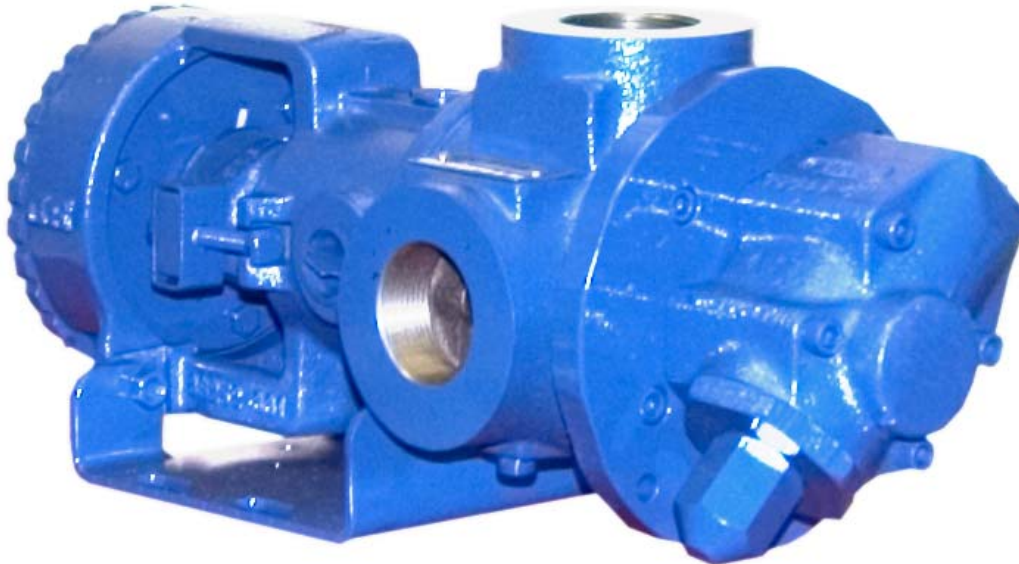


**GHS SERIES
 FLEXIBLE SEAL
 HEAVY DUTY STANDARD
 STAINLESS STEEL ROTARY
 GEAR PUMP**

This heavy duty series with internal “wetted” parts of 316 Stainless Steel is ideal for handling corrosive applications. Superior rotor shaft support and an integral maintenance-free radial/thrust bearing, reduce deflection and wear. Due to the “galling” nature of stainless, extra internal clearance is necessary. A capacity correction table for liquids less than 750 SSU is available in Section 500.



SHOWN ^W/INTERCHANGE FOOT BRACKET

The GHS stainless series is designed for applications in the operating ranges noted below. These units are available with head and backhead jackets for temperature control, silicon carbide bushings for wear resistance, and numerous shaft seal options described on the following pages.

FEATURES

- 200 PSI CAPABILITY
- BALL BEARING THRUST CONTROL
- ROTOR END CLEARANCE EXTERNALLY ADJUSTABLE
- EXCEPTIONAL SEAL VERSATILITY WITH INTERNAL SEAL VENT
- COMPUTER PROFILED GEARING FOR QUIET OPERATION
- MULTIPLE PORT POSITIONS
- FLEXIBLE SEAL DESIGN ALLOWS FOR A VARIETY OF INDUSTRY STANDARD SEALS OR PACKING

OPERATING RANGE

- CAPACITY (GPM): (3 TO 295)
 [LPM] : [11 TO 1116]
- PRESSURE (PSI) : [0 TO 200]
 [BAR] : [0 TO 14]
- VISCOSITY (SSU) : (28 TO 2,000,000)
 [cSt] : [1 TO 440,000]
- TEMPERATURE (F) : (-30° TO 675°)
 [C] : [-34° TO 358°]

APPLICATIONS

- USE WITH ANY CLEAN LIQUID COMPATIBLE WITH 316 STAINLESS STEEL
- ★ BOOSTER SERVICE
 - ★ CIRCULATING
 - ★ FILTERING
 - ★ LUBRICATING
 - ★ TRANSFERRING

EXTERIOR	BACKH.D	ROTOR & IDLER	HOUSING PORTS	BUSHING	IDLER PIN	SHAFT	SHAFT SEALING		ROTA-TION	INTERNAL RELIEF VALVE	
							MECH. SEAL	PACKING		MATERIAL	SETTING
316 STAIN. STEEL	CAST IRON	316 STAIN. STEEL	GHC 180° FLG. GHS 90° NPT	CARBON GRAPHITE	COATED 316 SST	STAIN. STEEL	CARBON, SIC, TEFLON ENC.	CARBON FIBER	C.W.	316 STAINLESS STEEL	75 PSI [5 BAR]

G H C 1 DC 9 - B
G H S 1 DC 9 - B
 | | | | | | | | | | | |
 GEAR DUTY DESIGN PORT SIZE HYD. SIZE SEAL STYLE

Standard Models

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 1 DC9-B ① ● ▸	GHS 1 DC9-B ① ● ● GHS 1 DC10-B ① ■ ■	9 [28]		6 [19]						32 [14,5]	2.9
GHC 1 DE9-B ① ● ▸	GHS 1 DE9-B ① ● ● GHS 1 DE10-B ① ■ ■	11 [35]		7 [22]						32 [14,5]	2.9
GHC 1-1/2 GC9-B ● ▸	GHS 1-1/2 GC9-B ● ● GHS 1-1/2 GC10-B ■ ■	16 [50]		10 [32]						63 [28,6]	2.9
	GHS 2 GC9-B ● ● GHS 2 GC10-B ■ ■									63 [28,6]	2.9
GHC 1-1/2 GF9-B ● ▸	GHS 1-1/2 GF9-B ● ● GHS 1-1/2 GF10-B ■ ■	23 [73]	1750 [1460]	15 [47]	1150 [960]					GHC ● 350 [177]	63 [28,6] 2.9
	GHS 2 GF9-B ● ● GHS 2 GF10-B ■ ■									GHS ● 400 [204]	63 [28,6] 2.9
GHC 1-1/2 GH9-B ● ▸	GHS 1-1/2 GH9-B ● ● GHS 1-1/2 GH10-B ■ ■	31 [98]		20 [63]		75 [5]	100 [7]	200 [14]		GHS ● 400 [204]	63 [28,6] 2.9
	GHS 2 GH9-B ● ● GHS 2 GH10-B ■ ■									■ 63 [28,6]	2.9
GHC 1-1/2 GJ9-B ● ▸	GHS 1-1/2 GJ9-B ● ● GHS 1-1/2 GJ10-B ■ ■	38 [120]		25 [79]						500 [260]	63 [28,6] 2.9
	GHS 2 GJ9-B ● ● GHS 2 GJ10-B ■ ■										63 [28,6] 2.9
	GHS 2 JG9-B ● ● GHS 2 JG10-B ■ ■	40 [126]	1150 [960]	30 [95]	870 [725]						161 [73,2] 5.3
GHC 3 JG9-B ● ▸	GHS 3 JG9-B ● ● GHS 3 JG10-B ■ ■										161 [73,2] 5.3
	GHS 2 JJ9-B ● ● GHS 2 JJ10-B ■ ■	56 [177]		42 [133]							161 [73,2] 5.3
GHC 3 JJ9-B ● ▸	GHS 3 JJ9-B ● ● GHS 3 JJ10-B ■ ■										161 [73,2] 5.3

STANDARD MODELS CONTINUED

① 3450 [2875] RPM PERMISSIBLE TO 1,000 SSU [220 cSt.] AND 100 PSI [7 BAR]

● MECHANICAL SEAL
■ PACKING/LIP SEAL

▸ PORTS ARE COMPATIBLE WITH 150# ANSI FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS ARE AVAILABLE FOR EXPORT MARKET.

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GHC 1 DC9-B**, **GHS 1 DC9-B**

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Standard Models (Continued)

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]	LBS [KG]	CU. FT.
GHC	GHS 2 JL9-B ●	77 [243]	1150 [960]	58 [133]	870 [725]	75 [5]	100 [7]	200 [14]	GHC ●	161 [73,2]	5.3
	GHS 2 JL10-B ■									161 [73,2]	
GHC 3 JL9-B ● †	GHS 3 JL9-B ●	107 [338]	960 [960]	81 [256]	580 [480]	75 [5]	100 [7]	200 [14]	GHC ●	161 [73,2]	5.3
	GHS 3 JL10-B ■									161 [73,2]	
GHC 3 JP9-B ● †	GHS 2 JP9-B ●	99 [375]	960 [960]	80 [252]	580 [480]	75 [5]	100 [7]	200 [14]	GHC ●	161 [73,2]	5.3
	GHS 2 JP10-B ■									161 [73,2]	
GHC 3 JP9-B ● †	GHS 3 JP9-B ●	132 [500]	960 [960]	80 [252]	580 [480]	75 [5]	100 [7]	200 [14]	GHC ●	161 [73,2]	5.3
	GHS 3 JP10-B ■									161 [73,2]	
GHC 3 NK9-B ● †	GHS 2 NK9-B ●	165 [624]	960 [960]	99 [312]	580 [480]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 2 NK10-B ■									180 [81,8]	
GHC 3 NK9-B ● †	GHS 2-1/2 NK9-B ●	172 [542]	960 [960]	115 [362]	580 [480]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 2-1/2 NK10-B ■									180 [81,8]	
GHC 3 NK9-B ● †	GHS 3 NK9-B ●	215 [678]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 3 NK10-B ■									180 [81,8]	
GHC 3 NM9-B ● †	GHS 2 NM9-B ●	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 2 NM10-B ■									180 [81,8]	
GHC 3 NM9-B ● †	GHS 2-1/2 NM9-B ●	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 2-1/2 NM10-B ■									180 [81,8]	
GHC 3 NP9-B ● †	GHS 3 NP9-B ●	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 3 NP10-B ■									180 [81,8]	
GHC 3 NP9-B ● †	GHS 2-1/2 NP9-B ●	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	180 [81,8]	5.3
	GHS 2-1/2 NP10-B ■									180 [81,8]	
GHC 3 NP9-B ● †	GHS 2 RM9-B ●	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 2 RM10-B ■									357 [162]	
GHC 3 RM9-B ● †	GHS 2-1/2 RM9-B ● †	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 2-1/2 RM10-B ■ †									357 [162]	
GHC 3 RM9-B ● †	GHS 3 RM9-B ● †	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 3 RM10-B ■ †									357 [162]	
GHC 3 RM9-B ● †	GHS 4 RM9-B ● †	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 4 RM10-B ■ †									357 [162]	
GHC 3 RP9-B ● †	GHS 3 RP9-B ● †	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 3 RP10-B ■ †									357 [162]	
GHC 3 RP9-B ● †	GHS 4 RP9-B ● †	172 [542]	720 [600]	143 [451]	480 [400]	75 [5]	100 [7]	200 [14]	GHC ●	357 [162]	10.7
	GHS 4 RP10-B ■ †									357 [162]	

STANDARD MODELS CONTINUED

- MECHANICAL SEAL
- PACKING/LIP SEAL

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

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GHC 1 DC9-B, GHS 1 DC9-B**

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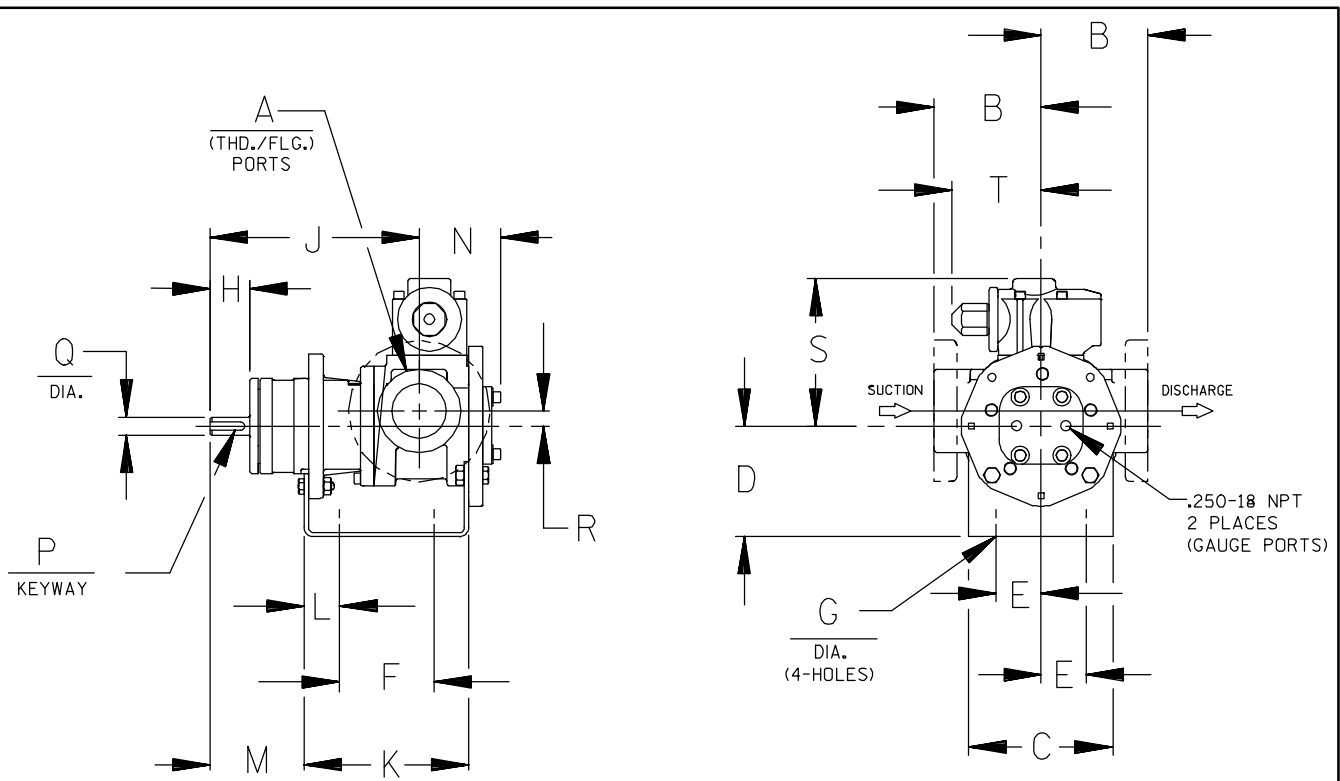
MODEL NUMBER		NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE - PSI [BAR]			TEMP.	Wt.	Vol.
		GPM [LPM]	RPM 60 Hz [50 HZ]	GPM [LPM]	RPM 60 Hz [50 HZ]	BELOW 38 SSU [4 cSt]	38 TO 100 SSU [21 cSt]	100 TO 250,000 SSU [55,000 cSt]	°F [°C]	LBS [KG]	CU. FT.
GHC	GHS										
	GHS 3 RR9-B ● ▸ GHS 3 RR10-B ■ ▸	255 [804]	720 [600]	170 [536]	480 [400]	75 [5]	100 [7]	200 [14]	GHS ● 400 [204] ■ 500 [260]	357 [162]	10.7
	GHS 4 RR9-B ● ▸ GHS 4 RR10-B ■ ▸			196 [618]						357 [162]	
	GHS 4 RS9-B ● ▸ GHS 4 RS10-B ■ ▸			295 [930]						357 [162]	

▸ PORTS ARE COMPATIBLE WITH 150# ANSI STAINLESS STEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN BOLDFACE. EXAMPLE: **GHC 1 DC9-B, GHS 1 DC9-B**

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) 40R, 70K 61H OR 65Q	TEMPERATURE: 675 °F MAX. PRESSURE: 200 PSI MAX.
GHS ONLY JACKETED	40K, 40W, 41U, 41W	LIMIT JACKET PRESSURE TO 150 PSI

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



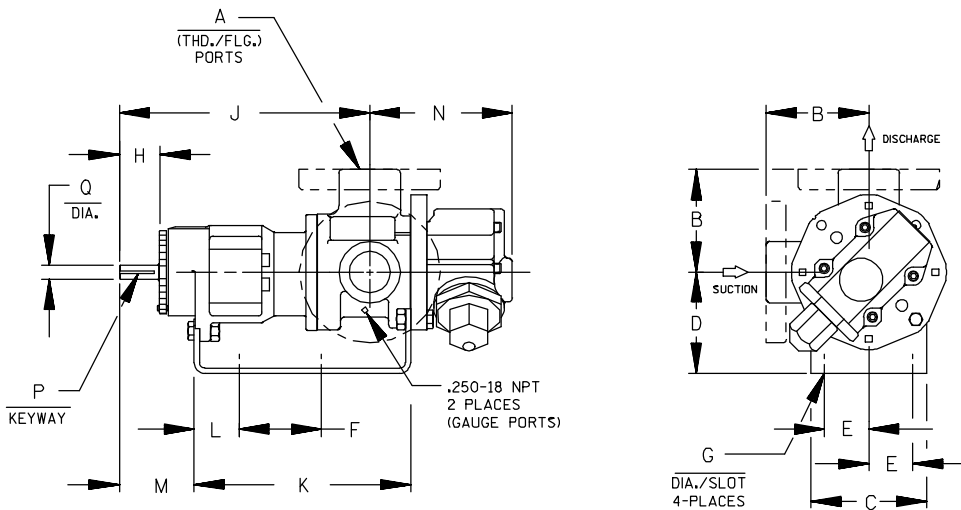
CAD FILE NO.: 16458B

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"	2.50 [64] †	4.00 [102]	3.50* [89]	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]	.50 [13]	.62 [16]	5.19 [132]	3.58 [91]
		4.00* [102] †		5.25 [133]										.75 [19]				
GHC G	1-1/2"	3.50 [89] †	5.88 [149]	3.50* [89]	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]	.75 [19]	.62 [16]	6.00 [152]	3.62 [92]
		4.00* [102] †		4.50 [114]										5.25 [133]				
GHC J	3"	4.50 [114] †	6.88 [175]	4.50 [114]	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]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]
		6.00* [152] †		5.25* [133]										6.25 [159]				

* STANDARD DIMENSION

† PORTS ARE COMPATIBLE WITH 125* OR 250* ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 90° HOUSING



CAD FILE NO.: 16669G

MODEL NUMBERS	PUMP DIMENSIONS - INCHES [MILLIMETERS]														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q
GHS D	1"	2.50* [641]	4.00 [102]	3.50* [891]	1.62 [41]	5.50 [140]	.41 [10]	1.16 [30]	8.43 [214]	7.54 [192]	1.09 [28]	2.29 [58]	4.98 [127]	.12 [3] x .75 [19]	.50 [13]
		4.00 † [102]		5.25 [133]											
GHS G	1-1/2" 2"	3.50* [891]	4.88 [124]	3.50* [891]	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]
		4.00 † [102]		5.25 [133]											
GHS J	2" 3"	4.50* [114]	6.88 [175]	5.25* [133]	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]
		6.00 † [152]		6.25 [159]											
GHS N	2" 3"	5.12 [130]	8.00 [203]	4.50 [114]	2.88 [73]	10.00 [254]	.44 [11]	2.58 [66]	16.37 [416]	15.14 [385]	2.69 [68]	4.56 [116]	8.72 [221]	.25 [6] x 2.00 [51]	1.12 [28]
				5.25* [133]											
GHS R	2"	6.50 [165]	10.50 [267]	7.00 [178]	3.75 [95]	13.75 [349]	.52 [13]	2.25 [57]	17.87 [454]	17.36 [441]	1.86 [47]	4.70 [119]	11.31 [287]	.38 [10] x 1.88 [48]	1.44 [37]
	2-1/2"														
	3"														
	4"	7.19 † [183]													

* STANDARD DIMENSION

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

‡ 180° HOUSING

GHC/GHS

FOR GHC DRIVE OPTIONS

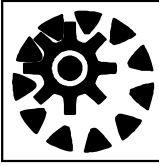
AND DIMENSIONS

SEE SECTION 540

FOR GHS DRIVE OPTIONS

AND DIMENSIONS

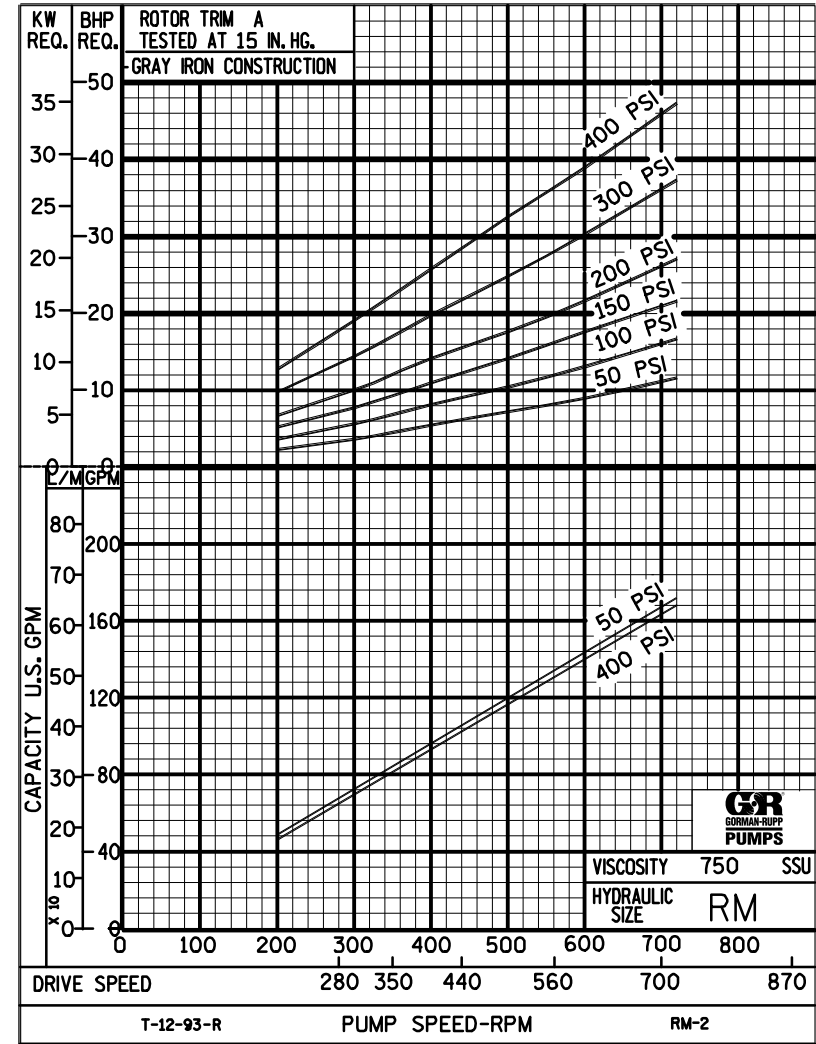
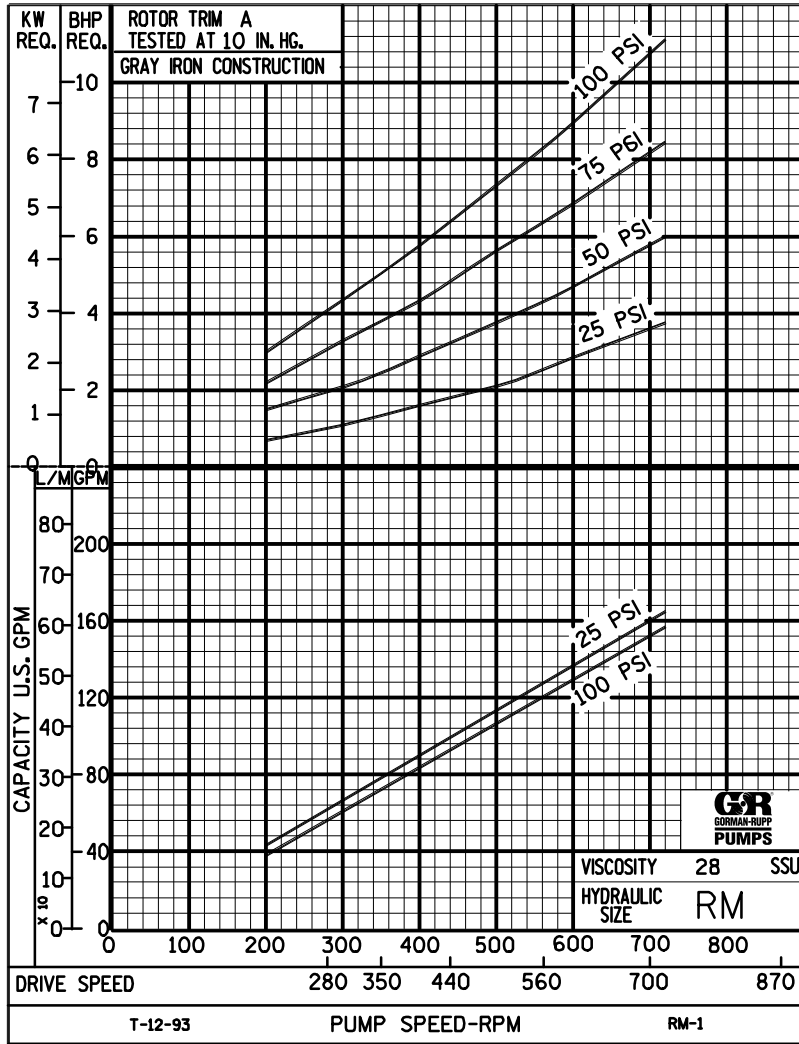
SEE SECTION 545



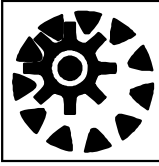
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

RM Hydraulic Size



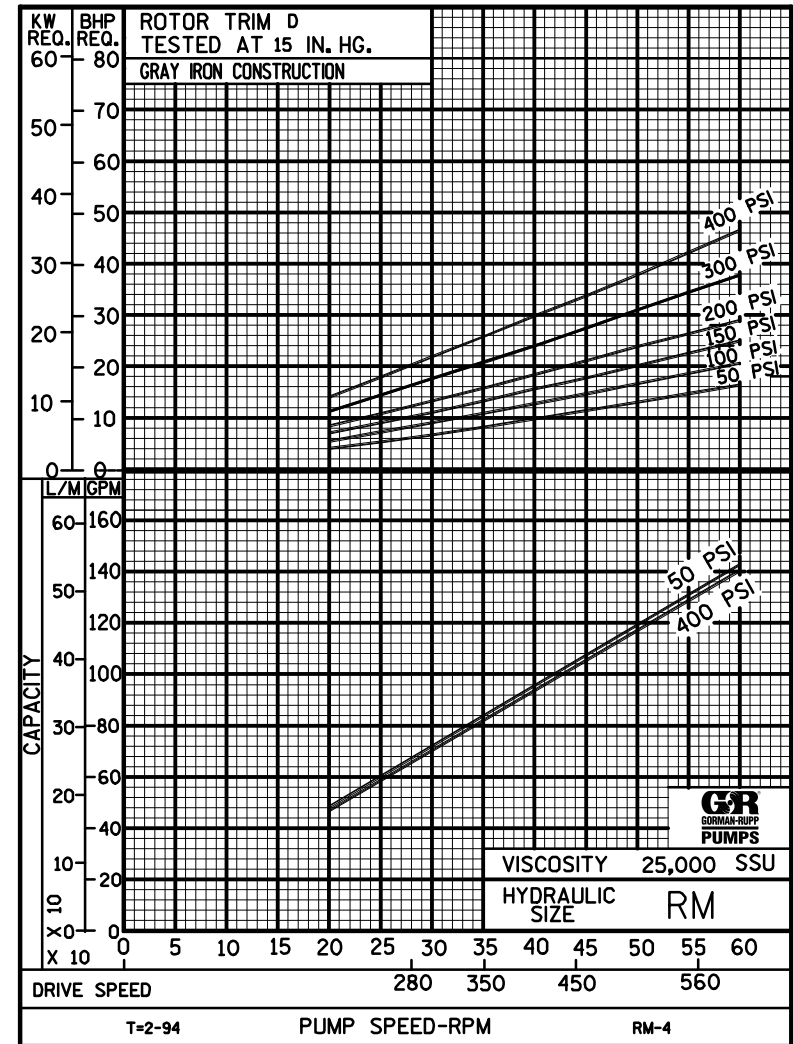
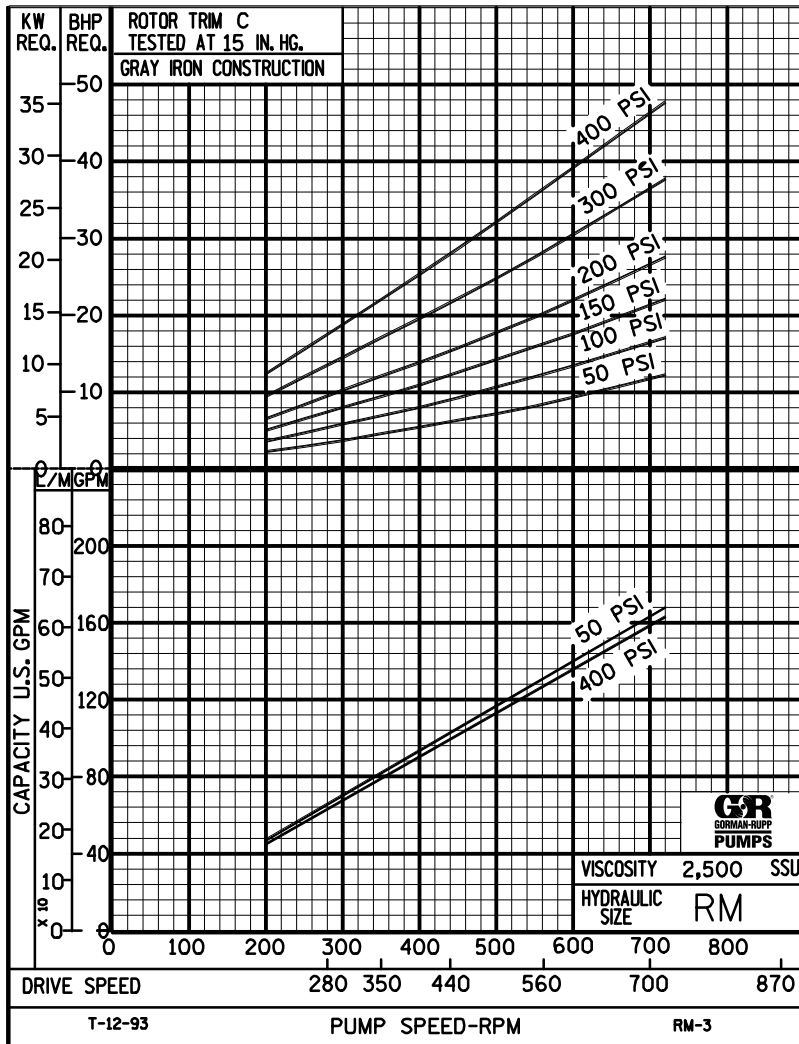
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PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

RM Hydraulic Size



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RM

PUMP HYDRAULIC SIZE CHART

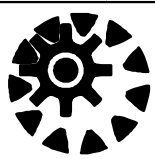
SEC. 500

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January 2010

172 GPM
720 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)											
					2"	2 1/2"	3"	4"	6"	LOW PRES R/V			HI PRES R/V		25	50	75	100	150	200	300	400				
172	720	STD	28	3.1	.21	.08	.03	.01	-	58	84	121	178		165	161	159	157								
			32		.22	.09	.03	.01	-						4.1	6.2	9.1	11								
			38	3.1	.23	.10	.03	.01	-	61	87	123	181		166	163	160	159	155							
			50		.26	.11	.04	.01	-						5.2	7.8	10	13	18							
			70	3.1	.29	.12	.04	.01	-	65	90	126	185	245	168	166	164	162	160	158						
			100		.32	.14	.05	.01	-							6.8	9.2	12	14	20	25					
			150	3.1	.35	.15	.05	.01	-	69	94	130	188	250	170	168	167	166	164	163	161	158				
			200		.38	.16	.06	.02	-							7.8	10	13	15	21	26	36	47			
			300	3.1	.43	.19	.07	.02	-	74	100	134	193	256	171	170	170	169	168	166	166	165				
			500		.50	.22	.06	.02	-							8.9	11	14	16	22	27	37	47			
			750	3.2	.41	.20	.08	.03	.01	78	104	137	197	260	172	172	172	171	170	169	169	168				
			1,000		.55	.27	.11	.04	.01							9.4	12	14	17	22	27	37	48			
		2,000	3.4	1.10	.54	.23	.08	.01	85	111	143	203	269	169	168	168	168	167	167	165	163					
		3,500		1.92	.94	.40	.13	.03							11	13	16	18	23	28	38	49				
		5,000	3.6	2.74	1.35	.56	.19	.04	89	115	147	207	273	169	169	168	168	167	167	166	164					
		7,500		4.11	2.02	.85	.29	.06							11	14	17	19	24	29	39	50				
		10,000	3.9	5.48	2.69	1.13	.38	.07	93	119	150	211	278	170	169	169	168	168	168	167	165					
		15,000		8.22	4.04	1.69	.57	.11							13	15	17	21	26	31	41	52				
		20,000																								
		25,000																								
		50,000																								
		75,000																								
		100,000																								
		150,000																								
200,000																										
250,000																										
		"C"																								
			"D"																							

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



RM

PUMP HYDRAULIC SIZE CHART

SEC. 500

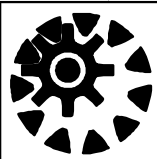
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January 2010

153 GPM
640 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)																
					2"	2 1/2"	3"	4"	6"	LOW PRES R/V		HI PRES R/V			MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY												
153	640	STD	28	2.5	.16	.07	.02	.01	-	57	84	120	178		145	142	139	137													
			32		.17	.07	.02	.01	-						3.3	6.1	7.9	10													
			38	2.5	.19	.08	.03	.01	-	60	86	122	180		146	144	141	140	137												
			50		.20	.09	.03	.01	-						4.5	6.8	9.1	11	16												
			70	2.5	.23	.10	.03	.01	-	63	89	124	183	242	148	146	144	143	141	139											
			100		.25	.11	.04	.01	-						5.9	8.1	10	12	17	23											
			150	2.5	.28	.12	.04	.01	-	66	93	127	186	246	150	149	148	147	145	144	142	139									
			200		.31	.13	.05	.01	-						6.7	9.2	11	13	18	23	32	41									
			300	2.5	.35	.15	.05	.01	-	72	98	131	190	251	152	151	150	150	149	148	146	145									
			500		.41	.12	.05	.02	-						7.8	10	12	14	19	24	33	42									
		750	2.6	.36	.18	.07	.03	-	75	101	134	193	254	153	152	152	152	151	150	150	149										
		1,000		.48	.24	.10	.03	.01						7.9	10	12	14	19	24	33	42										
		2,000	2.7	.97	.47	.20	.07	.01	82	110	139	199	260	151	150	150	149	149	148	147	146										
		3,500		1.69	.83	.35	.12	.02						8.8	11	13	15	20	24	33	43										
		5,000	2.9	2.42	1.19	.50	.17	.03	86	112	142	202	264	151	150	150	150	149	148	147	146										
		7,500		3.63	1.78	.75	.25	.05						10	13	15	16	21	26	35	45										
		10,000	3.2	4.83	2.37	1.00	.34	.07	89	115	145	205	268	151	151	150	150	150	149	148	147										
		15,000		7.25	3.56	1.49	.50	.10						12	14	16	18	23	28	36	47										
		20,000	3.5	9.67	4.75	1.99	.67	.13	92	118	147	207	270	152	151	151	150	150	150	149	148										
		25,000		12.1	5.94	2.49	.84	.16						14	16	18	20	25	30	39	50										
50,000																															
75,000																															
100,000																															
150,000																															
200,000																															
250,000																															

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



RM

PUMP HYDRAULIC SIZE CHART

SEC. 500

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January 2010

125 GPM
520 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)								
					2"	2 1/2"	3"	4"	6"	LOW PRES R/V		HI PRES R/V			MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY				
125	520	STD	28	1.9	.11	.05	.02	-	-	55	83	119	176	116	113	112	109						
			32		.12	.05	.02	-	-					2.3	4.1	7.1	9.8						
			38	1.9	.13	.05	.02	.01	-	57	85	121	177	118	115	113	111	108					
			50		.15	.06	.02	.01	-					3.5	5.1	7.9	10	14					
			70	1.9	.16	.07	.02	.01	-	60	88	123	180	236	120	118	117	115	113	110			
			100		.18	.08	.03	.01	-					4.5	6.1	8.9	11	15	18				
			150	1.9	.21	.09	.03	.01	-	64	91	125	182	239	122	121	120	119	117	115	113	111	
			200		.22	.10	.03	.01	-					5.2	6.8	9.3	11	15	18	26	34		
			300	1.9	.25	.11	.02	.01	-	68	95	128	185	242	124	123	122	121	120	119	118	117	
			500		.20	.10	.04	.01	-					5.6	7.4	9.4	11	15	18	26	34		
		750	2.0	.30	.15	.06	.02	-	72	98	130	187	244	125	124	124	123	123	122	122	121		
		1,000		.40	.20	.08	.03	.01					5.9	7.6	9.6	11	15	18	26	34			
		2,000	2.3	.81	.40	.17	.06	.01	78	104	134	191	249	123	122	122	121	120	120	118	118		
		3,500		1.41	.69	.29	.10	.02					6.7	8.4	11	12	16	19	26	34			
		5,000	2.6	2.01	.99	.42	.14	.03	81	107	136	194	252	123	123	122	122	121	121	119	119		
		7,500		3.02	1.48	.62	.21	.04					8.4	10	12	14	17	21	28	35			
		10,000	2.9	4.03	1.98	.83	.28	.05	85	110	139	196	254	124	123	123	122	122	122	120	120		
		15,000		6.04	2.97	1.25	.42	.08					10	12	14	16	19	23	30	37			
		20,000	3.2	8.06	3.96	1.66	.56	.11	87	112	140	197	256	124	124	123	123	123	123	122	121		
		25,000		10.1	4.95	2.08	.70	.14					12	13	16	17	21	25	32	39			
50,000	4.6	20.1	9.90	4.15	1.40	.27	93	117	143	202	260	124	124	123	123	123	123	122	121				
75,000		30.2	14.8	6.23	2.10	.41					16	18	20	22	26	30	38	45					
100,000																							
150,000																							
200,000																							
250,000																							

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



RM

PUMP HYDRAULIC SIZE CHART

SEC. 500

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January 2010

**85 GPM
350 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	PIPE DIAMETER					CRACKING PRESS. (PSI)					DIFFERENTIAL PRESSURE (PSI)						
		2"	2 1/2"	3"		4"	6"	LOW PRES R/V		HI PRES R/V			MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY					
85	350	STD	28	1.3	.05	.02	.01	-	-	54	81	117	171	78	74	72	70					
			32	1.3	.06	.02	.01	-	-	54	81	117	171	1.3	3.1	4.1	5.2					
			38	1.3	.06	.03	.01	-	-	55	82	118	172	79	75	74	72	70				
			50	1.3	.07	.03	.01	-	-	55	82	118	172	2.1	3.1	4.8	6.1	7.9				
			70	1.3	.08	.04	.01	-	-	58	85	119	173	227	80	78	77	76	74	73		
			100	1.3	.09	.04	.01	-	-	58	85	119	173	227	2.8	3.8	5.3	6.6	8.6	11		
			150	1.3	.11	.05	.02	-	-	61	87	121	174	228	82	80	79	79	78	78	77	76
			200	1.3	.12	.05	.02	-	-	61	87	121	174	228	3.3	4.1	5.8	6.9	9.1	12	17	22
			300	1.3	.13	.04	.02	.01	-	65	90	123	176	230	83	82	81	81	80	80	80	79
			500	1.3	.14	.07	.03	.01	-	65	90	123	176	230	3.4	4.2	5.9	7.1	9.3	12	17	22
			750	1.4	.21	.10	.04	.01	-	67	93	124	177	231	84	83	83	82	82	82	82	81
			1,000	1.4	.27	.13	.06	.02	-	67	93	124	177	231	3.4	4.3	6.0	7.2	9.4	12	17	22
		2,000	1.6	.55	.27	.11	.04	.01	73	97	127	179	233	83	82	82	81	81	80	80	79	
		3,500	1.6	.96	.47	.20	.07	.01	73	97	127	179	233	3.6	5.1	6.2	7.9	9.8	12	17	22	
		5,000	1.8	1.37	.67	.28	.10	.02	75	100	128	181	235	83	83	83	82	82	81	80	80	
		7,500	1.8	2.05	1.01	.42	.14	.03	75	100	128	181	235	4.6	5.8	7.1	9.1	11	13	19	23	
		10,000	2.2	2.74	1.35	.56	.19	.04	78	102	130	182	236	83	83	82	82	82	82	81	81	
		15,000	2.2	4.11	2.02	.85	.29	.06	78	102	130	182	236	5.6	7.1	8.2	10	12	14	20	25	
		20,000	2.6	5.48	2.69	1.13	.38	.07	80	104	131	183	237	84	83	83	83	83	82	82	82	
		25,000	2.6	6.85	3.36	1.41	.48	.09	80	104	131	183	237	6.8	8.1	9.5	11	13	16	21	26	
		50,000	4.1	13.7	6.73	2.82	.95	.18	85	108	133	185	239	84	83	83	83	83	82	82	82	
		75,000	4.1	20.6	10.0	4.23	1.43	.28	85	108	133	185	239	10	12	14	15	17	19	25	30	
		100,000	5.6	27.4	13.5	5.64	1.90	.37	87	110	134	186	240	84	83	83	83	83	82	82	82	
		150,000	5.6	41.0	20.2	8.47	2.86	.55	87	110	134	186	240	13	15	17	18	22	24	30	35	
200,000	7.5	54.8	27.0	11.3	3.81	.74	89	112	135	187	241	84	83	83	83	83	82	82	82			
250,000	7.5	68.5	33.7	14.1	4.76	.92	89	112	135	187	241	15	17	19	20	26	27	33	39			

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



RM

SEC. 500

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February 2025

24 GPM
100 RPM

NOMINAL		VISCOSITY		N.I.P.R.	FRICTION PIPE LOSS (PSI/FT) <small>(Schedule 40 Steel Pipe)</small>					CAPACITY (GPM)				H.P. REQUIRED						
GPM	RPM	ROTOR TRIM	(SSU)	(PSIa)	PIPE DIAMETER					MEDIUM-DUTY & HEAVY-DUTY				HEAVY-DUTY ONLY						
					2½"	3"	4"	5"	6"	DIFFERENTIAL PRESSURE (PSI)				150	200	300	400			
						25	50	75	100	150	200	300	400							
24	100	STD																		
				"D"																
			200,000	2.3	7.6	3.2	1.1	0.4	0.2	24	24	24	24	24	24	23	23			
			399,999		15.2	6.4	2.2	0.9	0.4	3.6	4.1	4.5	4.9	5.6	6.4	7.1	7.7			
			400,000	2.6						24	24	24	24	24	24	23	23			
			599,999		23	9.6	3.2	1.3	0.6	4.1	4.5	4.9	5.3	6.0	6.8	7.6	8.2			
			600,000	3.2						24	24	24	24	24	24	23	23			
			799,999		NR	13	4.3	1.8	0.8	4.5	4.9	5.3	5.7	6.4	7.2	7.9	8.6			
			800,000	3.5						24	24	24	24	24	24	23	23			
			1M		NR	16	5.4	2.2	1	5.0	5.3	5.7	6.1	6.8	7.6	8.4	9.1			

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