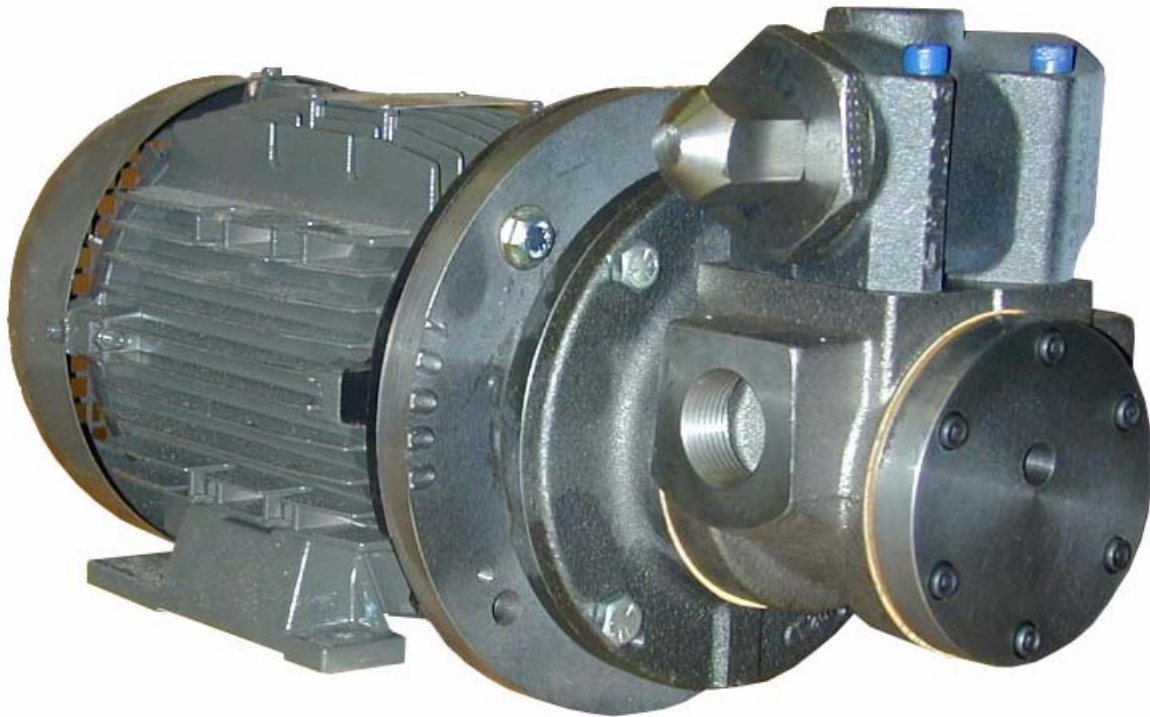


**GMC SERIES  
 MEDIUM DUTY COMPACT  
 ROTARY GEAR PUMP**



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

EXTER- IOR	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 SEAL STYLE  
 SIZE SIZE

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

**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.

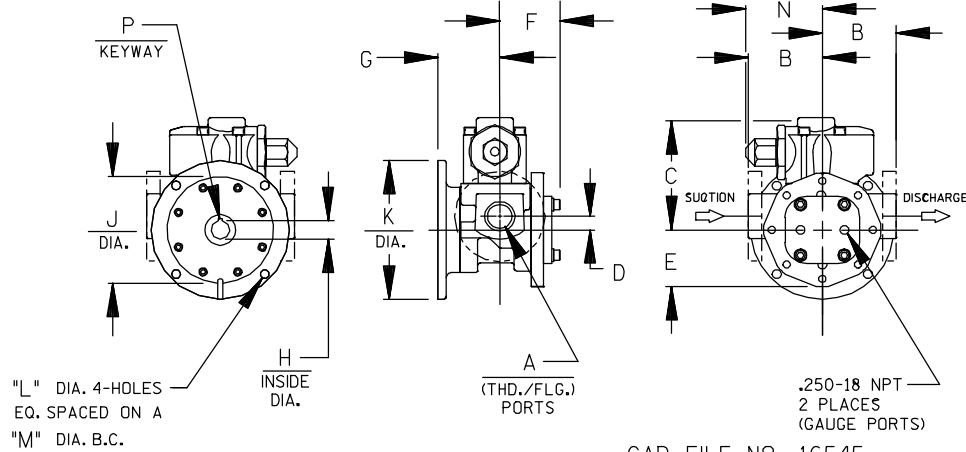
**THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO**  
 GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

# Basic Pump Dimensions

\* STANDARD DIMENSION

† 90° HOUSING

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



CAD FILE NO.: 16545

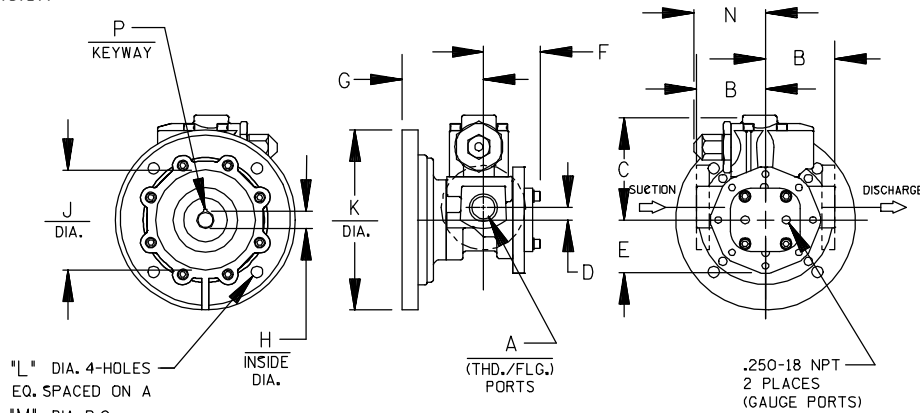
PUMP MODEL	PUMP DIMENSIONS - INCHES [MM]							PUMP MOUNTING DIMENSIONS							
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	
GMC D	1"	2.50 † [64]	5.19 [132]	.62 [16]	2.67 [68]	2.73 [69]	2.79 [71]	.62 † [16]	4.50 [114]	6.50 [165]	.41 [10]	5.88 [149]	3.58 [91]	.19 [5]	1.66 [42]
		2.75 * [70]													
GMC G	1-1/2"	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]
		3.75 * [95]													

OPTIONAL (WITH ADAPTOR PLATE)

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

\* STANDARD DIMENSION

† 90° HOUSING



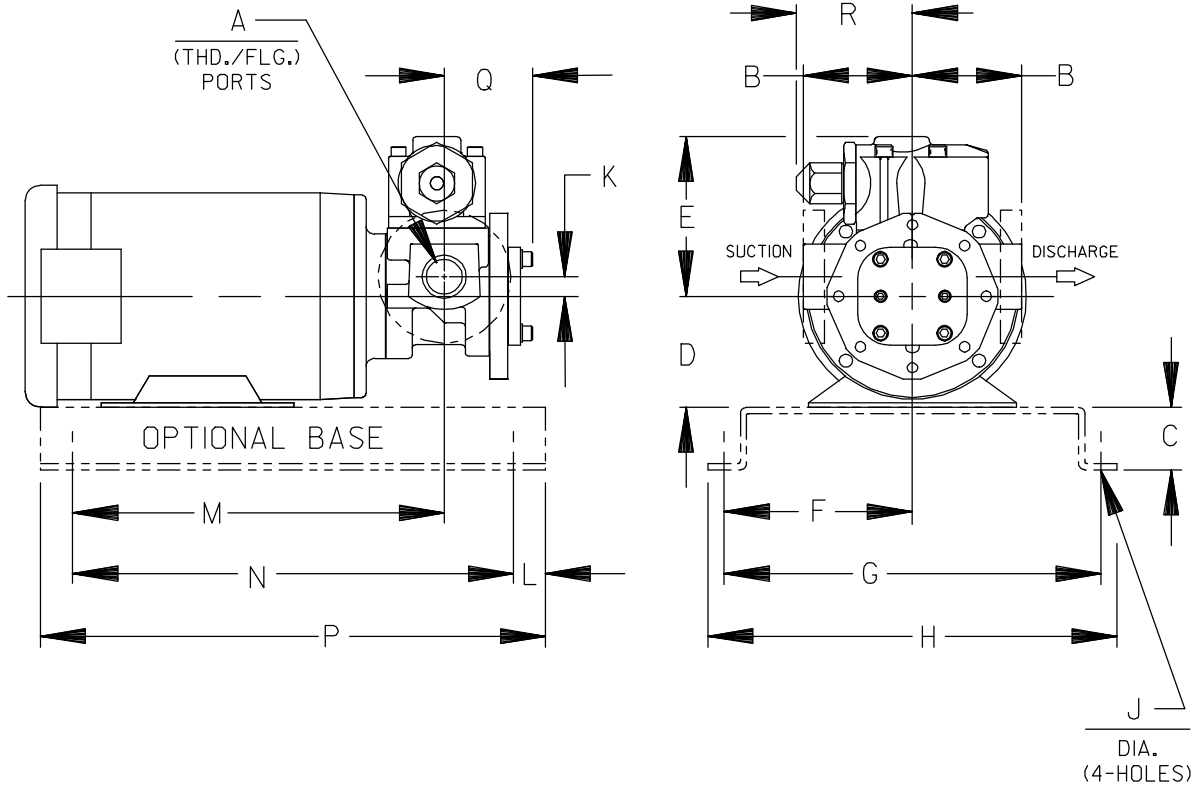
CAD FILE NO.: 16579

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 AE110/112	1"	† [64]	[132]	[16]	[68]	[69]	[117]	[24] [28]	[130] [180]	[200] [250]	[12] [15]	[165] [215]	[91]	[8] X [46] [8] X [56]
			* [70]												
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]
GMC G [METRIC]	AE90 AE110/112	2"						[24] [28]	[130] [180]	[200] [250]	[12] [15]	[165] [215]		[8] X [46] [8] X [56]	

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



## DIRECT CLOSE COUPLED C-FLANGE DRIVE OPTION DIMENSIONS



CAD FILE NO: 16503

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	4.50 [114]		11.42 [290]															
		1820/184C	2.75* [70]		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			4.50 [114]								11.49 [292]							
	2"	182C/184C	3.75* [95]	4.50 [114]	5.25 [133]	12.00 [305]	12.49 [317]	12.86 [327]	.56 [14]	.63 [16]	2.00 [51]	12.00 [305]	12.49 [317]	12.86 [327]	12.75 [324]	16.75 [425]	3.34 [85]	3.62 [92]		
		182TC/184TC																	4.50 [114]	12.00 [305]
		213TC/215TC																	5.25 [133]	12.86 [327]

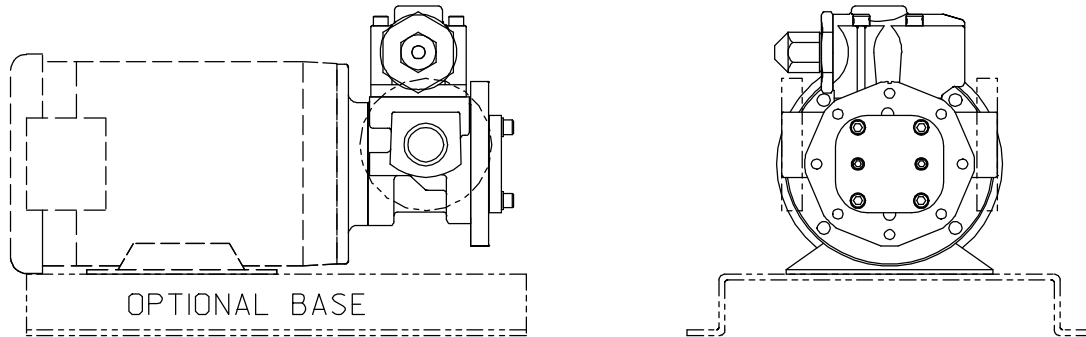
\* STANDARD DIMENSION

† 90° HOUSING



## 1 PHASE DIRECT CLOSE COUPLED C-FLANGE DRIVE OPTIONS

(Drive Assembly Number Is For Motor Only)



16503.S01

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



## 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	
GMC G	1750	5.00	184C (a)	91141-558	91151-558	
		3.00	182TC (b)			91161-554
		5.00	184TC (b)			91161-558
		7.50	213TC (c)	91141-572	91151-572	91161-572
GMC D/G	1150	10.00	215TC (c)	91141-576	91151-576	91161-576
		.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
GMC G	1150	2.00	184C (a)		91151-590	91161-590
		2.00	184TC (b)	91141-700	91141-700	
		3.00	213TC (c)	91141-704	91151-704	91161-704
GMC D	850	5.00	215TC (c)	91141-708	91151-708	91161-708
		.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

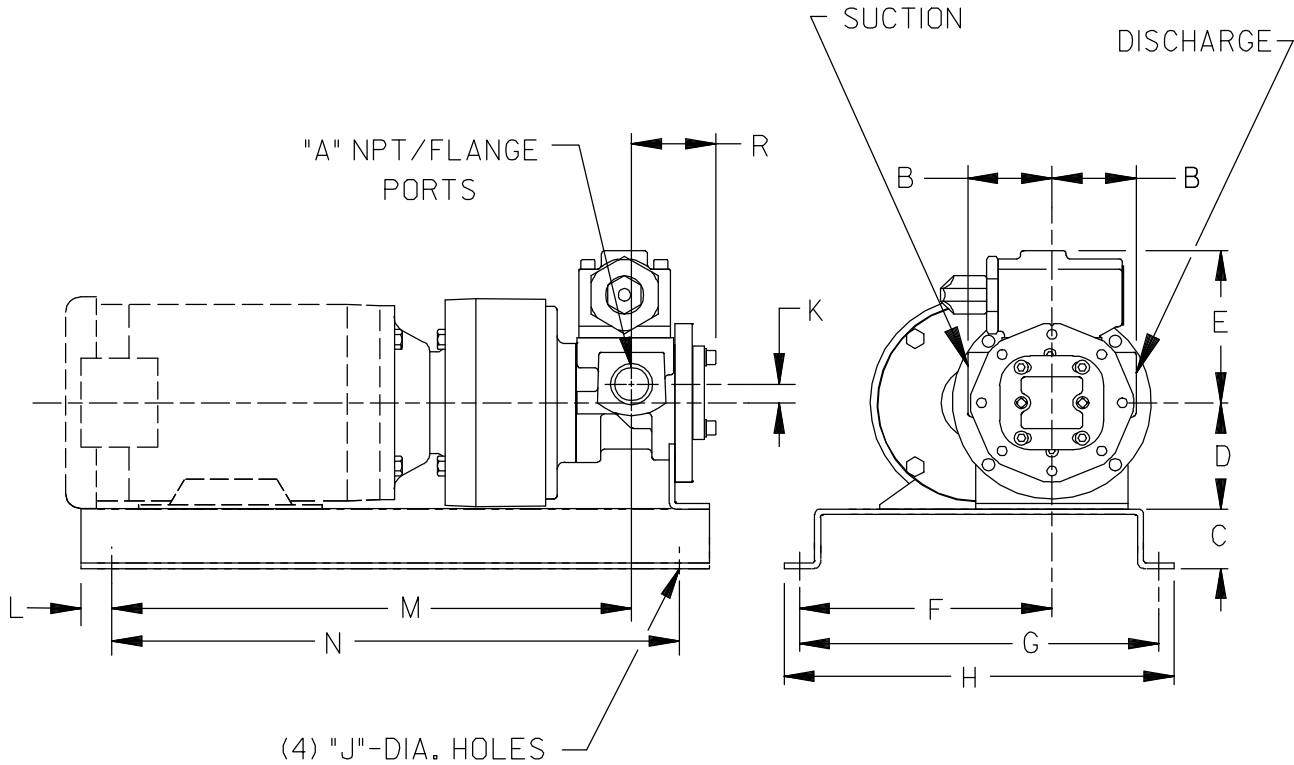
**NOTE: CONSULT FACTORY FOR:**

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



## GRR REDUCER CLOSE COUPLED C-FLANGE DRIVE OPTION DIMENSIONS

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



CAD FILE NO.: 16390B

PUMP MODEL	UNIT DIMENSIONS														
	"A"	MOTOR FRAME	B	C	D	E	F	G	H	J	K	L	M	N	R
GMC D	1"	56C	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]
		143TC/145TC	2.75* [70]		4.50 [114]										
GMC G	1 1/2"	56C	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]
		143TC/145TC	3.75* [95]		4.50 [114]										
		184C													

\* STANDARD DIMENSION

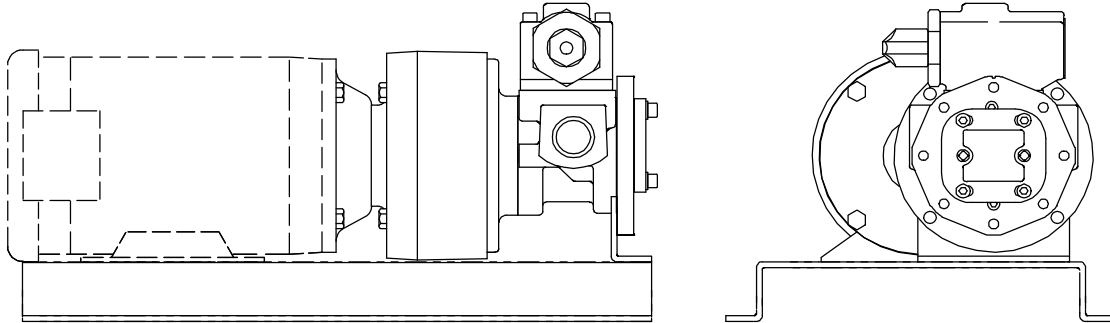
† 90° HOUSING



# 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		FRAME	DRIVE ASSY NO.	
			MAX HP @ 1750	MAX HP @ 1150			
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.





# PERFORMANCE CURVES

## SPEED VS. CAPACITY/HORSEPOWER

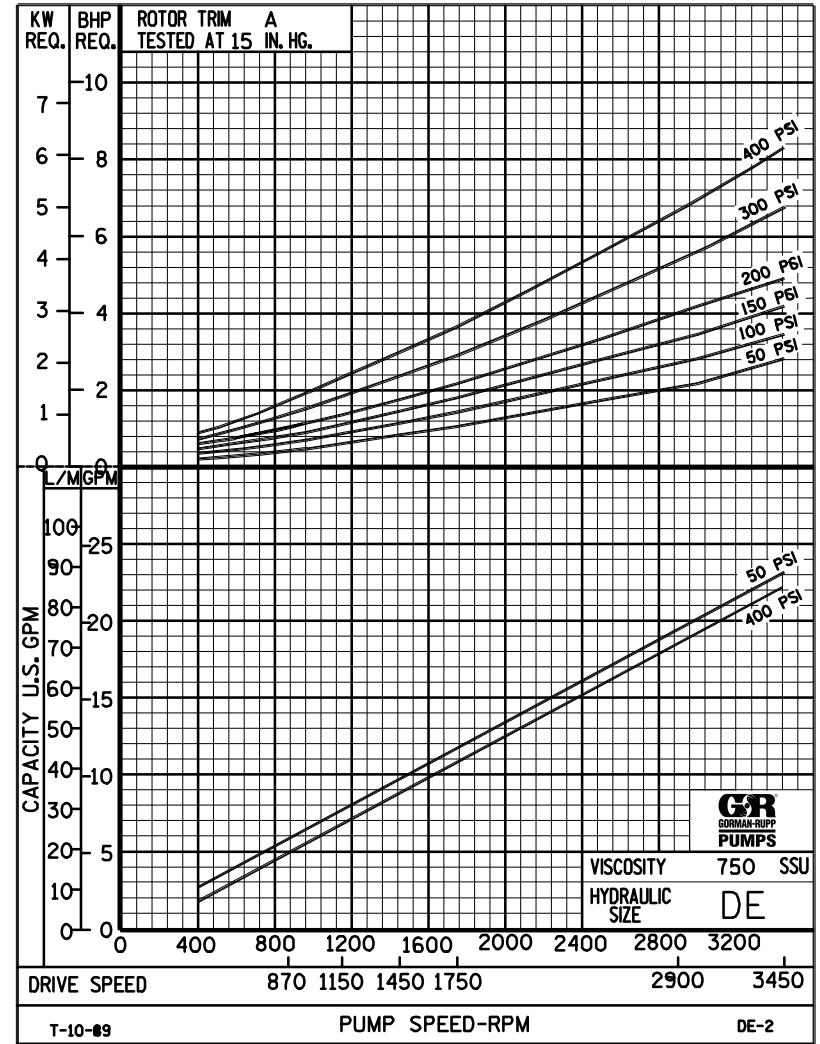
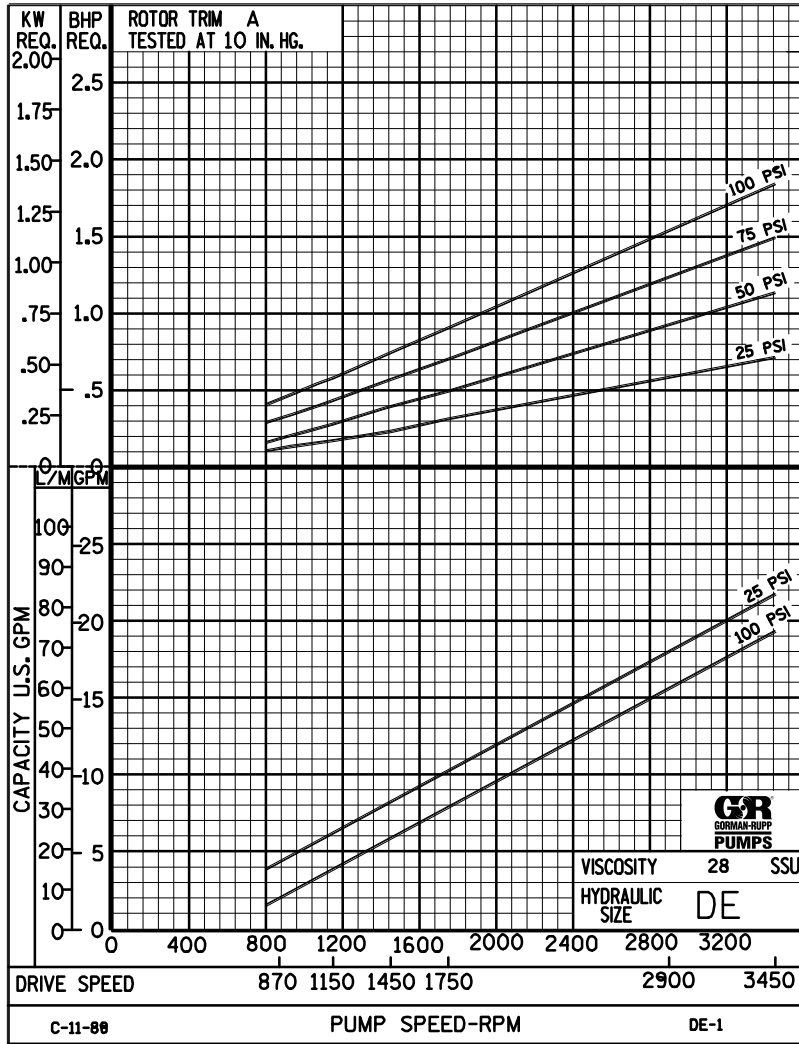
# DE

Hydraulic Size

SEC. 500

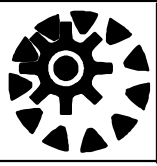
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# PERFORMANCE CURVES

## SPEED VS. CAPACITY/HORSEPOWER

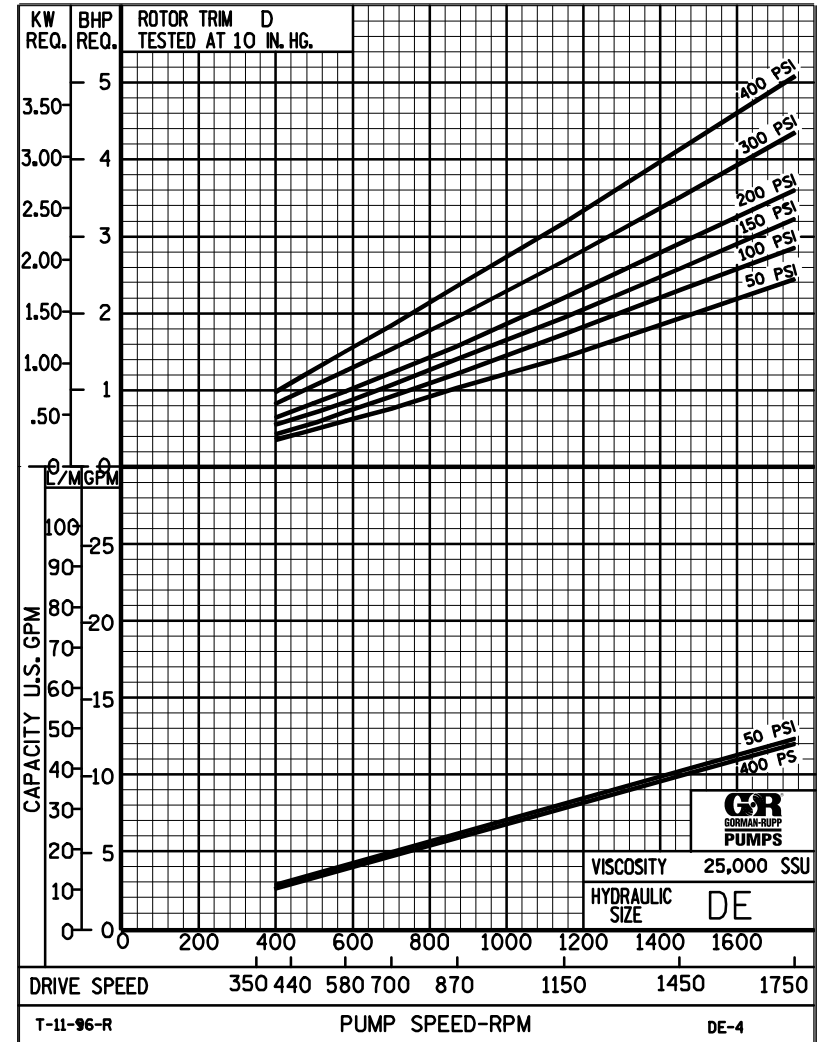
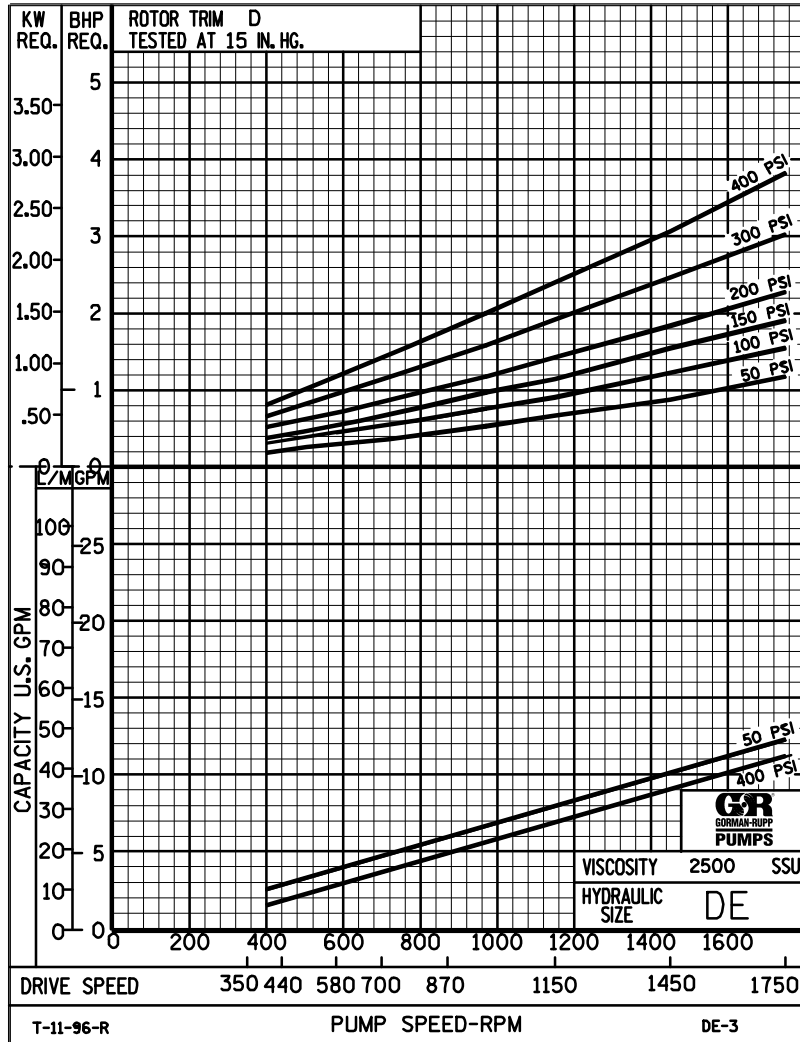
# DE

Hydraulic Size

SEC. 500

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# DE

## PUMP HYDRAULIC SIZE CHART

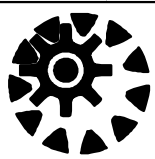
SEC. 500

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22 GPM  
3450 RPM

NOMINAL		ROTOR TRIM	VISCOSITY (SSU)	N.I.P.R. (PSIA)	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					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					
22	3450	STD	28	12.3	.01	.01	.01	.01	.01	74	99	127				21.0	21.0	20.0	19.0					
			32		.33	.11	.03	.02	.01							.85	1.2	1.6	1.9					
			38	12.3	.43	.14	.04	.02	.01	74	99	129	178				22.0	21.0	21.0	20.0	20.0			
			50		.51	.16	.05	.02	.01								1.2	1.5	1.9	2.2	3.0			
			70	12.3	.59	.18	.05	.03	.01	74	100	131	179	232			22.0	22.0	22.0	21.0	21.0	20.0		
			100		.68	.22	.06	.03	.01								1.6	1.9	2.3	2.7	3.4	4.2		
			150	12.3	.75	.24	.07	.04	.01	74	101	134	180	234			23.0	22.0	22.0	22.0	21.0	21.0	20.0	
			200		.80	.27	.09	.05	.02								2.1	2.4	2.7	3.0	3.8	4.6	6.1	7.6
			300	12.3	.85	.33	.11	.06	.02	75	103	137	181	236			23.0	23.0	22.0	22.0	22.0	21.0	21.0	20.0
			500		1.41	.54	.18	.10	.04								2.4	2.7	3.0	3.3	4.0	4.8	6.3	7.8
			750	12.3	2.11	.80	.27	.15	.06	76	105	140	183	238			23.0	23.0	23.0	23.0	23.0	22.0	22.0	22.0
			1,000		2.81	1.07	.36	.19	.07								2.6	2.9	3.2	3.6	4.3	5.0	6.5	7.9
					2,000																			
					3,500																			
		5,000																						
		7,500																						
		10,000																						
		15,000																						
		20,000																						
		25,000																						
		50,000																						
		75,000																						
		100,000																						
		150,000																						
		200,000																						
		250,000																						

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



# DE

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**11 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						
11	1750	STD	28	3.2	.01	.01	.01	.01	.01	60	86	114				10.0	9.5	8.5	8.0						
			32		.10	.03	.01	.01	.01							.39	.57	.76	.95						
			38	3.2	.13	.04	.01	.01	.01	60	86	115	163			10.0	9.5	8.5	8.5	7.5					
			50		.05	.02	.01	.01	.52							.52	.70	.89	1.1	1.5					
			70	3.2	.17	.06	.02	.01	.01	60	87	116	163	215		10.0	10.0	9.5	9.0	8.5	7.5				
			100		.21	.06	.02	.01	.01							.65	.84	1.0	1.2	1.6	2.1				
			150	3.2	.28	.09	.03	.01	.01	60	87	117	164	216		11.0	10.0	10.0	10.0	9.5	9.5	9.0	8.5		
			200		.36	.14	.05	.03	.01							.79	.97	1.2	1.4	1.7	2.1	2.9	3.6		
			300	3.2	.43	.16	.06	.03	.01	61	88	118	164	216		11.0	11.0	11.0	10.0	10.0	10.0	10.0	9.5		
			500		.70	.27	.09	.05	.02							.84	1.0	1.2	1.4	1.8	2.1	2.9	3.7		
		750	3.2	1.05	.40	.14	.07	.03	61	89	120	165	217		11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.0			
		1,000		1.41	.54	.18	.10	.04							.88	1.1	1.3	1.5	1.8	2.2	2.9	3.7			
		2,000	5.0	2.81	1.07	.36	.19	.07	62	90	121	166	218		12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0			
		3,500		4.91	1.87	.63	.34	.13							1.1	1.3	1.5	1.6	2.0	2.4	3.1	3.9			
		5,000	6.3	7.02	2.67	.89	.48	.18	65	92	121	167	219		12.0	12.0	12.0	12.0	12.0	12.0	11.0	11.0			
		7,500		10.5	4.01	1.34	.72	.27							1.3	1.5	1.7	1.9	2.2	2.6	3.4	4.2			
		10,000	7.7	14.0	5.34	1.79	.96	.36	68	94	122	168	220		12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.0			
		15,000		21.0	8.01	2.68	1.45	.53							1.7	1.9	2.1	2.3	2.6	3.0	3.8	4.6			
		20,000	9.0	28.0	10.7	3.57	1.93	.71	71	96	122	169	221		12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0			
		25,000		35.0	13.4	4.46	2.41	.89							2.2	2.4	2.6	2.9	3.2	3.6	4.2	5.1			
50,000																									
75,000																									
100,000																									
150,000																									
200,000																									
250,000																									

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



# DE

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**7 GPM  
1150 RPM**

NOMINAL		ROTOR TRIM	VISCOSITY (SSU)	N.I.P.R. (PSIA)	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					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						
7	1150	STD	28	2.0	.01	.01	.01	.01	.01	56	81	108			6.0	5.0	4.5	3.5							
			32		.04	.02	.01	.01	.01							.17	.30	.44	.59						
			38	2.0	.06	.02	.01	.01	.01	56	81	109	161			6.5	6.0	5.0	4.5	3.5					
			50		.07	.02	.01	.01	.01							.30	.42	.54	.67	.93					
			70	2.0	.08	.03	.01	.01	.01	56	82	110	161	212		7.0	6.5	6.0	5.5	5.0	4.0				
			100		.09	.03	.01	.01	.01							.41	.52	.64	.76	1.0	1.3				
			150	2.0	.11	.04	.02	.01	.01	57	83	111	161	213		7.0	7.0	6.5	6.5	6.0	5.5	5.0	4.5		
			200		.23	.09	.03	.02	.01							.50	.60	.71	.82	1.1	1.4	1.9	2.3		
			300	2.0	.27	.11	.04	.02	.01	57	84	112	162	213		7.5	7.0	7.0	7.0	6.5	6.5	6.0	5.5		
			500		.45	.17	.06	.03	.01							.52	.63	.74	.86	1.1	1.4	1.9	2.4		
		750	2.0	.67	.26	.09	.05	.02	57	85	113	162	213		7.5	7.5	7.5	7.5	7.5	7.0	7.0	7.0			
		1,000		.89	.34	.11	.06	.02							.54	.64	.75	.87	1.1	1.4	1.9	2.4			
		"D"	2,000	3.5	1.79	.68	.23	.12	.05	58	86	113	163	213		8.0	8.0	7.5	7.5	7.5	7.5	7.0	7.0		
			3,500		3.13	1.19	.40	.22	.08							.56	.72	.88	1.1	1.3	1.5	2.0	2.5		
			5,000	4.5	4.46	1.70	.57	.31	.11	60	87	113	163	213		8.0	8.0	8.0	7.5	7.5	7.5	7.5	7.0		
			7,500		6.70	2.55	.85	.46	.17							.77	.92	1.1	1.2	1.5	1.7	2.2	2.7		
			10,000	5.5	8.93	3.40	1.14	.61	.23	62	88	114	164	214		8.0	8.0	8.0	8.0	7.5	7.5	7.5	7.5		
			15,000		13.4	5.10	1.70	.92	.34							1.1	1.2	1.3	1.5	1.7	2.0	2.4	2.9		
			20,000	6.4	17.9	6.80	2.27	1.23	.45	63	88	114	164	214		8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.5		
			25,000		22.3	8.50	2.84	1.53	.57							1.3	1.4	1.6	1.7	2.0	2.2	2.7	3.2		
50,000	9.9		44.6	17.0	5.68	3.06	1.13	65	91	117	167	218		8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.5				
75,000			-	-	-	-	-							1.7	1.8	1.9	2.0	2.3	2.5	3.1	3.5				
100,000																									
150,000																									
200,000																									
250,000																									

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



# DE

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**5.5 GPM  
870 RPM**

NOMINAL		ROTOR TRIM	VISCOSITY (SSU)	N.I.P.R. (PSIA)	FRICTION PIPE LOSS (PSI/FT) (Based on Sch 40 Steel Pipe)					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								
5.5	870	STD	28	1.5	.01	.01	.01	.01	.01	54	80	106				4.5	4.0	3.5	3.0								
			32		.03	.01	.01	.01	.01							.11	.20	.32	.45								
			38	1.5	.04	.01	.01	.01	.01	54	80	106	158			4.5	4.5	3.5	3.5	3.0							
			50		.05	.02	.01	.01	.01							.15	.26	.38	.50	.75							
			70	1.5	.06	.02	.01	.01	.01	54	80	107	158	208		5.0	4.5	4.5	4.0	3.5	3.0						
			100		.07	.03	.01	.01	.01							.21	.32	.43	.55	.78	1.0						
			150	1.5	.09	.04	.01	.01	.01	55	81	107	158	209		5.5	5.0	5.0	4.5	4.5	4.0	3.5	3.0				
			200		.19	.07	.02	.01	.01							.27	.38	.49	.60	.80	1.0	1.4	1.7				
			300	1.5	.23	.09	.03	.02	.01	55	81	108	159	209		5.5	5.5	5.0	5.0	5.0	4.5	4.5	4.0				
			500		.38	.15	.05	.03	.01							.32	.42	.52	.62	.81	1.0	1.4	1.7				
		750	1.5	.57	.22	.07	.03	.01	55	81	108	159	209		5.5	5.5	5.5	5.5	5.5	5.5	5.0	5.0					
		1,000		.76	.29	.10	.05	.02							.35	.44	.54	.64	.83	1.0	1.4	1.7					
		2,000	2.8	1.53	.58	.19	.10	.04	56	82	108	159	209		6.0	6.0	6.0	5.5	5.5	5.5	5.5	5.0					
		3,500		2.67	1.02	.34	.18	.07							.39	.50	.61	.72	.91	1.1	1.5	1.8					
		5,000	3.6	3.82	1.46	.49	.26	.10	57	83	109	160	210		6.0	6.0	6.0	6.0	5.5	5.5	5.5	5.5					
		7,500		5.74	2.19	.73	.39	.15							.53	.64	.75	.86	1.1	1.3	1.6	2.0					
		10,000	4.5	7.65	2.91	.97	.53	.19	59	85	110	160	210		6.0	6.0	6.0	6.0	6.0	5.5	5.5	5.5					
		15,000		11.5	4.37	1.46	.79	.29							.72	.85	.94	1.0	1.2	1.4	1.8	2.1					
		20,000	5.2	15.3	5.83	1.95	1.05	.39	61	86	111	161	211		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0					
		25,000		19.1	7.28	2.43	1.31	.48							.93	1.0	1.1	1.2	1.4	1.6	2.0	2.4					
50,000	9.3	38.3	14.6	4.86	2.63	.97	62	87	112	162	212		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0							
75,000		-	-	-	-	-							1.2	1.3	1.4	1.5	1.7	1.8	2.2	2.6							
100,000																											
150,000																											
200,000																											
250,000																											

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



# DE

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**3.5 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						
							50	75	100	150	200	25	50	75	100	150	200	300	400								
3.5	580	STD	28	1.1	.01	.01	.01	.01	.01	53	78	104				3.0	2.5	2.0	2.0								
			32		.02	.01	.01	.01	.01							.06	.11	.21	.31								
			38	1.1	.03	.01	.01	.01	.01	53	78	104	154			3.0	3.0	2.5	2.0	2.0							
			50		.04	.01	.01	.01	.01							.07	.13	.23	.32	.50							
			70	1.1	.04	.01	.01	.01	.01	53	78	104	154	204			3.5	3.0	3.0	2.5	2.5	2.0					
			100		.06	.02	.01	.01	.01								.09	.16	.26	.37	.59	.75					
			150	1.1	.07	.03	.01	.01	.01	53	78	104	155	205			3.5	3.5	3.0	3.0	3.0	2.5	2.5	2.0			
			200		.15	.06	.01	.01	.01								.12	.20	.30	.41	.59	.75	1.0	1.2			
			300	1.1	.17	.07	.02	.01	.01	53	79	104	155	205			3.5	3.5	3.5	3.5	3.0	3.0	3.0	2.5			
			500		.29	.11	.04	.02	.01								.15	.23	.33	.44	.59	.75	1.1	1.3			
		750	1.1	.43	.17	.06	.03	.01	53	79	104	155	205			3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.0			
		1,000		.58	.22	.07	.04	.02								.17	.26	.36	.46	.60	.75	1.1	1.4				
		2,000	2.3	1.15	.44	.15	.08	.03	54	79	105	155	205			4.0	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
		3,500		2.00	.77	.26	.14	.05								.20	.28	.37	.49	.64	.77	1.1	1.4				
		5,000	3.0	2.87	1.09	.37	.20	.07	54	80	105	156	206			4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	
		7,500		4.31	1.64	.55	.30	.11								.31	.39	.46	.54	.67	.81	1.1	1.4				
		10,000	3.8	5.74	2.19	.73	.40	.15	55	80	106	156	206			4.0	4.0	4.0	4.0	4.0	4.0	3.5	3.5	3.5	3.5	3.5	
		15,000		8.61	3.28	1.09	.59	.22								.42	.49	.56	.63	.76	.89	1.2	1.5				
		20,000	4.5	11.5	4.37	1.46	.79	.29	56	81	106	156	206			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5	
		25,000		14.4	5.46	1.83	.99	.36								.52	.59	.66	.73	.85	.97	1.3	1.6				
50,000	7.9	28.7	10.9	3.65	1.97	.73	56	81	106	156	206			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.5			
75,000		43.0	16.4	5.47	2.95	1.09								.85	.90	.96	1.0	1.1	1.3	1.5	1.8						
100,000																											
150,000																											
200,000																											
250,000																											

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