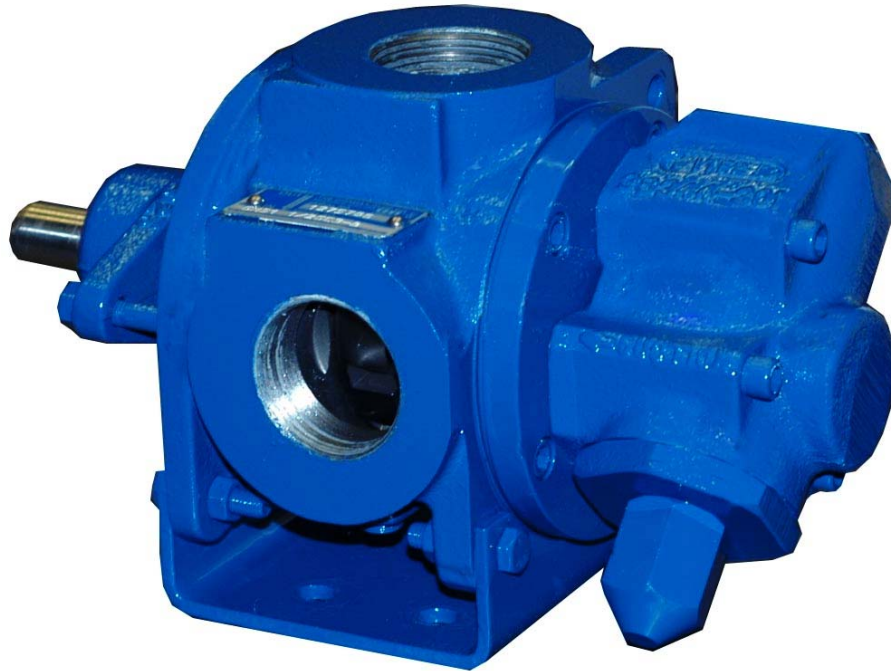


**MEDIUM DUTY STANDARD;  
 D, G, J, N & R SIZE  
 ROTARY GEAR PUMP**



The GMS series is designed for applications in the operating ranges noted below. These units are available with head and backhead jackets (R size only) for temperature control, carbon graphite bushings for low viscosity liquids, silicon carbide bushings for wear resistance, and carbide, positive drive or packing seals for viscous sealing.

For continuous service, or for handling more viscous liquids, see the heavy duty GHS section.

For belt driven applications, select an extended shaft option and consult factory for availability of drive assembly. A pedestal bearing is required for belt driven applications.

**FEATURES**

- 150 PSI CAPABILITY
- SELF-CONTAINED, NO EXTERNAL BEARING REQUIRED (UNLESS BELT DRIVEN)
- HIGH STRENGTH, COMPUTER PROFILED GEARING FOR QUIET OPERATION
- THRUST CONTROLLED PUMP ELEMENTS
- EXCEPTIONAL SEAL VERSATILITY

**OPERATING RANGE**

- CAPACITY (GPM) : (3 TO 265)  
 [LPM] : [11 TO 930]
- PRESSURE (PSI) : (0 TO 150)  
 [BAR] : [0 TO 10.3]
- VISCOSITY (SSU) : (28 TO 250,000)  
 [cSt] : [1 TO 55,000]
- TEMPERATURE (F) : (-60° TO 450°)  
 [C] : [-51° TO 230°]

**APPLICATIONS**

- ★ BOOSTER SERVICE
- ★ CIRCULATING
- ★ FILTERING
- ★ LUBRICATING
- ★ TRANSFERRING

EXT.	ROTOR & IDLER	HOUSING PORTS	BUSHINGS	IDLER PIN	SHAFT	SHAFT SEALING		ROT.	INTERNAL RELIEF VALVE	
						MECH. SEAL ●	PACKING ■		MATERIAL	SETTING
CAST IRON	HIGH STRENGTH IRON	90° TAPPED	BRONZE	HARDENED STEEL		FLUORO <sup>①</sup> CARBON, NI-RESIST	PTFE <sup>②</sup> GRAPHITE	C.W.	DUCTILE IRON	75 PSI [5 BAR]

## Standard Models

**G M S 1 DC 3 - B**  
 GEAR DUTY DESIGN PORT SIZE HYDRAULIC SEAL STYLE

MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE-PSI [BAR]			TEMP.	Weight	Volume
	GPM	RPM	GPM	RPM	BELOW	38 TO	100 TO	°F	LBS	CU. FT.
	[LPM]	60 Hz [50 Hz]	[LPM]	60 Hz [50 Hz]	38 SSU [4 cSt]	100 SSU [21 cSt]	250,000 SSU [55,000 cSt]	[°C]	[KG]	FT.
<b>GMS 1DC 3-B</b> ● <b>GMS 1DC 4-B</b> ■	9 [28]		6 [19]						19 [8,6]	0.6
<b>GMS 1DE 3-B</b> ● <b>GMS 1DE 4-B</b> ■	11 [35]		7 [22]						19 [8.6]	0.6
<b>GMS 1-1/2 GC 3-B</b> ● <b>GMS 1-1/2 GC 4-B</b> ■	16 [50]		10 [32]						32 [14,5]	2.9
<b>GMS 2 GC 3-B</b> ● <b>GMS 2 GC 4-B</b> ■								● 400 [205]	32 [14,5]	2.9
<b>GMS 1-1/2 GF 3-B</b> ● <b>GMS 1-1/2 GF 4-B</b> ■	23 [73]	1750 [1460]	15 [47]	1150 [960]					32 [14,5]	2.9
<b>GMS 2 GF 3-B</b> ● <b>GMS 2 GF 4-B</b> ■					50 [3]	75 [5]	150 [10.3]		32 [14,5]	2.9
<b>GMS 1-1/2 GH 3-B</b> ● <b>GMS 1-1/2 GH 4-B</b> ■	31 [98]		20 [63]					■ 450 [230]	32 [14,5]	2.9
<b>GMS 2 GH 3-B</b> ● <b>GMS 2 GH 4-B</b> ■									32 [14,5]	2.9
<b>GMS 1-1/2 GJ 3-B</b> ● <b>GMS 1-1/2 GJ 4-B</b> ■	38 [120]		25 [79]						32 [14,5]	2.9
<b>GMS 2 GJ 3-B</b> ● <b>GMS 2 GJ 4-B</b> ■									32 [14,5]	2.9
<b>GMS 2 JG 3-B</b> ● <b>GMS 2 JG 4-B</b> ■									83 [37,6]	2.9
<b>GMS 2-1/2 JG 3-B</b> ● <b>GMS 2-1/2 JG 4-B</b> ■	33 [126]	960 [960]	30 [95]	870 [725]					83 [37,6]	2.9
<b>GMS 3 JG 3-B</b> ● <b>GMS 3 JG 4-B</b> ■									83 [37,6]	2.9
STANDARD MODELS CONT.										

**NOTE:** RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ3-B**

● MECHANICAL SEAL

■ PACKING/LIPSEAL

① DUPONT VITON® OR EQUIVALENT

② DUPONT TEFLON® OR EQUIVALENT

**THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO**

GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

# Standard Models Cont'd

MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA	
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE-PSI [BAR]			TEMP.	Weight	Volume
	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]		
GMS 2 JJ 3-B ● GMS 2 JJ 4-B ■	47 [177]	960 [960]	42 [133]	870 [725]	50 [3]	75 [5]	150 [10.3]	● 400 [205]	83	2.9
GMS 2-1/2 JJ 3-B ● GMS 2-1/2 JJ 4-B ■									83 [37,6]	2.9
GMS 3 JJ 3-B ● GMS 3 JJ 4-B ■									83 [37,6]	2.9
GMS 2 JL 3-B ● GMS 2 JL 4-B ■	64 [243]	960 [960]	58 [183]	870 [725]	50 [3]	75 [5]	150 [10.3]	● 400 [205]	83	2.9
GMS 2-1/2 JL 3-B ● GMS 2-1/2 JL 4-B ■									83 [37,6]	2.9
GMS 3 JL 3-B ● GMS 3 JL 4-B ■									83 [37,6]	2.9
GMS 2 JP 3-B ● GMS 2 JP 4-B ■	89 [338]	960 [960]	81 [256]	870 [725]	50 [3]	75 [5]	150 [10.3]	● 400 [205]	83	2.9
GMS 2-1/2 JP 3-B ● GMS 2-1/2 JP 4-B ■									83 [37,6]	2.9
GMS 3 JP 3-B ● GMS 3 JP 4-B ■									83 [37,6]	2.9
GMS 1-1/2 NK 3-B ● GMS 1-1/2 NK 4-B ■	90 [283]	960 [960]	60 [189]	870 [725]	50 [3]	75 [5]	150 [10.3]	■ 450 [230]	109	2.9
GMS 2 NK 3-B ● GMS 2 NK 4-B ■									109 [49]	2.9
GMS 2-1/2 NK 3-B ● GMS 2-1/2 NK 4-B ■									109 [49]	2.9
GMS 3 NK 3-B ● GMS 3 NK 4-B ■	120 [378]	960 [960]	80 [252]	870 [725]	50 [3]	75 [5]	150 [10.3]	■ 450 [230]	109	2.9
GMS 2 NM 3-B ● GMS 2 NM 4-B ■									109 [49]	2.9
GMS 2-1/2 NM 3-B ● GMS 2-1/2 NM 4-B ■									109 [49]	2.9
GMS 3 NM 3-B ● GMS 3 NM 4-B ■	150 [473]	960 [960]	99 [312]	870 [725]	50 [3]	75 [5]	150 [10.3]	■ 450 [230]	109	2.9
GMS 2 NP 3-B ● GMS 2 NP 4-B ■									109 [49]	2.9
GMS 2-1/2 NP 3-B ● GMS 2-1/2 NP 4-B ■									109 [49]	2.9
GMS 3 NP 3-B ● GMS 3 NP 4-B ■									109	2.9

STANDARD MODELS CONT.

- MECHANICAL SEAL
- PACKING/LIPSEAL

NOTE: RECOMMENDED PORT SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ 3-B**

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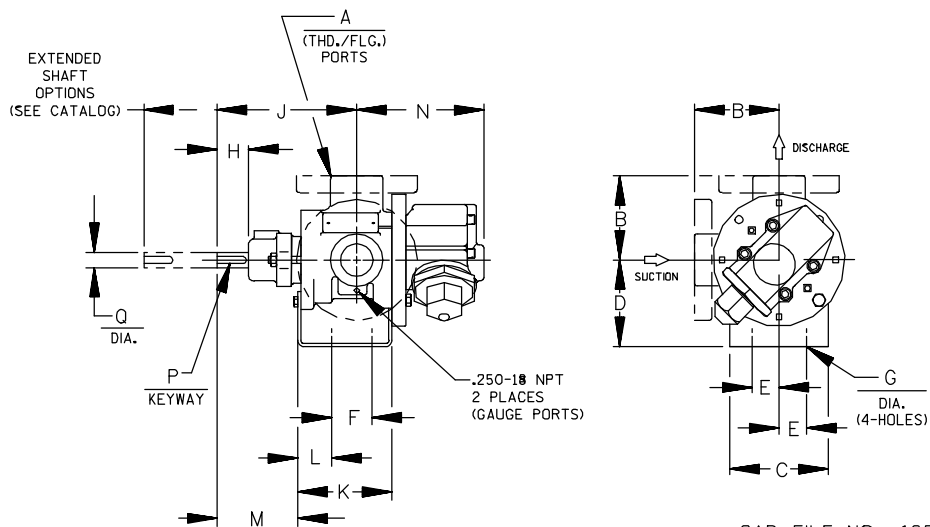
MODEL NUMBER	NOM. CAPACITY - SPEED				MAXIMUM				SHIPPING DATA							
	MAXIMUM		ALTERNATIVE		DIFFERENTIAL PRESSURE - PSI [BAR]			TEMP.	Weight LBS [KG]	Volume CU. FT.						
	GPM [LPM]	RPM 60 Hz [50 Hz]	GPM [LPM]	RPM 60 Hz [50 Hz]	BELOW 38 SSU [4 cSt]	38 TO 100 SSU [21 cSt]	100 TO 250,000 SSU [55,000 cSt]	°F [°C]								
GMS 2 RM 3-B ● GMS 2 RM 4-B ■	153 [542]	640 [600]	115 [362]	480 [400]				● 400 [205]	233 [106]	10.7						
GMS 2-1/2 RM 3-B ● † GMS 2-1/2 RM 4-B ■ †									233 [106]	10.7						
<b>GMS 3 RM 3-B ● †</b> <b>GMS 3 RM 4-B ■ †</b>									233 [106]	10.7						
GMS 4 RM 3-B ● † GMS 4 RM 4-B ■ †									233 [106]	10.7						
GMS 2-1/2 RP 3-B ● † GMS 2-1/2 RP 4-B ■ †									233 [106]	10.7						
<b>GMS 3 RP 3-B ● †</b> <b>GMS 3 RP 4-B ■ †</b>	190 [678]	640 [600]	143 [451]		50 [3]	75 [5]	150 [10.3]	● 400 [205]	233 [106]	10.7						
GMS 4 RP 3-B ● † GMS 4 RP 4-B ■ †	233 [106]								10.7							
GMS 2-1/2 RR 3-B ● † GMS 2-1/2 RR 4-B ■ †	228 [804]								170 [536]					■ 450 [230]	233 [106]	10.7
GMS 3 RR 3-B ● † GMS 3 RR 4-B ■ †															233 [106]	10.7
<b>GMS 4 RR 3-B ● †</b> <b>GMS 4 RR 4-B ■ †</b>															233 [106]	10.7
GMS 3 RS 3-B ● † GMS 3 RS 4-B ■ †	265 [930]	196 [618]						233 [106]	10.7							
<b>GMS 4 RS 3-B ● †</b> <b>GMS 4 RS 4-B ■ †</b>								233 [106]	10.7							

NOTE: RECOMMENDED SIZES ARE SHOWN IN **BOLDFACE**. EXAMPLE: **GMS 2GJ 3-B**

† PORTS ARE COMPATIBLE WITH 125# ANSI CAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL [DIN] FLANGES OR TAPPED [BSP] PORTS AVAILABLE FOR EXPORT MARKET.

**THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO**  
GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA

# Basic Pump Dimensions



CAD FILE NO.: 16530

MODEL NUMBERS	PUMP DIMENSIONS - INCHES [MILLIMETERS]															
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	
GMS D	1"	2.50* [64]	4.00 [102]	3.50* [89]	1.62 [41]	1.62 [41]	.41 [10]	1.44 [36]	5.81 [148]	3.24 [82]	.89 [23]	3.99 [101]	4.97 [126]	.19 [5] x 1.00 [25]	.62 [16]	
		2.75† [70]		4.50 [114]												5.25 [133]
		3.19 [81]														
		4.00† [102]														
GMS G	1-1/2"	3.50* [89]	4.88 [124]	3.50* [89]	1.62 [41]	1.62 [41]	.41 [10]	1.64 [42]	5.96 [151]	3.85 [98]	.76 [19]	4.14 [105]	5.70 [145]	.19 [5] x 1.25 [32]	.75 [19]	
		3.75† [95]		4.50 [114]												5.25 [133]
	2"	4.00 [102]	6.25 [159]	6.25 [159]												
		4.00† [102]														
GMS J	2"	4.50* [114]	6.88 [175]	5.25* [133]	2.88 [73]	3.00 [76]	.44 [11]	2.50 [64]	9.91 [252]	5.71 [145]	1.18 [30]	7.31 [186]	8.50 [216]	.25 [6] x 2.00 [51]	1.00 [25]	
		5.00† [127]		6.25 [159]												7.00 [178]
	6.00† [152]	7.00 [178]		8.00 [203]												
	6.31† [160]	8.00 [203]														
GMS N	1-1/2"	5.12* [130]	8.00 [203]	4.50 [114]	2.88 [73]	4.25 [108]	.44 [11]	2.50 [64]	9.20 [234]	6.42 [163]	1.12 [28]	6.12 [155]	7.59 [193]	.25 [6] x 2.00 [51]	1.25 [32]	
				5.25* [133]												6.25 [159]
	7.19† [183]			7.00 [178]												8.00 [203]
				8.00 [203]												
GMS R	2"	8.50* [216]	10.25 [260]	7.00* [178]	3.75 [95]	5.75 [146]	.53 [13]	3.03 [77]	12.50 [318]	8.43 [214]	1.38 [35]	8.35 [212]	11.31 [287]	.38 [10] x 2.25 [57]	1.50 [38]	
				7.00* [178]												7.00* [178]
	7.19† [183]			7.00* [178]												7.00* [178]
				7.00* [178]												7.00* [178]

\* STANDARD DIMENSION

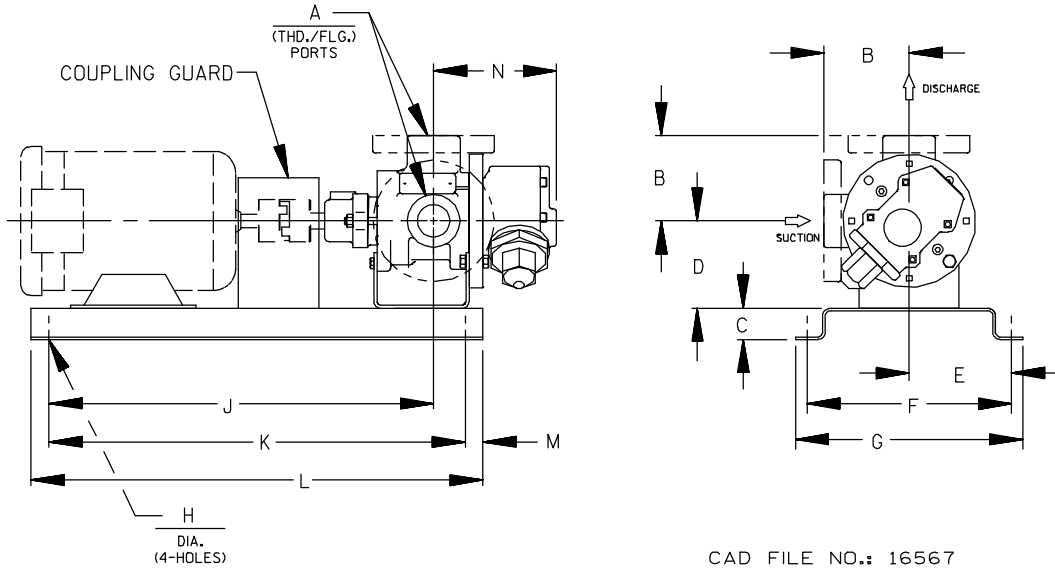
† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

**THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO**  
**GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA**



## DIRECT FLEX DRIVE OPTION DIMENSIONS



CAD FILE NO.: 16567

PUMP MODEL	PUMP DIMENSIONS - INCHES[MILLIMETERS]														
	A	B	MOTOR FRAME	C	D	E	F	G	H	J	K	L	M	N	
GMS D	1"	2.50*	56 (H)	2.00	3.50*	4.44	8.88	10.14	.56	20.04	19.25	25.25	3.00	4.97	
		[64]	143T/145T	[51]	[89]	[113]	[228]	[258]		[509]	[489]	[841]	[78]		
		2.75 †	182T/184T	4.00	4.50	7.75	15.50	17.50		26.41	23.50	33.50	5.00		[126]
		[70]	213T/215T	[102]	[114]	[197]	[394]	[445]		[671]	[597]	[851]	[127]		
GMS G	1- 1/2"	3.50*	56 (H)	2.00	3.50*	4.44	8.88	10.14	.56	20.20	19.25	25.25	3.00	5.71	
		[89]	143T/145T	[51]	[89]	[113]	[228]	[258]		[513]	[489]	[841]	[76]		
	2"	3.75 †	182T/184T	4.00	4.50	7.75	15.50	17.50	26.57	23.50	33.50	5.00	[145]		
		[95]	213T/215T	[102]	[114]	[197]	[394]	[445]	[675]	[597]	[851]	[127]			
GMS J	2"	4.50*	182T/184T	4.00	4.50	9.50	19.00	21.00	.69	36.16	35.50	45.50	5.00	8.49	
		[114]	213T/215T		[114]										[133]
	2- 1/2"	5.00 †	254T/256T	6.25	9.50	19.00	21.00	.69	36.16	35.50	45.50	5.00	[216]		
		[127]	284T/286T	[159]	[241]	[483]	[533]	[18]	[918]	[902]	[1156]	[127]			
GMS N	1- 1/2"	5.12*	182T/184T	4.00	4.50	9.50	19.00	21.00	.69	35.44	35.50	45.50	5.00	7.59	
		[130]	213T/215T		[114]										[133]
	2"	7.19 †	254T/256T	6.25	9.50	19.00	21.00	.69	35.44	35.50	45.50	5.00	[193]		
		[183]	284T/286T	[159]	[241]	[483]	[533]	[18]	[900]	[902]	[1158]	[127]			
3"	8.00*	324T/326T	8.00	9.50	19.00	21.00	.69	35.44	35.50	45.50	5.00	8.70			
	[203]		[203]	[241]	[483]	[533]	[18]	[900]	[902]	[1158]	[127]	*			

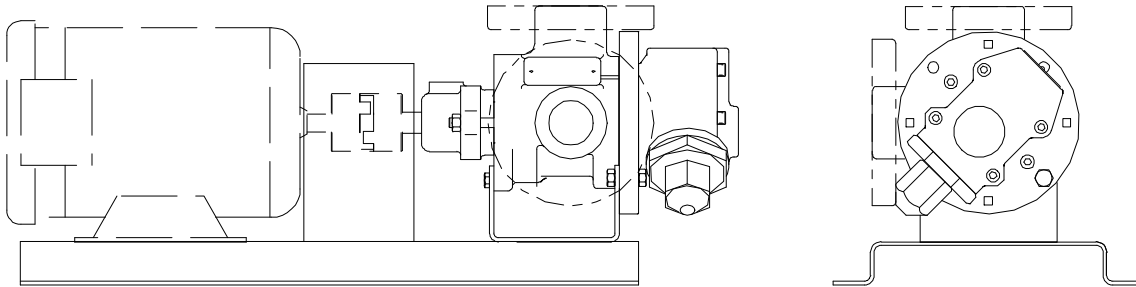
\* STANDARD DIMENSION

† 180° HOUSING

┆ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSICAST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSIPIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

## DIRECT FLEX DRIVE OPTIONS

Drive Assembly Number Includes Base, Coupling & Guard, But **Not** the Motor



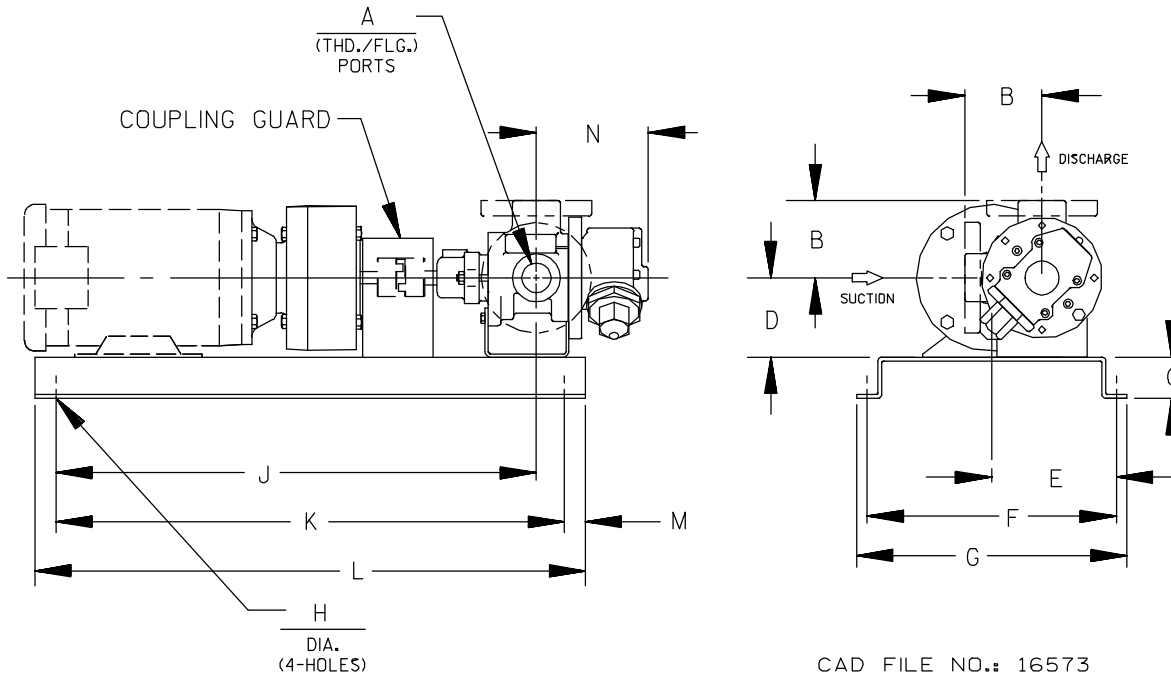
CAD FILE NO.: 16567

PUMP MODEL NUMBER	60 HZ. RPM	FRAME	MTG. FT. OPTION REQ.	DRIVE ASSY NO.
<b>GMS D</b>	1750 1150 850	56/56H	STD	90251-082
		143T/145T	STD	90251-084
		182T/184T	80F	90251-090
		213T/215T	80J	90251-094
<b>GMS G</b>	1750 1150 850	56/56H	STD	90251-160
		143T/145T	STD	90251-162
		184	80F	90221-156
		182T/184T	80F	90251-168
		213T/215T	80J	90251-176
		254T	80P	90251-180
<b>GMS J</b>	850	182T/184T	80F	90251-310
		213T/215T	STD	90251-318
		254T/256T	80P	90251-330
		284T/286T	80S	90251-338
<b>GMS N</b>	850	254T/256T	80P	90251-394
		284T/286T	80S	90251-402
		324T/326T	80V	90251-410

NOTE: CONSULT FACTORY FOR OPTIONS NOT SHOWN.



## GRR REDUCER C-FLANGE FLEX DRIVE OPTION DIMENSIONS (56C - 215TC Frame Size Range)



CAD FILE NO.: 16573

PUMP MODEL	PUMP DIMENSIONS															
	A	B	MOTOR FRAME	C	D	E	F	G	H	J	K	L	M	N		
GMS D	1"	2.50 * [64]	56C	2.00 [51]	3.50 * [89]	6.50 [165]	13.00 [330]	15.00 [381]	.56 [14]	19.98 [507]	25.50 [648]	31.50 [800]	3.00 [76]	4.98 [126]		
		2.75 † [70]	184C			7.31 [186]	14.62 [371]	16.62 [422]		26.68 [678]	37.25 [946]	43.25 [1098]				
		3.19 † [61]	143TC/145TC													
		4.00 † [102]	182TC/184TC													
			213TC/215TC													
GMS G	1-1/2"	3.50 * [89]	56C	2.00 [51]	3.50 * [89]	6.50 [165]	13.00 [330]	15.00 [381]	.58 [14]	20.11 [511]	25.50 [648]	31.50 [800]	3.00 [76]	5.72 [145]		
		3.75 † [95]	184C			7.31 [186]	14.62 [371]	16.62 [422]		26.81 [681]	37.25 [946]	43.25 [1098]				
	4.00 † [102]	143TC/145TC														
	4.00 † [102]	182TC/184TC	4.50 [114]													
			213TC/215TC		5.25 [133]											
GMS J	2"	4.50 * [114]	182TC/184TC	2.00 [51]	4.50 [114]	7.31 [186]	14.62 [371]	16.62 [422]	.56 [14]	30.20 [767]	32.00 [813]	38.00 [965]	3.00 [76]	8.50 [216]		
	2-1/2"	5.00 † [127]														
		6.00 † [152]	213TC/215TC								5.25 * [133]					
	3"	6.31 † [160]														
GMS N	1-1/2"		182TC/184TC	2.00 [51]	4.50 [114]	7.31 [186]	14.62 [371]	16.62 [422]	.56 [14]	* 29.48 [749]			3.00 [76]	7.59 [193]		
	2"	5.12 * [130]														
		2-1/2"								213TC/215TC	5.25 * [133]					
	3"		7.19 † [183]													

\* STANDARD DIMENSION

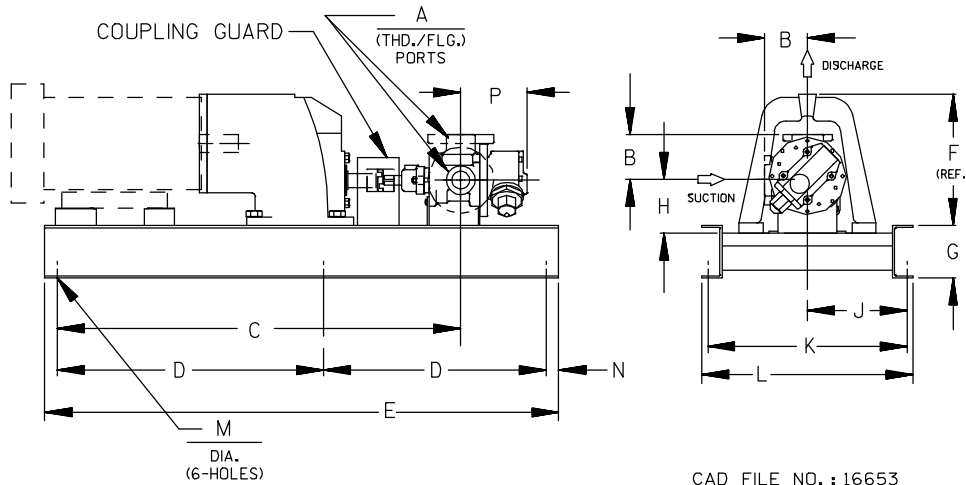
† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125# OR 250# ANSI/AST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.





## GRR REDUCER C-FLANGE FLEX DRIVE OPTION DIMENSIONS (213TC - 326TC Frame Size Range)



CAD FILE NO. : 16653

PUMP MODEL	PUMP DIMENSIONS														
	A	B	MOTOR FRAME	C	D	E	F	G	H	J	K	L	M	N	P
GMS J	2"	4.50 * [114]	213TC/215TC	41.57 [1056]	23.00 [584]	56.00 [1422]	12.14 [308]								
	2 1/2"	5.00 † [127]	254TC/256TC	42.03 [1068]											
		6.00 † [152]	254TC/256TC	44.76 [1137]	24.12 [613]	58.25 [1480]		8.00 [203]	6.25 [159]	10.12 [257]	20.25 [514]	22.50 [572]	.69 [18]	5.00 [127]	8.49 [216]
	3"	6.31 † [160]	284TC/286TC	46.98 [1183]	25.75 [654]	61.50 [1562]	14.91 [378]								
GMS N	1 1/2"		213TC/215TC	41.98 [1066]											
	2"	5.12 * [130]	213TC/215TC	40.85 [1038]	23.00 [584]	56.00 [1422]	12.14 [308]								
				254TC/256TC	42.42 [1077]										7.59 [193]
	2 1/2"	7.19 † [183]	254TC/256TC	41.31 [1049]	24.12 [613]	58.25 [1480]		8.00 [203]	6.25 [159]	10.12 [257]	20.25 [514]	22.50 [572]	.69 [18]	5.00 [127]	8.70 [221]
3"		284TC/286TC	45.15 [1147]	25.75 [654]	61.50 [1562]	14.91 [379]								*	
GMS R	2"		184TC	38.50 [978]	22.62 [575]	55.25 [1403]	10.80 [274]								
	2 1/2"	6.50 * [165]	213TC/215TC												
				213TC/215TC	43.80 [1112]	25.28 [642]	60.56 [1538]	12.26 [311]	8.00 [203]	7.00 [178]	10.38 [264]	20.75 [527]	23.00 [584]	.69 [18]	5.00 [127]
	3"	7.19 † [183]	254TC/256TC												
4"		254TC/256TC	48.75 [1238]	27.75 [705]	65.50 [1664]	16.04 [407]									
		284TC/286TC													

\* STANDARD DIMENSION

† 180° HOUSING

‡ PORTS ARE COMPATIBLE WITH 125\* OR 250\* ANSI/AST IRON FLANGES. ALL OTHER PORTS ARE TAPPED NPT FOR ANSI PIPE. OPTIONAL (DIN) FLANGES OR TAPPED (BSP) PORTS AVAILABLE FOR EXPORT MARKET.

**CROSS REFERENCE OF MOTOR FRAMES TO GEARBOX RATIOS:**

- Ⓐ 2:1, 3.15:1 (15 hp Only), 2.5:1
- Ⓑ 3.15:1 (20 hp Only), 4:1, 5:1
- Ⓒ 2.5:1, 4:1
- Ⓓ 3.15:1, 5:1

**REFERENCE: PUMP FOOT BRACKET OPTIONS**

MOTOR FRAME	CENTER HEIGHT	PUMP OPTION
213TC thru 286TC	6.25"	80P ("J" & "N" Size Only)
182TC thru 326TC	7.00"	STD ("R" Size Only)



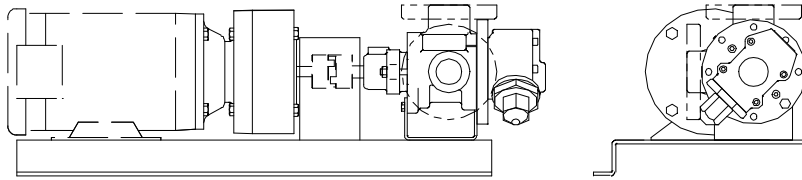
# GMS

SEC. 525

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## GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

(Drive Assembly Number Includes Base, Coupling, Guard and Gear Reducer, But **NOT** the Motor)



CAD FILE NO.: 16573

PUMP MODEL	RPM @ 1750	RPM @ 1150	REDUCER ①		FRAME	MTG.FT. OPTION REQ.	DRIVE ASSY NO.		
			MAX HP @ 1750	MAX HP @ 1150					
GMS D	875	575	2.00:1	5.65	3.73	56C	STD	90253-510	
				11.70	7.72	143TC/145TC	STD	90253-516	
				11.70	7.72	182C/184C	80F	90253-519	
				13.01	8.59	182TC/184TC	80F	90253-526	
	580	383	3.00:1	3.76	2.48	56C	STD	90253-530	
				8.10	5.35	143TC/145TC	STD	90253-533	
				8.10	5.35	182C/184C	80F	90253-539	
	440	288	4.00:1	10.62	7.01	182TC/184TC	80F	90253-546	
				2.82	1.86	56C	STD	90253-550	
				5.90	3.89	143TC/145TC	STD	90253-553	
	350	230	5.00:1	5.90	3.89	182C/184C	80F	90253-562	
				7.24	4.78	182TC/184TC	80F	90253-566	
				2.26	1.49	56C	STD	90253-570	
				5.20	3.43	143TC/145TC	STD	90253-573	
	GMS G	875	575	2.00:1	5.20	3.43	182C/182C	80F	90253-582
					5.98	3.95	182TC/184TC	80F	90253-586
5.65					3.73	56C	STD	90253-610	
11.70					7.72	143TC/145TC	STD	90253-616	
11.70					7.72	182C/184C	80F	90253-624	
580		383	3.00:1	13.01	8.59	182TC/184TC	80F	90253-626	
				13.01	8.59	213TC/213TC	80J	90253-628	
				3.76	2.48	56C	STD	90253-630	
				8.10	5.35	143TC/145TC	STD	90253-639	
440		288	4.00:1	8.10	5.35	182C/184C	80F	90223-639	
	10.62			7.01	182TC/184TC	80F	90253-646		
	10.62			7.01	213TC/215TC	80J	90253-648		
	2.82			1.86	56C	STD	90253-660		
	5.90			3.89	143TC/145TC	STD	90253-663		
350	230	5.00:1	5.90	3.89	182C/184C	80F	90253-672		
			7.24	4.78	182TC/184TC	80F	90253-675		
			7.24	4.78	213TC	80J	90253-677		
			2.26	1.49	56C	STD	90253-690		
			5.20	3.43	143TC/145TC	STD	90253-693		
				5.20	3.43	182C/184C	80F	90253-702	
				5.89	3.95	182TC/184TC	80F	90253-705	
				5.89	3.95	213TC	80J	90253-707	

(CONT'D)

① Listed reducer horsepower rated for Standard Service (8-10 hrs/day). For Light Service (3-5 hrs/day) multiply maximum rated horsepower by 1.1. For Heavy Service (16-24 hrs/day) multiply maximum rated horsepower by 0.9.

NOTE: CONSULT FACTORY FOR OPTIONS NOT SHOWN.



# GMS

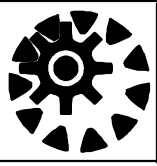
## GRR REDUCER C-FLANGE FLEX DRIVE OPTIONS

(Drive Assembly Number Includes Base, Coupling, Guard and Gear Reducer, But **NOT** the Motor)

PUMP MODEL	RPM @ 1750	RPM @ 1150	REDUCER <sup>①</sup>		FRAME	MTG.FT. OPTION REQ.	DRIVE ASSY NO.	
			MAX HP @ 1750	MAX HP @ 1150				
GMS J	875	575	2.00:1	13.01	8.59	182TC/184TC	80F	90253-722
				13.01	8.59	213TC/215TC	STD	90253-724
				36.29	23.95	254TC/256TC	80P	90253-728
				36.29	23.95	284TC/286TC	80P	90253-732
	580	383	3.00:1	10.62	7.01	182TC/184TC	80F	90253-735
				10.62	7.01	213TC/215TC	80J	90253-741
	550	365	3.15:1	25.76	17.00	254TC/256TC	80P	90253-743
				25.76	17.00	284TC	80P	90253-746
				42.96	28.35	286TC	80P	90253-747
	440	288	4.00:1	7.24	4.78	182TC/184TC	80F	90253-750
				7.24	4.78	213TC	80J	90253-754
	350	230	5.00:1	5.98	3.95	182TC/184TC	80F	90253-767
				5.98	3.95	213TC	STD	90253-769
				16.01	10.57	215TC	80P	90253-774
				30.49	20.12	254TC/256TC	80J	90253-778
	GMS N	875	575	2.00:1	13.01	8.59	213TC/215TC	STD
36.29					23.95	254TC/256TC	80P	90253-801
36.29					23.95	284TC/286TC	80P	90253-805
580		383	3.00:1	10.62	7.01	213TC/215TC	STD	90253-814
				25.76	17.00	254TC/256TC	80P	90253-819
550		365	3.15:1	42.96	28.35	284TC/286TC	80P	90253-820
				7.24	4.78	213TC	STD	90253-827
350		230	5.00:1	5.98	3.95	213TC	STD	90253-842
				16.01	10.57	215TC	80P	90253-845
				30.49	20.12	254TC/256TC	80P	90253-847
GMS R	640	417	2.76:1	80.20	52.93	324TC	STD	90253-874
				80.20	52.93	364TC	STD	90253-878
	555	365	3.15:1	10.10	6.66	213TC/215TC	STD	90253-881
				25.76	17.00	254TC/256TC	STD	90253-886
				42.96	28.35	284TC/286TC	STD	90253-891
	520	340	3.38:1	66.20	43.69	324TC	STD	90253-896
				66.20	43.69	326TC	STD	90253-898
	440	288	4.00:1	9.42	6.22	184TC	STD	90253-901
				20.00	13.20	213TC/215TC	STD	90253-904
				38.16	25.18	254TC/256TC	STD	90253-909
				38.16	25.18	284TC	STD	90253-913
	420	278	4.13:1	40.40	26.40	286TC	STD	90253-916
				54.40	35.90	324TC	STD	90253-918
	350	230	5.00:1	6.10	4.03	184TC	STD	90253-921
				16.01	10.57	213TC/215TC	STD	90253-924
				30.49	20.12	254TC/256TC	STD	90253-929
30.49				20.12	284TC/286TC	STD	90253-933	

① Listed reducer horsepower rated for Standard Service (8-10 hrs/day). For Light Service (3-5 hrs/day) multiply maximum rated horsepower by 1.1. For Heavy Service (16-24 hrs/day) multiply maximum rated horsepower by 0.9.

NOTE: CONSULT FACTORY FOR OPTIONS NOT SHOWN.

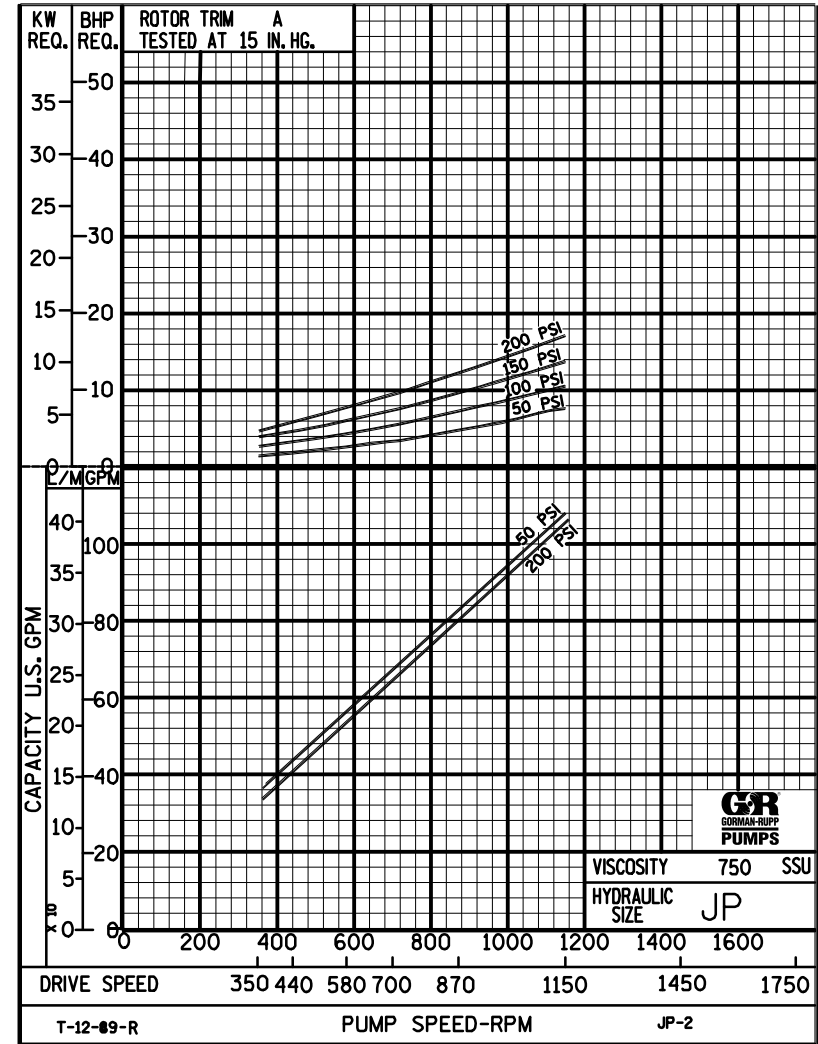
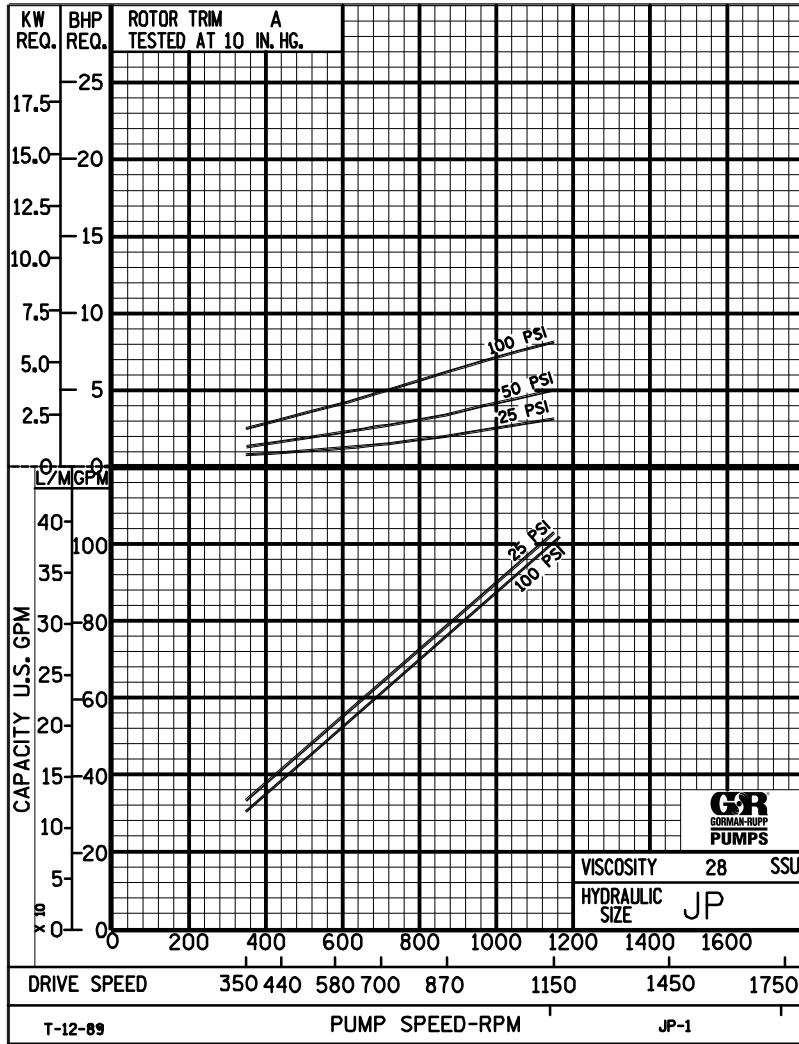


# PERFORMANCE CURVES

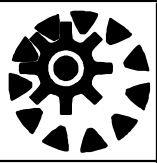
## SPEED VS. CAPACITY/HORSEPOWER

# JP

Hydraulic  
Size



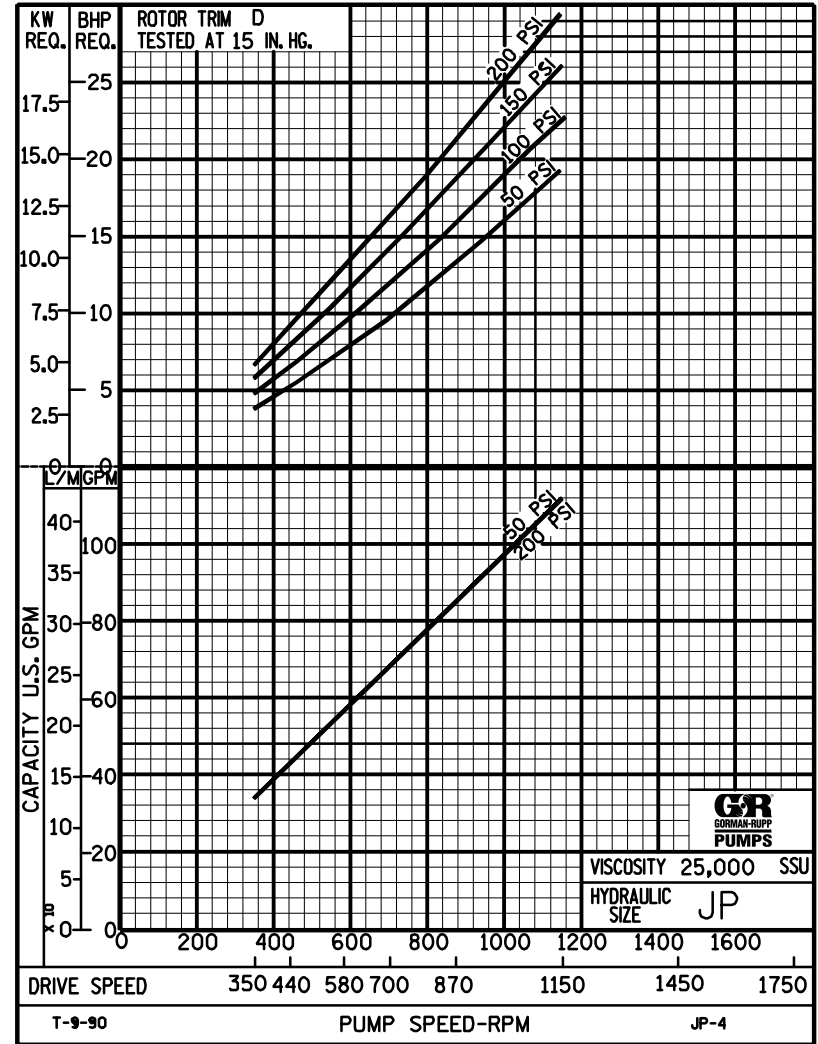
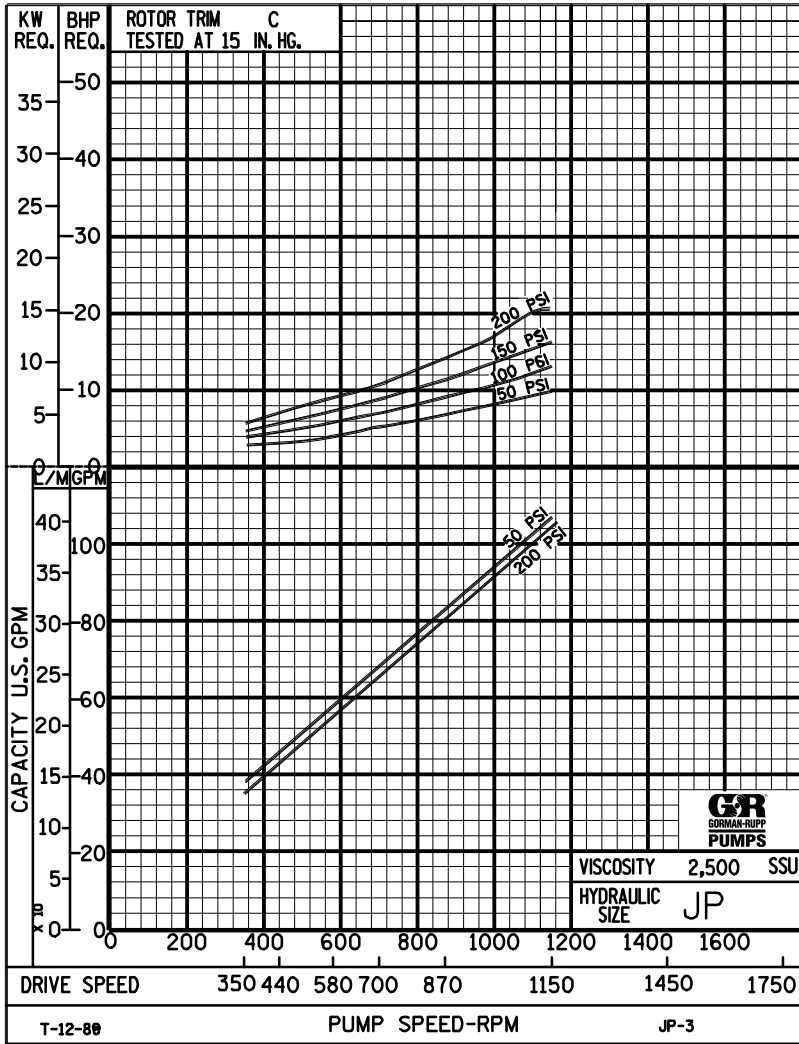
THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO  
 GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA



# PERFORMANCE CURVES

## SPEED VS. CAPACITY/HORSEPOWER

**JP** Hydraulic Size



THE GORMAN-RUPP COMPANY • MANSFIELD, OHIO  
 GORMAN-RUPP OF CANADA LIMITED • ST. THOMAS, ONTARIO, CANADA



# JP

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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107 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		HEAVY DUTY									
							50	75	100	150	200	25	50	75	100	150	200	300	400					
107	1150	STD	28	4.8	.01	.01	.01	.01	.01	77	104	143			103	100	100	99						
			32		.23	.07	.03	.01	.01						3.2	5.0	6.3	8.1						
			38	4.8	.29	.09	.04	.02	.01	78	105	144	188			105	103	102	101	100				
			50		.34	.11	.05	.02	.01							3.5	5.5	6.8	8.6	12				
			70	4.8	.39	.12	.05	.02	.01	79	107	144	189	240			106	105	104	103	102	101		
			100		.44	.14	.06	.02	.01								3.8	6.0	7.4	9.1	13	16		
			150	4.8	.50	.15	.07	.03	.01	80	107	145	189	241			108	106	106	105	104	103		
			200		.54	.17	.07	.03	.01								4.1	6.5	8.0	9.6	13	16		
			300	4.8	.61	.19	.08	.03	.01	81	109	145	190	242			109	108	107	107	106	105		
			500		.64	.22	.09	.04	.01								4.4	7.1	8.5	10	14	17		
		750	4.8	.70	.26	.13	.06	.02	82	111	146	190	243			109	109	108	108	108	107			
		1,000		.94	.35	.17	.07	.03								4.7	7.6	9.1	11	14	17			
		2,000	5.7	1.87	.69	.34	.14	.05	86	118	153	196	252			109	109	109	108	108	108			
		3,500		3.28	1.21	.59	.25	.09								6.1	9.9	12	13	16	20			
		5,000	6.2	4.68	1.73	.85	.36	.12	90	123	156	200	256			110	110	109	109	109	109			
		7,500		7.02	2.59	1.27	.54	.18								9.9	13	15	16	20	23			
		10,000	6.8	9.36	3.45	1.70	.71	.24	96	129	160	204	260			110	110	110	109	109	109			
		15,000		14.1	5.17	2.54	1.07	.36								14	16	18	19	23	26			
		20,000	7.3	18.7	6.89	3.39	1.42	.48	102	135	164	208	264			111	110	110	110	109	109			
		25,000		23.4	8.62	4.23	1.78	.60								18	19	21	23	26	30			
50,000																								
75,000																								
100,000																								
150,000																								
200,000																								
250,000																								

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



# JP

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**81 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						
							50	75	100	150	200	25	50	75	100	150	200	300	400						
81	870	STD	28	3.0	.01	.01	.01	.01	.01	74	100	133			77	75	75	74							
			32		.14	.04	.02	.01	.01						2.2	3.4	4.7	6.0							
			38	3.0	.18	.06	.03	.01	.01	74	100	133	174			78	77	76	75	75					
			50		.21	.07	.03	.01	.01							2.3	3.7	5.0	6.2	7.5					
			70	3.0	.24	.08	.03	.01	.01	74	101	134	174	226			79	78	78	77	76	75			
			100		.27	.09	.04	.02	.01								2.5	4.0	5.2	6.5	8.0	10			
			150	3.0	.31	.10	.04	.02	.01	75	101	134	175	226			81	79	79	78	78	77			
			200		.34	.11	.05	.02	.01								2.6	4.3	5.5	6.8	8.6	11			
			300	3.0	.38	.12	.05	.02	.01	75	102	135	175	227			81	81	80	79	79	78			
			500		.44	.13	.07	.03	.01								2.8	4.5	5.8	7.0	9.2	12			
		750	3.0	.53	.20	.10	.04	.02	75	102	135	175	227			82	81	81	80	80.5	80				
		1,000		.71	.26	.13	.06	.02								3.0	4.8	6.0	7.3	9.7	12				
		2,000	3.7	1.42	.52	.26	.11	.04	76	104	137	177	229			82	82	81	81	81	81				
		3,500		2.48	.92	.45	.19	.07								4.2	6.8	7.9	9.0	12	14				
		5,000	4.2	3.55	1.31	.64	.27	.09	80	109	139	179	231			83	83	82	82	82	82				
		7,500		5.32	1.96	.96	.41	.14								6.8	9.0	10	11	14	16				
		10,000	4.6	7.09	2.61	1.28	.54	.18	84	114	143	183	235			84	84	83	83	83	82				
		15,000		10.7	3.92	1.92	.81	.27								9.3	11	12	14	16	19				
		20,000	5.0	14.2	5.22	2.57	1.08	.37	89	120	149	187	241			85	84	84	84	84	83				
		25,000		17.7	6.52	3.21	1.35	.46								12	13	14	16	18	21				
50,000	7.6	35.5	13.1	6.41	2.69	.91	95	126	155	193	247			85	84	84	84	84	83						
75,000		-	-	-	-	-								17	18	21	23	24	27						
100,000																									
150,000																									
200,000																									
250,000																									

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



# JP

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**54 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												
54	580	STD	28	1.9	.01	.01	.01	.01	.01	62	87	114			51	50	50	49													
			32		.07	.02	.01	.01	.01							1.5	2.3	3.1	4.0												
			38	1.9	.09	.03	.01	.01	.01	62	89	116	166			52	51	51	50	50											
			50		.10	.03	.02	.01	.01							1.6	2.5	3.3	4.2	5.0											
			70	1.9	.12	.04	.02	.01	.01	63	90	118	167	219		53	52	52	51	51	50										
			100		.14	.04	.02	.01	.01							1.7	2.7	3.5	4.4	5.4	6.9										
			150	1.9	.16	.05	.02	.01	.01	64	91	120	167	219		54	53	53	52	52	51										
			200		.17	.05	.02	.01	.01							1.8	2.9	3.7	4.5	5.8	7.3										
			300	1.9	.19	.06	.03	.01	.01	65	92	122	168	220		54	54	53	53	53	52										
			500		.24	.09	.05	.02	.01							1.9	3.0	3.9	4.7	6.2	7.8										
		750	1.9	.36	.13	.07	.03	.01	66	93	124	168	220		54	54	54	54	54	53											
		1,000		.47	.18	.09	.04	.01							2.0	3.2	4.0	4.9	6.5	8.2											
		2,000	2.6	.95	.35	.17	.07	.03	70	95	124	168	222		55	55	54	54	54	54											
		3,500		1.66	.61	.30	.13	.04							2.8	4.6	5.3	6.1	7.8	9.5											
		5,000	3.0	2.36	.87	.43	.18	.06	72	97	126	170	224		55	55	55	55	55	54											
		7,500		3.55	1.31	.64	.27	.09							4.6	6.0	6.8	7.6	9.3	11											
		10,000	3.5	4.73	1.74	.86	.36	.12	74	99	128	172	226		56	56	56	55	55	55											
		15,000		7.09	2.61	1.28	.54	.18							6.3	7.4	8.2	9.1	11	13											
		20,000	3.9	9.45	3.48	1.71	.72	.24	78	103	128	174	226		57	56	56	56	56	56											
		25,000		11.8	4.35	2.14	.90	.30							8.0	8.9	9.6	11	12	14											
50,000	6.1	23.6	8.70	4.27	1.79	.61	82	107	132	178	230		57	56	56	56	56	56													
75,000		35.5	13.1	6.41	2.69	.91							11	12	14	16	16	18													
100,000																															
150,000																															
200,000																															
250,000																															

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





# JP

## PUMP HYDRAULIC SIZE CHART

SEC. 500

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**32 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)											
					1½"	2"	2½"	3"	4"	LOW PRES R/V			HI PRES R/V		MEDIUM DUTY AND HEAVY DUTY				HEAVY DUTY ONLY							
32	350	STD	28	1.3	.01	.01	.01	.01	.01	56	82	113			31	30	30	29								
			32		.03	.01	.01	.01	.01						.89	1.4	1.9	2.4								
			38	1.3	.04	.01	.01	.01	.01	56	82	113	159			31	31	30	30	30						
			50		.04	.02	.01	.01	.01							.94	1.5	2.0	2.5	3.0						
			70	1.3	.05	.02	.01	.01	.01	56	83	113	159	211			32	31	31	31	30.7	30.4				
			100		.06	.02	.01	.01	.01								1.0	1.6	2.1	2.6	3.2	4.1				
			150	1.3	.06	.02	.01	.01	.01	56	83	113	159	211			32	32	31	31	31	31				
			200		.06	.02	.01	.01	.01								1.1	1.7	2.2	2.7	3.5	4.4				
			300	1.3	.09	.03	.02	.01	.01	57	84	113	159	211			32	32	32	32	32	31				
			500		.14	.05	.03	.01	.01								1.1	1.8	2.3	2.8	3.7	4.7				
		750	1.3	.21	.08	.04	.02	.01	57	84	113	159	211			32	32	32	32	32	32					
		1,000		.28	.11	.05	.02	.01								1.2	1.9	2.4	2.9	3.9	5.0					
		2,000	2.0	.56	.21	.10	.04	.02	59	86	115	159	211			33	33	32	32	32	32					
		3,500		.98	.36	.18	.08	.03								1.7	2.7	3.2	3.6	4.7	5.7					
		5,000	2.4	1.40	.52	.26	.11	.04	61	88	117	160	212			33	33	33	33	33	32					
		7,500		2.10	.78	.38	.16	.06								2.7	3.6	4.1	4.5	5.6	6.6					
		10,000	2.9	2.80	1.03	.51	.21	.07	63	90	120	161	213			33	33	33	33	33	33					
		15,000		4.20	1.55	.76	.32	.11								3.8	4.5	4.9	5.4	6.5	7.5					
		20,000	3.2	5.60	2.06	1.02	.43	.15	66	93	123	161	213			34	34	34	33	33	33					
		25,000		7.00	2.58	1.27	.53	.18								4.8	5.3	5.8	6.3	7.4	8.4					
50,000	5.4	14.0	5.16	2.53	1.06	.36	69	96	126	164	216			34	34	34	33	33	33							
75,000		21.0	7.73	3.80	1.60	.54								6.7	7.3	8.2	9.4	9.8	11							
100,000	8.0	28.0	10.3	5.07	2.13	.72	73	100	130	168	220			34	34	34	33	33	33							
150,000		42.0	15.5	7.60	3.19	1.08								8.1	8.8	10	11	12	13							
200,000																										
250,000																										

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