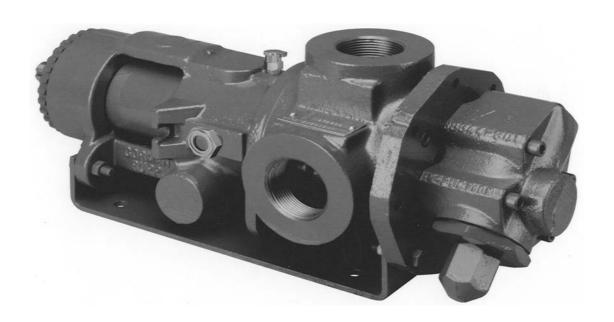


SEC. 550 GHA SERIES January 2010 **EXTREME DUTY ABRASIVE** G, J, N, R & S HYD SIZE

ROTARY GEAR PUMP



The GHA series is designed for applications in the operating ranges noted below. These units are available with head and backhead jackets for temperature control, and packing or carbide mechanical seal options described on the following pages.

This abrasive handling, extreme duty series, provides superior wear resistance. The design also provides superior rotor shaft support and an integral, maintenance-free radial/thrust bearing for reduced deflection and wear. Reduced speeds enable service over extended periods. Information such as percentage, size and hardness of solids present in the liquid are useful to estimate pump life.

FEATURES

HARDENED, WEAR RESISTANT GEARS. HOUSING, HEAD, PIN, AND BUSHING

HARD FACE. WEAR RESISTANT MECHANICAL SEAL

OVERSIZED TAPERED SEAL CAVITY HEAVY DUTY NEEDLE ROLLER **BEARING**

ROTOR END CLEARANCE EXTERNALLY **ADJUSTABLE**

FLEXIBLE SEAL DESIGN ALLOWS FOR A VARIETY OF INDUSTRY STANDARD SEALS OR PACKING

BALL BEARING THRUST CONTROL

OPERATING RANGE

CAPACITY (GPM): (8 TO 325)

> [25 TO 1020] [LPM] :

PRESSURE (PSI) : [0 TO 200)

[BAR]: [0 TO 14]

VISCOSITY (SSU): (28 TO 250,000)

[cSt] : [1 TO 55,000]

TEMPERATURE (F) : (-60 $^{\circ}$ TO 500 $^{\circ}$) [C] : [-51 $^{\circ}$ TO 260 $^{\circ}$]

APPLICATIONS

PAGE 10

USE WITH ANY LIQUID COMPATIBLE WITH **CAST IRON**

- **★** PAINTS
- ★ INKS
- ★ ADHESIVES
- ★ WASTE LIQUIDS
- **★** EMULSIONS
- **★** FILTERING

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SUPERSEDES ALL PREVIOUS ISSUES

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Standard Construction

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EXTER- IOR	ROTOR & IDLER	HSG PORTS	IDLER BUSHING	BACKHD BEARING	IDLER PIN		SHAFT SEALING			INTERNAL	
						SHAFT	MECHANICAL	PACKING	ROTA- TION	RELIEF VALVE	
							SEAL •			MATERIAL	SETTING
CAST IRON	HARD IRON	90° TAPPED/ FLNG'D	SILICON CARBIDE	① NEEDLE BEARING	TUNGSTEN CARBIDE	HARD. STEEL	SILICON CARB. SILICON CARB. VITON	ARAMID FIBER W/GRAPHITE	C.W.	DUCTILE IRON	75 PSI [5 BAR]

Standard Models

G H A 2 NK 3 — B
GEAR DUTY DESIGN PORT HYDRAULIC SEAL STYLE
SIZE SIZE

	NOM. CAPACITY-SPEED			M	SHIPPING			
MODEL	MAXIMUM		DIFFERE	NTIAL PRESS	TEMP.	DATA		
	GPM	RPM	BELOW	38 TO	100 TO	_	② Weight	
NUMBER	[LPM]	60 Hz [50 HZ]	38 SSU [4 cSt]	100 SSU [21 cSt]	250,000 SSU [55,000 cSt]	°F [°C]	LBS [KG]	CU. FT.
GHA 1-1/2 GC 3-B GHA 1-1/2 GC 4-B ■	8 [25]						57 [25,9]	
GHA 1-1/2 GF 3-B GHA 1-1/2 GF 4-B	11 [36]	870					57 [25,9]	2.9
GHA 1-1/2 GH 3-B GHA 1-1/2 GH 4-B	15 [49]	[720]					57 [25,9]	
GHA 1-1/2 GJ 3-B GHA 1-1/2 GJ 4-B	19 [60]						57 [25,9]	
GHA 2 JJ 3-B GHA 2 JJ 4-B	28 [88]					•	144 [65,5]	
GHA 2 JL 3-B GHA 2 JL 4-B	38 [121]		100 [7]	150 [10]	200 [14]	250 [119]	144 [65,5]	5.3
GHA 2 JP 3-B GHA 2 JP 4-B	54 [169]					_	144 [65,5]	
GHA 2 NK 3-B GHA 2 NK 4-B	_ 60	580 [480]				500 [260]	180 [81,6]	5.3
GHA 3 NK 3-B GHA 3 NK 4-B	[188]						180 [81,6]	
GHA 2 NM 3-B GHA 2 NM 4-B	80						180 [81,6]	
GHA 3 NM 3-B GHA 3 NM 4-B	[251]						180 [81,6]	
GHA 2 NP 3-B GHA 2 NP 4-B	99						180 [81,6]	
GHA 3 NP 3-B GHA 3 NP 4-B	[313]	[313]					180 [81,6]	10.7

STANDARD MODELS CONT.

MECHANICAL SEAL

PACKING

¹ EXCEPT "S" SIZE AND 4-B MODELS (SILICON CARBIDE BUSHING).

² FOR 4-B UNIT WEIGHT, REFER TO GHS SECTION

Standard Models Cont'd

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MODEL	NOM. CAPACITY-SPEED MAXIMUM		NIEEEDE	NENTIAL PRESS	SHIPPING DATA			
MODEL	GPM	RPM	BELOW	38 TO	100 TO	TEMP.	Weight	Volume
NUMBER	[LPM]	60 Hz [50 HZ]	38 SSU [4 cSt]	100 SSU [21 cSt]	250,000 SSU [55,000 cSt]	°F [°C]	LBS [KG]	CU. FT.
GHA 2 RM 3-B GHA 2 RM 4-B ■							357 [162]	
GHA 2-1/2 RM 3-B	85 [271]	350 [290]					357 [162]	
GHA 3 RM 3-B GHA 3 RM 4-B			. 100 [7]	150 [10]	200 [14]	250 [119] = 500 [260]	357 [162]	
GHA 3 RP 3-B GHA 3 RP 4-B	105 [339]	350					357 [162]	10.7
GHA 3 RR 3-B GHA 3 RR 4-B	125 [402]						357 [162]	
GHA 3 RS 3-B GHA 3 RS 4-B	146 [465]	[290]					357 [162]	
GHA 4 RS 3-B GHA 4 RS 4-B	146 [465]						357 [162]	
GHA 3 SR 3-B GHA 3 SR 4-B	210 [660] 325 [1020]	350	100 [7]	150 [10]	200 [14]	400 [204]	530 [240]	
GHA 4 SR 3-B GHA 4 SR 4-B							530 [240]	17.3
GHA 3 SU 3-B GHA 3 SU 4-B		[290]				5 00	530 [240]	17.0
GHA 4 SU 3-B GHA 4 SU 4-B		[1020]					[260]	530 [240]

PORTS ARE COMPATIBLE WITH 125# ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE.

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

GHA

FOR GHA DRIVE OPTIONS

AND DIMENSIONS

SEE

SECTION 545

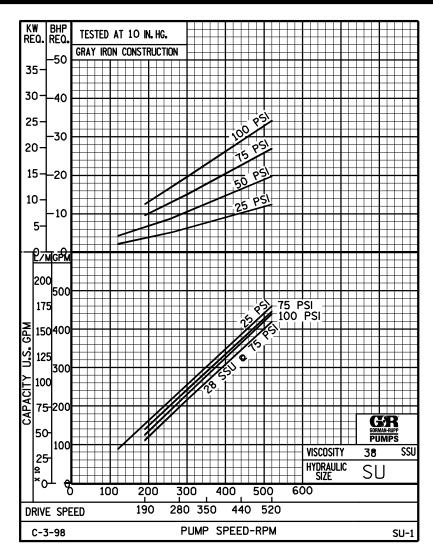


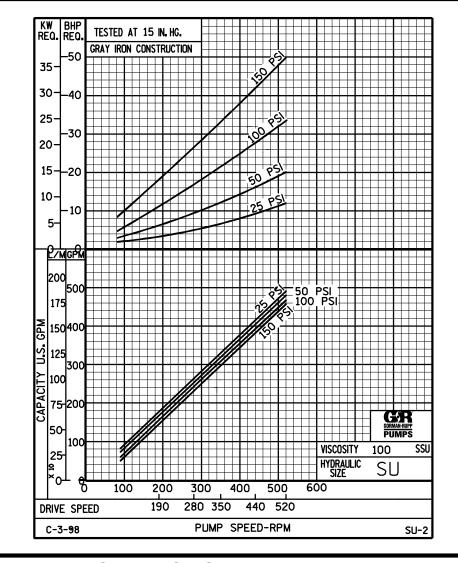
PERFORMANCE CURVES CII

Hydraulic January 2010 Size

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SPEED VS. CAPACITY/HORSEPOWER





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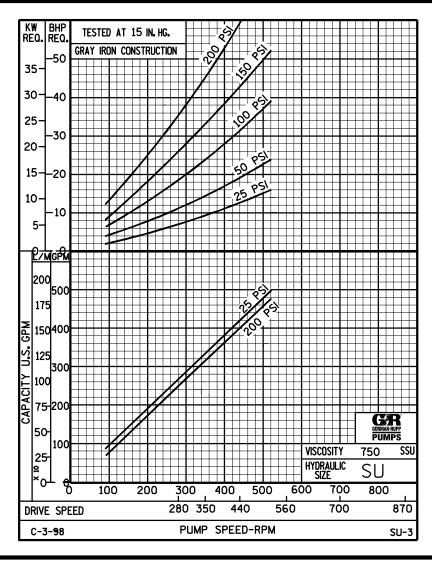
PERFORMANCE CURVES QII

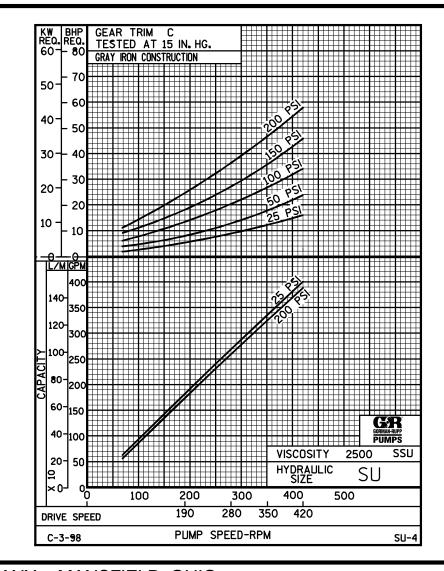
Hydraulic January 2010 Size

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SPEED VS. CAPACITY/HORSEPOWER







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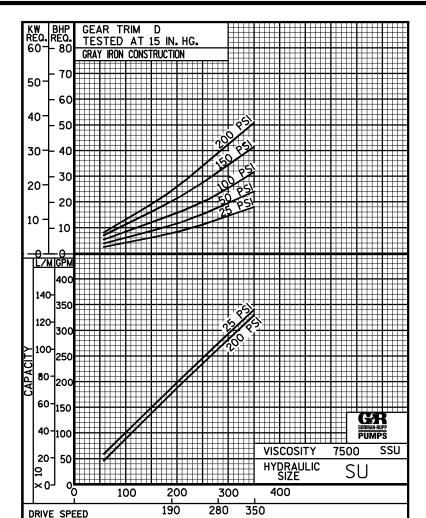


PERFORMANCE CURVES QII

January 2010 Hydraulic Size

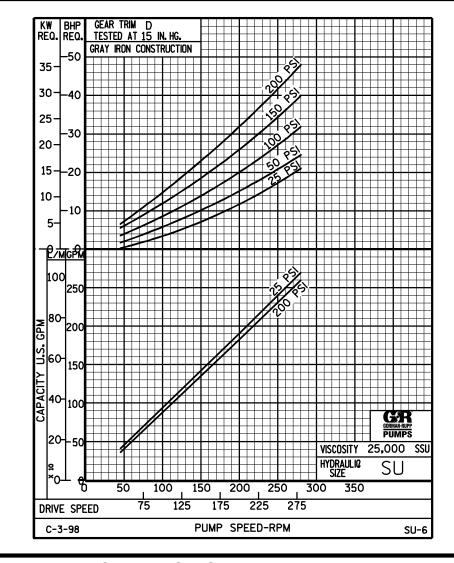
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SPEED VS. CAPACITY/HORSEPOWER



PUMP SPEED-RPM

C-3-98



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SU-5

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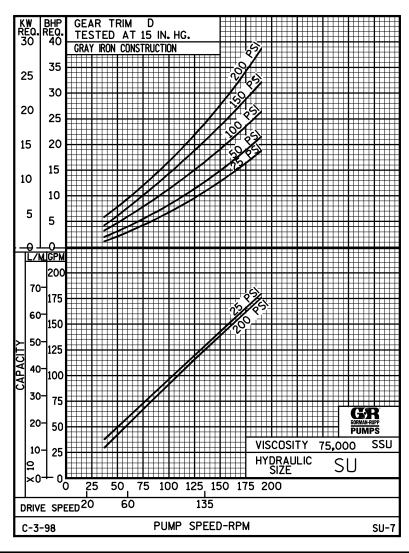


PERFORMANCE CURVES SIJ

SU Hydraulic Size PAGE 135

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