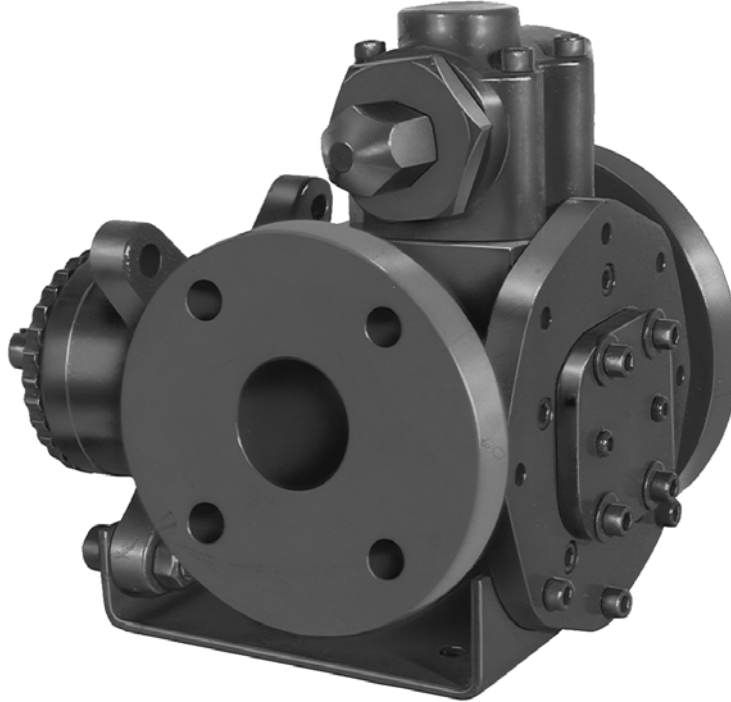


**GHC SERIES
 HEAVY DUTY COMPACT
 STEEL ROTARY GEAR PUMP**

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 GHC steel series is designed for applications in the operating ranges noted on the model pages. These units are available with head 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. These units may be foot mounted or, by using a motor adaptor, direct connected to NEMA "C" flange motors.

FEATURES

- 400 PSI CAPABILITY
- BALL BEARING THRUST CONTROL
- ROTOR END CLEARANCE EXTERNALLY ADJUSTABLE
- HIGH STRENGTH, COMPUTER PROFILED GEARING FOR QUIET OPERATION
- MULTIPLE PORT POSITIONS
- INTERNAL SEAL VENT

OPERATING RANGE

CAPACITY	(GPM) :	(3 TO 107)
	[LPM] :	[11 TO 405]
PRESSURE	(PSI) :	[0 TO 300]
	[BAR] :	[0 TO 21]
VISCOSITY	(SSU) :	(28 TO 25,000)
	[cSt] :	[1 TO 5417]
TEMPERATURE	(F) :	(-20° TO 350°)
	[C] :	[-29° TO 177°]

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]			
GHC	GHS							LBS [KG]	CU. FT.			
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 ●	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 ●	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]				100 [7]	150 [10]	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		
GHC	GHS	[LPM]	60 Hz	[LPM]	60 Hz	38 SSU	100 SSU	250,000 SSU	[° C]	LBS	CU. FT.
			[50 HZ]		[50 HZ]	[4 cSt]	[21 cSt]	[55,000 cSt]		[KG]	
	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]					500 [260]	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

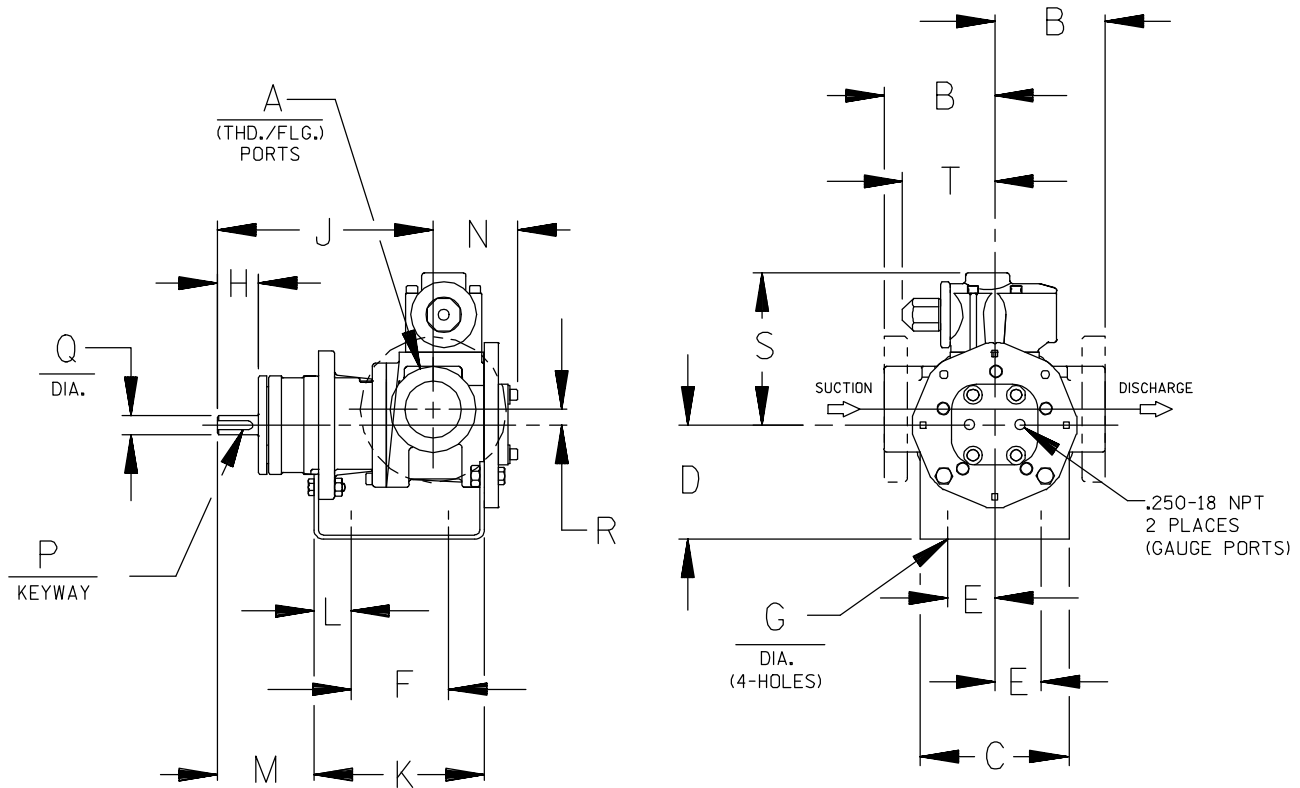
- MECHANICAL SEAL
- LIPSEAL/PACKING
- † PORTS ARE COMPATIBLE WITH 150# ANSI FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

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

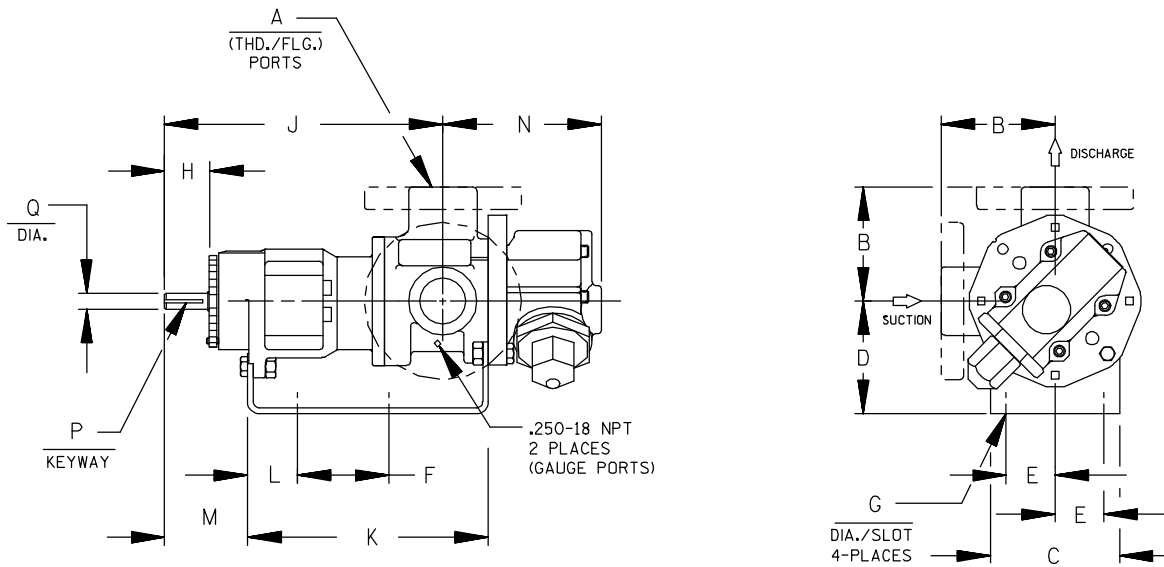
NOTE: PROPER PUMP APPLICATION REQUIRES CONSIDERATION OF ADDITIONAL FACTORS. PLEASE REVIEW APPLICATION GUIDE IN SECTION 500 OR CONSULT THE FACTORY.



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] 6.25 [159] 7.00 [178] 8.00 [203]	2.88 [73]	10.00 [254]	.44 [11]	2.58 [66]	16.37 [416]	15.14 [385]	2.69 [68]	4.56 [116]	7.59 [193]	.25 [6] x 2.00 [51]	1.12 [32]
	3"	7.19 [183]											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

SECTION 545



PERFORMANCE CURVES

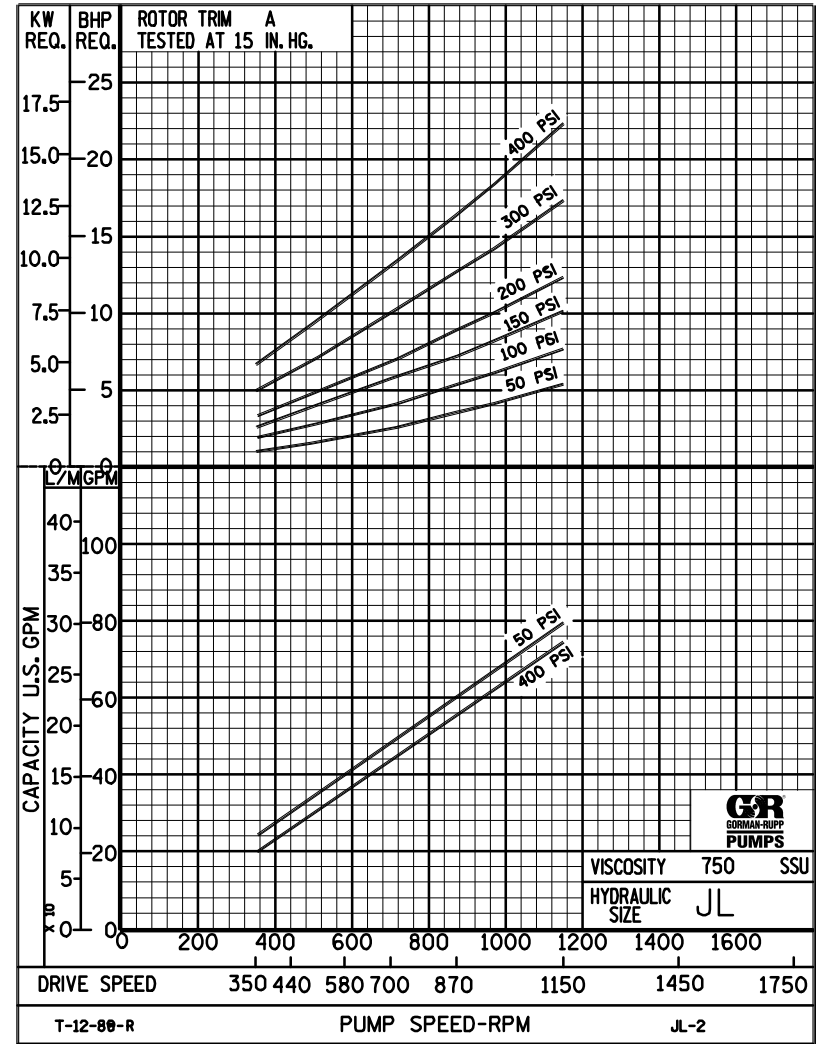
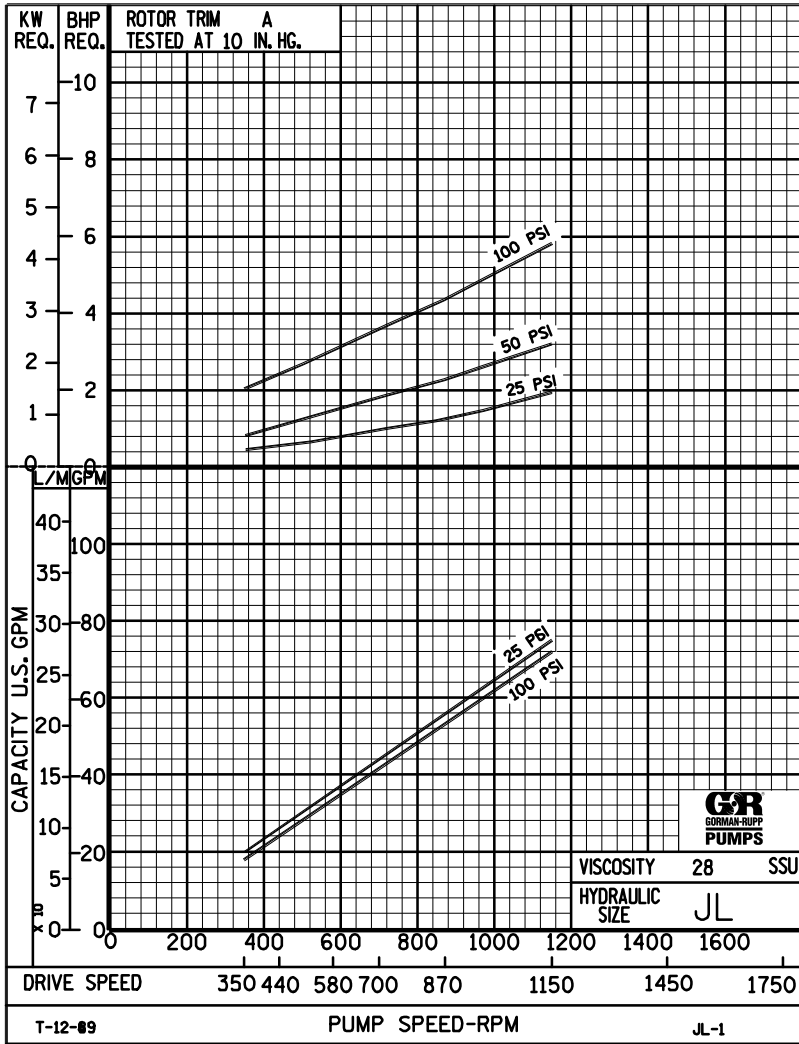
SPEED VS. CAPACITY/HORSEPOWER

JL Hydraulic Size

SEC. 500

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PERFORMANCE CURVES

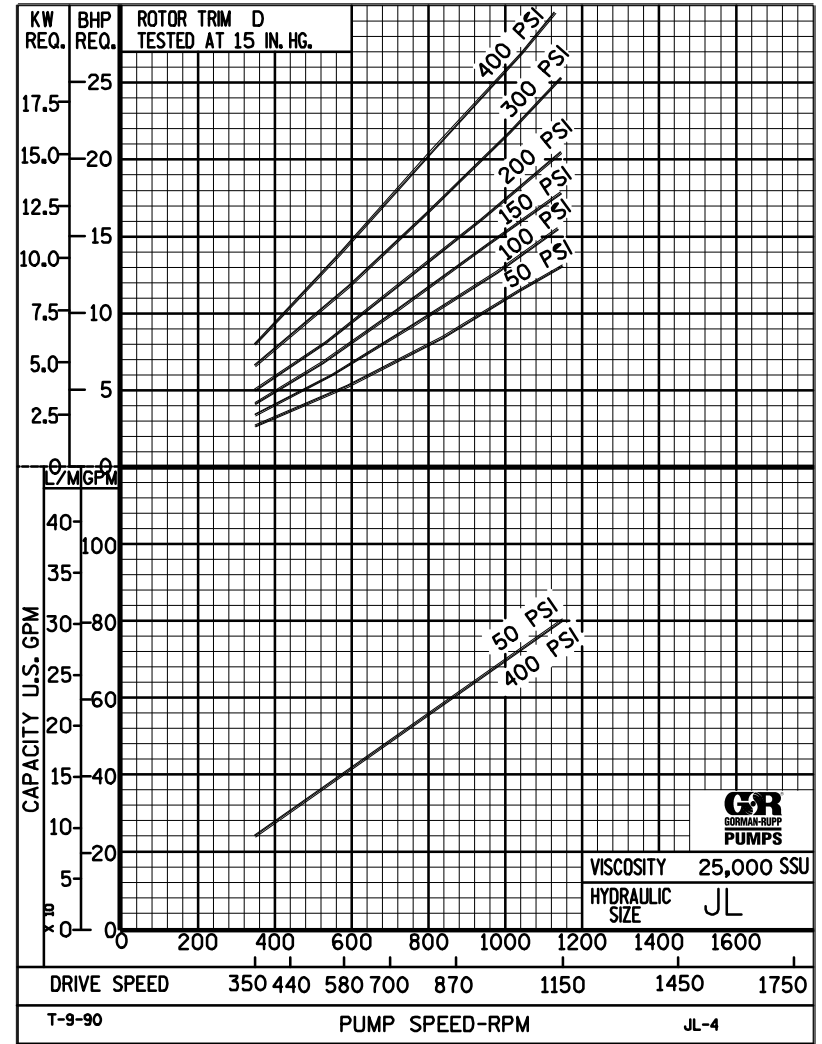
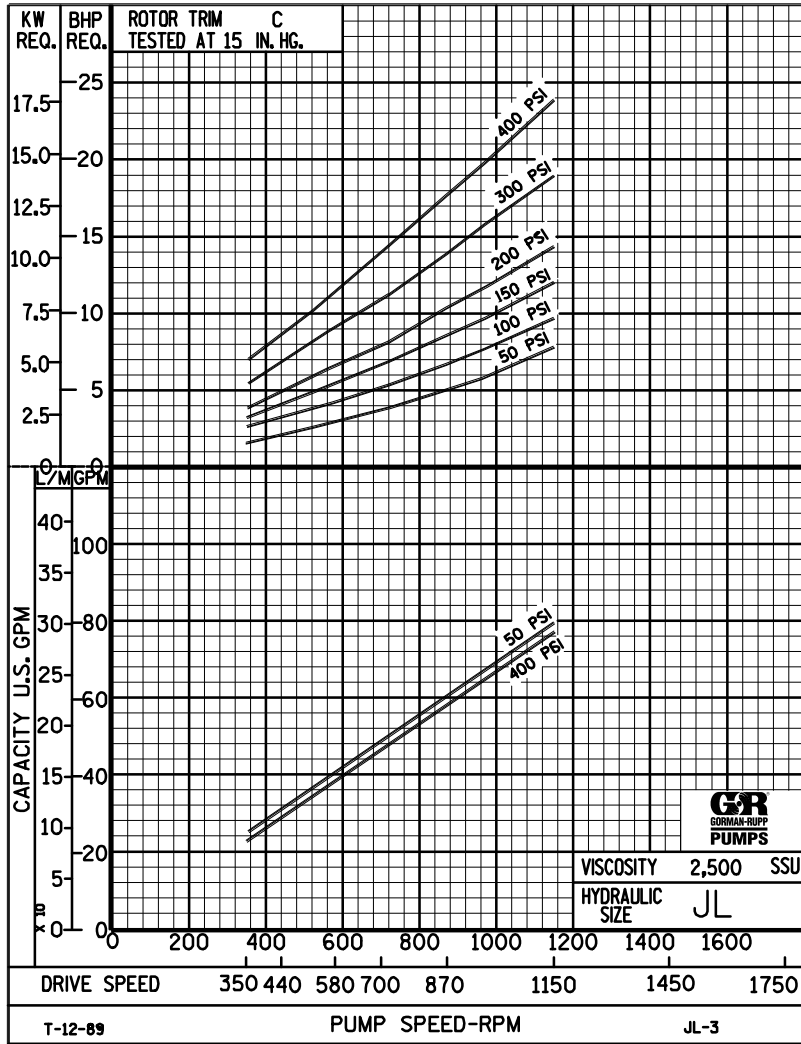
SPEED VS. CAPACITY/HORSEPOWER

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PUMP HYDRAULIC SIZE CHART

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**77 GPM
1150 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)														
					1½"	2"	2½"	3"	4"	LOW PRES R/V			HI PRES R/V		25	50	75	100	150	200	300	400							
77	1150	STD	28	4.3	.01	.01	.01	.01	.01	73	99	132				75	73	72	72										
			32		.13	.04	.02	.01	.01							2.0	3.2	4.5	5.8										
			38	4.3	.16	.05	.02	.01	.01	73	99	132	173				76	74	74	73	72								
			50		.19	.06	.03	.01	.01								2.1	3.4	4.7	6.0	8.8								
			70	4.3	.22	.07	.03	.01	.01	73	100	133	173	225			77	76	75	75	74	73							
			100		.25	.08	.03	.01	.01								2.4	3.7	5.0	6.2	9.0	12							
			150	4.3	.28	.09	.04	.02	.01	74	100	133	174	225			78	77	77	76	76	75	72	70					
			200		.31	.10	.04	.02	.01								2.7	4.1	5.3	6.5	9.1	12	17	22					
			300	4.3	.35	.11	.04	.02	.01	74	101	134	174	226			79	78	78	77	77	76	74	72					
			500		.38	.13	.06	.03	.01								3.6	4.9	6.0	7.6	9.8	12	17	22					
		750	4.3	.51	.19	.09	.04	.02	74	101	134	174	226			79	79	79	79	78	77	75	74						
		1,000		.68	.25	.12	.05	.02								4.2	5.4	6.6	7.7	10	12	17	22						
		2,000	4.8	1.35	.50	.25	.10	.04	75	103	136	176	228			79	79	79	79	79	78	77	76						
		3,500		2.36	.87	.43	.18	.06								6.3	7.4	8.5	9.7	12	14	19	24						
		5,000	5.1	3.37	1.24	.61	.26	.09	79	108	138	178	230			80	79	79	79	79	79	78	77						
		7,500		5.06	1.86	.92	.39	.13								8.4	9.5	11	12	14	17	21	26						
		10,000	5.5	6.74	2.48	1.22	.51	.17	83	113	142	182	234			80	80	79	79	79.5	79	78	78						
		15,000		10.1	3.72	1.83	.77	.26								10	12	12	14	17	19	23	28						
		20,000	5.8	13.5	4.96	2.44	1.02	.35	88	119	148	186	240			80	80	80	79	79	79	79	79						
		25,000		16.9	6.20	3.05	1.28	.43								12	13	14	16	18	21	25	30						
50,000	8.1	33.7	12.4	6.09	2.56	.86	94	125	154	192	246			80	80	79	79	79	79	78	78								
75,000		-	-	-	-	-								16	18	21	23	25	27	30	35								
100,000																													
150,000																													
200,000																													
250,000																													

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



JL

PUMP HYDRAULIC SIZE CHART

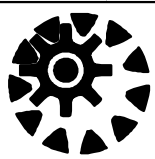
SEC. 500

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58 GPM
870 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)											
					1½"	2"	2½"	3"	4"	LOW PRES R/V		HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY					
58	870	STD	28	2.8	.01	.01	.01	.01	.01	63	88	115	167	220	55	54	54	53	12	16	21		
			32		.08	.03	.01	.01	.01						1.2	2.3	3.3	4.4					
			38	2.8	.10	.03	.02	.01	.01	63	90	117	167	220	56	56	55	54	53	12	16	21	
			50		.12	.04	.02	.01	.01						1.3	2.5	3.5	4.5	6.7				
			70	2.8	.14	.04	.02	.01	.01	64	91	119	168	220	58	57	56	56	55	53	12	16	21
			100		.15	.05	.02	.01	.01						1.3	2.6	3.6	4.5	6.7	8.7			
			150	2.8	.18	.06	.03	.01	.01	65	92	121	168	220	59	58	58	57	57	56	54	52	
			200		.19	.06	.03	.01	.01						1.5	2.9	3.8	4.7	6.9	8.7	12	16	
			300	2.8	.21	.06	.03	.01	.01	66	93	123	169	221	59	59	59	58	58	57	56	55	
			500		.26	.10	.05	.02	.01						1.8	3.4	4.1	5.1	7.0	8.8	13	16	
			750	2.8	.38	.14	.07	.03	.01	67	94	125	169	221	60	60	60	59	58	58	58	57	
			1,000		.51	.19	.09	.04	.02						3.0	3.5	4.4	5.3	7.1	8.9	13	16	
			2,000	3.4	1.02	.38	.19	.08	.03	71	96	125	169	223	60	60	60	60	60	59	58	58	
			3,500		1.78	.66	.32	.14	.05						4.4	5.0	5.8	6.7	8.6	10	14	18	
			5,000	3.7	2.54	.94	.46	.19	.07	73	98	127	171	225	60	60	60	60	60	60	59	58	
			7,500		3.81	1.40	.69	.29	.10						5.7	6.7	7.6	8.6	11	12	15	20	
10,000	4.1	5.08	1.87	.92	.39	.13	75	100	129	173	227	60	60	60	60	60	60	59	58				
15,000		7.61	2.80	1.38	.58	.20						6.8	8.0	9.0	9.8	12	13	17	21				
20,000	4.4	10.2	3.74	1.84	.77	.26	79	104	129	175	227	60	60	60	60	60	59	59	58				
25,000		12.7	4.67	2.30	.96	.33						8.2	8.9	9.8	11	13	15	18	22				
50,000	6.6	25.4	9.34	4.59	1.93	.65	83	108	133	179	231	60	60	60	60	60	59	59	58				
75,000		38.1	14.0	6.88	2.89	.98						10	11	13	14	16	18	22	26				
100,000	9.0	50.8	18.7	9.18	3.85	1.30	87	112	137	183	235	60	60	60	60	60	59	59	58				
150,000		-	-	-	-	-						12	14	15	16	19	21	25	29				
200,000																							
250,000																							

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



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PUMP HYDRAULIC SIZE CHART

SEC. 500

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January 2010

**38 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)									
					1½"	2"	2½"	3"	4"	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					
38	580	STD	28	1.8	.01	.01	.01	.01	.01	58	83	115			36	35	35	34						
			32		.04	.01	.01	.01	.01							.82	1.5	2.2	2.9					
			38	1.8	.05	.02	.01	.01	.01	58	83	115	159			37	36	35	35	33				
			50		.06	.02	.01	.01	.01							.88	1.6	2.3	2.9	4.3				
			70	1.8	.07	.02	.01	.01	.01	58	83	115	159	211			38	37	37	36	35	34		
			100		.08	.02	.01	.01	.01							.91	1.6	2.3	3.0	4.3	5.5			
			150	1.8	.09	.02	.01	.01	.01	59	84	117	159	211			39	38	38	37	37	36	35	32
			200		.09	.03	.01	.01	.01							1.1	1.7	2.4	3.0	4.4	5.5	8.2	11	
			300	1.8	.10	.04	.02	.01	.01	59	86	117	159	211			39	39	38	38	37	37	36	35
			500		.17	.06	.03	.02	.01							1.3	1.9	2.8	3.2	4.4	5.6	8.3	11	
		750	1.8	.25	.09	.05	.02	.01	59	86	117	159	211			40	39	39	39	38	38	38	37	
		1,000		.33	.12	.06	.03	.01							1.7	2.4	3.1	3.6	4.7	5.8	8.4	11		
		2,000	2.4	.67	.25	.12	.05	.02	61	88	119	161	213			40	40	39	39	39	39	38	38	
		3,500		1.17	.43	.21	.09	.03							2.8	3.3	4.0	4.6	5.7	6.8	9.2	12		
		5,000	2.8	1.66	.61	.30	.13	.05	63	90	121	161	213			40	40	40	40	39	39	39	39	
		7,500		2.50	.92	.45	.19	.07							3.4	3.9	4.6	5.3	6.4	7.5	9.9	12		
		10,000	3.1	3.33	1.23	.60	.25	.09	65	92	124	161	215			40	40	40	40	39	39	39	39	
		15,000		4.99	1.84	.90	.38	.13							4.0	4.5	5.2	5.9	7.0	8.3	11	13		
		20,000	3.5	6.65	2.45	1.20	.51	.17	67	94	127	161	215			40	40	40	40	39	39	39	39	
		25,000		8.31	3.06	1.51	.63	.22							4.5	5.0	5.7	6.4	7.6	8.9	11	14		
50,000	5.4	16.6	6.12	3.01	1.26	.43	71	98	131	165	219			40	40	40	40	39	39	39	39			
75,000		24.9	9.18	4.51	1.89	.64							5.9	6.5	7.2	8.0	9.1	11	14	17				
100,000	7.8	33.3	12.3	6.01	2.52	.85	75	102	135	169	223			40	40	40	40	39	39	39	39			
150,000		49.9	18.4	9.02	3.78	1.28							7.2	7.8	8.7	9.8	11	13	16	20				
200,000																								
250,000																								

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



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PUMP HYDRAULIC SIZE CHART

SEC. 500

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**23 GPM
350 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)													
					1½"	2"	2½"	3"	4"	LOW PRES R/V			HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY									
23	350	STD	28	1.4	.01	.01	.01	.01	.01	55	81	111			21	21	21	20										
			32		.02	.01	.01	.01	.01						.52	.85	1.3	1.8										
			38	1.4	.02	.01	.01	.01	.01	55	81	111	158			22	22	21	21	20								
			50		.03	.01	.01	.01	.01							.58	.90	1.4	1.8	2.6								
			70	1.4	.03	.01	.01	.01	.01	55	81	111	158	209			22	22	22	21	21	20						
			100		.03	.01	.01	.01	.01								.64	.98	1.4	1.8	2.6	3.3						
			150	1.4	.03	.01	.01	.01	.01	56	82	111	158	209			23	23	22	22	22	21	21	20				
			200		.04	.02	.01	.01	.01								.68	1.1	1.4	1.9	2.6	3.3	4.8	6.3				
			300	1.4	.06	.03	.01	.01	.01	56	82	111	158	209			23	23	23	23	22	22	21	21				
			500		.10	.04	.02	.01	.01								.80	1.2	1.6	1.9	2.7	3.3	4.8	6.4				
		750	1.4	.15	.06	.03	.01	.01	56	82	111	158	209			24	23	23	23	23	23	22	22					
		1,000		.20	.08	.04	.02	.01								1.1	1.5	1.8	2.1	2.8	3.5	5.0	6.6					
		2,000	1.8	.40	.15	.08	.03	.01	57	83	112	159	210			24	24	23	23	23	23	23	23					
		3,500		.71	.26	.13	.06	.02								1.6	2.1	2.3	2.7	3.5	4.2	5.5	7.1					
		5,000	2.2	1.01	.37	.18	.08	.03	58	84	113	160	211			24	24	24	24	23	23	23	23					
		7,500		1.51	.56	.28	.12	.04								2.0	2.4	2.7	3.1	3.8	4.6	5.8	7.5					
		10,000	2.6	2.01	.74	.37	.16	.05	59	86	114	161	212			24	24	24	24	23	23	23	23					
		15,000		3.02	1.11	.55	.23	.08								2.4	2.8	3.2	3.6	4.3	5.0	6.4	7.9					
		20,000	2.9	4.03	1.48	.73	.31	.11	61	88	115	161	212			24	24	24	24	24	23	23	23					
		25,000		5.03	1.85	.91	.38	.13								2.7	3.2	3.5	3.9	4.5	5.3	6.8	8.3					
50,000	4.6	10.1	3.71	1.82	.77	.26	63	90	117	163	214			24	24	24	24	24	23	23	23							
75,000		15.1	5.56	2.73	1.15	.39								3.6	4.0	4.4	4.9	5.6	6.5	8.2	9.8							
100,000	6.6	20.1	7.41	3.64	1.53	.52	66	93	120	166	217			24	24	24	24	24	23	23	23							
150,000		30.2	11.1	5.46	2.29	.77								4.3	4.8	5.3	5.8	6.5	7.7	9.5	11							
200,000	10.2	40.3	14.8	7.28	3.05	1.03	69	96	123	169	220			24	24	24	24	24	23	23	23							
250,000		-	-	-	-	-								4.9	5.7	6.1	6.7	7.5	9.2	11	13							

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



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SEC. 500

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February 2025

11 GPM
150 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							
					2"	2½"	3"	4"	5"	DIFFERENTIAL PRESSURE (PSI)				150	200	300	400				
						25	50	75	100	150	200	300	400								
11	150	STD																			
				"D"	200,000	3.5	7.1	3.5	1.5	0.5	0.2	10.6	10.6	10.5	10.5	10.4	10.4	10.3	10.2		
			399,999		14.2		7	2.9	1	0.4	2.3	2.5	2.7	2.9	3.3	3.6	4.0	4.4			
			400,000		3.9	10.6	10.6	10.5	10.5	10.4	10.4	10.3	10.2								
			599,999			2.5	2.7	2.9	3.1	3.5	3.8	4.2	4.6								
			600,000		4.8	10.6	10.6	10.5	10.5	10.4	10.4	10.3	10.2								
			799,999			2.7	2.9	3.1	3.3	3.6	4.0	4.4	4.8								
			800,000		5.2	10.6	10.6	10.5	10.5	10.4	10.4	10.3	10.2								
	1M	NR	14			5.8	2	0.8	3.0	3.2	3.4	3.6	3.9	4.2	4.6	5.0					

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