- Original Commerical pump design
- Three-piece cast iron construction for assembly flexibility
- Durable high-strength cast iron body for excellent power to weight ratio
- Balanced thrust plates optimize pump efficiency
- Roller bearings for durability and resistance to fluid contamination
- Multiple sections available



Product Features	Description
Pump Type	Cast iron, Fixed
Mounting	SAE, DIN
Ports	SAE, Split Flange, NPT
Shaft Style	SAE, DIN
Pump Speed	900 to 2400 RPM
Motor Speed	800 to 2000 RPM
Maximum Displ.	6.4 in ³ /rev
Maximum Operating Pressure	3000 PSI

Product Features	Description
Fluids	Standard Hydraulic Fluid, Phosphate Ester
Fluid Temperature	Range of Operating Temperature -20 to 80°C (0 to 180°F)
Fluid Viscosity	50-7500 SUS
Direction of Rotation (looking at the driveshaft)	Clockwise, Counter Clockwise, Bi-Rotational

NOTE: Different types of pump options are available in terms of shaft, mounting and port type. Please contact Parker.



PGP/PGM051 Specifications

PGP051 Frame Size	05	07	10	12	15	17	20	22	25
Displacement – cm³/rev (in³/rev)	20.9	31.3	41.8	52.2	62.7	73.1	83.6	94.0	104.5
	(1.28)	(1.91)	(2.55)	(3.19)	(3.83)	(4.46)	(5.10)	(5.74)	(6.38)
Max continuous pressure – bar (PSI)	207	207	207	207	207	207	172	172	172
	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(2,500)	(2,500)	(2,500)
Max Speed – RPM	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Approximate Weight – Lbs. [kg]	34	35.5	37	38.5	40	41.5	43	48.5	50
	[15.5]	[16]	[17]	[17.5]	[18]	[19]	[19.5]	[22]	[22.5]

PGM051 Frame Size	05	07	10	12	15	17	20	22	25
Displacement – cm³/rev (in³/rev)	20.90 (1.28)	31.30 (1.91)	41.80 (2.55)	52.20 (3.19)	62.70 (3.83)	73.10 (4.46)	83.60 (5.10)	94.00 (5.74)	104.50 (6.38)
Max continuous pressure – bar (PSI)	207 (3,000)	207 (3,000)	207 (3,000)	207 (3,000)	207 (3,000)	207 (3,000)	172 (2,500)	172 (2,500)	172 (2,500)
Max Speed – RPM	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Approximate Weight – Lbs. [kg]	34 [15.5]	35.5 [16.0]	37 [17.0]	38.5 [17.5]	40 [18]	41.5 [19]	43 [19.5]	48.5 [22]	50 [22.5]

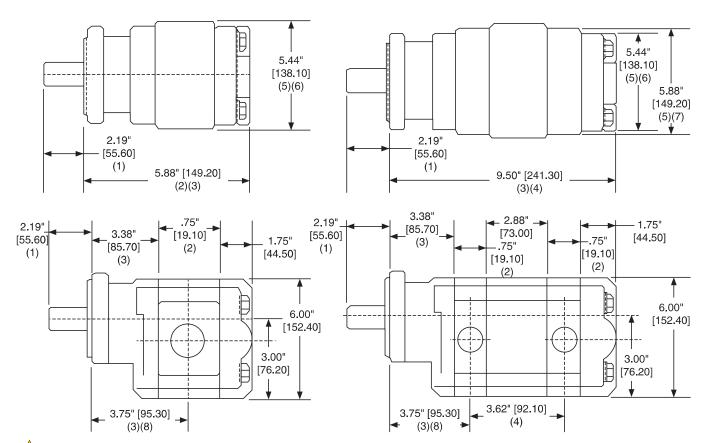
PGP/PGM051 Dimensions

NOTES

- Dimension will vary with shaft type Dimension + gear width
- Dimension is for Type 1 SEC. Type 2: subtract 1.00" (25.4 mm)
- Dimension + total gear width
- Dimension + total gear width
 Dimension will vary with port type. Subtract 0.25" (6.4 mm) for S.F. ports.
 For 2.25" and 2.50" gear width, dimension is 6.75" (171.5 mm).
 Dimension is for wide B-C. Narrow B-C dimensions: 5.00" (127 mm)
 Dimension + ½ front section gear width
- 6.

Single Units

Multiple Units





PGP051

Flow data at 2500 PSI (172 bar) unless noted

Speed			Gear W	idth Output (gp	m/lpm)		
RPM	1"	1 1/4"	1 ½"	1 3/4"	2"	2 1/4"	2 ½"
900	8.5	10.5	13	15	17.5	20	22
900	32	39.5	49	57	66	75.5	83.5
1200	12	15	18	21	24	27	30
1200	45.5	57	68	79.5	91	102	114
1500	15	19	23	27	31	35	39
1500	57	72	87	102	117	132	148
1000	18	23	27.5	32.5	37.5	42	47
1800	68	87	104	123	142	159	178
2100	21.5	27	32.5	38.5	44	49.5	55
2100	81.5	102	123	146	167	187	208
2400	25	31	37	44	51	57	63.5
2400	94.5	117	140	167	193	216	240

^{*}Flow data at 2000 PSI (138 bar) rated pressure.

PGP051

Input power at 2500 PSI (172 bar) unless noted

Speed		Gear Width Inches (HP/Kw)									
RPM	1"	1 1/4"	1 ½"	1 3/4"	2"	2 1/4"	2 ½"				
900 19 14	19	22	26	30	34	38	42				
	14	17	20	23	26	29	32				
1200	25	30	34	40	45	51	56				
1200	18	22	26	30	34	38	42				
1500	31	37	43	50	56	63	69				
1500	23	27	32	37	42	47	51				
1800	36	44	51	59	67	75	82				
1800	27	33	38	44	50	56	61				
2100	42	51	60	69	78	87	96				
2100	31	38	44	51	58	65	72				
2400	47	57	68	79	89	99	110				
2400	35	43	51	59	66	74	82				

^{*}Input power at 2000 PSI (138 bar)

PGM051

Motor performance data at 2500 PSI (172 bar) unless noted.

Motor peri	noted performance data at 2500 For (172 bar) unless noted.												
	1" Gear			1 ½" Gear			2" Gear				2½" Gear		
Speed RPM	Output Inp		Input	Output		Input	Output		Input	Out	Output		
111 101	Torque	Power	Flow	Torque	Power	Flow	Torque	Power	Flow	Torque	Power	Flow	
800	825	10.5	10.5	1310	16.5	15.5	1810	23	21	2330	29.5	26	
800	93	8	39.5	148	12.5	58.5	204.5	17	79.5	263.5	22	98.5	
1200	850	16	15.5	1340	25.5	22.5	1830	35	30.5	2340	44.5	37.5	
1200	96	12	58.5	151.5	19	85	207	26	115	264.5	33	142	
1600	830	21	20	1330	34	30	1805	46	40	2300	58.5	49.5	
1600	94	15.5	75.5	150.5	25.5	114	204	34.5	151	260	43.5	187	
2000	800	25.5	25	1290	41	37	1770	56	49	2250	71.5	61.5	
2000	90.5	19	94.5	146	30.5	140	200	42	185	254	53.5	233	

U.S./Metric

Torque: In.

In.-lbs.

Flow: GPM LPM Power: HP

*Motor performance data at 2000 PSI (138 bar).



No Porting ≤ 3000 PSI

Order	Code	Port	Size	Gear Width Availability			
cw	ccw	In	Out	10	12	15	17
АВ	AB	None	None	Х	Х	Х	Х

No Porting ≤ 2500 PSI

Order Code		Port	: Size	Gear Width Availability			
cw	ccw	In Out		20	22	25	
АВ	AB	None	None	Х	Х	Х	



ODT Tube Porting ≤ 3000 PSI

Order Code ODT Tube Porting Port Size				Gear Width Availability					
CW	ccw	In	Out	10	12	15	17		
EC	ED	3/4"*	-	X*	X*		Х		
ED	EC	-	3/4"				X		
EF	EF	3/4"	3/4"			2500	X		
EJ	EG	1"*	3/4"				X*		
EK	EH	1-1/4"*	3/4"			2500*	X		
AC	AD	1"*	-	X*	X*	X*	X*		
AA	AO	1-1/4"*	-			X*	X*		

^{*} Ports designated by an asterisk * are for use as the low-pressure inlet port only.

ODT Tube Porting ≤ 2500 PSI

Order	Order Code		e Porting Size	Gear Width Availability			
CW	ccw	In	Out	20	22	25	
AC	AD	1"*	-	Х			
AD	AC	-	1"	×			
AF	AF	1"	1"	X	×	X	
AJ	AG	1-1/4"*	1"	X*			
AK	AH	1-1/2"*	1"	X*		X	
AA	AO	1-1/4"*	-		X	X	
AO	AA	-	1-1/4"		X	X	
AL	AL	1-1/4"	1-1/4"		X	X	
AP	AM	1-1/2"*	1-1/4"		X	X	
AE	AU	1-1/2"*	-	X*	×	X	
AU	AE	-	1-1/2"			X	
AR	AR	1-1/2"	1-1/2"			X	

^{*} Ports designated by an asterisk * are for use as the low-pressure inlet port only.

NOTES

- 1. Shaded cells are acceptable for motor codes.
- 2. X means both codes are available.
- 3. 2500 indicates maximum pressure rating on port.
- 4. CW = Clockwise; CWW = Counter Clockwise.



Split Flange Porting ≤ 3000 PSI

Order	Code		ge Porting Size		Gear Width	Availability	
CW	ccw	In	Out	10	12	15	17
UC	UD	3/4"	-	2500	×		
UD	UC	-	3/4"	2500	×		
UF	UF	3/4"	3/4"	2500	X	×	
UJ	UG	1"*	3/4"	2500*	X*	X*	
UK	UH	1-1/4"*	3/4"		X*	X*	X*
ОС	OD	1"*	-		X*	2500	×
OD	ОС	-	1"			2500	×
OF	OF	1"	1"			2500	X
OJ	OG	1-1/4"*	1"			2500*	X*
OK	ОН	1-1/2"*	1"			2500*	X*
OA	ОВ	1-1/4"*	-		X*	X*	
OE	OU	1-1/2"*	-			X*	X*

^{*} Ports designated by an asterisk * are for use as the low-pressure inlet port only.

Split Flange Porting ≤ 2500 PSI

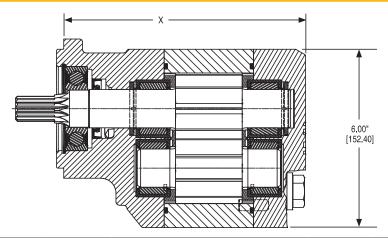
Order Code		Split Flange Porting Port Size		Gear Width Availability		
CW	ccw	In	Out	20	22	25
ОС	OD	1"*	-	Х		
OD	ОС	-	1"	X		
OF	OF	1"	1"	X	X	X
OJ	OG	1-1/4"*	1"	X*		
OK	ОН	1-1/2"*	1"	X*	×	×
OL	OL	1-1/4"	1-1/4"	Х	X	X
OP	OM	1-1/2"*	1-1/4"	X*	×	X
OE	OU	1-1/2"*	-	X*		
OR	OR	1-1/2"	1-1/2"		X	X
XB	ZB	2"*	-	X*		
OQ	ON	2"*	1-1/4"	X*	X*	X*
OV	os	2"*	1-1/2"		X*	X*

^{*} Ports designated by an asterisk * are for use as the low-pressure inlet port only.

NOTES

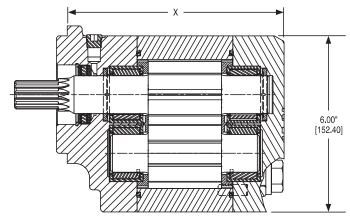
- 1. Shaded cells are acceptable for motor codes.
- 2. X means both codes are available.
- 3. 2500 indicates maximum pressure rating on port.
- 4. CW = Clockwise; CWW = Counter Clockwise.





	X DIMENSION – Type 1								
SEC CODE	05	07	10	12	15	17	20	22	25
00	6.62"	6.87"	7.12"	7.37"	7.62"	7.87"	8.12"	8.37"	8.62"
	[168.15]	[174.50]	[180.85]	[187.20]	[193.55]	[199.90]	[206.25]	[212.60]	[218.95]
42	6.38"	6.63"	6.88"	7.13"	7.38"	7.63"	7.88"	8.13"	8.38"
	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]	[193.80]	[200.15]	[206.50]	[212.85]
78	6.38"	6.63"	6.88"	7.13"	7.38"	7.63"	7.88"	8.13"	8.38"
	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]	[193.80]	[200.15]	[206.50]	[212.85]
97	6.38"	6.63"	6.88"	7.13"	7.38"	7.63"	7.88"	8.13"	8.38"
	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]	[193.80]	[200.15]	[206.50]	[212.85]
98	6.38"	6.63"	6.88"	7.13"	7.38"	7.63"	7.88"	8.13"	8.38"
	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]	[193.80]	[200.15]	[206.50]	[212.85]

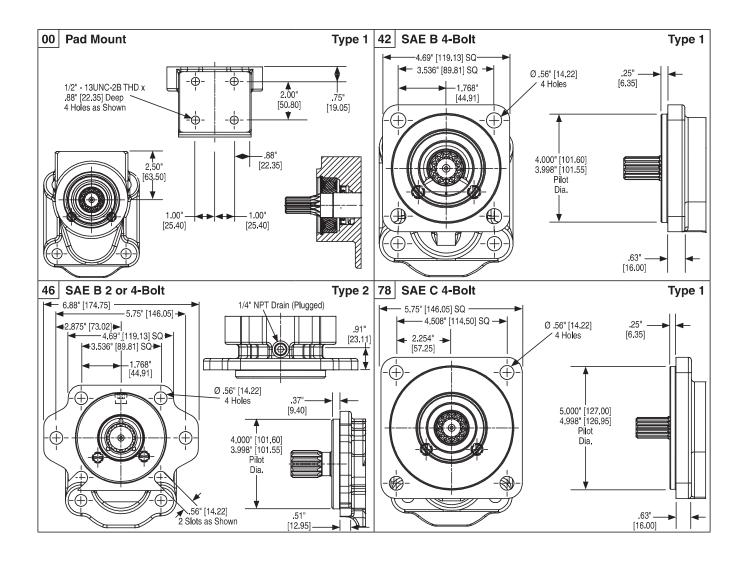




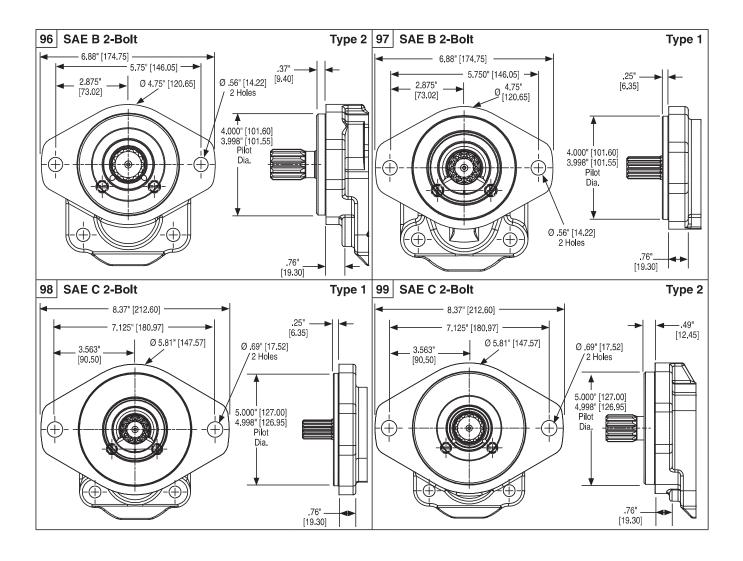
	X DIMENSION – Type 2 (Standard PEC)								
SEC CODE	05	07	10	12	15	17	20	22	25
46	5.38"	5.63"	5.88"	6.13"	6.38"	6.63"	6.88"	7.13"	7.38"
	[136.65]	[143.00]	[149.35]	[155.70]	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]
96	5.38"	5.63"	5.88"	6.13"	6.38"	6.63"	6.88"	7.13"	7.38"
	[136.65]	[143.00]	[149.35]	[155.70]	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]
99	5.38"	5.63"	5.88"	6.13"	6.38"	6.63"	6.88"	7.13"	7.38"
	[136.65]	[143.00]	[149.35]	[155.70]	[162.05]	[168.40]	[174.75]	[181.10]	[187.45]

	X DIMENSION – Type 2 (Large PEC)							
SEC CODE	12	15	17	20	22	25		
46	6.76"	7.01"	7.26"	7.51"	7.76"	8.01"		
	[171.70]	[178.05]	[184.40]	[190.75]	[197.10]	[203.45]		
96	6.76"	7.01"	7.26"	7.51"	7.76"	8.01"		
	[171.70]	[178.05]	[184.40]	[190.75]	[197.10]	[203.45]		
99	6.76"	7.01"	7.26"	7.51"	7.76"	8.01"		
	[171.70]	[178.05]	[184.40]	[190.75]	[197.10]	[203.45]		

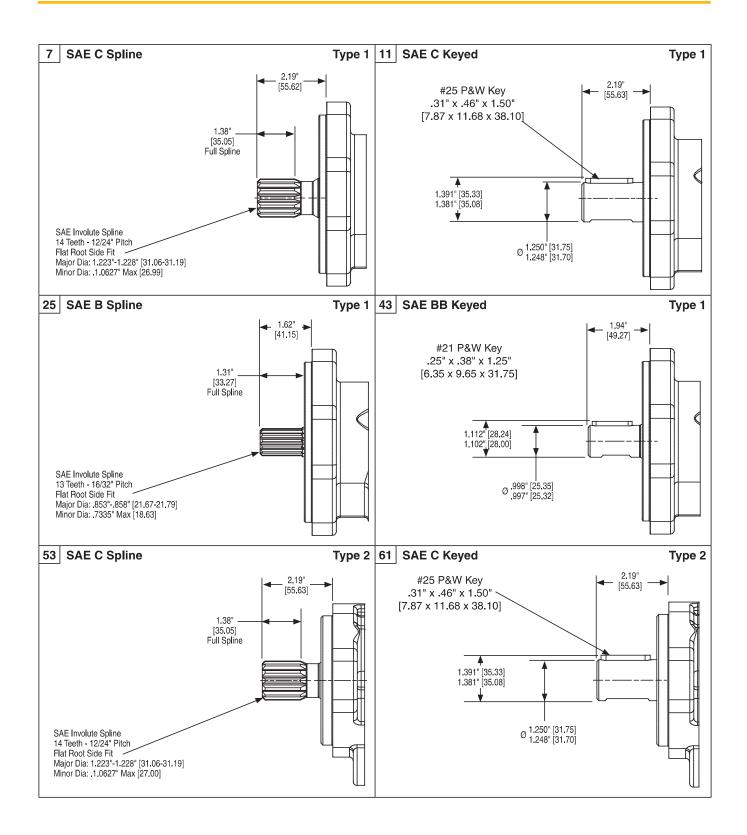




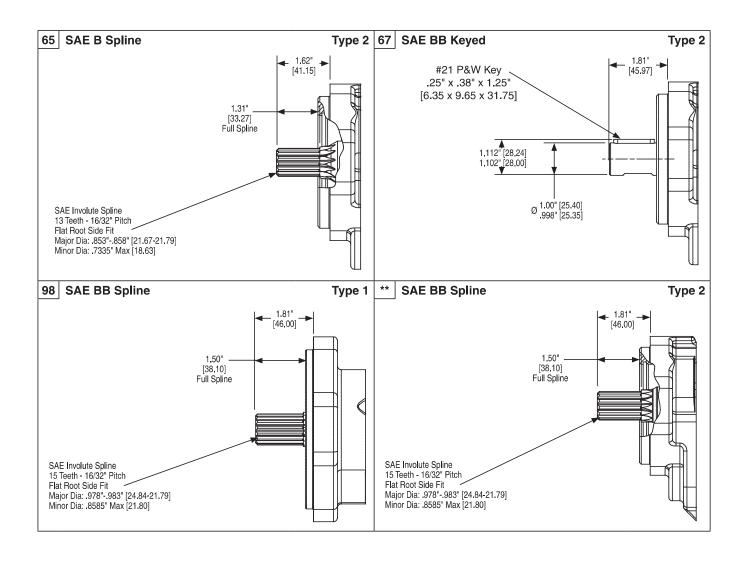














PGP051

Rotation Flow Path	ODT Porting		Split Flange Porting		Port Size	
	CW	CCW	CW	CCW	In	Out
	СВ	ВС	LB	BL	1"	-
	DB	BD	MB	ВМ	1-1/4"	-
	FB	BF	NB	BN	1-1/2"	-
	PJ	JP	BR	RB	-	3/4"
	CJ	JC	LR	RL	1"	3/4"
	DJ	JD	MR	RM	1-1/4"	3/4"
	FJ	JF	NR	RN	1-1/2"	3/4"
	DK	KD	MS	SM	1-1/4"	1"
	FK	KF	NS	SN	1-1/2"	1"
	CR	RC	LX	XL	1"	3/4"
	DR	RD	MX	XM	1-1/4"	3/4"
	FR	RF	-	-	1-1/2"	3/4"
	DS	SD	MZ	ZM	1-1/4"	1"
	FS	SF	NZ	ZN	1-1/2"	1"
	HZ	ZH	-	-	-	1"
	KJ	JK	SR	RS	1"	3/4"

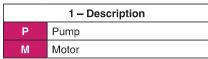


PGM051

Rotation Flow Path	ODT Porting	Split Flange Porting	Port	Size
	DUAL	DUAL	In	Out
	CC	LL	1"	1"
	ВВ	MM	1-1/4"	1-1/4"
	FF	NN	1-1/2"	1-1/2"







2 – Unit				
Α	Single			
В	Tandem			
С	Single or Tandem w/2-pc Shaft (O.B. bearing required)			

	3 – Rotation / Shaft				
1	Pump, cw w/o O.B. bearing				
2	Pump, ccw w/o O.B. bearing				
4	Pump, cw with O.B. bearing				
5	Pump, ccw with O.B. bearing				
8	Motor, bi-rot. with O.B. bearing; 1/4" NPT drain				
9	Motor, bi-rot. w/o O.B. bearing; 1/4" NPT drain				

	4 – Mount (type 1 unless noted)				
00	4-Bolt Pad mount				
42	SAE 4-Bolt B ANSI 101-4: Port Dia. 4"				
78	SAE 4-Bolt C ANSI 127-4: Port Dia. 5"				
91	For piggyback: Port Dia. 4"				
92	For piggyback: Port Dia. 5"				
96	SAE 2-Bolt B ANSI 101-2, type 2: Port Dia. 4"				
97	SAE 2-Bolt B ANSI 101-2: Port Dia. 4"				
98	SAE 2-Bolt C ANSI 127-2: Port Dia. 5"				
99	SAE 2-Bolt C ANSI 127-2: type 2: Port Dia. 5"				

	5 - Port Options					
Single	Units	Port	Size			
w/o ST	w/ST	Left	Right			
	Unported					
BE	BY	No Port	No Port			
Tander	Tandem Units					
w/o ST	w/ST					
BI	BY	1"	1"			
	ODT Porting					
Single Units		Port Size				
w/o ST	w/ST	Left Right				

Single	Units	Port Size				
w/o ST	w/ST	Left	Right			
CE	CY	3/4"	-			
DE	DY	-	3/4"			
FE	FY	3/4"	3/4"			
Tanden	Tandem Units					
w/o ST	w/ST					
CI	CY	3/4"	-			
DI	DY		3/4"			
FI	FY	3/4"	3/4"			
Piggyback Port End - Pump Only						
	CW	CCW	Double			

NOTE: w/o ST columns denote units without support studs w/ST columns denote units with support studs

LO

MO

KO

Type

051-051

6 – Gear Housing						
Order Code		Port Size				
CW	CCW	In	Out			
N	No Porting ≤ 3000 PSI					
AB	AB	None	None			
N-	No Porting ≤ 2500 PSI					
AB	AB	None	None			
See chart on page 39						

6 – Gear Housing				
Order	Order Code		Port Size	
CW	CCW	In	Out	
ODT.	ODT Tube Porting ≤ 3000 PSI			
EC	ED	3/4"*	-	
ED	EC	-	3/4"	
EF	EF	3/4"	3/4"	
EJ	EG	1"*	3/4"	
EK	EH	1-1/4"*	3/4"	
AC	AD	1"*	-	
AA	AO	1-1/4"*	-	
ODT Tube Porting ≤ 2500 PSI				
AC	AD	1"*	-	
AD	AC	-	1"	
AF	AF	1"	1"	
AJ	AG	1-1/4"*	1"	
AK	AH	1-1/2"*	1"	
AA	AO	1-1/4"*	-	
AO	AA	-	1-1/4"	
AL	AL	1-1/4"	1-1/4"	
AP	AM	1-1/2"*	1-1/4"	
AE	AU	1-1/2"*	-	
AU	AE	-	1-1/2"	
AR	AR	1-1/2"	1-1/2"	
*Ports designated by an asterisk * are for				

*Ports designated by an asterisk * are for use as the low-pressure inlet port only.

See chart on page 40

FOR ALL UNITS

To determine direction of shaft rotation, view the unit with the shaft pointing toward you, and the idler (driven) gear beneath the shaft. With clockwise rotation, flow will be left to right. The inlet pump port will be on the left, outlet on the right. The flow is in the opposite direction with counter-clockwise rotation. Inverting the pump will reverse the inlet and outlet ports but not the direction of rotation.

Continued on Next Page



Multiple Units:
Repeat if Necessary

PG 1 051 2 3 3 4 4 5 5 6 6 7 7 - 8 8 9 9 6 6 7 7 10 10

Order Code		Housing Port Size	
cw ccw		In	Out
Split Flange Porting ≤ 3000 PSI			
UC	UD	3/4"	-
UD	UC	-	3/4"
UF	UF	3/4"	3/4"
UJ	UG	1"*	3/4"
UK	UH	1-1/4"*	3/4"
oc	OD	1"*	_
OD	ОС	-	1"
OF	OF	1"	1"
OJ	OG	1-1/4"*	1"
OK	OH	1-1/2"*	1"
OA	ОВ	1-1/4"*	-
OE	OU	1-1/2"*	-
Split Flange Porting ≤ 2500 PSI			
ОС	OD	1"*	-
OD	ОС	-	1"
OF	OF	1"	1"
OJ	OG	1-1/4"*	1"
OK	OH	1-1/2"*	1"
OL	OL	1-1/4"	1-1/4"
OP	OM	1-1/2"*	1-1/4"
OE	OU	1-1/2"*	-
OR	OR	1-1/2"	1-1/2"
ХВ	ZB	2"*	-
OQ	ON	2"*	1-1/4"
OV	os	2"*	1-1/2"

7 – Gear Width					
Order	Gear Width	in.³ /rev.	cm³ /rev.	Max Pressure	
Code				PSI	bar
	ODT Tube Ports ≤ 2500 and ≤ 3000 PSI Split Flange Ports ≤ 2500 and ≤ 3000 PSI				
05	1/2"	1.28	20.9	3000	207
07	3/4"	1.91	31.3	3000	207
10	1"	2.55	41.8	3000	207
12	1-1/4"	3.19	52.2	3000	207
15	1-1/2"	3.83	62.7	3000	207
17	1-3/4"	4.46	73.1	3000	207
20	2"	5.10	83.6	2500	172
22	2 - 1/4"	5.74	94.0	2500	172
25	2-1/2"	6.38	104.5	2500	172

8 – Drive Shafts (type 1 unless noted) For single, tandem, or two-piece shaft unless noted.		
07	SAE C 14 tooth spline 1.25" dia., ANSI 32-4	
11	SAE C keyed 1.25" dia., 5/16" x 15/32" x 1-1/2" key, ANSI 32-1	
25	SAE B 13 tooth spline .88" dia., ANSI 22-4	
43	SAE BB keyed 1.00" dia. 1/4" x 3/8" x 1-1/4" key, ANSI 25-1	
53	SAE C 14 tooth spline 1.25" dia., ANSI 32-4, type 2 (single & tandem)	
61	SAE C Keyed, type 2	
65	SAE B 13 tooth spline .88" dia., ANSI 22-4, type 2 (single & tandem)	
67	SAE BB keyed 1.00" dia., 1/4"x3/8"x1-1/4" key, ANSI 25-1, type 2 (single & tandem)	
98	SAE BB 15 tooth spline, 1.00" dia., ANSI 25-4 (single & tandem)	
**	SAE BB 15 tooth spline, type 2	

Continued on Next Page

use as the low-pressure inlet port only.
See chart on page 41



Multiple Units:
Repeat if Necessary

PG 1 051 2 3 3 4 4 5 5 6 6 7 7 - 8 8 9 9 6 6 7 7 10 10

9 – Bearing Carriers			
Order Code		Port Size	
cw ccw		IN	OUT
OD Tube Porting (pump)			
СВ	вс	1"	-
DB	BD	1-1/4"	-
FB	BF	1-1/2"	-
PJ	JP	-	3/4"
CJ	JC	1"	3/4"
DJ	JD	1-1/4"	3/4"
FJ	JF	1-1/2"	3/4"
DK	KD	1-1/4"	1"
FK	KF	1-1/2"	1"
CR	RC	1"	3/4"
DR	RD	1-1/4"	3/4"
FR	RF	1-1/2"	3/4"
DS	SD	1-1/4"	1"
FS	SF	1-1/2"	1"
HZ	ZH	-	1"
KJ	JK	1"	3/4"
SAE Split F	lange		
LB	BL	1"	-
МВ	вм	1-1/4"	-
NB	BN	1-1/2"	-
BR	RB	_	3/4"
LR	RL	1"	3/4"
MR	RM	1-1/4"	3/4"
NR	RN	1-1/2"	3/4"
MS	SM	1-1/4"	1"
NS	SN	1-1/2"	1"
LX	XL	1"	3/4"
MX	XM	1-1/4"	3/4"
MZ	ZM	1-1/4"	1"
NZ	ZN	1-1/2"	1"
SR	RS	1"	3/4"
See chart on	page 48		

9 – Bearing Carriers			
Order Code		Port Size	
CW	CCW IN C		OUT
OD Tube Porting (motor)			
DUAL	CC	1"	1"
DUAL	ВВ	1-1/4"	1-1/4"
DUAL	FF	1-1/2"	1-1/2"
OD Tube Porting (motor)			
DUAL	LL	1"	1"
DUAL	MM	1-1/4"	1-1/4"
DUAL	NN	1-1/2"	1-1/2"
See chart on page 49			

10 - Connecting Shaft			
F	For connecting tandem units.		
01	Connecting Shaft - Multiple Units		
22	Piggyback Pump Connecting Shaft 051 to 051		
23	Piggyback Pump Connecting Shaft 076 to 051		

NOTE: Split flange thread depths may be more shallow than SAE standard. Contact Product Support Department for actual dimensions.

