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		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

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

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.
GHC 1 DC32-B ① ● ⊢		9 [28]	1750 [1460]	6 [19]	1150 [960]	100 [7]	150 [10]	300 [21]	GHC ● 350 [177] GHS ● 400 [204] ■ 500 [260]	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]						71 [32,2]	2.9
GHC 1-1/2 GJ32-B ② ● ⊢	**GHS 1-1/2 GJ32-B** ● ⊢ **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]		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** ■ ⊢	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.		
		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.
GHC	GHS										
	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]				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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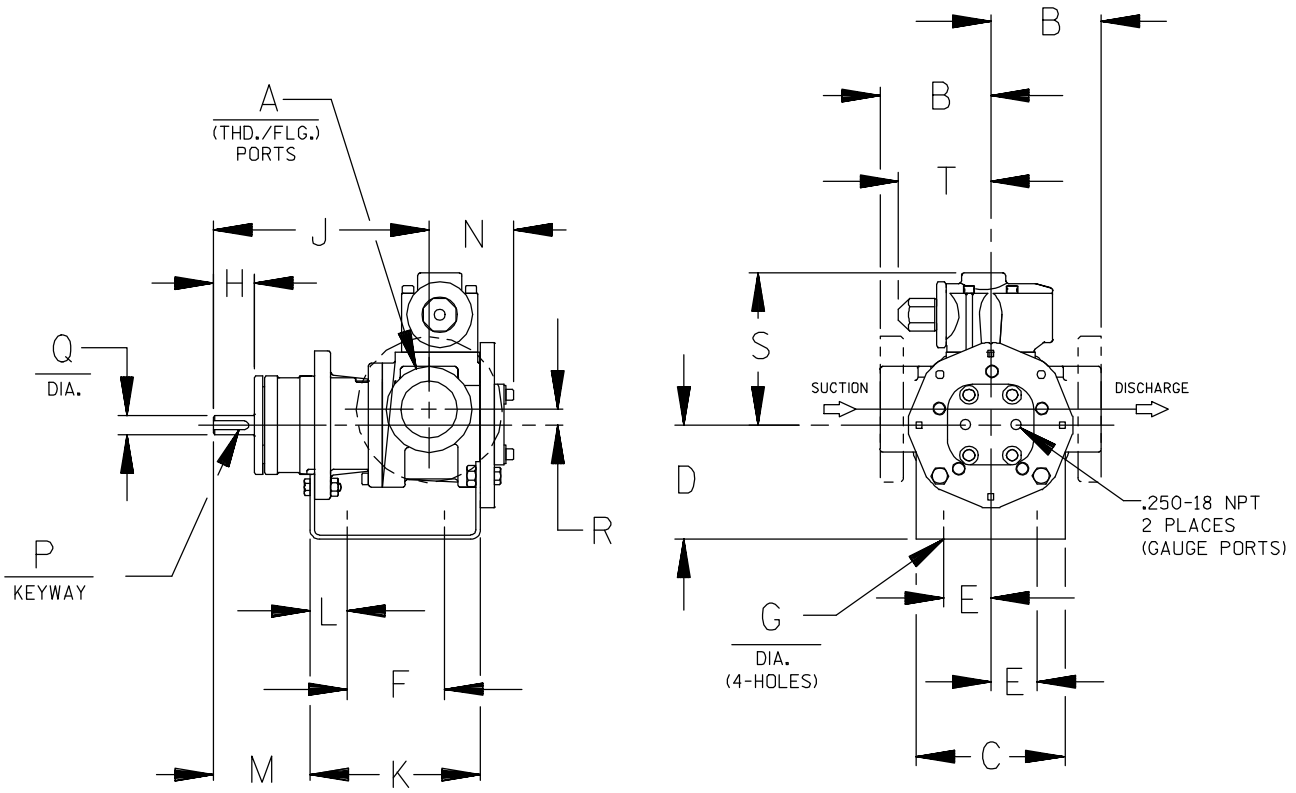

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MODEL NUMBERS	PUMP DIMENSIONS - INCHES [MILLIMETERS]																	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
GHC D	1"	4.00 [102] ⊢	4.00 [102]	3.50 [89] ✳ 4.50 [114] 5.25 [133]	1.62 [41]	3.12 [79]	.41 [10]	1.16 [30]	6.19 [157]	5.04 [128]	.76 [19]	2.62 [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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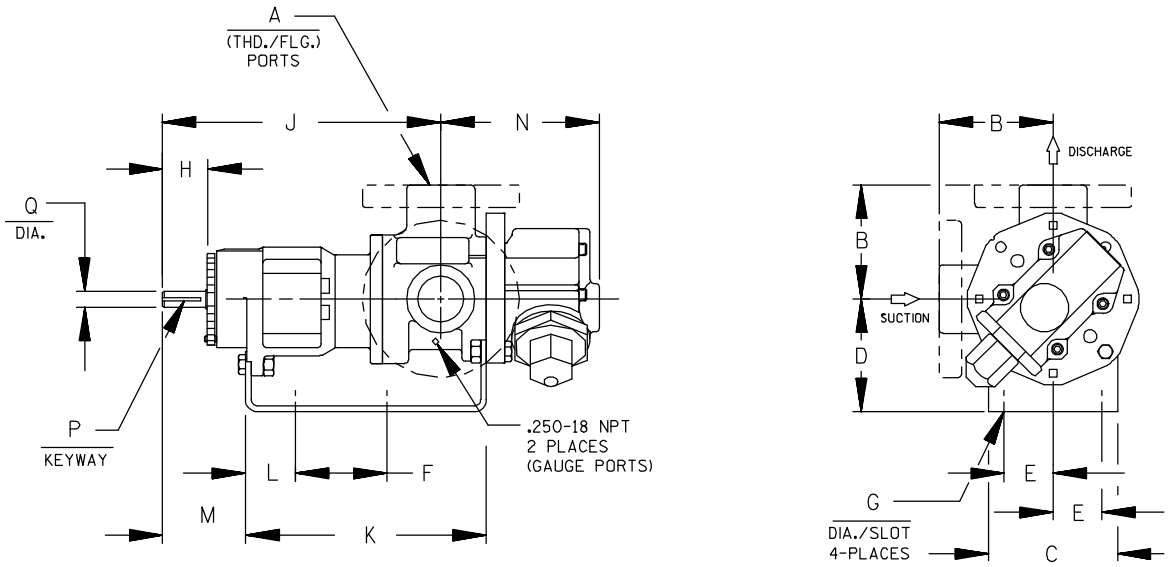
Dimensions — GHS



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 [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] × 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] 8.72 [221] ✳	.25 [6] × 2.00 [51]	1.12 [32]
	3"	7.19 ⊢ [183]													
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

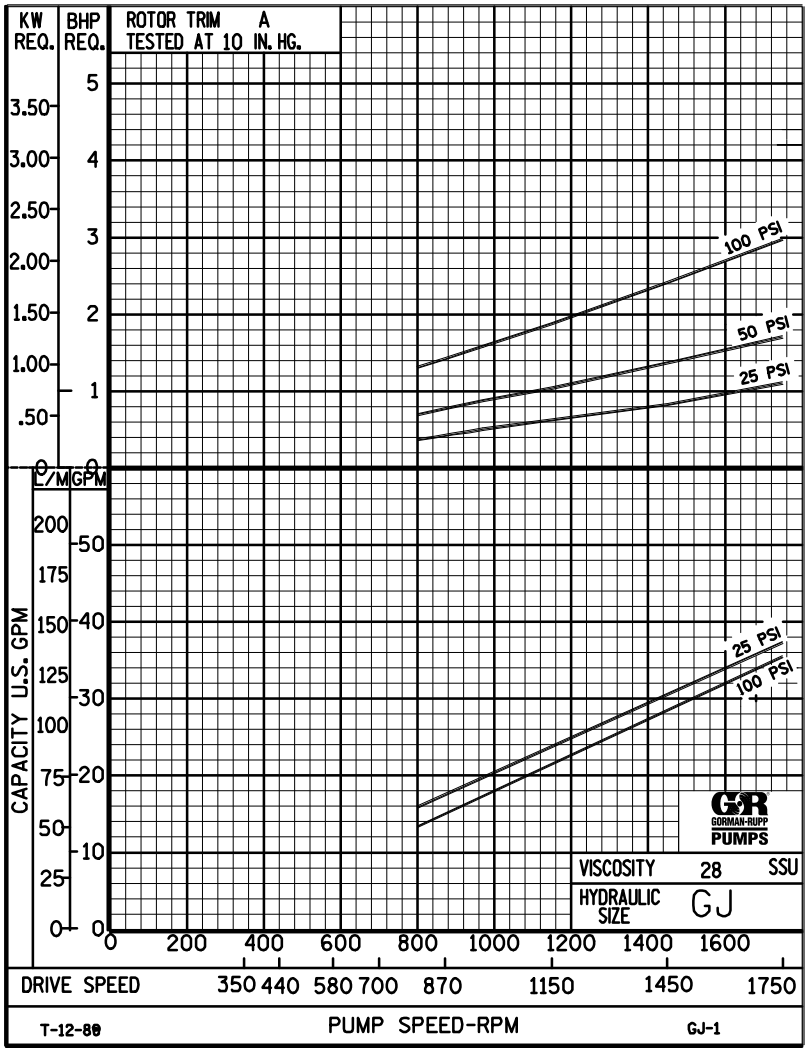
SECTION 545

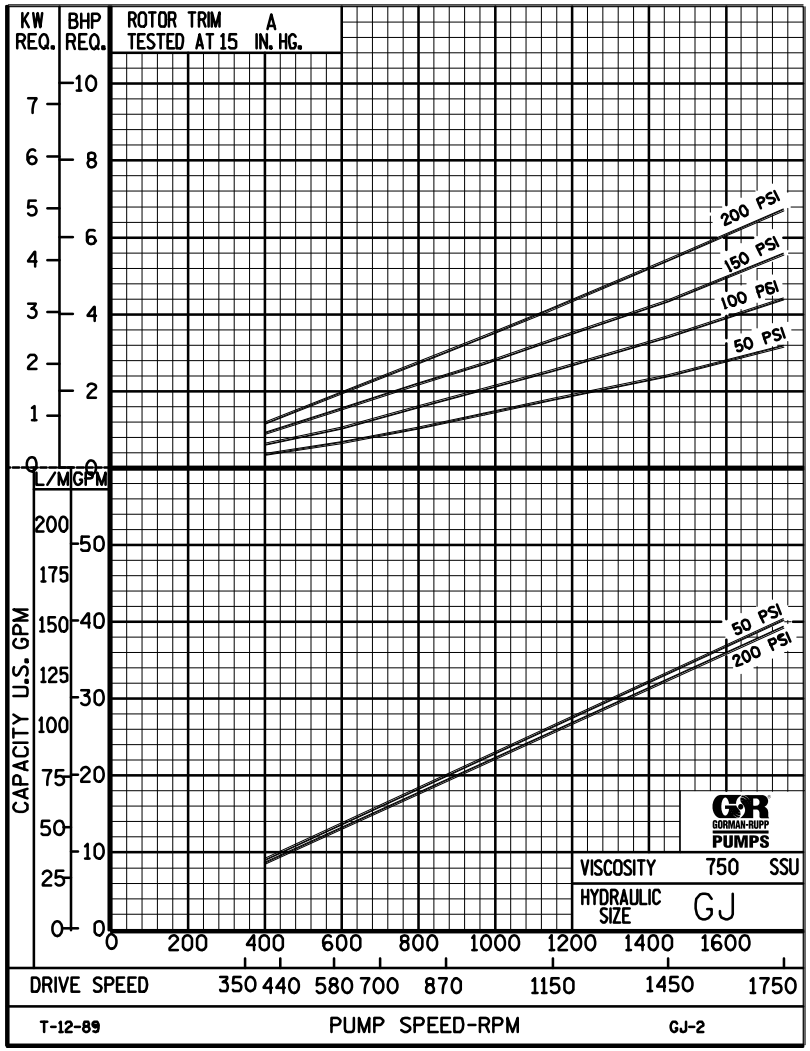
GORMAN-RUPP
ROTARY GEAR PUMPS

PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GJ Hydraulic Size





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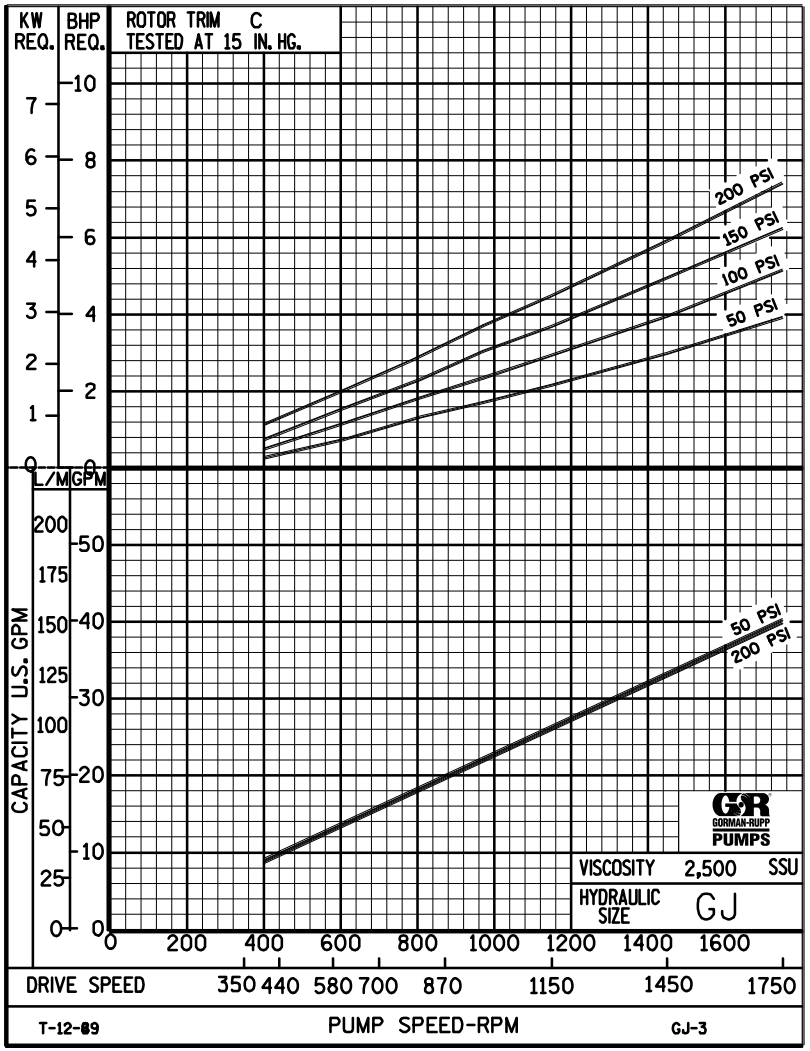
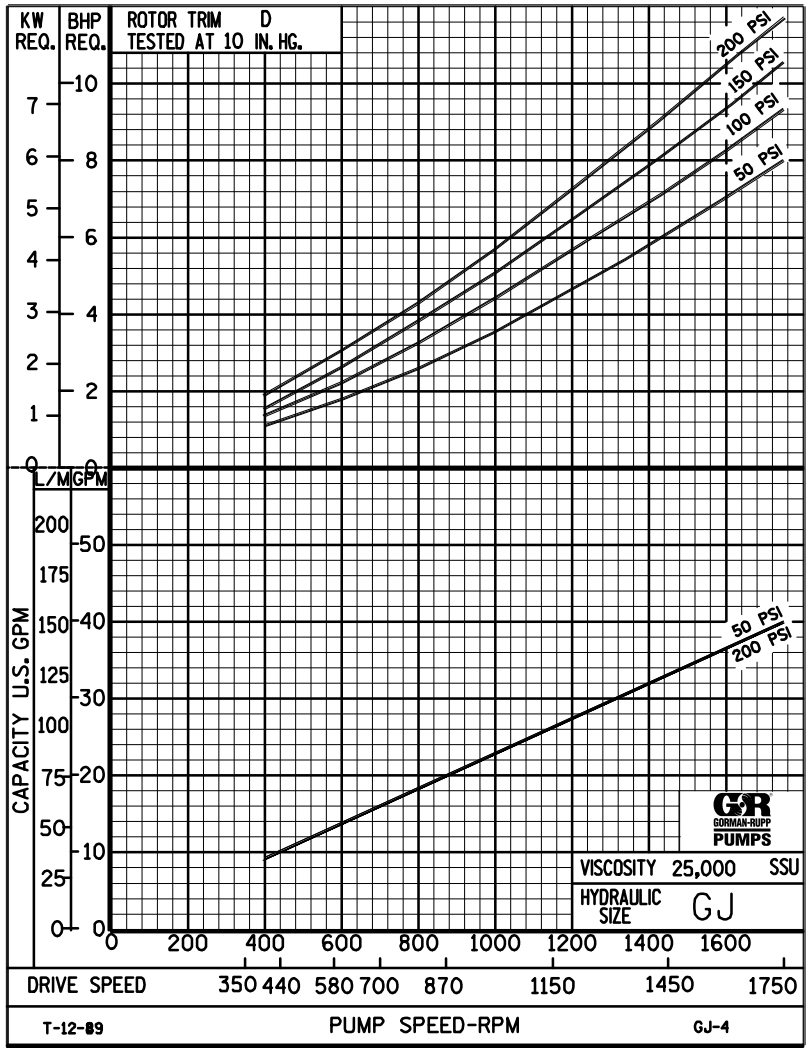
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GJ Hydraulic Size





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GORMAN-RUPP
ROTARY GEAR PUMPS

GJ

PUMP HYDRAULIC SIZE CHART

38 GPM
1750 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 ¾"	1"	1¼"	1½"	2"	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) MEDIUM DUTY AND HEAVY DUTY 25	50	75	100	150	HEAVY DUTY ONLY 200	300	400
38	1750	STD	28	4.5	.02	.01	.01	.01	.01	74	100	127			37	36	36	35				
			32		.88	.28	.08	.04	.01						1.1	1.7	2.4	3.0				
			38	4.5	1.12	.35	.10	.05	.02	74	100	128	180		38	37	37	37	36			
			50		1.33	.44	.12	.06	.02						1.5	2.0	2.6	3.2	4.5			
			70	4.5	1.45	.46	.13	.06	.02	76	101	128	182	240	39	38	38	38	37	36		
			100		1.74	.56	.16	.08	.03						1.5	2.1	2.8	3.4	4.7	6.0		
			150	4.5	1.91	.63	.17	.08	.03	78	103	130	184	242	39	39	39	38	38	38		
			200		2.26	.72	.18	.09	.03						1.9	2.5	3.1	3.7	4.9	6.1		
			300	4.5	2.45	.81	.19	.10	.04	78	103	132	184	244	40	40	39	39	39	38		
			500		2.82	.92	.31	.17	.06						2.1	2.8	3.6	4.3	5.4	6.5		
			750	4.5	3.64	1.39	.46	.25	.09	80	105	134	186	246	40	40	40	40	39	39		
			1,000		4.85	1.85	.62	.33	.12						2.3	3.2	3.8	4.4	5.6	6.7		
		"C"	2,000	5.9	9.69	3.69	1.23	.67	.25	80	105	136	186	247	40	40	40	40	39	39		
			3,500		17.0	6.46	2.16	1.17	.43						3.3	3.9	4.6	5.1	6.3	7.4		
			5,000	6.8	24.3	9.23	3.08	1.66	.61	86	106	136	186	247	40	40	40	40	40	40		
			7,500		36.4	13.9	4.62	2.50	.92						4.8	5.3	5.9	6.5	7.6	8.8		
			10,000	7.7	48.5	18.5	6.16	3.33	1.23	92	117	142	192	247	40	40	40	40	40	40		
			15,000		72.7	27.7	9.24	4.99	1.84						6.0	6.7	7.2	7.8	9.0	10		
			20,000	8.5	97.0	36.9	12.3	6.65	2.45	98	123	148	198	248	40	40	40	40	40	40		
		"D"	25,000		121	46.1	15.4	8.31	3.06						7.4	8.0	8.7	9.4	11	12		
			50,000																			
			75,000																			
			100,000																			
			150,000																			
			200,000																			
			250,000																			

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

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GORMAN-RUPP
ROTARY GEAR PUMPS

GJ

PUMP HYDRAULIC SIZE CHART

25 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 ¾"	1"	1¼"	1½"	2"	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) MEDIUM DUTY AND HEAVY DUTY 25	50	75	100	150	HEAVY DUTY ONLY 200	300	400
25	1150	STD	28	2.5	.01	.01	.01	.01	.01	66	92	118			23	23	22	21				
			32		.42	.13	.04	.02	.01						.63	1.0	1.5	1.9				
			38	2.5	.53	.17	.05	.02	.01	66	92	118	170		24	24	23	22	21			
			50		.64	.21	.06	.03	.01						.95	1.2	1.6	2.0	2.6			
			70	2.5	.70	.23	.06	.03	.01	67	93	120	170	230	25	25	24	23	23	22		
			100		.85	.27	.08	.04	.01						1.2	1.4	1.7	2.1	3.0	3.7		
			150	2.5	.94	.32	.08	.04	.01	67	93	122	172	232	26	26	25	24	24	22		
			200		.97	.35	.10	.06	.02						1.3	1.5	1.9	2.3	3.1	3.8		
			300	2.5	.99	.37	.13	.07	.03	68	95	122	174	234	26	26	25	25	25	24		
			500		1.60	.61	.21	.11	.04						1.3	1.7	2.3	2.5	3.5	4.0		
			750	2.5	2.39	.91	.31	.17	.06	68	95	124	174	235	26	26	26	26	25	25		
			1,000		3.19	1.22	.41	.22	.08						1.3	1.8	2.2	2.5	3.3	4.2		
		"C"	2,000	3.4	6.38	2.43	.81	.44	.16	69	98	125	175	235	26	26	26	26	26	26		
			3,500		11.2	4.25	1.42	.77	.28						1.8	2.3	2.8	3.2	3.9	4.7		
			5,000	4.0	16.0	6.07	2.03	1.09	.41	78	105	130	180	237	26	26	26	26	26	26		
			7,500		23.9	9.10	3.04	1.64	.61						2.4	2.9	3.4	3.7	4.7	5.2		
			10,000	4.7	31.9	12.2	4.06	2.19	.81	87	112	137	187	237	26	26	26	26	26	26		
			15,000		47.8	18.2	6.08	3.28	1.21						2.9	3.7	4.2	4.5	5.4	6.0		
			20,000	5.2	63.8	24.3	8.11	4.38	1.61	87	112	137	187	237	26	26	26	26	26	26		
		"D"	25,000		79.7	30.4	10.2	5.47	2.02						4.0	4.5	4.9	5.3	6.1	6.8		
			50,000																			
			75,000																			
			100,000																			
			150,000																			
			200,000																			
			250,000																			

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

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ROTARY GEAR PUMPS

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PUMP HYDRAULIC SIZE CHART

19 GPM
870 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 ¾"	1"	1¼"	1½"	2"	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
															MEDIUM DUTY AND HEAVY DUTY					HEAVY DUTY ONLY		
19	870	STD	28	1.7	.01	.01	.01	.01	.01	64	90	116			17	16	16	15				
			32		.26	.08	.02	.01	.01						.45	.79	1.1	1.4				
			38	1.7	.33	.11	.03	.02	.01	64	90	116	168		18	17	17	16	15			
			50		.40	.13	.04	.02	.01						.58	.81	1.1	1.5	2.2			
			70	1.7	.44	.14	.04	.02	.01	65	91	118	168	228	19	18	18	17	17	16		
			100		.53	.17	.05	.02	.01						.61	.85	1.3	1.6	2.4	2.7		
			150	1.7	.58	.19	.06	.03	.01	65	91	120	170	230	19	19	18	18	18	17		
			200		.62	.23	.08	.04	.01						.65	.90	1.4	1.6	2.6	3.0		
			300	1.7	.74	.28	.10	.05	.02	66	93	120	172	232	19	19	19	19	18	18		
			500		1.21	.46	.16	.09	.03						.77	1.1	1.4	1.7	2.7	3.1		
			750	1.7	1.82	.69	.23	.13	.05	66	93	122	172	233	20	20	19	19	19	19		
			1,000		2.43	.92	.31	.17	.06						.81	1.3	1.6	1.9	2.9	3.3		
		"C"	2,000	2.5	4.85	1.85	.62	.33	.12	67	96	123	173	233	20	20	20	19	19	19		
			3,500		8.48	3.23	1.08	.58	.22						1.2	1.5	1.9	2.1	3.1	3.4		
			5,000	3.1	12.1	4.61	1.54	.83	.31	76	103	128	178	235	20	20	20	20	19	19		
			7,500		18.2	6.92	2.31	1.25	.46						1.6	2.0	2.3	2.6	3.5	3.8		
			10,000	3.7	24.3	9.23	3.08	1.66	.61	85	110	135	185	235	20	20	20	20	19	19		
			15,000		36.4	13.9	4.62	2.50	.92						2.1	2.5	2.9	3.3	3.9	4.4		
			20,000	4.1	48.5	18.5	6.16	3.33	1.23	85	110	135	185	235	19	19	19	19	19	19		
		"D"	25,000		60.6	23.1	7.70	4.16	1.53						2.8	2.9	3.2	3.6	4.1	5.0		
			50,000	4.5	121	46.2	15.4	8.32	3.06	85	114	141	193	246	19	19	19	19	19	19		
			75,000		–	–	–	–	–						3.7	4.1	4.5	4.9	5.2	5.6		
			100,000																			
			150,000																			
			200,000																			
			250,000																			

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

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PUMP HYDRAULIC SIZE CHART

13 GPM
580 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 ¾"	1"	1¼"	1½"	2"	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) MEDIUM DUTY AND HEAVY DUTY 25	50	75	100	150	HEAVY DUTY ONLY 200	300	400
13	580	STD	28	1.2	.01	.01	.01	.01	.01	58	84	109			11	11	10	10				
			32		.13	.04	.01	.01	.01						.36	.60	.81	1.0				
			38	1.2	.17	.06	.02	.01	.01	58	84	109	159		12	11	11	11	10			
			50		.21	.07	.02	.01	.01						.47	.63	.93	1.2	1.7			
			70	1.2	.23	.08	.03	.01	.01	60	86	111	161	219	12	12	12	11	11	10		
			100		.28	.09	.03	.01	.01						.50	.69	.99	1.3	1.8	2.0		
			150	1.2	.34	.11	.04	.02	.01	60	86	111	162	220	13	12	12	12	12	11		
			200		.43	.15	.06	.03	.01						.57	.80	1.1	1.3	1.8	2.1		
			300	1.2	.52	.20	.07	.04	.01	62	88	113	164	222	13	13	13	12	12	12		
			500		.83	.34	.11	.06	.02						.66	.92	1.2	1.4	1.8	2.2		
			750	1.2	1.26	.49	.16	.09	.03	62	88	113	164	222	13	13	13	13	12.9	12		
			1,000		1.68	.65	.21	.12	.05						.74	1.1	1.3	1.5	1.9	2.2		
		"C"	2,000	1.9	3.23	1.32	.44	.24	.09	63	90	115	165	223	13	13	13	13	12	12		
			3,500		6.10	2.31	.77	.42	.16						.92	1.3	1.5	1.7	2.1	2.2		
			5,000	2.4	8.25	3.28	1.11	.58	.23	67	92	117	165	223	13	13	13	13	13	13		
			7,500		13.1	5.01	1.61	.89	.33						1.2	1.7	1.9	2.1	2.5	2.9		
			10,000	2.9	17.8	6.85	2.22	1.21	.45	70	96	120	166	224	13	13	13	13	13	13		
			15,000		25.2	9.90	3.41	1.83	.68						1.4	1.7	2.0	2.2	2.6	3.0		
			20,000	3.3	34.4	13.0	4.33	2.28	.91	74	99	122	166	224	13	13	13	13	13	13		
		"D"	25,000		45.3	16.8	5.54	3.01	1.11						1.6	1.8	2.1	2.3	2.7	3.1		
			50,000	5.5	85.2	32.6	11.2	6.22	2.21	84	109	132	176	234	13	13	13	13	13	13		
			75,000		132	48.8	16.9	9.31	3.28						2.4	2.6	2.9	3.1	3.6	3.9		
			100,000																			
			150,000																			
			200,000																			
			250,000																			

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