

EXTREME DUTY ABRASIVE G, J, N, R & S HYD SIZE

SEC. 550

## **ROTARY GEAR PUMP**

**GHA SERIES** 

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

CAPACITY	(GPM): [LPM]:	(8 TO 325) [25 TO 1020]
PRESSURE	(PSI) : [BAR] :	[0 TO 200) [0 TO 14]
VISCOSITY	(SSU):(2 [cSt] :	28 TO 250,000) [1 TO 55,000]

**OPERATING RANGE** 

TEMPERATURE (F) : (-60° TO 500°) [C] : [-51° TO 260°]

# **APPLICATIONS**

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

🛧 INKS

★ ADHESIVES

★ WASTE LIQUIDS

★ EMULSIONS

★ FILTERING

#### THE GORMAN-RUPP COMPANY MANSFIELD, OHIO

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SUPERSEDES ALL PREVIOUS ISSUES

## Standard Construction

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						SHAFT SEALING	SHAFT SEALING			INTER	NAL
EXTER- IOR	ROTOR &	HSG PORTS	IDLER BUSHING	BACKHD	IDLER PIN	SHAFT	MECHANICAL		ROTA-		
	IDLER		Boonina	DEATING	1 114		SEAL •		TION	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**

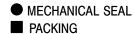
G	н	Α	2	NK	3	– В
		1	1			
GEAR	DUTY	DESIGN	PORT SIZE	HYDRAULIC SIZE	SEAL	STYLE

	NOM. CAPACITY-SPEED MAXIMUM		MAXIMUM DIFFERENTIAL PRESSURE - PSI [BAR] TEMP.				Shipping Data	
MODEL NUMBER	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]	② Weight LBS [KG]	Volume 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	100 [7]	150 [10]	200 [14]	● 250 [119] 500 [260]	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]	5.3
GHA 2 JL 3-B GHA 2 JL 4-B ■	38 [121]						144 [65,5]	
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					180 [81,6]	
GHA 3 NK 3-B GHA 3 NK 4-B	[188]	[480]					180 [81,6]	
GHA 2 NM 3-B GHA 2 NM 4-B	80						180 [81,6]	5.3
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]						180 [81,6]	10.7

STANDARD MODELS CONT.

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

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



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## Standard Models Cont'd

								<u> </u>
	NOM. CAPACITY-SPEED		MAXIMUM				SHIPPING	
MODEL	MAXIMUM		DIFFERE	NTIAL PRESS	TEMP. DATA		4	
NUMBER	GPM	RPM	BELOW	38 TO	100 TO		Weight	Volume
NUNDER		60 Hz	38 SSU	100 SSU	250,000 SSU	°F	LBS	CU.
	[LPM]	[50 HZ]	[4 cSt]	[21 cSt]	[55,000 cSt]	[°C]	[KG]	FT.
GHA 2 RM 3-B ● GHA 2 RM 4-B ■							357 [162]	
GHA 2-1/2 RM 3-B ● GHA 2-1/2 RM 4-B ■	85 [271]	350 [290] 350 [290]	. 100 [7]	150 [10]	200 [14]	● 250 [119] ■ 500 [260]	357 [162]	10.7
GHA 3 RM 3-B GHA 3 RM 4-B							357 [162]	
GHA 3 RP 3-B GHA 3 RP 4-B	105 [339]						357 [162]	
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]						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		100 [7]	150		● 400 [204] ■ 500 [260]	530 [240]	17.3
GHA 4 SR 3-B GHA 4 SR 4-B	[660]	350 [290]			200 [14]		530 [240]	
GHA 3 SU 3-B GHA 3 SU 4-B	325			[10]			530 [240]	17.5
GHA 4 SU 3-B GHA 4 SU 4-B	[1020]						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.

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