



## GPD PUMP & MOTOR PORT SIZING

The following chart shows maximum flows at which our pump and motor products will function properly. Remember in sizing ports, the slower the oil moves through the system, the better the system will perform.

Port or Hole Size (in inches)	SAE Dash No.	Actual Dia.	Area	Maximum Flow in GPM at		
				8 FPS	10 FPS	18 FPS
1/2 SAE O Ring Port	( 8)	.391	.120	2.99	3.74	6.73
5/8 SAE O Ring Port	(10)	.484	.184	4.59	5.74	10.32
1/2 SAE 4 Bolt Port		.500	.196	4.89	6.11	11.00
1/2 NPT		.546	.234	5.84	7.29	13.13
3/4 SAE O Ring Port	(12)	.609	.291	7.26	9.07	16.33
5/8		.625	.307	7.66	9.57	17.23
7/8 SAE O Ring Port	(14)	.719	.406	10.12	12.66	22.78
3/4 NPT		.742	.432	10.77	13.47	24.24
3/4 SAE 4 Bolt Port		.750	.442	11.02	13.78	24.80
13/16		.812	.518	12.92	16.15	29.06
1 SAE O Ring Port	(16)	.844	.559	13.94	17.43	31.37
7/8		.875	.601	14.99	18.73	33.72
PGM330 In/Out PEC Core		-----	.658	16.41	20.51	36.92
15/16		.9375	.690	17.21	21.51	38.72
1 NPT		.952	.719	17.93	22.41	40.34
1 SAE 4 Bolt Port		1.000	.785	19.58	24.47	44.05
PGP315 Inlet Core		-----	.900	22.44	28.05	50.50
1-1/4 SAE O Ring Port	(20)	1.078	.913	22.77	28.46	51.23
PGM350 In/Out PEC Core		-----	.930	23.19	28.99	52.18
1-1/8		1.125	.994	24.79	30.99	55.77
1-3/16		1.188	1.108	27.63	34.54	62.17
PGM365 In/Out PEC Core		-----	1.201	29.95	37.44	67.39
1-1/4 SAE 4 Bolt Port		1.250	1.227	30.60	38.25	68.85
1-1/4 NPT		1.278	1.282	31.97	39.96	71.93
1-1/2 SAE O Ring Port	(24)	1.312	1.353	33.74	42.18	75.92
1-3/8		1.375	1.485	37.03	46.29	83.32
PGP330 Inlet Core		-----	1.600	39.90	49.88	89.78
1-1/2 NPT		1.568	1.694	42.24	52.81	95.05
1-1/2 SAE 4 Bolt Port		1.500	1.767	44.06	55.08	99.15
PGP350 Inlet Core		-----	2.160	53.87	67.33	
PGP365 Inlet Core		-----	2.400	59.85	74.81	
1-3/4		1.750	2.405	59.98	74.97	
2 SAE O Ring Port	(32)	1.781	2.491	62.12	77.65	
2 SAE 4 Bolt Port		2.000	3.142	78.35	97.94	
2-1/2 SAE 4 Bolt Port		2.500	4.908	122.39	152.99	
3 SAE 4 Bolt		3.000	7.069	176.28	220.36	

8 FPS is recommended maximum velocity for INLET port sizing.

10 FPS is recommended maximum velocity for INTERNAL passage inlet sizing.

18 FPS is recommended maximum velocity for Pump OUTLET and Motor INLET & OUTLET port sizing.

NOTE: Individual NPT and "O" ring port fitting passages may vary from the above stated diameter.

These should be checked before this chart is used.