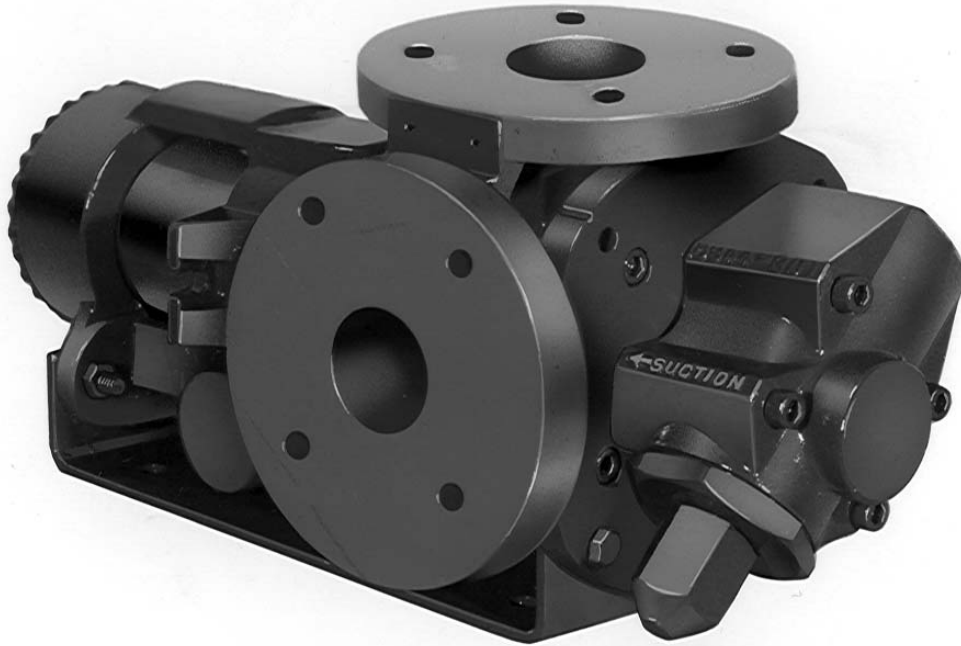


GHS SERIES Flexible Seal HEAVY DUTY STANDARD STEEL ROTARY GEAR PUMP

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

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

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

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					100 [7]	150 [10]					
GHC 1 DC32-B ① ● †		9 [28]		6 [19]						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]	1750 [1460]	10 [32]	1150 [960]			300 [21]	GHC ● [177]	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]						350 [177]	71 [32,2]	2.9
GHC 1-1/2 GH32-B ● †	GHS 1-1/2 GH32-B ● † GHS 1-1/2 GH38-B ■ †	31 [98]		20 [63]						GHS ● [204]	71 [32,2]	2.9
GHC 1-1/2 GJ32-B ② ● †	GHS 1-1/2 GJ32-B ② ● † GHS 1-1/2 GJ38-B ② ■ †	38 [120]		25 [79]						400 [204]	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]				500 [260]	154 [69,8]	5.3	
GHC 3 JJ32-B ● †	GHS 3 JJ32-B ● † GHS 3 JJ38-B ■ †	56 [177]		36 [114]						300 [21]	154 [69,8]	5.3
GHC 3 JL32-B ● †	GHS 3 JL32-B ● † GHS 3 JL38-B ■ †	77 [243]		58 [183]							154 [69,8]	5.3
GHC 3 JP32-B ② ● †	GHS 3 JP32-B ② ● † GHS 3 JP38-B ② ■ †	107 [338]		81 [256]						200 [14]		154 [69,8]

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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MODEL NUMBER		NOM. CAPACITY - SPEED				MAXIMUM			SHIPPING DATA		
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE - PSI [BAR]			TEMP.	Wt.	Vol.
		GPM	RPM	GPM	RPM	BELOW	38 TO	100 TO	° F	LBS	CU.
GHC	GHS	[LPM]	60 Hz	[LPM]	60 Hz	38 SSU	100 SSU	250,000 SSU	[° C]	[KG]	FT.
			[50 HZ]		[50 HZ]	[4 cSt]	[21 cSt]	[55,000 cSt]			
	GHS 2 NK32-B ● † GHS 2 NK38-B ■ †	99 [375]		60 [189]				300 [21]		200	5.3
										[90,7]	
	GHS 3 NK32-B ● † GHS 3 NK38-B ■ †	132 [500]	960 [960]	80 [252]	580 [480]					200	5.3
										[90,7]	
	GHS 2 NM32-B ● † GHS 2 NM38-B ■ †	165 [624]		99 [312]						200	5.3
										[90,7]	
	GHS 3 NP32-B ① ● † GHS 3 NP38-B ① ■ †	172 [542]	720 [600]	115 [362]	480 [400]	100 [7]	150 [10]	300 [21]	GHS ● 400 [204]	302	10.7
										[136,9]	
	GHS 3 RM32-B ● † GHS 3 RM38-B ■ †	215 [678]		143 [451]						302	10.7
										[136,9]	
	GHS 4 RM32-B ● † GHS 4 RM38-B ■ †	255 [804]		170 [536]						302	10.7
										[136,9]	
	GHS 2-1/2 RP32-B ● † GHS 2-1/2 RP38-B ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	
	GHS 3 RP32-B ● † GHS 3 RP38-B ■ †	255 [804]		170 [536]						302	10.7
										[136,9]	
	GHS 4 RP32-B ● † GHS 4 RP38-B ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	
	GHS 3 RR32-B ● † GHS 3 RR38-B ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	
	GHS 4 RR32-B ● † GHS 4 RR38-B ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	
	GHS 3 RS32-B ① ● † GHS 3 RS38-B ① ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	
	GHS 4 RS32-B ① ● † GHS 4 RS38-B ① ■ †	295 [930]		196 [618]						302	10.7
										[136,9]	

STANDARD MODELS CONTINUED

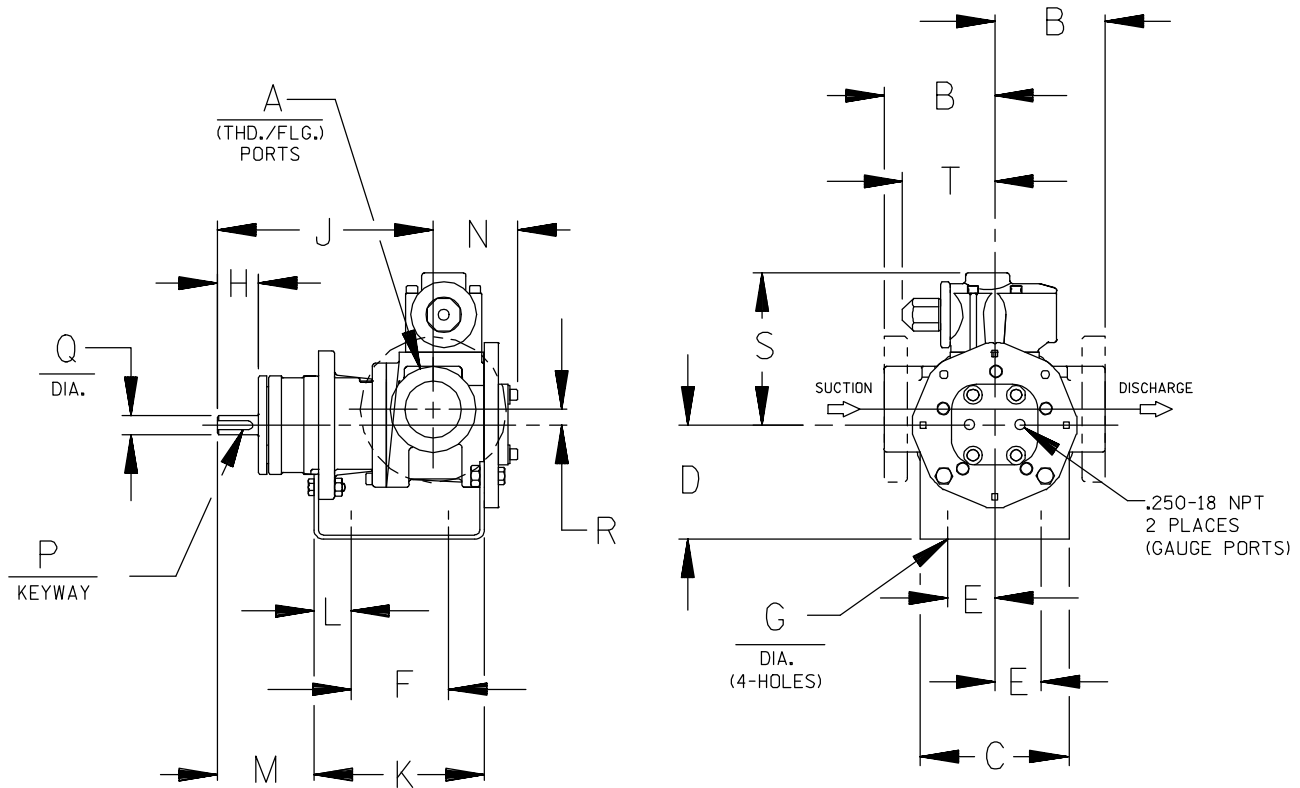
- MECHANICAL SEAL
- LIPSEAL/PACKING
- † PORTS ARE COMPATIBLE WITH 150# ANSI FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

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

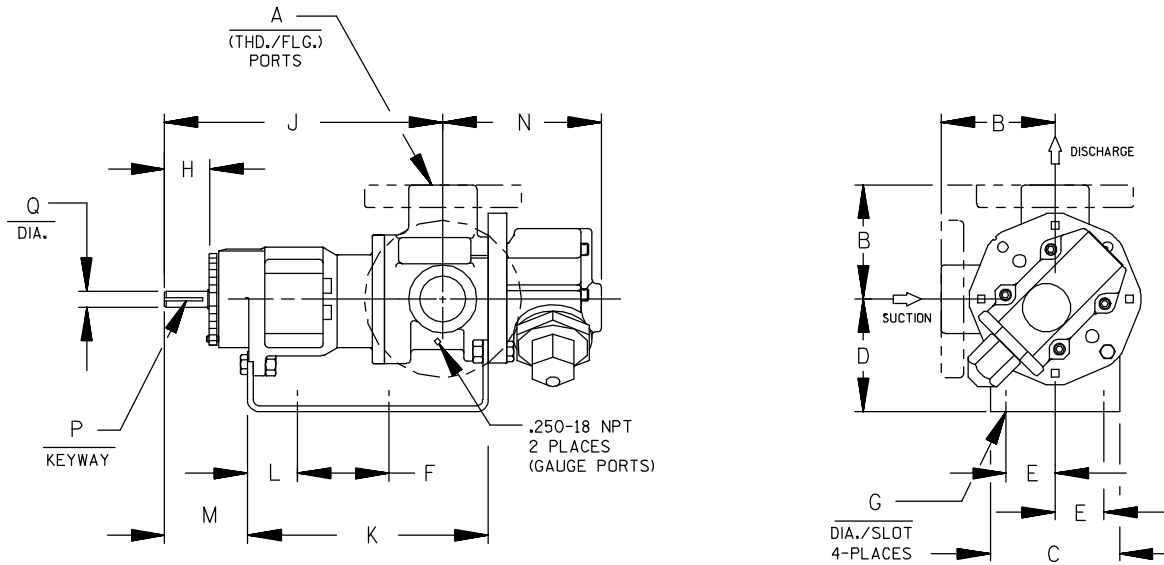
NOTE: PROPER PUMP APPLICATION REQUIRES CONSIDERATION OF ADDITIONAL FACTORS. PLEASE REVIEW APPLICATION GUIDE IN SECTION 500 OR CONSULT THE FACTORY.



CAD FILE NO.: 16458D

MODEL NUMBERS	PUMP DIMENSIONS - INCHES [MILLIMETERS]																	
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
GHC D	1"	4.00 † [102]	4.00 [102]	3.50* [89] 4.50 [114] 5.25 [133]	1.62 [41]	3.12 [79]	.41 [10]	1.16 [30]	6.19 [157]	5.04 [128]	.76 [19]	2.62 [66]	2.74 [70]	.12 [3] x .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] x 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] x 2.00 [51]	1.00 [25]	1.12 [28]	9.06 [230]	6.75 [171]

* STANDARD DIMENSION
 PORTS ARE COMPATIBLE WITH 150# OR 300# ANSISTEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT
 † FOR ANSIPIPE. OPTIONAL [DIN FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.
 NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.
 ‡ 90° HOUSING



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] x 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] x 2.00 [51]	1.00 [25]
GHS N	2"	5.25* [133] 5.38 [137]	8.00 [203]	4.50 [114] 5.25* [133]	2.88 [73]	10.00 [254]	.44 [11]	2.58 [66]	16.37 [416]	15.14 [385]	2.69 [68]	4.56 [116]	7.59 [193]	.25 [6] x 2.00 [51]	1.12 [32]
	3"	7.19 [183]		7.00 [178] 8.00 [203]									8.72 [221] *		
GHS R	2-1/2"														
	3"	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] x 1.88 [48]	1.44 [37]
	4"														

* STANDARD DIMENSION

† PORTS ARE COMPATIBLE WITH 150* OR 300* ANSISTEEL FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

† 180° HOUSING

GHC/GHS

FOR GHC DRIVE OPTIONS

AND DIMENSIONS

SEE

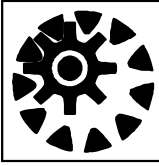
SECTION 540

FOR GHS DRIVE OPTIONS

AND DIMENSIONS

SEE

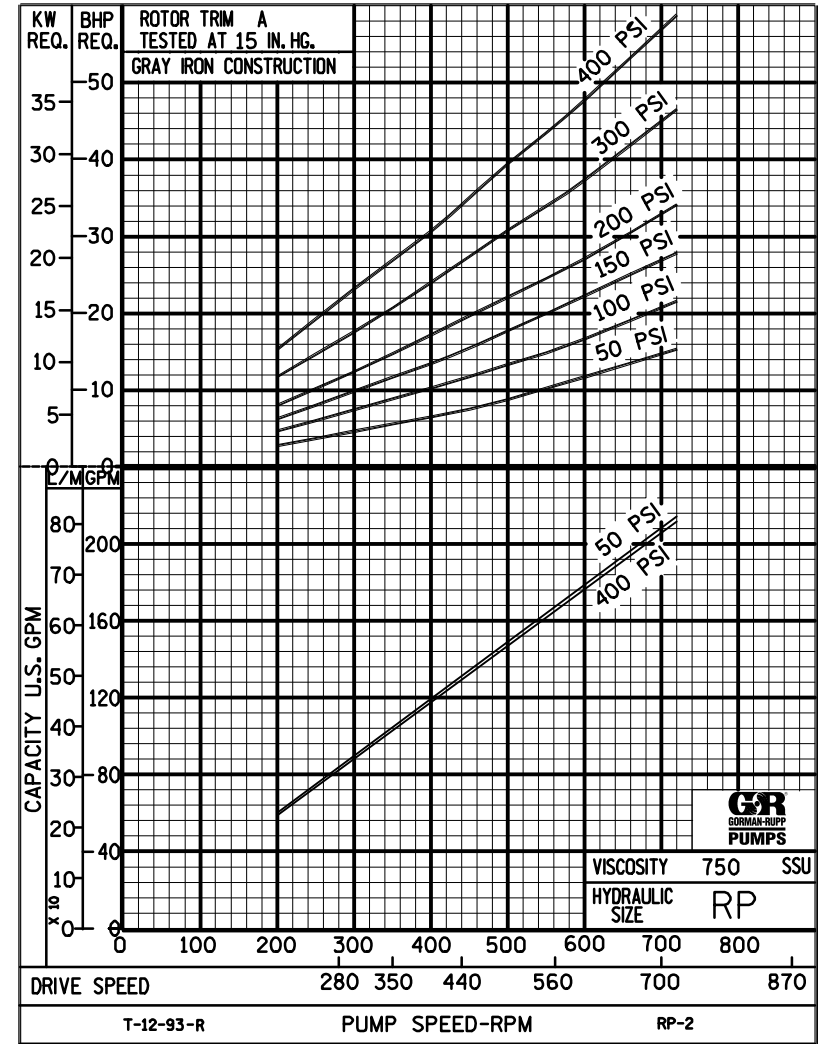
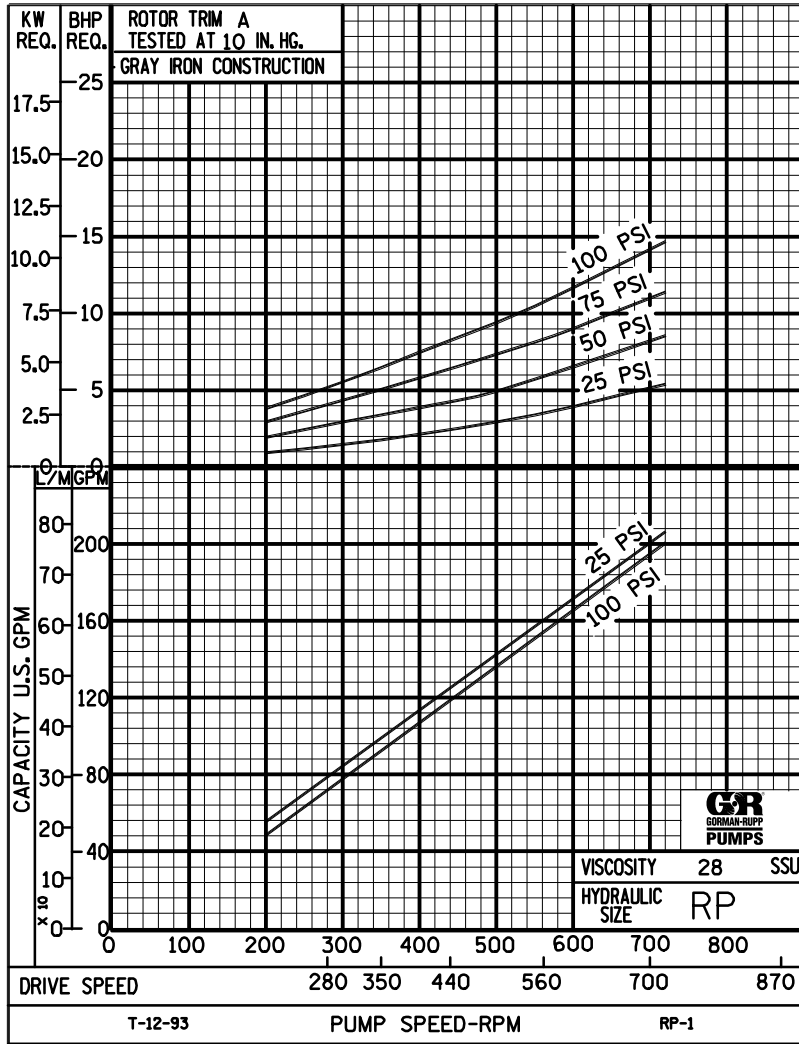
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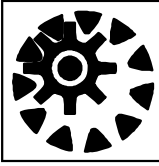
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

RP Hydraulic Size



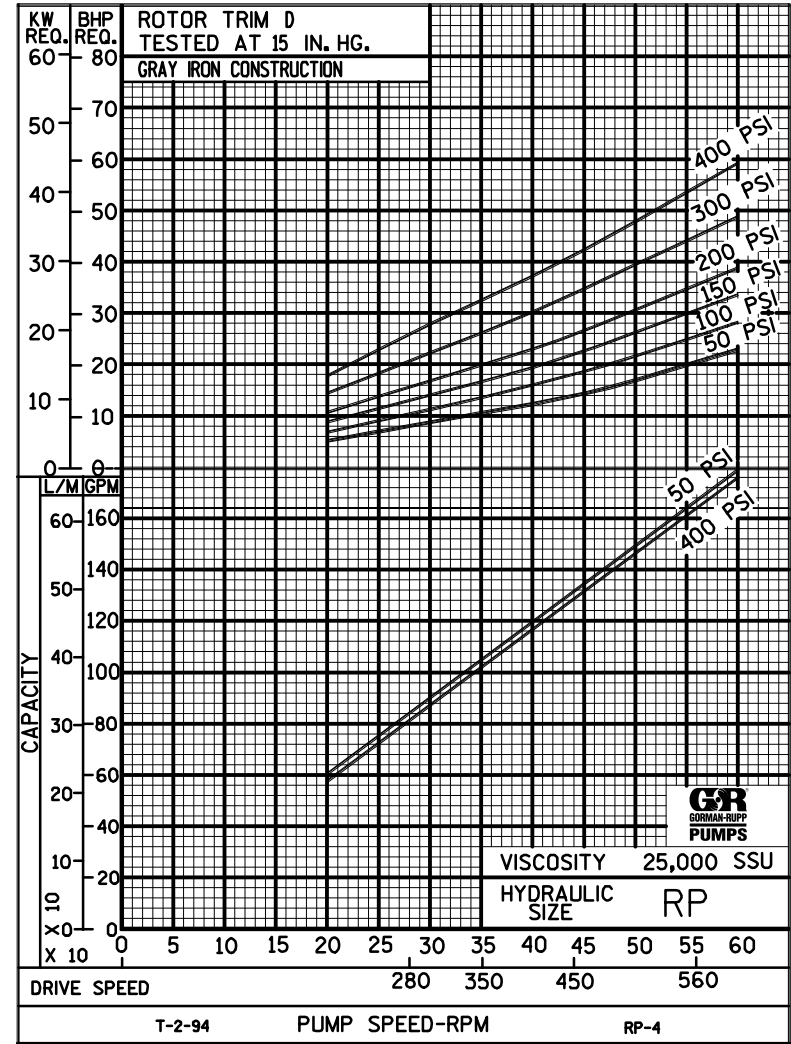
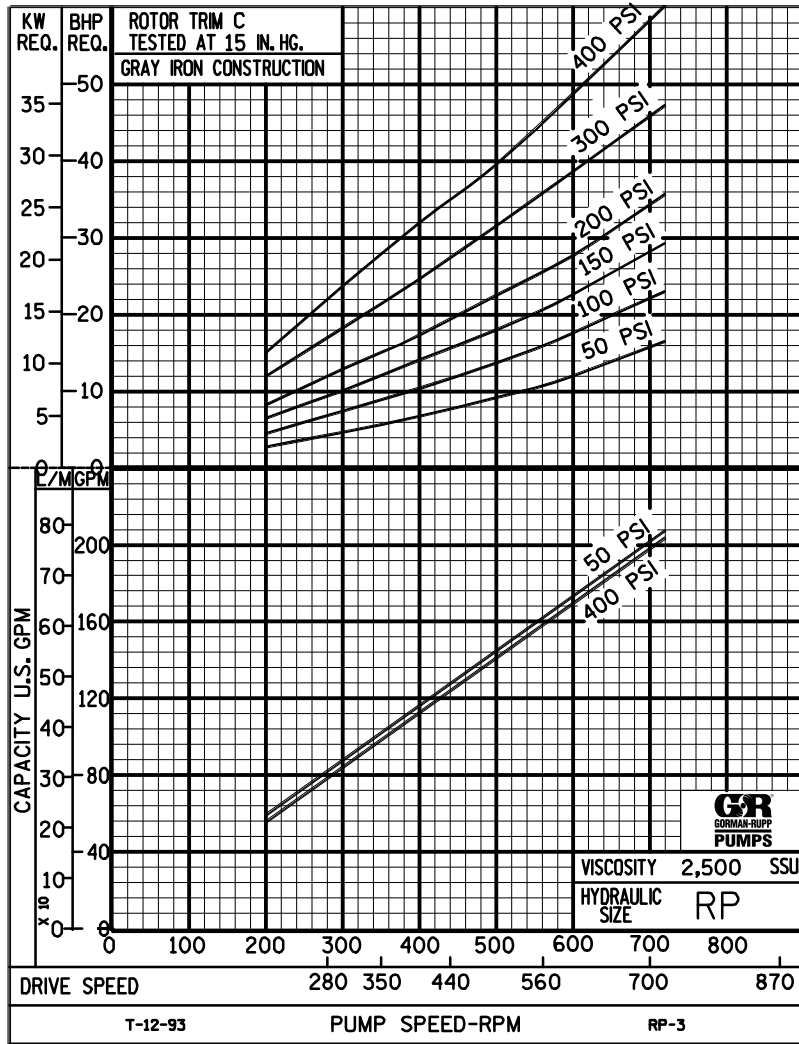
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PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

RP Hydraulic Size



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RP

PUMP HYDRAULIC SIZE CHART

SEC. 500

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215 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		HEAVY DUTY									
							50	75	100	150	200	25	50	75	100	150	200	300	400					
215	720	STD	28	4.0	.31	.13	.04	.01	-	62	87	123	185		206	204	202	200						
			32		.33	.13	.04	.01	-						5.9	8.1	12	15						
			38	4.0	.35	.14	.05	.01	-	64	90	126	187		208	206	204	202	196					
			50		.38	.16	.05	.01	-						7.3	9.3	13	16	23					
			70	4.0	.42	.18	.06	.02	-	69	95	130	192	251	210	208	208	206	202	198				
			100		.46	.20	.07	.02	-						9.3	12	15	18	25	30				
			150	4.0	.51	.22	.08	.02	-	74	99	134	196	258	212	212	210	210	208	204	202	200		
			200		.55	.24	.08	.02	-						11	13	17	20	26	32	45	58		
			300	4.0	.61	.27	.10	.03	-	80	105	140	202	267	214	212	212	212	210	208	206	206		
			500		.72	.31	.11	.02	-						12	15	18	21	28	34	46	59		
		750	4.0	.51	.25	.10	.04	.01	84	110	144	206	274	214	214	214	214	214	212	212	212			
		1,000		.68	.33	.14	.05	.01						13	16	19	22	29	35	47	60			
		2,000	4.3	1.35	.66	.28	.09	.02	92	118	151	213	287	208	208	208	206	206	206	206	204			
		3,500		2.37	1.16	.49	.16	.03						15	17	20	24	30	36	48	61			
		5,000	4.7	3.38	1.66	.70	.24	.05	97	123	156	218	294	208	208	208	208	206	206	206	204			
		7,500		5.08	2.49	1.05	.35	.07						16	19	22	25	32	39	50	63			
		10,000	5.2	6.77	3.32	1.39	.47	.09	102	127	160	222	301	210	208	208	208	208	208	206	206			
		15,000		10.2	4.99	2.09	.71	.14						18	20	24	28	34	41	53	66			
		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.



RP

PUMP HYDRAULIC SIZE CHART

SEC. 500

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**190 GPM
640 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				
							50	75	100	150	200	25	50	75	100	150	200	300	400				
190	640	STD	28	3.2	.24	.10	.03	.01	-	60	85	122	180		184	181	179	177					
			32		.26	.10	.04	.01	-						4.9	7.3	10	13					
			38	3.2	.27	.11	.04	.01	-	63	88	124	183		185	182	180	179	174				
			50		.30	.13	.04	.01	-						6.2	8.9	12	15	19				
			70	3.2	.33	.14	.05	.01	-	67	92	128	187	248		187	185	183	178	176			
			100		.37	.16	.06	.02	-							7.9	10	13	16	21	28		
			150	3.2	.41	.17	.06	.02	-	71	97	132	191	253		189	187	186	185	183	181	179	176
			200		.44	.19	.07	.02	-							8.9	12	15	18	22	29	39	50
			300	3.2	.49	.21	.08	.02	-	77	102	136	196	260		190	189	188	188	187	185	184	183
			500		.58	.25	.06	.02	-							10	13	16	19	24	30	40	50
		750	3.2	.45	.22	.09	.03	.01	81	107	140	200	266		191	191	190	190	189	188	188	187	
		1,000		.60	.29	.12	.04	.01							11	13	16	19	24	30	41	51	
		2,000	3.5	1.19	.59	.25	.08	.02	88	114	146	207	276		186	185	185	184	183	183	182	180	
		3,500		2.09	1.03	.43	.15	.03							12	14	18	20	26	31	42	54	
		5,000	3.9	2.98	1.46	.61	.21	.04	93	119	150	211	281		187	186	185	185	184	184	184	181	
		7,500		4.47	2.20	.92	.31	.06							13	16	19	22	28	33	43	57	
		10,000	4.4	5.96	2.93	1.23	.41	.08	97	123	154	215	287		187	186	186	185	185	185	185	182	
		15,000		8.94	4.39	1.84	.62	.12							15	18	21	24	30	35	46	60	
		20,000	5.1	11.9	5.86	2.46	.83	.16	100	126	158	218	292		187	187	186	186	186	186	186	183	
		25,000		14.9	7.32	3.07	1.04	.20							17	20	23	27	32	37	48	63	
50,000																							
75,000																							
100,000																							
150,000																							
200,000																							
250,000																							

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



RP

PUMP HYDRAULIC SIZE CHART

SEC. 500

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155 GPM
520 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			
							50	75	100	150	200	25	50	75	100	150	200	300	400			
155	520	STD	28	2.3	16	.07	.02	.01	-	57	84	120	178		148	145	143	141				
			32		.17	.07	.02	.01	-						3.3	5.3	7.9	10				
			38	2.3	.19	.08	.03	.01	-	60	86	122	180		149	147	145	143	138			
			50		.20	.09	.03	.01	-						4.6	6.7	9.1	11	16			
			70	2.3	.23	.10	.03	.01	-	63	89	124	183	242	151	149	147	146	143	140		
			100		.25	.11	.04	.01	-						5.9	7.9	10	12	17	22		
			150	2.3	.28	.12	.04	.01	-	66	93	127	186	246	153	152	150	150	148	146	144	141
			200		.31	.13	.05	.01	-						6.7	8.8	11	13	18	22	31	40
			300	2.3	.35	.15	.05	.01	-	72	98	131	190	251	154	153	153	152	151	150	149	148
			500		.41	.12	.05	.02	-						7.6	9.8	12	14	18	23	32	41
		750	2.3	36	.18	.07	.03	-	75	101	134	193	254	155	155	154	154	153	153	152	152	
		1,000		.48	.24	.10	.03	.01						7.8	10	12	14	19	23	33	41	
		2,000	2.9	.97	.47	.20	.07	.01	82	110	139	199	260	152	151	151	150	149	149	148	146	
		3,500		1.69	.83	.35	.12	.02						8.6	11	13	16	20	24	34	42	
		5,000	3.3	2.42	1.19	.50	.17	.03	86	112	142	202	264	153	152	152	151	151	150	149	148	
		7,500		3.63	1.78	.75	.25	.05						11	13	14	18	23	27	36	44	
		10,000	3.8	4.83	2.37	1.00	.34	.07	89	115	145	205	268	154	153	153	152	152	151	151	149	
		15,000		7.25	3.56	1.49	.50	.10						14	16	19	20	25	29	38	47	
		20,000	4.3	9.67	4.75	1.99	.67	.13	93	118	148	207	272	155	154	154	153	153	152	152	151	
		25,000		12.1	5.94	2.49	.84	.16						16	18	21	23	28	32	41	49	
50,000	6.1	24.2	11.9	4.98	1.68	.33	98	124	151	212	276	155	154	154	153	153	152	152	151			
75,000		36.3	17.8	7.47	2.52	.49						22	24	27	30	34	39	48	57			
100,000																						
150,000																						
200,000																						
250,000																						

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



RP

PUMP HYDRAULIC SIZE CHART

SEC. 500

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January 2010

105 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					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			
							50	75	100	150	200	25	50	75	100	150	200	300	400			
105	350	STD	28	1.5	.07	.03	.01	-	-	55	82	118	175	98	95	93	92					
			32		.08	.03	.01	-	-					1.5	4.1	4.9	6.9					
			38	1.5	.09	.04	.01	-	-	57	83	119	176	99	97	95	94	90				
			50		.10	.04	.01	-	-					2.2	4.3	5.9	7.4	11				
			70	1.5	.11	.05	.02	-	-	59	86	121	177	230	101	99	98	97	95	94		
			100		.13	.05	.02	.01	-					2.9	4.9	6.8	8.3	11	15			
			150	1.5	.14	.06	.02	.01	-	63	89	123	179	233	103	102	101	100	99	98	97	95
			200		.15	.07	.02	-	-					3.5	5.3	7.2	8.8	12	15	20	27	
			300	1.5	.18	.05	.02	.01	-	67	93	125	181	235	104	103	103	102	102	100	100	99
			500		.16	.08	.03	.01	-					3.8	5.6	7.4	8.9	12	15	21	27	
		750	1.6	.24	.12	.05	.02	-	70	95	127	183	237	105	105	104	104	103	102	102	101	
		1,000		.32	.16	.07	.02	-					3.9	5.7	7.5	9.1	12	15	21	28		
		2,000	2.0	.64	.32	.13	.04	.01	75	100	130	185	241	103	103	102	102	101	100	99	98	
		3,500		1.13	.55	.23	.08	.02					4.1	6.2	7.9	9.8	13	16	22	29		
		5,000	2.4	1.61	.79	.33	.11	.02	78	104	132	187	243	104	103	103	103	102	101	100	100	
		7,500		2.42	1.19	.50	.17	.03					5.2	7.9	8.9	11	14	17	24	30		
		10,000	2.8	3.22	1.58	.66	.22	.04	81	106	134	189	245	104	104	104	103	103	102	101	100	
		15,000		4.83	2.37	1.00	.34	.07					6.4	9.2	10	12	15	19	25	31		
		20,000	3.3	6.45	3.17	1.33	.45	.09	83	108	136	190	247	105	105	104	104	104	103	103	102	
		25,000		8.06	3.96	1.66	.56	.11					7.5	10	11	13	16	20	26	32		
50,000	5.0	16.1	7.92	3.32	1.12	.22	89	113	137	192	250	105	105	104	104	104	103	103	102			
75,000		24.2	11.9	4.98	1.68	.33					11	13	14	16	20	23	29	35				
100,000	6.9	32.2	15.8	6.64	2.24	.43	92	115	140	194	252	105	105	104	104	104	103	103	102			
150,000		48.4	23.8	9.96	3.36	.65					15	16	18	19	22	26	32	37				
200,000	8.7	64.5	31.7	13.3	4.48	.87	94	117	142	195	253	105	105	104	104	104	103	103	102			
250,000		80.6	39.6	16.6	5.60	1.09					19	21	22	24	24	28	34	40				

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



RP

SEC. 500

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30 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				
30	100	STD															
				"D"													
			200,000	2.7	9.5	4	1.3	0.55	0.3	30	30	30	30	29	29	29	29
			399,999		19	8	2.7	1.1	0.5	3.9	4.5	5.0	5.6	6.6	7.6	8.6	9.6
			400,000	3						30	30	30	30	29	29	29	29
			599,999		NR	12	4	1.6	0.8	4.2	4.8	5.3	5.9	6.8	7.8	8.8	9.8
			600,000	3.7						30	30	30	30	29	29	29	29
			799,999		NR	16	5.4	2.2	1	4.4	5.1	5.6	6.2	7.2	8.1	9.1	10
			800,000	4						30	30	30	30	29	29	29	29
			1M		NR	20	6.7	2.7	1.3	4.6	5.4	5.9	6.5	7.6	8.4	9.4	11

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