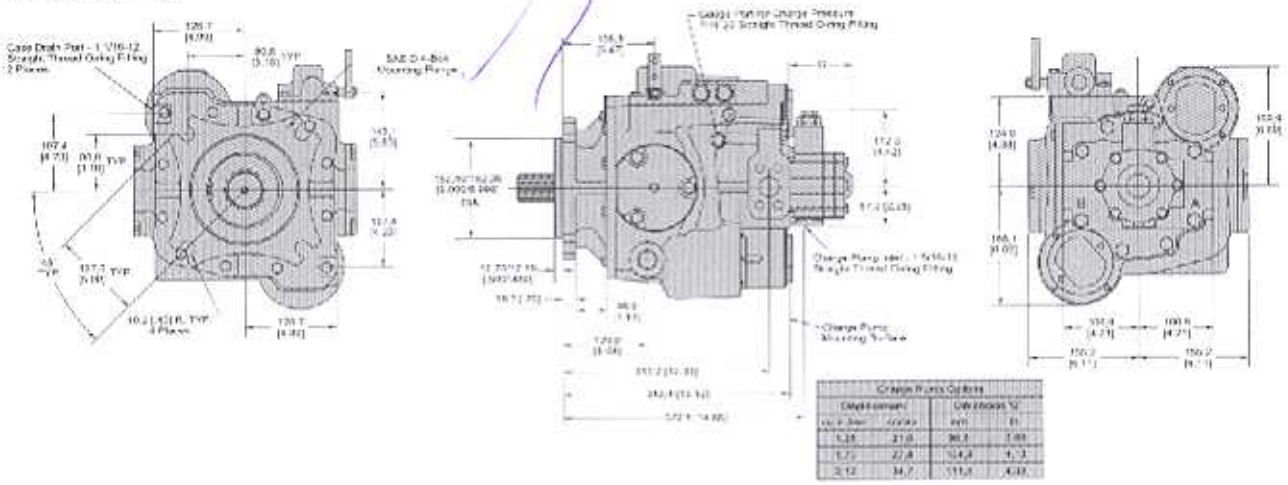
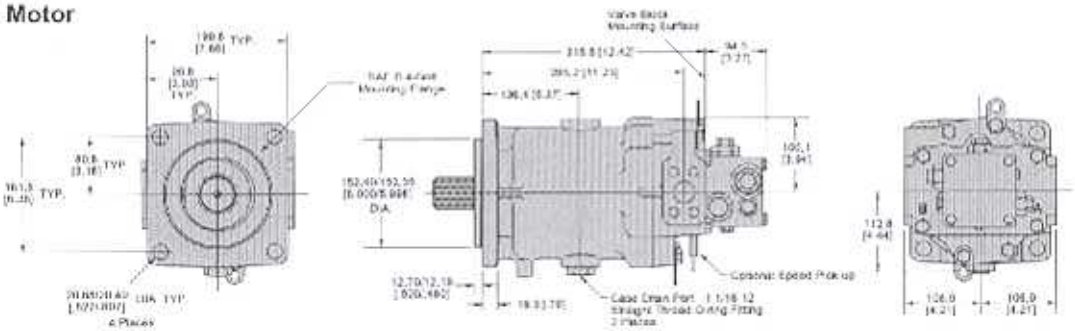
Model 76 Dimensions

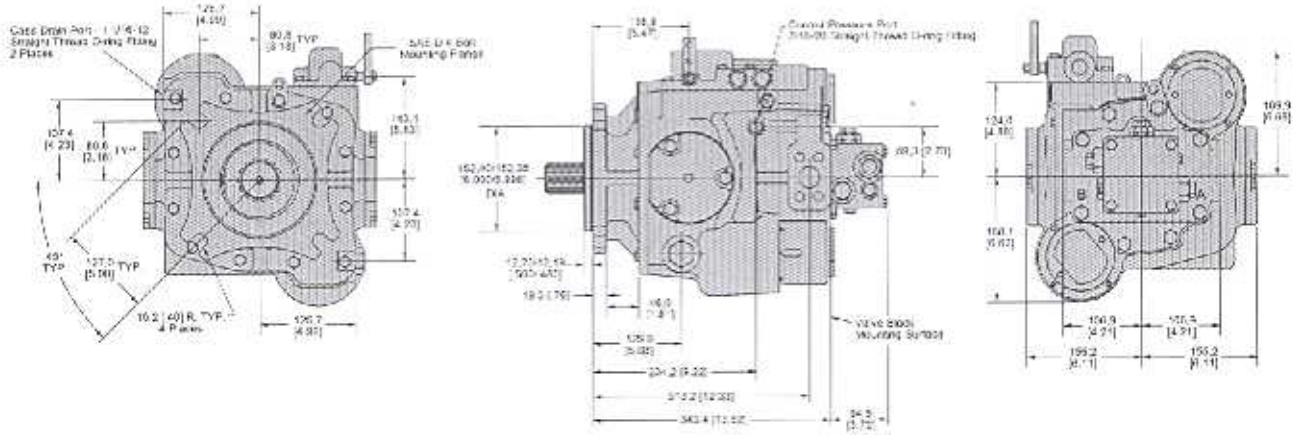
Variable Pump



Fixed Motor



Variable Motor



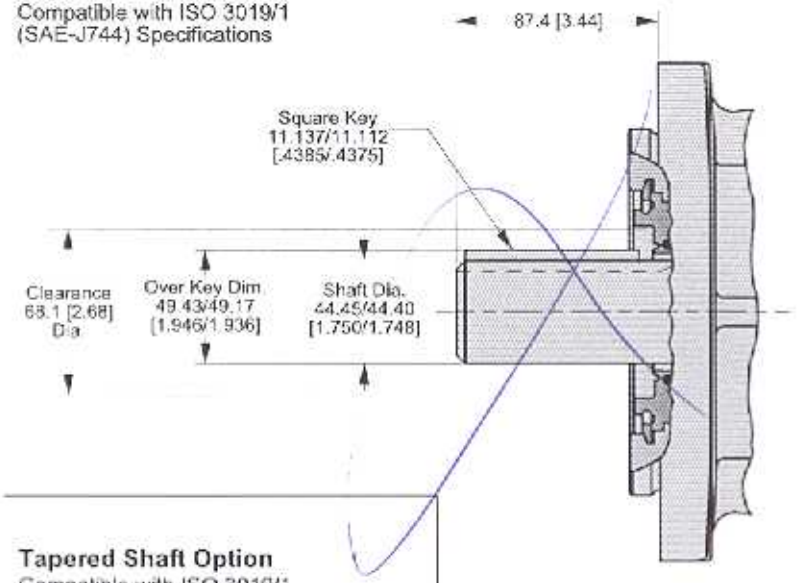
Heavy Duty Component Approximate Weights

lb [Kg]

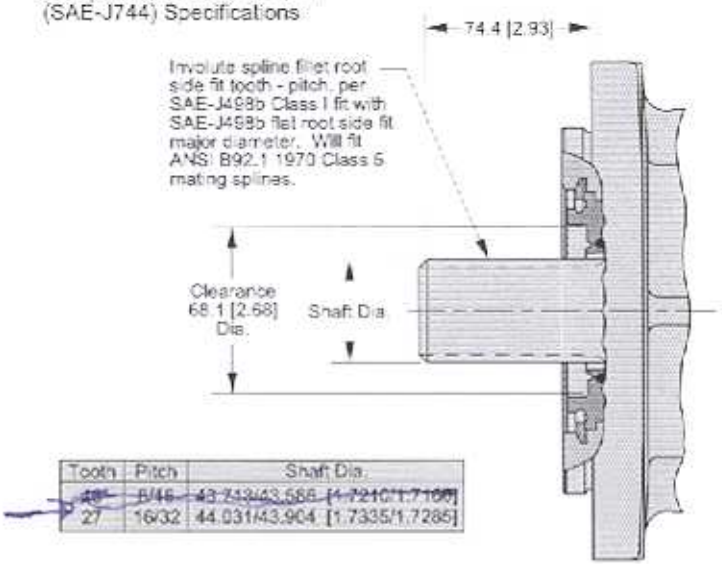
Model	Variable Pump	Fixed Motor	Variable Motor
33	138 [62,6]	83 [37,6]	140 [63,5]
39	138 [62,6]	83 [37,6]	140 [63,5]
46	138 [62,6]	83 [37,6]	140 [63,5]
54	188 [85,3]	106 [48,1]	190 [86,2]
64	188 [85,3]	106 [48,1]	190 [86,2]
76	226 [101,7]	121 [54,5]	228 [102,6]

Model 76 Shaft and Port Dimensions

Keyed Shaft Option
Compatible with ISO 3019/1
(SAE-J744) Specifications

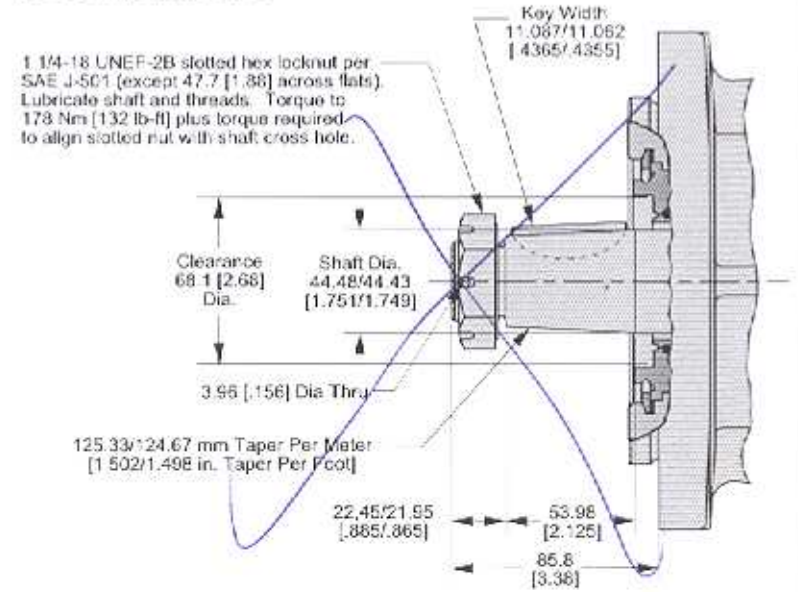


Splined Shaft Options
Compatible with ISO 3019/1
(SAE-J744) Specifications

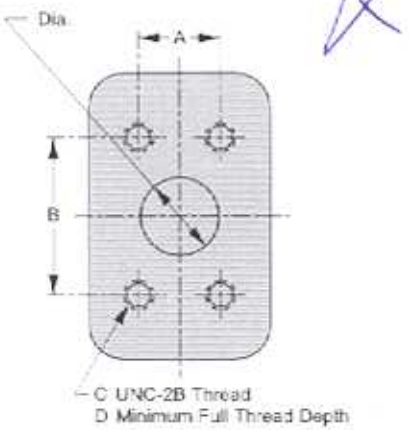


Tooth	Pitch	Shaft Dia.
~~28~~	~~8/16~~	~~43.713/43.586 [1.721C/1.716B]~~
27	16/32	44.031/43.904 [1.7335/1.7285]

Tapered Shaft Option
Compatible with ISO 3019/1
(SAE-J744) Specifications

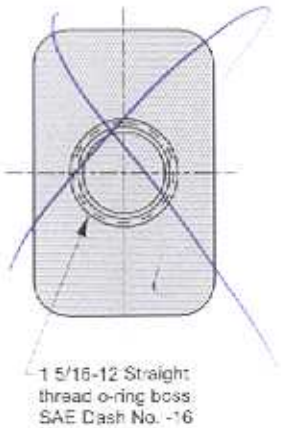


Split Flange Port Options
Per SAE-J518 Specifications



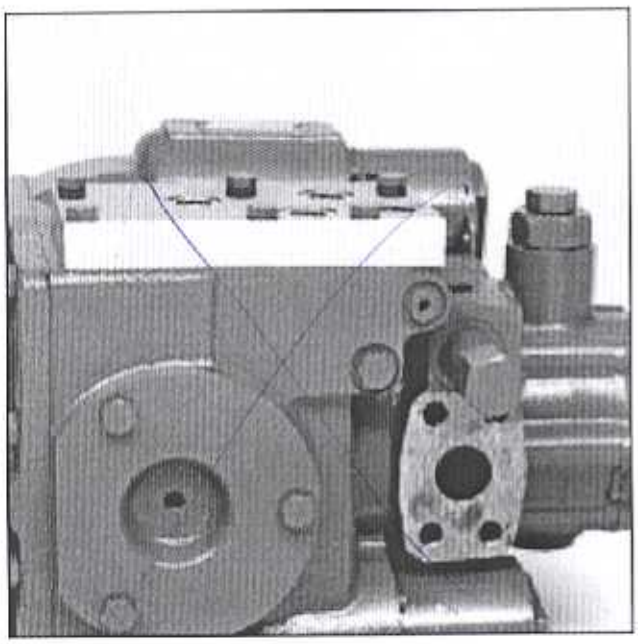
Code	Dia.	A	B	C	D
61	25.4 [1.00]	26.19 [1.031]	52.37 [2.062]	3/8-16	22.4 [.88]
62	25.4 [1.00]	27.76 [1.093]	57.15 [2.250]	7/16-14	27.0 [1.06]

O-ring Port Option
Per SAE-J514 Specifications



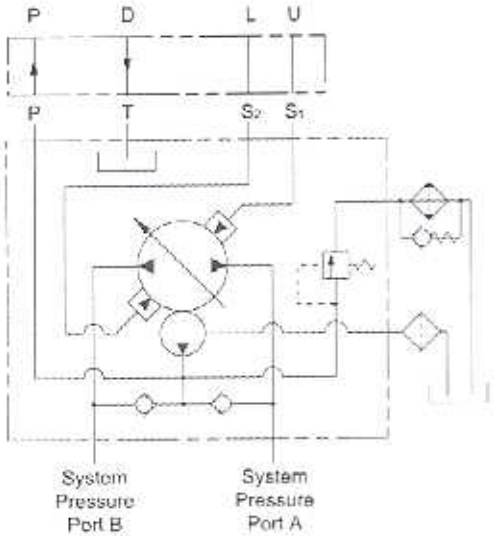
All dimensions given in millimeters [inches].

Port Plate

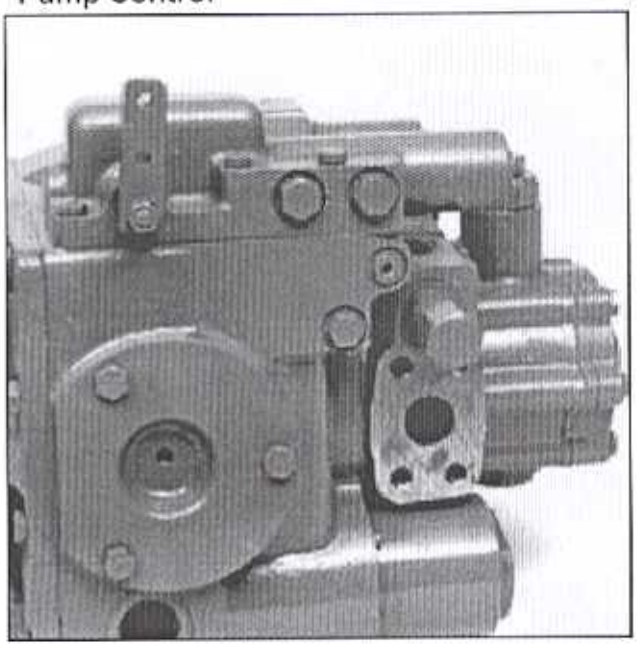


The port plate is the simplest control option available. It fits all Eaton heavy duty pumps and motors.

The port plate is commonly used as a slave control that receives commands from other controls in the same system.

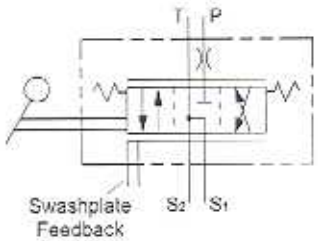


Standard Variable Pump Control



The standard variable pump control is the most common type of control used on heavy duty hydrostatic variable displacement pumps. It is normally actuated by direct mechanical linkages or cables.

A wide band neutral zone controller is available. It expands the center lever position where the pump output is zero flow.



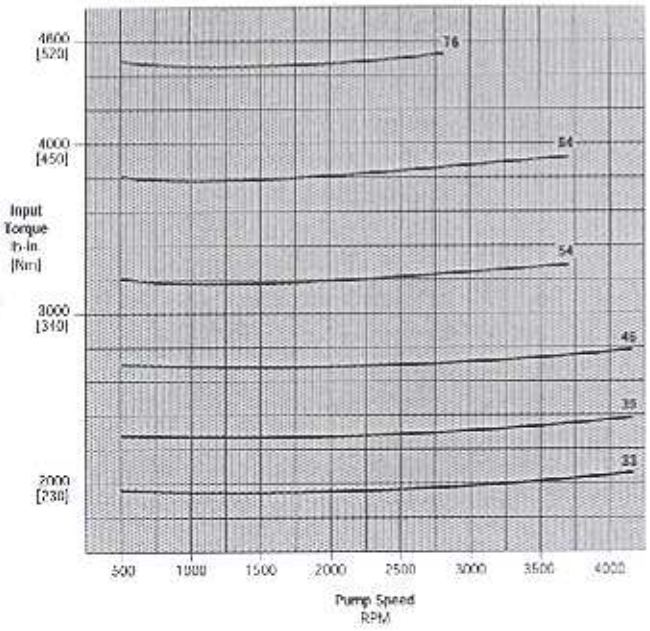
Pump Performance

Pump Performance

Model		33	39	46	54	64	76
Displacement	in³/rev	3.32	3.89	4.60	5.44	6.44	7.62
	cm³/rev	54.4	63.7	75.3	89.1	105.5	124.8
Maximum Shaft Speed*	RPM @ 18°	4510**	4160	4160	3720	3720	2775
Peak Pressure***	PSI [bar]	6000 [415]	6000 [415]	6000 [415]	6000 [415]	6000 [415]	6000 [415]
Output Flow	GPM @ 3500 PSI	61.5	67.3	79.2	84.1	99.1	87.9
	LPM @ 241 bar	233	255	300	318	375	333
Input Torque	lb-in @ 3500 PSI	2049	2346	2786	3285	3900	4552
	Nm @ 241 bar	232	265	315	371	441	514

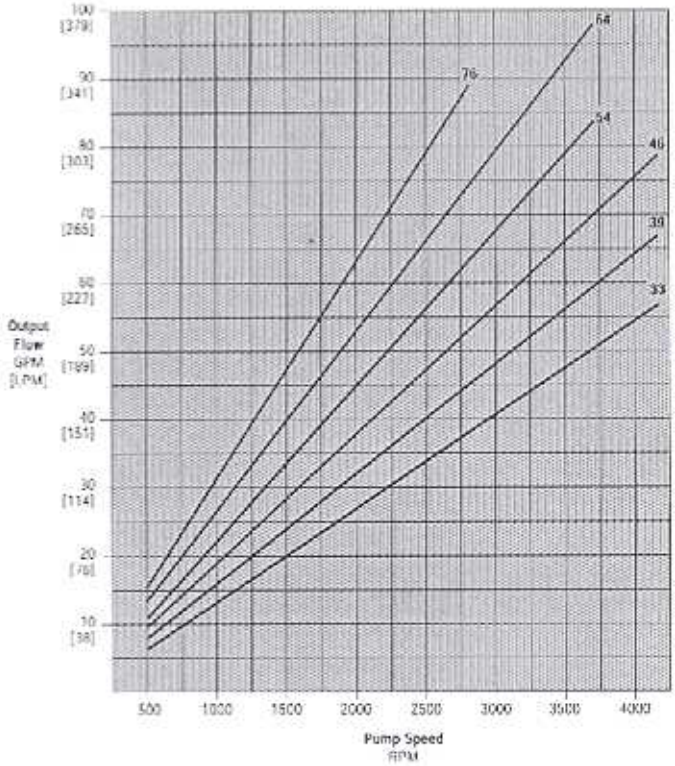
Pump performance calculated at 96% efficiency.
* The maximum pump shaft speed may be limited by the charge pump speed rating.
** The maximum swashplate angle on model 33 pumps is 15.5°.
*** Peak pressure should not exceed 1% of operating time.

Input Torque vs Speed



System Pressure ..... 3500 psi [240 bar]
Charge Pressure ..... 220 psi [15 bar]
Oil Viscosity ..... 60 SUS
Temperature ..... 180° F [82° C]

Output Flow vs Speed



Charge Pump Performance

Eaton offers a choice of four charge pump displacements to go with their heavy duty transmission line: .85, 1.28, 1.70, and 2.12 in³/rev [13,9; 21,0; 27,6; 34,7 cm³/rev]. These charge pumps are available with one or more of the following options:

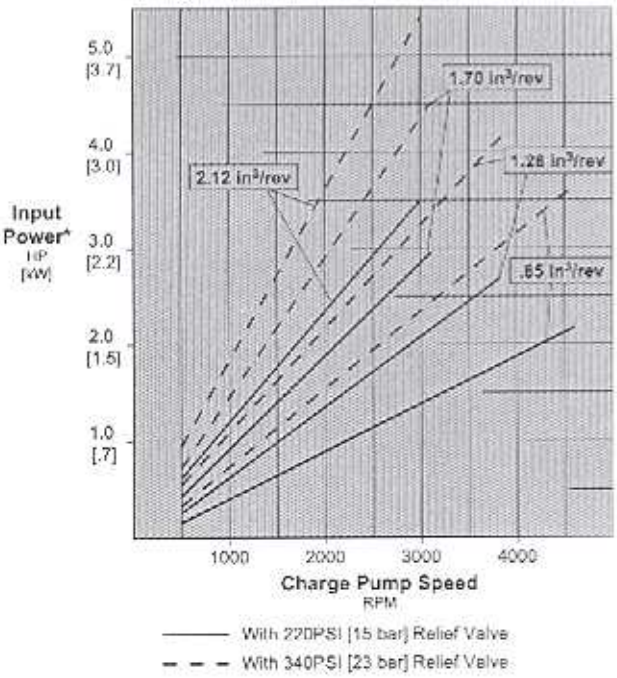
- a pressure sensing port
- remote pressure side filter ports
- a spin-on pressure side filter
- mounting flanges for auxiliary pumps

Charge Pump Performance

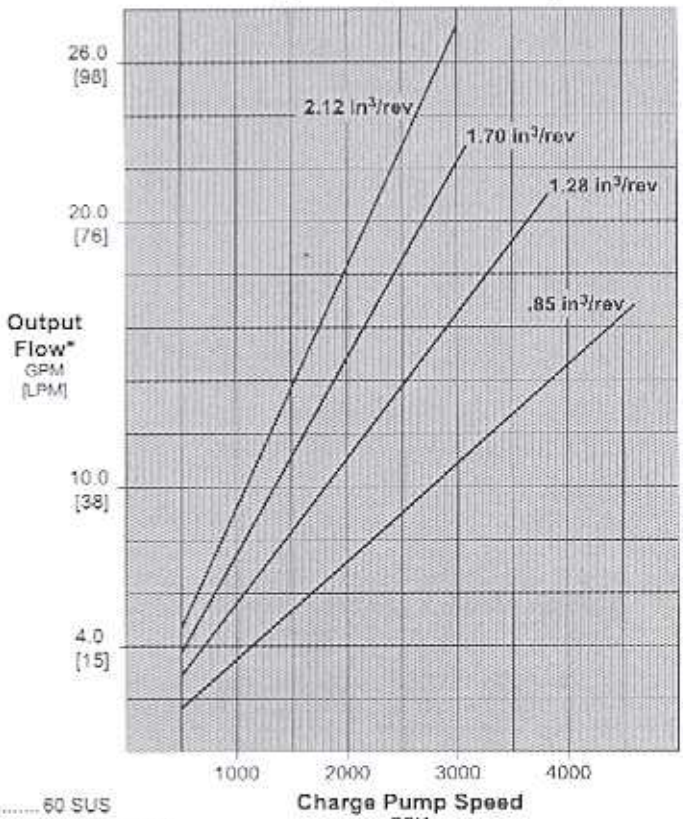
Displacement	in³/rev	.85	1.28	1.70	2.12
	cm³/rev	13,9	21,0	27,9	34,7
Maximum Shaft Speed	RPM	4600	3800	3100	3000
Output Flow @ Maximum Speed*	GPM	16.9	21.0	22.8	27.5
	LPM	64,0	79,5	86,3	104,2
Input Power @ 220 PSI [15 bar] and Maximum Speed*	HP	2.17	2.70	2.93	3.54
	kW	1,62	2,01	2,18	2,64

*Theoretical Values

Charge Pump Power vs Speed



Charge Pump Flow vs Speed



Oil Viscosity ..... 60 SUS
Temperature ..... 180° F [82° C]
* Theoretical Values