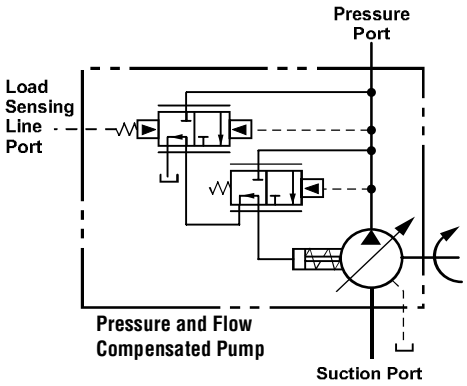
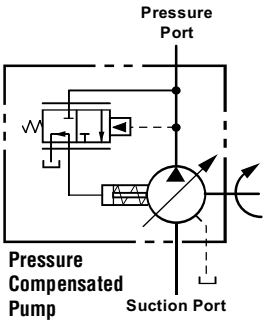
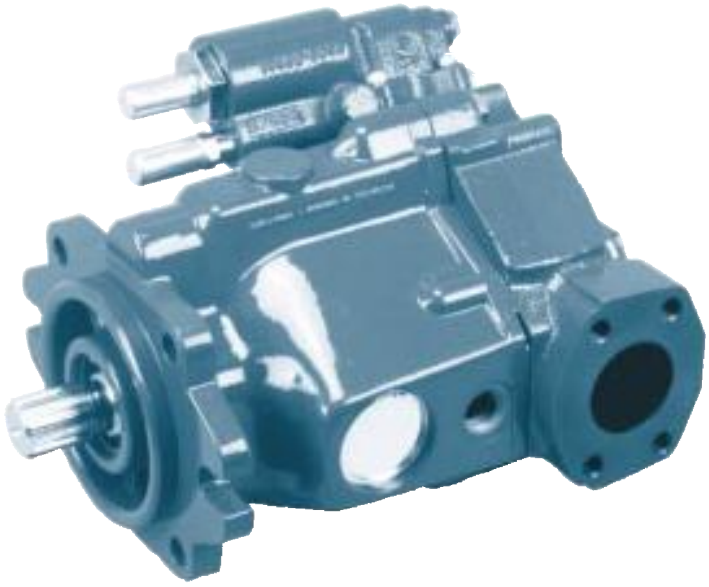
Model 70523, 69 cm³/r [4.21 in³/r]



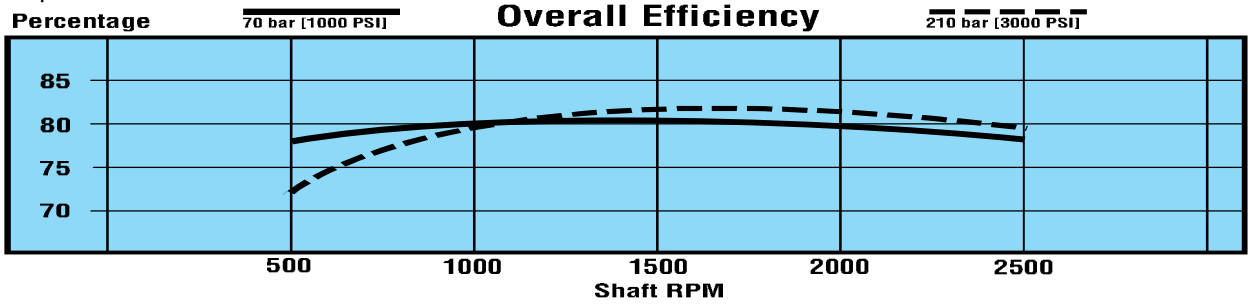


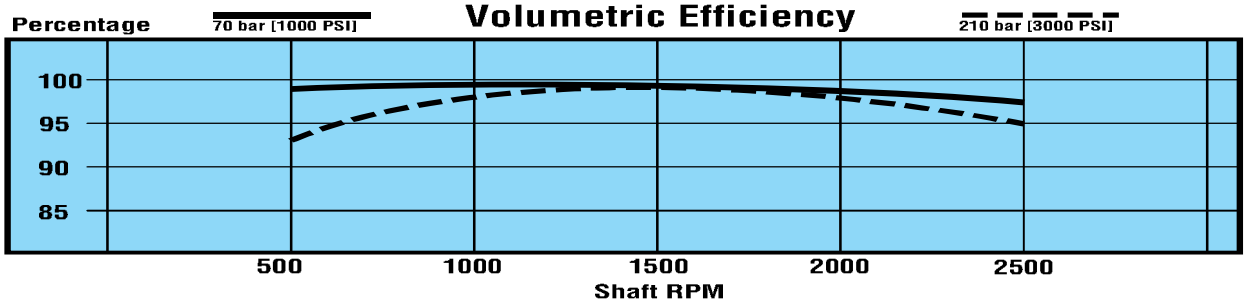


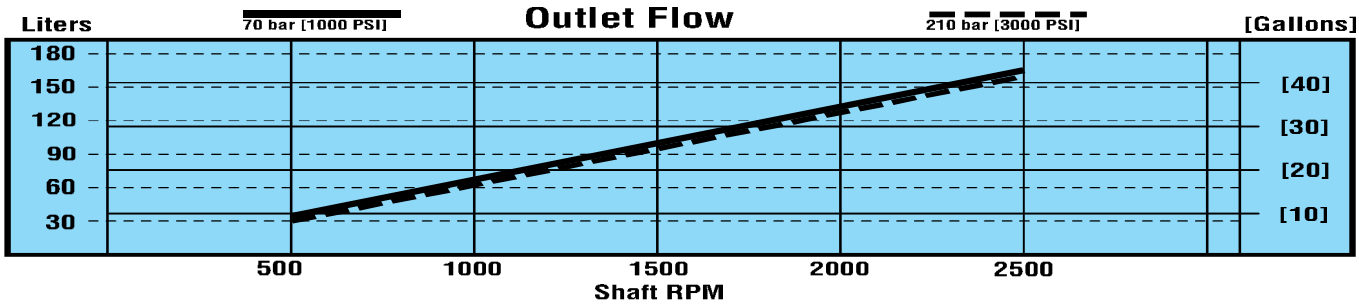
	Model 70523	
Specification	**Metric Units**	**U.S. Units**
Mounting Flange	2 and/or 4 Bolt SAE "C" Mount	
Maximum Displacement / Rev	0 to 69 cm³/r	0 to 4.21 in³/r
Flow @ Rated Speed and PSI	159 l/min.	42 GPM
Maximum Rated Speed	2500 RPM	2500 RPM
Continuous Rated Pressure	210 bar	3000 PSI
Maximum Intermittent Pressure	310 bar	4500 PSI
Continuous Allowable Case Pressure	2 bar	25 PSI
Maximum High Pressure Setting @ Zero Flow	Std. 210 bar	Std. 3000 PSI
Low Pressure Setting @ Zero Flow	Std. 14 bar	Std. 200 PSI
Compensator Response @ Rated PSI and RPM	35 mil. sec.	35 mil. sec.
Compensator Recovery @ Rated PSI and RPM	125 mil. sec.	125 mil. sec.
Maximum Continuous Inlet Vacuum	0,94 bar absolute	2 in. Hg.
Max. Thrust Load Into Pump and Shaft Side Load, for Input Shaft.	Consult an Eaton representative and/or Eaton engineering	
Maximum Continuous Inlet Temperature	107°C	225° F
Minimum Operating Temperature	-29° C	-20° F
Weight per single pump	35,4 kg	78 lbs.

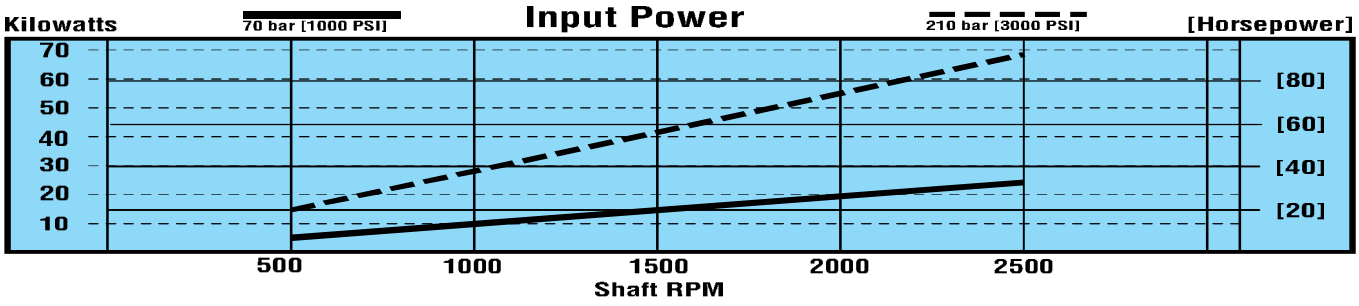
Model 70523 Performance Data

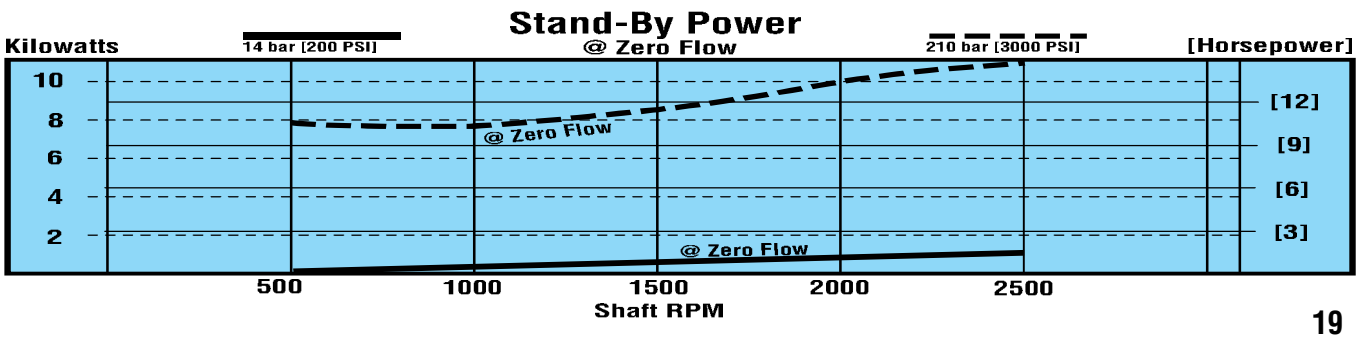
The charts below are representative of a 69 cm^3/r [4.21 in^3/r] Pressure-Flow Compensated Piston Pump. The tests were run at an oil temperature of 82°C [180°F] with viscosity 7 - 9 cSt [50 - 54 SUS] and the pump at maximum displacement.











Model 70523 Code

The Model 70523 Pressure or Pressure-Flow Compensated Piston Pumps are specified by the following model code. Once a pump is built from the model code, a product number will be assigned to that arrangement.

In using the Model Code make sure all positions are selected within the 21 digit code for each pump.

Code Example:

Position -	AAW	R	A	A	0	1	0	1	0	A	B	0	0	0	0	A	0	0
	1, 2, 3,	4,	5,	6,	7,	8,	9,	10,	11,	12,	13,	14,	15,	16, 17,		18, 19,	20,	21
					0	1							0	0 0		0 A	0	0

All left (CCW) or right (CW) directions given are viewed from the input shaft end of the pump.

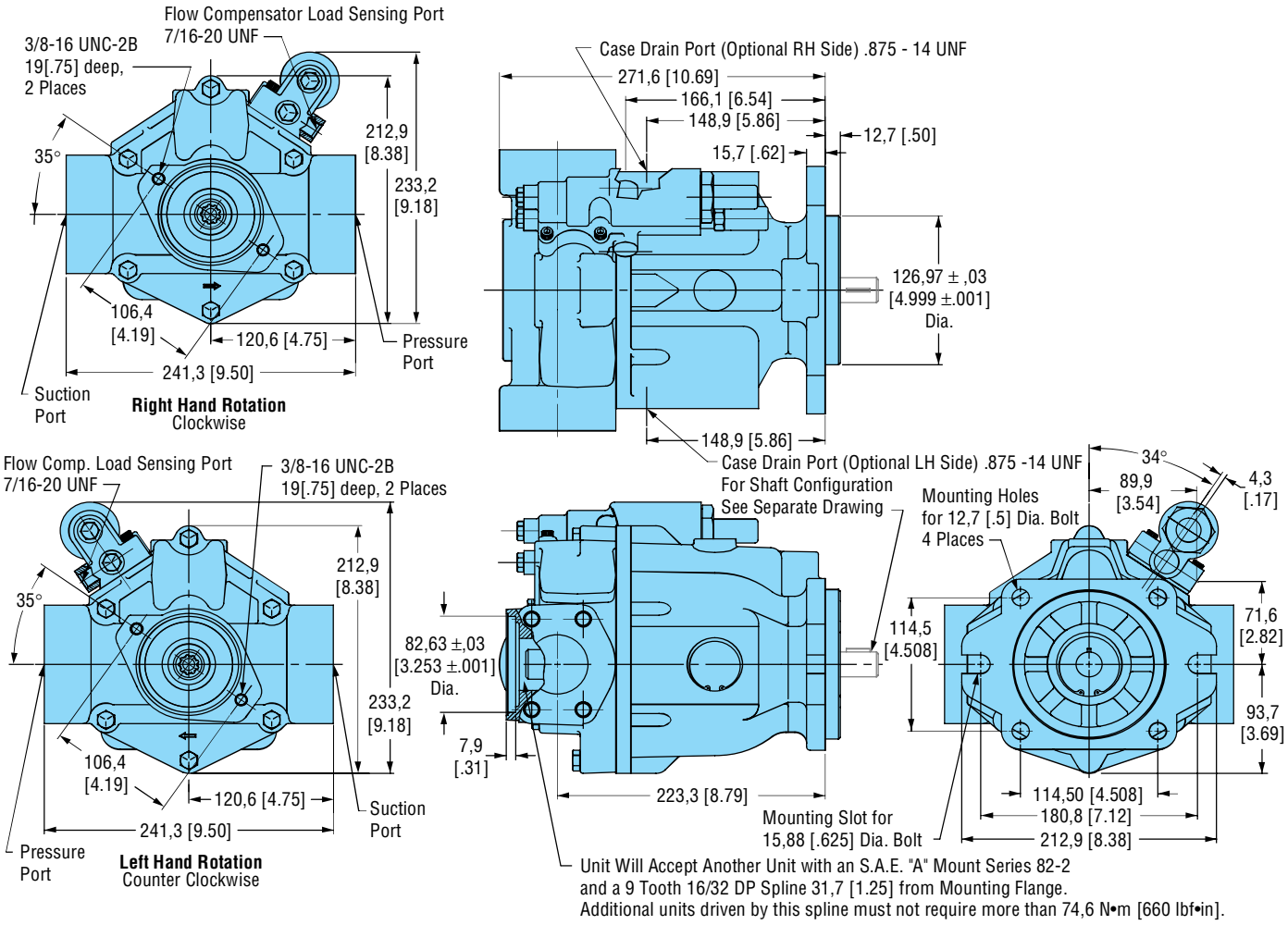
Position 1, 2, 3 - **Code Title**
AAW = Model 70523, 69 cm³/r [4.21 in³/r]
Pressure or Pressure-Flow Compensated Piston Pump

Position 4 - **Input Shaft Rotation**
R = Righthand Rotation (CW)
L = Lefthand Rotation (CCW)

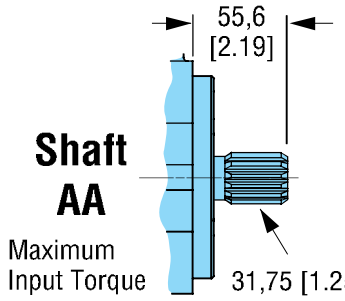
	Code	AAW
Position 5, 6 - **Input Shaft**		
AA = 14 Tooth 12/24 Spline, Shaft Extension 55.6 [2.19]	**AA**	Std.
AC = Straight Shaft Dia. 31.8 [1.25], Keyway 7.98 [.314] x 34.11 [1.343], Shaft Extension 55.6 [2.19] (Key Included)	**AC**	Std.
Position 7, 8 - **Pressure Compensator Setting**		
01 = 210-215 bar [3000-3100 PSI] Note: Consult an Eaton representative for additional settings from 35 bar [500 PSI] min.	**01**	Std.
Position 9, 10 - **Flow Compensator Setting**		
00 = No Flow Compensator	**00**	Std.
01 = 13.1-14.57 bar [190-210 PSI] Note: Consult an Eaton representative for additional settings to a max. of 31 bar [450 PSI]	**01**	Std.
Position 11 - **Compensator Special Features**		
0 = Top Mounted Compensator Assembly, No Special Features	**0**	Std.
D = Rear Mounted Compensator Assembly, No Special Features	**D**	Opt..
G = Top Mounted Compensator Assembly with Bleed Off	**G**	Opt.
Position 12 - **Main Ports, Size and Location**		
A = 50.8 [2.00] Suction Port; 25.4 [1.00] Pressure Port; - 4 Bolt Flange, Code 61 - Opposite Sides	**A**	Std.
B = 50.8 [2.00] Suction Port; 31.8 [1.25] Pressure Port; - 4 Bolt Flange, Code 61 - Opposite Sides	**B**	Opt.
C = 50.8 [2.00] Suction Port; 31.8 [1.25] Pressure Port; - 4 Bolt Flange, Code 61 - Rear Ports	**C**	Opt.
Position 13 - **Drain Port, Size and Location**		
A = .875-14 - UNF SAE Straight Thread O-ring Port - Left Side of Housing	**A**	Std.
B = .875-14 - UNF SAE Straight Thread O-ring Port - Right Side of Housing	**B**	Std.
Position 14 - **Auxiliary Rear Mounting**		
0 = No Auxiliary Mounting	**0**	Std.
B = [2- Bolt B] SAE Flange Series 101-2 with a 13 Tooth 16/32 External Spline (Coupler and O-ring not Included)	**B**	Opt.
C = [2- Bolt A] SAE Flange Series 82-2 with a 9 Tooth 16/32 External Spline (Coupler and O-ring Included)	**C**	Opt.
Position 15 - **Maximum Displacement Option**		
0 = As Given in Code Title	**0**	Std.
Position 16, 17 - **Special Features**		
00 = No Special Features	**00**	Std.
Position 18, 19 - **Paint**		
0A = Primer	**0A**	Std.
Position 20 - **Identification**		
0 = Standard	**0**	Std.
Position 21 - **Design Code**		
0 = Eaton assigned design code	**0**	Std.

Model 70523
Installation Drawings

Opposite Side Porting with
2 Bolt "A" Auxiliary Rear Mounting and
Compensator in Top Position



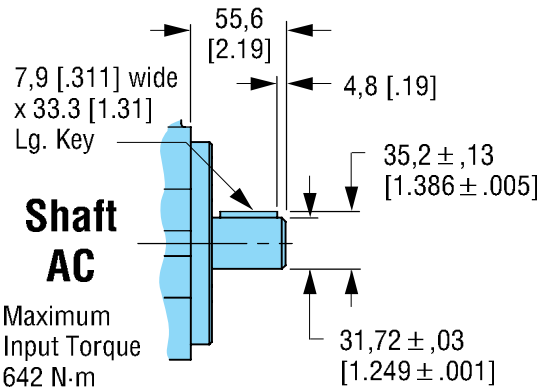
Input Shafts



Shaft AA

Maximum
Input Torque
642 N·m
[5,677 lbf·in]

31,75 [1.25] Dia., **14 Tooth**
12/24 DP 30 Degree
Involute Flat Root, Class 1
Side Fit Spline, S.A.E. J498b

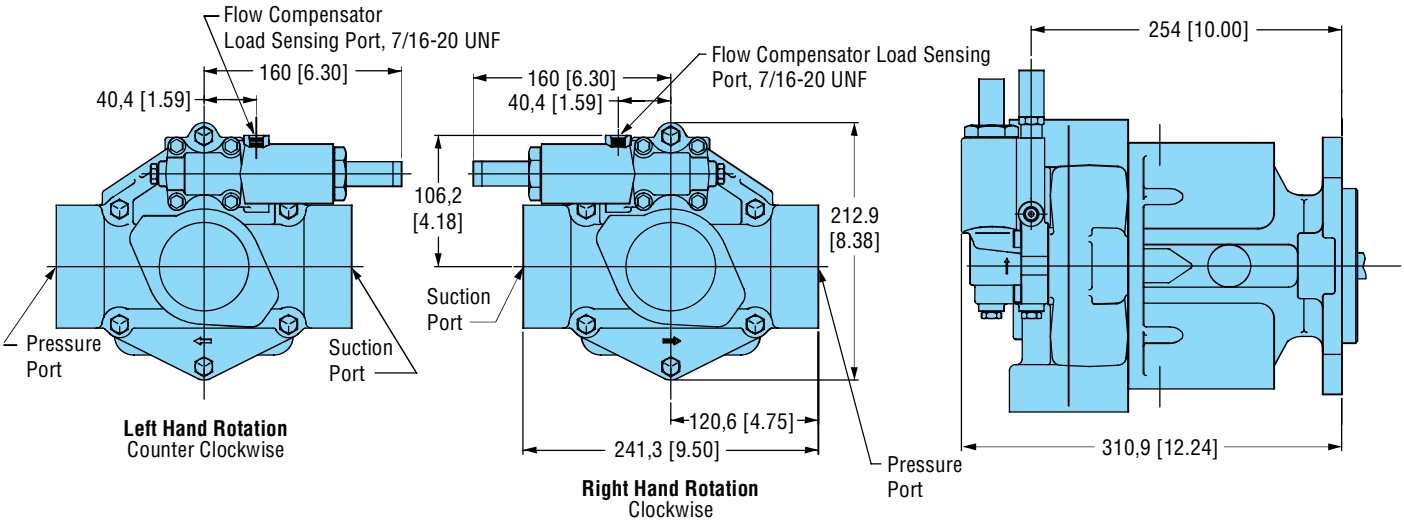


Shaft AC

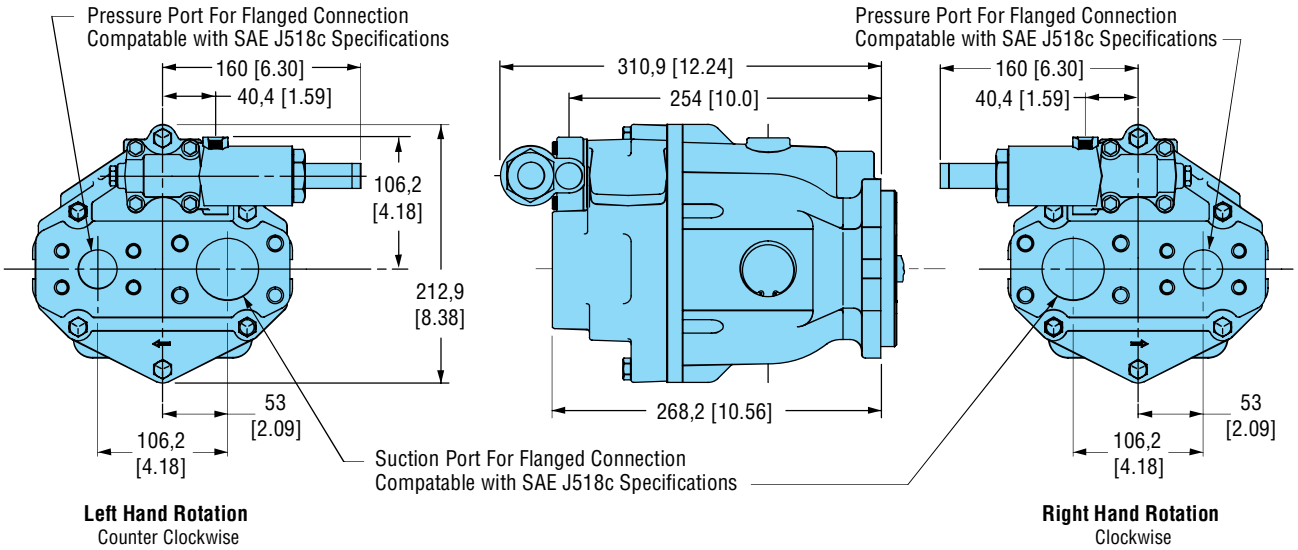
Maximum
Input Torque
642 N·m
[5,677 lbf·in]

Model 70523
Installation Drawings

Opposite Side Porting with Compensator Position on the Rear



Rear Porting with Compensator Position on the Rear



Model 70523
Installation Drawings

2-Bolt "B" Auxiliary Rear Mounting