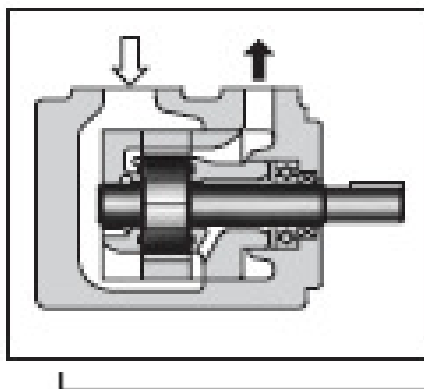


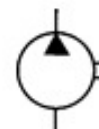
■ PV2R Series Single Vane Pumps

The pumps have been developed especially for low noise operation. To comply with a wide range of applications for instance the injection molding machine industry, we provide the wide range of delivery volume [5.8-237.0 cm³/rev.] for the pumps.

The main internal spare parts of the pumps are built in as cartridge kit. Therefore, the maintenance can be easily done by simply changing the cartridges.



Graphic Symbol



■ Ratings

Model Number	Geometric Displacement cm ³ /rev	Max. Operating Pressure kgf/cm ²							Output Flow Input Power	Shaft Speed Range rpm	
		Peroleum Base Oils			Water Containing Fluids			Synthetic Fluids		Max .	Min .
		Specially *6 Specified	Anti wear Type	R & O Type	Anti wear Type *6 Water Glycols	Water Glycols	Water in Oil Emulsions	Phosphate Esters			
PV2R1-6	5.8	210 *5	175 *5	160	160	70	70	160	Refer Page 49, 50 & 51	1800 (1200)*3	750*4
PV2R1-8	8.0										
PV2R1-10	9.4										
PV2R1-12	12.2										
PV2R1-14	13.7										
PV2R1-17	16.6										
PV2R1-19	18.6										
PV2R1-23	22.7										
PV2R1-25	25.3	160	160	140	160	70	70	140	Refer Page 52 & 53	1800 (1200)*3	600
PV2R1-31	31.0										
PV2R2-41	41.3	210	175	140	160	70	70	140	Refer Page 51 & 52	1800 (1200)*3	600*4
PV2R2-47	47.2										
PV2R2-53	52.5										
PV2R2-59	58.2										
PV2R2-65	64.7										
PV2R3-76	76.4	210	175	140	160	70	70	140	Refer Page 52 & 53	1800 (1200)*3	600
PV2R3-94	93.6										
PV2R3-116	115.6									1800*1 (1200)*3	
PV2R4-136	136	175	175	140	160	70	70	140	Refer Page 53 & 54	1800*2 (1200)*3	600
PV2R4-153	153										
PV2R4-184	184										
PV2R4-200	201										
PV2R4-237	237										

* 1 . If PV2R3-116 is used at speed above 1700 rpm, the suction pressure is limited to 0 kgf/cm (0 in. Hg)² * 2 . If PV2R4-237 is used at speed above 1700 rpm, the suction pressure is limited to 0.13 kgf/cm² (3.94 in Hg. vacuum) * 3 . If phosphate esters or water containing fluids are used, the maximum speed is limited to 1200 rpm. * 4 . For starting at low speed, the maximum viscosity is limited. For details, see Hydraulic Fluids. * 5 . With pressure above 160 kgf/cm² raise the speed over 1450 rpm.

* 6 . For the brands of 'Anti wear type water glycol' and 'Specially specified' petroleum based oils see the 'Hydraulic fluids' in page 362

■ Model Number Designation

F	PV2R1	-6	-L	-R	A	A	-40
Special Seals	Series Number	Nominal Displacement	Type of Mounting	Shaft Rotation	Discharge Port Position	Suction Port Position	Design Number
F: For Phosphate Easter Type Fluids (Omit if not required)	PV2R1	6, 8 10, 12 14, 17 19, 23 25, 31	L: Foot Mounting	(Viewed from Shaft End)			40
	PV2R2	41, 47 53, 59 65		R: Clockwise (Normal)	A: Upwards (Normal)	A: Upwards (Normal)	40
	PV2R3	76, 94 116	F: Flange Mounting		B: Bottom	B: Bottom	30
	PV2R4	136,153 184,200 237			R: Right	R: Right	30
					L: Left	L: Left	30

I Available to supply pump with anti-clockwise rotation. Consult Yuken for details.

■ Pipe Flange Kits

Pipe flange Kits are available. When ordering, specify kits from the table below.

Pump Model Numbers	Name of Port	Pipe Flange Kit Numbers
		Threaded Connection
PV2R1	Suction	F5-08-A-1080
	Discharge	F5-04-A-1080
PV2R2	Suction	F5-10-A-1080
	Discharge	F5-06-A-1080
PV2R3	Suction	F5-16-A-1080
	Discharge	F5-10-A-1080
PV2R4	Suction	----
	Discharge	F5-12-A-1080

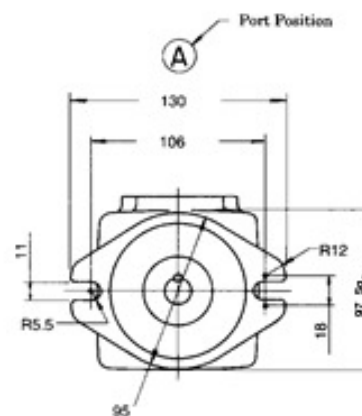
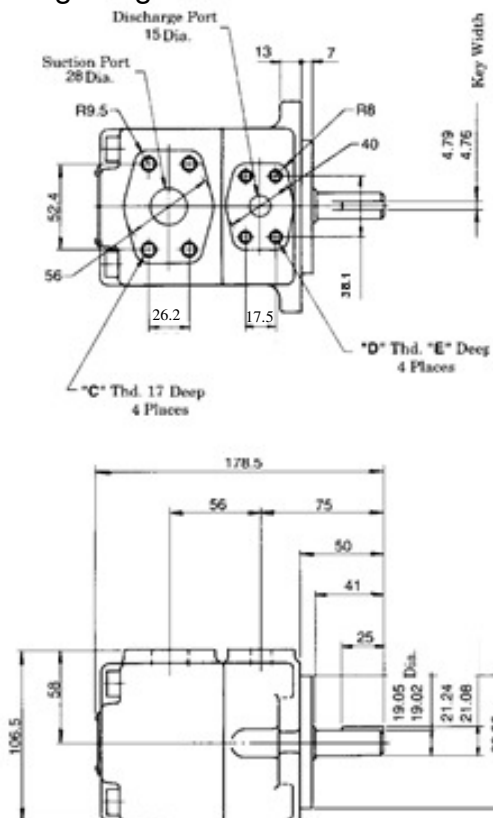
Notes: Special seals (Viton Seals) are required when phosphate ester type fluids are used. (put "F" before model code of pipe flange when ordering).

* Detail of the pipe flange kit is described on page 358

■ Mass

Model Numbers	Mass kg.	
	Flange Mtg.	Foot Mtg.
PV2R1	9.0	11.2
PV2R2	19.0	23.3
PV2R3	36.7	46.7
PV2R4	68.5	93.5

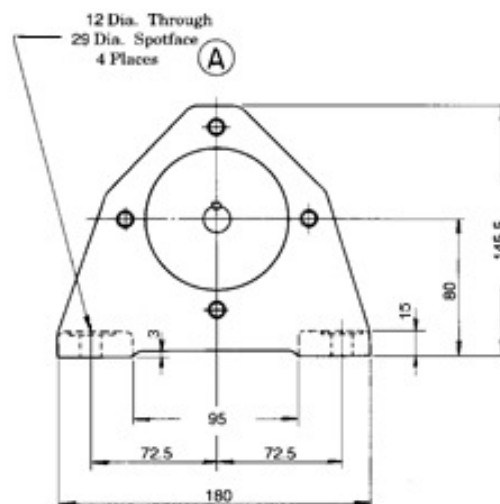
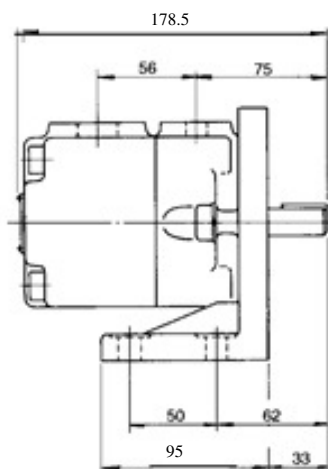
Flange Mtg. : PV2R1- -F-RAA-40



Model Numbers	"C" Thd.	"D" Thd.	E mm.
PV2R1- -F-RAA-40	M10	M8	14

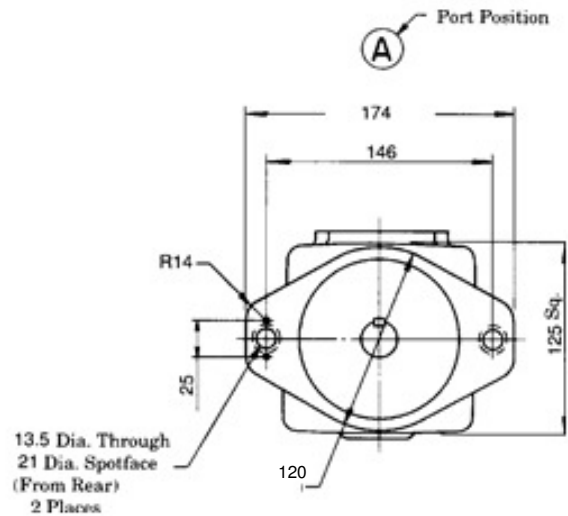
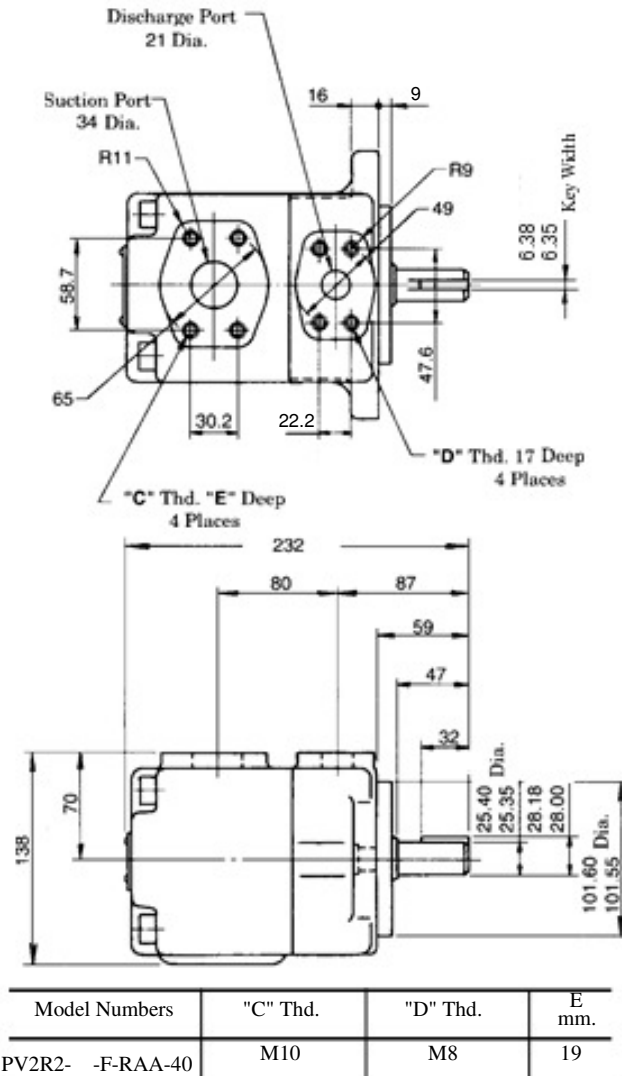
DIMENSION IN MILLIMETRES

Foot Mtg. : PV2R1- -L-RAA-40



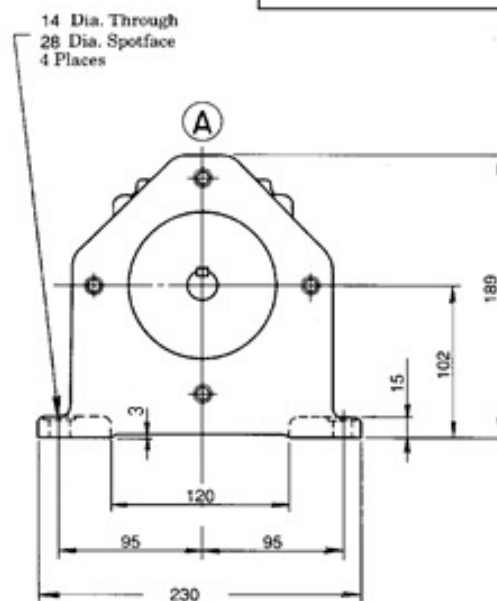
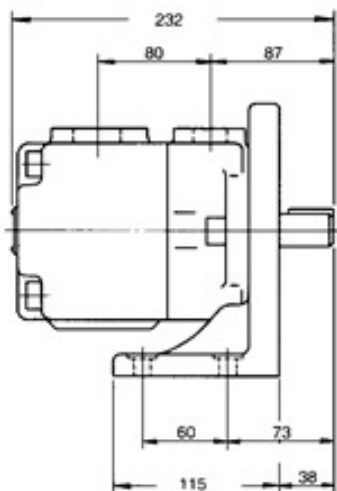
• For other dimensions, refer to "Flange Mtg".

Flange Mtg. : PV2R2- -F-RAA-40

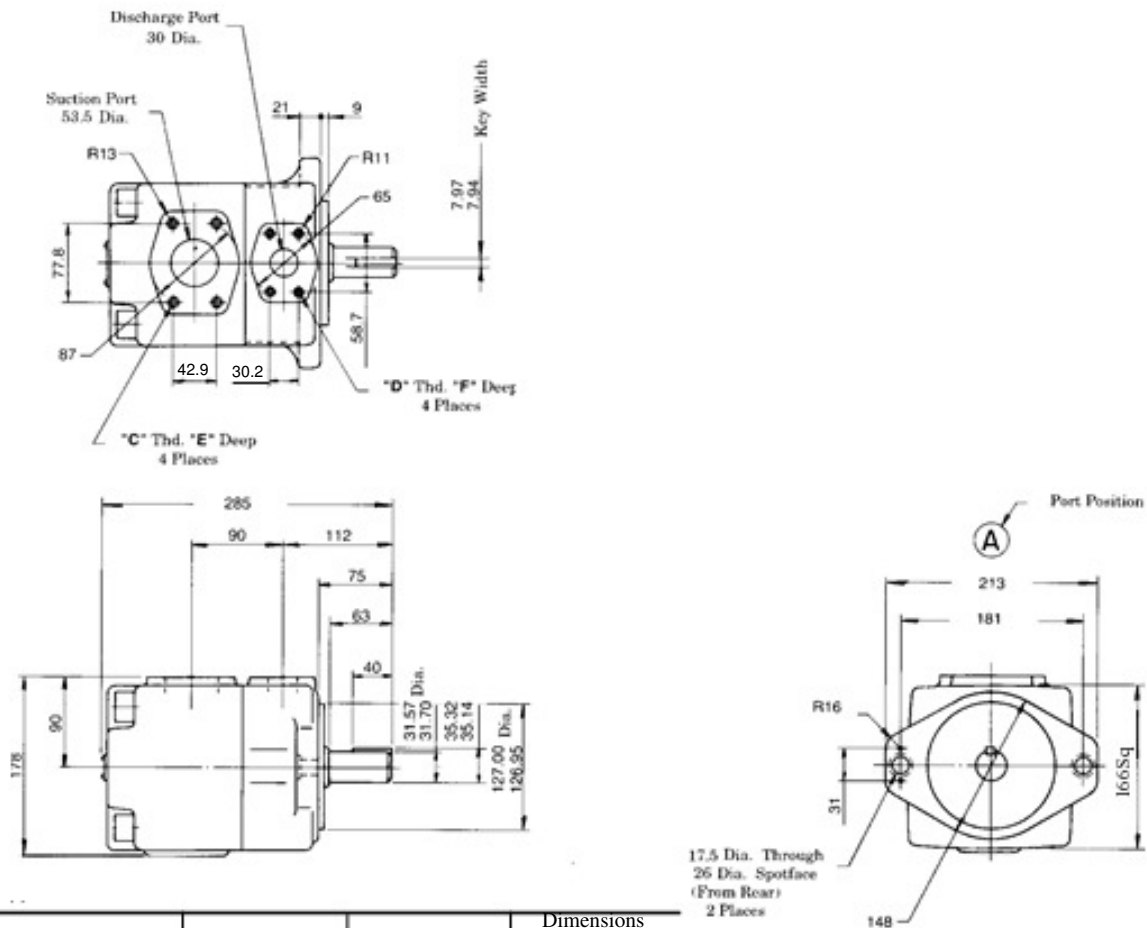


DIMENSION IN MILLIMETRES

Foot Mtg. : PV2R2- -L-RAA-40



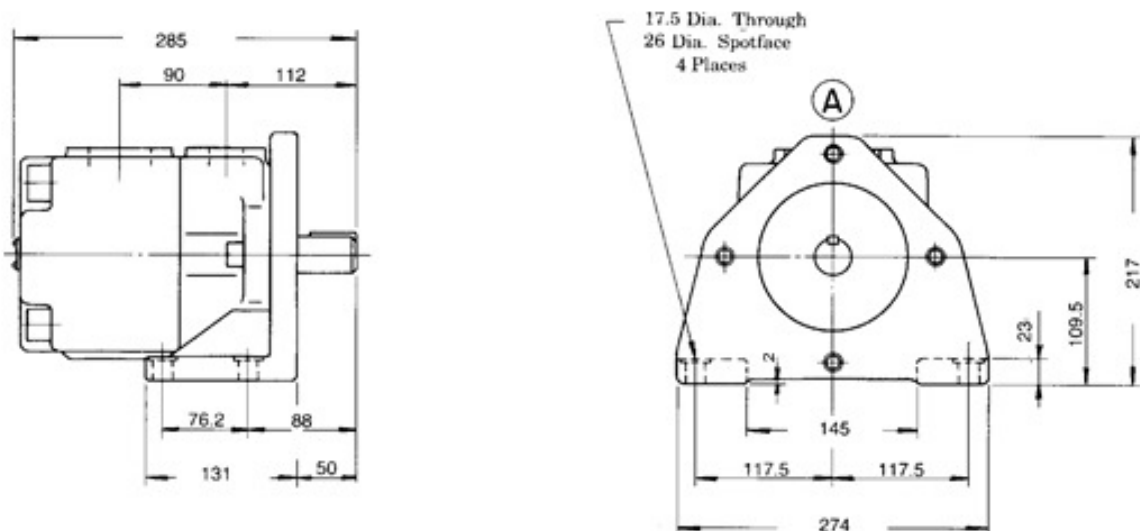
Flange Mtg. : PV2R3- -F-RAA-30



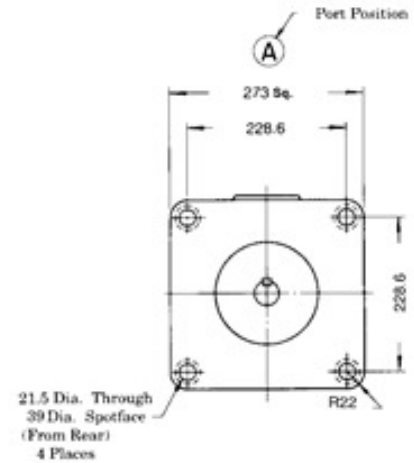
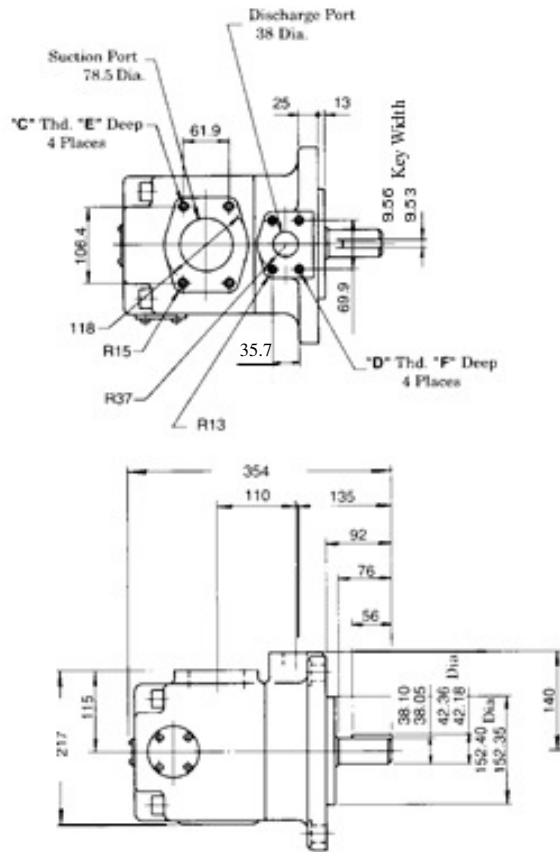
Model Numbers	"C" Thd.	"D" Thd.	Dimensions mm.	
			E	F
PV2R3-F-RAA-30	M12	M10	19	19

DIMENSION IN MILLIMETRES

Foot Mtg. : PV2R3- -L-RAA-40



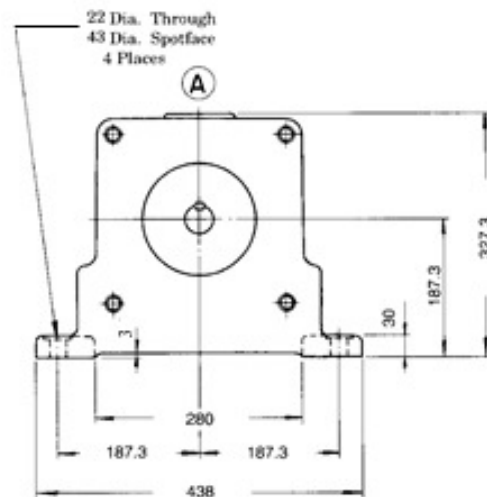
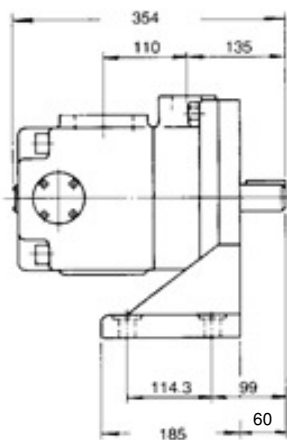
Flange Mtg. : PV2R4- -F-RAA-30



Model Numbers	"C" Thd.	"D" Thd.	Dimensions mm.	
			E	F
PV2R4--F-RAA-30	M16	M12	19	19

DIMENSION IN
MILLIMETRES

Foot Mtg. : PV2R4- -L-RAA-30



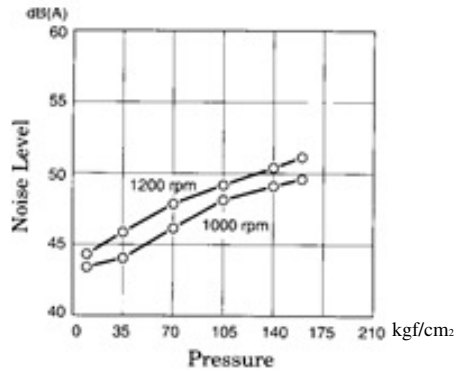
● For other dimensions, refer to "Flange Mtg".

■ Noise Level

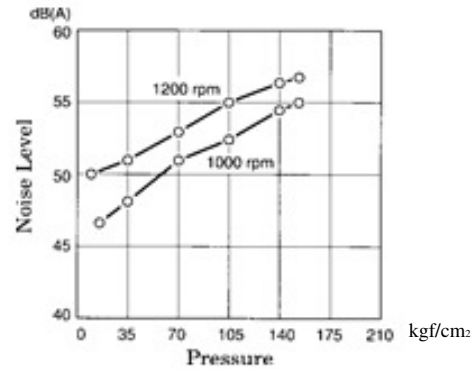
● Measuring Conditions

Fluid Viscosity : 20 cSt (100 SSU)
 Measurement Point : One Metre horizontally away from pump head cover
 Background Noise : 40dB (A)

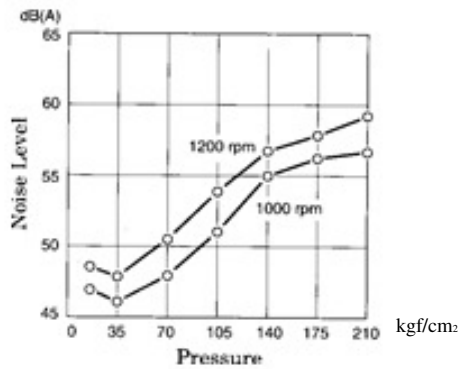
● PV2R1-6



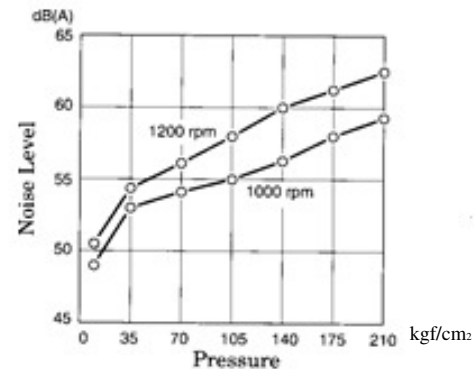
● PV2R1-31



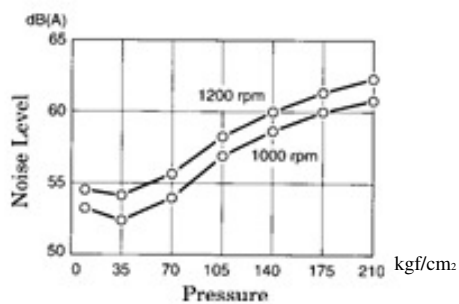
● PV2R2-41



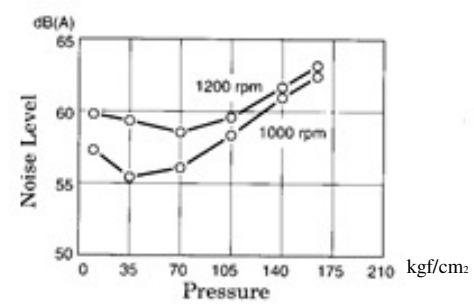
● PV2R2-65



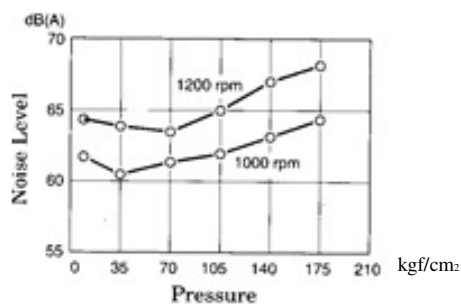
● PV2R3-76



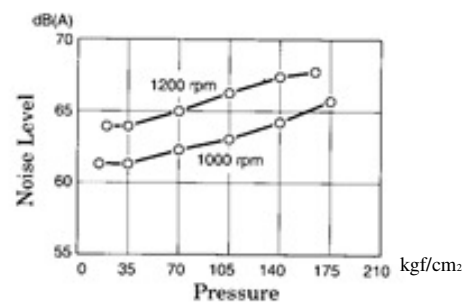
● PV2R3-116



● PV2R4-136

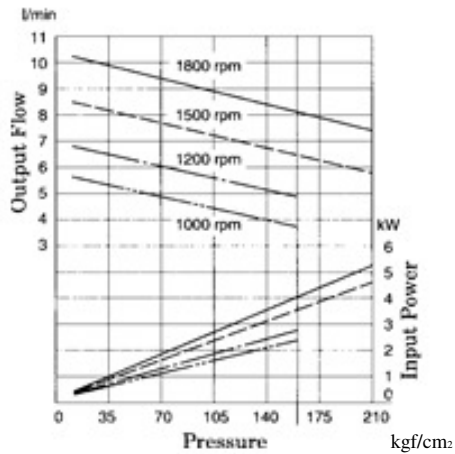


● PV2R4-184

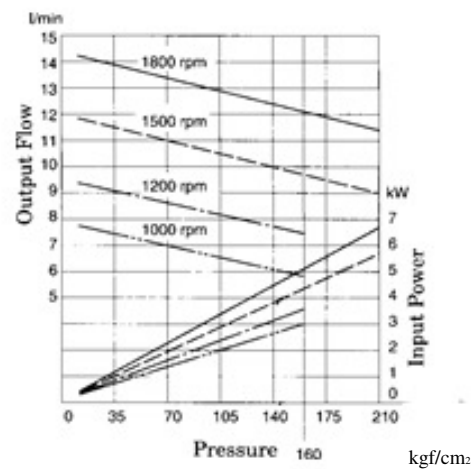


Typical Pump Characteristics at viscosity 20 cSt (100 SSU) [ISO VG32 Oils, 50°C (122°F)]

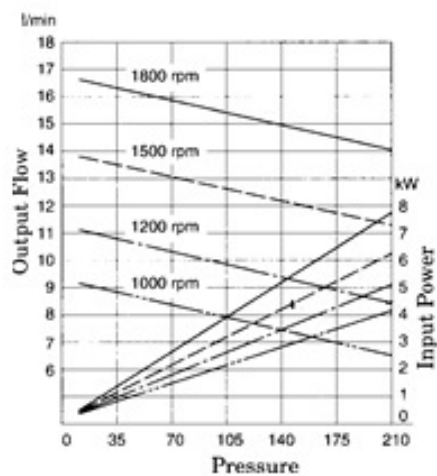
• PV2R1-6



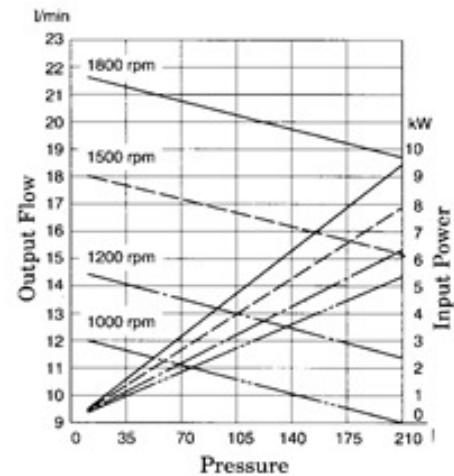
• PV2R1-8



• PV2R1-10

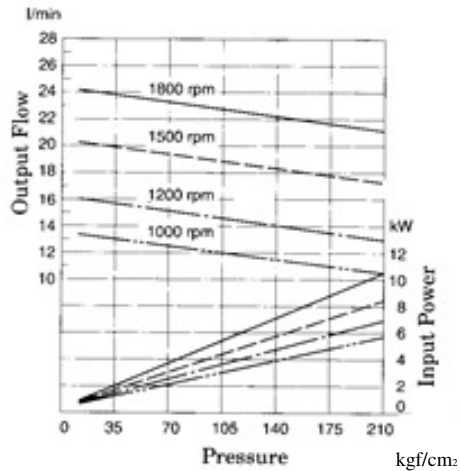


• PV2R1-12

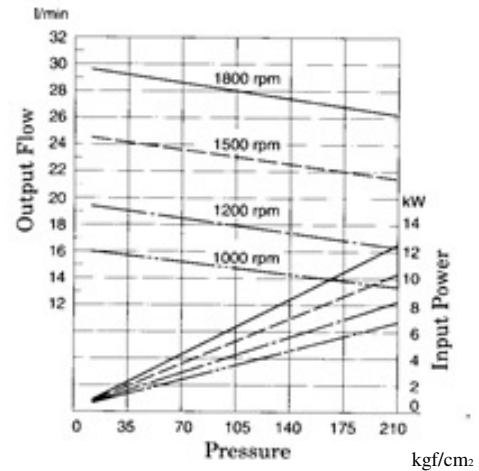


Typical Pump Characteristics at viscosity 20 cSt (100) SSU) [ISO VG32 Oils, 50°C]

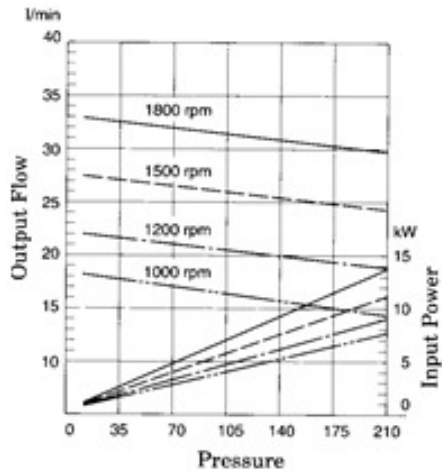
• PV2R1-14



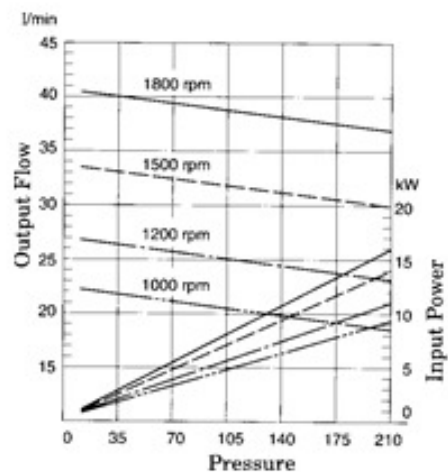
• PV2R1-17



• PV2R1-19

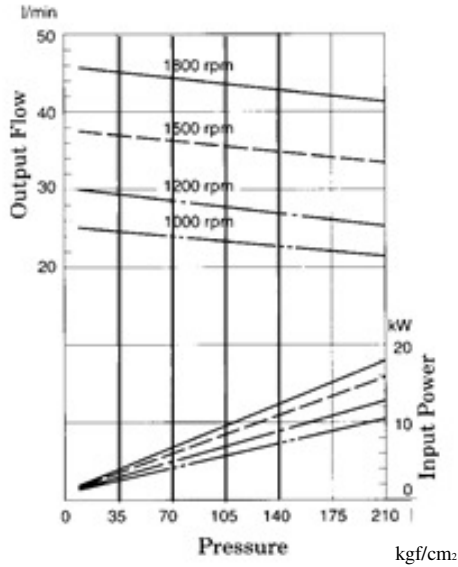


• PV2R1-23

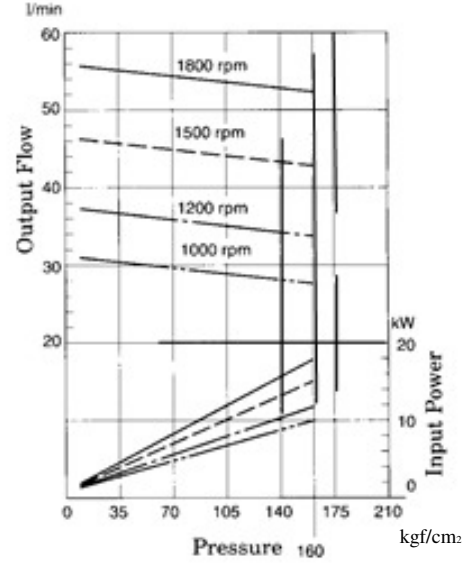


Typical Pump Characteristics at viscosity 20 cSt (100) SSU) [ISO VG32 Oils]

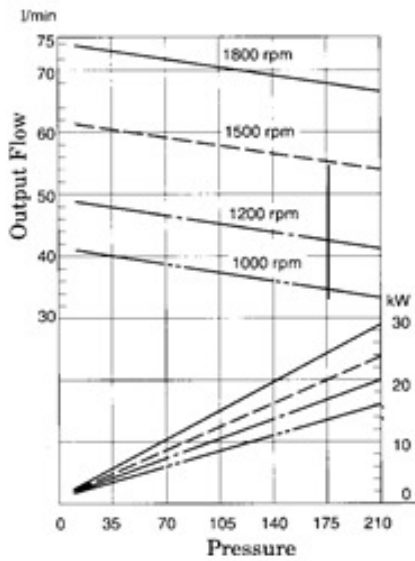
• PV2R1-25



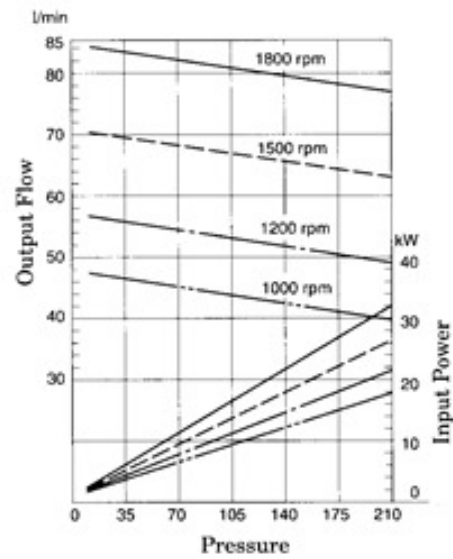
• PV2R1-31



• PV2R2-41

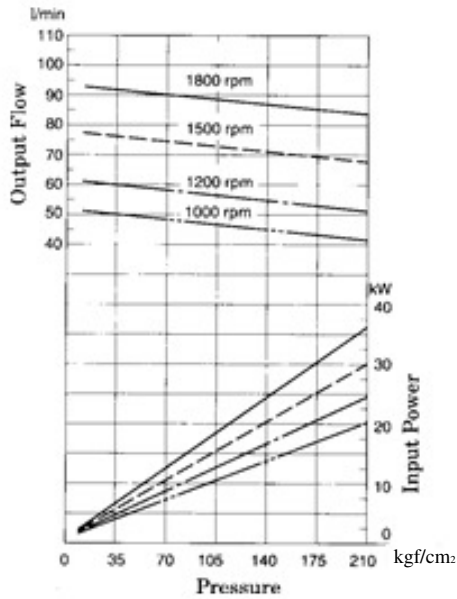


• PV2R2-47

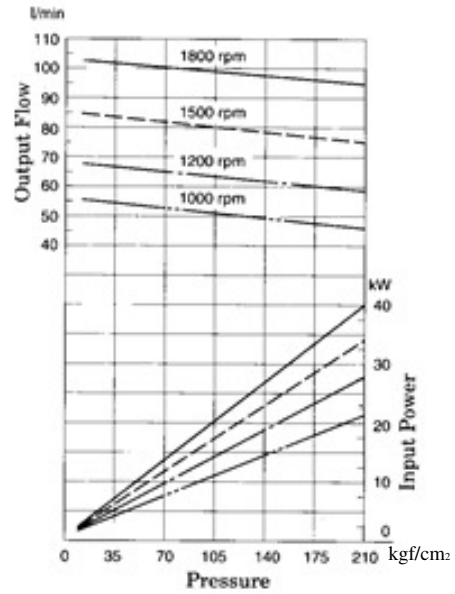


Typical Pump Characteristics at viscosity 20 cSt (100) SSU) [ISO VG32 Oils, 50°C]

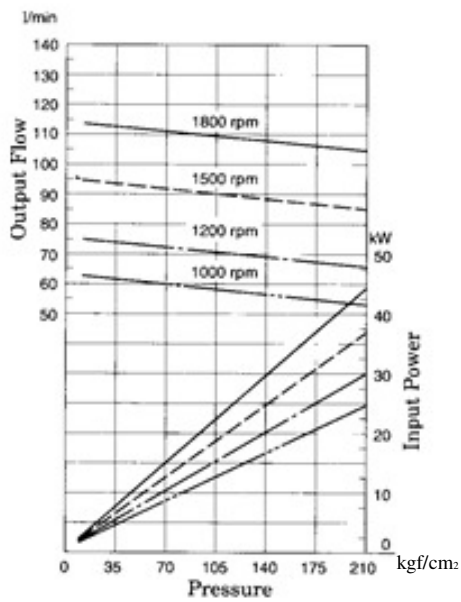
• PV2R2-53



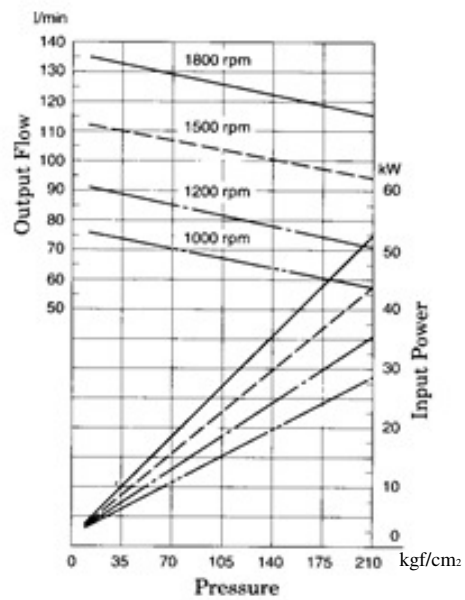
• PV2R2-59



• PV2R2-65

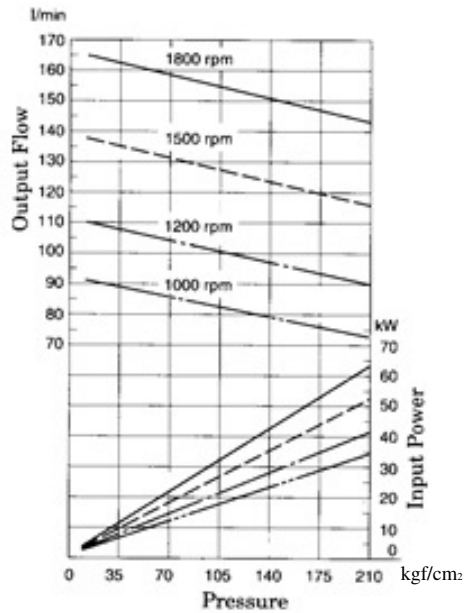


• PV2R3-76

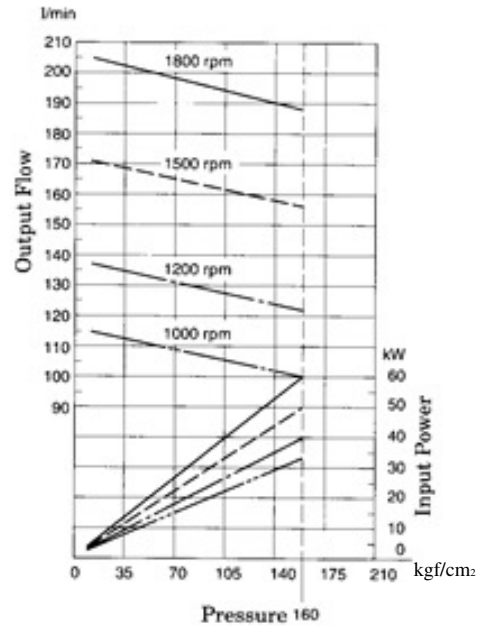


Typical Pump Characteristics at viscosity 20 cSt (100) SSU [ISO VG32 Oils, 50°C]

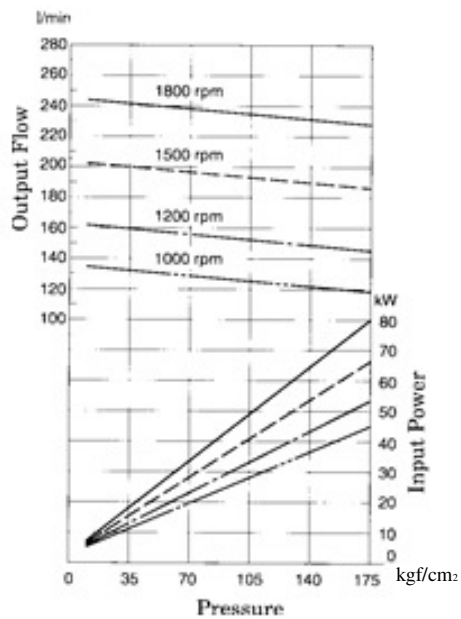
• PV2R3-94



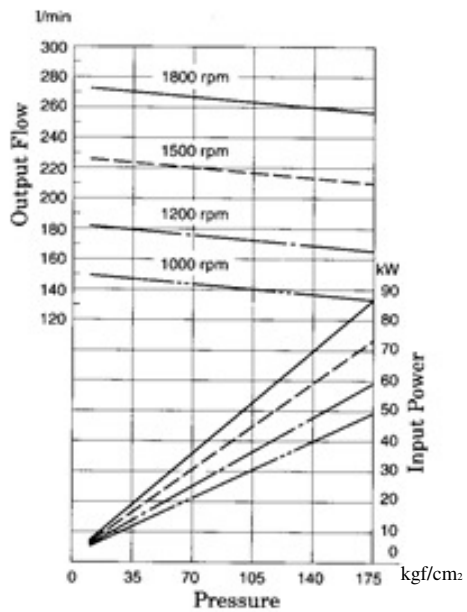
• PV2R3-116



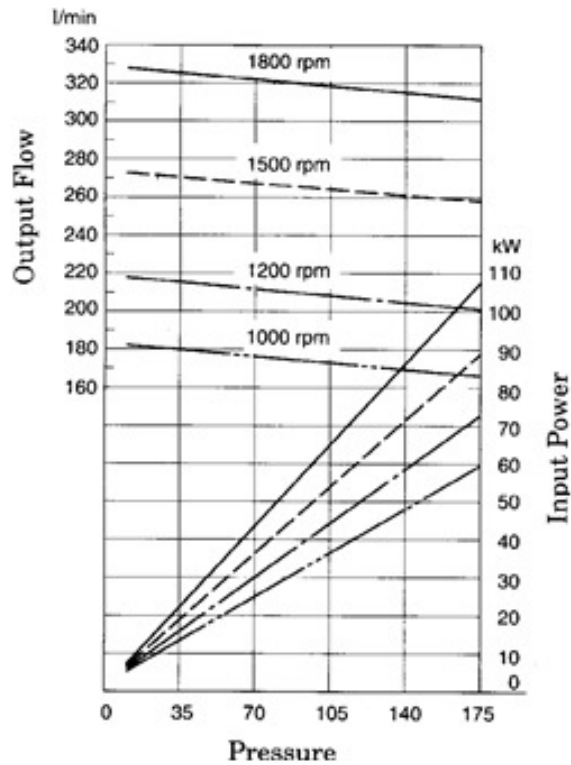
• PV2R4-136



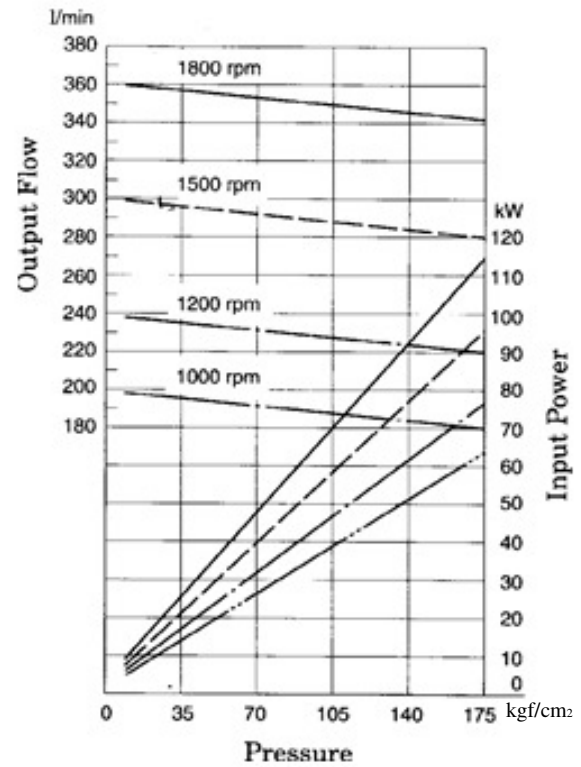
• PV2R4-153



• PV2R4-184



• PV2R4-200



• PV2R4-237

