Specifications for CP16 Series

Description ..... Clutch Pumps

Flow Range ..... To 38 GPM (143.8 LTR)

Displacements ..... To 3.904 C.I.R. (63.74 CC's/REV.)

Maximum Pressure to ..... 3000 PSI (207 BAR)

Maximum Speed to ..... 3600 RPM

Rotation ..... A or C

Bearings ..... Journal

Construction ..... Cast Iron Gear Plates with Aluminum Flange and Cover Plate

Performance Data

Pump Model	Section Size	US Gallons	Displacement/Revolution (Theoretical)				Maximum Pressure								Max. Speed
							'V' Belt Drive						Flat Ribbed Drive		
							Clutch #1		Clutch #2		Clutch #3		Clutch #4		
			Cubic Inches	Liters	Cubic CM	Imperial Gallons	PSI	BAR	PSI	BAR	PSI	BAR	PSI	BAR	RPM
P16	45	.0038	.878	.0144	14.39	.0031	3000	207	3000	207	3000	207	3000	207	3600
P16	65	.0055	1.270	.0208	20.83	.0045	3000	207	3000	207	3000	207	3000	207	3600
P16	85	.0072	1.663	.0273	27.27	.0060	2800	193	3000	207	3000	207	3000	207	3400
P16	100	.0085	1.964	.0321	32.21	.0070	2400	165	3000	207	3000	207	3000	207	3300
P16	115	.0097	2.241	.0367	36.75	.0080	2000	138	2900	200	3000	207	2900	200	3100
P16	150	.0127	2.934	.0481	48.11	.0105	1500	103	2600	179	3000	207	2600	179	2800
P16	180	.0152	3.511	.0575	57.57	.0125	1200	83	2100	145	2200	152	2100	145	2500
P16	200	.0169	3.904	.0639	63.94	.0140	1100	76	1900	131	2000	138	1900	131	2200

All data based on SAE 10W oil at 150°F.
Available with Viton® Seals.

⚠ **CAUTION:** "Inlet vacuum" should not exceed 5" Hg at normal operating speed and temperature. Operation of pumps in excess of 5" Hg requires factory approval.

Operating Notes

1. Detailed installation and operating instructions are included in each clutch-pump package. Consult those instructions before installation and/or operation.
2. Clutch Data:
   - Clutch No. 1 – 12 V.D.C.; 4.26 amps; 2.82 ohms @ 20°C; 75 Lb. Ft.
   - Clutch No. 2 – 12 V.D.C.; 4.36 amps; 2.75 ohms @ 20°C; 125 Lb. Ft.
   - Clutch No. 3 – 12 V.D.C.; 4.58 amps; 2.62 ohms @ 20°C; 200 Lb. Ft.
   - Clutch No. 4 – 12 V.D.C.; 4.36 amps; 2.75 ohms @ 20°C; 125 Lb. Ft.
3. Burnishing: If full rated torque (or system pressure) is required at start-up, burnishing or cycling of the clutch will be necessary. Burnishing of the clutch can be accomplished by running the engine between 2500 and 3000 RPM and cycling the clutch on and off against the system relief valve. The relief valve should be set at 75% of the maximum pressure rating as shown in the chart above. The clutch should be cycled 50 times at a rate of 10 to 15 cycles per minute.
4. Voltage: The torque capability of the clutch varies with the actual voltage measured at the clutch. Do not operate at less than 11.5 volts.
5. For maximum clutch life: #1 #2 & #4 should be mounted to run in 'C' rotation. #3 should be mounted to run in 'A' rotation, (looking at the front of the clutch).

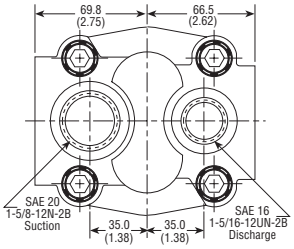
Electric Clutch Switch: Order Kit No. 33520

Parker Hannifin Corporation
Gear Pump Division
Youngstown, Ohio USA

Cover Plates Available for P16 / CP16

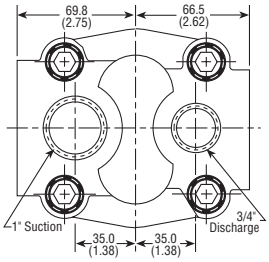
Inch equivalents for millimeter dimensions are shown in (**).

1 Rear Ported Straight Thread



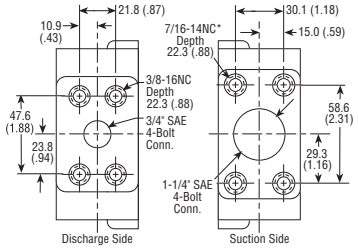
2 Rear Ported NPT

7 Rear Ported BSPT



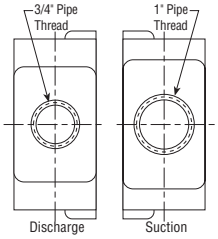
3 Side Ported SAE 4-Bolt

Metric Threads are available – Consult factory. SAE 4-Bolt NPT Connectors Are Available. See Accessory Section.



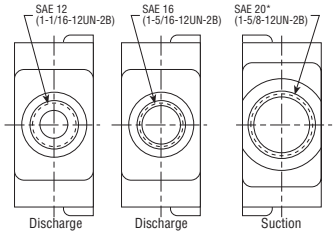
4 Side Ported NPT

8 Side Ported BSPT

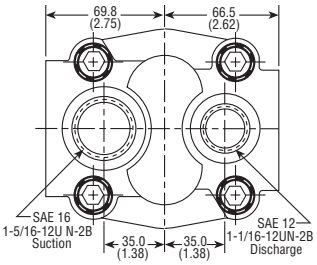


5 Side Ported Straight Thread SAE 12 Discharge

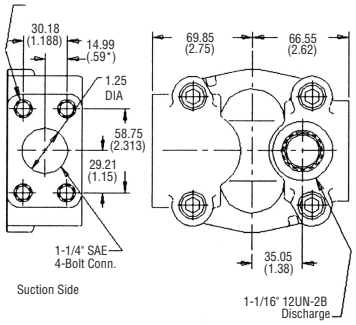
9 Side Ported Straight Thread SAE 16 Discharge



6 Rear Ported Straight Thread

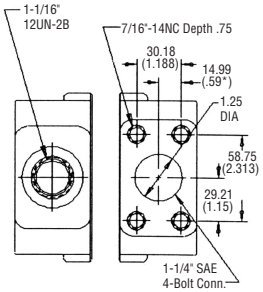


10 Side Ported SAE 4-Bolt Rear Ported Straight Thread



11 Side Ported SAE 4-Bolt Straight Thread

Must use 1-1/4" Length Max. Capscrews



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