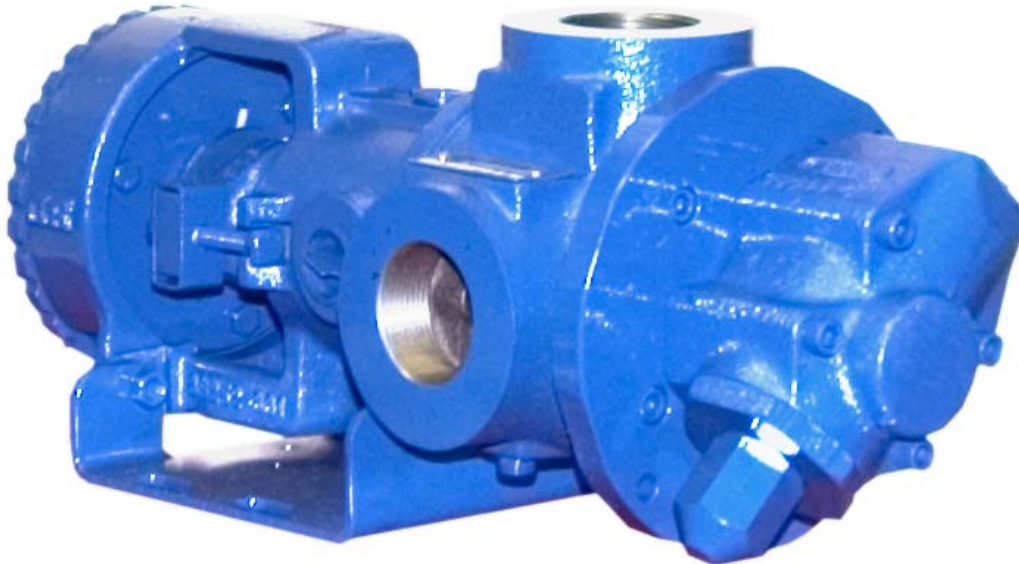


**GHS SERIES
 FLEXIBLE SEAL
 HEAVY DUTY STANDARD
 STAINLESS STEEL ROTARY
 GEAR PUMP**

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	BACKHD	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. [LBS [KG]]	Vol. [CU. FT.]
		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 ● 63 [28,6] 2.9 350 [177] 63 [28,6] 2.9	
	GHS 2 GF9-B ● ● GHS 2 GF10-B ■									GHS ● 63 [28,6] 2.9 400 [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]		63 [28,6] 2.9 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]						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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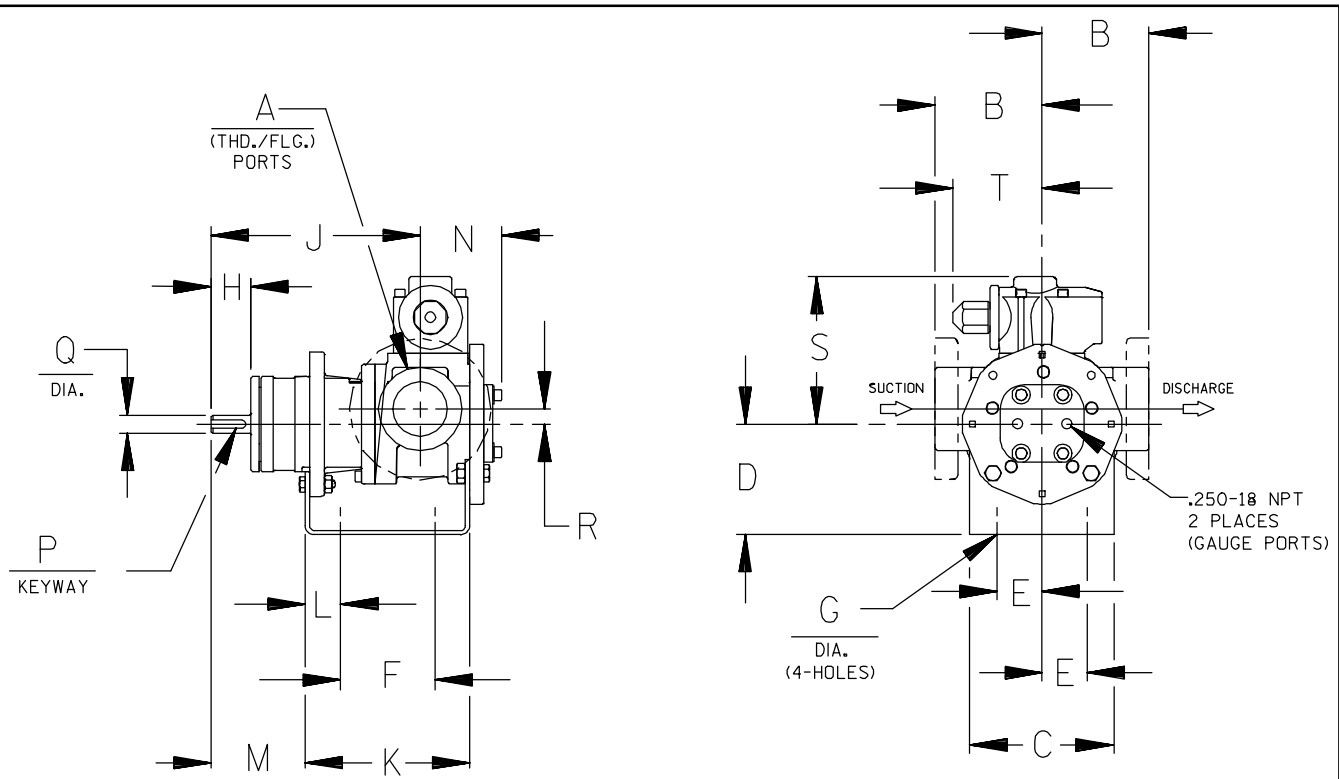
MODEL NUMBER		NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
		MAXIMUM		ALTERNATIVE		DIFF. PRESSURE - PSI [BAR]			TEMP.	Wt.	Vol.
		GPM [LPM]	RPM 60 Hz [50 HZ]	GPM [LPM]	RPM 60 Hz [50 HZ]	BELOW 38 SSU [4 cSt]	38 TO 100 SSU [21 cSt]	100 TO 250,000 SSU [55,000 cSt]	°F [°C]	LBS [KG]	CU. FT.
GHC	GHS										
	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.



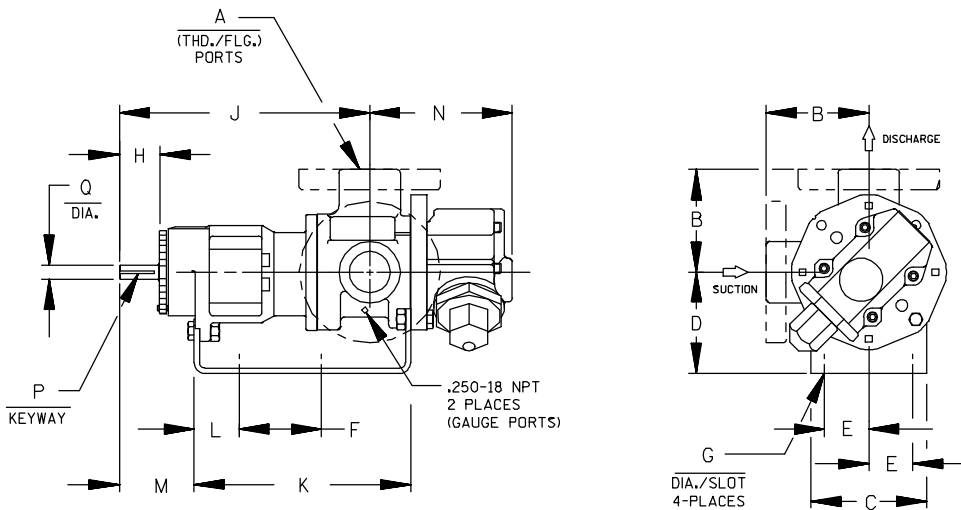
CAD FILE NO.: 16458B

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* [64]	4.00 [102]	3.50* [89]	4.50 [114]	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]														
GHS G	1-1/2" 2"	3.50* [89]	4.88 [124]	3.50* [89]	4.50 [114]	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]														
GHS J	2" 3"	4.50* [114]	6.88 [175]	5.25* [133]	6.25 [159]	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]														
GHS N	2" 3"	5.12 [130]	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]	8.72 [221]	.25 [6] x 2.00 [51]	1.12 [28]
GHS R	2" 2-1/2" 3" 4"	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]	
																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

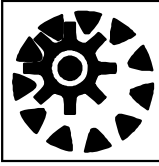
AND DIMENSIONS

SEE SECTION 540

FOR GHS DRIVE OPTIONS

AND DIMENSIONS

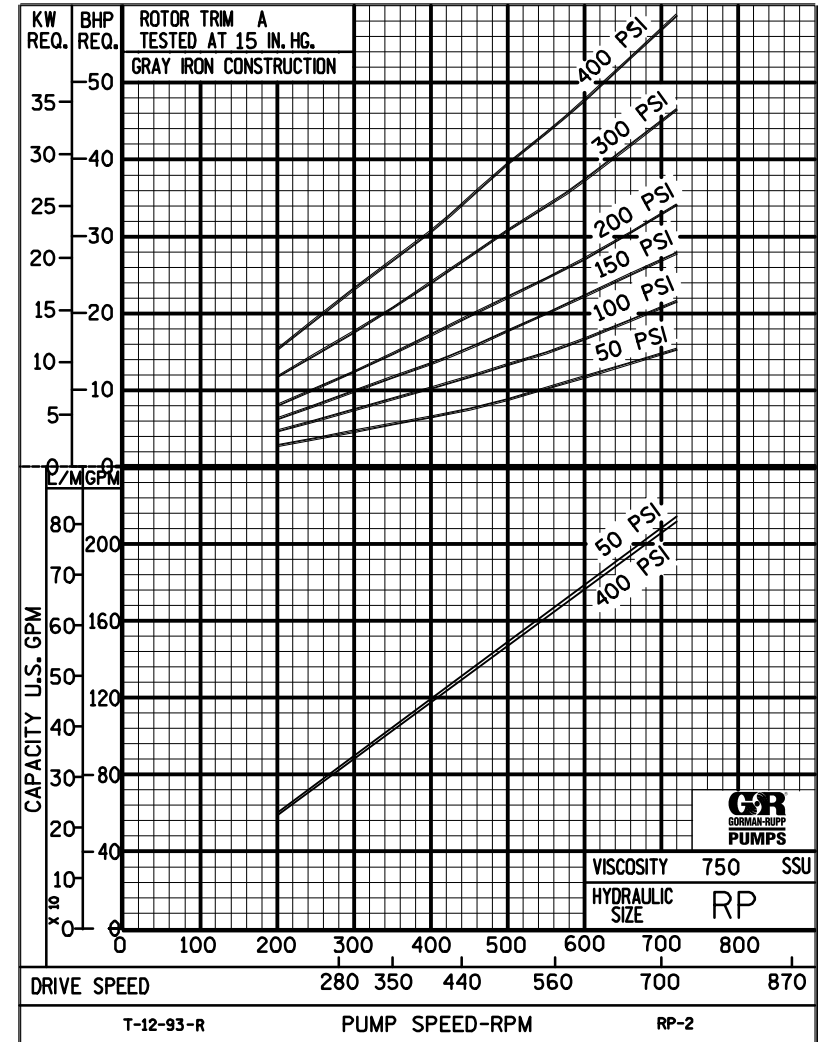
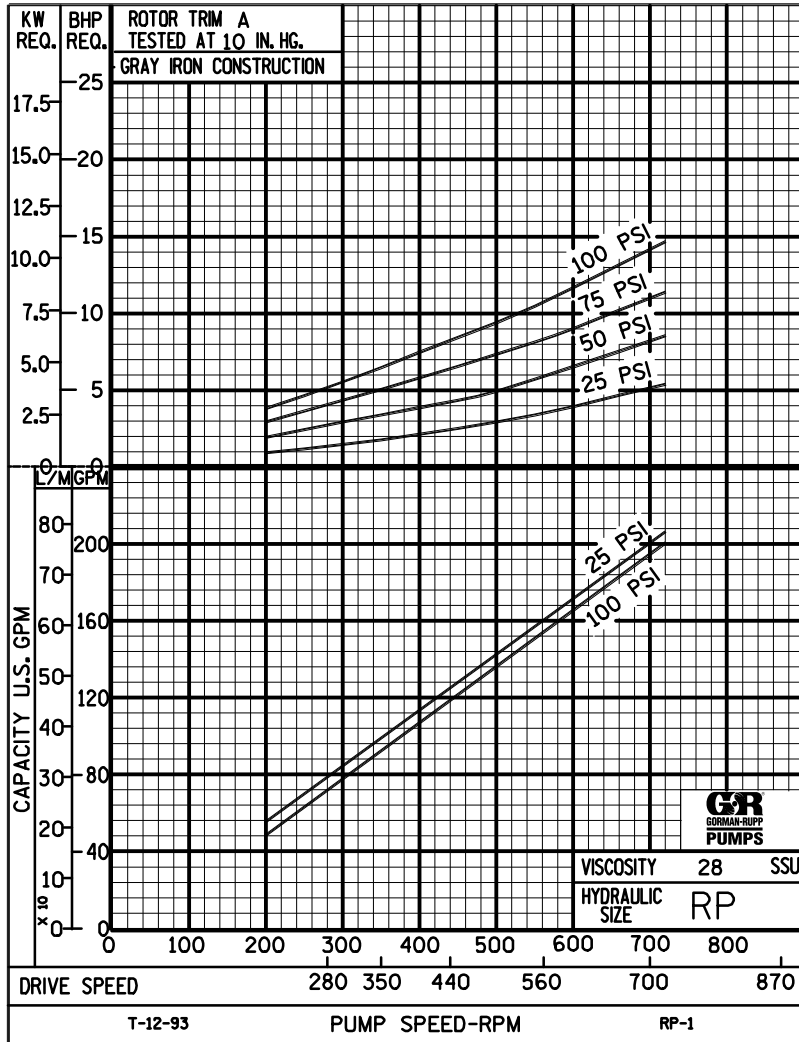
SEE SECTION 545



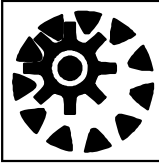
PERFORMANCE CURVES

SPEED VS. CAPACITY/HORSEPOWER

RP Hydraulic Size



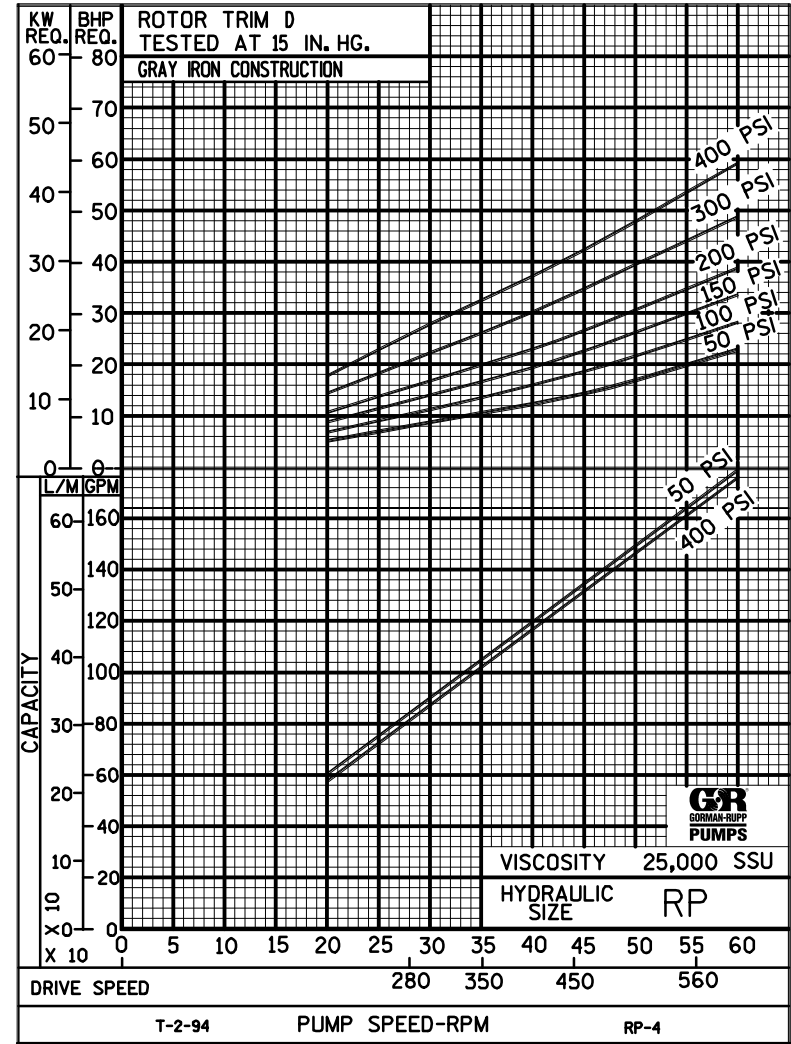
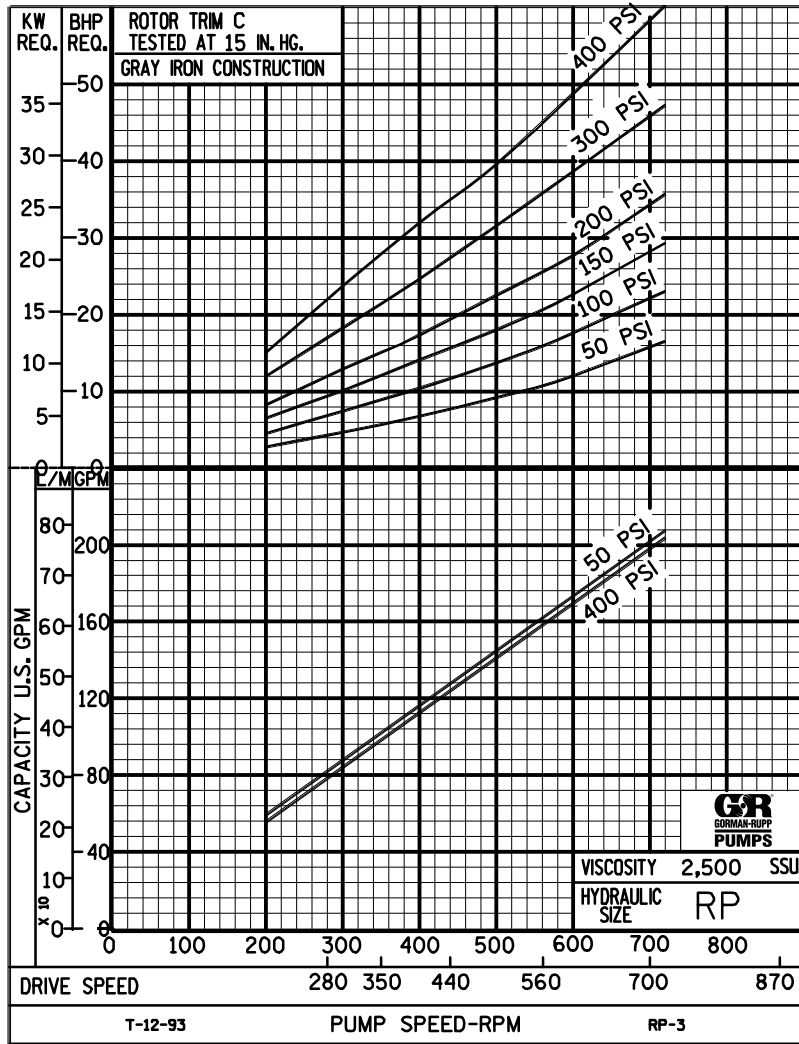
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PERFORMANCE CURVES

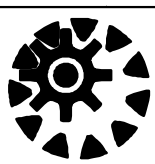
SPEED VS. CAPACITY/HORSEPOWER

RP Hydraulic Size



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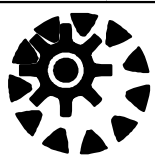
RP

PUMP HYDRAULIC SIZE CHART

SEC. 500	Page 112
	January 2010
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)													
							LOW PRES R/V		HI PRES R/V			HEAVY DUTY																
		2" 2 1/2" 3" 4" 6"					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

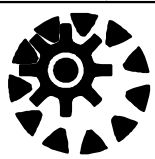
Page 113

January 2010

**190 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										
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

Page 114

January 2010

**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	-							153	152	150	150	148	146	144	141	
			200		.31	.13	.05	.01	-	66	93	127	186	246		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

Page 115

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)									
							LOW PRES R/V		HI PRES R/V			MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY								
					2"	2 1/2"	3"	4"	6"	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	-							103	102	101	100	99	98	97	95	
			200		.15	.07	.02	-	-	63	89	123	179	233		3.5	5.3	7.2	8.8	12	15	20	27	
			300	1.5	.18	.05	.02	.01	-							104	103	103	102	102	100	100	100	99
			500		.16	.08	.03	.01	-	67	93	125	181	235		3.8	5.6	7.4	8.9	12	15	21	27	
		750	1.6	.24	.12	.05	.02	-							105	105	104	104	103	102	102	101		
		1,000		.32	.16	.07	.02	-	70	95	127	183	237		3.9	5.7	7.5	9.1	12	15	21	28		
		2,000	2.0	.64	.32	.13	.04	.01							103	103	102	102	101	100	99	98		
		3,500		1.13	.55	.23	.08	.02	75	100	130	185	241		4.1	6.2	7.9	9.8	13	16	22	29		
		5,000	2.4	1.61	.79	.33	.11	.02							104	103	103	103	102	101	100	100		
		7,500		2.42	1.19	.50	.17	.03	78	104	132	187	243		5.2	7.9	8.9	11	14	17	24	30		
		10,000	2.8	3.22	1.58	.66	.22	.04							104	104	104	103	103	102	101	100		
		15,000		4.83	2.37	1.00	.34	.07	81	106	134	189	245		6.4	9.2	10	12	15	19	25	31		
		20,000	3.3	6.45	3.17	1.33	.45	.09							105	105	104	104	104	103	103	102		
		25,000		8.06	3.96	1.66	.56	.11	83	108	136	190	247		7.5	10	11	13	16	20	26	32		
50,000	5.0	16.1	7.92	3.32	1.12	.22							105	105	104	104	104	103	103	102				
75,000		24.2	11.9	4.98	1.68	.33	89	113	137	192	250		11	13	14	16	20	23	29	35				
100,000	6.9	32.2	15.8	6.64	2.24	.43							105	105	104	104	104	103	103	102				
150,000		48.4	23.8	9.96	3.36	.65	92	115	140	194	252		15	16	18	19	22	26	32	37				
200,000	8.7	64.5	31.7	13.3	4.48	.87							105	105	104	104	104	103	103	102				
250,000		80.6	39.6	16.6	5.60	1.09	94	117	142	195	253		19	21	22	24	24	28	34	40				

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