GORMAN-RUPP
ROTARY GEAR PUMPS

GHS SERIES Flexible Seal
HEAVY DUTY STANDARD
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 GHS steel series is designed for applications in the operating ranges noted below. These units are available with head and backhead 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.

FEATURES

400 PSI CAPABILITY

BALL BEARING THRUST CONTROL

ROTOR END CLEARANCE EXTERNALLY ADJUSTABLE

HIGH STRENGTH, COMPUTER PROFILED GEARING FOR QUIET OPERATION

MULTIPLE PORT POSITIONS

FLEXIBLE SEAL DESIGN ALLOWS FOR A VARIETY OF INDUSTRIAL STANDARD SEALS OR PACKING

INTERNAL SEAL VENT

OPERATING RANGE

CAPACITY	(GPM):	(3 TO 295)
	[LPM] :	[11 TO 1116]
PRESSURE	(PSI) :	[0 TO 300)
	[BAR] :	[0 TO 21]
VISCOSITY	(SSU) :	(28 TO 2,000,000)
	[cSt] :	[1 TO 440,000]
TEMPERATURE	(F) :	(-20° TO 675°)
	[C] :	[-29° TO 358°]

APPLICATIONS

USE WITH ANY CLEAN LIQUID COMPATIBLE WITH IRON/STEEL

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

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Standard Construction

EXTERIOR	BACKHD	ROTOR & IDLER	HOUSING PORTS	BUSHING	IDLER PIN	SHAFT	SHAFT SEALING		ROTATION	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 SIZE	SEAL		STYLE

MODEL NUMBER		NOM. CAPACITY – SPEED				MAXIMUM				SHIPPING DATA	
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE – PSI [BAR]			TEMP.	Wt.	Vol.
GHC	GHS	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]	LBS [KG]	CU. FT.
GHC 1 DC32–B ① ● ⊩		9 [28]	1750 [1460]	6 [19]	1150 [960]	100 [7]	150 [10]	300 [21]	GHC ● 350 [177]	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]		10 [32]						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]						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 ● 400 [204]	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]				200 [14]		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]			300 [21]	■ 500 [260]	154 [69,8]	5.3
GHC 3 JJ32-B ● ⊩	**GHS 3 JJ32-B** ● ⊩ **GHS 3 JJ38-B** ■ ⊩	56 [177]		36 [114]						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]	5.3

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.

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Standard Models Cont'd

MODEL NUMBER		NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE - PSI [BAR]			TEMP.		
GHC	GHS	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]	Wt. LBS [KG]	Vol. CU. FT.
	GHS 2 NK32-B ● ⊩ GHS 2 NK38-B ■ ⊩	99 [375]	960 [960]	60 [189]	580 [480]	100 [7]	150 [10]	300 [21]	GHS ● 400 [204] ■ 500 [260]	200 [90,7]	5.3
	GHS 3 NK32-B ● ⊩ GHS 3 NK38-B ■ ⊩									200 [90,7]	5.3
	GHS 2 NM32-B ● ⊩ GHS 2 NM38-B ■ ⊩	132 [500]		80 [252]						200 [90,7]	5.3
	GHS 3 NM32-B ● ⊩ GHS 3 NM38-B ■ ⊩									200 [90,7]	5.3
	GHS 3 NP32-B ① ● ⊩ GHS 3 NP38-B ■ ⊩	165 [624]		99 [312]				200 [14]		200 [90,7]	5.3
	GHS 2-1/2 RM32-B ● ⊩ GHS 2-1/2 RM38-B ■ ⊩	172 [542]	720 [600]	115 [362]	480 [400]			300 [21]		302 [136,9]	10.7
	GHS 3 RM32-B ● ⊩ GHS 3 RM38-B ■ ⊩									302 [136,9]	10.7
	GHS 4 RM32-B ● ⊩ GHS 4 RM38-B ■ ⊩									302 [136,9]	10.7
	GHS 2-1/2 RP32-B ● ⊩ GHS 2-1/2 RP38-B ■ ⊩	215 [678]		143 [451]						302 [136,9]	10.7
	GHS 3 RP32-B ● ⊩ GHS 3 RP38-B ■ ⊩									302 [136,9]	10.7
	GHS 4 RP32-B ● ⊩ GHS 4 RP38-B ■ ⊩									302 [136,9]	10.7
	GHS 3 RR32-B ● ⊩ GHS 3 RR38-B ■ ⊩	255 [804]		170 [536]						302 [136,9]	10.7
	GHS 4 RR32-B ● ⊩ GHS 4 RR38-B ■ ⊩									302 [136,9]	10.7
	GHS 3 RS32-B ① ● ⊩ GHS 3 RS38-B ■ ⊩	295 [930]		196 [618]				200 [14]		302 [136,9]	10.7
	GHS 4 RS32-B ① ● ⊩ GHS 4 RS38-B ■ ⊩									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.

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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.

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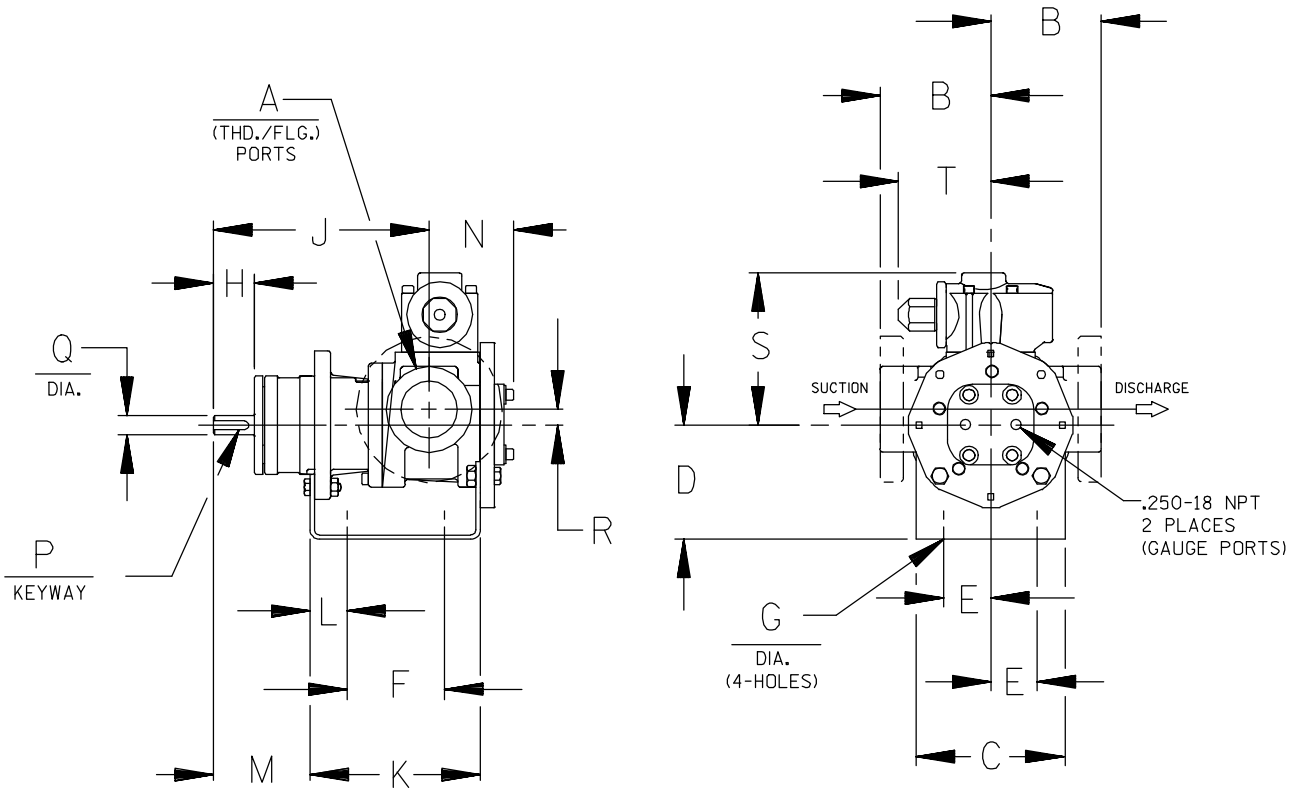
Dimensions – GHC



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] × .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] × 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] × 2.00 [51]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]

✳ STANDARD DIMENSION
PORTS ARE COMPATIBLE WITH 150# OR 300# ANSI STEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT

⊢ FOR ANSI PIPE. OPTIONAL [DIN FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.
NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 90° HOUSING

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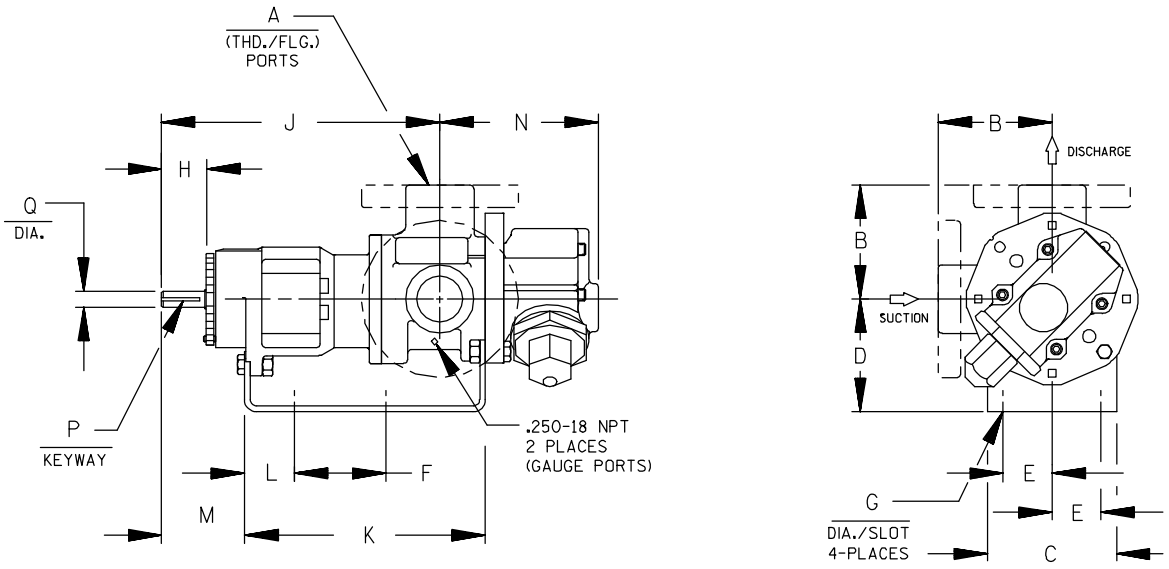
Dimensions – GHS



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 [158]	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] × 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] × 2.00 [51]	1.00 [25]
GHS N	2"	5.25 ✳ [133] 5.38 ⊢ [137]	8.00 [203]	4.50 [114] 5.25 ✳ [133] 6.25 [159] 7.00 [178] 8.00 [203]	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] × 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] × 1.88 [48]	1.44 [37]
	3"														
	4"														

✳ STANDARD DIMENSION

⊢ PORTS ARE COMPATIBLE WITH 150# OR 300# ANSI STEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 180° HOUSING

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GHC/GHS

FOR GHC DRIVE OPTIONS

AND DIMENSIONS

SEE

SECTION 540

FOR GHS DRIVE OPTIONS

AND DIMENSIONS

SEE

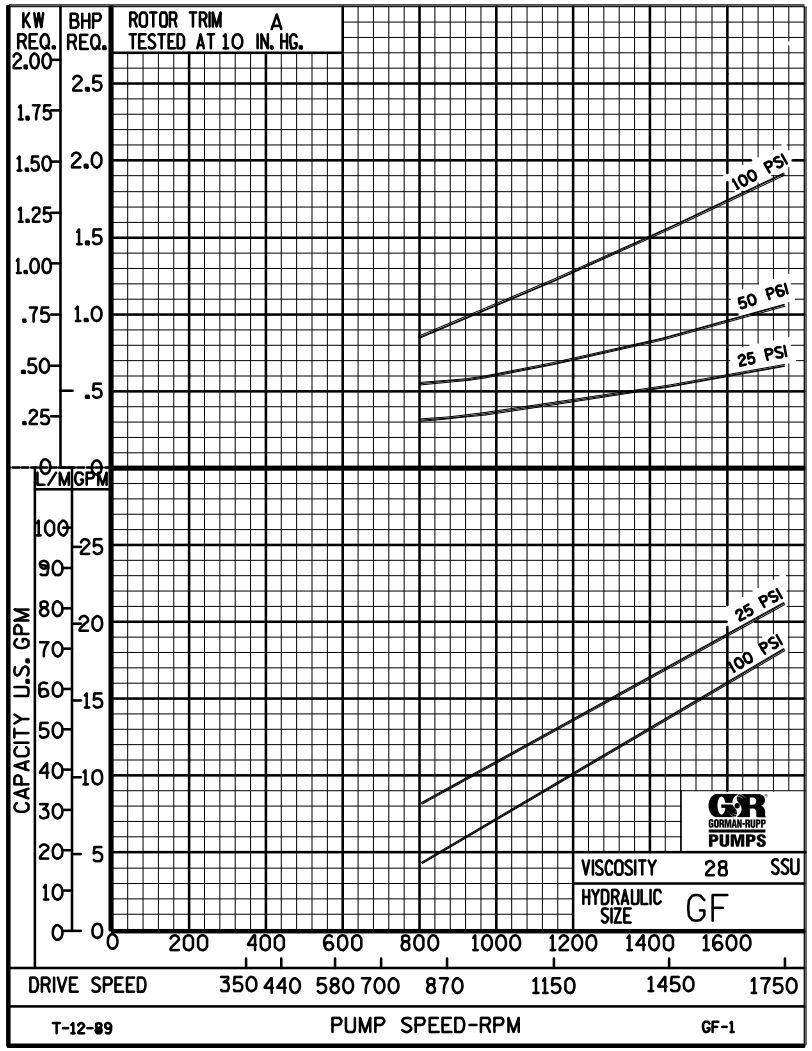
SECTION 545

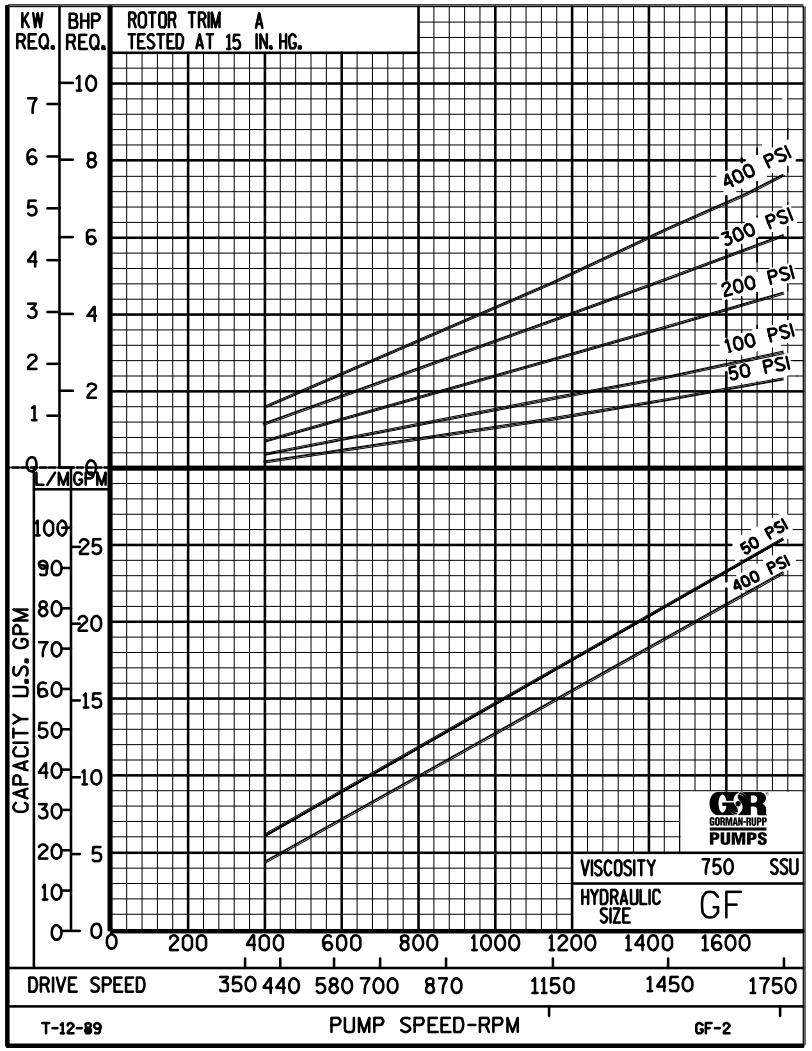
GORMAN-RUPP
ROTARY GEAR PUMPS

PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GF Hydraulic Size





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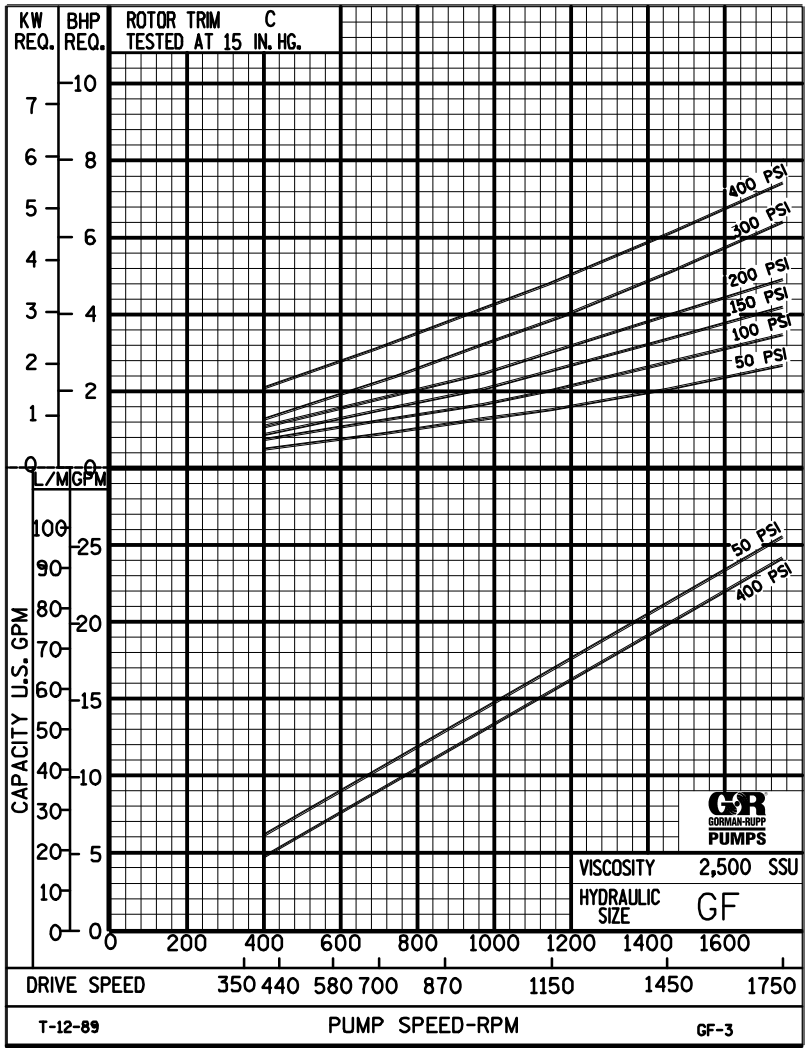
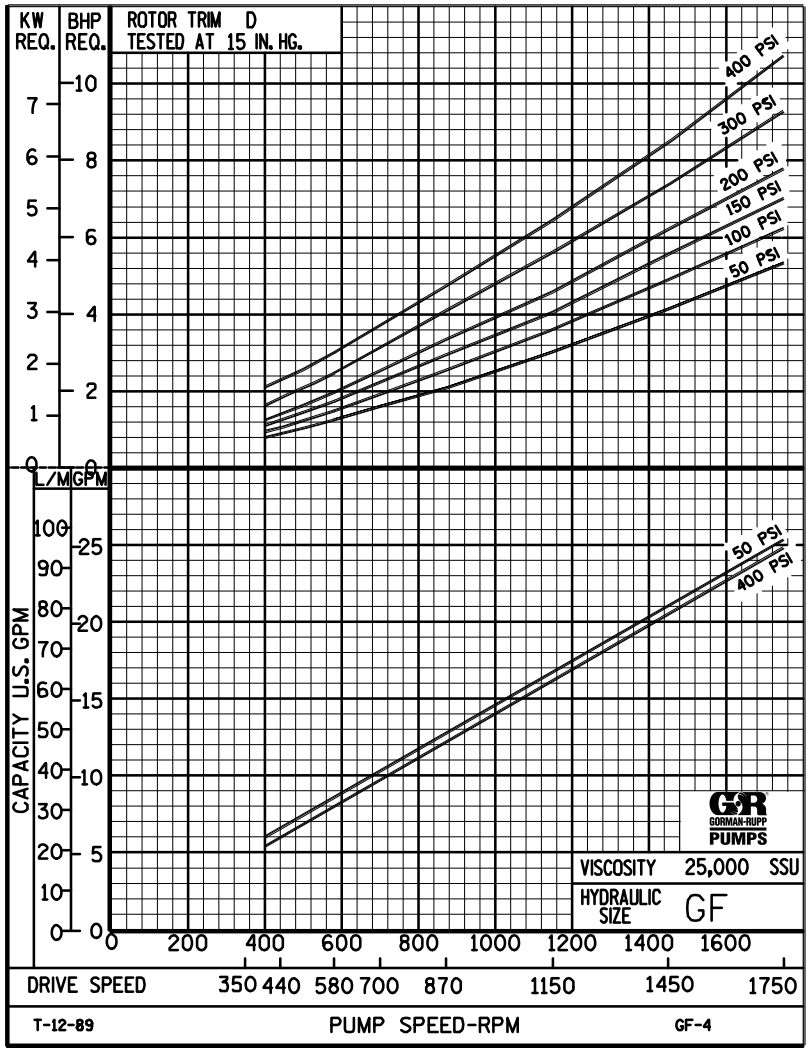
GORMAN-RUPP
ROTARY GEAR PUMPS

PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GF Hydraulic Size





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GORMAN-RUPP
ROTARY GEAR PUMPS

GF

PUMP HYDRAULIC SIZE CHART

23 GPM
1750 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		
					¾"	1"	1¼"	1½"	2"	50	75	100	150	200								
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
		"C"	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	7.6
			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	8.3
			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	9.3
			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
		"D"	50,000																			
			75,000																			
			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

GF

PUMP HYDRAULIC SIZE CHART

15 GPM
1150 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		
					¾"	1"	1¼"	1½"	2"	50	75	100	150	200								
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	12
			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
		"D"	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
			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

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PUMP HYDRAULIC SIZE CHART

11 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)							
					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		
CAP. GPM	SPEED RPM		(SSU)	(PSIA)	¾"	1"	1¼"	1½"	2"	50	75	100	150	200								
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
		"C"	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
		"D"	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.

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GORMAN-RUPP
ROTARY GEAR PUMPS

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PUMP HYDRAULIC SIZE CHART

8 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		
					¾"	1"	1¼"	1½"	2"	50	75	100	150	200								
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	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
			7,500		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
			15,000		15.3	5.83	1.95	.105	.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
		"D"	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
			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
			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

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