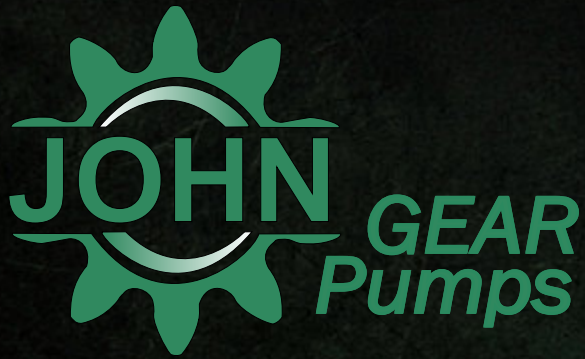




TECHNICAL CATALOGUE

PARTS • SPECIFICATIONS
ORDERING INFORMATION • DIMENSIONS



QUALITY COMPONENTS
BUILT TO PERFORM



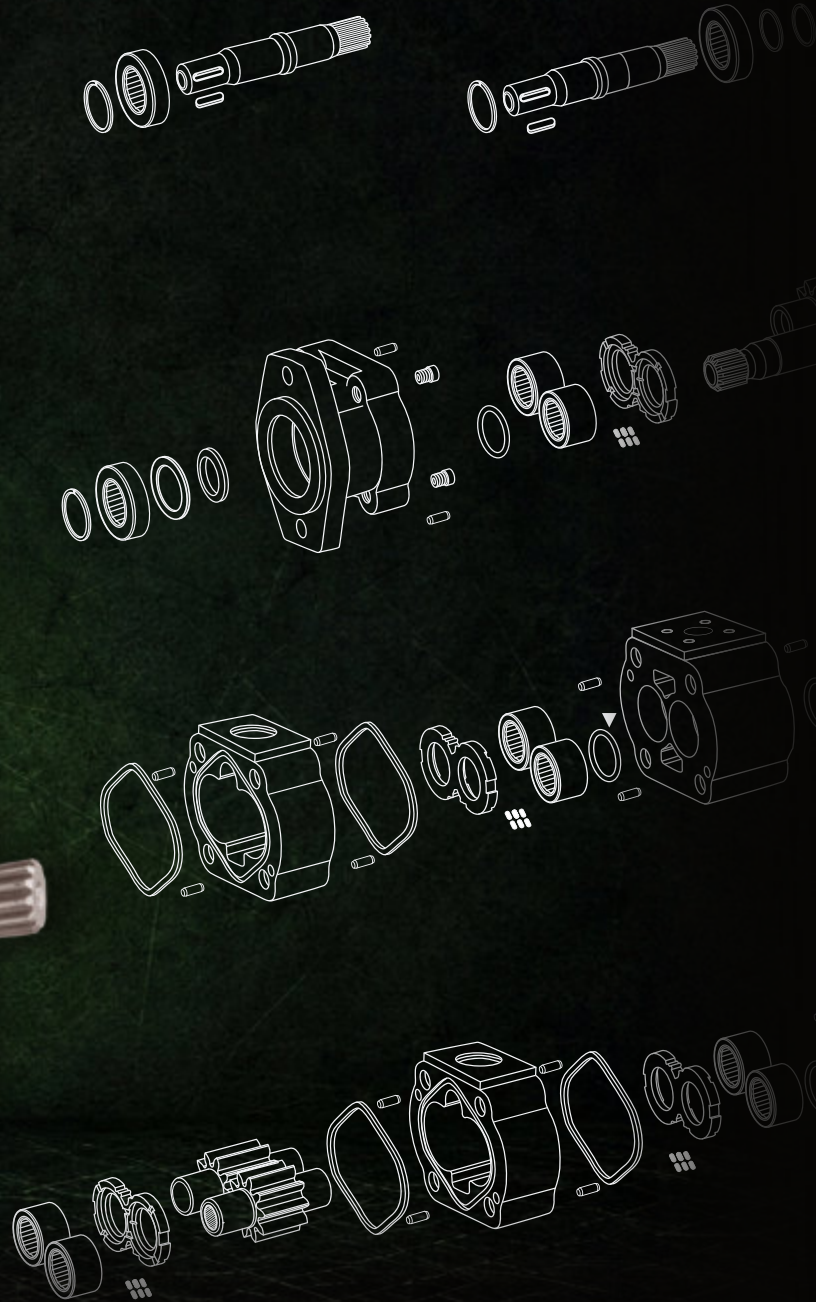
OEM
COMPATIBLE



FAST LEAD TIMES
CUSTOM SOLUTIONS



TECHNICAL SUPPORT
YOU CAN RELY ON



2026
EDITION



JOHN GEAR PUMPS ARE ASSEMBLED & TESTED IN ONTARIO, CANADA

TABLE OF CONTENT

Series 21 - Bearing Pump and Motor

Page 2

JG21 Frame Size	05	07	10	12	15	17	20
Displacement in ³ /rev	.99	1.48	1.97	2.46	2.96	3.45	2.94
Max continuous pressure - PSI	3500	3500	3500	3500	3500	2500	2500
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Series 31 - Bearing Pump and Motor

Page 6

JG31 Frame Size	05	07	10	12	15	17	20
Displacement in ³ /rev	.99	1.48	1.97	2.46	2.96	3.45	2.94
Max continuous pressure - PSI	3000	3000	3000	3000	3000	2500	2500
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Series 51 - Bearing Pump and Motor

Page 10

JG51 Frame Size	07	10	12	15	17	20	22
Displacement in ³ /rev	1.91	2.55	3.19	3.83	4.46	5.10	5.74
Max continuous pressure - PSI	3000	3000	3000	3000	3000	2500	2500
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Series 76 - Bearing Pump and Motor

Page 14

JG76 Frame Size	15	17	20	22	25	27	30
Displacement in ³ /rev	6.15	7.18	8.20	9.23	10.25	11.28	12.30
Max continuous pressure - PSI	3000	3000	2500	2500	2500	2000	2000
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Series 315 - Bushing Pump and Motor

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JG315 Frame Size	05	07	10	12	15	17	20
Displacement in ³ /rev	0.62	0.93	1.25	1.55	1.86	2.17	2.48
Max continuous pressure - PSI	3500	3500	3500	3500	3300	2900	2500
Max Speed - RPM	3000	3000	3000	3000	3000	3000	3000

Series 330 - Bushing Pump and Motor

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JG330 Frame Size	05	07	10	12	15	17	20
Displacement in ³ /rev	0.99	1.48	1.97	2.46	2.96	3.45	3.94
Max continuous pressure - PSI	3500	3500	3500	3500	3500	3250	3000
Max Speed - RPM	3000	3000	3000	3000	3000	3000	3000

Series 350 - Bushing Pump and Motor

Page 26

JG350 Frame Size	10	12	15	17	20	22	25
Displacement in ³ /rev	2.55	3.19	3.83	4.46	5.10	5.74	6.38
Max continuous pressure - PSI	3500	3500	3500	3250	3000	2750	2500
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Series 365 - Bushing Pump and Motor

Page 30

JG365 Frame Size	10	12	15	17	20	22	25
Displacement in ³ /rev	3.60	4.50	5.40	6.30	7.20	8.10	9.00
Max continuous pressure - PSI	3500	3500	3500	3500	3500	3200	3000
Max Speed - RPM	2400	2400	2400	2400	2400	2400	2400

Bearing Parts List

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Bushing Parts List

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How to Identify a Pump/Motor

Page 38

Dump Pumps & Walking Floor Pumps

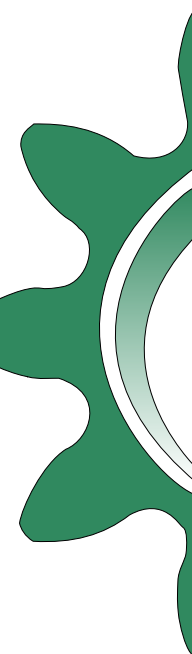
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Aluminium Gear Pumps

Page 42

Contact / Warranty Information

Page 44





JOHN GEAR PUMPS & MOTORS

John Gear Pumps - 21 Series models are interchangeable with Commercial, Parker, Permco and Muncie.

They are available in a variety of mounting flanges, shaft configurations and porting options.

Our 21 series pumps offer working pressure up to 3500 psi ideal for the most demanding of applications.



HEAVY DUTY

Dowelled cast iron construction with working pressure up to 3500psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.50	1/2"	0.99	16.1	3500	241
0.75	3/4"	1.48	24.2	3500	241
1.00	1"	1.97	32.3	3500	241
1.25	1-1/4"	2.46	40.4	3500	241
1.50	1-1/2"	2.96	48.4	3300	228
1.75	1-3/4"	3.45	56.5	2500	172
2.00	2"	3.94	64.6	2500	172

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)				
	1"	1-1/4"	1-1/2"	1-3/4"	2"
900	6.5 (24.5)	8 (30.5)	10 (38)	12 (45.5)	13.5 (51)
1200	9 (34)	11.5 (43.5)	14 (53)	16 (60.5)	18.5 (70)
1500	11.5 (43.5)	14.5 (55)	17.5 (66)	20.5 (77.5)	23.5 (89)
1800	14 (53)	18 (68)	21.5 (81.5)	25 (94.5)	29 (110)
2100	16.5 (62.5)	21 (79.5)	25 (94.5)	29.5 (111)	34 (128.5)
2400	19 (72)	24 (91)	29 (110)	34 (128.5)	39 (147.5)

Motor Performance Data

SPEED RPM	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)
	1"		1-1/2"		2"	
800	9 (34)	550 (62)	13 (49)	870 (98.5)	17 (64.5)	1150 (130)
1200	13 (49)	550 (62)	18 (68)	870 (98.5)	23.5 (89)	1150 (130)
1600	16 (60.5)	550 (62)	23 (87)	860 (97.5)	30.5 (115.5)	1140 (129)
2000	19.5 (74)	550 (62)	28 (106)	850 (96)	37 (140)	1125 (127)

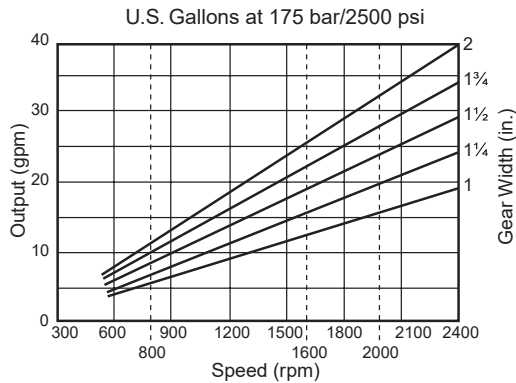
Note: Input Flow @ 2000psi | Output Torque @140 bar

JOHN GEAR PUMPS & MOTORS

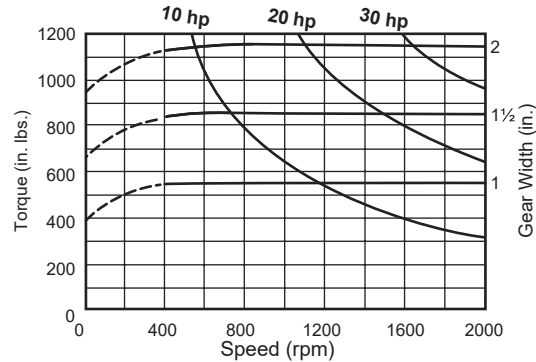


21 SERIES

Pump Performance
Average Output

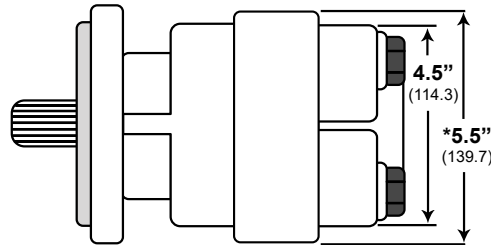


Motor Performance
Average Torque Output
(in. lbs.) at 140 bar/2000 psi



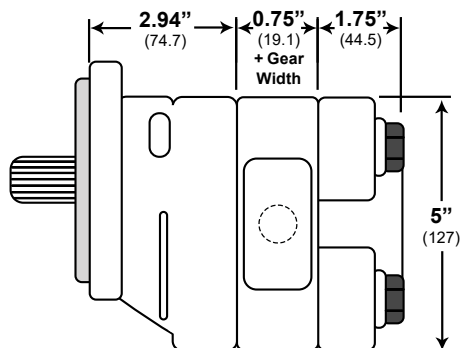
Dimensions - INCHES (mm)

Single Unit (top view)

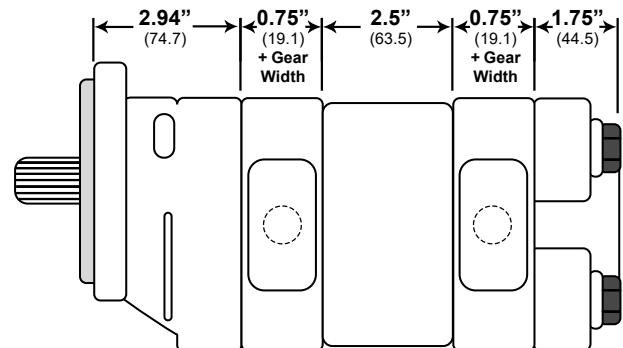


*width will change with size of Gear Section

Single Unit (side view)



Tandem Unit (side view)



Approximate Weight - LBS (kg)

GEAR WIDTH											
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	24 (11)	25 (11)	26 (12)	28 (13)	29 (13)	31 (14)	33 (15)	-	-	-	-
MULTI	21 (10)	22 (10)	23 (10)	24 (11)	25 (11)	26 (12)	28 (13)	-	-	-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 1/2" gear on the rear would be 26lbs + 21lbs for a total of 47lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	-	2850
SAE "A" Keyed	-	-
SAE "B" Spline	8580 TYPE 2: 6035	5850
SAE "B" Keyed	4925	4925
0.75 Dia Keyed	-	4150

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	13180	5850
SAE "BB" Keyed	7850	5850
SAE "C" Spline	-	5850
SAE "C" Keyed	-	5850
Connecting Shaft	-	5850

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

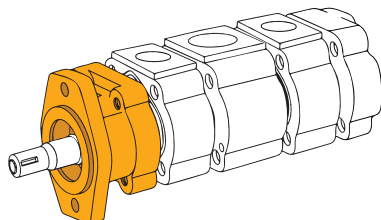
JGP21 - B - 3 46 - BI - ID 10 - 30 - B - IF 12 - 1*

Type¹

JGP = Pump
JGM = Motor

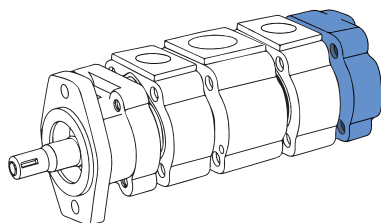
Unit²

A = Single Unit
B = Tandem Unit
C = Continental Shaft



Shaft End Cover³

1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
3 = Pump (Double Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
6 = Pump with Shaft Bearing (Double Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Port End Cover⁵

NPT Codes

Single Units		Tandem Units		Port Size	
				Left	Right
BE	BY	BI	BY	None	None
KE	KY	KI	KY	3/4"	None
LE	LY	LI	LY	None	3/4"
ME	MY	MI	MY	3/4"	3/4"
QU	QU	QU	QU	1"	1"
AI		AI		3/4"	1"
EI		EI		1"	3/4"

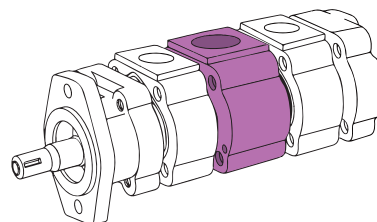
ORB Codes

Single Unit		Tandem Units		Port Size	
				Left	Right
CE	CY	CI	CY	3/4"	None
DE	DY	DI	DY	None	3/4"
FE	FY	FI	FY	3/4"	3/4"
GE	GY	GI	GY	1"	3/4"
HE	HY	HI	HY	3/4"	1"
JE	JY	JI	JY	1"	1"
MA	YO	MU	YO	1"	None
RA	RO	SU	RO	None	1"

Repeat for multi-section unit

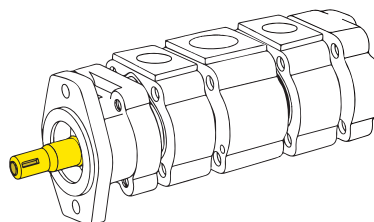
Connecting Shaft¹⁰

* for connecting multiple units
1 = Connecting Shaft



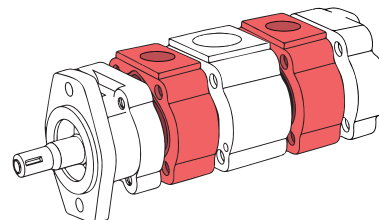
Bearing Carriers⁹

See next page for Bearing carrier options



Shaft Type⁸

07 = SAE 'C' 14 Tooth Spline 1.250" Dia. (Cont. Only)
12 = Keyed Shaft .75" Dia. (Cont. Only)
25 = SAE 'B' 13 Tooth Spline 0.875" Dia.
30 = SAE 'B' Keyed 0.875" Dia.
43 = SAE 'BB' Keyed 1" Dia.
95 = SAE 'A' 9 Tooth Spline 0.62" Dia. (Cont. Only)
65 = SAE 'B' 13 Tooth Spline 0.875 Dia. (Type 2)
98 = SAE 'BB' 15 Tooth Spline 1" Dia.



Gear Section^{6&7}

see next page for options.

▫ Shaded cells include extended studs.

JOHN GEAR PUMPS & MOTORS



Gear Section ⁶

NPT Codes

Code	Port Size		Gear Size						
	Left	Right	05	07	10	12	15	17	20
IL	1/2"	None	x	x	x				
IM	None	1/2"	x	x	x				
IR	1/2"	1/2"	x	x					
IC	3/4"	None		x	x	x	x	x	x
ID	None	3/4"		x	x	x	x	x	x
IF	3/4"	3/4"	x	x	x	x	x	x	x
IG	3/4"	1"			x	x	x	x	x
IH	3/4"	1-1/4"					x	x	
IJ	1"	3/4"			x	x	x	x	x
IK	1-1/4"	3/4"					x	x	
YC	1"	None			x	x	x	x	x
YD	None	1"			x	x	x	x	x
YF	1"	1"			x	x	x	x	x
YG	1"	1-1/4"					x	x	x
YH	1"	1-1/2"							x
YJ	1-1/4"	1"					x	x	x
YK	1-1/2"	1"							x
IA	1-1/4"	None					x	x	x
IB	None	1-1/4"					x	x	x
YL	1-1/4"	1-1/4"					x	x	x

Split Flange Codes

Code	Port Size		Gear Size						
	Left	Right	07	10	12	15	17	20	
UC	3/4"	None	x	x	x	x	x	x	
UD	None	3/4"	x	x	x	x	x	x	
UF	3/4"	3/4"	x	x	x	x	x	x	
UG	3/4"	1"		x	x	x	x	x	
UH	3/4"	1-1/4"			x	x	x	x	
UJ	1"	3/4"		x	x	x	x	x	
UK	1-1/4"	3/4"			x	x	x	x	
OC	1"	None			x	x	x	x	
OD	None	1"			x	x	x	x	
OF	1"	1"		x	x	x	x	x	
OG	1"	1-1/4"			x	x	x	x	
OH	1"	1-1/2"					x	x	
OJ	1-1/4"	1"			x	x	x	x	
OK	1-1/2"	1"					x	x	
OA	1-1/4"	None			x	x	x	x	
OB	None	1-1/4"			x	x	x	x	
OL	1-1/4"	1-1/4"				x	x	x	
OM	1-1/4"	1-1/2"					x	x	
OP	1-1/2"	1-1/4"					x	x	
OE	1-1/2"	None					x	x	
OU	None	1-1/2"					x	x	

ORB Codes

Code	Port Size		Gear Size						
	Left	Right	07	10	12	15	17	20	
EC	3/4"	None	x	x	x	x	x	x	
ED	None	3/4"	x	x	x	x	x	x	
EF	3/4"	3/4"	x	x	x	x	x	x	
EG	3/4"	1"		x*	x	x	x	x	
EH	3/4"	1-1/4"				x*	x	x	
IN	3/4"	1-1/2"					x*	x	
EJ	1"	3/4"		x*	x	x	x	x	
EK	1-1/4"	3/4"				x*	x	x	
IP	1-1/2"	3/4"					x*	x	
EZ	7/8"	None			x				
EL	7/8"	1"		x*					
EM	1"	7/8"		x*					
AC	1"	None		x*	x	x	x	x	
AD	None	1"		x*	x	x	x	x	
AF	1"	1"			x*	x	x	x	
AG	1"	1-1/4"			x*	x*	x	x	
AH	1"	1-1/2"					x*	x	
AJ	1-1/4"	1"			x*	x*	x	x	
AK	1-1/2"	1"					x*	x	
AA	1-1/4"	None			x*	x*	x	x	
AO	None	1-1/4"			x*	x*	x	x	
AL	1-1/4"	1-1/4"					x	x	
AM	1-1/4"	1-1/2"					x*	x	
AP	1-1/2"	1-1/4"					x*	x	
AE	1-1/2"	None					x*	x	
AU	None	1-1/2"					x*	x	

Blank Codes

Code	Port Size		Gear Size						
	Left	Right	05	07	10	12	15	17	20
AB	None	None	x	x	x	x	x	x	x

Gear Section ⁷ Code (Displacement - in³/r)

05	07	10	12	15	17	20
(0.99)	(1.48)	(1.97)	(2.46)	(2.96)	(3.45)	(3.94)

- Ports marked with an 'x' are recommended porting. For all other porting please consult the factory.
- Shaded cells are good for Motor units.
- Ports marked with a 'x*' are low pressure inlet porting.
- NPT threads are not recommended for use at pressures in excess of 1500

Bearing Carriers ⁹

NPT Codes

IN	OUT	CW (left)	CCW (right)
1"	None	TB	BT
1-1/4"	None	VB	BV
1"	3/4"	TX	XT
1-1/4"	3/4"	VX	XV
1-1/4"	1"	VZ	ZV
1"	3/4"	TJ	JT
1-1/4"	3/4"	VJ	JV
1-1/4"	1"	VK	KV
1"	3/4"	ZX	XZ
1"	3/4"	ZS	SZ

Split Flange Codes

IN	OUT	CW (left)	CCW (right)
1"	None	LB	BL
1-1/4"	None	MB	BM
None	3/4"	BR	RB
1"	3/4"	LR	RL
1-1/4"	3/4"	MR	RM
1-1/4"	1"	MS	SM
1"	3/4"	LX	XL
1-1/4"	3/4"	MX	XM
1-1/4"	1"	MZ	ZM
1"	3/4"	SR	RS
1"	3/4"	RZ	ZR

ORB Codes

IN	OUT	CW (left)	CCW (right)
1"	None	CB	BC
1-1/4"	None	DB	BD
1-1/2"	None	FB	BF
None	3/4"	PJ	JP
1"	3/4"	CJ	JC
1-1/4"	3/4"	DJ	JD
1-1/2"	3/4"	FJ	JF
1-1/4"	1"	DK	KD
1-1/2"	1"	FK	KF
1"	3/4"	CR	RC
1-1/4"	3/4"	DR	RD
1-1/2"	3/4"	FR	RF
1-1/4"	1"	DS	SD
1-1/2"	1"	FS	SF
1"	3/4"	KJ	JK
1"	3/4"	KX	XK

No Porting

IN	OUT	CW (left)	CCW (right)
None	None	C	D
None	None	B	B

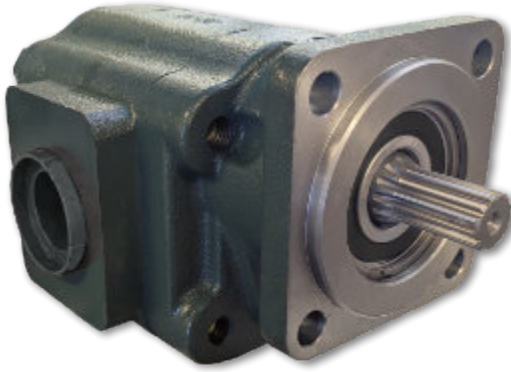
- Consult the factory for other porting options.

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Dowelled cast iron construction with working pressure up to 3000psi



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Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



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Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.50	1/2"	0.99	16.1	3000	207
0.75	3/4"	1.48	24.2	3000	207
1.00	1"	1.97	32.3	3000	207
1.25	1-1/4"	2.46	40.4	3000	207
1.50	1-1/2"	2.96	48.4	3000	207
1.75	1-3/4"	3.45	56.5	2500	172
2.00	2"	3.94	64.6	2500	172

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)				
	1"	1-1/4"	1-1/2"	1-3/4"	2"
900	6.5 (24.5)	8 (30.5)	10 (38)	12 (45.5)	13.5 (51)
1200	9 (34)	11.5 (43.5)	14 (53)	16 (60.5)	18.5 (70)
1500	11.5 (43.5)	14.5 (55)	17.5 (66)	20.5 (77.5)	23.5 (89)
1800	14 (53)	18 (68)	21.5 (81.5)	25 (94.5)	29 (110)
2100	16.5 (62.5)	21 (79.5)	25 (94.5)	29.5 (111)	34 (128.5)
2400	19 (72)	24 (91)	29 (110)	34 (128.5)	39 (147.5)

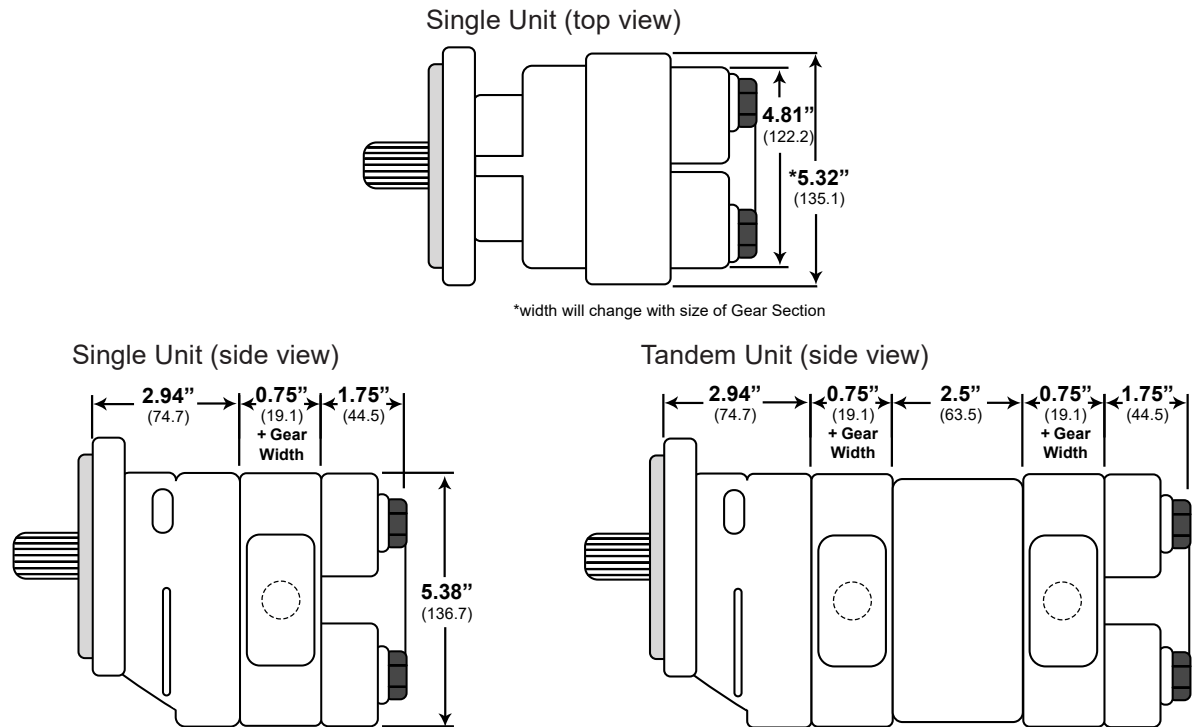
Motor Performance Data

SPEED RPM	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)
	1"		1-1/2"		2"	
800	9 (34)	675 (76.5)	13 (49)	1035 (117)	17 (64.5)	1385 (156.5)
1200	13 (49)	685 (77.5)	18 (68)	1055 (119.5)	23.5 (89)	1410 (159.5)
1600	16 (60.5)	680 (77)	23 (87)	1030 (116.5)	30.5 (115.5)	1390 (157)
2000	19.5 (74)	660 (74.5)	28 (106)	1010 (114)	37 (140)	1370 (155)

Note: Input Flow @ 2000psi | Output Torque @140 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	30 (14)	31 (14)	33 (15)	34 (15)	35 (16)	36 (16)	37 (17)	38 (17)	39 (18)	-	-
MULTI	23 (10)	24 (11)	27 (12)	28 (12)	29 (13)	31 (14)	32 (14)			-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 1/2" gear on the rear would be 33lbs + 23bs for a total of 56lbs

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	2600	2600
SAE "A" Keyed	-	-
SAE "B" Spline	7900	5850
SAE "B" Keyed	4925	4925
0.75 Dia Keyed	-	4150

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	13180	5850
SAE "BB" Keyed	7850	5850
SAE "C" Spline	-	5850
SAE "C" Keyed	-	5850
Connecting Shaft	-	5850

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

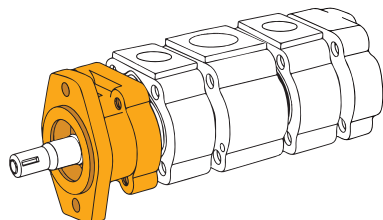
JGP31 - B - 3 46 - BI - UH 12 - 30 - B - UD 07 - 1*

Type¹

JGP = Pump
JGM = Motor

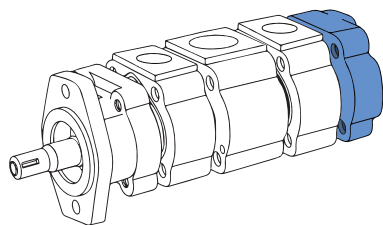
Unit²

A = Single Unit
B = Tandem Unit
C = Continental Shaft



Shaft End Cover³

1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
3 = Pump (Double Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
6 = Pump with Shaft Bearing (Double Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Port End Cover⁵

NPT Codes

Single Units		Tandem Units		Port Size	
				Left	Right
BE	BY	BI	BY	None	None
KE	KY	KI	KY	3/4"	None
LE	LY	LI	LY	None	3/4"
ME	MY	MI	MY	3/4"	3/4"
QU		QU		1"	1"

ORB Codes

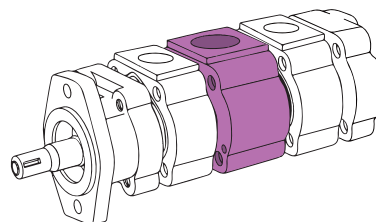
Single Unit		Tandem Units		Port Size	
				Left	Right
CE	CY	CI	CY	3/4"	None
DE	DY	DI	DY	None	3/4"
FE	FY	FI	FY	3/4"	3/4"
GE	GY	GI	GY	1"	3/4"
JE	JY	JI	JY	1"	1"
MA	YO	MU	YO	1"	None
RA	RO	SU	RO	None	1"

◦ Shaded cells include extended studs.

Repeat for multi-section unit

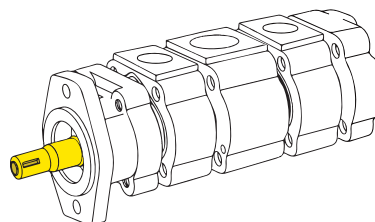
Connecting Shaft¹⁰

* for connecting multiple units
1 = Connecting Shaft



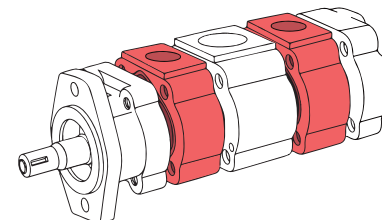
Bearing Carriers⁹

See next page for Bearing carrier options



Shaft Type⁸

07 = SAE 'C' 14 Tooth Spline 1.250" Dia. (Cont. Only)
12 = Keyed Shaft .75" Dia. (Cont. Only)
25 = SAE 'B' 13 Tooth Spline 0.875" Dia.
30 = SAE 'B' Keyed 0.875" Dia.
43 = SAE 'BB' Keyed 1" Dia.
95 = SAE 'A' 9 Tooth Spline 0.62" Dia. (Cont. Only)
65 = SAE 'B' 13 Tooth Spline 0.875" Dia. (Type 2)
98 = SAE 'BB' 15 Tooth Spline 1" Dia.



Gear Section^{6&7}

see next page for options.

JOHN GEAR PUMPS & MOTORS



31 SERIES

Gear Section ⁶

NPT Codes

Code	Port Size		Gear Size						
	Left	Right	05	07	10	12	15	17	20
IL	1/2"	None		x	x				
IM	None	1/2"		x	x				
IR	1/2"	1/2"		x					
IC	3/4"	None			x	x	x	x	x
ID	None	3/4"			x	x	x	x	x
IF	3/4"	3/4"			x	x	x	x	x
IG	3/4"	1"			x*	x	x	x	
IH	3/4"	1-1/4"					x*	x	
IJ	1"	3/4"			x*	x	x	x	
IK	1-1/4"	3/4"					x	x	
YC	1"	None			x*	x	x	x	
YD	None	1"			x*	x	x	x	
YF	1"	1"				x	x	x	x
YG	1"	1-1/4"					x*	x	x
YH	1"	1-1/2"						x*	x
YJ	1-1/4"	1"					x*	x	x
YK	1-1/2"	1"						x*	x
IA	1-1/4"	None					x*	x	x
IB	None	1-1/4"					x*	x	x
YL	1-1/4"	1-1/4"						x	x
YM	1-1/4"	1-1/2"							x*
YP	1-1/2"	1-1/4"							x*
YA	1-1/2"	None							x*
YB	None	1-1/2"							x*

Code	Port Size		Gear Size						
	Left	Right	05	07	10	12	15	17	20
AB	None	None	x	x	x	x	x	x	x

Split Flange Codes

Code	Port Size		Gear Size						
	Left	Right	07	10	12	15	17	20	
UC	3/4"	None		x	x	x	x		
UD	None	3/4"		x	x	x	x		
UF	3/4"	3/4"	x	x	x	x			
UG	3/4"	1"		x*	x	x	x	x	
UH	3/4"	1-1/4"			x*	x*	x	x	
UJ	1"	3/4"		x*	x	x	x	x	
UK	1-1/4"	3/4"			x*	x*	x	x	
OC	1"	None			x	x	x		
OD	None	1"			x	x	x	x	
OF	1"	1"		x	x	x	x	x	
OG	1"	1-1/4"			x*	x*	x	x	
OH	1"	1-1/2"					x*	x*	
OJ	1-1/4"	1"			x*	x*	x	x	
OK	1-1/2"	1"					x*	x*	
OA	1-1/4"	None			x*	x	x	x	
OB	None	1-1/4"			x*	x	x	x	
OL	1-1/4"	1-1/4"				x	x	x	
OM	1-1/4"	1-1/2"					x*	x*	
OP	1-1/2"	1-1/4"					x*	x*	
OE	1-1/2"	None					x*	x	
OU	None	1-1/2"					x*	x	

ORB Codes

Code	Port Size		Gear Size						
	Left	Right	07	10	12	15	17	20	
EC	3/4"	None		x*	x	x	x	x	
ED	None	3/4"		x*	x	x	x	x	
EF	3/4"	3/4"		x	x	x	x	x	
EG	3/4"	1"		x*	x*	x	x	x	
EH	3/4"	1-1/4"				x*	x*		
IN	3/4"	1-1/2"					x*	x*	
EJ	1"	3/4"		x*	x*	x	x	x	
EK	1-1/4"	3/4"				x*	x*		
IP	1-1/2"	3/4"					x*	x	
EZ	7/8"	None				x			
EL	7/8"	1"			x*	x*			
EM	1"	7/8"			x*	x*			
AC	1"	None			x*	x*	x	x	x
AD	None	1"			x*	x*	x	x	x
AF	1"	1"				x	x	x	
AG	1"	1-1/4"				x*	x*	x*	
AH	1"	1-1/2"					x*	x*	
AJ	1-1/4"	1"				x*	x*	x*	
AK	1-1/2"	1"					x*	x*	
AA	1-1/4"	None				x*	x*		
AO	None	1-1/4"				x*	x*		
AL	1-1/4"	1-1/4"					x	x	
AM	1-1/4"	1-1/2"					x*	x*	
AP	1-1/2"	1-1/4"					x*	x*	
AE	1-1/2"	None					x*	x*	
AU	None	1-1/2"					x*	x*	

Gear Section ⁷ Code (Displacement - in³/r)

05	07	10	12	15	17	20
(0.99)	(1.48)	(1.97)	(2.46)	(2.96)	(3.45)	(3.94)

- Ports marked with an 'x' are recommended porting. For all other porting please consult the factory.
- Shaded cells are good for Motor units.
- Ports marked with a 'x*' are low pressure inlet porting.
- NPT threads are not recommended for use at pressures in excess of 1500

Bearing Carriers ⁹

NPT Codes

IN	OUT	CW (left)	CCW (right)
1" None		TB	BT
1-1/4" None		VB	BV
1" 3/4"		TX	XT
1-1/4" 3/4"		VX	XV
1-1/4" 1"		VZ	ZV
1" 3/4"		TJ	JT
1-1/4" 3/4"		VJ	JV
1-1/4" 1"		VK	KV
1-1/2" 1"		WK	KW
1" 3/4"		ZX	XZ
1" 3/4"		ZS	SZ

Split Flange Codes

IN	OUT	CW (left)	CCW (right)
1" None		LB	BL
1-1/4" None		MB	BM
1-1/2" None		NB	BN
None 3/4"		BR	RB
1" 3/4"		LR	RL
1-1/4" 3/4"		MR	RM
1-1/2" 3/4"		NR	RN
1-1/4" 1"		MS	SM
1-1/2" 1"		NS	SN
1" 3/4"		LX	XL
1-1/4" 3/4"		MX	XM
1-1/2" 3/4"		NX	XN
1-1/4" 1"		MZ	ZM
1-1/2" 1"		NZ	ZN
1" 3/4"		SR	RS
1" 3/4"		RZ	ZR

ORB Codes

IN	OUT	CW (left)	CCW (right)
1" None		CB	BC
1-1/4" None		DB	BD
1-1/2" None		FB	BF
None 3/4"		PJ	JP
1" 3/4"		CJ	JC
1-1/4" 3/4"		DJ	JD
1-1/2" 3/4"		FJ	JF
1-1/4" 1"		DK	KD
1-1/2" 1"		FK	KF
1" 3/4"		CR	RC
1-1/4" 3/4"		DR	RD
1-1/2" 3/4"		FR	RF
1-1/4" 1"		DS	SD
1-1/2" 1"		FS	SF
1" 3/4"		KJ	JK
1" 3/4"		KX	XK

No Porting

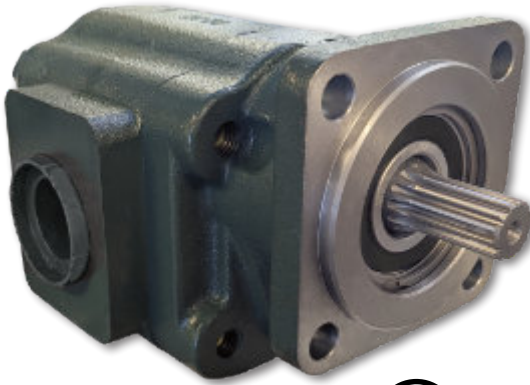
IN	OUT	CW (left)	CCW (right)
None None		C	D
None None		B	B

JOHN GEAR PUMPS & MOTORS

John Gear Pumps - 51 Series models are interchangeable with Commercial, Parker, Permco and Muncie.

They are available in a variety of mounting flanges, shaft configurations and porting options.

Our 51 series pumps offer working pressure up to 3000 psi ideal for the most demanding of applications.



HEAVY DUTY

Dowelled cast iron construction with working pressure up to 3000psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.75	3/4"	1.91	31.3	3000	207
1.00	1"	2.55	41.8	3000	207
1.25	1-1/4"	3.19	52.2	3000	207
1.50	1-1/2"	3.83	62.7	3000	207
1.75	1-3/4"	4.46	73.1	3000	207
2.00	2"	5.1	83.6	2500	172
2.25	2-1/4"	5.74	94	2500	172
2.50	2-1/2"	6.38	104.5	2500	172

Pump Performance Data

SPEED RPM	GEAR WIDTH													
	GPM (LPM)													
	1"		1-1/4"		1-1/2"		1-3/4"		2"		2-1/4"		2-1/2"	
900	8.5	(32)	10.5	(39.5)	13	(49)	15	(57)	17.5	(66)	20	(75.5)	22	(83.5)
1200	12	(45.5)	15	(57)	18	(68)	21	(79.5)	24	(91)	27	(102)	30	(113.5)
1500	15	(57)	19	(72)	23	(87)	27	(102)	31	(117.5)	35	(132.5)	39	(147.5)
1800	18	(68)	23	(87)	27.5	(104)	32.5	(123)	37.5	(142)	42	(159)	47	(178)
2100	21.5	(81.5)	27	(102)	32.5	(123)	38.5	(145.5)	44	(166.5)	48.5	(183.5)	55	(208)
2400	25	(94.5)	31	(117.5)	37	(140)	44	(166.5)	51	(193)	57	(216)	63.5	(240.5)

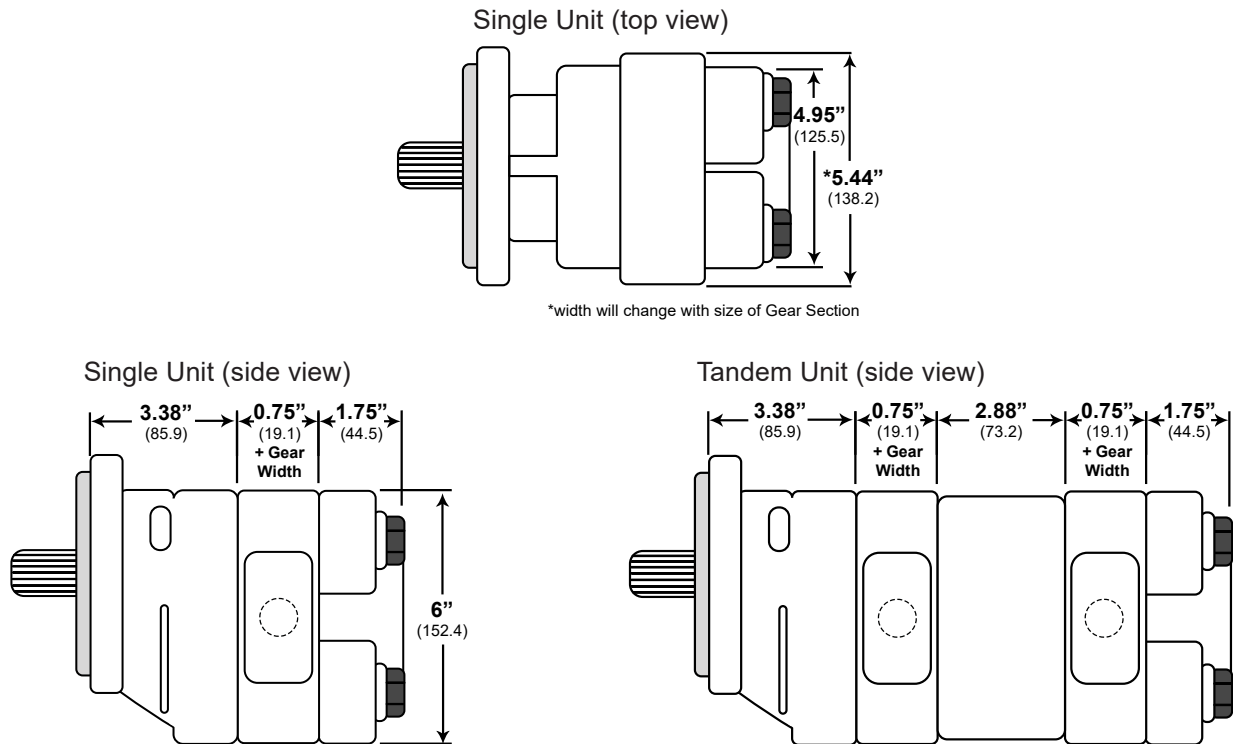
Motor Performance Data

SPEED	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE
	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)
	RPM	1"	1-1/2"	2"	2-1/2"			
800	10.5 (39.5)	825 (93.5)	15.5 (58.5)	1310 (148)	21 (79.5)	1810 (204.5)	26 (98.5)	2300 (260)
1200	15.5 (58.5)	850 (96)	22.5 (85)	1340 (151.5)	30.5 (115.5)	1830 (207)	37.5 (142)	2340 (264.5)
1600	20 (75.5)	830 (94)	30 (113.5)	1330 (150.5)	40 (151.5)	1805 (204)	49.5 (187.5)	2300 (260)
2000	25 (94.5)	800 (90.5)	37 (140)	1290 (146)	49 (185.5)	1770 (200)	61.5 (233)	2250 (254.5)

Note: Input Flow @ 2000psi | Output Torque @140 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	37 (17)	40 (18)	43 (20)	45 (20)	46 (21)	48 (22)	49 (22)	51 (23)	54 (24)	-	-
MULTI	30 (14)	31 (14)	33 (15)	34 (15)	36 (16)	37 (17)	38 (17)	42 (19)	45 (20)	-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 1/2" gear on the rear would be 43lbs + 30lbs for a total of 73lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	-	-
SAE "A" Keyed	-	-
SAE "B" Spline	6100	6100
SAE "B" Keyed	5750	5750

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	9400	8500
SAE "BB" Keyed	5600	5600
SAE "C" Spline	12900	8500
SAE "C" Keyed	10900	8500
Connecting Shaft	-	8500

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

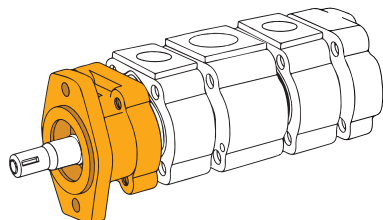
Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

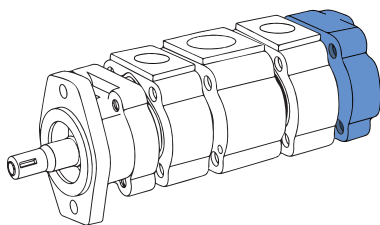
JGP51 - B - 3 46 - BI - EJ 12 - 30 - B - EG 10 - 1*

Type¹
JGP = Pump
JGM = Motor

Unit²
A = Single Unit
B = Tandem Unit
C = Continental Shaft



Shaft End Cover³
1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
3 = Pump (Double Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
6 = Pump with Shaft Bearing (Double Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Port End Cover⁵

NPT Codes

Single Units		Tandem units		Port Left	Size Right
BE	BY	BI	BY	None	None
KE	KY	KI	KY	3/4"	None
LE	LY	LI	LY	None	3/4"
ME	MY	MI	MY	3/4"	3/4"

ORB Codes

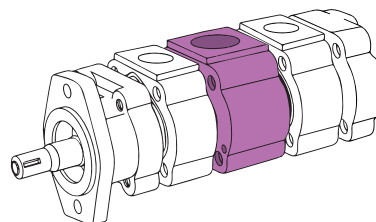
Single Units		Tandem units		Port Size	
				Left	Right
CE	CY	CI	CY	3/4"	None
DE	DY	DI	DY	None	3/4"
FE	FY	FI	FY	3/4"	3/4"

▫ Shaded cells include extended studs.

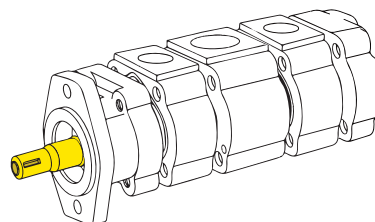
Shaft End Cover⁴
00 = Pad Mount
42 = 4-Bolt B
45 = 2/4-Bolt B (Type 2)
46 = 2/4-Bolt B
78 = 4-Bolt C
97 = 2-Bolt B
98 = 2-Bolt C

Repeat for multi-section unit

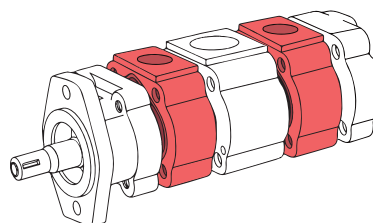
Connecting Shaft¹⁰
* for connecting multiple units
1 = Connecting Shaft



Bearing Carriers⁹
See next page for Bearing carrier options



Shaft Type⁸
07 = SAE 'C' 14 Tooth Spline 1.25" Dia.
11 = SAE 'C' Keyed Shaft 1.25" Dia.
25 = SAE 'B' 13 Tooth Spline 0.875" Dia.
43 = SAE 'BB' Keyed 1" Dia.
53 = SAE 'C' 14 Tooth Spline 1.25" Dia. (Type 2)
65 = SAE 'B' 13 Tooth Spline 0.875" Dia. (Type 2)
73 = SAE 'C' Keyed 1.25" Dia. (Cont. Only)
98 = SAE 'BB' 15 Tooth Spline 1" Dia. (Cont. Only)



Gear Section^{6&7}
see next page for options.

JOHN GEAR PUMPS & MOTORS



51 SERIES

Gear Section ⁶

NPT Codes

Code	Port Size		Gear Size							
	Left	Right	10	12	15	17	20	22	25	
IC	3/4"	None	x							
ID	None	3/4"	x	x	x	x				
IF	3/4"	3/4"	x	x	x	x	x			
IG	3/4"	1"	x*	x	x					
IH	3/4"	1-1/4"			x					
IJ	1"	3/4"	x*	x	x	x	x			
IK	1-1/4"	3/4"			x					
YC	1"	None		x	x	x	x	x		
YD	None	1"		x	x	x	x	x		
YF	1"	1"		x	x	x	x	x	x	
YG	1"	1-1/4"			x*	x	x	x		
YH	1"	1-1/2"							x	
YJ	1-1/4"	1"			x*	x	x	x	x	
YK	1-1/2"	1"							x	
IA	1-1/4"	None			x*	x*	x	x	x	
IB	None	1-1/4"			x*	x*	x	x	x	
YL	1-1/4"	1-1/4"				x	x	x	x	
YM	1-1/4"	1-1/2"					x*	x	x	
YP	1-1/2"	1-1/4"					x*	x	x	
YR	1-1/2"	1-1/2"					x	x	x	
YA	1-1/2"	None					x	x	x	
YB	None	1-1/2"					x	x	x	

Split Flange Codes

Code	Port Size		Gear Size							
	Left	Right	10	12	15	17	20	22	25	
UC	3/4"	None	x	x	x	x				
UD	None	3/4"	x	x	x	x				
UF	3/4"	3/4"	x	x	x	x	x	x	x	
UG	3/4"	1"	x*	x*	x					
UH	3/4"	1-1/4"		x*	x*	x*				
UJ	1"	3/4"	x*	x*	x	x				
UK	1-1/4"	3/4"		x*	x*	x*				
OC	1"	None	x	x*	x	x	x	x	x	
OD	None	1"	x	x*	x	x	x	x	x	
OF	1"	1"		x	x	x	x	x	x	
OG	1"	1-1/4"		x	x*	x*				
OH	1"	1-1/2"			x*	x*	x*	x	x	
OJ	1-1/4"	1"		x	x*	x*	x	x	x	
OK	1-1/2"	1"			x*	x*	x*	x	x	
OL	1-1/4"	1-1/4"			x*	x*	x	x	x	
OM	1-1/4"	1-1/2"			x*	x*	x*	x	x	
ON	1-1/4"	2"					x*	x*	x*	
OP	1-1/2"	1-1/4"			x*	x*	x*	x	x	
OQ	2"	1-1/4"					x*	x*	x*	
OR	1-1/2"	1-1/2"				x*	x*	x	x	
OS	1-1/2"	2"					x*	x*	x*	
OV	2"	1-1/2"					x*	x*	x*	
OX	2"	2"							x	
OA	1-1/4"	None		x*	x*	x*	x	x	x	
OB	None	1-1/4"		x*	x*	x*	x	x	x	
OE	1-1/2"	None			x*	x*	x*	x	x	
OU	None	1-1/2"			x*	x*	x*	x	x	
UB	1"	2"					x*	x*	x*	
UQ	2"	1"					x*	x*	x*	
XB	2"	None					x*	x*	x*	
ZB	None	2"					x*	x*	x*	

ORB Codes

Code	Port Size		Gear Size							
	Left	Right	10	12	15	17	20	22	25	
EC	3/4"	None	x*	x*	x	x	x			
ED	None	3/4"	x*	x*	x	x	x			
EF	3/4"	3/4"	x	x	x	x	x			
EG	3/4"	1"	x	x	x	x				
EH	3/4"	1-1/4"			x*	x*				
EJ	1"	3/4"	x	x	x	x	x			
EK	1-1/4"	3/4"			x*	x*				
AC	1"	None	x*	x*	x*	x*	x			
AD	None	1"	x*	x*	x*	x*	x	x	x	
AF	1"	1"			x	x	x	x	x	
AG	1"	1-1/4"			x*	x*	x			
AH	1"	1-1/2"				x*	x	x	x	
AJ	1-1/4"	1"			x*	x*	x	x	x	
AK	1-1/2"	1"				x*	x	x	x	
AL	1-1/4"	1-1/4"					x	x	x	
AM	1-1/4"	1-1/2"					x*	x*	x*	
AP	1-1/2"	1-1/4"					x*	x*	x*	
AR	1-1/2"	1-1/2"						x	x	
AA	1-1/4"	None			x*	x*	x	x	x	
AO	None	1-1/4"			x*	x*	x	x	x	
AE	1-1/2"	None					x*	x*	x	
AU	None	1-1/2"					x*	x*	x	

Blank Codes

Code	Port Size		Gear Size						
	Left	Right	10	12	15	17	20	22	25
AB	None	None	x	x	x	x	x	x	x

- Ports marked with an 'x' are recommended porting. For all other porting please consult the factory.
- Shaded cells are good for Motor units.
- Ports marked with a 'x*' are low pressure inlet porting.
- NPT threads are not recommended for use at pressures in excess of 1500

Gear Section ⁷

Code (Displacement - in³/r)

05	07	10	12	15	17	20	22	25
(1.28)	(1.91)	(2.55)	(3.19)	(3.83)	(4.46)	(5.10)	(5.74)	(6.38)

Bearing Carriers ⁹

NPT Codes

IN	OUT	CW (left)	CCW (right)
1" None	TB	BT	
1-1/4" None	VB	BV	
1-1/2" None	WB	BW	
1" 3/4"	TX	XT	
1-1/4" 3/4"	VX	XV	
1-1/2" 3/4"	WX	XW	
1-1/4" 1"	VZ	ZV	
1-1/2" 1"	WZ	ZW	
1" 3/4"	TJ	JT	
1-1/4" 3/4"	VJ	JV	
1-1/4" 1"	VK	KV	
1-1/2" 1"	WK	KW	
1" 3/4"	ZX	XZ	
1" 3/4"	ZS	SZ	

Split Flange Codes

IN	OUT	CW (left)	CCW (right)
1" None	LB	BL	
1-1/4" None	MB	BM	
1-1/2" None	NB	BN	
None 3/4"	BR	RB	
1" 3/4"	LR	RL	
1-1/4" 3/4"	MR	RM	
1-1/2" 3/4"	NR	RN	
1-1/4" 1"	MS	SM	
1-1/2" 1"	NS	SN	
1" 3/4"	LX	XL	
1-1/4" 3/4"	MX	XM	
1-1/2" 3/4"	NX	XN	
1-1/4" 1"	MZ	ZM	
1-1/2" 1"	NZ	ZN	
1" 3/4"	SR	RS	
1" 3/4"	RZ	ZR	

ORB Codes

IN	OUT	CW (left)	CCW (right)
1" None	CB	BC	
1-1/4" None	DB	BD	
1-1/2" None	FB	BF	
None 3/4"	PJ	JP	
1" 3/4"	CJ	JC	
1-1/4" 3/4"	DJ	JD	
1-1/2" 3/4"	FJ	JF	
1-1/4" 1"	DK	KD	
1-1/2" 1"	FK	KF	
1" 3/4"	CR	RC	
1-1/4" 3/4"	DR	RD	
1-1/2" 3/4"	FR	RF	
1-1/4" 1"	DS	SD	
1-1/2" 1"	FS	SF	
1" 3/4"	KJ	JK	
1" 3/4"	KX	XK	

No Porting

IN	OUT	CW (left)	CCW (right)
None None	C	D	
None None	B	B	

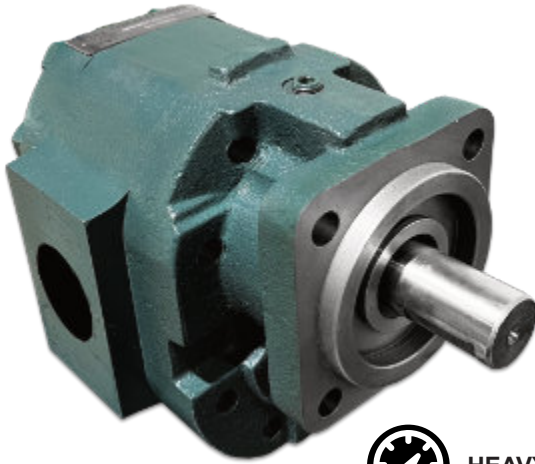


JOHN GEAR PUMPS & MOTORS

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Dowelled cast iron construction with working pressure up to 3000psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.75	3/4"	3.07	50.3	3000	207
1.00	1"	4.1	67.2	3000	207
1.25	1-1/4"	5.12	83.9	3000	207
1.50	1-1/2"	6.15	100.8	3000	207
1.75	1-3/4"	7.17	117.5	3000	207
2.00	2"	8.2	134.4	2500	172
2.25	2-1/4"	9.22	151.1	2500	172
2.50	2-1/2"	10.25	168	2500	172
2.75	2-3/4"	11.28	184.8	2000	138
3.00	3"	12.3	201.6	2000	138

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)									
	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"	
900	11.5 (43.5)	15.5 (58.5)	19.5 (74)	23 (87)	27 (102)	30.5 (115.5)	34.5 (130.5)	38 (144)	42 (159)	
1200	17 (64.5)	22 (83.5)	27 (102)	32 (121)	37.5 (142)	42 (159)	48 (181.5)	52.5 (198.5)	58 (219.5)	
1500	22 (83.5)	29 (110)	35.5 (134.5)	41.5 (157)	48 (181.5)	54.5 (206.5)	61 (231)	67 (253.5)	74 (280)	
1800	27.5 (104)	35.5 (134.5)	43.5 (164.5)	51 (193)	59 (223.5)	66 (250)	74 (280)	81.5 (308.5)	90 (340.5)	
2100	33 (125)	42 (159)	51.5 (195)	60 (227)	69.5 (263)	78 (295.5)	87 (329.5)	96.5 (365.5)	106 (401.5)	
2400	38 (144)	49 (185.5)	59.5 (225)	70 (265)	80 (303)	90 (340.5)	101 (382.5)	111 (420)	122 (462)	

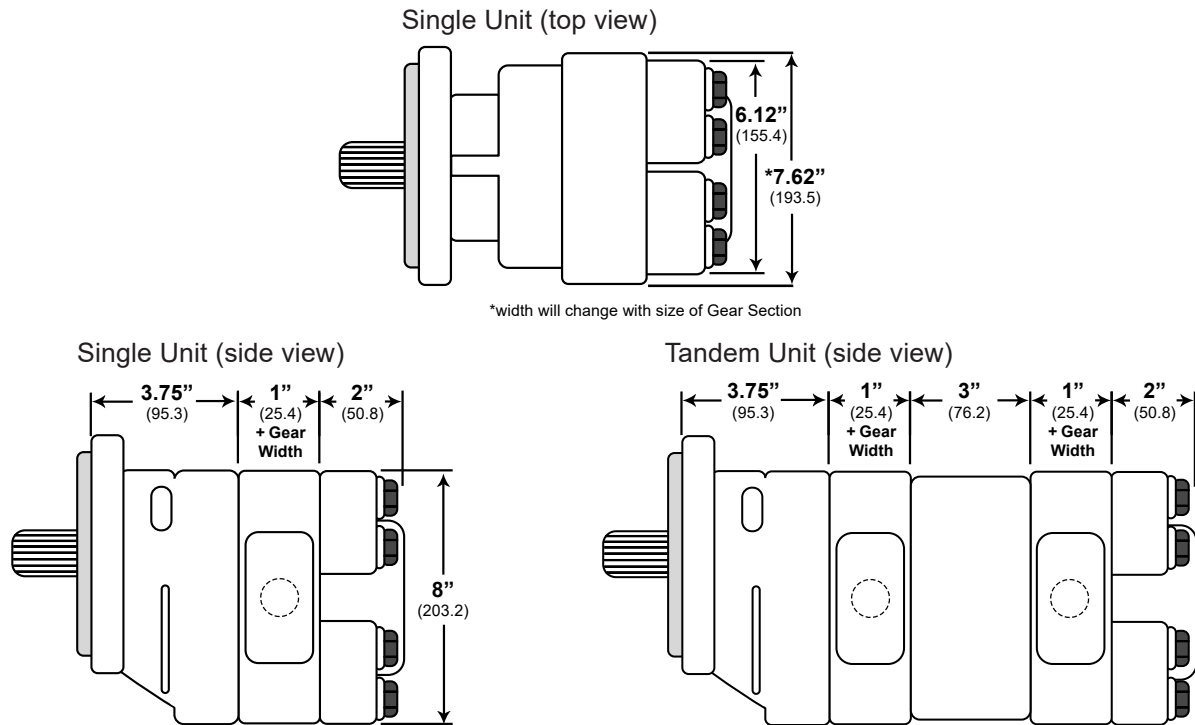
Motor Performance Data

SPEED RPM	INPUT FLOW		OUTPUT TORQUE		INPUT FLOW		OUTPUT TORQUE		INPUT FLOW		OUTPUT TORQUE	
	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)
	1"		1-1/2"		2"		2-1/2"		3"			
800	20.5 (77.5)	1410 (159.5)	28 (106)	2149 (243)	35.5 (134.5)	2875 (325)	43 (163)	3660 (414)	50.5 (191)	3625 (410)		
1200	27.5 (104)	1400 (158.5)	38 (144)	2149 (243)	49.5 (187.5)	2870 (324.5)	60.5 (229)	3650 (413)	72 (272.5)	3575 (404.5)		
1600	34 (128.5)	1375 (155.5)	49 (185.5)	2110 (238.5)	64 (242.5)	2830 (320)	78.5 (297)	3600 (407)	93 (352)	3500 (396)		
2000	41.5 (157)	1350 (152.5)	59 (223.5)	2090 (236.5)	78 (295.5)	2800 (316.5)	96.5 (365)	3500 (396)	114 (431.5)	3425 (387.5)		

Note: Input Flow @ 2000psi | Output Torque @140 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	67 (30)	70 (32)	72 (33)	74 (34)	76 (34)	79 (36)	82 (37)	85 (39)	88 (40)	-	92 (42)
MULTI	54 (24)	57 (26)	60 (27)	63 (29)	65 (29)	67 (30)	69 (31)	71 (32)	74 (34)	-	76 (34)

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 1/2" gear on the rear would be 72lbs + 54lbs for a total of 126lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "C" Spline	12500	10000
SAE "C" Keyed	7500	7500
Connecting Shaft	-	10000

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

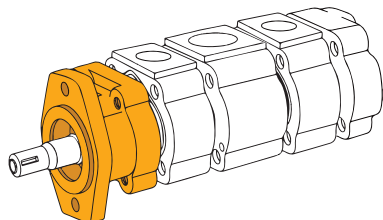
JGP76 - B - 3 42 - BI - ID 10 - 11 - MB - ID 07 - 1 *

Type ¹

JGP = Pump
JGM = Motor

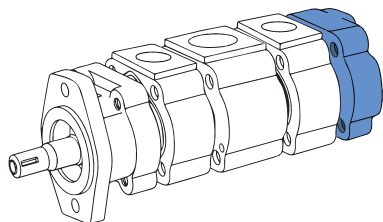
Unit ²

A = Single Unit
B = Tandem Unit
C = Continental Shaft



Shaft End Cover ³

1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
3 = Pump (Double Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
6 = Pump with Shaft Bearing (Double Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Port End Cover ⁵

NPT Codes

Single Units		Tandem units		Port Size	
				Left	Right
BE	BY	BI	BY	None	None

ORB Codes

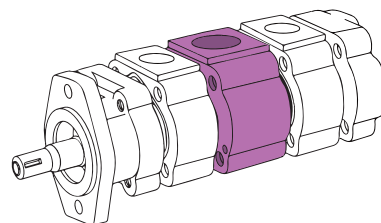
Single Units		Tandem units		Port Size	
				Left	Right
JE	JY	JI	JY	1"	1"

▫ Shaded cells include extended studs.

Repeat for multi-section unit

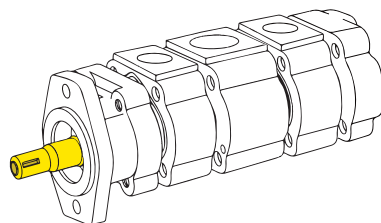
Connecting Shaft ¹⁰

* for connecting multiple units
1 = Connecting Shaft



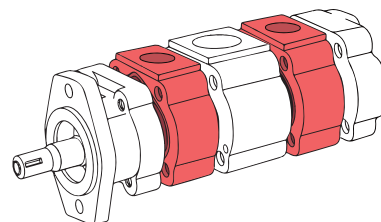
Bearing Carriers ⁹

See next page for Bearing carrier options



Shaft Type ⁸

07 = SAE 'C' 14 Tooth Spline 1.25" Dia.
11 = SAE 'C' Keyed Shaft 1.25" Dia.



Gear Section ^{6&7}

see next page for options.

JOHN GEAR PUMPS & MOTORS



76 SERIES

Gear Section ⁶

NPT Codes

Code	Port Size		Gear Size									
	Left	Right	7	10	12	15	17	20	22	25	27	30
IC	3/4"	None	x	x	x	x						
ID	None	3/4"	x	x	x	x						
IG	3/4"	1"		x	x	x						
IJ	1"	3/4"		x	x	x						
YC	1"	None				x	x	x	x			
YD	None	1"				x	x	x	x			
YF	1"	1"		x	x							
YG	1"	1-1/4"			x	x						
YJ	1-1/4"	1"			x	x						
YL	1-1/4"	1-1/4"			x	x	x					

- Ports marked with an 'x' are recommended porting. For all other porting please consult the factory.
- Shaded cells are good for Motor units.
- Ports marked with a 'x*' are low pressure inlet porting.
- NPT threads are not recommended for use at pressures in excess of 1500

ORB Codes

Code	Port Size		Gear Size														
	Left	Right	7	10	12	15	17	20	22	25	30						
EC	3/4"	None	x	x	x	x											
ED	None	3/4"	x	x	x	x											
EF	3/4"	3/4"	x														
EG	3/4"	1"	x		x	x											
EH	3/4"	1-1/4"	x*														
EJ	1"	3/4"	x*	x*	x	x											
EK	1-1/4"	3/4"	x*														
AC	1"	None			x	x											
AD	None	1"			x	x											
AF	1"	1"		x	x	x	x	x									
AG	1"	1-1/4"	x*	x*													
AH	1"	1-1/2"				x*											
AJ	1-1/4"	1"	x*	x*													
AK	1-1/2"	1"				x*											
AL	1-1/4"	1-1/4"			x	x	x	x	x	x							
AM	1-1/4"	1-1/2"			x*	x*											
AP	1-1/2"	1-1/4"			x*	x*											
AR	1-1/2"	1-1/2"							x	x	x						

Split Flange Codes

Code	Port Size		Gear Size														
	Left	Right	7	10	12	15	17	20	22	25	27	30					
UC	3/4"	None	x	x	x	x											
UD	None	3/4"	x	x	x	x											
UF	3/4"	3/4"	x														
UG	3/4"	1"	x*	x													
UH	3/4"	1-1/4"															
UJ	1"	3/4"	x*	x	x	x	x	x									
UK	1-1/4"	3/4"															
OC	1"	None			x												
OD	None	1"		x	x	x	x	x									
OF	1"	1"		x	x	x	x	x									
OG	1"	1-1/4"	x*	x*	x												
OH	1"	1-1/2"		x*	x*	x*	x	x									
OJ	1-1/4"	1"	x*	x*	x	x	x	x	x								
OK	1-1/2"	1"		x*	x*	x*	x	x									
OL	1-1/4"	1-1/4"			x	x	x	x	x	x	x	x					
OM	1-1/4"	1-1/2"		x*	x*	x*	x*	x	x								
ON	1-1/4"	2"				x*	x*	x*	x*	x*	x*	x*					
OP	1-1/2"	1-1/4"		x*	x*	x*	x*	x	x	x	x	x					
OQ	2"	1-1/4"				x*	x*	x*	x*	x*	x*	x*					
OR	1-1/2"	1-1/2"						x	x	x	x	x					
OS	1-1/2"	2"						x*	x*	x*	x*	x*					
OT	1-1/2"	2-1/2"									x	x	x				
OV	2"	1-1/2"						x*	x*	x*	x*	x*					
OW	2-1/2"	1-1/2"									x*	x*	x*				
OX	2"	2"										x	x				
OA	1-1/4"	None			x	x	x	x	x	x							
UB	1"	2"						x*									
UQ	2"	1"						x*									
OB	None	1-1/4"			x	x	x	x	x	x							
OE	1-1/2"	None						x	x								
OU	None	1-1/2"						x	x	x	x	x					
OY	2"	2-1/2"														x*	
OZ	2-1/2"	2"															x*
UN	1-1/4"	2-1/2"														x*	
US	2-1/2"	1-1/4"														x*	

Blank Codes

Code	Port Size		Gear Size														
	Left	Right	7	10	12	15	17	20	22	25	27	30					
UC	3/4"	None	x	x	x	x	x	x	x	x	x	x					

Gear Section ⁷

Code (Displacement - in³/r)

07	10	12	15	17	20	22	25	27	30
(3.07)	(4.10)	(5.12)	(6.15)	(7.17)	(8.20)	(9.22)	(10.3)	(11.3)	(12.3)

Bearing Carriers ⁹

NPT Codes

IN	OUT	CW (left)	CCW (right)
1"	None	TB	BT
1-1/4"	None	VB	BV
1-1/2"	None	WB	BW
1"	3/4"	TX	XT
1-1/4"	3/4"	VX	XV
1-1/2"	3/4"	WX	XW
1-1/4"	1"	VZ	ZV
1-1/2"	1"	WZ	ZW
1"	3/4"	TJ	JT
1-1/4"	3/4"	VJ	JV
1-1/4"	1"	VK	KV
1-1/2"	1"	WK	KW
1"	3/4"	ZX	XZ
1"	3/4"	ZS	SZ

Split Flange Codes

IN	OUT	CW (left)	CCW (right)
1"	None	LB	BL
1-1/4"	None	MB	BM
1-1/2"	None	NB	BN
None	3/4"	BR	RB
1"	3/4"	LR	RL
1-1/4"	3/4"	MR	RM
1-1/2"	3/4"	NR	RN
1-1/4"	1"	MS	SM
1-1/2"	1"	NS	SN
1"	3/4"	LX	XL
1-1/4"	3/4"	MX	XM
1-1/2"	3/4"	NX	XN
1-1/4"	1"	MZ	ZM
1-1/2"	1"	NZ	ZN
1"	3/4"	SR	RS
1"	3/4"	RZ	ZR

ORB Codes

IN	OUT	CW (left)	CCW (right)
1"	None	CB	BC
1-1/4"	None	DB	BD
1-1/2"	None	FB	BF
None	3/4"	PJ	JP
1"	3/4"	CJ	JC
1-1/4"	3/4"	DJ	JD
1-1/2"	3/4"	FJ	JF
1-1/4"	1"	DK	KD
1-1/2"	1"	FK	KF
1"	3/4"	CR	RC
1-1/4"	3/4"	DR	RD
1-1/2"	3/4"	FR	RF
1-1/4"	1"	DS	SD
1-1/2"	1"	FS	SF
1"	3/4"	KJ	JK
1"	3/4"	KX	XK

No Porting

IN	OUT	CW (left)	CCW (right)
None	None	C	D
None	None	B	B

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OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.50	1/2"	0.62	10.2	3500	241
0.75	3/4"	0.93	15.2	3500	241
1.00	1"	1.24	20.3	3500	241
1.25	1-1/4"	1.55	25.4	3500	241
1.50	1-1/2"	1.86	30.5	3300	228
1.75	1-3/4"	2.17	35.6	2900	200
2.00	2"	2.48	40.6	2500	172

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)											
	1/2"		3/4"		1"		1-1/4"		1-1/2"		1-3/4"	
900	2	(7.5)	3.2	(12)	4.4	(16.5)	5.5	(21)	6.7	(25.5)	7.9	(30)
1200	2.8	(10.5)	4.4	(16.5)	6	(22.5)	7.6	(29)	9.2	(35)	10.7	(40.5)
1500	3.6	(13.5)	5.6	(21)	7.7	(29)	9.6	(36.5)	11.6	(44)	13.5	(51)
1800	4.4	(16.5)	6.8	(25.5)	9.3	(35)	11.6	(44)	14	(53)	16.3	(61.5)
2100	5.2	(19.5)	8.1	(30.5)	10.9	(41.5)	13.6	(51.5)	16.4	(62)	19.1	(72.5)
2400	6	(22.5)	9.3	(35)	12.5	(47.5)	15.6	(59)	18.8	(71)	21.9	(83)
3000	7.7	(29)	11.7	(44.5)	15.7	(59.5)	19.6	(74)	23.7	(89.5)	27.6	(104.5)

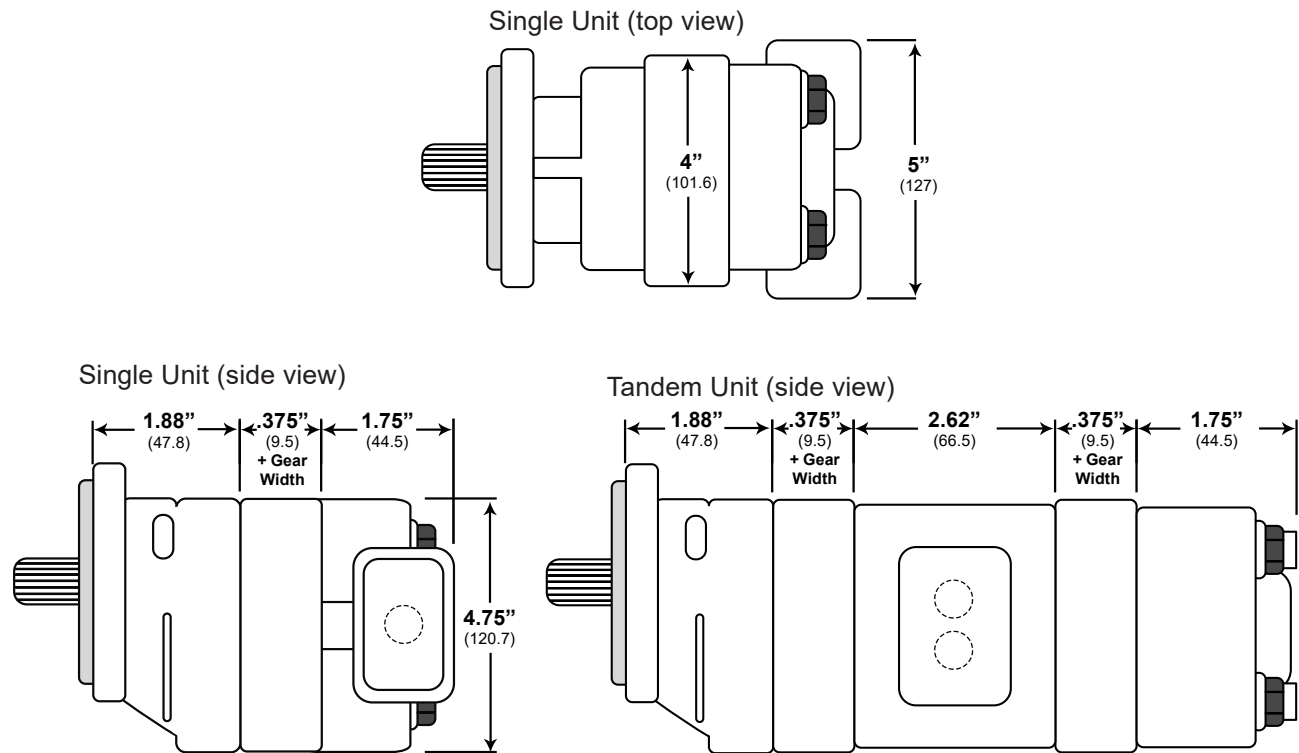
Motor Performance Data

SPEED RPM	INPUT FLOW		OUTPUT TORQUE		INPUT FLOW		OUTPUT TORQUE		INPUT FLOW		OUTPUT TORQUE	
	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)
	1"		1-1/2"		2"		2-1/2"		3"			
900	7.1 (27)	665 (75)	8.3 (31.5)	830 (94)	9.6 (36.5)	940 (106.5)	10.9 (41.5)	965 (109)	12.2 (46)	950 (107.5)		
1200	8.8 (33.5)	665 (75)	10.5 (39.5)	830 (94)	12.2 (46)	940 (106.5)	13.8 (52)	965 (109)	15.5 (58.5)	950 (107.5)		
1500	10.6 (40)	665 (75)	12.6 (47.5)	825 (93.5)	14.7 (55.5)	935 (105.5)	16.7 (63)	955 (108)	18.8 (71)	945 (107)		
1800	12.3 (46.5)	665 (75)	14.7 (55.5)	820 (92.5)	17.2 (65)	930 (105)	19.6 (74)	950 (107.5)	22.1 (83.5)	940 (106.5)		
2100	14 (53)	665 (75)	16.8 (63.5)	820 (92.5)	19.7 (74.5)	930 (105)	22.5 (85)	950 (107.5)	25.4 (96)	940 (106.5)		
2400	15.7 (59.5)	640 (72.5)	18.9 (71.5)	800 (90.5)	22.2 (84)	910 (103)	25.4 (96)	930 (105)	28.8 (109)	920 (104)		
3000	19 (72)	640 (72.5)	23 (87)	800 (90.5)	27.2 (103)	905 (102.5)	31.2 (118)	925 (104.5)	35.3 (133.5)	915 (103.5)		

Note: Input Flow @ 2500psi | Output Torque @175 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	16 (7)	17 (8)	18 (8)	19 (9)	20 (9)	21 (10)	22 (10)	-	-	-	-
MULTI	16 (7)	17 (8)	18 (8)	19 (9)	20 (9)	21 (10)	22 (10)	-	-	-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit. (e.g. a tandem pump with a 1" gear at the front and a 1/2" gear on the rear would be 18lbs + 16lbs for a total of 34lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	4450	-
SAE "A" Keyed	3600	-
SAE "B" Spline	13400	-
SAE "B" Keyed	9900	-
Connecting Shaft	-	5550

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

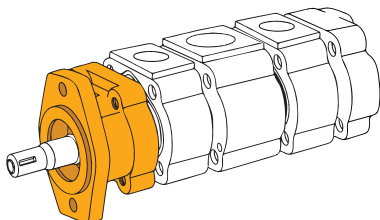
This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Model Code Breakdown

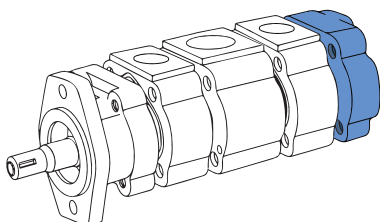
JGP315 - B - 1 93 - BI - AB 07 - 65 - KB - AB 07 - 1 *

Type ¹
JGP = Pump
JGM = Motor

Unit ²
A = Single Unit
B = Tandem Unit
C = Continental Shaft
AL / BL / CL = Add Extended Studs



Shaft End Cover ³
1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
9 = Motor (Double Rotation)



Port End Cover ⁵

NPT Codes

CW CCW		Side Port	
		In	Out
BI		None	None
AJ	JA	1-1/4"	1"
AK	KA	1-1/4"	3/4"
AL	LA	1"	1"
AM	MA	1"	3/4"
AR	RA	3/4"	3/4"
DQ		1/2"	1"
DN		3/4"	3/4"
DM		1"	1"

NPT Codes

CW CCW		Rear Port	
		In	Out
RX		1"	1"
RY		3/4"	3/4"
RZ		1/2"	1/2"

▫ Shaded cells are good for motors

ORB Codes

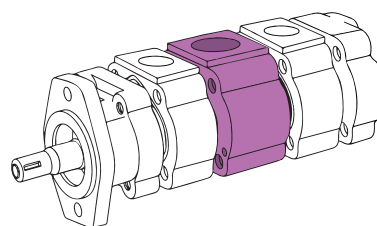
CW CCW		Rear Port	
		In	Out
UC	CU	1-1/4"	1"
UF	FU	1-1/4"	7/8"
UN	NU	1-1/4"	3/4"
UD	DU	1"	1"
UP	PU	1"	7/8"
UQ	QU	1"	3/4"
UR	RU	1"	5/8"
LN	NL	7/8"	7/8"
LP	PL	7/8"	3/4"
LQ	QL	7/8"	5/8"
LR	RL	3/4"	3/4"
LS	SL	3/4"	5/8"
LT	TL	3/4"	1/2"
RN		1"	1"
RQ		3/4"	3/4"
RS		1/2"	1/2"

ORB Codes

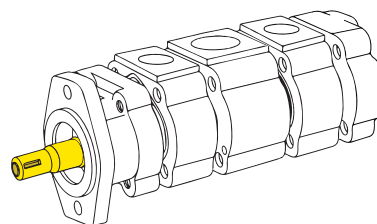
CW CCW		Side Port	
		In	Out
FB	BF	1-1/4"	1"
FG	CF	1-1/4"	7/8"
FG	GF	1-1/4"	3/4"
FJ	JF	1-1/4"	5/8"
FL	LF	1"	1"
FV	VF	1"	7/8"
FW	WF	1"	3/4"
FX	XF	1"	5/8"
FY	YF	7/8"	7/8"
FZ	ZF	7/8"	3/4"
BC	CB	7/8"	5/8"
BG	GB	7/8"	1/2"
BJ	JB	3/4"	3/4"
BL	LB	3/4"	5/8"
BN	NB	3/4"	1/2"
BV	VB	1-1/4"	None
BW	WB	1"	None
BX	XB	7/8"	None
BY	YB	3/4"	None
BZ	ZB	None	1"
PD	DP	None	7/8"
PE	EP	None	3/4"
PM	MP	None	5/8"
PN	NP	None	1/2"
VN		1"	1"
VR		3/4"	3/4"
VQ		1/2"	1/2"

Repeat for multi-section unit

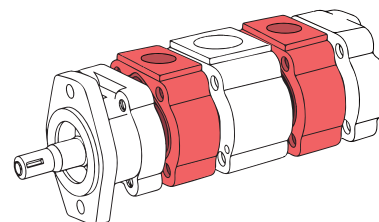
Connecting Shaft ¹⁰
* for connecting multiple units
1 = Connecting Shaft



Bearing Carriers ⁹
See next page for Bearing carrier options



Shaft Type ⁸
65 = SAE 'B' 13 Tooth Spline 0.875" Dia. (Type 2)
66 = SAE 'B' Keyed 0.875" Dia. (Type 2)
96 = SAE 'A' 9 Tooth Spline 0.625" Dia. (Type 2)
97 = SAE 'A' Keyed 0.625" Dia. (Type 2)



Gear Section ^{6&7}
see next page for options.

JOHN GEAR PUMPS & MOTORS



Gear Section ⁶

Blank Codes

Code	Port Size		Gear Size							
	In	Out	5	7	10	12	15	17	20	
AB	None	None	x	x	x	x	x	x	x	Pump
EB	None	None	x	x	x	x	x	x	x	Motor

Gear Section ⁷

Code (Displacement - in³/r)

05	07	10	12	15	17	20
(.62)	(.93)	(1.24)	(1.55)	(1.86)	(2.17)	(2.48)

Bearing Carriers ⁹

ORB Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
1-1/2"	1"	1"	JG	GJ
1-1/2"	1"	7/8"	KG	GK
1-1/2"	7/8"	7/8"	LG	GL
1-1/2"	1"	3/4"	MG	GM
1-1/2"	3/4"	3/4"	NG	GN
1-1/4"	1"	1"	PG	GP
1-1/4"	1"	7/8"	QG	GQ
1-1/4"	7/8"	7/8"	RG	GR
1-1/4"	1"	3/4"	SG	GS
1-1/4"	3/4"	3/4"	TG	GT
1-1/4"	3/4"	5/8"	UG	GU
1-1/4"	3/4"	1/2"	VG	GV
1-1/4"	5/8"	5/8"	WG	GW
1-1/4"	1/2"	1/2"	XG	GX
1"	1"	1"	YG	GY
1"	1"	7/8"	ZG	GZ
1"	7/8"	7/8"	RC	CR
1"	1"	3/4"	SC	CS
1"	3/4"	3/4"	TC	CT
1"	3/4"	5/8"	VC	CV
1"	3/4"	1/2"	WC	CW
1"	5/8"	5/8"	XC	CX
1"	1/2"	1/2"	YC	CY

ORB Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
1-1/2"	1-1/2"	KB	BK
1-1/2"	1-1/4"	KC	CK
1-1/2"	1"	KF	FK
1-1/2"	7/8"	KL	LK
1-1/2"	3/4"	KM	MK
1-1/4"	1-1/4"	KN	NK
1-1/4"	1"	KO	OK
1-1/4"	7/8"	KP	PK
1-1/4"	3/4"	KQ	QK
1-1/4"	5/8"	MB	BM
1-1/4"	1/2"	ML	LM
1"	1"	MN	NM
1"	7/8"	MQ	QM
1"	3/4"	MR	RM
1"	5/8"	MS	SM
1"	1/2"	MT	TM
3/4"	3/4"	MU	UM
3/4"	5/8"	MV	VM
3/4"	1/2"	MW	WM

Split Flange Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
1-1/4"	1-1/4"	CJ	JC
1-1/4"	1"	CL	LC
1-1/4"	3/4"	CM	MC
1-1/4"	1/2"	HB	BH
1"	1"	HC	CH
1"	3/4"	HF	FH
1"	1/2"	HL	LH
3/4"	3/4"	HM	MH
3/4"	1/2"	HN	NH

Split Flange Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
1-1/4"	3/4"	3/4"	CA	AC
1-1/4"	3/4"	1/2"	DA	AD
1-1/4"	1/2"	1/2"	EA	AE
1"	3/4"	3/4"	FA	AF
1"	3/4"	1/2"	GA	AG
1"	1/2"	1/2"	HA	AH

⁹ Out¹ - 1st section from shaft, Out² - 2nd section from shaft



JOHN GEAR PUMPS & MOTORS

John Gear Pumps - 330 Series models are interchangeable with Commercial, Parker, Permco and Muncie.

They are available in a variety of mounting flanges, shaft configurations and porting options.

Our 330 series pumps offer working pressure up to 3500 psi ideal for the most demanding of applications.



HEAVY DUTY

Dowelled cast iron construction with working pressure up to 3500psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.50	1/2"	0.99	16.2	3500	241
0.75	3/4"	1.48	24.3	3500	241
1.00	1"	1.97	32.3	3500	241
1.25	1-1/4"	2.46	40.3	3500	241
1.50	1-1/2"	2.96	48.5	3500	241
1.75	1-3/4"	3.45	56.5	3250	224
2.00	2"	3.94	64.6	3000	207

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)											
	1/2"		3/4"		1"		1-1/4"		1-1/2"		1-3/4"	
900	3.2 (12)	5.1 (19.5)	7 (26.5)	8.8 (33.5)	10.6 (40)	12.4 (47)	14.3 (54)					
1200	4.5 (17)	7 (26.5)	9.5 (36)	12 (45.5)	14.5 (55)	16.9 (64)	19.4 (73.5)					
1500	5.8 (22)	8.9 (33.5)	12.1 (46)	15.2 (57.5)	18.3 (69.5)	21.4 (81)	24.5 (92.5)					
1800	7.1 (27)	10.8 (41)	14.7 (55.5)	18.4 (69.5)	22.1 (83.5)	25.9 (98)	29.6 (112)					
2100	8.4 (32)	12.7 (48)	17.2 (65)	21.6 (82)	26 (98.5)	30.3 (114.5)	34.7 (131.5)					
2400	9.6 (36.5)	14.7 (55.5)	19.8 (75)	24.8 (94)	29.8 (113)	34.8 (131.5)	39.8 (150.5)					
3000	12.2 (46)	18.5 (70)	24.9 (94.5)	31.2 (118)	37.5 (142)	43.8 (166)	50.1 (189.5)					

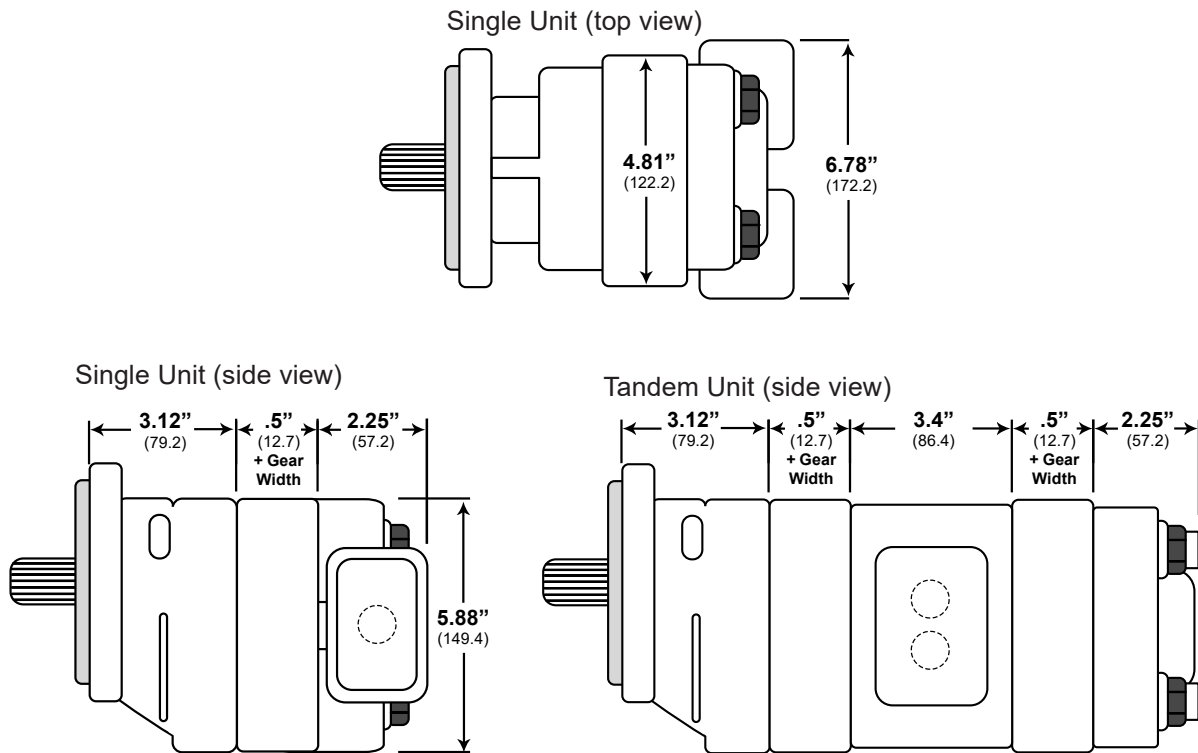
Motor Performance Data

SPEED RPM	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)	INPUT FLOW GPM (LPM)	OUTPUT TORQUE IN/LBS (NM)
	1"		1-1/4"		1-1/2"		1-3/4"		2"	
900	10.1 (38)	1010 (114)	12.3 (46.5)	1270 (143.5)	14.5 (55)	1530 (173)	16.7 (63)	1665 (188.5)	19 (72)	1770 (200)
1200	12.8 (48.5)	1005 (113.5)	15.7 (59.5)	1265 (143)	18.6 (70.5)	1525 (172.5)	21.4 (81)	1660 (187.5)	24.3 (92)	1760 (199)
1500	15.6 (59)	1000 (113)	19.1 (72.5)	1255 (142)	22.6 (85.5)	1515 (171.5)	26.1 (99)	1650 (186.5)	29.6 (112)	1750 (198)
1800	18.4 (69.5)	995 (112.5)	22.5 (85)	1250 (141.5)	26.6 (100.5)	1505 (170)	30.8 (116.5)	1640 (185.5)	34.9 (132)	1740 (197)
2100	21.1 (80)	990 (112)	25.9 (98)	1240 (140)	30.7 (116)	1495 (169)	35.4 (134)	1625 (184)	40.2 (152)	1720 (194.5)
2400	23.9 (90.5)	985 (111.5)	29.3 (111)	1235 (139.5)	34.7 (131.5)	1480 (167.5)	40.1 (152)	1605 (181.5)	45.5 (172)	1695 (191.5)
3000	29.2 (111)	980 (111)	35.9 (136)	1230 (139)	42.6 (161)	1475 (167)	49.3 (187)	1595 (180.5)	56 (212)	1685 (190.5)

Note: Input Flow @ 2500psi | Output Torque @175 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	-	35 (16)	36 (16)	37 (17)	39 (18)	40 (18)	41 (19)	42 (19)	44 (20)	-	-
MULTI	-	31 (14)	33 (15)	34 (15)	35 (15)	37 (17)	38 (17)	39 (18)	40 (18)	-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 3/4" gear on the rear would be 36lbs + 31lbs for a total of 67lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	-	-
SAE "A" Keyed	-	-
SAE "B" Spline	8450	6250
SAE "B" Keyed	6250	6250

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	13000	6250
SAE "BB" Keyed	9300	6250
SAE "C" Spline	-	6250
SAE "C" Keyed	-	6250
Connecting Shaft	-	6250

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

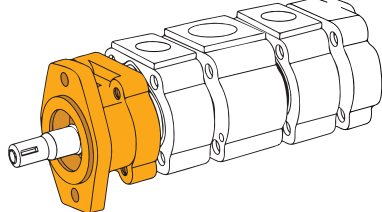
JGP330 - B - 1 42 - BI - AB 07 - 65 - KB - AB 07 - 1 *

Type ¹

JGP = Pump
JGM = Motor

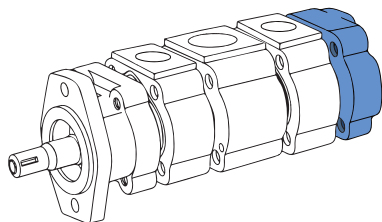
Unit ²

A = Single Unit
B = Tandem Unit
C = Continental Shaft
AL / BL / CL = Add Extended Studs



Shaft End Cover ³

1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Shaft End Cover ⁴

42 = 4-Bolt B
46 = 2/4-Bolt B
78 = 4-Bolt C
97 = 2-Bolt B

Port End Cover ⁵

ORB Codes

CW	CCW	Side Port	
		In	Out
BI		None	None
BA		None	None
VC		1-1/4"	1-1/4"
VN		1"	1"
VR		3/4"	3/4"
FJ	JF	1-1/4"	1"
FL	LF	1"	1"
BG	GB	1-1/4"	None
BJ	JB	1"	None
BN	NB	None	1"

Split Flange Codes

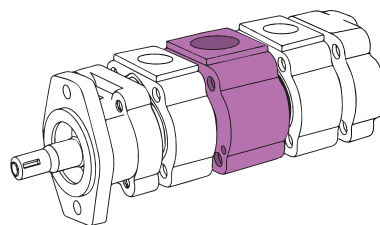
CW	CCW	Side Port	
		In	Out
CS		1-1/4"	1-1/4"
CT		1"	1"
CV		3/4"	3/4"
EJ	JE	1-1/2"	1-1/4"
EK	KE	1-1/2"	1"
EL	LE	1-1/4"	1-1/4"
EM	ME	1-1/4"	1"
EN	NE	1"	1"
OF	FO	1-1/2"	None
OG	GO	1-1/4"	None
OJ	JO	1"	None
OM	MO	None	1-1/4"
ON	NO	None	1"

▫ Shaded cells are good for motors

Repeat for multi-section unit

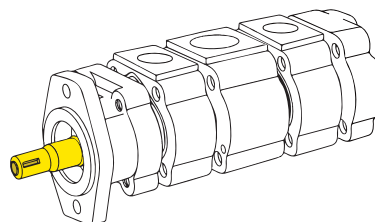
Connecting Shaft ¹⁰

* for connecting multiple units
1 = Connecting Shaft



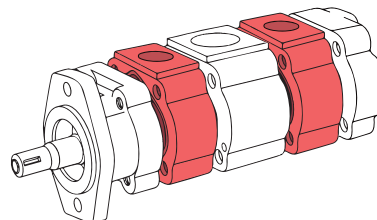
Bearing Carriers ⁹

See next page for Bearing carrier options



Shaft Type ⁸

25 = SAE 'B' 13 Tooth Spline 0.875" Dia.
30 = SAE 'B' Keyed 0.875" Dia.
43 = SAE 'BB' Keyed 1" Dia.
98 = SAE 'BB' 15 Tooth Spline 1" Dia.



Gear Section ^{6&7}

see next page for options.

JOHN GEAR PUMPS & MOTORS



Gear Section ⁶

Blank Codes

Code	Port Size		Gear Size							
	In	Out	5	7	10	12	15	17	20	
AB	None	None	x	x	x	x	x	x	x	Pump
EB	None	None	x	x	x	x	x	x	x	Motor

Gear Section ⁷

Code (Displacement - in³/r)

05	07	10	12	15	17	20
(.99)	(1.48)	(1.97)	(2.46)	(2.96)	(3.45)	(3.94)

Bearing Carriers ⁹

ORB Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
1-1/2"	1"	1"	GV	VG
1-1/4"	1"	1"	GY	YG
1"	1"	1"	GZ	ZG

ORB Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
1-1/2"	1-1/4"	KM	MK
1-1/2"	1"	KN	NK
1-1/4"	1-1/4"	KO	OK
1-1/4"	1"	KP	PK
1"	1"	KQ	QK

ORB Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
1-1/2"	1-1/4"	PQ	QP
1-1/4"	1-1/4"	PR	RP
1-1/4"	1-1/4"	NN	
1"	1"	QQ	
3/4"	3/4"	RR	

Split Flange Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
2"	1-1/4"	1-1/4"	AM	MA
2"	1-1/4"	1"	AN	NA
2"	1"	1"	AP	PA
1-1/2"	1-1/4"	1-1/4"	AT	TA
1-1/2"	1-1/4"	1"	AU	UA
1-1/2"	1"	1"	AV	VA
1-1/4"	1-1/4"	1-1/4"	AW	WA
1-1/4"	1-1/4"	1"	AX	XA
1-1/4"	1"	1"	AY	YA
1"	1"	1"	AZ	ZA

Split Flange Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	HB	BH
2"	1-1/4"	HC	CH
2"	1"	HF	FH
1-1/2"	1-1/2"	HL	LH
1-1/2"	1-1/4"	HM	MH
1-1/2"	1"	HN	NH
1-1/4"	1-1/4"	HO	OH
1-1/4"	1"	HP	PH
1"	1"	HQ	QH

Split Flange Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	UN	NU
2"	1-1/4"	UO	OU
1-1/2"	1-1/2"	UP	PU
1-1/2"	1-1/4"	UQ	QU
1-1/4"	1-1/4"	UR	RU
1-1/2"	1-1/2"	BB	
1-1/4"	1-1/4"	CC	
1"	1"	EE	
3/4"	3/4"	FF	

- Out¹ - 1st section from shaft
- Out² - 2nd section from shaft

▫ Shaded cells are good for motors.

Blank Codes

IN	OUT ¹	CW (left)	CCW (right)
None	None	C	D



JOHN GEAR PUMPS & MOTORS

John Gear Pumps - 350 Series models are interchangeable with Commercial, Parker, Permco and Muncie.

They are available in a variety of mounting flanges, shaft configurations and porting options.

Our 350 series pumps offer working pressure up to 3500 psi ideal for the most demanding of applications.



HEAVY DUTY

Dowelled cast iron construction with working pressure up to 3500psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.50	1/2"	1.28	21	3500	241
0.75	3/4"	1.91	31.3	3500	241
1.00	1"	2.55	41.8	3500	241
1.25	1-1/4"	3.19	52.3	3500	241
1.50	1-1/2"	3.83	62.8	3500	241
1.75	1-3/4"	4.46	73.1	3250	224
2.00	2"	5.1	83.6	3000	207
2.25	2-1/4"	5.74	94.1	2750	190
2.50	2-1/2"	6.38	104.5	2500	172

Pump Performance Data

SPEED RPM	GEAR WIDTH GPM (LPM)									
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	
900	4 (15)	6.4 (24)	8.8 (33.5)	11.2 (42.5)	13.7 (52)	16.1 (61)	18.6 (70.5)	21 (79.5)	23.4 (88.5)	
1200	5.6 (21)	8.8 (33.5)	12.1 (46)	15.4 (58.5)	18.7 (71)	21.9 (83)	25.2 (95.5)	28.4 (108)	31.7 (120)	
1500	7.3 (27.5)	11.3 (43)	15.5 (58.5)	19.5 (74)	23.6 (89.5)	27.7 (105)	31.8 (121)	35.9 (136)	40 (152)	
1800	8.9 (33.5)	13.8 (52)	18.8 (71)	23.6 (89.5)	28.6 (109)	33.5 (127)	38.4 (146)	43.4 (165)	48.3 (183)	
2100	10.6 (40)	16.3 (61.5)	22.1 (83.5)	27.8 (105)	33.6 (127)	39.3 (149)	45.1 (171)	50.8 (193)	56.6 (215)	
2400	12.2 (46)	18.8 (71)	25.4 (96)	31.9 (121)	38.5 (146)	45.1 (171)	51.7 (196)	58.2 (221)	64.8 (246)	

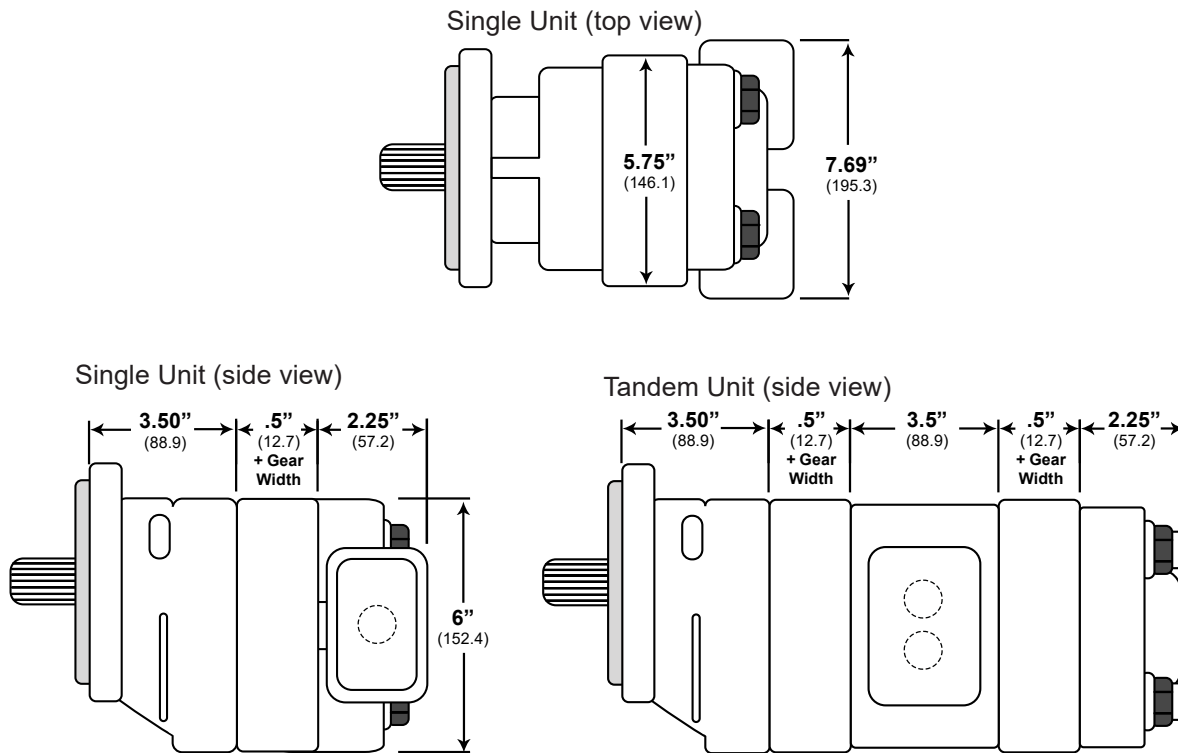
Motor Performance Data

SPEED RPM	INPUT FLOW GPM (LPM)		OUTPUT TORQUE IN/LBS (NM)		INPUT FLOW GPM (LPM)		OUTPUT TORQUE IN/LBS (NM)		INPUT FLOW GPM (LPM)		OUTPUT TORQUE IN/LBS (NM)	
	1"		1-1/4"		1-1/2"		1-3/4"		2"			
900	7.1 (27)	665 (75)	8.3 (31.5)	830 (94)	9.6 (36.5)	925 (104.5)	10.9 (41.5)	965 (109)	12.2 (46)	950 (107.5)		
1200	8.8 (33.5)	665 (75)	10.5 (39.5)	830 (94)	12.2 (46)	925 (104.5)	13.8 (52)	965 (109)	15.5 (58.5)	950 (107.5)		
1500	10.6 (40)	665 (75)	12.6 (47.5)	825 (93.5)	14.7 (55.5)	920 (104)	16.7 (63)	955 (108)	18.8 (71)	945 (107)		
1800	12.3 (46.5)	665 (75)	14.7 (55.5)	820 (92.5)	17.2 (65)	915 (103.5)	19.6 (74)	950 (107.5)	22.1 (83.5)	940 (106.5)		
2100	14 (53)	665 (75)	16.8 (63.5)	820 (92.5)	19.7 (74.5)	915 (103.5)	22.5 (85)	950 (107.5)	25.4 (96)	940 (106.5)		
2400	15.7 (59.5)	640 (72.5)	18.9 (71.5)	800 (90.5)	22.2 (84)	895 (101)	25.4 (96)	930 (105)	28.8 (109)	920 (104)		

Note: Input Flow @ 2500psi | Output Torque @ 175 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

	GEAR WIDTH										
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	-	50 (23)	51 (23)	53 (24)	54 (24)	56 (25)	57 (26)	59 (27)	60 (27)	-	-
MULTI	-	50 (23)	51 (23)	53 (24)	54 (24)	56 (25)	57 (26)	59 (27)	60 (27)	-	-

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1" gear at the front and a 3/4" gear on the rear would be 51lbs + 50lbs for a total of 101lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	-	-
SAE "A" Keyed	-	-
SAE "B" Spline	6450	6450
SAE "B" Keyed	4750	4750

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	9900	9000
SAE "BB" Keyed	7100	7100
SAE "C" Spline	19100	9000
SAE "C" Keyed	13900	9000
Connecting Shaft	-	9000

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

Repeat for multi-section unit

JGP350 - L - 1 42 - BI - AB 07 - 25 - KB - AB 07 - 1 *

1 2 3 4 5 6 7 8 9 6 7 10

Type¹
JGP = Pump
JGM = Motor

Unit²
A = Single Unit
B = Tandem Unit
C = Continental Shaft
L = Unit with Extended Studs

Shaft End Cover³
1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)

Shaft End Cover⁴
42 = 4-Bolt B
46 = 2/4-Bolt B
78 = 4-Bolt C
97 = 2-Bolt B
98 = 2-Bolt C

Port End Cover⁵

Bearing Carriers⁹
See next page for Bearing carrier options

Shaft Type⁸
7 = SAE 'C' 14 Tooth Spline 1.25" Dia.
11 = SAE 'C' Keyed 1.25" Dia.
25 = SAE 'B' 13 Tooth Spline 0.875" Dia.
43 = SAE 'BB' Keyed 1" Dia.
98 = SAE 'BB' 15 Tooth Spline 1" Dia.

Connecting Shaft¹⁰
* for connecting multiple units
1 = Connecting Shaft

Gear Section^{6&7}
see next page for options.

ORB Codes

CW	CCW	Side Port In	Side Port Out
BI	None	None	None
BA	None	None	None
VC	1-1/4"	1-1/4"	1-1/4"
VN	1"	1"	1"
VR	3/4"	3/4"	3/4"
FB	BF	1-1/2"	1-1/4"
FC	CF	1-1/2"	1"
FG	GF	1-1/4"	1-1/4"
FJ	JF	1-1/4"	1"
FL	LF	1"	1"
BC	CB	1-1/2"	None
BG	GB	1-1/4"	None
BJ	JB	1"	None
BL	LB	None	1-1/4"
BN	NB	None	1"

Split Flange Codes

CW	CCW	Side Port In	Side Port Out
EC	CE	2"	1-1/2"
EF	FE	2"	1-1/4"
EG	GE	2"	1"
EH	HE	1-1/2"	1-1/4"
EJ	JE	1-1/2"	1-1/4"
EK	KE	1-1/2"	1"
EL	LE	1-1/4"	1-1/4"
EM	ME	1-1/4"	1"
EN	NE	1"	1"
EO	OE	2"	None
OF	FO	1-1/2"	None
OG	GO	1-1/4"	None
OJ	JO	1"	None
OL	LO	None	1-1/2"
OM	MO	None	1-1/4"

Split Flange Codes

CW	CCW	Side Port In	Side Port Out
ON	NO	None	1"
CR	1-1/2"	1-1/2"	1-1/2"
CS	1-1/4"	1-1/4"	1-1/4"
CT	1"	1"	1"
CV	3/4"	3/4"	3/4"

◻ Shaded cells are good for motors

JOHN GEAR PUMPS & MOTORS



Gear Section ⁶

Blank Codes

Code	Port Size		Gear Size									
	In	Out	5	7	10	12	15	17	20	22	25	
AB	None	None	x	x	x	x	x	x	x	x	x	Pump
EB	None	None	x	x	x	x	x	x	x	x	x	Motor

Gear Section ⁷

Code (Displacement - in³/r)

05	07	10	12	15	17	20	22	25
(1.28)	(1.91)	(2.55)	(3.19)	(3.83)	(4.46)	(5.10)	(5.74)	(6.38)

Bearing Carriers ⁹

ORB Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
2"	1-1/4"	1-1/4"	GM	MG
2"	1-1/4"	1"	GN	NG
2"	1"	1"	GP	PG
1-1/2"	1-1/4"	1-1/4"	GT	TG
1-1/2"	1-1/4"	1"	GU	UG
1-1/2"	1"	1"	GV	VG
1-1/4"	1-1/4"	1-1/4"	GW	WG
1-1/4"	1-1/4"	1"	GX	XG
1-1/4"	1"	1"	GY	YG
1"	1"	1"	GZ	ZG

ORB Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	KB	BK
2"	1-1/4"	KC	CK
2"	1"	KF	FK
1-1/2"	1-1/2"	KL	LK
1-1/2"	1-1/4"	KM	MK
1-1/2"	1"	KN	NK
1-1/4"	1-1/4"	KO	OK
1-1/4"	1"	KP	PK
1"	1"	KQ	QK

ORB Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	PE	EP
2"	1-1/4"	PM	MP
1-1/2"	1-1/2"	PN	NP
1-1/2"	1-1/4"	PQ	QP
1-1/4"	1-1/4"	PR	RP
1-1/2"	1-1/2"	MM	
1-1/4"	1-1/4"	NN	
1"	1"	QQ	
3/4"	3/4"	RR	

Split Flange Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
2-1/2"	1-1/4"	1-1/4"	AF	FA
2-1/2"	1-1/4"	1"	AG	GA
2-1/2"	1"	1"	AH	HA
2"	1-1/4"	1-1/4"	AM	MA
2"	1-1/4"	1"	AN	NA
2"	1"	1"	AP	PA
1-1/2"	1-1/4"	1-1/4"	AT	TA
1-1/2"	1-1/4"	1"	AU	UA
1-1/2"	1"	1"	AV	VA
1-1/4"	1-1/4"	1-1/4"	AW	WA
1-1/4"	1-1/4"	1"	AX	XA
1-1/4"	1"	1"	AY	YA
1"	1"	1"	AZ	ZA

Split Flange Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	HB	BH
2"	1-1/4"	HC	CH
2"	1"	HF	FH
1-1/2"	1-1/2"	HL	LH
1-1/2"	1-1/4"	HM	MH
1-1/2"	1"	HN	NH
1-1/4"	1-1/4"	HO	OH
1-1/4"	1"	HP	PH
1"	1"	HQ	QH

Split Flange Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	UN	NU
2"	1-1/4"	UO	OU
1-1/2"	1-1/2"	UP	PU
1-1/2"	1-1/4"	UQ	QU
1-1/4"	1-1/4"	UR	RU
2"	2"	AA	
1-1/2"	1-1/2"	BB	
1-1/4"	1-1/4"	CC	
1"	1"	EE	
3/4"	3/4"	FF	

- Out¹ - 1st section from shaft
- Out² - 2nd section from shaft

- Shaded cells are good for motors.

Blank Codes

IN	OUT ¹	CW (left)	CCW (right)
None	None	C	D



JOHN GEAR PUMPS & MOTORS

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They are available in a variety of mounting flanges, shaft configurations and porting options.

Our 365 series pumps offer working pressure up to 3500 psi ideal for the most demanding of applications.



HEAVY DUTY

Dowelled cast iron construction with working pressure up to 3500psi



OEM COMPATIBLE

Meeting or exceeding OEM. Our parts and assemblies are interchangeable with leading brands



BUILT TO ORDER

Choose the porting, mounting flange and shaft configuration to meet your needs

Specifications

GEAR WIDTH		DISPLACEMENT		MAX PRESSURE	
		IN ³ /REV	CM ³ /REV	PSI	BAR
0.75	3/4"	2.7	44.2	3500	241
1.00	1"	3.6	59	3500	241
1.25	1-1/4"	4.5	73.7	3500	241
1.50	1-1/2"	5.4	88.5	3500	241
1.75	1-3/4"	6.3	103.2	3500	241
2.00	2"	7.2	118	3500	241
2.25	2-1/4"	8.1	132.7	3250	224
2.50	2-1/2"	9	147.5	3000	207

Pump Performance Data

RPM	GEAR WIDTH GPM (LPM)															
	3/4"			1"		1-1/4"		1-1/2"		1-3/4"		2"		2-1/4"		2-1/2"
900	8	(30.5)	11.5	(43.5)	14.9	(56.5)	18.4	(69.5)	21.8	(82.5)	25.4	(96)	28.8	(109)	32.3	(122.5)
1200	11.5	(43.5)	16.2	(61.5)	20.8	(78.5)	25.5	(96.5)	30	(113.5)	34.7	(131.5)	39.3	(149)	44	(166.5)
1500	15	(57)	20.9	(79)	26.6	(100.5)	32.5	(123)	38.2	(144.5)	44.1	(167)	49.8	(188.5)	55.6	(210.5)
1800	18.5	(70)	25.6	(97)	32.5	(123)	39.5	(149.5)	46.4	(175.5)	53.4	(202)	60.3	(228.5)	67.3	(255)
2100	22	(83.5)	30.2	(114.5)	38.3	(145)	46.5	(176)	54.6	(206.5)	62.8	(237.5)	70.8	(268)	79	(299)
2400	25.6	(97)	34.9	(132)	44.2	(167.5)	53.5	(202.5)	62.8	(237.5)	72.1	(273)	81.4	(308)	90.7	(343.5)

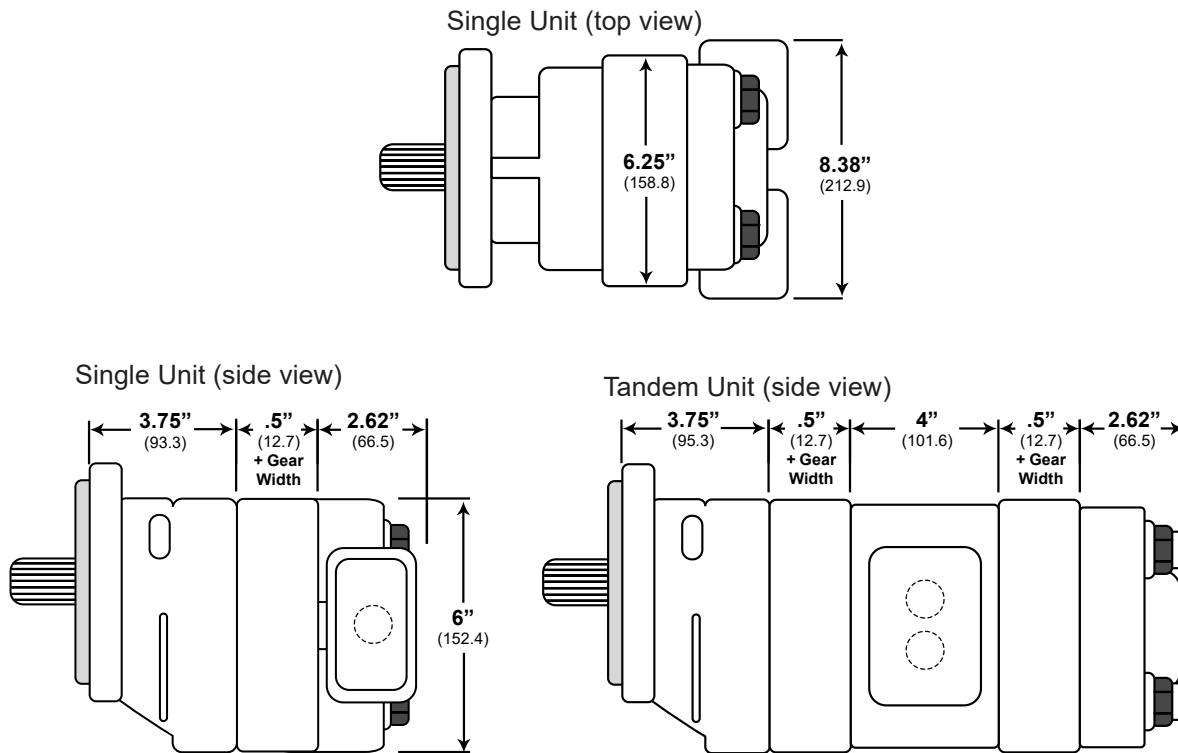
Motor Performance Data

RPM	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE	INPUT FLOW	OUTPUT TORQUE
	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)	GPM (LPM)	IN/LBS (NM)
	1"		1-1/4"		1-1/2"		1-3/4"		2"		2-1/4"		2-1/2"	
900	18.4 (69.5)	1865 (211)	22 (83.5)	2355 (266.5)	25.6 (97)	2860 (323.5)	29.2 (110.5)	3370 (381)	32.9 (124.5)	3850 (435.5)	36.5 (138)	4020 (454.5)	40.1 (152)	4125 (466.5)
1200	23.3 (88)	1845 (208.5)	28.1 (106.5)	2330 (263.5)	32.9 (124.5)	2840 (321)	37.6 (142.5)	3335 (377)	42.4 (160.5)	3810 (431)	47.2 (178.5)	3980 (450)	52 (197)	4080 (461.5)
1500	28.2 (106.5)	1815 (205.5)	34.1 (129)	2295 (259.5)	40.1 (152)	2780 (314.5)	46 (174)	3280 (371)	52 (197)	3750 (424)	57.9 (219)	3915 (443)	63.8 (241.5)	4020 (454.5)
1800	33.1 (125.5)	1805 (204)	40.2 (152)	2280 (258)	47.3 (179)	2765 (312.5)	54.5 (206.5)	3265 (369.5)	61.5 (233)	3730 (422)	68.6 (259.5)	3895 (440.5)	75.7 (286.5)	3995 (452)
2100	37.9 (143.5)	1755 (198.5)	46.2 (175)	2220 (251)	54.4 (206)	2690 (304)	62.8 (237.5)	3160 (357.5)	71.1 (269)	3610 (408.5)	79.3 (300)	3770 (426.5)	87.6 (331.5)	3865 (437)
2400	42.8 (162)	1705 (193)	52.3 (198)	2155 (243.5)	61.7 (233.5)	2615 (296)	71.2 (269.5)	3055 (345.5)	80.6 (305)	3490 (394.5)	90.1 (341)	3645 (412)	99.5 (376.5)	3740 (423)

Note: Input Flow @ 2500psi | Output Torque @175 bar

JOHN GEAR PUMPS & MOTORS

Dimensions - INCHES (mm)



Approximate Weight - LBS (kg)

GEAR WIDTH											
	1/2"	3/4"	1"	1-1/4"	1-1/2"	1-3/4"	2"	2-1/4"	2-1/2"	2-3/4"	3"
SINGLE	-	-	56 (25)	59 (27)	61 (28)	64 (29)	66 (30)	69 (31)	71 (32)	74 (34)	76 (34)
MULTI	-	-	56 (25)	59 (27)	61 (28)	64 (29)	66 (30)	69 (31)	71 (32)	74 (34)	76 (34)

For the total weight of a multiple unit add the weight from the row of the SINGLE unit to the weight from the row of the MULTI unit.
(e.g. a tandem pump with a 1-1/4" gear at the front and a 1" gear on the rear would be 59lbs + 56lbs for a total of 115lbs)

PL Factor

Shaft Style	Integral	Two Piece (Continental)
SAE "A" Spline	-	-
SAE "A" Keyed	-	-
SAE "B" Spline	5050	5050
SAE "B" Keyed	3700	3700

Shaft Style	Integral	Two Piece (Continental)
SAE "BB" Spline	7750	7750
SAE "BB" Keyed	5550	5550
SAE "C" Spline	14900	11950
SAE "C" Keyed	10800	10800
Connecting Shaft	-	11950

Each section of a multi-section pump or motor should be treated as an individual unit, with its own flow and power requirements.

However, because all sections are connected by a common drive shaft, the total power transmitted through the unit is limited by the mechanical strength of that shaft.

This limitation is expressed using the "PL" factor, where:

P = operating pressure

L = total gear width (sum of all sections)

In multi-section units, the PL value must be checked for both the main drive shaft and the first connecting shaft, as each shaft type has its own maximum allowable PL rating.

Formula: PL = Pressure × Total Gear

How to specify and code John Gear Pumps

This catalog contains codes for the most widely used models only. Other assembly codes are available from our sales representatives.

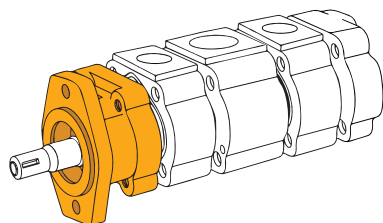
Optionally when building a multi-section unit append a BEARING CARRIER⁹ and another GEAR SECTION^{6&7} for each additional section and finish with a single CONNECTION SHAFT¹⁰

Model Code Breakdown

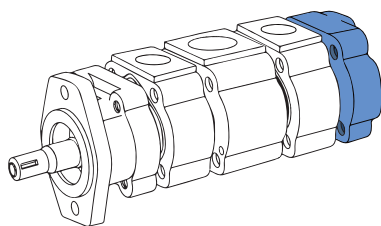
JGP365 - L - 1 42 - BI - AB 07 - 25 - KB - AB 07 - 1 *

Type ¹
JGP = Pump
JGM = Motor

Unit ²
A = Single Unit
B = Tandem Unit
C = Continental Shaft
L = Unit with Extended Studs



Shaft End Cover ³
1 = Pump (Clockwise Rotation)
2 = Pump (Counter-clockwise Rotation)
4 = Pump with Shaft Bearing (Clockwise Rotation)
5 = Pump with Shaft Bearing (Counter-clockwise Rotation)
8 = Motor with Shaft Bearing (Double Rotation)
9 = Motor (Double Rotation)



Shaft End Cover ⁴
42 = 4-Bolt B
78 = 4-Bolt C
97 = 2-Bolt B
98 = 2-Bolt C

Port End Cover ⁵

ORB Codes

Split Flange Codes

Split Flange Codes

CW	CCW	Side Port In	Side Port Out
BI	None	None	None
BA	None	None	None
VC	1-1/4"	1-1/4"	1-1/4"
VN	1"	1"	1"
VR	3/4"	3/4"	3/4"
FB	BF	1-1/2"	1-1/4"
FC	CF	1-1/2"	1"
FG	GF	1-1/4"	1-1/4"
FJ	JF	1-1/4"	1"
FL	LF	1"	1"
BC	CB	1-1/2"	None
BG	GB	1-1/4"	None
BJ	JB	1"	None
BL	LB	None	1-1/4"
BN	NB	None	1"

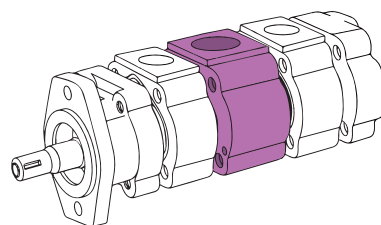
CW	CCW	Side Port In	Side Port Out
EC	CE	2"	1-1/2"
EF	FE	2"	1-1/4"
EG	GE	2"	1"
EH	HE	1-1/2"	1-1/4"
EJ	JE	1-1/2"	1-1/4"
EK	KE	1-1/2"	1"
EL	LE	1-1/4"	1-1/4"
EM	ME	1-1/4"	1"
EN	NE	1"	1"
EO	OE	2"	None
OF	FO	1-1/2"	None
OG	GO	1-1/4"	None
OJ	JO	1"	None
OL	LO	None	1-1/2"
OM	MO	None	1-1/4"

CW	CCW	Side Port In	Side Port Out
ON	NO	None	1"
CR	1-1/2"	1-1/2"	1-1/2"
CS	1-1/4"	1-1/4"	1-1/4"
CT	1"	1"	1"
CV	3/4"	3/4"	3/4"

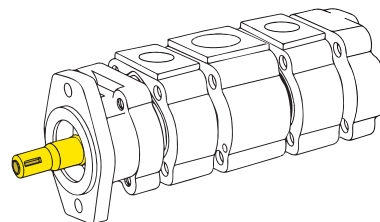
▫ Shaded cells are good for motors

Repeat for multi-section unit

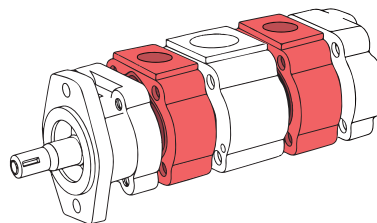
Connecting Shaft ¹⁰
* for connecting multiple units
1 = Connecting Shaft



Bearing Carriers ⁹
See next page for Bearing carrier options



Shaft Type ⁸
7 = SAE 'C' 14 Tooth Spline 1.25" Dia.
11 = SAE 'C' Keyed 1.25" Dia.



Gear Section ^{6&7}
see next page for options.

JOHN GEAR PUMPS & MOTORS



Gear Section ⁶

Blank Codes

Code	Port Size		Gear Size										
	In	Out	5	7	10	12	15	17	20	22	25		
AB	None	None	x	x	x	x	x	x	x	x	x	Pump	
EB	None	None	x	x	x	x	x	x	x	x	x	Motor	

Gear Section ⁷

Code (Displacement - in³/r)

07	10	12	15	17	20	22	25
(2.70)	(3.60)	(4.50)	(5.40)	(6.30)	(7.20)	(8.10)	(9.00)

Bearing Carriers ⁹

ORB Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
2"	1-1/2"	1-1/2"	GJ	JG
2"	1-1/2"	1-1/4"	GK	KG
2"	1-1/2"	1"	GL	LG
2"	1-1/4"	1-1/4"	GM	MG
2"	1-1/4"	1"	GN	NG
2"	1"	1"	GP	PG
1-1/2"	1-1/2"	1-1/2"	GQ	QG
1-1/2"	1-1/2"	1-1/4"	GR	RG
1-1/2"	1-1/2"	1"	GS	SG
1-1/2"	1-1/4"	1-1/4"	GT	TG
1-1/2"	1-1/4"	1"	GU	UG
1-1/2"	1"	1"	GV	VG
1-1/4"	1-1/4"	1-1/4"	GW	WG
1-1/4"	1-1/4"	1"	GX	XG
1-1/4"	1"	1"	GY	YG
1"	1"	1"	GZ	ZG

ORB Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	KB	BK
2"	1-1/4"	KC	CK
2"	1"	KF	FK
1-1/2"	1-1/2"	KL	LK
1-1/2"	1-1/4"	KM	MK
1-1/2"	1"	KN	NK
1-1/4"	1-1/4"	KO	OK
1-1/4"	1"	KP	PK
1"	1"	KQ	QK

ORB Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
2"	1-1/2"	PE	EP
2"	1-1/4"	PM	MP
1-1/2"	1-1/2"	PN	NP
1-1/2"	1-1/4"	PQ	QP
1-1/4"	1-1/4"	PR	RP
1-1/2"	1-1/2"	MM	
1-1/4"	1-1/4"	NN	
1"	1"	QQ	
3/4"	3/4"	RR	

- Out¹ - 1st section from shaft
- Out² - 2nd section from shaft

- Shaded cells are good for motors.

Split Flange Codes - Dual output

IN	OUT ¹	OUT ²	CW (left)	CCW (right)
2-1/2"	1-1/2"	1-1/2"	AC	CA
2-1/2"	1-1/2"	1-1/4"	AD	DA
2-1/2"	1-1/2"	1"	AE	EA
2-1/2"	1-1/4"	1-1/4"	AF	FA
2-1/2"	1-1/4"	1"	AG	GA
2-1/2"	1"	1"	AH	HA
2"	1-1/2"	1-1/2"	AJ	JA
2"	1-1/2"	1-1/4"	AK	KA
2"	1-1/2"	1"	AL	LA
2"	1-1/4"	1-1/4"	AM	MA
2"	1-1/4"	1"	AN	NA
2"	1"	1"	AP	PA
1-1/2"	1-1/2"	1-1/2"	AQ	QA
1-1/2"	1-1/2"	1-1/4"	AR	RA
1-1/2"	1-1/2"	1"	AS	SA
1-1/2"	1-1/4"	1-1/4"	AT	TA
1-1/2"	1-1/4"	1"	AU	UA
1-1/2"	1"	1"	AV	VA
1-1/4"	1-1/4"	1-1/4"	AW	WA
1-1/4"	1-1/4"	1"	AX	XA
1-1/4"	1"	1"	AY	YA
1"	1"	1"	AZ	ZA

Split Flange Codes - Single output

IN	OUT ¹	CW (left)	CCW (right)
2-1/2"	1-1/2"	CJ	JC
2-1/2"	1-1/4"	CL	LC
2-1/2"	1"	CM	MC
2"	1-1/2"	HB	BH
2"	1-1/4"	HC	CH
2"	1"	HF	FH
1-1/2"	1-1/2"	HL	LH
1-1/2"	1-1/4"	HM	MH
1-1/2"	1"	HN	NH
1-1/4"	1-1/4"	HO	OH
1-1/4"	1"	HP	PH
1"	1"	HQ	QH
2-1/2"	1-1/2"	NR	RN

IN	OUT ¹	CW (left)	CCW (right)
1-1/4"	1"	RS	SR

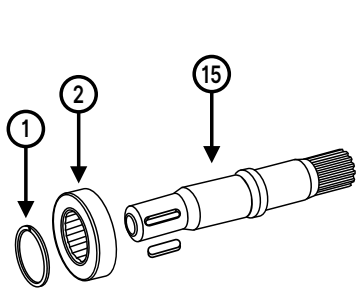
Split Flange Codes - Combined

IN	OUT ¹	CW (left)	CCW (right)
2-1/2"	1-1/2"	UC	CU
2-1/2"	1-1/4"	UF	FU
2"	1-1/2"	UN	NU
2"	1-1/4"	UO	OU
1-1/2"	1-1/2"	UP	PU
1-1/2"	1-1/4"	UQ	QU
1-1/4"	1-1/4"	UR	RU
2"	2"	AA	
1-1/2"	1-1/2"	BB	
1-1/4"	1-1/4"	CC	
1"	1"	EE	
3/4"	3/4"	FF	

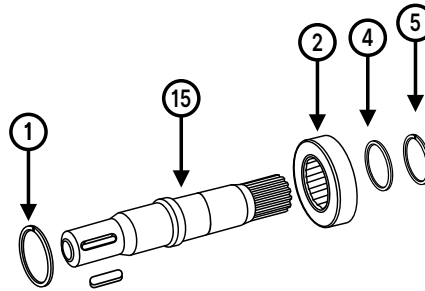
Blank Codes

IN	OUT ¹	CW (left)	CCW (right)
None	None	C	D

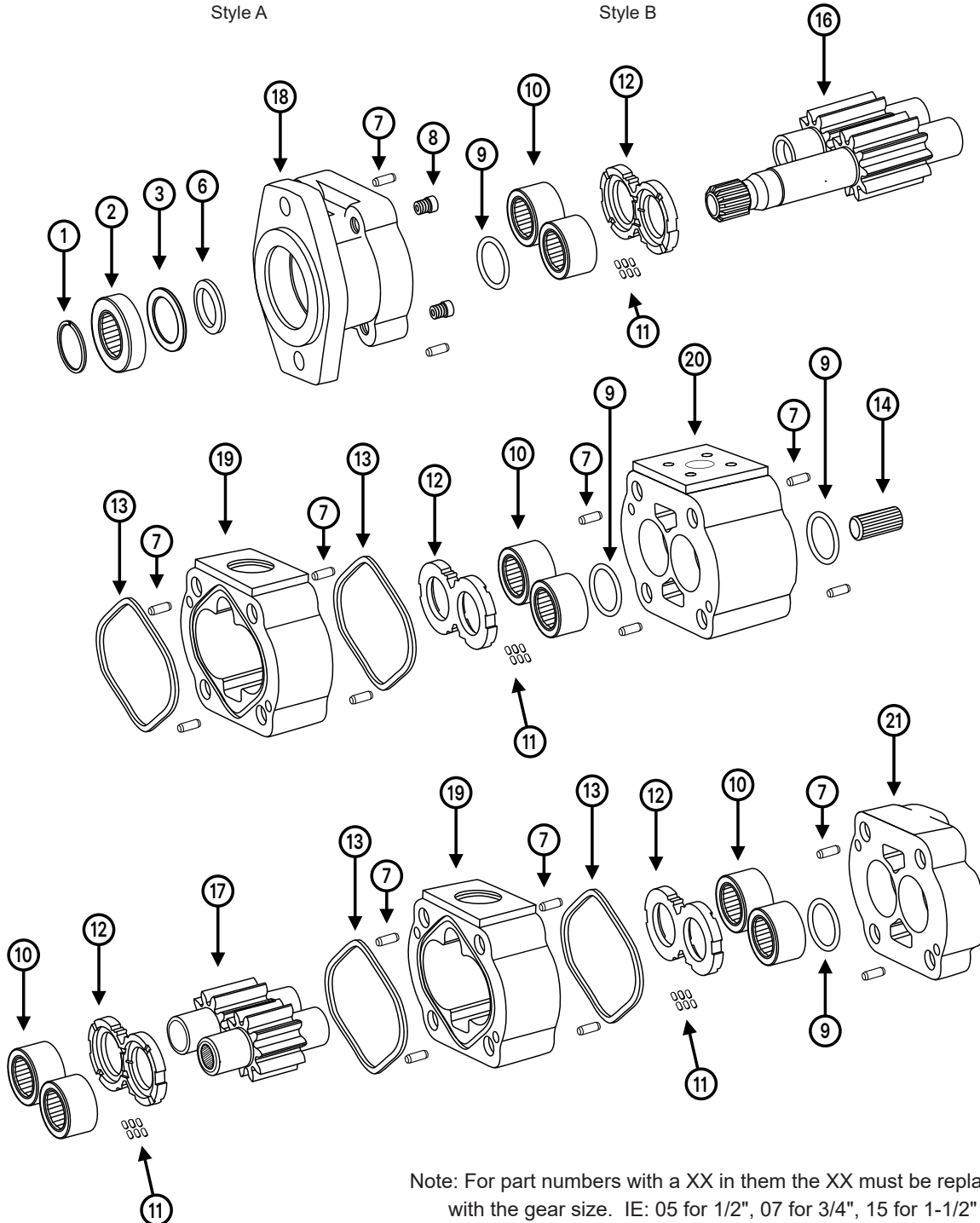
Bearing Style Pump/Motor



Continental Shaft
Style A



Continental Shaft
Style B



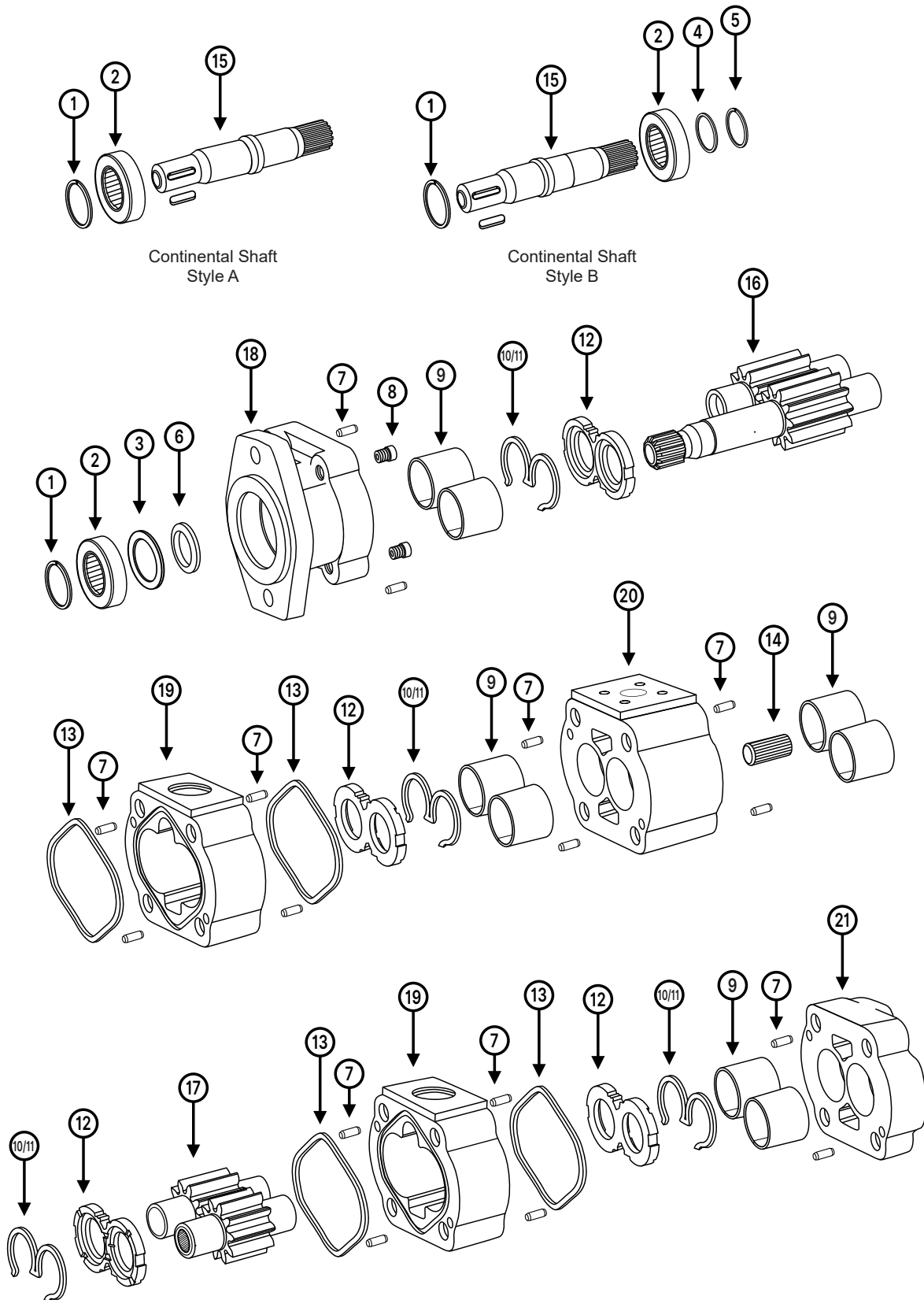
Note: For part numbers with a XX in them the XX must be replaced with the gear size. IE: 05 for 1/2", 07 for 3/4", 15 for 1-1/2"

JOHN GEAR PUMPS & MOTORS



		SERIES			
	DESCRIPTION	21	31	51	76
1	SHAFT BEARING SPIRO LOCK	CJG-2686-063	CJG-2686-063	CJG-2686-065	CJG-2686-025
2a	SHAFT BEARING	CJG-0381-040	CJG-0381-040	CJG-0381-077	CJG-0381-078
2b	BEARING SPACER	CJG-3383-069	CJG-3383-069	CJG-3383-087	CJG-3383-018
3	SEAL RETAINER / SPACER	CJG-3381-040	CJG-3381-040	CJG-3383-020	CJG-2584-051
3a	SEAL RETAINER O-RING	not req.	not req.	not req.	CJG-2881-457
4	CONTINENTAL SHAFT SPACER	C31-0100-002	C31-0100-002	CJG-3381-046	CJG-3381-039
5	CONTINENTAL SHAFT SNAP RING	CJG-2685-011	CJG-2685-011	CJG-2685-040	CJG-2685-029
6a	PUMP SHAFT SEAL	CJG-2883-058	CJG-2883-058	CJG-2883-103	CJG-2883-103
6b	CONTINENTAL PUMP SHAFT SEAL	CJG-2883-107	CJG-2883-107	use regular seal	use regular seal
6c	MOTOR SHAFT SEAL	CJG-2883-119	CJG-2883-119	CJG-2883-115	CJG-2883-094
6d	CONTINENTAL MOTOR SHAFT SEAL	CJG-2883-126	CJG-2883-126	use regular seal	use regular seal
7	DOWEL PIN	CJG-2082-071	CJG-2082-032	CJG-2082-032	CJG-2082-033
8a	PRESSURE PLUG	CJG-2286-004	CJG-2286-004	CJG-2286-004	CJG-2286-004
8b	CHECK VALVE	CJG-3681-001	CJG-3681-001	CJG-3681-001	CJG-3681-001
9	RING SEAL	CJG-2585-006	CJG-2585-006	CJG-2585-009	CJG-2585-011
10	ROLLER BEARINGS	CJG-0381-068	CJG-0381-068	CJG-0381-059	CJG-0381-060
11	POCKET SEALS	CJG-2882-051	CJG-2882-051	CJG-2882-051	CJG-2882-052
12	THRUST PLATE	CJG-2185-013	CJG-2185-013	CJG-2185-012	CJG-2185-020
13	HOUSING GASKET	CJG-2884-019	CJG-2884-050	CJG-2884-021	CJG-2884-024
14	CONNECTING SHAFT	C31-1133-001	C31-1133-001	C51-1133-001	C76-1133-001
15	CONTINENTAL SHAFT				
	.75D KEYED	C31-1135-152	C31-1135-152	-	-
	SAE C 14T SPLINE 1.25D	C31-1135-133	C31-1135-133	C51-1135-194	C76-1135-148
	SAE C KEYED 1.25D	-	-	C51-1500-500	C76-1135-147
	SAE B 13T SPLINE 7/8D	C31-1135-138	C31-1135-138	C51-1000-300	-
	SAE B KEYED LONG 7/8D	C31-1135-192	C31-1135-192	-	-
	SAE BB KEYED 1D	C31-1500-400	C31-1500-400	C51-1500-400	-
	SAE BB 15T SPLINE 1D	C31-1000-401	C31-1000-401	C51-1000-400	-
	SAE A 9T SPLINE 5/8D	C31-1000-200	C31-1000-200	-	-
16	SHAFT AND GEAR SET				
	SAE C 14T SPLINE 1.25D	-	-	C51-29XX-250	C76-29XX-250
	SAE C KEYED 1.25D	-	-	C51-29XX-750	C76-29XX-750
	SAE B 13T SPLINE 7/8D	C31-29XX-230	C31-29XX-230	C51-29XX-230	-
	SAE B KEYED 7/8D	C31-29XX-730	C31-29XX-730	-	-
	SAE BB KEYED 1D	C31-29XX-740	C31-29XX-740	C51-29XX-740	-
	SAE BB 15T SPLINE 1D	C31-29XX-240	C31-29XX-240	-	-
	SAE B 13T SPLINE 7/8D TYPE 2	C31-29XX-430	C31-29XX-430	C51-29XX-430	-
	SAE C 14T SPLINE 7/8D TYPE 2	-	-	C51-29XX-450	-
17	GEAR SET	C31-28XX-000	C31-28XX-000	C51-28XX-000	C76-28XX-000
18	SHAFT END COVER				
	PAD MOUNT	-	C31-5017-401	C51-5017-401	-
	6-BOLT ROUND	-	C31-5047-401	C51-5047-201	-
	4-BOLT D	-	-	-	C76-5037-403
	4-BOLT C	-	C31-5037-402	C51-5037-402	C76-5037-402
	2-BOLT C	-	-	C51-5027-402	C76-5027-402
	4-BOLT B	C21-5030-201	C31-5037-401	C51-5037-401	C76-5037-401
	2 BOLT B	C21-5020-401	C31-5027-401	C51-5027-401	-
	2/4-BOLT B	C21-5053-202	C31-5053-402	C51-5057-401	-
	2-BOLT A	C21-5020-404	C31-5027-404	-	-
	2-BOLT B TYPE 2	C21-5029-205	C31-5029-201	-	-
	2/4-BOLT B TYPE 2	-	-	C51-5057-404	-
	4-BOLT CLOVERLEAF TYPE 2	C21-5036-201	-	-	-
	2-BOLT C TYPE 2	-	-	C51-5027-206	-
19a	GEAR SECTION	C21-80XX-100	C15-82XX-100	C51-82XX-100	C76-82XX-100
19b	GEAR SECTION HI-FLOW	-	-	C55-82XX-101	-
20a	PUMP BEARING CARRIER	C21-7363-100	C31-7723-100	C51-7723-100	C76-7723-100
20b	MOTOR BEARING CARRIER	C21-7300-100	C31-7740-100	C51-7740-100	C76-7740-100
21a	PORT END COVER	C21-3100-100	C31-3120-100	C51-3120-100	C76-3120-100
21b	PORT END COVER LARGE PORTS	-	C31-3420-100	C51-3420-100	-
21c	PORT END COVER HI-FLOW	-	-	C55-3220-332	-

Bearing Style Pump/Motor



Note: For part numbers with a XX in them the XX must be replaced with the gear size. IE: 05 for 1/2", 07 for 3/4", 15 for 1-1/2"

JOHN GEAR PUMPS & MOTORS



		SERIES			
	DESCRIPTION	315	330	350	365
1	SHAFT BEARING SPIRO LOCK	-	CJG-2686-063	CJG-2686-065	CJG-2686-025
2a	SHAFT BEARING	-	CJG-0381-040	CJG-0381-077	CJG-0381-078
2b	BEARING SPACER	-	CJG-3383-069	CJG-3383-087	CJG-3383-099
3	SEAL RETAINER	CJG-3384-313	CJG-3381-040	CJG-3383-020	CJG-2584-119
4	CONTINENTAL SHAFT SPACER	-	C31-0100-002	CJG-3381-046	CJG-3782-158
5	CONTINENTAL SHAFT SNAP RING	-	CJG-2685-011	CJG-2685-040	CJG-2685-029
6a	PUMP SHAFT SEAL	CJG-2883-151	CJG-2883-058	CJG-2883-103	CJG-2883-052
6b	CONTINENTAL PUMP SHAFT SEAL	-	CJG-2883-107	use regular seal	use regular seal
6c	MOTOR SHAFT SEAL	CJG-2883-156	CJG-2883-119	CJG-2883-115	CJG-2883-094
6d	CONTINENTAL MOTOR SHAFT SEAL	-	CJG-2883-126	use regular seal	use regular seal
7a	PUMP DOWEL PIN	CJG-2082-071	CJG-2082-032	CJG-2082-032	CJG-2082-062
7b	MOTOR DOWEL PIN	CJG-2082-071	CJG-2082-032	CJG-2082-032	CJG-2082-069
8a	PRESSURE PLUG	CJG-2286-004	CJG-2286-004	CJG-2286-004	CJG-2286-004
8b	CHECK VALVE	CJG-3681-001	CJG-3681-001	CJG-3681-001	CJG-3681-001
9	BUSHINGS	CJG-0482-195	CJG-0482-306	CJG-0482-308	CJG-0482-307
10a	PUMP THRUST PLATE SEAL	CJG-2883-168	CJG-2883-166	CJG-2882-140	CJG-2883-176
10b	MOTOR THRUST PLATE SEAL END	CJG-2881-996	CJG-2881-930	CJG-2885-074	CJG-2885-070
10c	MOTOR THRUST PLATE SEAL SIDE	CJG-2881-997	CJG-2881-931	CJG-2885-073	CJG-2885-069
11a	PUMP NYLON BACKUP SEAL	CJG-2883-169	CJG-2883-167	CJG-2882-139	CJG-2883-177
11b	MOTOR NYLON BACKUP SEAL	CJG-2881-995	CJG-2881-929	CJG-2885-075	CJG-2885-071
12a	PUMP THRUST PLATE	CJG-2185-063	CJG-2185-056	CJG-2185-057	CJG-2185-055
12b	MOTOR THRUST PLATE	CJG-2185-070	CJG-2185-065	CJG-2185-068	CJG-2185-060
13a	PUMP HOUSING GASKET	CJG-2881-968	CJG-2884-050	CJG-2884-074	CJG-2884-052
13b	MOTOR HOUSING GASKET	CJG-2881-968	CJG-2884-076	CJG-2884-021	CJG-2884-023
14	CONNECTING SHAFT	C15-1133-001	C30-1133-001	C50-1133-001	C65-1133-001
15	CONTINENTAL SHAFT				
	SAE C 14T SPLINE 1.25D	-	C30-1000-500	-	-
	SAE C KEYED 1.25D	-	-	C50-1500-500	C65-1500-500
	SAE B 13T SPLINE 7/8D	-	C30-1000-300	C50-1000-300	-
	SAE B KEYED 7/8D	-	C30-1500-300	-	-
	SAE BB KEYED 1D	-	C30-1500-400	-	-
	SAE BB 15T SPLINE 1D	-	-	C50-1000-401	-
16	SHAFT AND GEAR SET				
	SAE C 14T SPLINE 1.25D	-	-	C50-29XX-250	C65-29XX-250
	SAE C KEYED 1.25D	-	-	C50-29XX-750	C65-29XX-750
	SAE B 13T SPLINE 7/8D	C15-29XX-430	C30-29XX-230	C50-29XX-230	-
	SAE B KEYED 7/8D	C15-29XX-930	C30-29XX-730	-	-
	SAE B KEYED/TAPERED 7/8D	C15-29XX-604	-	-	-
	SAE BB KEYED 1D	-	C30-29XX-740	C50-29XX-740	-
	SAE BB 15T SPLINE 1D	-	C30-29XX-240	C50-29XX-240	-
	SAE A 9T SPLINE 5/8D	C15-29XX-420	-	-	-
	SAE A KEYED 5/8D	C15-29XX-920	-	-	-
17	GEAR SET	C15-28XX-000	C30-28XX-000	C50-28XX-000	C65-28XX-000
18a	SHAFT END COVER				
	4-BOLT C	-	C30-5033-202	C50-5033-202	C65-5033-202
	2-BOLT C	-	-	C50-5023-202	C65-5023-202
	4-BOLT B	-	C30-5033-201	C50-5133-201	C65-5033-201
	2 BOLT B	C15-5029-403	C30-5023-201	C50-5023-201	C65-5023-201
	2 BOLT B NO CHECK PORTS	C15-5029-203			
	2/4-BOLT B	-	C30-5053-202	C50-5053-401	-
	2-BOLT A	C15-5029-404	-	-	-
	2-BOLT A NO CHECK PORTS	C15-5029-204	-	-	-
18b	365 MOTOR SHAFT END COVER				
	4-BOLT C	-	-	-	C65-5033-402
	2-BOLT C	-	-	-	C65-5023-402
19	GEAR SECTION	C15-82XX-100	C30-82XX-100	C50-82XX-100	C65-82XX-100
20a	BEARING CARRIER 1 OUTLET	C15-7100-100	C30-7100-100	C50-7100-100	C65-7100-100
20b	BEARING CARRIER 2 OUTLETS	C15-7300-100	C30-7300-100	C50-7300-100	C65-7300-100
20c	BEARING CARRIER MOTOR	-	C30-7200-100	C50-7200-100	-
21a	PUMP SHAFT END COVER - BLANK	C15-3000-100	C30-3000-100	C50-3000-100	C65-3000-100
21b	PUMP SHAFT END COVER	C15-3030-100	C30-3010-100	C50-3010-100	C65-3010-100
21c	MOTOR SHAFT END COVER	C15-3020-100	C30-3020-100	C50-3020-100	C65-3020-100

Identifying Pumps/Motors

Pump Rotation

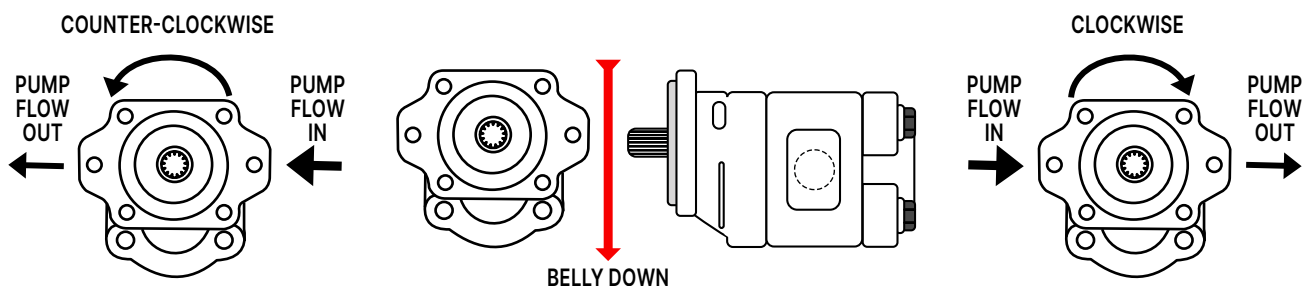
Gear pump rotation direction refers to the rotation direction of the gear pump drive shaft, that is, the rotation direction of the input shaft during normal operation. It is usually divided into three types:

- Clockwise (CW, RH, Right Hand)
- Counter-clockwise (CCW, LH, Left Hand)
- Bi-rotational (BI)

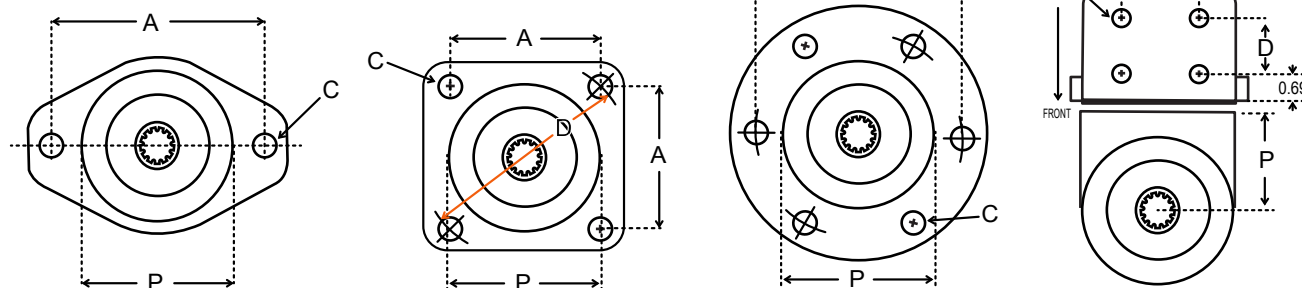
As an industry standard the rotation is determined when viewed looking at the input shaft.

Usually a single rotation pump uses the larger port as the inlet port, and the smaller one as the pressure side of the pump. Bi-rotational pumps are constructed so they have the same size ports and the drive shaft may turn either direction.

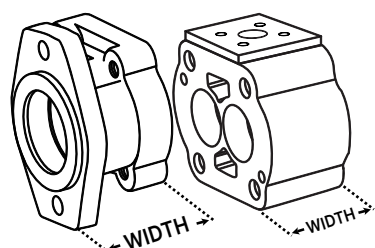
First identify the belly of the pump. In a fixed displacement unit, the input shaft drives the primary gear, which in turn drives the idler gear positioned in the belly. This offset creates a distinct bulged area in the housing that can be used as visual reference.



Shaft End Covers



	A	C	P	D
SAE A - 2 BOLT	4.187	.437	3.25	
SAE B - 2 BOLT	5.75	.562	4	
SAE C - 2 BOLT	7.125	.687	5	
SAE B - 4 BOLT	3.536	.562	4	5
SAE C - 4 BOLT	5.508	.687	5	6.375
SAE D - 4 BOLT	6.364	.812	6	9
6 BOLT ROUND	3.25	.44	2.625	
PAD MOUNT	2.0	1/2-13UNC (1-1/4 DEEP)	2.5	2.0



BEARING			BUSHING		
SERIES	SHAFT END COVER	BEARING CARRIER	SERIES	SHAFT END COVER	BEARING CARRIER
21	2.94	2.50	315	1.88	2.62
31	2.94	2.50	330	3.12	3.40
51	3.38	2.88	350	3.50	3.50
76	3.75	3.00	365	3.5	4.00

TYPE 2 SHAFT END COVERS ARE 1" SHORTER

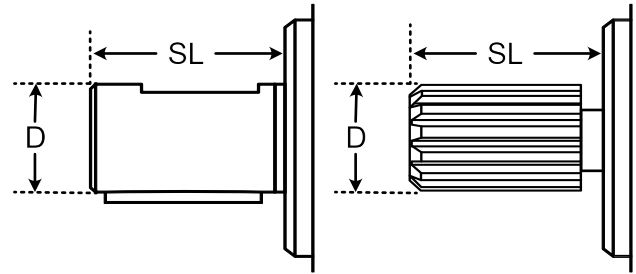
*SIZES IN INCHES

JOHN GEAR PUMPS & MOTORS



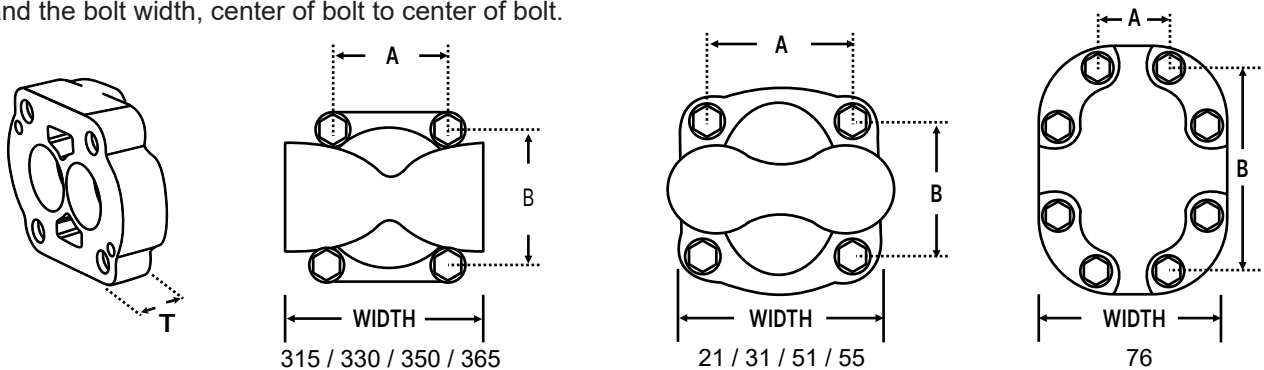
Shaft

SAE CODE	D	SL	KEY WIDTH	TEETH
A	0.625	0.937	.16 x .16 x .75	9T
B	0.875	1.312	.25 x .375 x 1	13T
BB	1	1.5	.25 x .38 x 1.25	15T
C	1.25	1.875	.31 x .47 x 1.5	14T



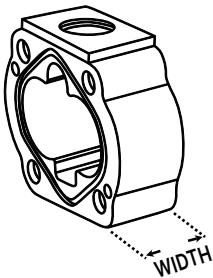
Port End Cover

Look at the unit from the port-end-cover and match it to the closes example below. Measure the overall width and the bolt width, center of bolt to center of bolt.



	A	B	BOLT SIZE	WIDTH ported	WIDTH unported	T ported	T unported
21	3.14	3.14	9/16	4.6		1.75	
31	3.56	3.56	5/8	4.81		1.75 or 2.25 (large ports)	
51	3.57	3.57	5/8	4.94		1.75 or 2.25 (large ports)	
55	3.57	3.57	5/8	6.62		2.38	
76	2.57	6.52	5/8	6.13		2	
315	2.38	3.36	1/2	4.5	4	2	1.75
330	3.57	3.57	5/8	7.12	4.81	2.56	2.25
350	3.57	3.57	5/8	7.38	5.75	2.75	2.25
P 365	4.25	4.25	5/8	7.62	6.25	3.06	2.62
M 365	4.25	4.25	3/4	7.62	6.25	2.88	2.62

Gear Housing



21 / 31 / 51 / 55								
Housing Width	1.25	1.5	1.75	2	2.25	2.5	2.75	3
Gear Width	0.5	0.75	1	1.25	1.5	1.75	2	2.25
76								
Housing Width	1.5	1.75	2	2.25	2.5	2.75	3	3.25
Gear Width	0.5	0.75	1	1.25	1.5	1.75	2	2.25
315								
Housing Width	1.375	1.125	1.375	1.625	1.875	2.125	2.375	-
Gear Width	0.5	0.75	1	1.25	1.5	1.75	2	-
330								
Housing Width	-	1.25	1.5	1.75	2	2.25	2.5	2.75
Gear Width	-	0.75	1	1.25	1.5	1.75	2	2.25
350								
Housing Width	1.25	1.5	1.75	2	2.25	2.5	2.75	3
Gear Width	0.75	1	1.25	1.5	1.75	2	2.25	2.5
365								
Housing Width	1.5	1.75	2	2.25	2.5	2.75	3	3.25
Gear Width	1	1.25	1.5	1.75	2	2.25	2.5	2.75

*SIZES IN INCHES

Heavy Motion 101/102 Series Dump Pumps

Replacement for Parker/Commercial 101 Remote Mount and 102 Direct Mount configurations.
Available in C or G frames.

Featuring:

- Two or Three Line Hook-up
- Max rpm 1800
- Max Pressure 2500 PSI (173bar)
- Dowelled for Higher Pressure
- Heavy Duty Roller Bearings
- Cast Iron Construction
- Optional Airshift Control
- Optional Mounting Bracket



SERIES	REMOTE MOUNT	DIRECT MOUNT	FLOW AT 1800 RPM (GPM/LPM)		INLET	PRESSURE & RETURN PORT	SHAFT
			2"	2-1/2"			
101 C	X		39 / 147	48 / 180.5	1-1/4" NPT	1" NPT	1" Keyed
101 G	X		29 / 109.3		1-1/4" NPT	3/4" NPT	1" Keyed
102 C		X			1-1/4" NPT	1" NPT	7/8" 13 tooth
102 G		X			1-1/4" NPT	3/4" NPT	7/8" 13 tooth

	PART NUMBER	ROTATION	GEAR SIZE	MANUAL SHIFT	AIR SHIFT
102 C	HC102-LMS-25	Counter-Clockwise	2.5"	X	
	HC102-LAS-25	Counter-Clockwise	2.5"		X
	HC102-RAS-25	Clockwise	2.5"		X
	HC102-RMS-25	Clockwise	2.5"	X	
102 G	HG102-LAS-20 (4B)	Counter-Clockwise	2"		X
	HG102-LMS-20 (4B)	Counter-Clockwise	2"	X	
	HG102-RAS-20 (4B)	Clockwise	2"		X
	HG102-RMS-20 (4B)	Clockwise	2"	X	
101 C	HC101-XMS-20	BI	2"	X	
	HC101-XMS-25	BI	2.5"	X	
101 G	HG101-XMS-20	BI	2"	X	

Accessories

Part Number	Description	
AKC102-4	Airshift Valve for C101/C102, 4 bolt pattern	
AKG102	Airshift Valve for G101/G102, 2 bolt pattern	
HM314-0100-005	Mounting Bracket for C101	

Heavy Motion LG Series Dump / Walking Floor Pumps

Lightweight & compact the LG series is an ideal alternative to traditional dump pumps.

Featuring:

- Two or Three Line Hook-up
- Airshifts included
- Max rpm 2000
- Standard relief: 2500 psi
- Single or dual pressure
- Dual Pressure relief valve
- Low side: 2500 psi
- High side: 3000 psi



Model Code Breakdown

LG 27 D B4 R 25 N16

SERIES ¹ LG = Little Giant

Displacement ² 22 = 5.0 CID
22GPM @ 1000RPM
27 = 6.2 CID
27GPM @ 1000RPM

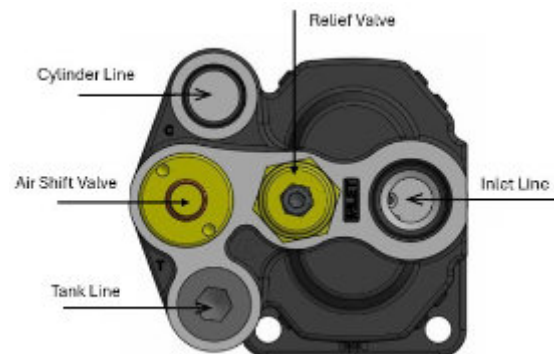
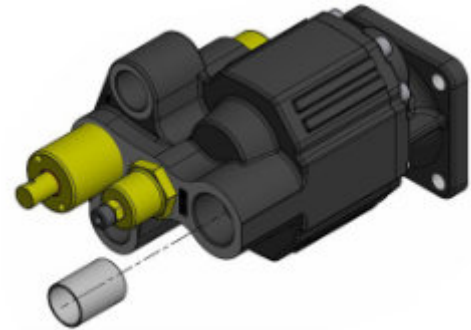
Pressure ³ D = Dual Pressure
S = Single Pressure

Flange/Shaft ⁴ B4 = SAE B 4 Bolt Flange, 7/8" - 13 Tooth Shaft
D4 = 4 Bolt Flange, DIN 5462, 8 Tooth Shaft
S4 = SAE B 4 Bolt Flange, 1" - 15 Tooth Shaft

Rotation ⁵ R = CW
L = CCW

Ports ⁷ N16 = 1" NPT
S16 = #16 ORB

Pressure ⁶ 25 = 2500PSI
2530 = 2500/3000PSI



Available Models	Pressure	Flange/Shaft	GPM @ 1000RPM	Rotation
LG27DB4R2530N16	2500/3000 Dual	SAE B 4 Bolt, 7/8" - 13T	27	CW
LG27DD4L2530N16	2500/3000 Dual	4 Bolt Flange, DIN, 8T	27	CCW
LG27DS4R2530N16	2500/3000 Dual	SAE B 4 Bolt, 1" - 15T	27	CW
LG22DD4R2530N16	2500/3000 Dual	4 Bolt Flange, DIN, 8T	22	CW
LG27SB4L25N16	2500 Single	SAE B 4 Bolt, 7/8" - 13T	27	CCW
LG27SD4L25N16	2500 Single	4 Bolt Flange, DIN, 8T	27	CCW
LG27SS4L25N16	2500 Single	SAE B 4 Bolt, 1" - 15T	27	CCW

* Contact us for availability and different models

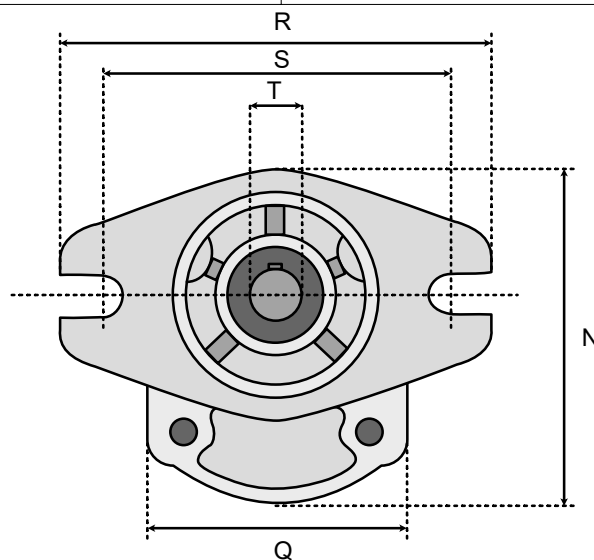
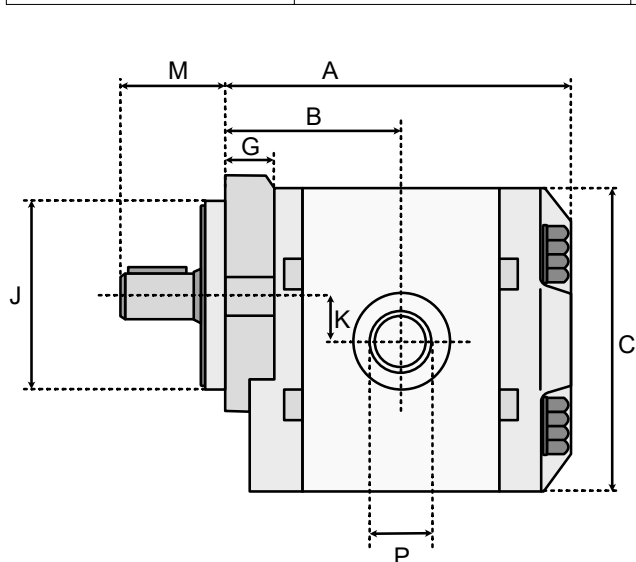


Aluminum Gear Pumps

Anfield pumps feature a floating bushing design with bodies made of high strength cold extruded aluminum which can withstand pressures of over 4000 psi. AP-10, 20, and 30 styles come with cast iron end caps and mounting flange.

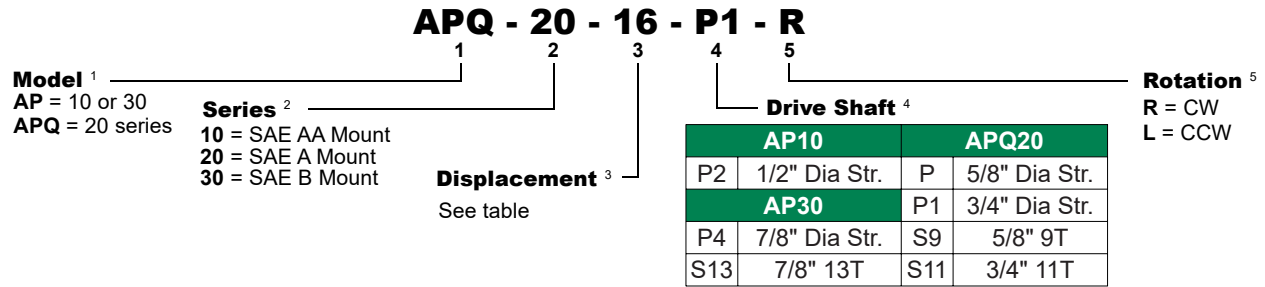


	AP-10	APQ-20	AP-30
Displacement cm ³ /rev	1.3 - 8.0	4.5 - 25	22 - 89
Displacement cu.in/rev	0.07 - 0.49	0.27 - 1.52	1.34 - 5.43
Min. RPM	500	500	400
Max RPM	4500	3500 3000 (22/25 displacement)	3000
Rated Pressure PSI (bar)	2900 (200)	2900 (200)	2900 (200)
Port Size Inlet (P)	SAE-8 (3/4" - 16 UNF)	SAE-12 (1-1/16 - 12 UNF)	SAE-16 / SAE-20
Port Size Outlet (P)	SAE-6 (9/16" - 18 UNF)	SAE-10 (7/8" - 14 UNF)	SAE-12 (1-1/16 - 12 UNF)
Flange (J)	SAE AA-2 Bolt	SAE A-2 Bolt	SAE B-2 Bolt
Shaft (T)	1/2" Straight - 1/8" Key	5/8" Straight - 5/32" Key 3/4" Straight - 3/16" Key 5/8" 9 Tooth Splined 3/4" 11 Tooth Splined	7/8" Straight - 1/4" Key 7/8" 13 Tooth Splined



	C	G	J	K	M	N	Q	R	S
AP-10	3.19 (81)	0.49 (12.5)	~1.99 (50.8)	0.47 (12)	1.06 (27)	3.13 (84)	2.6 (66)	4.02 (102)	3.25 (82.55)
APQ-20	4.53 (115)	0.55 (14)	~3.25 (82.55)	0.65 (16.5)	1.26 (32)	4.6 (116.6)	3.39 (86)	5.2 (130)	4.17 (106)
AP-30	-	0.70 (18)	~4 (98)	-	P4 = 1.61 (41) S13 = 1.81 (46)	-	4.53 (115)	6.85 (174)	5.75 (146)

Model Code Breakdown



		Displacement		Dimensions			SAE Ports	
Model	GPM @ 1800rpm	cm3/rev	cu.in/rev	A - in (mm)	B - in (mm)	lbs. (Kg)	in	out
AP-10-1.3	0.55	1.3	0.079	3.23 (82)	1.65 (42)	4 (1.81)	8	6
AP-10-1.7	0.76	1.7	0.104	3.39 (86)	1.68 (43)	4.3 (1.95)	8	6
AP-10-2.0	0.94	2.0	0.122	3.31 (84)	1.69 (43)	4.2 (1.90)	8	6
AP-10-2.7	1.25	2.7	0.165	3.39 (86)	1.73 (44)	4.5 (2.04)	8	6
AP-10-3.4	1.56	3.4	0.207	3.46 (88)	1.77 (45)	4.5 (2.04)	8	6
AP-10-4.1	1.95	4.1	0.250	3.54 (90)	1.81 (46)	4.8 (2.17)	8	6
AP-10-5.1	2.73	5.1	0.311	3.66 (93)	1.87 (48)	5.0 (2.27)	8	6
AP-10-6.1	2.88	6.1	0.372	3.78 (96)	1.93 (49)	5.0 (2.27)	8	6
AP-10-8.0	3.82	8.0	0.488	4.28 (107)	2.29 (58)	5.2 (2.36)	6	6
APQ-20-4.5	2.14	4.5	0.275	3.87 (98.3)	1.74 (44.2)	7.8 (3.54)	12	10
APQ-20-6.0	2.80	6.0	0.36	3.98 (101)	1.79 (45.5)	8.4 (3.80)	12	10
APQ-20-7.0	3.35	7.0	0.43	4.06 (103)	1.83 (46.5)	8.4 (3.80)	12	10
APQ-20-8.0	3.74	8.0	0.48	4.13 (105)	1.87 (47.5)	8.6 (3.90)	12	10
APQ-20-10	4.75	10	0.61	4.27 (108.5)	1.94 (49.3)	8.7 (3.95)	12	10
APQ-20-12	5.69	12	0.73	4.43 (112.5)	2.02 (51.3)	8.9 (4.04)	12	10
APQ-20-14	6.62	14	0.85	4.57 (116)	2.09 (53)	9.0 (4.08)	12	10
APQ-20-16	7.56	16	0.97	4.70 (119.5)	2.16 (54.8)	9.3 (4.20)	12	10
APQ-20-20	9.51	20	1.22	5.00 (127)	2.30 (58.5)	9.7 (4.41)	12	10
APQ-20-22	10.44	22	1.34	5.22 (132.5)	2.41 (61.3)	9.9 (4.49)	12	10
APQ-20-25	11.84	25	1.52	5.35 (136)	2.48 (63)	10.2 (4.62)	12	10
AP-30-22	10.44	22	1.34	5.16 (131)	2.60 (66)	19.1 (8.68)	16	12
AP-30-26	12.39	26	1.59	5.27 (134)	2.63 (67)	19.4 (8.80)	16	12
AP-30-34	16.13	34	2.07	5.47 (139)	2.71 (69)	20.1 (9.11)	16	12
AP-30-39	18.55	39	2.38	5.62 (143)	2.79 (71)	22.2 (9.19)	16	12
AP-30-43	20.42	43	2.62	5.78 (147)	2.87 (73)	20.7 (9.39)	16	12
AP-30-51	24.23	51	3.11	5.98 (152)	2.99 (76)	21.6 (9.82)	20	16
AP-30-60	28.52	60	3.66	6.22 (158)	3.11 (82)	22.4 (10.16)	20	16
AP-30-70	33.27	70	4.27	6.53 (166)	3.22 (82)	22.8 (10.36)	20	16
AP-30-78	37.09	78	4.76	6.73 (171)	3.34 (85)	23.5 (10.67)	20	16
AP-30-89	42.31	89	5.43	6.93 (176)	3.46 (88)	24.2 (11.00)	20	16



JOHN GEAR PUMPS

A Division of Cummins Hydraulics Ltd.



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PRODUCT CONFIGURATIONS

The configurations and specifications shown in this catalogue represent our most popular and commonly requested options. Additional displacements, shafts, mounting flanges, port configurations and other options may be available.

If you do not see the configuration required for your application, please contact John Gear Pumps. Many products can be configured or manufactured to meet specific application requirements.

DISCLAIMER

Every effort has been made to ensure the accuracy of the information contained in this catalogue. However, errors or omissions may occur, and specifications are subject to change without notice.

Certain product names, part numbers, trademarks, and other identifying information referenced in this catalogue are used solely for identification and cross-reference purposes. Such names, numbers, trademarks, and information may be the property of their respective owners.

The use of these references does not imply that the products shown are manufactured, authorized, sponsored, or endorsed by the respective original equipment manufacturers unless otherwise stated.

LIMITED WARRANTY

John Gear Pumps, a division of Cummins Hydraulics Ltd., warrants hydraulic pumps, motors and components branded as John Gear Pumps to be free from defects in materials and workmanship for a period of **twelve (12) months from the date the product is placed into service, but in no event more than twenty-four (24) months from the date of purchase from John Gear Pumps.**

Should a problem occur during the warranty period, John Gear Pumps must be notified promptly. Prior authorization is required before any product is returned for warranty consideration.

Products claimed to be defective must be returned to John Gear Pumps or an authorized dealer, freight prepaid, for inspection. John Gear Pumps will determine the cause and nature of the failure. Products determined to have failed due to a defect in materials or workmanship will, at the option of John Gear Pumps, be **repaired, replaced, or the original purchase price refunded.**

WARRANTY EXCLUSIONS

This warranty does not cover failure or damage resulting from:

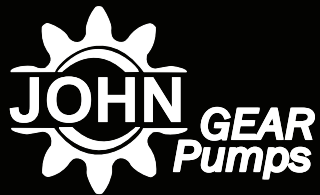
- Normal wear and tear
- System contamination or inadequate filtration
- Improper installation, maintenance, application or operation
- Operation outside published product specifications
- Excessive pressure, pressure spikes, cavitation, erosion or corrosion
- Improper handling or storage
- Failure to follow applicable OEM installation and startup procedures
- Unauthorized repair, alteration or modification

Continued operation of a product after a suspected failure, where such operation results in additional damage, may void warranty coverage.

John Gear Pumps and Cummins Hydraulics Ltd are not responsible for labour, removal or reinstallation costs, equipment downtime, loss of use, lost production or profits, overtime, or any incidental, indirect or consequential damages. In no event shall the liability of John Gear Pumps or Cummins Hydraulics Ltd. exceed the original purchase price of the product giving rise to the warranty claim.

Products returned for warranty consideration must be properly packaged to prevent shipping damage. All hydraulic ports must be capped or plugged to prevent contamination from entering the product.

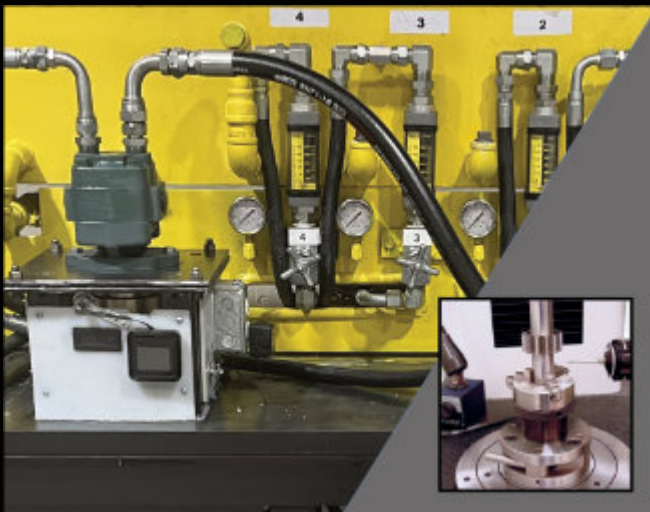
This warranty applies only to products operated and maintained within their intended application and published specifications.



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Assembled and Tested in
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