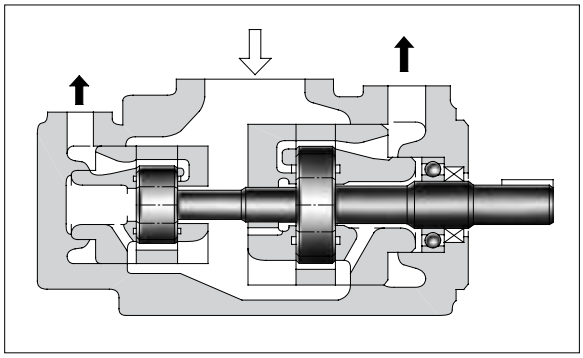
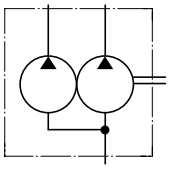
"PV2R" Series Double Vane Pumps

These double pumps consist of two PV2R seires single pumps combined in tandem within a single housing and driven by a common shaft. A Single suction port and two discharge ports are provided so that the output flow can be supplied to separate circuits.



Graphic Symbol



Model Number Designation

F-	PV2R13	-6	-76	-L	-R	A	A	A	-40	*
Special Seals	Series Number	Small Volume Pump Nominal Displacement cm^3/rev	Large Volume Pump Nominal Displacement cm^3/rev	Mounting	Direction of Rotation	Small Volume Pump Discharge Port Position	Large Volume Pump Discharge Port Position	Suction Port Position	Design Number	Design Standards
						(Viewed from Shaft End)				
F: Special seals for phosphate ester type fluids (Omit if not required)	**PV2R12**	**6, 8 10, 12 14, 17 19, 23 25, 31**	**26, 33 41, 47 53, 59 65**	**L:** Foot Mtg.	**R:** ★1 Clockwise (Normal)	**E:** Left 45° Upwards (Normal)	**A:** Upwards (Normal)	**A:** Upwards (Normal)	**42**	Refer to ★2
	PV2R13	**6, 8 10, 12 14, 17 19, 23 25, 31**	**76, 94 116**			**A:** Upwards (Normal)			**42**	
	PV2R23	**41, 47 53, 59 65**	**52, 60 66, 76 94, 116**			**E:** Left 45° Upwards (Normal)			**41**	
	PV2R33	**76, 94 116**	**76, 94 116**	**F:** Flange Mtg.		**A:** Upwards (Normal)			**31**	
	PV2R14	**6, 8 10, 12 14, 17 19, 23**	**136, 153 184, 200 237**			**A:** Upwards (Normal)			**32**	
	PV2R24	**26, 33 41, 47**							**31**	
	PV2R34	**52, 60 66, 76 94, 116**				**E:** Left 45° Upwards (Normal)			**31**	

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

★2. Design Standards: None ..... Japanese Standard "JIS" and European Design Standard
90 ..... N. American Design Standard

Pipe Flange Kits

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

Pump Model Numbers	Name of Port	Pipe Flange Kit Numbers						
		Threaded Connection			Socket Welding ★1		Butt Welding	
		Japanese Standard "JIS"	European Design Standard	N. American Design Standard ★2	Japanese Standard "JIS" European Design Standard	N. American Design Standard ★2	Japanese Standard "JIS" European Design Standard	N. American Design Standard ★2
PV2R12	Suction	F5-16-A-10	F5-16-A-1080	——	F5-16-B-10	F5-16-B-1090	F5-16-C-10	F5-16-C-1090
	Large Discharge	F5-06-A-10	F5-06-A-1080	——	F5-06-B-10	F5-06-B-1090	F5-06-C-10	F5-06-C-1090
	Small Discharge	F5-04-A-10	F5-04-A-1080	——	F5-04-B-10	F5-04-B-1090	F5-04-C-10	F5-04-C-1090
PV2R13	Suction	F5-24-A-10	——	——	F5-24-B-10	F5-24-B-1090	F5-24-C-10	F5-24-C-1090
	Large Discharge	F5-10-A-10	F5-10-A-1080	——	F5-10-B-10	F5-10-B-1090	F5-10-C-10	F5-10-C-1090
	Small Discharge	F5-04-A-10	F5-04-A-1080	——	F5-04-B-10	F5-04-B-1090	F5-04-C-10	F5-04-C-1090
PV2R23	Suction	F5-24-A-10	——	——	F5-24-B-10	F5-24-B-1090	F5-24-C-10	F5-24-C-1090
	Large Discharge	F5-10-A-10	F5-10-A-1080	——	F5-10-B-10	F5-10-B-1090	F5-10-C-10	F5-10-C-1090
	Small Discharge	F5-06-A-10	F5-06-A-1080	——	F5-06-B-10	F5-06-B-1090	F5-06-C-10	F5-06-C-1090
PV2R33	Suction	F5-28-A-10	——	——	F5-28-B-10	F5-28-B-1090	F5-28-C-10	F5-28-C-1090
	Large Discharge	F5-10-A-10	F5-10-A-1080	——	F5-10-B-10	F5-10-B-1090	F5-10-C-10	F5-10-C-1090
	Small Discharge	F5-10-A-10	F5-10-A-1080	——	F5-10-B-10	F5-10-B-1090	F5-10-C-10	F5-10-C-1090
PV2R14	Suction	F5-28-A-10	——	——	F5-28-B-10	F5-28-B-1090	F5-28-C-10	F5-28-C-1090
	Large Discharge	F5-12-A-10	F5-12-A-1080	——	F5-12-B-10	F5-12-B-1090	F5-12-C-10	F5-12-C-1090
	Small Discharge	F5-04-A-10	F5-04-A-1080	——	F5-04-B-10	F5-04-B-1090	F5-04-C-10	F5-04-C-1090
PV2R24	Suction	F5-28-A-10	——	——	F5-28-B-10	F5-28-B-1090	F5-28-C-10	F5-28-C-1090
	Large Discharge	F5-12-A-10	F5-12-A-1080	——	F5-12-B-10	F5-12-B-1090	F5-12-C-10	F5-12-C-1090
	Small Discharge	F5-06-A-10	F5-06-A-1080	——	F5-06-B-10	F5-06-B-1090	F5-06-C-10	F5-06-C-1090
PV2R34	Suction	F5-32-A-10	——	——	F5-32-B-10	F5-32-B-1090	F5-32-C-10	F5-32-C-1090
	Large Discharge	F5-12-A-10	F5-12-A-1080	——	F5-12-B-10	F5-12-B-1090	F5-12-C-10	F5-12-C-1090
	Small Discharge	F5-10-A-10	F5-10-A-1080	——	F5-10-B-10	F5-10-B-1090	F5-10-C-10	F5-10-C-1090

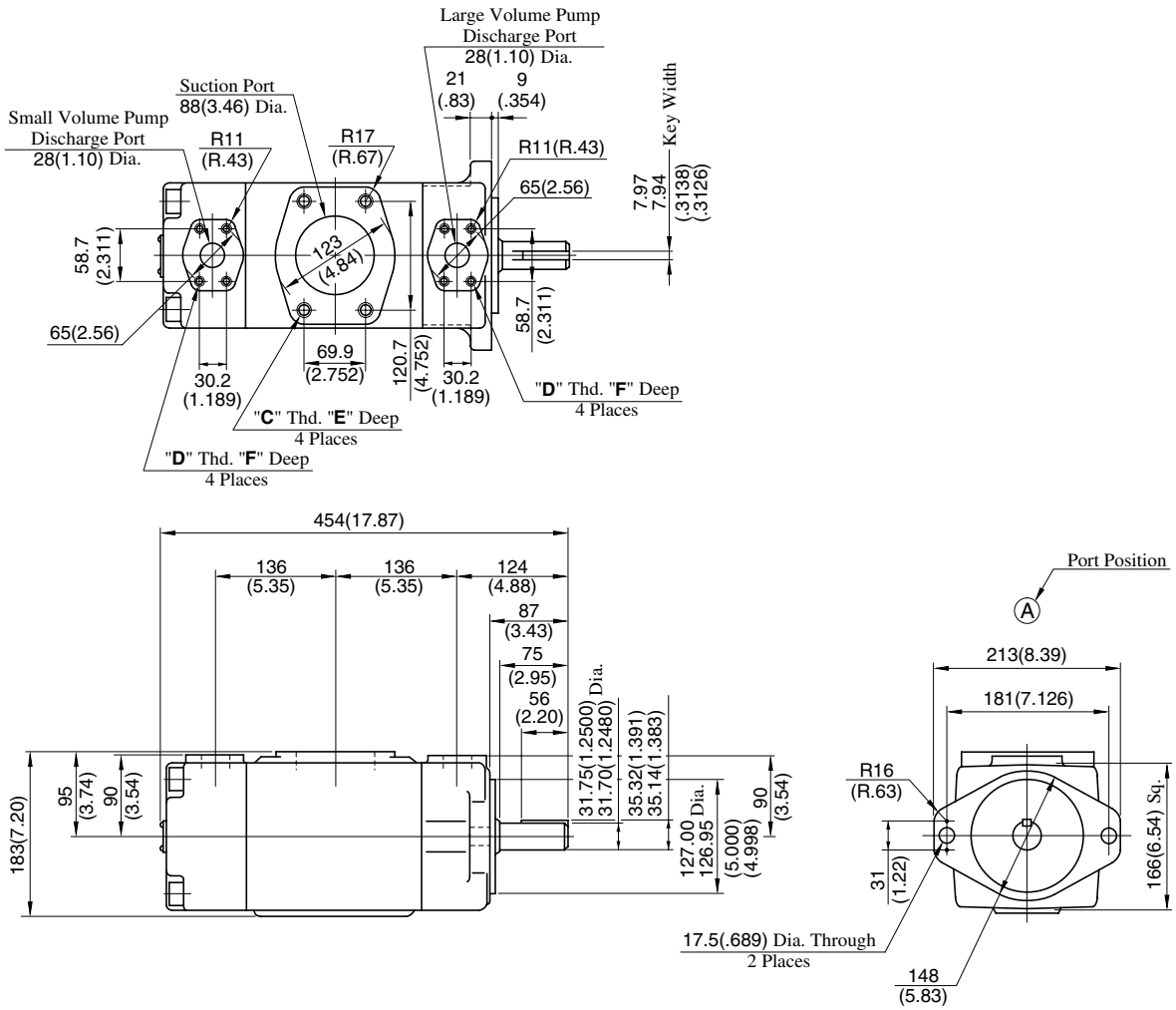
★1. In case of using socket welding flanges, there is a case where the operating pressure should be set lower than the normal because of strength of the flanges. Therefore, please pay cautious attention to the operating pressure when the socket welding flanges are used.

★2. As dimensions of the pipe flange mounting surface are conformed to SAE 4 Bolt Split Flange (Standard Pressure Series), pipe flanges conforming to the SAE Standards can be used.

Notes: Special seals (Viton seals) are required when phosphate ester type fluids are used. (Prefix **"F-"** to the pipe flange kit number when ordering.)

● Details of the pipe flange kits are shown on page 824.

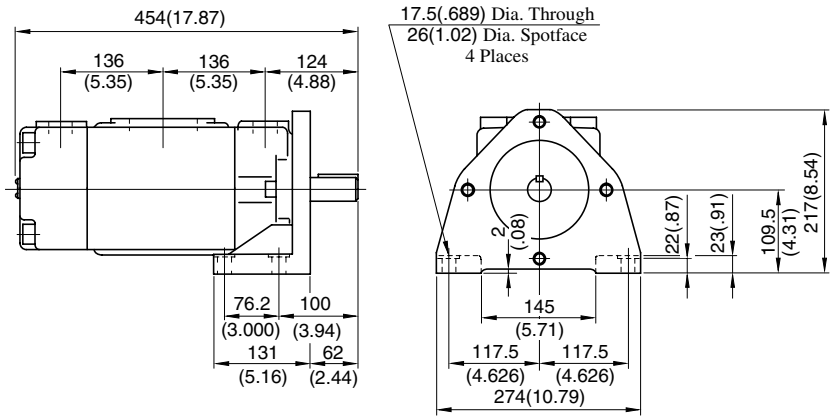
Flange Mtg.: PV2R33-∗-∗-F-RAAA-31/3190



Model Numbers	"C" Thd.	"D" Thd.	Dimensions mm (Inches)	
			E	F
PV2R33-∗-∗-F-RAAA-31	M16	M10	19 (.75)	19 (.75)
PV2R33-∗-∗-F-RAAA-3190	5/8-11 UNC	7/16-14 UNC	21 (.83)	20 (.79)

DIMENSIONS IN MILLIMETRES (INCHES)

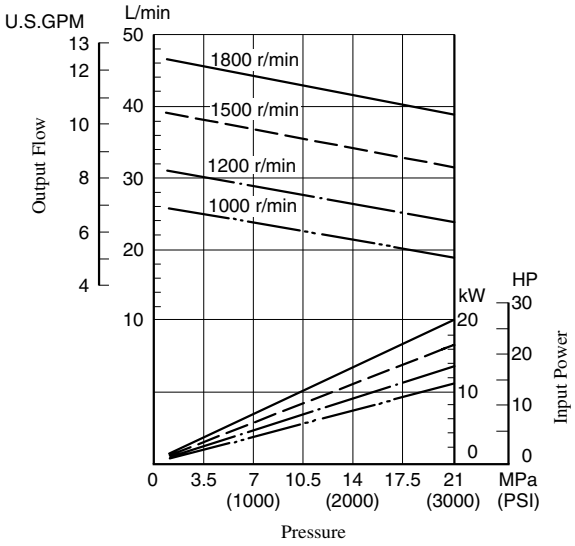
Foot Mtg.: PV2R33-∗-∗-L-RAAA-31/3190



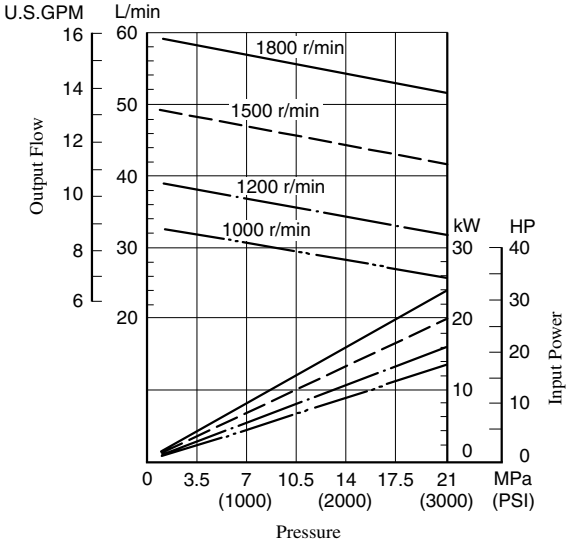
• For other dimensions, refer to "Flange Mtg.".

Typical Pump Characteristics at Viscosity 20 mm²/s (100 SSU) [ISO VG32 Oils, 50°C (122°F)]

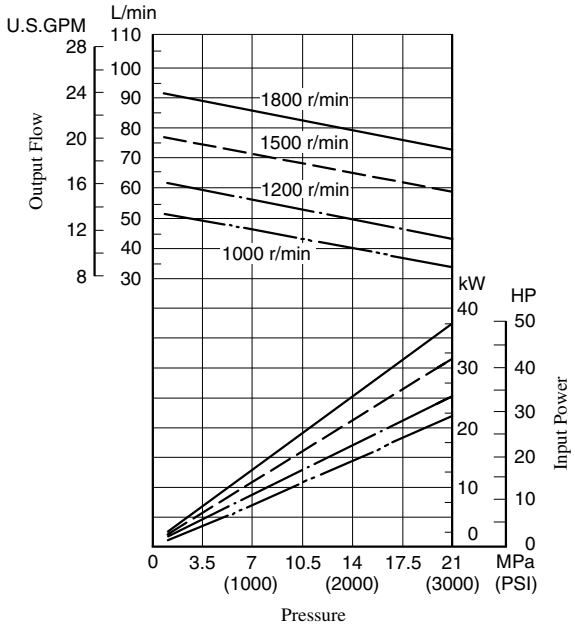
● **PV2R12-*-26**
● **PV2R24-26-***



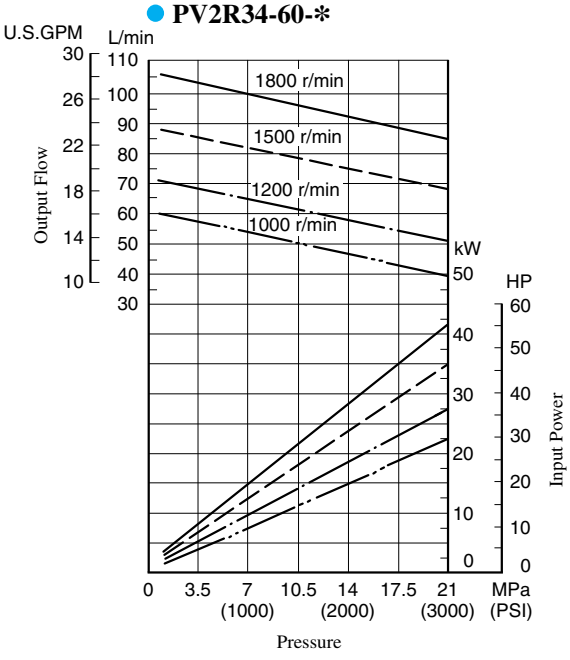
● **PV2R12-*-33**
● **PV2R24-33-***



● **PV2R23-*-52**
● **PV2R34-52-***

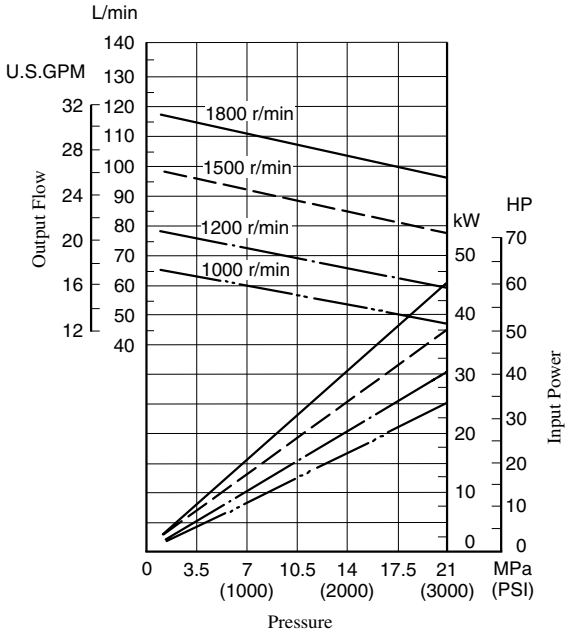


● **PV2R23-*-60**
● **PV2R34-60-***



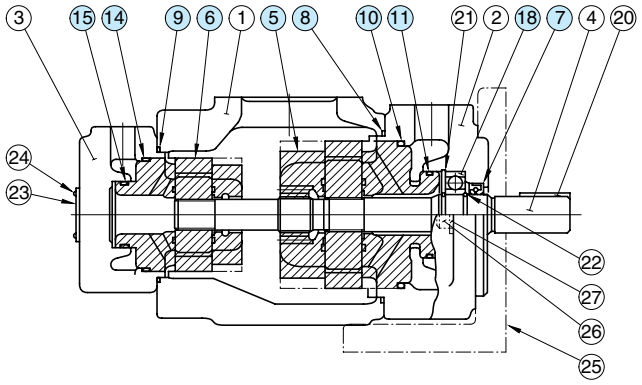
Typical Pump Characteristics at Viscosity 20 mm²/s (100 SSU) [ISO VG32 Oils, 50°C (122°F)]

● **PV2R23-*-66**
● **PV2R34-66-***



Spare Parts List

PV2R12-*-*-*-REAA-42/4290
PV2R13-*-*-*-RAAA-42/4290
PV2R23-*-*-*-REAA-41/4190
PV2R33-*-*-*-RAAA-31/3190



Cartridge Kits

Model Numbers	Cartridge Kit Numbers		Model Numbers	Cartridge Kit Numbers	
	⑥ Small Volume Pump	⑤ Large Volume Pump		⑥ Small Volume Pump	⑤ Large Volume Pump
PV2R12-6-★-*-REAA-42*	CPV2R13-6-L-42	CPV2R2 -★-R-41	PV2R13-6-★-*-RAAA-42*	CPV2R13-6-L-42	CPV2R3 -★-R-31
PV2R12-8-★-*-REAA-42*	CPV2R13-8-L-42		PV2R13-8-★-*-RAAA-42*	CPV2R13-8-L-42	
PV2R12-10-★-*-REAA-42*	CPV2R13-10-L-42		PV2R13-10-★-*-RAAA-42*	CPV2R13-10-L-42	
PV2R12-12-★-*-REAA-42*	CPV2R13-12-L-42		PV2R13-12-★-*-RAAA-42*	CPV2R13-12-L-42	
PV2R12-14-★-*-REAA-42*	CPV2R13-14-L-42		PV2R13-14-★-*-RAAA-42*	CPV2R13-14-L-42	
PV2R12-17-★-*-REAA-42*	CPV2R13-17-L-42		PV2R13-17-★-*-RAAA-42*	CPV2R13-17-L-42	
PV2R12-19-★-*-REAA-42*	CPV2R13-19-L-42		PV2R13-19-★-*-RAAA-42*	CPV2R13-19-L-42	
PV2R12-23-★-*-REAA-42*	CPV2R13-23-L-42		PV2R13-23-★-*-RAAA-42*	CPV2R13-23-L-42	
PV2R12-25-★-*-REAA-42*	CPV2R13-25-L-42		PV2R13-25-★-*-RAAA-42*	CPV2R13-25-L-42	
PV2R12-31-★-*-REAA-42*	CPV2R13-31-L-42		PV2R13-31-★-*-RAAA-42*	CPV2R13-31-L-42	
PV2R23-41-★-*-REAA-41*	CPV2R23-41-L-41	CPV2R3 -★-R-31	PV2R33-76-★-*-RAAA-31*	CPV2R33-76-L-31	CPV2R33 -★-R-31
PV2R23-47-★-*-REAA-41*	CPV2R23-47-L-41		PV2R33-94-★-*-RAAA-31*	CPV2R33-94-L-31	
PV2R23-53-★-*-REAA-41*	CPV2R23-53-L-41		PV2R33-116-★-*-RAAA-31*	CPV2R33-116-L-31	
PV2R23-59-★-*-REAA-41*	CPV2R23-59-L-41				
PV2R23-65-★-*-REAA-41*	CPV2R23-65-L-41				

Note: The ★ marks are a spaces for large volume pump nominal displacement. Referring to the model No. designation on page 181, write the correct nominal displacement figures.

Seals & Bearings

Item	Name of Parts	Part Numbers				Qty.
		PV2R12	PV2R13	PV2R23	PV2R33	
7★	Oil Seal	ISD 30 42 8	ISD 35 55 11	ISD 35 55 11	ISD 35 55 11	1
8★	O-Ring	SO-NB-G105	SO-NB-G135	SO-NB-G135	SO-NB-G135	1
9★	O-Ring	SO-NB-G80	SO-NB-G80	SO-NB-G105	SO-NB-G135	1
10★	O-Ring	SO-NB-G85	SO-NB-G115	SO-NB-G115	SO-NB-G115	1
11★	O-Ring	SO-NB-P46	SO-NB-A231	SO-NB-A231	SO-NB-A231	1
14★	O-Ring	SO-NB-G60	SO-NB-G60	SO-NB-G85	SO-NB-G115	1
15★	O-Ring	SO-NB-G30	SO-NB-G30	SO-NB-P46	SO-NB-A231	1
18	Bearing	6205	6207	6207	6207	1
19	Bearing	—	—	—	6305	1

Note: 1) The o-rings under item. Nos. ⑩ and ⑪ are included in the large volume pump cartridge kit and those under item. Nos. ⑭ and ⑮ in the small volume pump cartridge kit.
2) For pumps for phosphate ester type hydraulic fluids, different part Nos. are used. Please contact us.

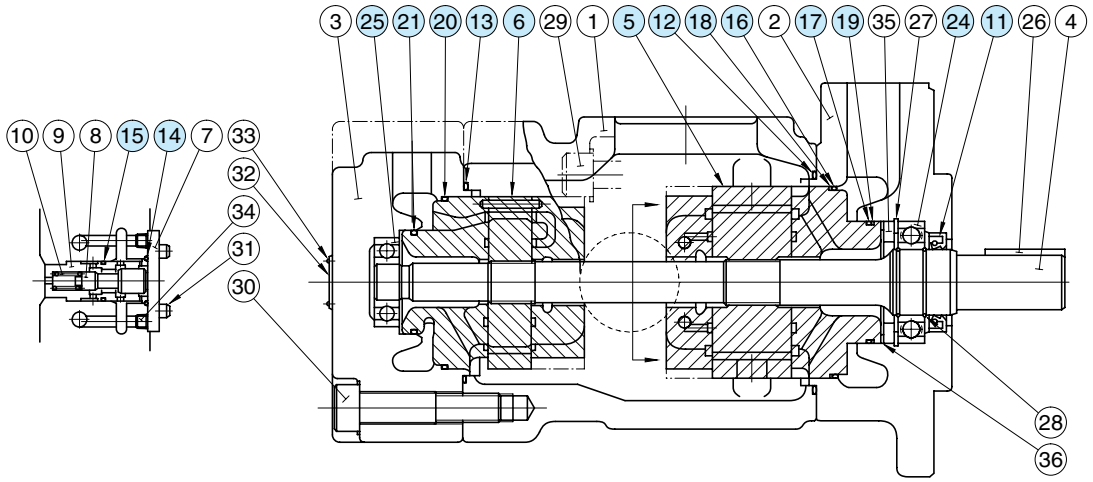
★ When ordering seals, please specify the seal kit number from the table right.

List of Seal Kits

Pump Model Numbers	Seal Kit Numbers
PV2R12-*-*-REAA-42*	KS-PV2R12-40
PV2R13-*-*-RAAA-42*	KS-PV2R13-40
PV2R23-*-*-REAA-41*	KS-PV2R23-40
PV2R33-*-*-RAAA-31*	KS-PV2R33-30

Spare Parts List

PV2R14-∗-∗-∗-RAAA-32/3290
PV2R24-∗-∗-∗-RAAA-31/3190
PV2R34-∗-∗-∗-REAA-31/3190



● Cartridge Kits

Model Numbers	Cartridge Kit Numbers	
	⑥ Small Volume Pump	⑤ Large Volume Pump
PV2R14-6-★-∗-RAAA-32∗	CPV2R13-6-L-42	CPV2R2 -★-R-41
PV2R14-8-★-∗-RAAA-32∗	CPV2R13-8-L-42	
PV2R14-10-★-∗-RAAA-32∗	CPV2R13-10-L-42	
PV2R14-12-★-∗-RAAA-32∗	CPV2R13-12-L-42	
PV2R14-14-★-∗-RAAA-32∗	CPV2R13-14-L-42	
PV2R14-17-★-∗-RAAA-32∗	CPV2R13-17-L-42	
PV2R14-19-★-∗-RAAA-32∗	CPV2R13-19-L-42	
PV2R14-23-★-∗-RAAA-32∗	CPV2R13-23-L-42	

Model Numbers	Cartridge Kit Numbers	
	⑥ Small Volume Pump	⑤ Large Volume Pump
PV2R24-26-★-∗-RAAA-31∗	CPV2R23-26-L-41	CPV2R4 -★-R-30
PV2R24-33-★-∗-RAAA-31∗	CPV2R23-33-L-41	
PV2R24-41-★-∗-RAAA-31∗	CPV2R23-41-L-41	
PV2R24-47-★-∗-RAAA-31∗	CPV2R23-47-L-41	
PV2R34-52-★-∗-REAA-31∗	CPV2R33-52-L-31	CPV2R34 -★-R-31
PV2R34-60-★-∗-REAA-31∗	CPV2R33-60-L-31	
PV2R34-66-★-∗-REAA-31∗	CPV2R33-66-L-31	
PV2R34-76-★-∗-REAA-31∗	CPV2R33-76-L-31	
PV2R34-94-★-∗-REAA-31∗	CPV2R33-94-L-31	
PV2R34-116-★-∗-REAA-31∗	CPV2R33-116-L-31	

Note: The ★ marks are a spaces for large volume pump nominal displacement. Referring to the model No. designation on page 181, write the correct nominal displacement figures.

● Seals & Bearings

Item	Name of Parts	Part Numbers			Qty.
		PV2R14	PV2R24	PV2R34	
11★	Oil Seal	ISD 45 68 12	ISD 45 68 12	ISD 45 68 12	1
12★	O-Ring	SO-NB-G145	SO-NB-G145	SO-NB-G145	1
13★	O-Ring	SO-NB-G80	SO-NB-G105	SO-NB-G135	1
14★	O-Ring	SO-NB-P28	SO-NB-P28	SO-NB-P28	1
15★	O-Ring	SO-NB-P22A	SO-NB-P22A	SO-NB-P22A	1
16★	O-Ring	SO-NA-G130	SO-NA-G130	SO-NA-G130	1
17★	O-Ring	SO-NA-G80	SO-NA-G80	SO-NA-G80	1
18★	Back Up Ring	SO-BE-G130	SO-BE-G130	SO-BE-G130	1
19★	Back Up Ring	SO-BB-G80	SO-BB-G80	SO-BB-G80	1
20★	O-Ring	SO-NB-G60	SO-NB-G85	SO-NB-G115	1
21★	O-Ring	SO-NB-G30	SO-NB-P46	SO-NB-A231	1
24	Bearing	6209	6209	6209	1
25	Bearing	—	—	6305	1

Note: 1) The o-rings and back up rings under item. Nos. ⑯ to ⑲ are included in the large volume pump cartridge kit and those under item. Nos. ⑳ and ㉑ in the small volume pump cartridge kit.
2) For pumps for phosphate ester type hydraulic fluids, different part Nos. are used. Please contact us.
★ When ordering seals, please specify the seal kit number from the table right.

● List of Seal Kits

Pump Model Numbers	Seal Kit Numbers
PV2R14-∗-∗-RAAA-32∗	KS-PV2R14-30
PV2R24-∗-∗-RAAA-31∗	KS-PV2R24-30
PV2R34-∗-∗-REAA-31∗	KS-PV2R34-30