Roller Bearing Series Gear Pumps & Motors

- Original Commerical pump design
- Three-piece cast iron construction for assembly flexibility
- Balanced thrust plates optimize pump efficiency
- Roller bearings for durability and resistance to fluid contamination
- Multiple sections available



Product Features	Description
Pump Type	Fixed
Mounting	SAE, DIN
Ports	Flange, NPT, ODT
Shaft Style	SAE, DIN
Pump Speed	900 to 2400 RPM
Motor Speed	800 to 2000 RPM
Maximum Displ.	3.9 in ³ /rev
Maximum Operating Pressure	3000 PSI
Fluids	Mineral oil, fire resistant fiuids: - water-oil emulsions 60/40, HFB - water-glycol, HFC - phosphate-esters, HFD

Product Features	Description
Fluid Temperature	Range of operating temperature -15 to +80°C (5 to 176° F). Max. permissible operating pressure dependent on fluid temperature. Temperature for cold start -20 to -15°C (-4 to 5° F) at speed ≤ 1500 RPM.
Fluid Viscosity	50-7500 SUS
Direction of Rotation (looking at the driveshaft)	Clockwise, Counter Clockwise, Bi-Rotational

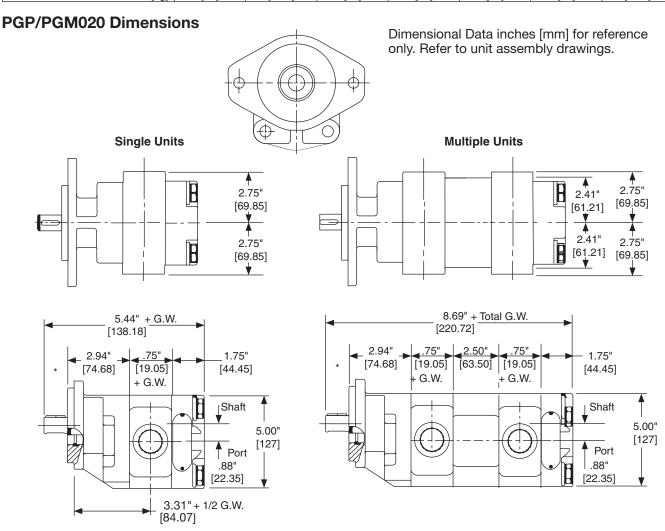
NOTE: Different types of pump options are available in terms of shaft, mounting and port type. Please contact Parker.



PGP/PGM020 Specifications

PGP020 Frame Size	05	07	10	12	15	17	20
Displacement – cm3/rev	16.1	24.2	32.3	40.4	48.4	56.5	64.6
(in3/rev)	(0.99)	(1.48)	(1.97)	(2.46)	(2.96)	(3.45)	(3.94)
Max continuous pressure – bar (PSI)	207	207	207	207	207	172	172
	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(2,500)	(2,500)
Max Speed – RPM	2,400	2,400	2,400	2,400	2,400	2,400	2,400
Approximate Weight – Lbs. [kg]	26	27	28	29	31	33	34
	[12]	[12.5]	[13]	[13]	[14]	[15]	[15.5]

PGM020 Frame Size	05	07	10	12	15	17	20
Displacement – cm³/rev	16.1	24.2	32.3	40.4	48.4	56.5	64.6
(in³/rev)	(0.99)	(1.48)	(1.97)	(2.46)	(2.96)	(3.45)	(3.94)
Max continuous pressure – bar (PSI)	207	207	207	207	207	172	172
	(3,000)	(3,000)	(3,000)	(3,000)	(3,000)	(2,500)	(2,500)
Max Speed – RPM	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Approximate Weight – Lbs.	26	27	28	29	31	33	34
[kg]	[12]	[12.5]	[13]	[13]	[14]	[15]	[15.5]



*This dimension will vary with type of driveshaft.



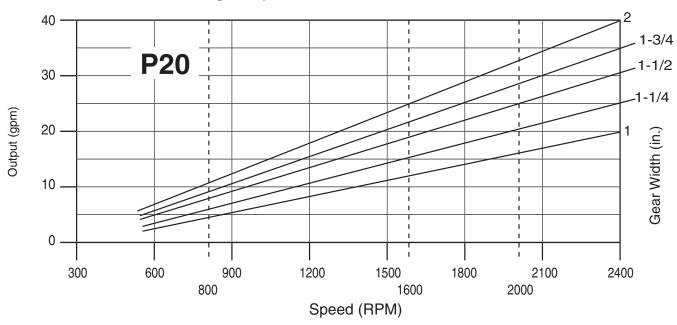
Pump	Gear Width – Output (GPM)									
Speed	1"	1-1/4"	1-1/2"	1-3/4"	2"					
900	6.5	8.0	10.0	12.0	13.5					
1200	9.0	11.5	14.0	16.0	18.5					
1500	11.5	14.5	17.5	20.5	23.5					
2100	16.5	21.0	25.0	29.5	34.0					

Motor	Gear Width										
Speed	1" Torque in Ibs.	GPM	1-1/2" Torque in Ibs.	GРM	2" Torque in Ibs.	GPM					
800	550	9.0	870	13.0	1150	17.0					
1200	550	13.0	870	18.0	1150	23.5					
1600	550	16.0	860	23.0	1140	30.5					
2000	550	19.5	850	28.0	1125	37.0					



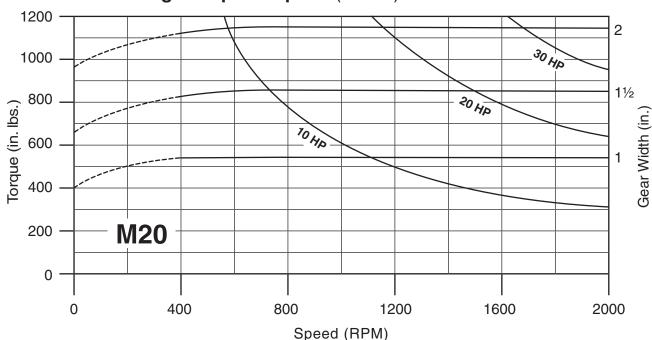
PGP020





PGM020

Average Torque Output - (in. lbs.) at 140 bar/2500 PSI





NPT Port ≤ 3000 PSI

Order	NPT Porting Port Size			Gear Width Availability							
Code	Left	Right	05	07	10	12	15	17	20		
AB	None	None	Х	Х	Х	Х	Х	Х	Х		
IL	1/2	None	Х	Х	Х	-	-	-	-		
IM	None	1/2	Х	X	Х	-	-	-	-		
IR	1/2	1/2	Х	Х	-	-	-	-	-		
IC	3/4	None	-	X	Х	X	Х	Х	Х		
ID	None	3/4	-	Х	х	Х	Х	Х	Х		
IF	3/4	3/4	-	X	Х	X	Х	Х	Х		
IG	3/4	1	-	-	Х	Х	Х	Х	Х		
IH	3/4	1-1/4	-	-	-	-	Х	Х	-		
IJ	1	3/4	-	-	Х	Х	Х	Х	Х		
IK	1-1/4	3/4	-	-	-	-	Х	Х	-		
YC	1	None	-	-	Х	Х	Х	Х	Х		
YD	None	1	-	-	Х	Х	Х	Х	Х		
YF	1	1	-	-	Х	Х	Х	Х	Х		
YG	1	1-1/4	-	-	-	X	Х	Х	Х		
YH	1	1-1/2	-	-	-	-	-	-	-		
۲Y	1-1/4	1	-	-	-	-	Х	Х	Х		
YK	1-1/2	1	-	-	-	-	-	-	-		
IA	1-1/4	None	-	-	-	-	Х	Х	Х		
IB	None	1-1/4	-	-	-	-	Х	Х	Х		
YL	1-1/4	1-1/4	-	-	-	-	Х	Х	Х		



ODT Tube Ports ≤ 2500 PSI

Order		e Porting Size		Gear Width Availability							
Code	Left	Right	05	07	10	12	15	17	20		
AB	None	None	Х	Х	Х	Х	Х	Х	Х		
EC	3/4	None	-	Х	Х	X	Х	X	X		
ED	None	3/4	-	Х	Х	Х	X	X	X		
EF	3/4	3/4	-	Х	Х	Х	Х	X	X		
EG	3/4	1	-	-	X	X	X	X	X		
EH	3/4	1-1/4*	-	-	-	X*	Х	Х	Х		
IN	3/4	1-1/2	-	-	-	-	-	Х	Х		
EJ	1	3/4	-	-	Х	Х	Х	X	X		
EK	1-1/4*	3/4	-	-	-	X*	Х	X	X		
IP	1-1/2	3/4	-	-	-	-	-	Х	Х		
EZ	7/8	None	-	-	-	X	-	-	-		
EL	7/8	1	-	-	Х	-	-	-	-		
EM	1	7/8	-	-	Х	-	-	-	-		
AC	1	None	-	-	Х	X	Х	X	X		
AD	None	1	-	-	X	X	X	X	X		
AF	1	1	-	-	-	X*	X	X	Х		
AG	1	1-1/4*	-	-	-	X*	Х	Х	Х		
AH	1	1-1/2	-	-	-	-	-	Х	Х		
AJ	1-1/4*	1	-	-	-	X*	Х	Х	Х		
AK	1-1/2	1	-	-	-	-	-	Х	Х		
AA	1-1/4*	None	-	-	-	X*	Х	X	X		
AO	None	1-1/4*	-	-	-	X*	Х	Х	Х		
AL	1-1/4	1-1/4	-	-	-	-	Х	Х	X		
AM	1-1/4	1-1/2	-	-	-	-	-	Х	Х		
AP	1-1/2	1-1/4	-	-	-	-	-	Х	X		
AE	1-1/2	None	-	-	-	-	-	Х	Х		
AU	None	1-1/2	-	-	-	-	-	Х	X		

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



ODT Tube Ports ≤ 3000 PSI

Order		e Porting : Size			Gear \	Width Avail	ability		
Code	Left	Right	05	07	10	12	15	17	20
AB	None	None	Х	Х	Х	Х	Х	Х	Х
EC	3/4	None	-	X	Х	Х	X	Х	X
ED	None	3/4	-	X	Х	X	X	Х	X
EF	3/4	3/4	-	X	Х	X	X	Х	X
EG	3/4	1*	-	-	X*	X	X	Х	X
EH	3/4	1-1/4*	-	-	-	-	X*	Х	Х
IN	3/4	1-1/2*	-	-	-	-	-	X*	Х
EJ	1*	3/4	-	-	X*	X	Х	Х	Х
EK	1-1/4*	3/4	-	-	-	-	X*	Х	Х
IP	1-1/2*	3/4	-	-	-	-	-	X*	Х
EZ	7/8	None	-	-	-	Х	-	-	-
EL	7/8	1*	-	-	X*	-	-	-	-
EM	1*	7/8	-	-	X*	-	-	-	-
AC	1*	None	-	-	X*	Х	Х	Х	Х
AD	None	1*	-	-	X*	Х	Х	Х	Х
AF	1	1	-	-	-	X*	Х	Х	Х
AG	1	1-1/4*	-	-	-	X*	X*	Х	Х
AH	1	1-1/2*	-	-	-	-	-	X*	Х
AJ	1-1/4*	1	-	-	-	X*	X*	Х	Х
AK	1-1/2*	1	-	-	-	-	-	X*	Х
AA	1-1/4*	None	-	-	-	X*	X*	Х	Х
AO	None	1-1/4*	-	-	-	X*	X*	Х	Х
AL	1-1/4	1-1/4	-	-	-	-	-	Х	Х
AM	1-1/4	1-1/2*	-	-	-	-	-	X*	Х
AP	1-1/2*	1-1/4	-	-	-	-	-	X*	Х
AE	1-1/2*	None	-	-	-	-	-	X*	Х
AU	None	1-1/2*	-	-	-	-	-	X*	Х

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



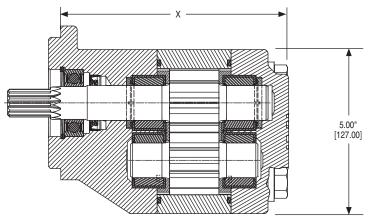
Roller Bearing Series Gear Pumps & Motors

Split Flange Porting ≤ 3000 PSI

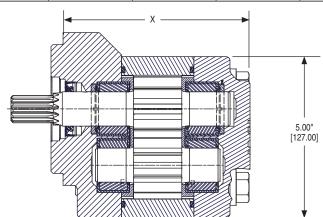
Order		ge Porting : Size			Gear \	Width Avail	ability		
Code	Left	Right	05	07	10	12	15	17	20
AB	None	None	Х	Х	Х	Х	Х	Х	Х
UC	3/4	None	-	X	X	Х	Х	X	Х
UD	None	3/4	-	X	X	X	Х	X	Х
UF	3/4	3/4	-	X	X	X	Х	X	-
UG	3/4	1	-	-	Х	X	Х	X	Х
UH	3/4	1-1/4	-	-	-	X	Х	X	Х
UJ	1	3/4	-	-	Х	X	Х	X	Х
UK	1-1/4	3/4	-	-	-	X	Х	X	Х
ОС	1	None	-	-	-	X	Х	X	Х
OD	None	1	-	-	-	X	X	X	X
OF	1	1	-	-	X	Х	X	X	X
OG	1	1-1/4	-	-	-	X	Х	X	Х
ОН	1	1-1/2	-	-	-	-	-	X	X
OJ	1-1/4	1	-	-	-	X	Х	X	X
OK	1-1/2	1	-	-	-	-	-	X	X
OA	1-1/4	None	-	-	-	X	Х	X	Х
ОВ	None	1-1/4	-	-	-	Х	Х	X	X
OL	1-1/4	1-1/4	-	-	-	-	Х	X	Х
OM	1-1/4	1-1/2	-	-	-	-	-	X	Х
OP	1-1/2	1-1/4	-	-	-	-	-	X	Х
OE	1-1/2	None	-	-	-	-	-	X	Х
OU	None	1-1/2	-	-	-	-	-	X	Х



Roller Bearing Series Gear Pumps & Motors



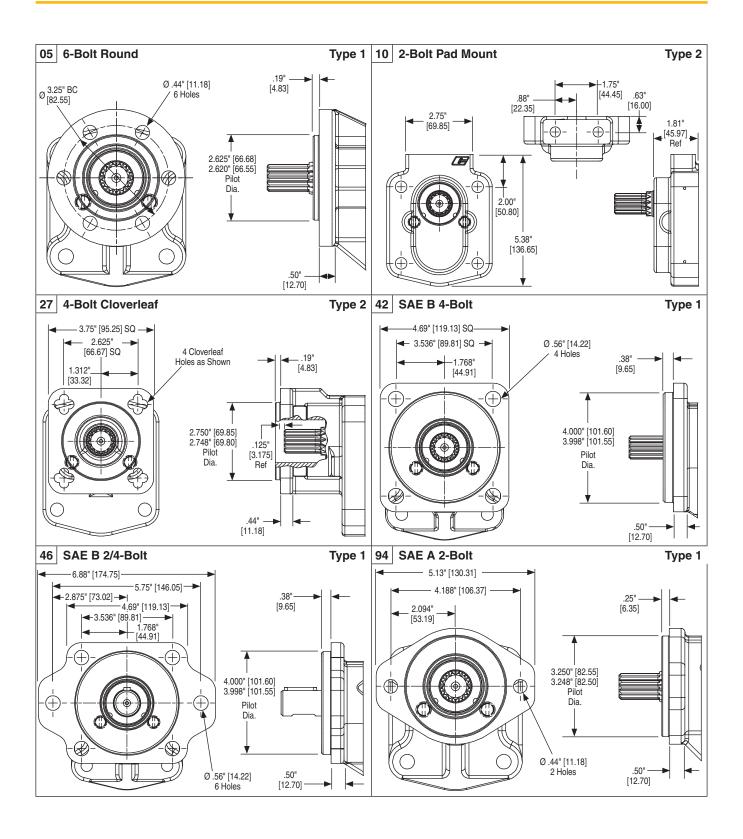
	X DIMENSION – Type 1												
SEC CODE	05	07	10	12	15	17	20						
05	5.94"	6.19"	6.44"	6.69"	6.94"	7.19"	7.44"						
	[150.88]	[157.23]	[163.58]	[169.93]	[176.28]	[182.63]	[188.98]						
42	5.94"	6.19"	6.44"	6.69"	6.94"	7.19"	7.44"						
	[150.88]	[157.23]	[163.58]	[169.93]	[176.28]	[182.63]	[188.98]						
46	5.94"	6.19"	6.44"	6.69"	6.94"	7.19"	7.44"						
	[150.88]	[157.23]	[163.58]	[169.93]	[176.28]	[182.63]	[188.98]						
94	5.94"	6.19"	6.44"	6.69"	6.94"	7.19"	7.44"						
	[150.88]	[157.23]	[163.58]	[169.93]	[176.28]	[182.63]	[188.98]						
97	5.94"	6.19"	6.44"	6.69"	6.94"	7.19"	7.44"						
	[150.88]	[157.23]	[163.58]	[169.93]	[176.28]	[182.63]	[188.98]						



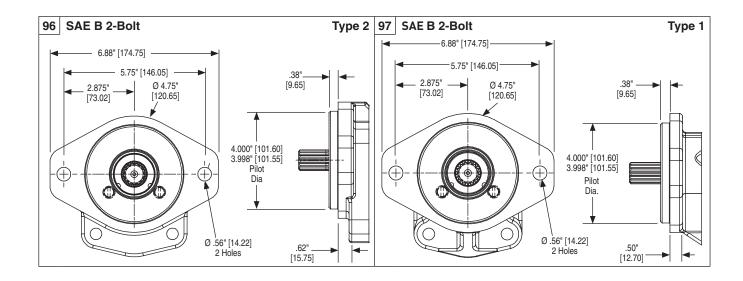
	X DIMENSION – Type 2												
SEC CODE	05	07	10	12	15	17	20						
10	4.81"	5.06"	5.31"	5.56"	5.81"	6.06"	6.31"						
	[122.17]	[128.52]	[134.87]	[141.22]	[147.57]	[153.92]	[160.27]						
27	6.56"	6.81"	7.06"	7.31"	7.56"	7.81"	8.06"						
	[166.62]	[172.97]	[179.32]	[185.67]	[192.02]	[198.37]	[204.72]						
96	4.81"	5.06"	5.31"	5.56"	5.81"	6.06"	6.31"						
	[122.17]	[128.52]	[134.87]	[141.22]	[147.57]	[153.92]	[160.27]						



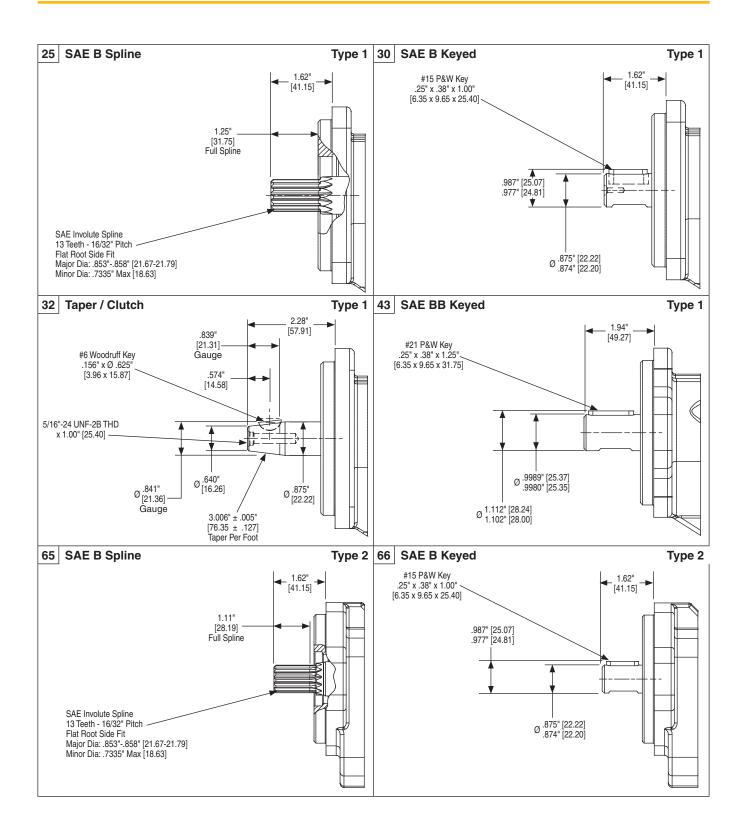
PGP/PGM020 Shaft End Covers (cont.)













PGP/PGM020 Drive Shafts (cont.)

