



aerospace
 climate control
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 filtration
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hydraulics
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Chelsea[®] Products Division

Pump Catalog



ENGINEERING YOUR SUCCESS.



Useful Formulas

Pump Output Horsepower:	$HP = G.P.M. \times PSI \div 1714$
Pump Input Horsepower:	$HP = G.P.M. \times PSI \div 1714 \div E$
Pump Input Torque (Lbs. ft.):	$T = CID \times PSI \div 75.36$
Gallons Per Minute:	$G.P.M. = CID \times R.P.M. \div 231$
Cubic Inches Displacement:	$CID = G.P.M. \times 231 \div R.P.M.$
Horse Power:	$HP = T \times R.P.M. \div 5252$
Flow in G.P.M. using P.T.O.:	$GPM = Engine \ R.P.M. \times P.T.O.\% \times CIR \div 231 \times E$
CCM Conversion:	$CCM = CID \times 16.39$
CID Conversion:	$CID = CCM \times .06102$

Abbreviations

- HP = Horsepower
- G.P.M. = Gallons per Minute
- CID = Cubic Inches Displacement
- PSI = Pounds per Square Inch
- R.P.M. = Revolutions per Minute
- E = Efficiency
- T = Torque
- CCM = Cubic Centimeter Displacement

! WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

Offer of Sale

The items described in this document are hereby offered for sale by Parker Hannifin Corporation, its subsidiaries or its authorized distributors. This offer and its acceptance are governed by the provisions stated in the "Offer of Sale".

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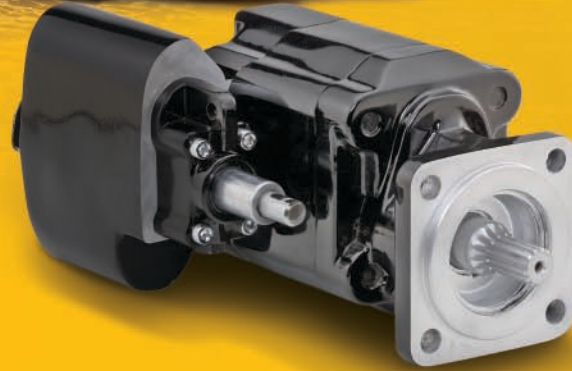
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Commercial Gear Pumps and Chelsea Power Take-Offs, the leading suppliers of gear pumps and Power Take-Off products in the work truck market, combine to provide you with the broadest coverage in the industry.

Our ability to engineer products for unique applications has kept us at the forefront of technology, and ensured our position as industry leaders. Our success has come from providing quality products with excellent sales and service support.

We manufacture hydraulic components for a wide range of applications including:

- Aerial Lift
- Refuse
- Dump Truck
- Salt / Sand
- Low Boy Trailer
- Roll Off
- Moving Floor



Dump Pumps

C101 / 102 - G101 / 102

- Maximum pressure 2500 PSI
- Maximum speed 2400 R.P.M.
- Relief valve setting 2000 PSI
- Genuine Commercial Quality

Standard

- All direct mounts are S.A.E. B 4 Bolt with 13 - Tooth Spline
- Applications – Dump Truck / Trailer

Part #	Description	Rotation	Gear	CID
C101/102 Pumps				
3149310226	C101D-2.5 (Remote Mount)	BI	2.5	6.38
3149325229	C102D-2.5-1 (Direct Mount)	CCW	2.5	6.38
3149325234	C102D-2.5 (Direct Mount)	CW	2.5	6.38
3149325227	C102D-2.5-1-AS (Direct Mount w/ Airshift Installed)	CCW	2.5	6.38
G101/102 Pumps				
3089310047	G101-1-2.0 (Remote Mount)	BI	2.0	3.94
3089310416	G102-1-2.0R-4S (Direct Mount)	CW	2.0	3.94
3089310418	G102-1-2.0L-4S Direct Mount)	CCW	2.0	3.94
3089310903	G102-1-2.0R-4S-AS (Direct Mount w/ Airshift Installed)	CW	2.0	3.94

NOTE: All dump pumps listed have a 3rd line sleeve included.

Accessories

Part #	Description
G101/102	
3089414016	ASK-16 (Air Shift Cylinder with Hoses and Fittings)
3089414049	ASK-49 (Air Shift Cylinder less Hoses and Fittings)
C101/102	
3149414006	ASK-6 (Air Shift Cylinder with Hoses and Fittings)
3149414017	ASK-17 (Air Shift Cylinder less Hoses and Fittings)
3140100005	Remote Mount Bracket C101
3911832323	Direct Mount Bracket C102
3913283052	3rd Line Sleeve

BI = Bi Rotational
 CW = Clockwise
 CCW = Counter Clockwise



P16 Pumps

S.A.E. B 2 Bolt

- Maximum pressure up to 3000 PSI
- Maximum speed 2400 R.P.M.
- Applications – Salt & Sand / Aerial Lift / Low Boy
- 7/8" B Tooth Shaft

Part #	Model #	Rotation	Port	Inlet	Outlet	CID	Max Pressure (PSI)
0120018	P16-65A-2N1	CCW	Rear O-Ring	1-1/4"	1"	1.27	3000
0301687	P16-65C-2N1	CW	Rear O-Ring	1-1/4"	1"	1.27	3000
0120321	P16-85A-2N1	CCW	Rear O-Ring	1-1/4"	1"	1.66	3000
0265164	P16-85C-2N1	CW	Rear O-Ring	1-1/4"	1"	1.66	3000
0120446	P16-100A-2N1	CCW	Rear O-Ring	1-1/4"	1"	1.96	3000
0120440	P16-100C-2N1	CW	Rear O-Ring	1-1/4"	1"	1.96	3000
0120623	P16-115A-2N1	CCW	Rear O-Ring	1-1/4"	1"	2.24	3000
0301557	P16-115C-2N1	CW	Rear O-Ring	1-1/4"	1"	2.24	3000
0120748	P16-150A-2N1	CCW	Rear O-Ring	1-1/4"	1"	2.93	3000
0120749	P16-150C-2N1	CW	Rear O-Ring	1-1/4"	1"	2.93	3000
0120893	P16-180A-2N1	CCW	Rear O-Ring	1-1/4"	1"	3.51	2200
0120894	P16-180C-2N1	CW	Rear O-Ring	1-1/4"	1"	3.51	2200
0121057	P16-200A-2N1	CCW	Rear O-Ring	1-1/4"	1"	3.90	2000
0121056	P16-200C-2N1	CW	Rear O-Ring	1-1/4"	1"	3.90	2000

CW = Clockwise

CCW = Counter Clockwise

CP-16 Clutch Pumps

- Maximum pressure up to 3000 PSI
- Maximum speed 3100-3600 R.P.M.
- Applications – Salt & Sand / Aerial Lift / Low Boy

Clutch Pump

Part #	Description	Port	Inlet	Outlet	CID
0120283	CP16-65C-06	Rear O-Ring	1"	3/4"	1.27
0120372	CP16-85C-06	Rear O-Ring	1"	3/4"	1.66
0120521	CP16-100C-06	Rear O-Ring	1"	3/4"	1.96
0120705	CP16-115C-06	Rear O-Ring	1"	3/4"	2.24



Kits

0033520 Switch Kit

0015433 Adapter Kit





PGP020 Pumps

Bi Rotational S.A.E. B 2 or 4 Bolt

- Maximum pressure up to 3000 PSI
- Maximum speed 2400 R.P.M.
- Applications – Wrecker / Salt & Sand

Part #	Description	Port	Rear	Side	Gear	CID	Max Pressure (PSI)
3089110271	PGP020 7/8" 13 - Tooth	NPT	1"	1"	1"	1.97	3000
3089110272	PGP020 7/8" 13 - Tooth	NPT	1"	1"	1-1/4"	2.46	3000
3089110264	PGP020 7/8" 13 - Tooth	NPT	1"	1-1/4"	1-1/2"	2.96	3000
3089110265	PGP020 7/8" 13 - Tooth	NPT	1"	1-1/4"	1-3/4"	3.45	2500
3089110266	PGP020 7/8" 13 - Tooth	NPT	1"	1-1/4"	2"	3.94	2500
3089110274	PGP020 7/8" 13 - Tooth	ODT	1"	1"	1"	1.97	3000
3089110278	PGP020 7/8" 13 - Tooth	ODT	1"	1"	1-1/4"	2.46	3000
3089110275	PGP020 7/8" 13 - Tooth	ODT	1"	1-1/4"	1-1/2"	2.96	3000
3089110276	PGP020 7/8" 13 - Tooth	ODT	1"	1-1/4"	1-3/4"	3.45	2500
3089110277	PGP020 7/8" 13 - Tooth	ODT	1"	1-1/4"	2"	3.94	2500

PGP051 Pumps

Bi Rotational S.A.E. B 4 Bolt

- Maximum pressure up to 3000 PSI
- Maximum speed 2400 R.P.M.
- Applications Moving Floors / Roll Off / Refuse



Part #	Description	Port	Rear	Side	Gear	CID	Max Pressure (PSI)
3139610367	PGP051 7/8" 13 - Tooth	NPT	1-1/4"	1-1/4"	2-1/2"	6.38	2500
3139610450	PGP051 7/8" 13 - Tooth	NPT	Blank	1-1/4"	2-1/2"	6.38	2500
3139610727	PGP051 7/8" 13 - Tooth	ODT	1-1/4"	1-1/4"	2"	5.10	2500
3139610725	PGP051 7/8" 13 - Tooth	ODT	1-1/4"	1-1/4"	2-1/4"	5.74	2500
3139610526	PGP051 7/8" 13 - Tooth	ODT	1-1/4"	1-1/4"	2-1/2"	6.28	2500

NOTE: All PGP051 pumps listed on this page have extended studs.

NPT = National Pipe Thread

ODT = O.D. Tube Porting



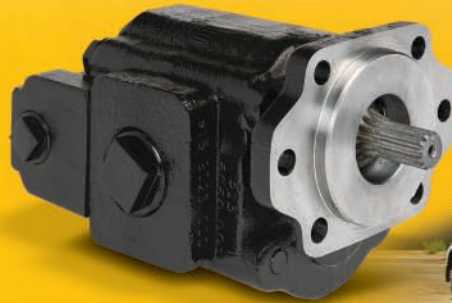
PGP051 Pumps / Motors

Bi Rotational S.A.E. B 2 or 4 Bolt

- Maximum pressure up to 3000 PSI
- Maximum speed 2400 R.P.M.
- Applications – Roll Off / Refuse / Moving Floor / Pup Trailers

Part #	Description	Port	Rear	Side	Gear	CID	Max Pressure (PSI)
3139610665	PGP051 7/8" 13 - Tooth	NPT	1-1/2"	1-1/4"	1-1/2"	3.83	3000
3139610664	PGP051 7/8" 13 - Tooth	NPT	1-1/2"	1-1/4"	1-3/4"	4.46	3000
3139610663	PGP051 7/8" 13 - Tooth	NPT	1-1/2"	1-1/4"	2"	5.10	2500
3139610659	PGP051 7/8" 13 - Tooth	NPT	1-1/2"	1-1/2"	2-1/4"	5.74	2500
3139610658	PGP051 7/8" 13 - Tooth	NPT	1-1/2"	1-1/2"	2-1/2"	6.38	2500

NOTE: All PGP051 pumps listed on this page have extended studs.



PGP051 Pumps

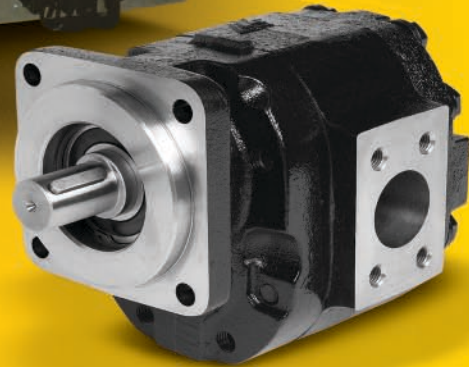
CCW Rotation S.A.E. B 2 or 4 Bolt with Relief Valve

- Maximum pressure up to 3000 PSI
- Maximum speed 2400 R.P.M.
- Application – Moving Floor

Part #	Description	Port	Rear	Side	Gear	CID	Max Pressure (PSI)
3139610677	PGP051 7/8" 13 - Tooth	NPT	RV	1-1/4"	1-1/2"	3.83	3000
3139610678	PGP051 7/8" 13 - Tooth	NPT	RV	1-1/4"	1-3/4"	4.46	3000
3139610679	PGP051 7/8" 13 - Tooth	NPT	RV	1-1/2"	2-1/4"	5.74	2500
3139610699	PGP051 7/8" 13 - Tooth	NPT	RV	1-1/2"	2-1/2"	6.38	2500

NPT = National Pipe Thread

RV = Relief Valve



PGP075 / PGP076 Pumps

**CCW Rotation S.A.E. C 4 Bolt
Standard and Universal Pumps Ports**

- Maximum pressure up to 3000 PSI
- Maximum speed 2500 R.P.M.
- Applications – Refuse / Side Loader / Front Loader / Rear Loader

PGP075 Standard

Part #	Description	Port	Inlet	Outlet	Gear	CID	Max Pressure (PSI)
3169310187	1-1/4" w/key	SF	2"	1-1/4"	2-1/4"	9.23	2250

PGP076 Universal With Test Ports and Adapter Ring

Part #	Description	Port	Inlet	Outlet	Gear	CID	Max Pressure (PSI)
3169610243	1-1/4" w/key	SF	1-1/2"	1-1/4"	1-1/2"	6.15	3000
3169610244	1-1/4" w/key	SF	1-1/2"	1-1/4"	1-3/4"	7.18	3000
3169610245	1-1/4" w/key	SF	2"	1-1/4"	2"	8.20	2500
3169610246	1-1/4" w/key	SF	2"	1-1/4"	2-1/4"	9.23	2500

SF = Split Flange

Accessories

Part #	Description
Dry Valves	
3169414001	Commercial Dry Valve 2" Inlet
0098003	ER-200 Dry Valve 2" Inlet
0098002	ER-150 Dry Valve 1-1/2" Inlet
93839-02	Bleeder Valve
HOC Accessories	
3164000206	HOC By Pass Block 2" Inlet
3169414014	HOC Flow Control 50 G.P.M.
3169414017	HOC Flow Control 45 G.P.M.
3169414021	HOC Flow Control 35 G.P.M.
3169414018	HOC Flow Control 25 G.P.M.
Muncie Dry Valve Adapter	
3912681800	Muncie DV Adapter 2" SF
3912681799	Muncie DV Adapter 1-1/2" SF

Light Trucks

- Pumps on the following pages are engineered to fit given chassis/transmission applications with Chelsea P.T.O.s
- Lightweight and compact to deliver the power needed for all applications
- See page 9 for more pump information



GM ALL-17

Pumps for 252 Series

Pumps Offered in the PGP511 with 5/8" - 9T or 3/4" - 11T Shaft / S.A.E. "A" Flange

Option Order Code	Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Cont. Pressure PSI	Max Speed R.P.M.	Shaft Size
1116	CGP-P11C016-1AC	0.37	0.002	3988	4000	5/8" 9T
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" 9T
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" 11T

DODGE DDG-1

Pumps for 252 Series

Pumps Offered in the PGP511 with 5/8" - 9T or 3/4" - 11T Shaft / S.A.E. "A" Flange

Option Order Code	Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Cont. Pressure PSI	Max Speed R.P.M.	Shaft Size
1116	CGP-P11C016-1AC	0.37	0.002	3988	4000	5/8" 9T
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" 9T
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" 11T
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" 11T

270 Pumps (Pumps Ordered Separately)

Pumps Offered in the PGM20 with Bi Directional rotation - S.A.E. "B" Shaft / S.A.E. "B" Flange

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Cont. Pressure PSI	Max Speed R.P.M.	Shaft Size
3089210081	1.97	0.009	3000	2400	7/8" 13T
3089210091	2.46	0.011	3000	2400	7/8" 13T
3089210082	2.96	0.013	3000	2400	7/8" 13T
3089210083	3.45	0.015	2500	2400	7/8" 13T
3089210084	3.94	0.017	2500	2400	7/8" 13T
3089210089	3.94	0.017	2500	2400	7/8" 13T

Light Trucks

DODGE DDG-2

PGP511 Pumps w/Counter Clockwise Rotation - S.A.E. "A" Shaft/S.A.E. "A" Flange P.T.O. Shaft
P.T.O. to order with this pump Option 442L*KHX-W6RC
P.T.O. Output to the Rear

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure (PSI)	Max Speed R.P.M.
CGP-P11A016-1AC	0.37	0.0016	3988	4000
CGP-P11A026-1AC	0.60	0.0026	3988	3600
CGP-P11A029-1AC	0.67	0.0029	3988	3600
CGP-P11A037-1AC	0.85	0.0037	3988	3300

PGP511 Pumps w/Clockwise Rotation - S.A.E."A" Shaft/S.A.E. "A" Flange P.T.O. Shaft
P.T.O. to order with this pump Option 442L*KHX-W3RC
P.T.O. Output Forward

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure (PSI)	Max Speed R.P.M.
CGP-P11C016-1AC	0.37	.0016	3988	4000
CGP-P11C026-1AC	0.60	.0026	3988	3600
CGP-P11C029-1AC	0.67	.0029	3988	3600
CGP-P11C037-1AC	0.85	.0037	3988	3300

PGP517 Pumps w/Clockwise Rotation - S.A.E. "B" Shaft/S.A.E. "A" Flange P.T.O. Shaft
P.T.O. to order with this pump Option 442L*KHX-W3RD
P.T.O. Output Forward

Chelsea Pump Model	Displacement in ³ /rev	Displacement Gal/rev	Continuous Pressure (PSI)	Max Speed R.P.M.
CGP-P17C050-2AN	1.16	0.0050	3625	3300
CGP-P17C066-2AN	1.52	0.0066	3625	3100
CGP-P17C087-2AN	2.01	0.0087	3625	3100
CGP-P17C100-2AN	2.31	0.0100	3625	3000
CGP-P17C137-2AN	3.16	0.0137	2900	2600

Light Trucks

FORD FRD-9

Chelsea CGP-P11 Series Pump Specifications for 4x4 or 4x2 Vehicles (3/4" 11 - Tooth Pump Spline)

Part #	Displacement in ³ /rev	GPM (1)	Pump (1) HP	Torque (1) Lbs. ft.	Continuous Pressure (PSI)	Max Speed R.P.M.
CGP-P11A016-5FC	0.37	2.9	6.0	17.0	3500	4000
CGP-P11A026-5FC	0.61	4.9	10.0	28.3	3500	3600
CGP-P11A032-5FC	0.73	5.8	12.0	34.0	3500	3300
CGP-P11A037-5FC	0.85	6.8	14.0	39.7	3500	3300
CGP-P11A042-5FC	0.98	7.8	16.0	45.3	3500	3000
CGP-P11A055-5FC	1.28	10.3	17.9	51.0	3000	2800
CGP-P11A061-5FC	1.40	11.3	18.0	51.2	2750	2800
CGP-P11A071-5FC	1.65	13.2	18.1	51.4	2350	2400
CGP-P11A082-5FC	1.89	15.1	18.5	52.7	2100	2300

Chelsea FGP-P17 Series Pump Specifications for 4x2 Vehicles Only (7/8" 13 - Tooth Pump Spline)

Part #	Displacement in ³ /rev	GPM (1)	Pump (1) HP	Torque (1) Lbs. ft.	Continuous Pressure (PSI)	Max Speed R.P.M.
FGP-P17A050-2AN	1.16	9.3	19.6	55.8	3625	3300
FGP-P17A066-2AN	1.53	12.2	25.8	73.4	3625	3100
FGP-P17A087-2AN	2.01	16.1	34.1	96.8	3625	3100
FGP-P17A100-2AN	2.32	18.6	39.2	111.5	3625	3000
FGP-P17A137-2AN	3.17	25.4	43.0	122.1	2900	2600

NOTE: FGP-P17 Pumps have a special housing design for mounting to the Ford TorqShift™ transmission.

Chelsea P16 Series Pump Specifications for 4x2 Vehicles Only (7/8" 13 - Tooth Pump Spline)

Part #	Displacement In ³ /rev	GPM (1)	Pump (1) HP	Torque (1) Lbs. ft.	Continuous Pressure (PSI)	Max Speed R.P.M.
P16-180A-2D1	3.511	28.1	36.1	102.5	2200	2500
P16-200A-2D1	3.902	31.2	36.4	103.5	2000	2000

(1) GPM & Pump Input HP @ 1200 Engine R.P.M. & 1848 P.T.O. Output Shaft R.P.M.

Light Trucks

Part #	Rotation	Shaft Size	Inlet (NPT)	Outlet (NPT)	CID
P16 A Pilot O-Ring					
P16-45C-1D6	CW	5/8" 9 - Tooth	1"	3/4"	0.87
P16-65C-1D6	CW	5/8" 9 - Tooth	1"	3/4"	1.27
P16-85C-1D6	CW	5/8" 9 - Tooth	1"	3/4"	1.66
P16-115C-1D6	CW	5/8" 9 - Tooth	1"	3/4"	2.21
P16-180A-2D1	CCW	7/8" 13 - Tooth	1"	3/4"	3.51
P16-200A-2D1	CCW	7/8" 13 - Tooth	1"	3/4"	3.90
CGP A Pilot O-Ring					
CGP-P11A016-1AC	CCW	5/8" 9 - Tooth	5/8"	1/2"	0.37
CGP-P11A016-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	0.37
CGP-P11A021-1AC	CCW	5/8" 9 - Tooth	5/8"	1/2"	0.48
CGP-P11A026-1AC	CCW	5/8" 9 - Tooth	5/8"	1/2"	0.60
CGP-P11A026-5AC	CCW	3/4" 11 - Tooth	3/4"	5/8"	0.60
CGP-P11A029-1AC	CCW	5/8" 9 - Tooth	5/8"	1/2"	0.67
CGP-P11A037-1AC	CCW	5/8" 9 - Tooth	5/8"	1/2"	0.85
CGP-P11A037-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	0.85
CGP-P11A042-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	0.98
CGP-P11A055-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	1.28
CGP-P11A061-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	1.40
CGP-P11A071-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	1.65
CGP-P11A082-5FC	CCW	3/4" 11 - Tooth	3/4"	5/8"	1.89
CGP-P11C016-1AC	CW	5/8" 9 - Tooth	5/8"	1/2"	0.37
CGP-P11C021-1AC	CW	5/8" 9 - Tooth	5/8"	1/2"	0.48
CGP-P11C029-1AC	CW	5/8" 9 - Tooth	5/8"	1/2"	0.67
CGP-P11C037-1AC	CW	5/8" 9 - Tooth	5/8"	1/2"	0.85
CGP-P14A049-1AE	CCW	5/8" 9 - Tooth	1"	5/8"	1.13
CGP-P14A062-1AE	CCW	5/8" 9 - Tooth	1"	5/8"	1.43
CGP-P14C049-1AE	CW	5/8" 9 - Tooth	1"	5/8"	1.13
CGP-P14C062-1AE	CW	5/8" 9 - Tooth	1"	5/8"	1.43
CGP-5C008-1AA	CW	5/8" 9 - Tooth	5/8"	1/2"	0.18
CGP-5C010-1AA	CW	5/8" 9 - Tooth	5/8"	1/2"	0.23
CGP-5C013-1AA	CW	5/8" 9 - Tooth	5/8"	1/2"	0.30
CGP-5C019-1AA	CW	4/8" 9 - Tooth	5/8"	1/2"	0.44
FGP-P17A050-2AN	CCW	7/8" 13 - Tooth	1-1/4"	3/4"	1.15
FGP-P17A066-2AN	CCW	7/8" 13 - Tooth	1-1/4"	3/4"	1.52
FGP-P17A087-2AN	CCW	7/8" 13 - Tooth	1-1/4"	3/4"	2.01
FGP-P17A100-2AN	CCW	7/8" 13 - Tooth	1-1/4"	3/4"	2.31
FGP-P16A137-2AN	CCW	7/8" 13 - Tooth	1-1/4"	3/4"	3.16
SAE "B" Flange					
3089210081	BI	7/8" 13 - Tooth	1" (R), 1" (S)	1" (R), 1" (S)	1.97
3089210091	BI	7/8" 13 - Tooth	1" (R), 1" (S)	1" (R), 1" (S)	2.46
3089210082	BI	7/8" 13 - Tooth	1" (R), 1-1/4" (S)	1" (R), 1-1/4" (S)	2.96
3089210083	BI	7/8" 13 - Tooth	1" (R), 1-1/4" (S)	1" (R), 1-1/4" (S)	3.45
3089210084	BI	7/8" 13 - Tooth	1" (R), 1-1/4" (S)	1" (R), 1-1/4" (S)	3.94
3089210089	BI	7/8" 13 - Tooth	1" OD Tube (R) 1-1/4" OD Tube (S)	1" OD Tube (R) 1-1/4" OD Tube (S)	3.94

(R) = Rear Ports

(S) = Side Ports

BI = Bi Rotational

CW = Clockwise

CCW = Counter Clockwise

NPT = National Pipe Thread

Muncie to Commercial Interchange

The Interchanges listed below are for reference to Pumps listed in this catalog.

C Series Dump Pumps

Muncie Part #	Commercial Model #	10 Digit Order Number	General Description
E2XL27-1RPRB	C101D-2.5	3149310226	Remote Mount Bi Rotation 2-1/2" Gear
E2XL27-2BPRL	C102D-2.5-1	3149325229	Direct Mount CCW Rotation 2-1/2" Gear
E2XL27-2BPRR	C102D-2.5	3149325234	Direct Mount CW Rotation 2-1/2" Gear
E3XA27-2BPRL	C102D-2.5-1-AS	3149325227	Direct Mount CCW Rotation 2-1/2" Gear Air Shift Installed
ACM-300	ASK17	3149414017	Air Shift Kit Without Hoses and Fittings

NOTE: E2 Stands for 2 Line and E3 Stands for 3 Line / All Commercial Pumps in this program are 3 Line and include the sleeve
If a 2 Line Hydraulic System is being used do not install the 3rd line sleeve in the suction port.

G Series Dump Pumps

Muncie Part #	Commercial Model #	10 Digit Order Number	General Description
S2LD15-1-RPRB	G101-1-2.0	3089310047	Remote Mount Bi Rotation 2" Gear
S2LD15-2-BPRL	G102-1-2.0L-4S	3089310-418	Direct Mount CCW Rotation 4 Bolt 2" Gear
S2LD15-2BPRR	G102-1-2.0R-4S	3089310416	Direct Mount CW Rotation 4 Bolt 2" Gear
S3AD15-2BPRR	G102-1-2.0R-4S-AS	3089310903	Direct Mount CW Rotation 4 Bolt 2" Gear Air Shift Installed
ACM-400	ASK49	3089414049	Air Shift Kit Without Hoses and Fittings

NOTE: S2 Stands for 2 Line and S3 Stands for 3 Line / All Commercial Pumps in this program are 3 Line and include the sleeve
If a 2 Line Hydraulic System is being used do not install the 3rd line sleeve in the suction port.

* Commercial Always Recommends the use of a Three - Line Dump Pump System for prolonged trouble-free operation.

P20 Series

Muncie Part #	Commercial Model #	10 Digit Order Number	General Description
PK8-2BPBB	PGP020B346QUYF10-25	3089110271	PGP020 2/4B NPT 7/8" 13T 10
PK11-2BPBB	PGP020B346QUYF12-25	3089110272	PGP020 2/4B NPT 7/8" 13T 12
PK13-2BPBB	PGP020B346QUYL15-25	3089110264	PGP020 2/4B NPT 7/8" 13T 15
PK15-2BPBB	PGP020B346QUYL17-25	3089110265	PGP020 2/4B NPT 7/8" 13T 17
PK17-2BPBB	PGP020B346QUYL20-25	3089110266	PGP020 2/4B NPT 7/8" 13T 20
PK8-2BSBB	PGP020B346JEAL10-25	3089110274	PGP020 2/4B ODT 7/8" 13T 10
PK11-2BSBB	PGP020B346JEAF12-25	3089110278	PGP020 2/4B ODT 7/8" 13T 12
PK13-2BSBB	PGP020B346JEAL15-25	3089110275	PGP020 2/4B ODT 7/8" 13T 15
PK15-2BSBB	PGP020B346JEAL17-25	3089110276	PGP020 2/4B ODT 7/8" 13T 17
PK17-2BSBB	PGP020B346JEAL20-25	3089110277	PGP020 2/4B ODT 7/8" 13T 20

P51 Series

Muncie Part #	Commercial Model #	10 Digit Order Number	General Description
PL16-2BPBB	PGP051A346**YL15-65	3139610665	PGP051 2/4B NPT 7/8" 13T 15
PL19-2BPBB	PGP051A346**YL17-65	3139610664	PGP051 2/4B NPT 7/8" 13T 17
PL23-2BPBB	PGP051A346**YL20-65	3139610663	PGP051 2/4B NPT 7/8" 13T 20
PL25-2BPBB	PGP051A346**YR22-65	3139610659	PGP051 2/4B NPT 7/8" 13T 22
PL27-2BPBB	PGP051A346**YR25-65	3139610658	PGP051 2/4B NPT 7/8" 13T 25
PL16-2BPBL-20	PBP051A346**YL15-75-RV	3139610677	PGP051 2/4B NPT 7/8" 13T 15 RV
PL19-2BPBL-20	PGP051A346**YL17-65-RV	3139610678	PGP051 2/4B NPT 7/8" 13T 17 RV
PL25-2BPBL-20	PGP051A346**YR22-65-RV	3139610679	PGP051 2/4B NPT 7/8" 13T 22 RV
PL27-2BPBL-20	PGP051A346**YR25-65-RV	3139610699	PGP051 2/4B NPT 7/8" 13T 25 RV

P76 Series

Muncie Part #	Commercial Model #	10 Digit Order Number	General Description
PMM27-7-CFSL	PGP076A578**OM15-11	3169610243	PGP076 4B SF 1-1/4" K 15
PMM31-7-CFSL	PGP076A578**OM17-11	3169610244	PGP076 4B SF 1-1/4" K 17
PMM35-7-CFSL	PGP076A578**ON20-11	3169610245	PGP076 4B SF 1-1/4" K 20
PMM40-7-CFSL	PGP076A578**ON22-11	3169610246	PGP076 4B SF 1-1/4" K 22

Permco to Commercial Interchange

The Interchanges listed below are for reference to Pumps listed in this catalog.

C Series Dump Pumps

Permco Model Number	Commercial Model #	10 Digit Order Number	Commercial General Description
DM-640-25-XR-O-T-250	C101D-2.5	3149310226	Remote Mount Bi Rotation 2-1/2" Gear
DMD-25-X-L-MS-25-EB	C102D-2.5-1	3149325229	Direct Mount CCW Rotation 2-1/2" Gear
DMD-25-X-R-MS-25-EB	C102D-2.5	3149325234	Direct Mount CW Rotation 2-1/2" Gear
DMD-25-X-L-AS-25-EB	C102D-2.5-1-AS	3149325227	Direct Mount CCW Rotation 2-1/2" Gear Air Shift Installed

NOTE: All Commercial Pumps in this program are 3 Line and include the sleeve
If a 2 Line Hydraulic System is being used do not install the 3rd line sleeve in the suction port.

G Series Dump Pumps

Permco Model Number	Commercial Model #	10 Digit Order Number	Commercial General Description
DMR-400-20-X-200	G101-1-2.0	3089310047	Remote Mount Bi Rotation 2" Gear
DMD-400-20-XR-200	G102-1-2.0L-4S	3089310418	Direct Mount CCW Rotation 4 Bolt 2" Gear
DMD-400-20-XL-200	G102-1-2.0R-4S	3089310416	Direct Mount CW Rotation 4 Bolt 2" Gear
DMD-400-20-XR-200-AS	G102-1-2.0R-4S-AS	3089310903	Direct Mount CW Rotation 4 Bolt 2" Gear Air Shift Installed

NOTE: All Commercial Pumps in this program are 3 Line and include the sleeve
If a 2 Line Hydraulic System is being used do not install the 3rd line sleeve in the suction port.

* Commercial Always Recommends the use of a Three - Line Dump Pump System for prolonged trouble-free operation.

P20 Series

Permco Model Number	Commercial Model #	10 Digit Order Number	Commercial General Description
P2100A290MDXE10-14	PGP020B346QUYF10-25	3089110271	PGP020 2/4B NPT 7/8" 13T 10
P2100A290MDXE12-14	PGP020B346QUYF12-25	3089110272	PGP020 2/4B NPT 7/8" 13T 12
P2100A290MDXK15-14	PGP020B346QUYL15-25	3089110264	PGP020 2/4B NPT 7/8" 13T 15
P2100A290MDXK17-14	PGP020B346QUYL17-25	3089110265	PGP020 2/4B NPT 7/8" 13T 17
P2100A290MDXK20-14	PGP020B346QUYL20-25	3089110266	PGP020 2/4B NPT 7/8" 13T 20
P2100A290IDZE10-14	PGP020B346JEAL10-25	3089113274	PGP020 2/4B ODT 7/8" 13T 10
P2100A290IDZE12-14	PGP020B346JEAF12-25	3089110278	PGP020 2/4B ODT 7/8" 13T 12
P2100A290IDZK15-14	PGP020B346JEAL15-25	3089110275	PGP020 2/4B ODT 7/8" 13T 15
P2100A290IDZK17-14	PGP020B346JEAL17-25	3089110276	PGP020 2/4B ODT 7/8" 13T 17
P2100A290IDZK20-14	PGP020B346JEAL20-25	3089110277	PGP020 2/4B ODT 7/8" 13T 20

P51 Series

Permco Model Number	Commercial Model #	10 Digit Order Number	Commercial General Description
M5151A890AAXK15-54	PGP051B346***YL*15-65	3139610665	PGP051 2/4B NPT 7/8" 13T 15
M5151A890AAXK17-54	PGP051B346***YL*17-65	3139610664	PGP051 2/4B NPT 7/8" 13T 17
M5151A890AAXK20-54	PGP051B346***YL*20-65	3139610663	PGP051 2/4B NPT 7/8" 13T 20
M5151A890AAXQ22-54	PGP051B346***YR*22-65	3139610659	PGP051 2/4B NPT 7/8" 13T 22
M5151A890AAXQ25-54	PGP051B346***YR*25-65	3139610658	PGP051 2/4B NPT 7/8" 13T 25

P75 P76 Series

Permco Model Number	Commercial Model #	10 Digit Order Number	Commercial General Description
P75C467ADNM22-00	PGP075C578*BE*ON*22-11	3169310187	PGP075 4B SF 1-1/4" K 22
VP28-4COFLMC	PGP076A578***OM15-11	3169610243	PGP076 4B SF 1-1/4" K 15
VP32-4COFLMC	PGP076A578***OM17-11	3169610244	PGP076 4B SF 1-1/4" K 17
VP37-4COFLMC	PGP076A578***ON20-11	3169610245	PGP076 4B SF 1-1/4" K 20
VP42-4COFLMC	PGP076A578***ON22-11	3169610246	PGP076 4B SF 1-1/4" K 22

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9. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

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Sales Offices

North America

United States

Parker Hannifin Corporation

595 Schelster Road
Lincolnshire, IL 60069
Tel: (847) 955-5253
Fax: (847) 821-9564

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Parker Hannifin Corporation
Chelsea Products Division
8225 Hacks Cross Road
Olive Branch, MS 38654, USA
Phone: (662) 895-1011
Fax: (662) 890-5379
www.parker.com/chelsea

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