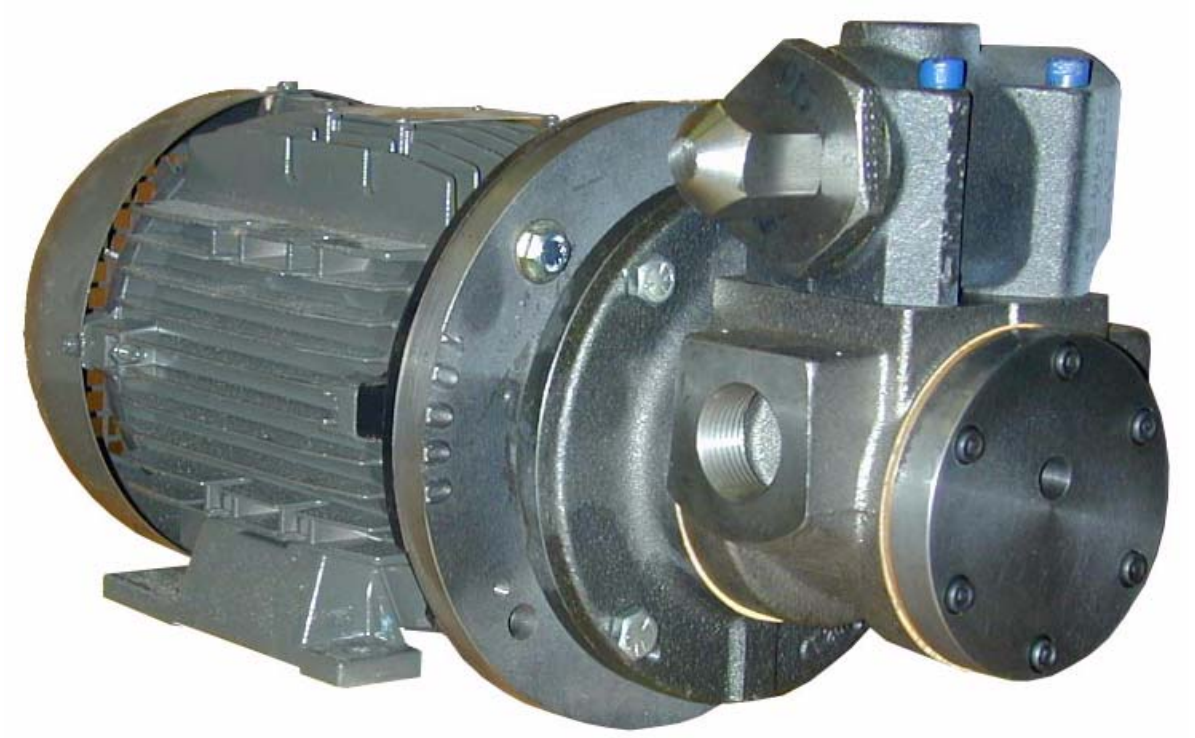
GORMAN-RUPP
ROTARY GEAR PUMPS

GMC SERIES
MEDIUM DUTY COMPACT
ROTARY GEAR PUMP



The GMC series is designed for applications in the operating ranges noted below. Direct connecting to other pieces of equipment provides an extremely compact system design.

The six sizes of Gorman-Rupp close coupled pumps connect to standard NEMA “C” flanges. Rotor shaft bores accept standard motor shafts; 5/8” standard, 7/8”, 1-1/8” and 1-3/8” are optional. Metric coupling also available.

At synchronous speeds, extra drive equipment, including couplings or outboard bearings, is not required.

For continuous service, or for handling viscous liquids, see the heavy duty GHS section.

FEATURES

200 PSI CAPABILITY
COMPACT-NEMA C MOUNTING – NO DRIVE COUPLING OR GUARD
ACCURATE ALIGNMENT
INEXPENSIVE PUMP/DRIVE UNIT
THRUST CONTROLLED PUMP ELEMENTS
LONG LIFE – QUIET OPERATION
MULTIPLE PORT POSITIONING

OPERATING RANGE

CAPACITY	(GPM):	(3 TO 38)
	[LPM] :	[11 TO 144]
PRESSURE	(PSI) :	(0 TO 200)
	[BAR] :	[0 TO 14]
VISCOSITY	(SSU) :	(28 TO 250,000)
	[cSt] :	[1 TO 55,000]
TEMPERATURE	(F) :	(-60° TO 300°)
	[C] :	[-51° TO 149°]

APPLICATIONS

USE WITH ANY CLEAN LIQUID COMPATIBLE WITH CAST IRON

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

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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 M C 1 DC 3 – B

GEAR | DUTY | DESIGN | PORT-SIZE | HYDRAULIC SIZE | SEAL | STYLE

MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE - PSI [BAR]			TEMP.		
	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]	Weight LBS [KG]	Volume CU. FT.
GMC 1DC 3-B ● **GMC 1DC 4-B** ■	9 [28]	1750 [1460]	6 [19]	1150 [960]	100 [7]	150 [10]	200 [14]	● 300 [149] ■ 225 [107]	20 [9,0]	0.6
GMC 1DE 3-B ● **GMC 1DE 4-B** ■	11 [35]		7 [22]						20 [9,0]	0.6
GMC 1-1/2GC 3-B ● **GMC 1-1/2GC 4-B** ■	16 [50]		10 [32]						32 [14,5]	0.6
GMC 2GC 3-B ● GMC 2GC 4-B ■									32 [14,5]	0.6
GMC 1-1/2GF 3-B ● **GMC 1-1/2GF 4-B** ■	23 [73]		15 [47]						32 [14,5]	0.6
GMC 2GF 3-B ● GMC 2GF 4-B ■									32 [14,5]	0.6
GMC 1-1/2GH 3-B ● **GMC 1-1/2GH 4-B** ■	31 [98]		20 [63]						32 [14,5]	0.6
GMC 2GH 3-B ● GMC 2GH 4-B ■									32 [14,5]	0.6
GMC 1-1/2GJ 3-B ● GMC 1-1/2GJ 4-B ■	38 [120]		25 [79]						32 [14,5]	0.6
GMC 2GJ 3-B ● **GMC 2GJ 4-B** ■									32 [14,5]	0.6

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. Example: **GMC 2GJ 3-B**

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

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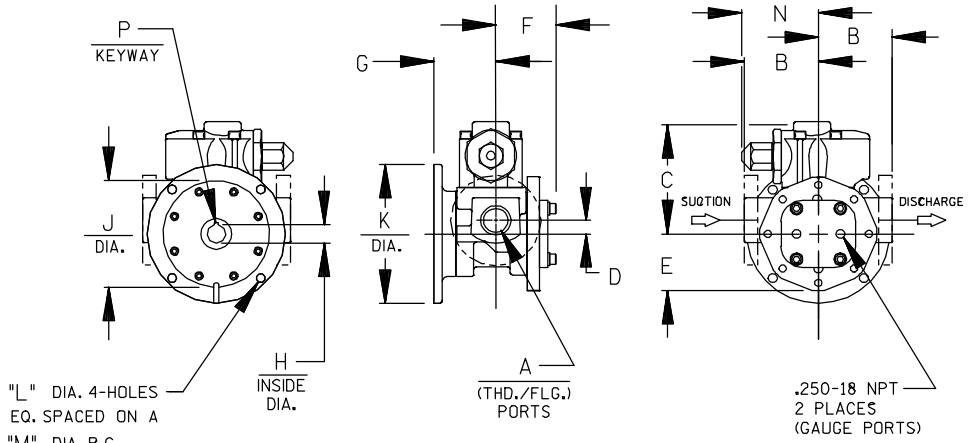
Basic Pump Dimensions

✳ STANDARD DIMENSION
† 90° HOUSING

MOTOR FRAMES 56C, 143TC, 145TC, 182C, 184C



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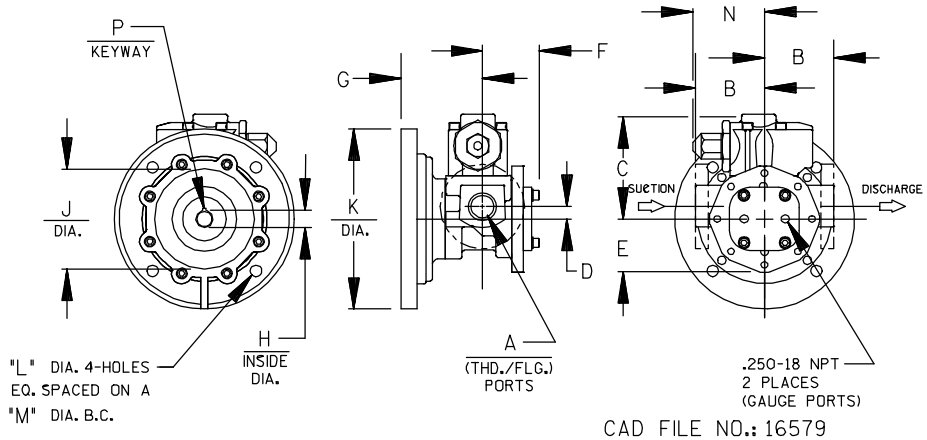
PUMP MODEL	PUMP DIMENSIONS - INCHES [MM]							PUMP MOUNTING DIMENSIONS						
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
GMC D	1"	2.50 † [64] 2.75 ✳ [70]	5.19 [132]	.62 [16]	2.67 [68]	2.73 [69]	2.79 [71]	.62 ✳ [16] .88 [22]	4.50 [114]	6.50 [165]	.41 [10]	5.88 [149]	3.58 [91]	.19 [5] × 1.66 [42]
GMC G	1-1/2"	3.50 † [89]	6.00 [152]	.62 [16]	3.25 [82]	3.34 [85]	2.86 [73]	.62 ✳ [16]	4.50 [114]	6.50 [165]	.41 [10]	5.88 [149]	3.62 [92]	.19 [5] × 1.69 [43]
	2"	3.75 ✳ [95]						.88 [22]						

OPTIONAL (WITH ADAPTOR PLATE)

MOTOR FRAMES 182TC, 184TC, 213C, 213TC, 215C, 215TC, 254C, AE90, AE100, AE112

✳ STANDARD DIMENSION
† 90° HOUSING



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PUMP MODEL		PUMP DIMENSIONS - INCHES [MM]							PUMP MOUNTING DIMENSIONS						
		A	B	C	D	E	F	G	H	J	K	L	M	N	P
GMC D [METRIC]	AE90	1"	[64] † [70] ✳	[132]	[16]	[68]	[69]	[117]	[24]	[130]	[200]	[12]	[165]	[91]	[8] X [46]
	AE110/112								[28]	[180]	[250]	[15]	[215]		[8] X [56]
GMC G		1-1/2"	3.50 † [89]	6.00 [152]	.62 [16]	3.25 [82]	3.34 [85]	4.62 [117]	1.12 ✳ [28]	8.50 [216]	9.00 [229]	.53 [14]	7.25 [184]	3.62 [92]	.25 [6] × 2.12 [54]
		2"	3.75 ✳ [95]						1.38 [35]						.31 [8] × 2.53 [64]
GMC G [METRIC]	AE90							[119]	[24]	[130]	[200]	[12]	[165]		[8] X [46]
	AE110/112								[28]	[180]	[250]	[15]	[215]		[8] X [56]

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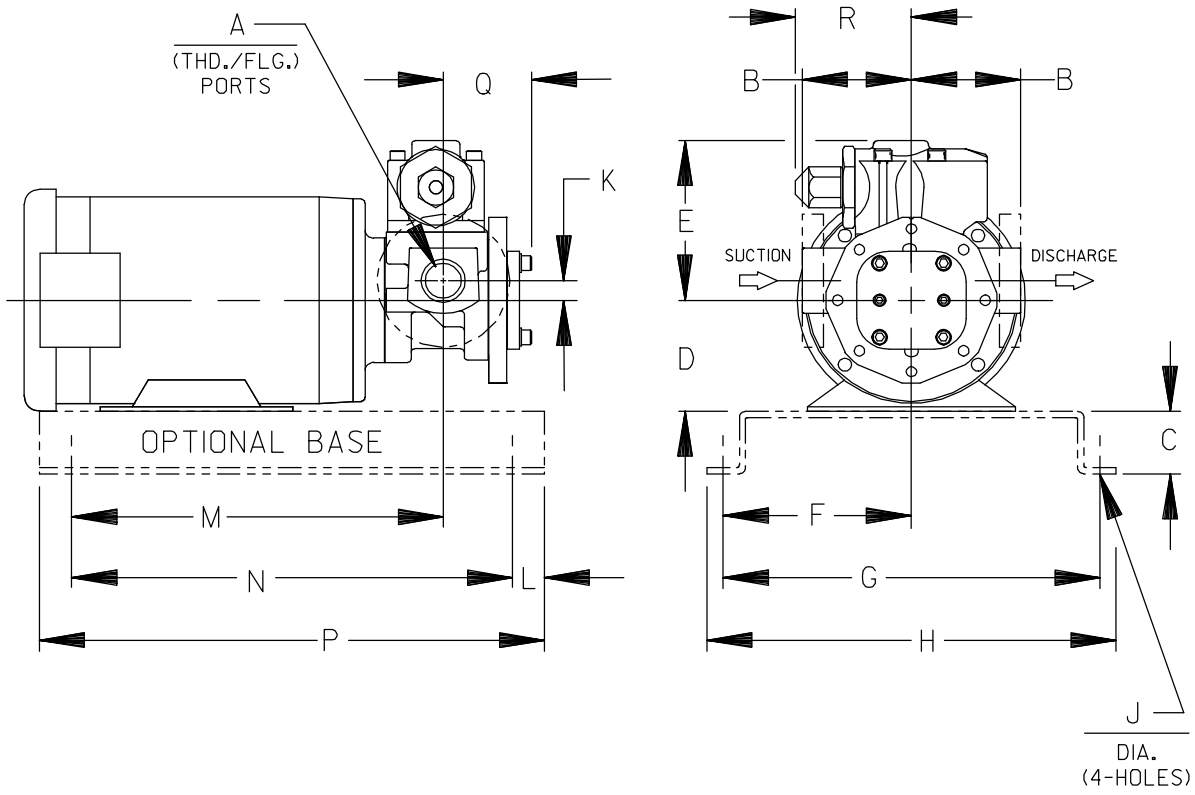
GMC

DIRECT CLOSE COUPLED C-FLANGE DRIVE OPTION DIMENSIONS



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PUMP MODEL	PUMP DIMENSIONS																
	A	MOTOR FRAME	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
GMC 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]	.63 [16]	2.00 [51]	11.11 [282]	12.75 [324]	16.75 [425]	2.74 [70]	3.58 [91]
		143TC/145TC											11.42 [290]				
		182C/184C	2.75✳ [70]		4.50 [114]								11.92 [303]				
GMC G	1-1/2"	56C	3.50 † [89]	2.00 [51]	3.50 [89]	6.00 [152]	6.25 [159]	12.50 [318]	14.50 [368]	.56 [14]	.63 [16]	2.00 [51]	11.18 [284]	12.75 [324]	16.75 [425]	3.34 [85]	3.62 [92]
		143TC/145TC											11.49 [292]				
	2"	182C/184C			4.50 [114]								12.00 [305]				
		182TC/184TC	3.75✳ [95]										12.49 [317]				
		213TC/215TC			5.25 [133]								12.86 [327]				

✳ STANDARD DIMENSION

† 90° HOUSING

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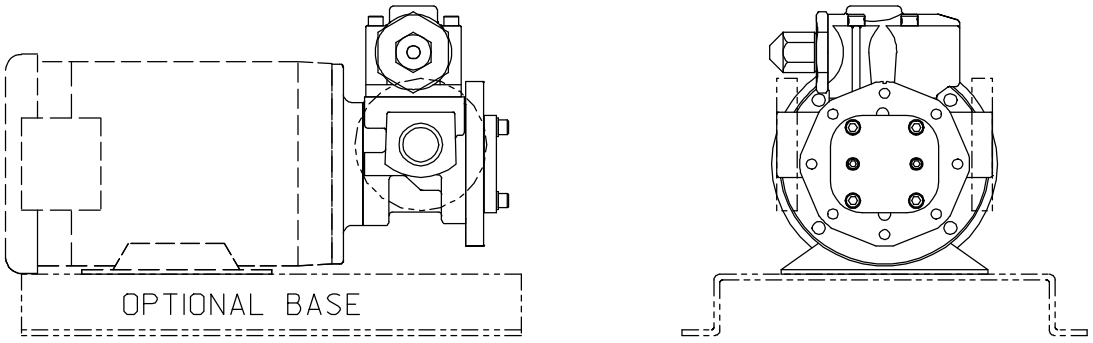
GORMAN-RUPP ROTARY GEAR PUMPS

1 PHASE
DIRECT CLOSE COUPLED C-FLANGE DRIVE OPTIONS

(Drive Assembly Number Is For Motor Only)



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PUMP MODEL NUMBER	1 PHASE		FRAME	115/230 VOLTS DRIVE ASSY NO.		
	RPM	HP		OPEN	TEFC	EXPLOSION PROOF
GMC D/G	1750	.75	56C	91111−540	91121−540	91131−540
		1.00	56C	91111−542	91121−542	91131−542
		1.50	56C	91111−546	91121−546	91131−546
		1.50	184C (a)			91131−547
		2.00	145TC (a)	91111−550		91131−550
		2.00	184C (a)		91121−550	
	1140	.75	56C	91111−580	91121−580	91131−580

(a) REQUIRES OPTION 50A OR 50J

NOTE: CONSULT FACTORY FOR:

1. HORSEPOWERS & FRAMES NOT SHOWN
2. DRIP PAN BASES
3. 115−208/230 VOLT MOTORS
4. 208−230/460 VOLT MOTORS
5. 50 HERTZ 380 VOLT MOTORS
6. FOR OPTIONAL BASE SEE PRICE PAGES
7. COUNTER−CLOCKWISE ROTATION FOR SINGLE PHASE MOTORS

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3 PHASE
DIRECT CLOSE COUPLED C-FLANGE DRIVE OPTIONS

(Drive Assembly Number Is For Motor Only)

PUMP MODEL NUMBER	3 PHASE		FRAME	230/460 VOLTS DRIVE ASSY NO.		
	RPM	HP		OPEN	TEFC	EXPLOSION PROOF
GMC D/G	1750	.75	56C	91141–540	91151–540	91161–540
		1.00	143TC (a)	91141–542		
		1.00	56C		91151–542	91161–542
		1.50	145TC (a)	91141–546		
		1.50	56C		91151–546	91161–546
		2.00	145TC (a)	91141–550	91151–550	
		2.00	56C			91161–550
		3.00	145TC (a)	91141–554		
		3.00	56C		91151–554	
		5.00	184C (a)	91141–558	91151–558	
GMC G	1750	3.00	182TC (b)			91161–554
		5.00	184TC (b)			91161–558
		7.50	213TC (c)	91141–572	91151–572	91161–572
		10.00	215TC (c)	91141–576	91151–576	91161–576
GMC D/G	1150	.75	56C	91141–580	91151–580	91161–580
		1.00	56C	91141–582	91151–582	91161–582
		1.00	56C	91141–586		
		1.50	145TC (a)		91151–586	91161–586
		1.50	182C (a)			91161–588
		2.00	184C (a)		91151–590	91161–590
GMC G	1150	2.00	184TC (b)	91141–700	91141–700	
		3.00	213TC (c)	91141–704	91151–704	91161–704
		5.00	215TC (c)	91141–708	91151–708	91161–708
GMC D	850	.75	184C (a)		91151–720	
GMC G	850	1.00	182TC (b)	91141–730	91151–730	
		1.50	184TC (b)	91141–734	91151–734	
		2.00	213TC (c)	91141–738	91151–738	
		3.00	215TC (c)	91141–742	91151–742	

(a) REQUIRES OPTION 50A OR 50J

(b) REQUIRES OPTION 70A AND 50B OR 50K

(c) REQUIRES OPTION 70A AND 50C OR 50L

NOTE: CONSULT FACTORY FOR:

1. **HORSEPOWERS & FRAMES NOT SHOWN**
2. **DRIP PAN BASES**
3. **115–208/230 VOLT MOTORS**
4. **208–230/460 VOLT MOTORS**
5. **50 HERTZ 380 VOLT MOTORS**
6. **FOR OPTIONAL BASE SEE PRICE PAGES**
7. **COUNTER–CLOCKWISE ROTATION FOR SINGLE PHASE MOTORS**

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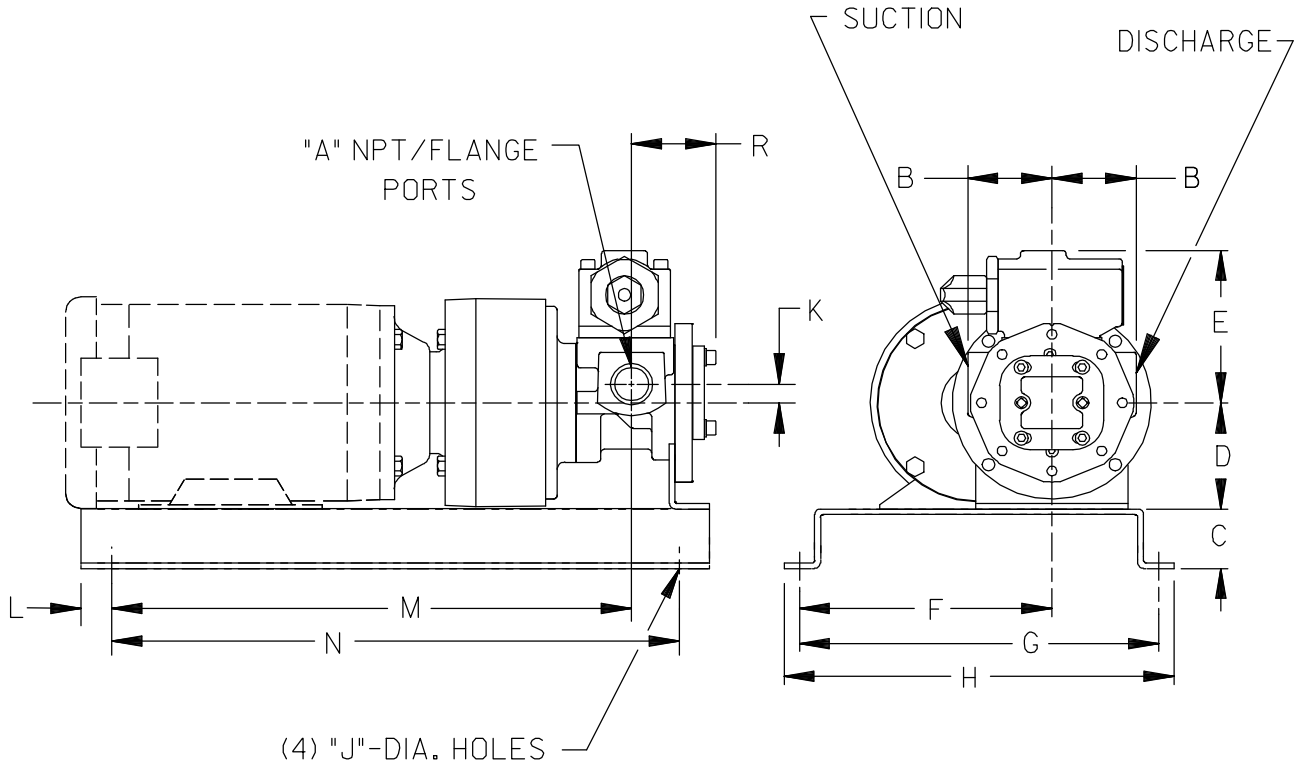
GMC

GRR REDUCER CLOSE COUPLED
C-FLANGE DRIVE OPTION DIMENSIONS

(Drive Assembly Number Includes Gear Reducer and Base, But **NOT** the Motor)



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PUMP MODEL	UNIT DIMENSIONS														
	"A"	MOTOR FRAME	B	C	D	E	F	G	H	J	K	L	M	N	R
GMC D	1"	56C 143TC/145TC	2.50 † [70]	2.00 [51]	3.50 [89]	5.19 [132]	6.50 [165]	13.00 [330]	15.00 [381]	.56 [14]	.63 [16]	3.00 [76]	14.22 [361]	25.50 [648]	2.66 [68]
		184C	2.75✳ [70]		4.50 [114]										
GMC G	1 ½"	56C 143TC/145TC	3.50 † [89]	2.00 [51]	3.50 [89]	6.00 [152]	6.50 [165]	13.00 [330]	15.00 [381]	.56 [14]	.63 [16]	3.00 [76]	14.16 [360]	25.50 [648]	3.27 [83]
	2"	184C	3.75 ✳ [95]		4.50 [114]										

✳ STANDARD DIMENSION

† 90° HOUSING

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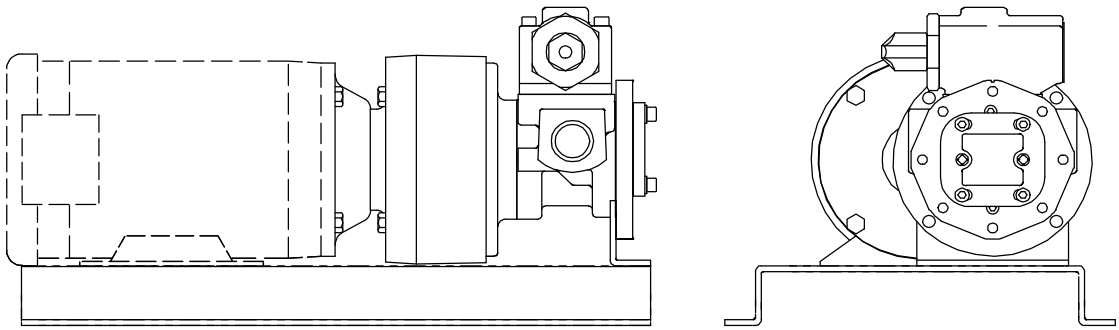
GORMAN-RUPP ROTARY GEAR PUMPS

GMC

GRR REDUCER CLOSE COUPLED C-FLANGE DRIVE OPTIONS

(Drive Assembly Number Includes Gear Reducer and Base, But **NOT** the Motor)



PUMP MODEL NUMBER	RPM @ 1750	RPM @ 1150	REDUCER (1)	MAX HP @ 1750	MAX HP @ 1150	FRAME	DRIVE ASSY NO.
GMC D (2)	875	575	2.00:1	5.65	3.73	56C	90153–510
				11.70	7.72	143TC/145TC	90153–519
				11.70	7.72	182C/184C	90153–522
	580	383	3.00:1	3.76	2.48	56C	90123–533
				8.10	5.35	143TC/145TC	90153–536
				8.10	5.35	182C/184C	90153–542
	440	288	4.00:1	2.82	1.86	56C	90153–550
				5.90	3.89	143TC/145TC	90153–553
				5.90	3.89	182C/184C	90153–559
	350	238	5.00:1	2.26	1.49	56C	90153–570
				5.20	3.43	143TC/145TC	90153–573
				5.20	3.43	182C/184C	90153–579
GMC G (2)	875	575	2.00:1	5.65	3.73	56C	90153–610
				11.70	7.72	143TC/145TC	90153–613
				11.70	7.72	182C/184C	90153–629
	580	383	3.00:1	3.76	2.48	56C	90153–630
				8.10	5.35	143TC/145TC	90153–633
				8.10	5.35	182C/184C	90123–642
	440	288	4.00:1	2.82	1.86	56C	90153–660
				5.90	3.89	143TC/145TC	90153–663
				5.90	3.89	182C/184C	90153–672
	350	238	5.00:1	2.26	1.49	56C	90153–690
				5.20	3.43	143TC/145TC	90153–693
				5.20	3.43	182C/184C	90153–702

(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.**

(2) **Use adds/deletes for large diameter head and coverplate kit if required.**

NOTES:
CONSULT FACTORY FOR:
HORSEPOWERS AND FRAMES NOT SHOWN.
DRIP PAN BASES.

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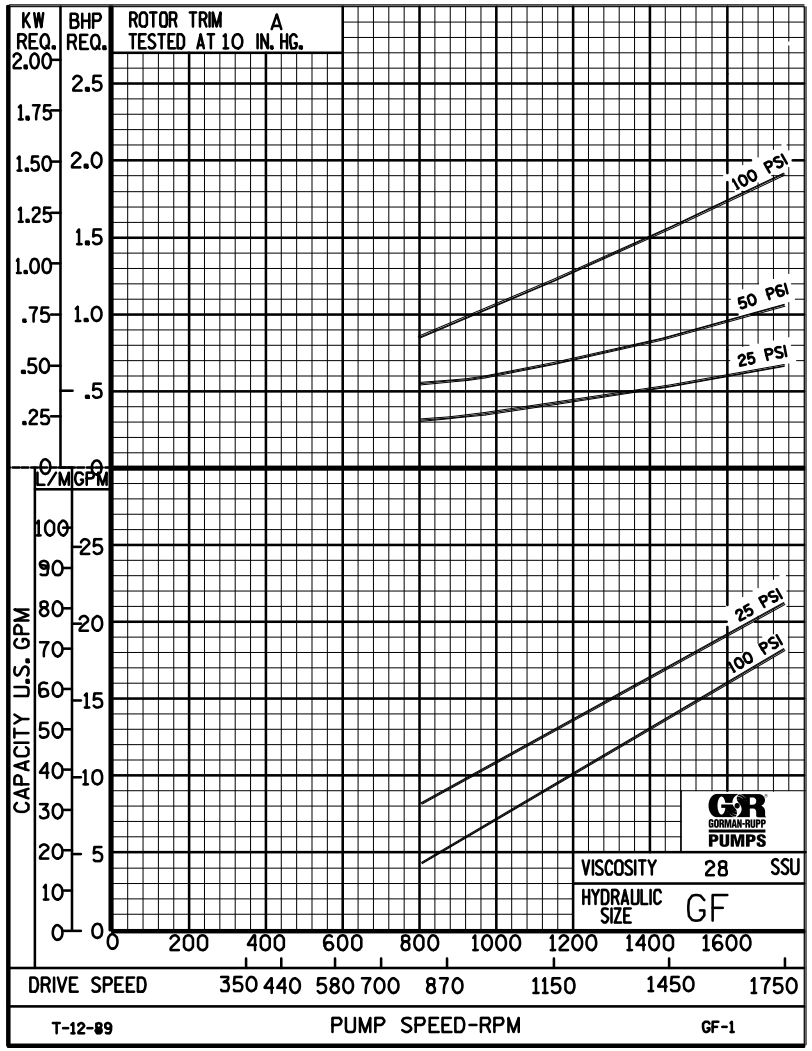
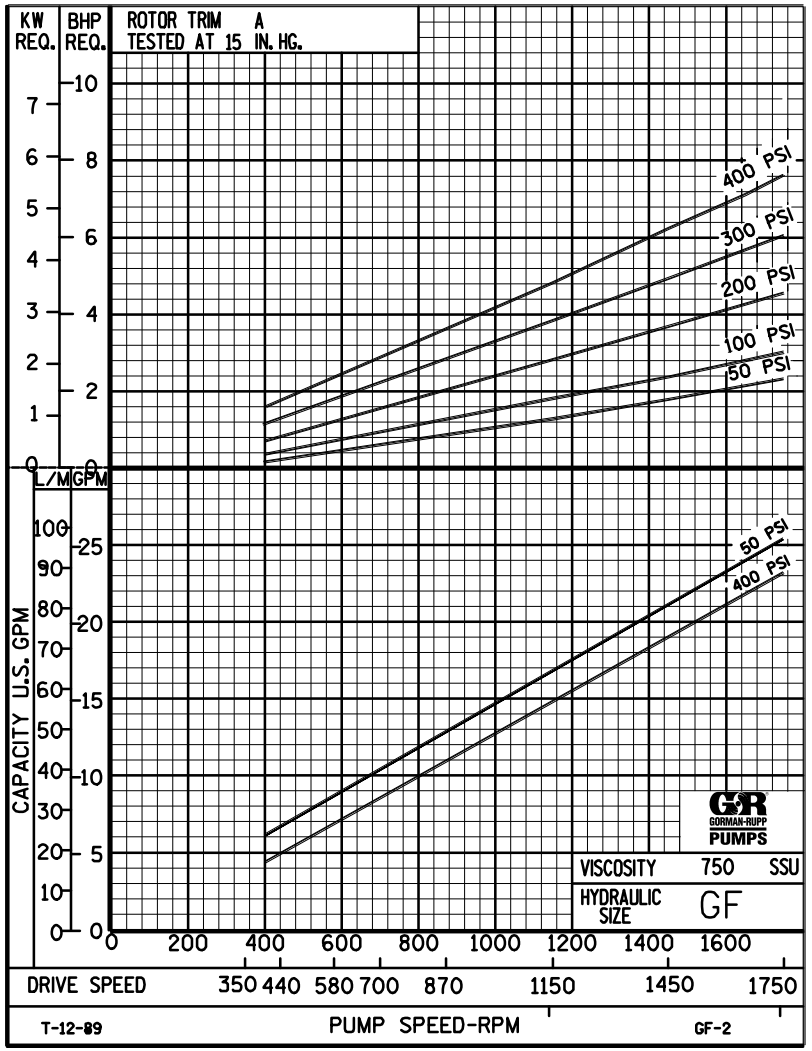
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

GF Hydraulic Size





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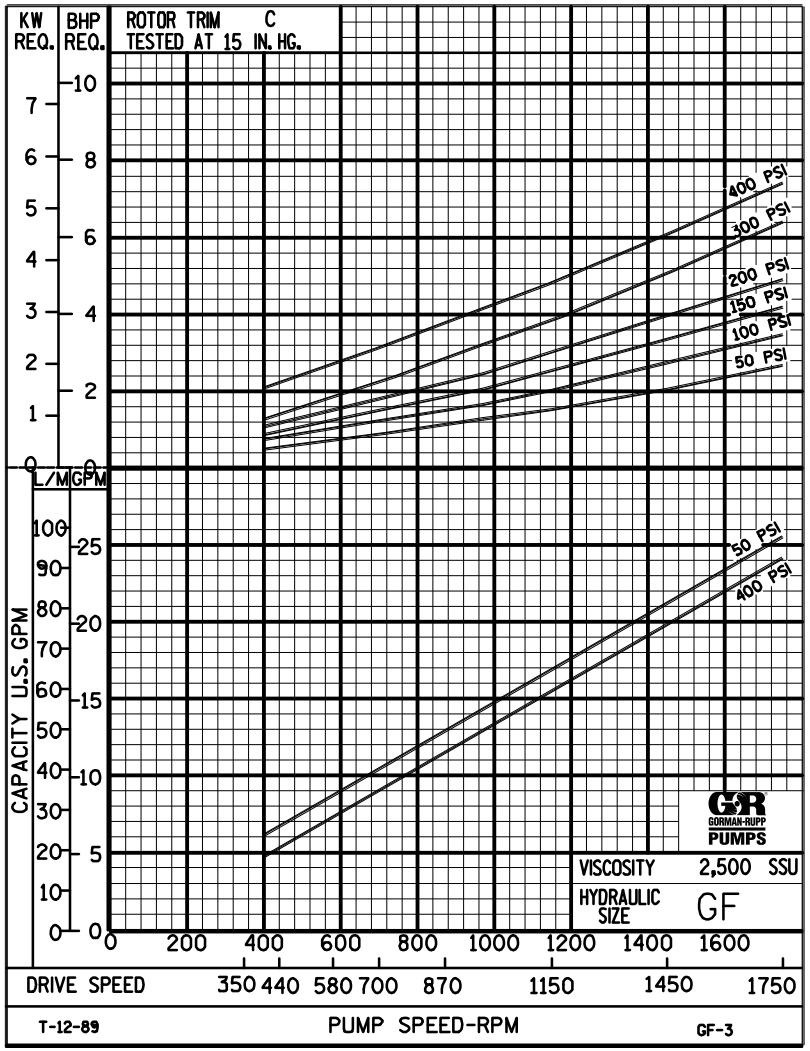
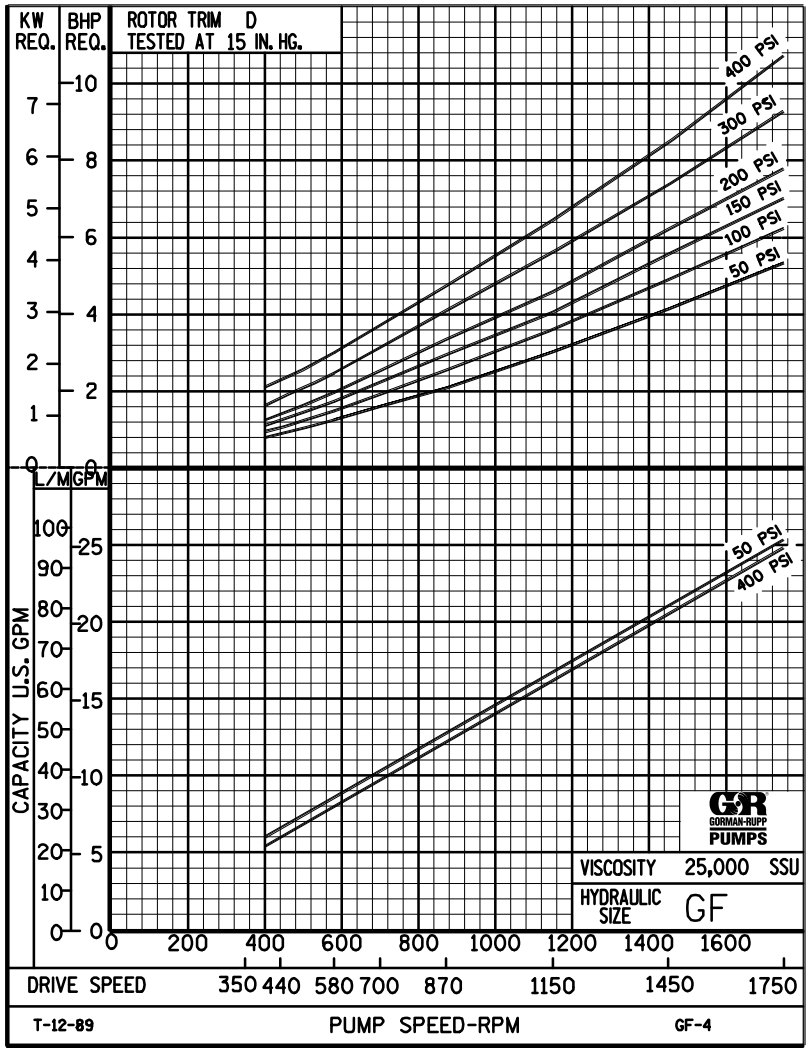
GORMAN-RUPP
ROTARY GEAR PUMPS

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

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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)							
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								
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

(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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3 GPM
200 RPM

NOMINAL		VISCOSITY		N.I.P.R	FRICTION PIPE LOSS (PSI/FT) (Schedule 40 Steel Pipe)					CAPACITY (GPM)				H.P. REQUIRED			
					PIPE DIAMETER					MEDIUM-DUTY & HEAVY-DUTY				HEAVY-DUTY ONLY			
										DIFFERENTIAL PRESSURE (PSI)							
GPM	RPM	ROTOR TRIM	(SSU)	(PSIa)	1½"	2"	2½"	3"	4"	25	50	75	100	150	200	300	400
3	200	STD															
		"D"	200,000	2.3	5.3	1.9	0.95	0.4	0.1	2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
			399,999		10.5	3.9	1.9	0.8	0.3	0.8	0.9	0.9	1.0	1.1	1.2	1.3	1.4
			400,000	2.6						2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
			599,999		15.8	5.8	2.9	1.2	0.4	1.0	1.0	1.0	1.1	1.2	1.3	1.4	1.5
			600,000	3.2						2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
			799,999		21	7.7	3.8	1.6	0.5	1.1	1.1	1.1	1.2	1.3	1.4	1.5	1.6
			800,000	3.5						2.8	2.8	2.8	2.8	2.8	2.8	2.7	2.7
			1M		NR	9.7	4.75	2	0.7	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.7

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

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