.50	1.29	68	93	120	170	222		8.5	8.5	8	8	8	8	8	8	8						
75,000			76.5	29.1	9.73	5.25	1.93							1.6	1.9	2.1	2.2	2.4	2.7	3.2	3.7							
"D"	100,000	6.0	102	38.9	13.0	7.00	2.58	70	95	122	172	224		8.5	8	8	8	8	8	8	8							
	150,000		153	58.3	19.5	10.5	3.87							2.1	2.5	2.6	2.7	3.0	3.2	3.7	4.2							
	200,000	9.4	204	77.7	26.0	14.0	5.15	76	101	130	180	236		8.5	8.5	8.5	8.5	8	8	8	8							
	250,000		-	-	-	-	-							2.5	3.0	3.1	3.2	3.4	3.7	4.2	4.7							

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