PV2R Series Single Vane Pumps — Maximum pressure 210 bar

- A high-pressure, high-performance pump specially developed for low-noise operation.
- To accommodate a wide range of applications—such as in plastics machinery—it features a displacement range of 5.8 ~ 237 cm³/rev.
- Internal components are assembled into a single integrated unit using screws, facilitating both assembly and maintenance.

Graphic Symbols

Specification

Model	Theory Displacement cm³/rev	Max Pressure kgf/cm²	Speed Range rpm	Weight kg: Flange Installation	Weight kg: Base Installation
*4PV2R1-6-※-※※※-42	5.8	210	*1 750~1800	9.0	11.2
*4PV2R1-8-※-※※※-42	8.0				
PV2R1-10-※-※※※-42	9.4				
PV2R1-12-※-※※※-42	12.2				
PV2R1-14-※-※※※-42	13.7				
PV2R1-17-※-※※※-40	16.6				
PV2R1-19-※-※※※-40	18.6				
PV2R1-23-※-※※※-40	22.7				
PV2R1-25-※-※※※-40	25.3				
PV2R1-28-※-※※※-40	28.1				
PV2R1-31-※-※※※-40	31.0	160			
PV2R2-26-※-※※※-40	26.6	210	*1 600~1800	19.0	23.3
PV2R2-33-※-※※※-40	33.3				
PV2R2-41-※-※※※-40	41.3				
PV2R2-47-※-※※※-40	47.2				
PV2R2-53-※-※※※-40	52.5				
PV2R2-59-※-※※※-40	58.2				
PV2R2-65-※-※※※-40	64.7				
PV2R2-75-※-※※※-40	75	160			
PV2R3-52-※-※※※-31	52.2	210	600~1800	36.7	46.7
PV2R3-60-※-※※※-31	59.6				
PV2R3-66-※-※※※-31	66.3				
PV2R3-76-※-※※※-31	76.4				
PV2R3-85-※-※※※-31	85				
PV2R3-94-※-※※※-31	93.6				
PV2R3-108-※-※※※-31	108	160			
*2PV2R3-116-※-※※※-31	115.6				
PV2R3-125-※-※※※-31	125	140			
PV2R3-136-※-※※※-31	136				
PV2R4-136-※-※※※-30	136	175	600~1800	68.5	93.5
PV2R4-153-※-※※※-30	153				
PV2R4-184-※-※※※-30	184				
PV2R4-200-※-※※※-30	201				
*3PV2R4-237-※-※※※-30	237				

- It is recommended to use an anti-wear, petroleum-based hydraulic fluid.
- Refer to page 17 for pressure-displacement and input power characteristics.

Note) *1. When starting at low speed, the maximum viscosity is limited; please refer to page 6.
*2. When utilizing a nominal displacement of 116 cm³/rev and operating at speeds exceeding 1700 rpm, the minimum suction port pressure is limited to 0 kgf/cm².
*3. When operating at a nominal displacement of 237 cm³/rev and a rotational speed exceeding 1700 rpm, the minimum suction port pressure is limited to -100 mmHg.
*4. When the operating pressure exceeds 160 kgf/cm², the minimum rotational speed is limited to 1450 rpm or higher.

Significance of the Model Designation

PV2R2-41-F-R A A-※

- Serial Number
- Nominal Displacement (cm³/rev)
- Mounting Type: L: Foot Mount; F: Flange Mount
- Rotation Direction (Viewed from Shaft End): R: Clockwise (Standard); L: Counter-clockwise
- Oil Drain Port Direction (Viewed from Shaft End): A: Up (Standard); B: Down; R: Right; L: Left
- Suction Port Direction (Viewed from Shaft End): A: Up (Standard); B: Down; R: Right; L: Left
- Design Code

※ The flange-mount type is available only with A-positioning.

Pipe Flange

Serial Number	Oil Port Name	Pipe Flange Assembly Model
PV2R1	Suction Port	F5-08-※-10T
	Oil Drain Port	F5-04-※-10T
PV2R2	Suction Port	F5-10-※-10T
	Oil Drain Port	F5-06-※-10T
PV2R3	Suction Port	F5-16-※-10T
	Oil Drain Port	F5-10-※-10T
PV2R4	Suction Port	F5-24-※-10T
	Oil Drain Port	F5-12-※-10T

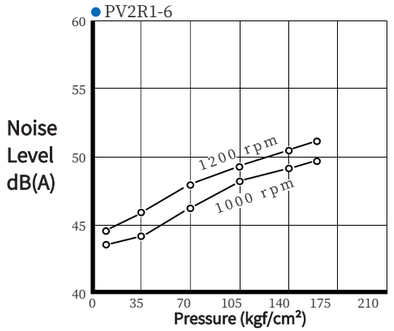
For detailed models and dimension drawings, please refer to Page 36.
If selecting a pipe flange assembly, please place your order based on the detailed model number.

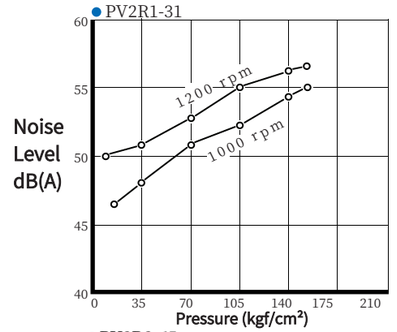
JINPINLUB.NET Hydraulic Industrial Vane Pump

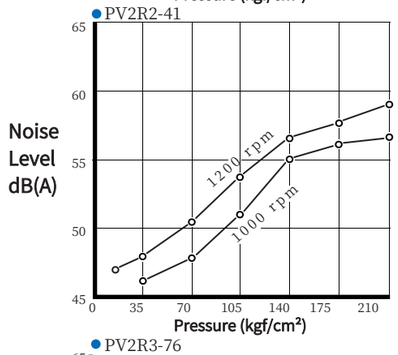
PV2R Series Single Vane Pumps — Maximum pressure 210 bar

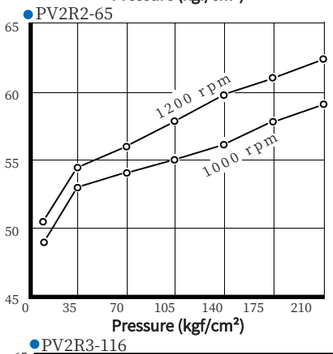
Noise Level (Example) Measurement Conditions

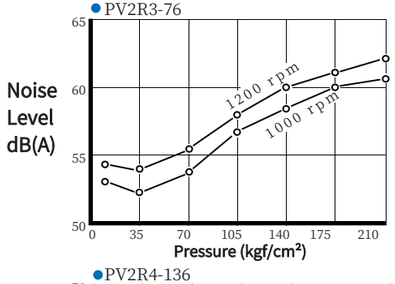
Oil Viscosity: 20 cSt
Measurement Location: 1 m behind the hydraulic pump
Background Noise: 40 dB (A)

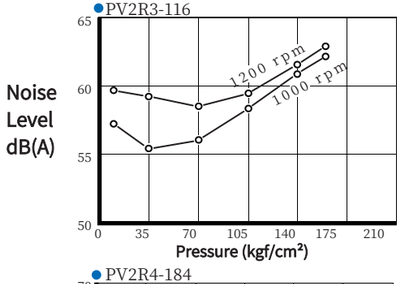


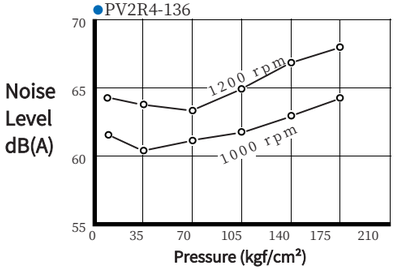


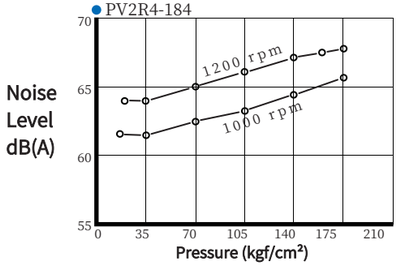






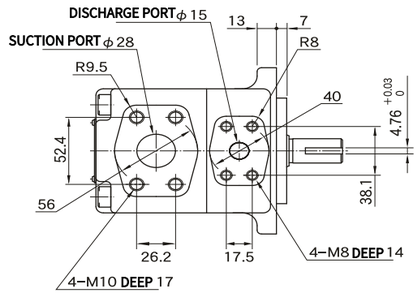




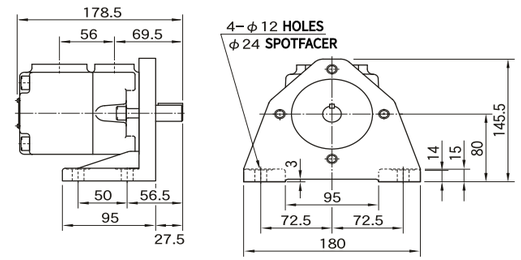


PV2R Series Single Vane Pumps — Maximum pressure 210 bar

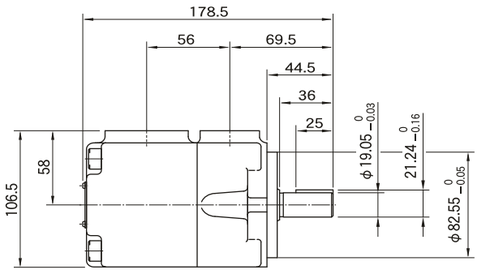
PV2R1-※-F (Flange-Mount Type)

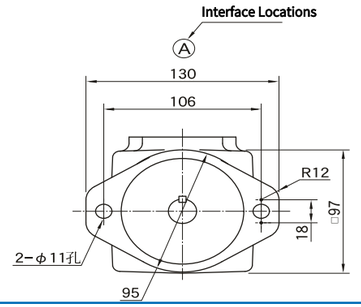


PV2R1-※-L (Base-Mount Type)

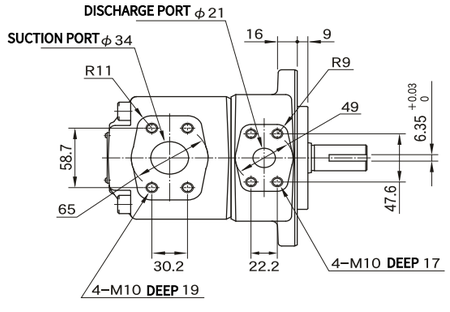


For other dimensions, please refer to the flange-mount type.

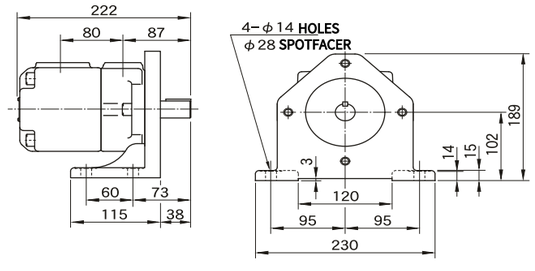




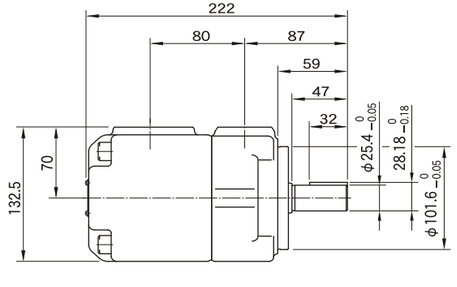
PV2R2-※-F (Flange-Mount Type)

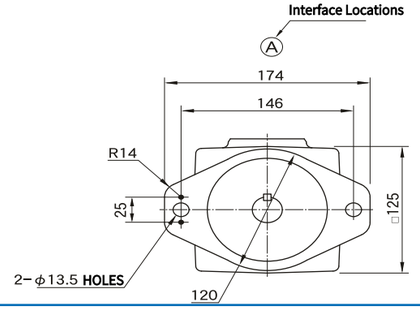


PV2R2-※-L (Base-Mount Type)



For other dimensions, please refer to the flange-mount type.

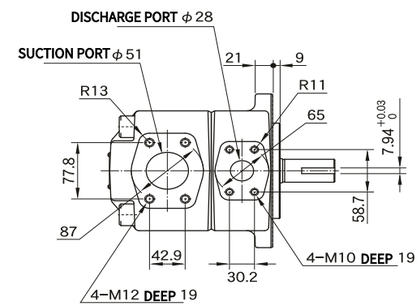




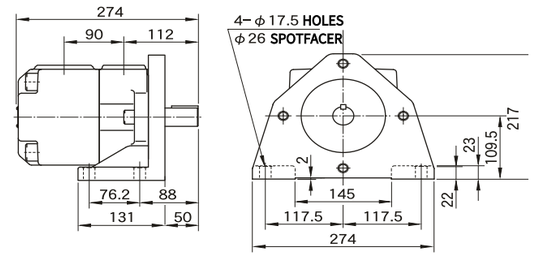
JINPINLUB.NET Hydraulic Industrial Vane Pump

PV2R Series Single Vane Pumps — Maximum pressure 210 bar

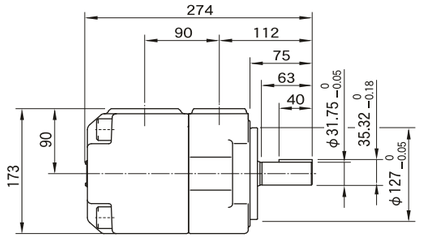
PV2R3-※-F (Flange-Mount Type)

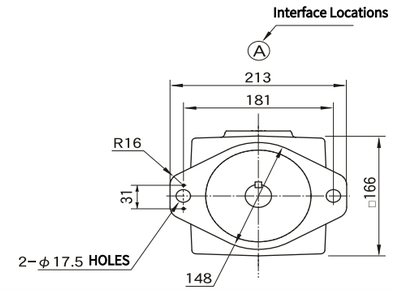


PV2R3-※-L (Base-Mount Type)

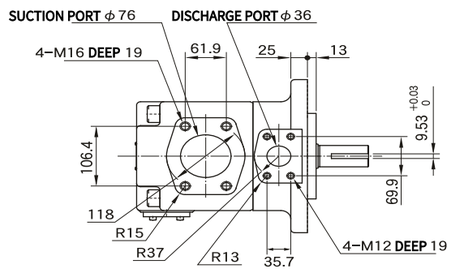


For other dimensions, please refer to the flange-mount type.

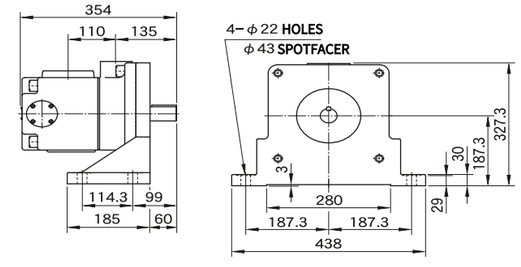




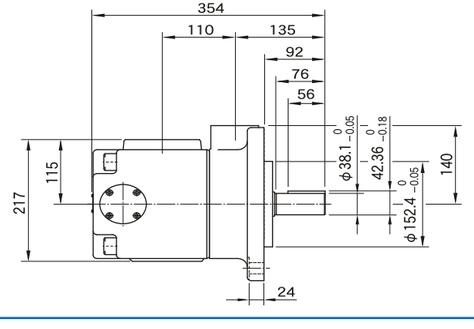
PV2R4-※-F (Flange-Mount Type)

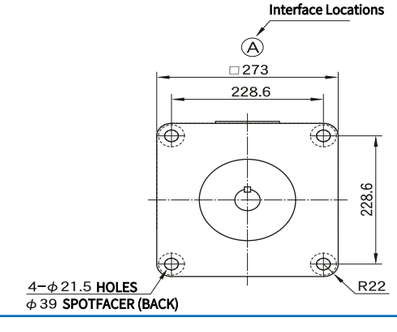


PV2R4-※-L (Base-Mount Type)



For other dimensions, please refer to the flange-mount type.



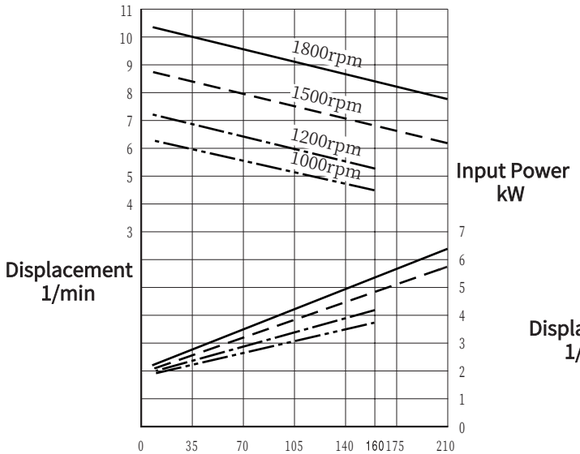


PV2R Series Single Vane Pumps — Maximum pressure 210 bar

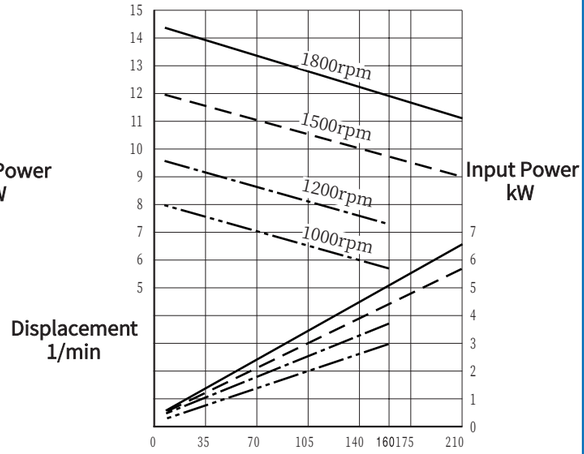
Pressure-Displacement and Input Power Characteristics

Hydraulic fluid viscosity: 20 cSt

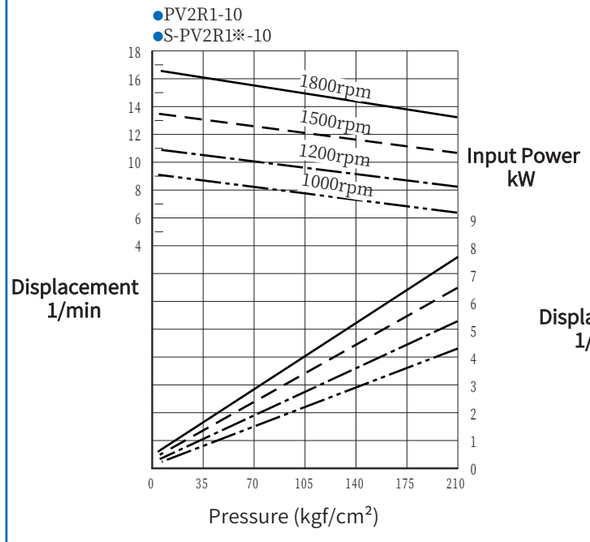
●PV2R1-6
●S-PV2R1※-6



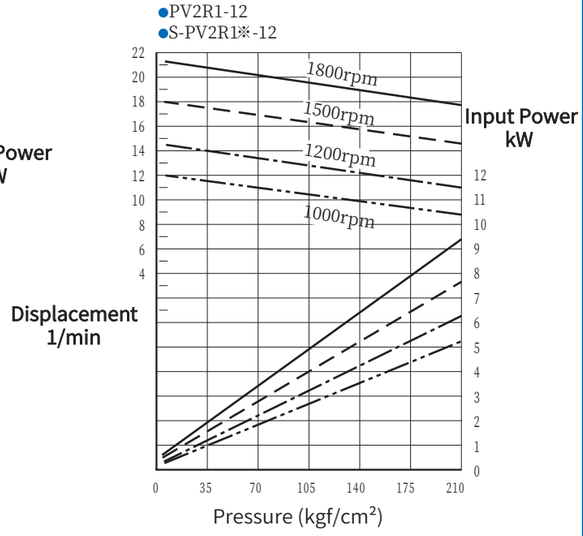
●PV2R1-8
●S-PV2R1※-8



●PV2R1-10
●S-PV2R1※-10



●PV2R1-12
●S-PV2R1※-12



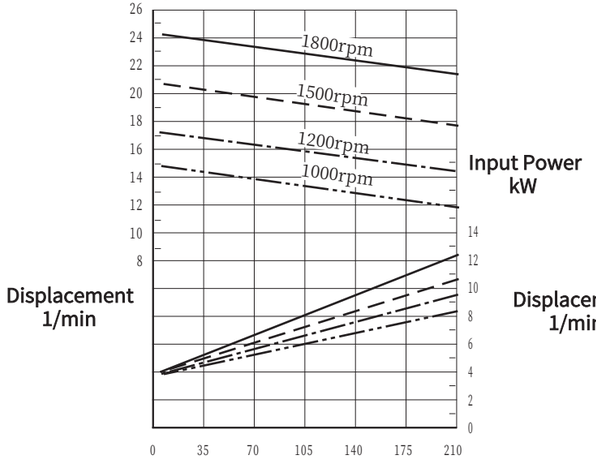
JINPINLUB.NET Hydraulic Industrial Vane Pump

PV2R Series Single Vane Pumps — Maximum pressure 210 bar

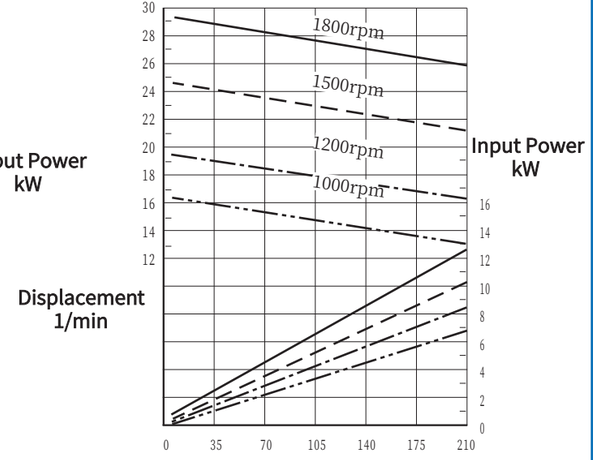
Pressure-Displacement and Input Power Characteristics

Hydraulic fluid viscosity: 20 cSt

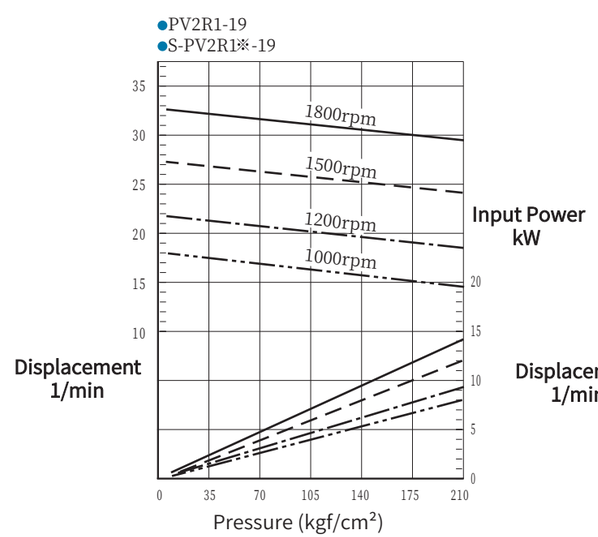
●PV2R1-14
●S-PV2R1※-14



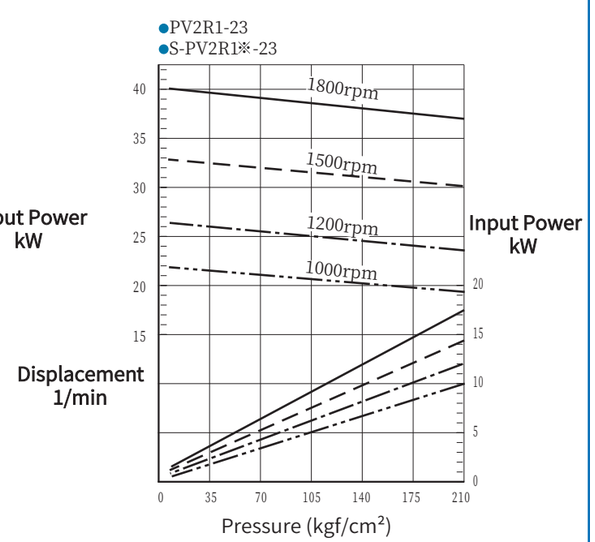
●PV2R1-17
●S-PV2R1※-17



●PV2R1-19
●S-PV2R1※-19



●PV2R1-23
●S-PV2R1※-23

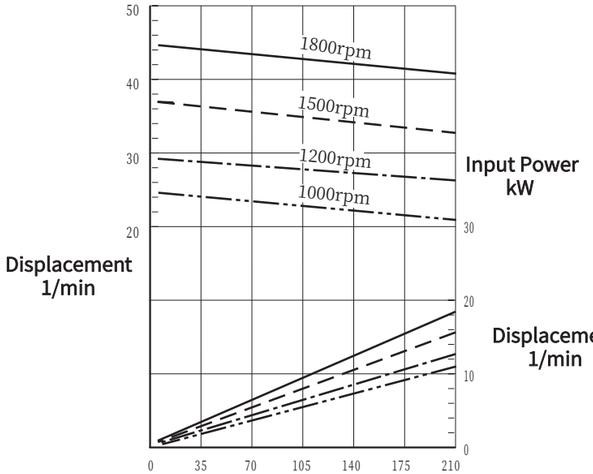


PV2R Series Single Vane Pumps — Maximum pressure 210 bar

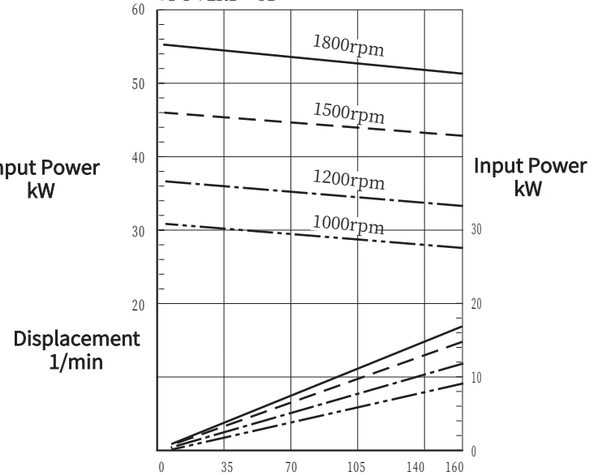
Pressure-Displacement and Input Power Characteristics

Hydraulic fluid viscosity: 20 cSt

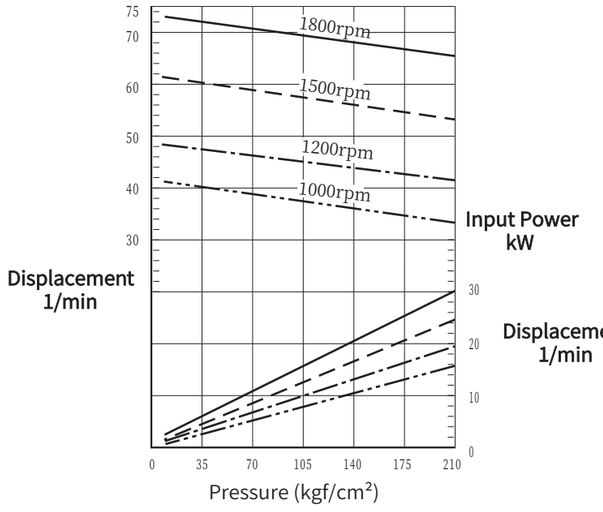
●PV2R1-25
●S-PV2R1※-25



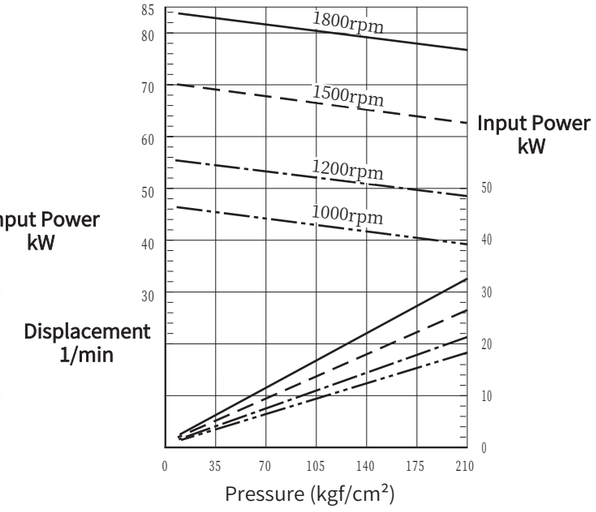
●PV2R1-31
●S-PV2R1※-31



●PV2R2-41
●S-PV2R2-41



●PV2R2-47
●S-PV2R2-47



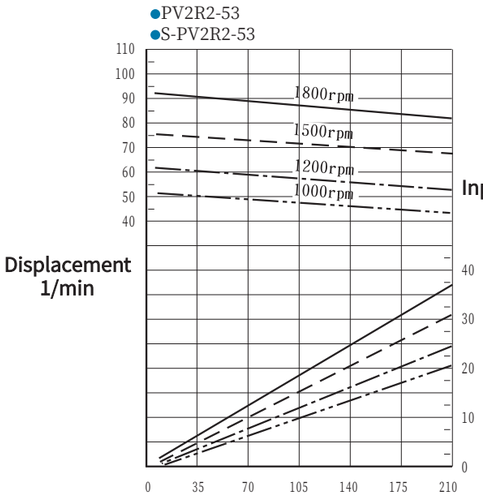
JINPINLUB.NET Hydraulic Industrial Vane Pump

PV2R Series Single Vane Pumps — Maximum pressure 210 bar

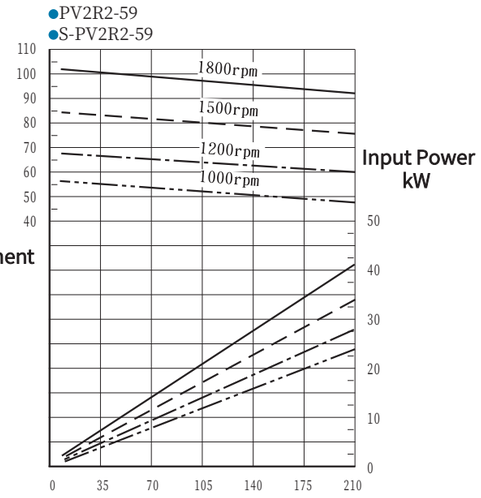
Pressure-Displacement and Input Power Characteristics

Hydraulic fluid viscosity: 20 cSt

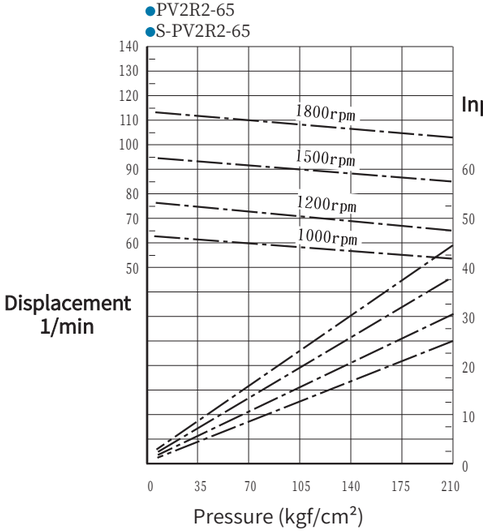
●PV2R2-53
●S-PV2R2-53



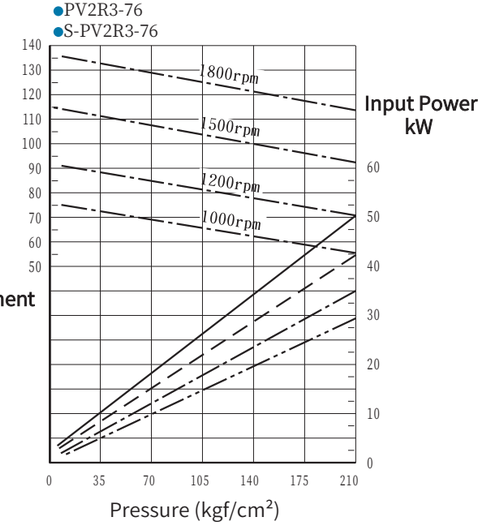
●PV2R2-59
●S-PV2R2-59



●PV2R2-65
●S-PV2R2-65



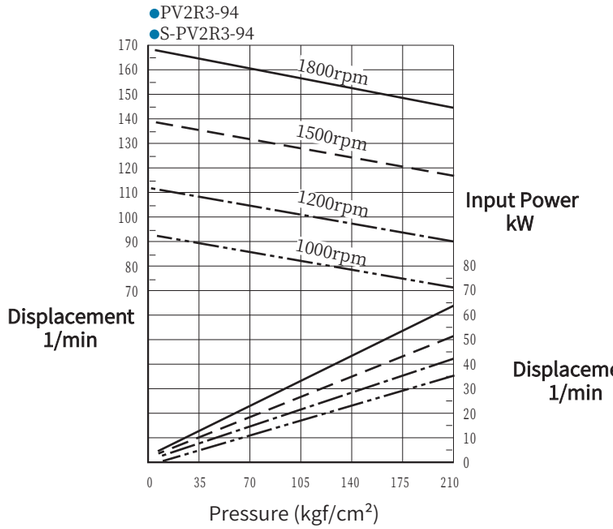
●PV2R3-76
●S-PV2R3-76

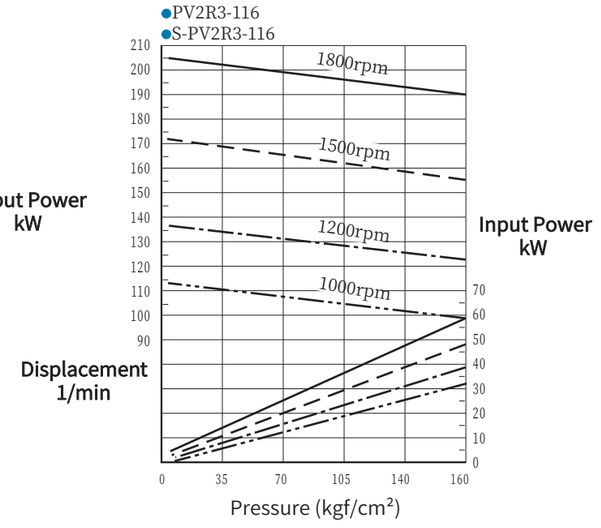


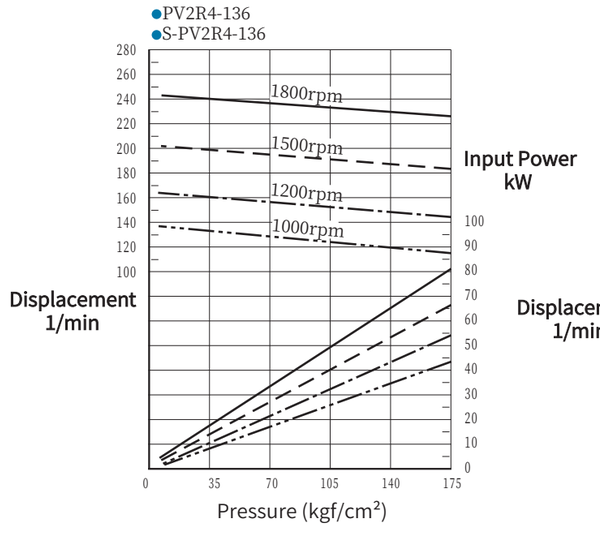
PV2R Series Single Vane Pumps — Maximum pressure 210 bar

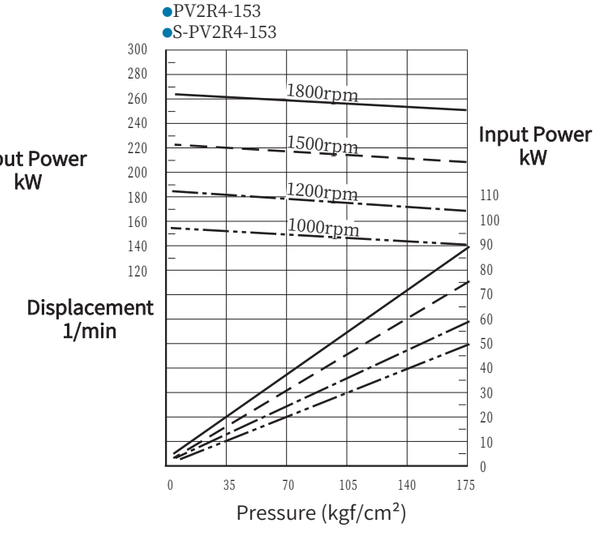
Pressure-Displacement and Input Power Characteristics

Hydraulic fluid viscosity: 20 cSt







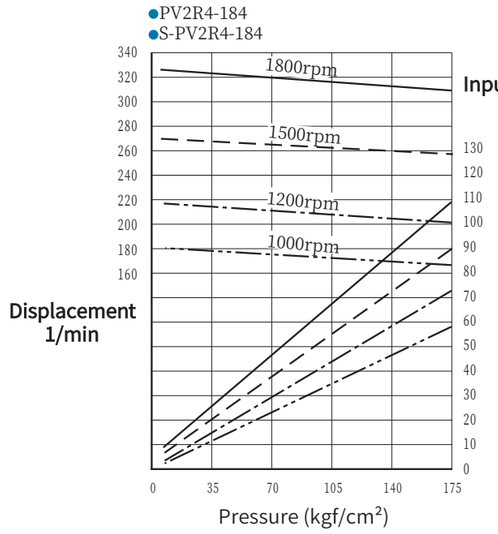


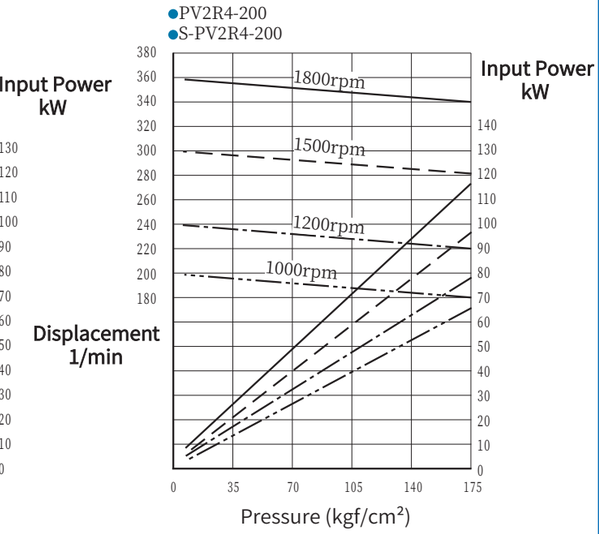
JINPINLUB.NET Hydraulic Industrial Vane Pump

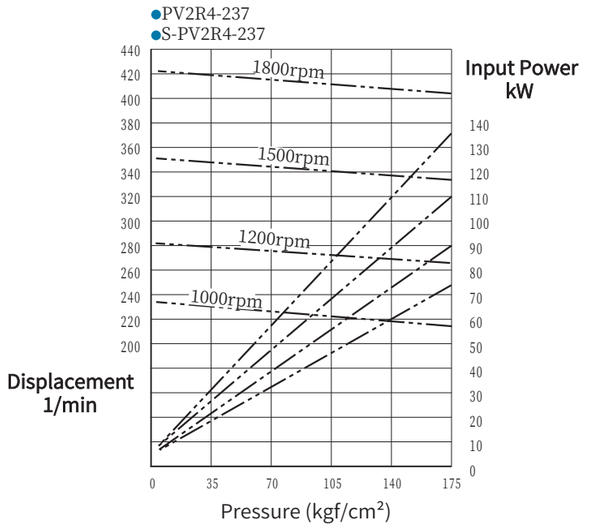
PV2R Series Single Vane Pumps — Maximum pressure 210 bar

Pressure-Displacement and Input Power Characteristics

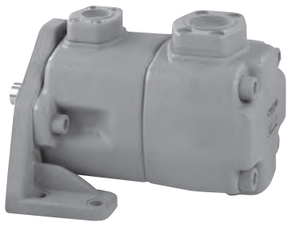
Hydraulic fluid viscosity: 20 cSt







S-PV2R Series Single Vane Pumps — Maximum pressure 210 bar



- A high-pressure, high-performance pump specially developed for low-noise operation.
- To accommodate a wide range of applications—such as in plastics machinery—it features a displacement range of 41.3 ~ 237 cm³/rev.
- Internal components are assembled into a single integrated unit using screws, facilitating both assembly and maintenance.
- By reducing the amplitude of pressure pulsations, the overall noise level of the machinery can be significantly lowered.

Specification

Model	Theory Displacement cm³/rev	Max Pressure kgf/cm²	Speed Range rpm	Weight kg: Flange Installation	Weight kg: Base Installation
S-PV2R2-26 -※-※※※- 41	26.6	210	600~1800	31.0	39.0
S-PV2R2-33 -※-※※※- 41	33.3				
S-PV2R2-41 -※-※※※- 41 ★1	41.3				
S-PV2R2-47 -※-※※※- 41	47.2				
S-PV2R2-53 -※-※※※- 41	52.5				
S-PV2R2-59 -※-※※※- 41	58.2				
S-PV2R2-65 -※-※※※- 41	64.7				
S-PV2R2-75 -※-※※※- 41	75	160			
S-PV2R3-52 -※-※※※- 31	52.2	210	600~1800	55.5	63.5
S-PV2R3-60 -※-※※※- 31	59.6				
S-PV2R3-66 -※-※※※- 31	66.3				
S-PV2R3-76 -※-※※※- 31	76.4				
S-PV2R3-85 -※-※※※- 31	85				
S-PV2R3-94 -※-※※※- 31	93.6				
S-PV2R3-108 -※-※※※- 31	108	175			
S-PV2R3-116 -※-※※※- 31	115.6	160			
S-PV2R3-125 -※-※※※- 31 ★2	125	140			
S-PV2R3-136 -※-※※※- 31	136				
S-PV2R4-136 -※-※※※- 30	136	175	600~1800	70	95
S-PV2R4-153 -※-※※※- 30	153				
S-PV2R4-184 -※-※※※- 30	184				
S-PV2R4-200 -※-※※※- 30	201				
S-PV2R4-237 -※-※※※- 30 ★3	237				

Graphic Symbols

- Refer to page 17 for pressure-displacement and input power characteristics.
- For hydraulic oil, the use of an anti-wear, petroleum-based hydraulic fluid is recommended. (See Page 7.)
- For a comparison of the noise levels between the S-PV2R2-65 and the PV2R2-65, please refer to Page 25.

★ 1.When starting at low speeds, the maximum viscosity is limited; please refer to page 6.

★ 2.When utilizing a nominal displacement of 116 cm³/rev and operating at speeds exceeding 1700 rpm, the minimum suction port pressure is limited to 0 kgf/cm².

★ 3.When operating at a nominal displacement of 237 cm³/rev and a rotational speed exceeding 1700 rpm, the minimum suction port pressure is limited to -100 mmHg.

Significance of the Model Designation

S-PV2R2-41-F-R A A-※

- Serial Number (Ultra-Low Noise Series)
- Nominal Displacement (cm³/rev)
- Mounting Type: L: Foot Mount; F: Flange Mount
- Rotation Direction (Viewed from Shaft End): R: Clockwise (Standard); L: Counter-clockwise
- Oil Drain Port Direction (Viewed from Shaft End): *A: Up (Standard); B: Down; R: Right; L: Left; *Flange-mount type is available only in Option A.
- Suction Port Direction (Viewed from Shaft End): A: Up (Standard) B: Down; R: Right L: Left
- Design Code

Pipe Flange

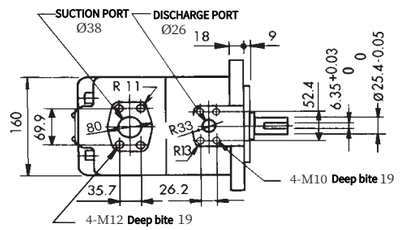
Serial Number	Oil Port Name	Pipe Flange Assembly Model
S-PV2R2	Suction Port	F5-12-※-10T
	Oil Drain Port	F5-08-※-10T
S-PV2R3	Suction Port	F5-16-※-10T
	Oil Drain Port	F5-10-※-10T
S-PV2R4	Suction Port	F5-24-※-10T
	Oil Drain Port	F5-12-※-10T

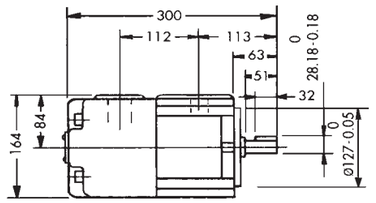
- For detailed models and dimension drawings, please refer to page 36.
- If selecting a pipe flange assembly, please order by the detailed model number.

JINPINLUB.NET Hydraulic Industrial Vane Pump

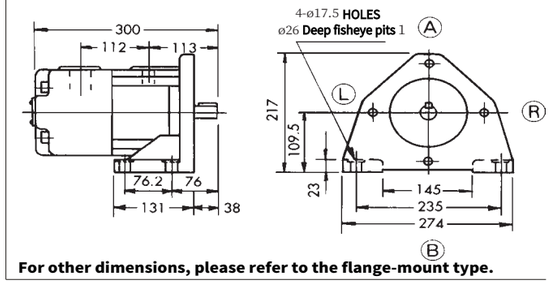
S-PV2R Series Single Vane Pumps — Maximum pressure 210 bar

S-PV2R2-※-※-F (Flange-Mount Type)

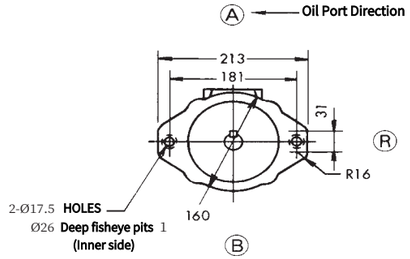




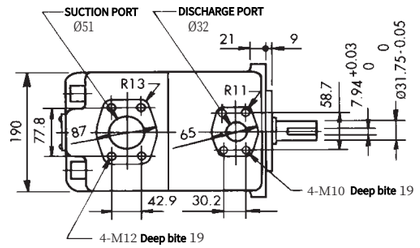
S-PV2R2-※-※-L (Base-Mount Type)

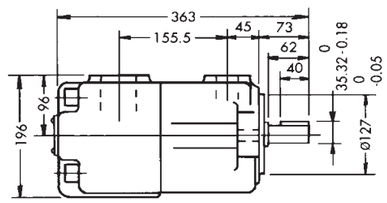


For other dimensions, please refer to the flange-mount type.

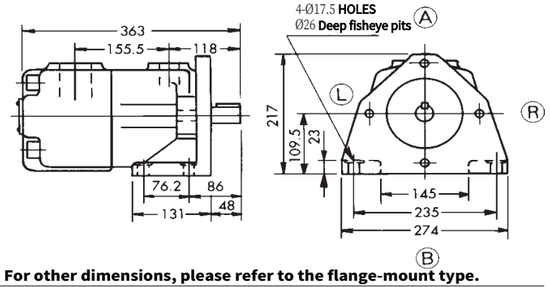


S-PV2R3-※-※-F (Flange-Mount Type)

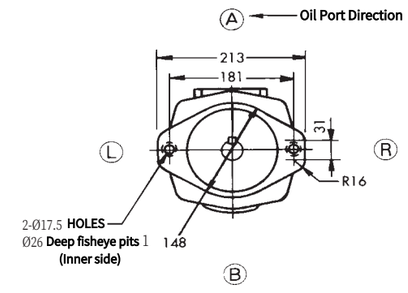




S-PV2R3-※-※-L (Base-Mount Type)



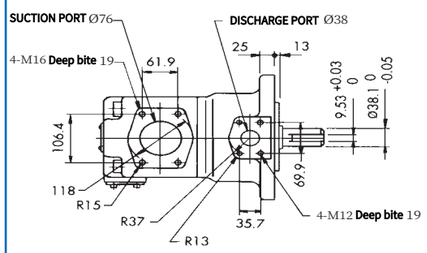
For other dimensions, please refer to the flange-mount type.

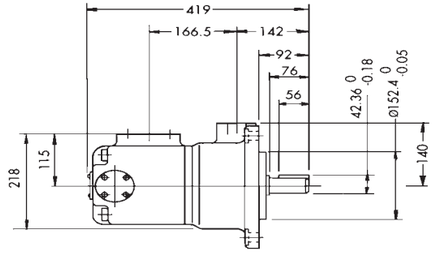


S-PV2R Series Single Vane Pumps

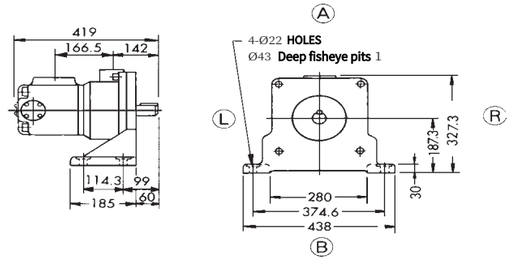
Maximum pressure 210 bar

S-PV2R4-※-※-F (Flange-Mount Type)

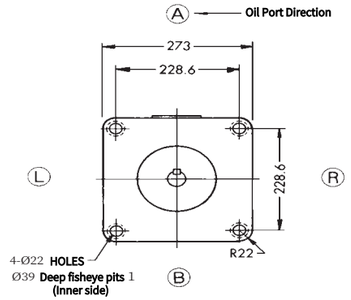




S-PV2R4-※-※-L (Base-Mount Type)



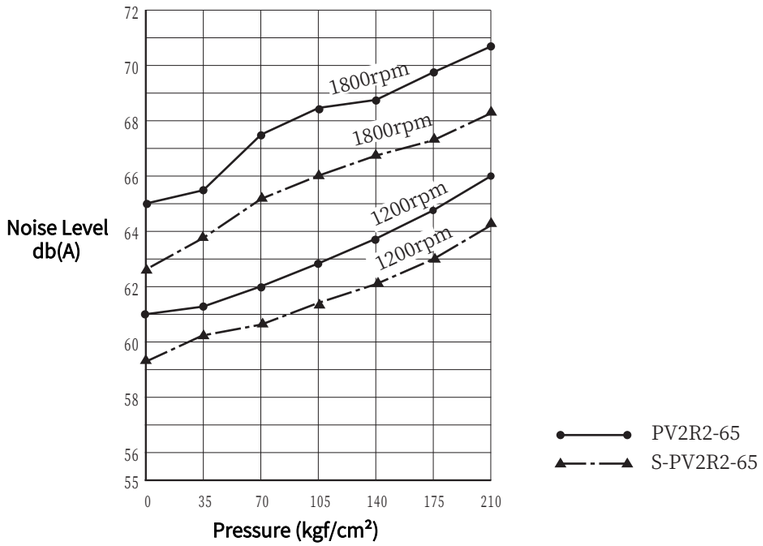
For other dimensions, please refer to the flange-mount type.



Noise Level Comparison: S-PV2R2-65 vs. PV2R2-65

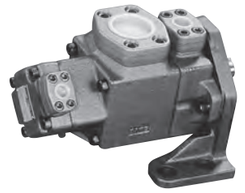
Hydraulic oil viscosity: 32 cSt

Test Location: 1m behind the hydraulic pump.



S-PV2R Series Double Vane Pumps

Maximum pressure 210 bar

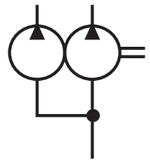


- This tandem pump consists of two independent, low-noise, single-stage vane pumps assembled in series within a single pump housing, sharing a common drive shaft.
- The oil discharge ports can supply separate circuits, allowing for the configuration of an optimal discharge volume tailored to each specific circuit, thereby creating a highly efficient hydraulic system.

Significance of the Model Designation

S-PV2R12	—6	—65	—L	—R	E	A	A	—42
Serial Number	Small Displacement Nominal Displacement cm³/rev	Large Displacement Nominal Displacement cm³/rev	Mounting Type	Direction of Rotation (Viewed from Shaft End)	Discharge Port Orientation of Small-Displacement (Viewed from the Shaft End)	Discharge Port Orientation of Large-Displacement (Viewed from the Shaft End)	Suction Port Direction (Viewed from Shaft End)	Design Code
PV2R12 S-PV2R12	6 8 10 12 14 17 19 23 25 28 31	*26 *33 41 47 53 59 65 75	L : Tripod Installation	R : Clockwise (Standard)	E: Top Left (Standard) F: Top Right G: Bottom Right H: Bottom Left	A: Up (Standard) B: Down R: Right L: Left	A: Up (Standard) B: Down R: Right L: Left	42 40
PV2R13 S-PV2R13	6 8 10 12 14 17 19 23 25 28 31	*52 *60 *66 76 85 94 108 116 125						42 41
S-PV2R14	6 8 10 12 14 17 19 23 25 28 31	136 153 184 200 237						31 30
PV2R23 S-PV2R23	*26 *33 41 47 53 59 65 75	*52 *60 *66 76 85 94 108 116 125 136	F : Flange Installation	L : Counter-clockwise	E: Top Left (Standard) F: Top Right G: Bottom Right H: Bottom Left	R: Right L: Left	R: Right L: Left	41
S-PV2R24		136 153 184 200 237						30
S-PV2R34	*52 *60 *66 76 85 94 108 116 125 136							30

Graphic Symbols



* Nominal displacements 26, 33, 52, 60, and 66 are applicable only to double vane pumps.

* Nominal displacements 6, 8, 10, 12, and 14 utilize a forced-ejection vane pump design.

(Refer to pages 32 and 33 for the pressure-displacement and input power characteristic curves.)

Pipe Flange

Oil Pump Model	Pipe Flange Assembly Model		
	Suction Port	High-Capacity Oil Drain Port	Low-Displacement Oil Outlet
PV2R12	F5-16 - ※ - 10T	F5-06 - ※ - 10T	F5-04 - ※ - 10T
S-PV2R12	F5-20 - ※ - 10T	F5-08 - ※ - 10T	F5-06 - ※ - 10T
PV2R13	F5-24 - ※ - 10T	F5-10 - ※ - 10T	F5-04 - ※ - 10T
S-PV2R13	F5-24 - ※ - 10T	F5-10 - ※ - 10T	F5-06 - ※ - 10T
S-PV2R14	F5-28 - ※ - 10T	F5-12 - ※ - 10T	F5-06 - ※ - 10T
PV2R23	F5-24 - ※ - 10T	F5-10 - ※ - 10T	F5-06 - ※ - 10T
S-PV2R23	F5-24 - ※ - 10T	F5-10 - ※ - 10T	F5-08 - ※ - 10T
S-PV2R24	F5-28 - ※ - 10T	F5-12 - ※ - 10T	F5-08 - ※ - 10T
S-PV2R34	F5-32 - ※ - 10T	F5-12 - ※ - 10T	F5-10 - ※ - 10T

Weight

Oil Pump Model	Weight (kg)	
	Flange Installation	Tripod Installation
PV2R12	25	29.3
S-PV2R12	41	51
PV2R13	45.6	55.6
S-PV2R13	64	74
S-PV2R14	94	119
PV2R23	51	61
S-PV2R23	74	84
S-PV2R24	112	137
S-PV2R34	126	151

- For the significance of pipe flange model designations and their dimensions, please refer to Page 36.
- If selecting a pipe flange assembly, please order by the detailed model number.

S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

Specification

Maximum Working Pressure

Nominal Displacement	Theoretical Displacement cm^3/rev	Maximum Working Pressure kgf/cm^2
6	5.8	★1 210
8	8.0	
10	9.4	
12	12.2	210
14	13.7	
17	16.6	
19	18.6	
23	22.7	★2 210
25	25.3	210
28	28.0	210
31	31.0	160
★3 26	26.6	
★3 33	33.3	
41	41.3	
47	47.2	210
53	52.5	
59	58.2	
65	64.7	
75	75	160
★3 52	52.2	
★3 60	59.6	
★3 66	66.3	210
76	76.4	
85	85	
94	93.6	
108	108	160
116	115.6	
125	125	140
136	136	
153	153	
184	184	175
200	201	
237	237	

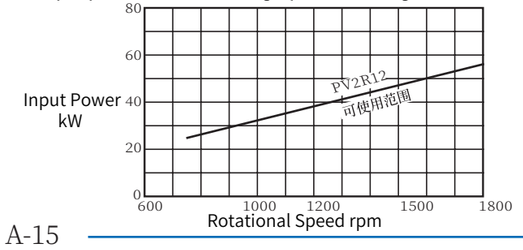
★ 1. When the operating pressure exceeds 160 kgf/cm^2, the rotational speed must be greater than 1450 rpm.

★ 2. For the (S)-PV2R1 small-displacement pump series, if a nominal displacement of 31 is selected, the maximum operating pressure is 160 kgf/cm^2.

★ 3. Nominal displacements of 26, 33, 52, 60, and 66 are applicable only to double vane pumps.

Input Power Limit

The relationship between the input power (the sum of the input powers of the two single pumps) and the rotational speed of the (S)-PV2R12 pump must fall within the range specified in the figure below.



Speed Range

Serial Number	Permissible Speed	
	Highest ★4	Lowest ★5
PV2R12 S-PV2R12	1800	750
PV2R13 S-PV2R13	1800	750
S-PV2R14	1800	750
PV2R23 S-PV2R23	1800	600
S-PV2R24	1800	600
S-PV2R34	1800	600

★ 4. The models listed in the table below have minimum suction pressure limitations depending on the engine speed. (For other models, the minimum suction pressure is -150 mmHg regardless of engine speed.)

Model	Minimum Suction Pressure	
	Below 1700 rpm	1700-1800 rpm
(S)-PV2R13-※-116	-150mmHg	0kgf/cm²
(S)-PV2R23-※-116	-150mmHg	0kgf/cm²
(S)-PV2R23-※-76	-150mmHg	-50mmHg
(S)-PV2R23-※-94	-150mmHg	-50mmHg
S-PV2R14-※-237	-150mmHg	-100mmHg
S-PV2R24-※-237	-150mmHg	-100mmHg
S-PV2R34-※-237	-150mmHg	-100mmHg
S-PV2R34-116-※	-150mmHg	0kgf/cm²

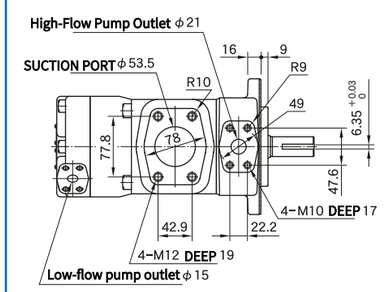
★ 5. Maximum viscosity limit during low-speed startup.

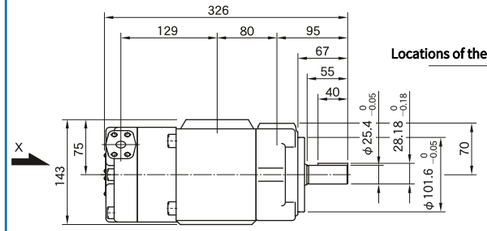
Serial Number	Rotational speed at startup (rpm)	Maximum Viscosity (cSt)
PV2R12 S-PV2R12 PV2R13 S-PV2R13 S-PV2R14	750	100
	950	200
PV2R23 S-PV2R23 S-PV2R24	600	100
	950	200

JINPINLUB.NET Hydraulic Industrial Vane Pump

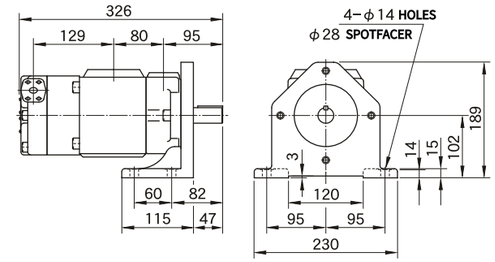
S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

PV2R12-※-※-F (Flange-Mount Type)

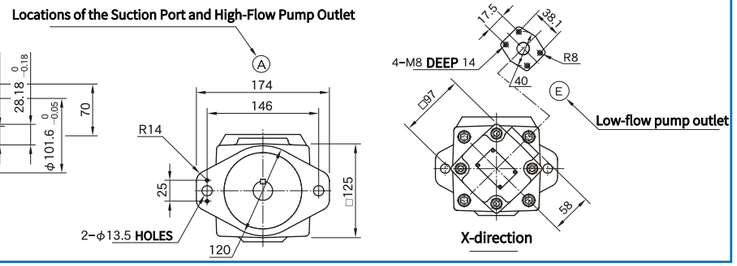




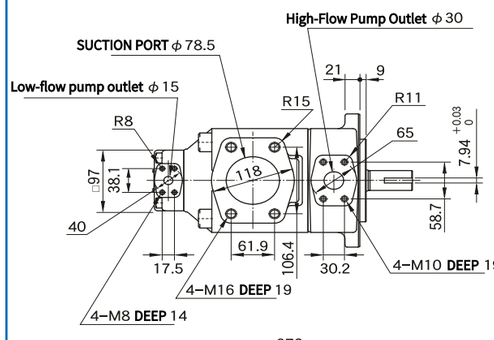
PV2R12-※-※-L (Base-Mount Type)

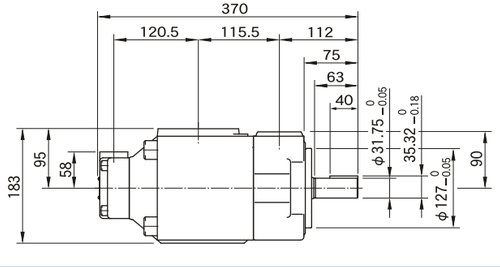


For other dimensions, please refer to the flange-mount type.

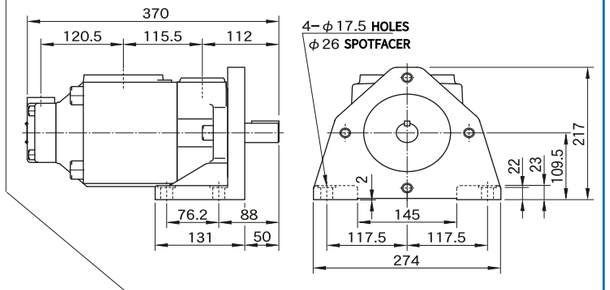


PV2R13-※-※-F (Flange-Mount Type)

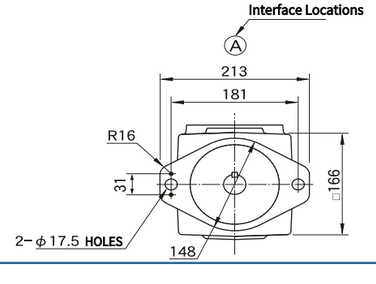




PV2R13-※-※-L (Base-Mount Type)

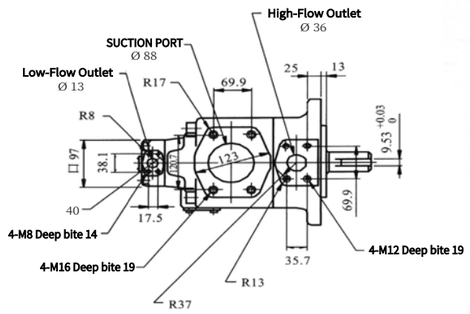


For other dimensions, please refer to the flange-mount type.

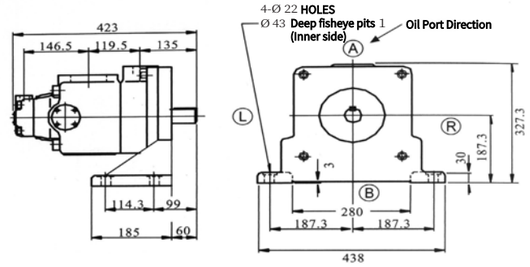


S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

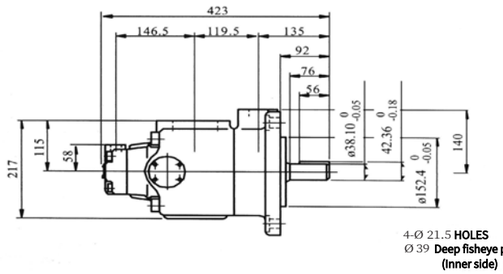
PV2R14-※-※-F (Flange-Mount Type)

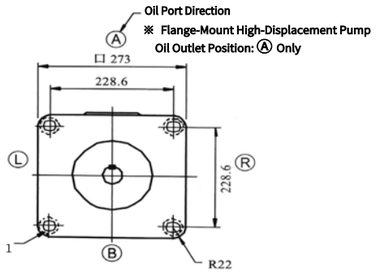


PV2R14-※-※-L (Base-Mount Type)

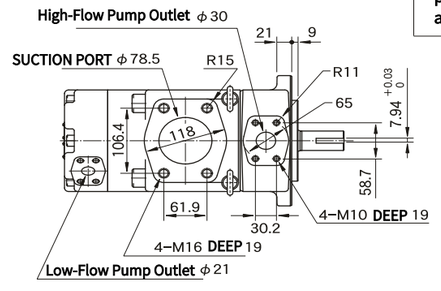


For other dimensions, please refer to the flange-mount type.



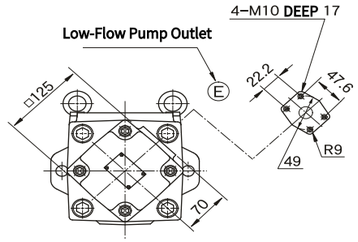


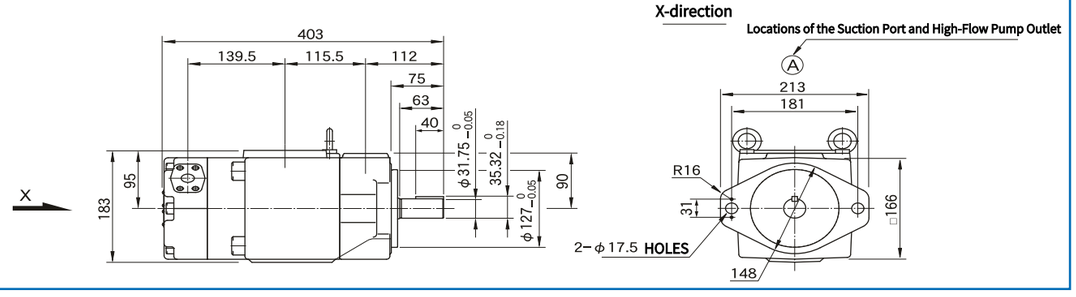
PV2R23-※-※-F (Flange-Mount Type)



PV2R23-※-※-L (Base-Mount Type)

The mounting bracket is interchangeable with the PV2R13 model; please refer to the dimensions of the PV2R13 model provided above for the bracket dimensions.

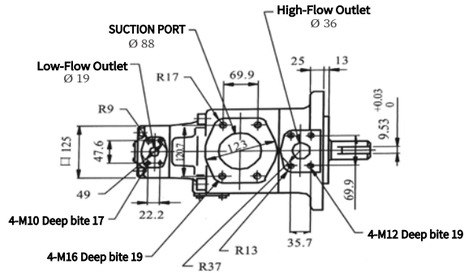




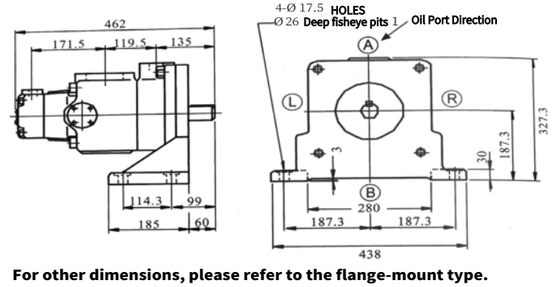
JINPINLUB.NET Hydraulic Industrial Vane Pump

S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

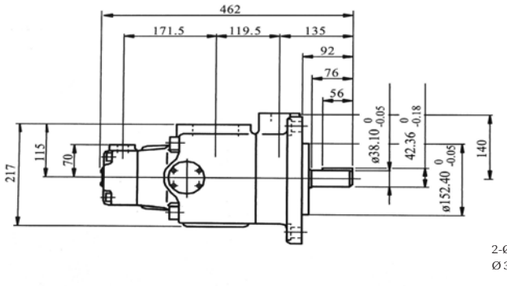
PV2R24-※-※-F (Flange-Mount Type)

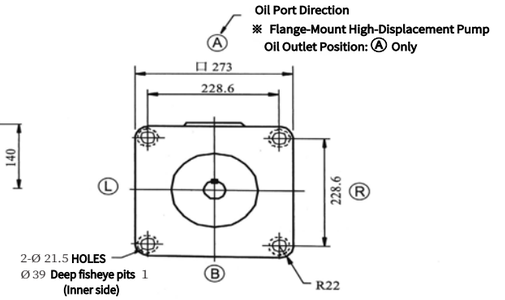


PV2R24-※-※-L (Base-Mount Type)

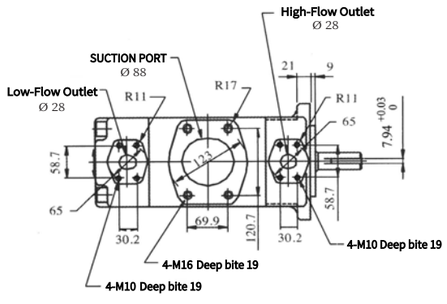


For other dimensions, please refer to the flange-mount type.

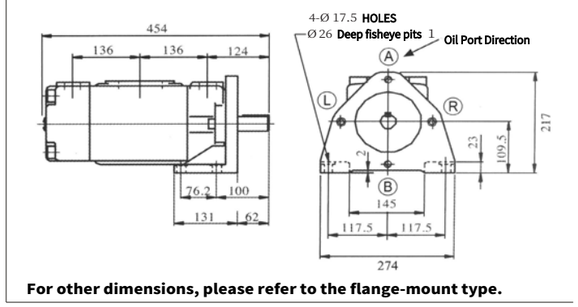




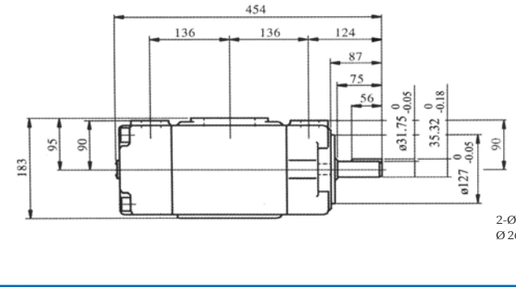
PV2R33-※-※-F (Flange-Mount Type)

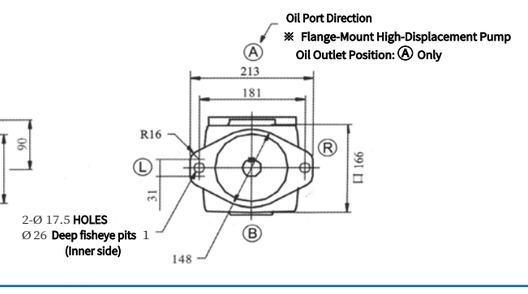


PV2R33-※-※-L (Base-Mount Type)



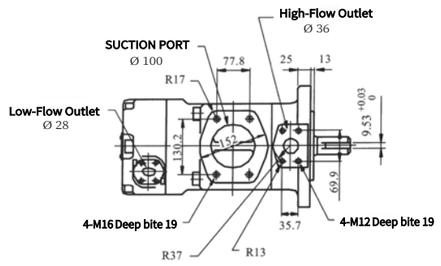
For other dimensions, please refer to the flange-mount type.



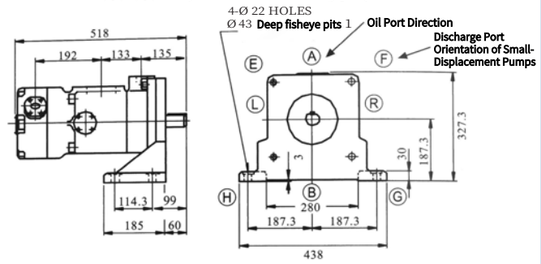


S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

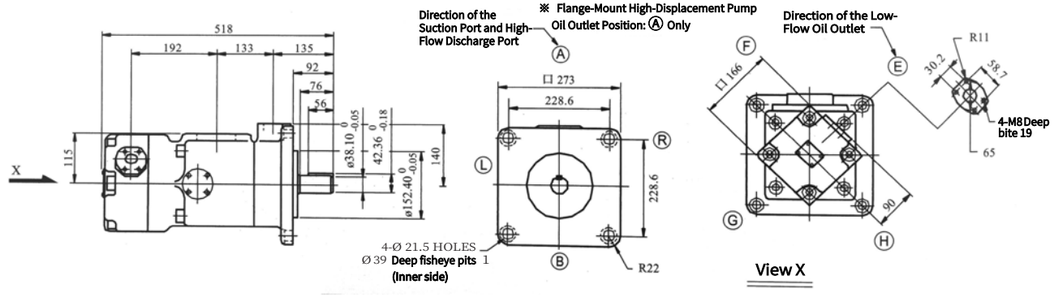
PV2R34-※-※-F (Flange-Mount Type)



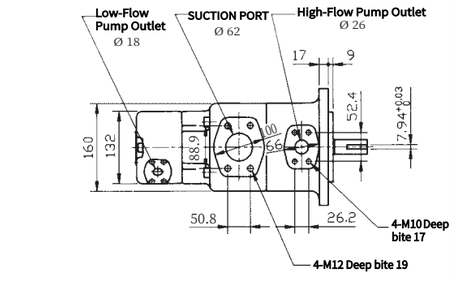
PV2R34-※-※-L (Base-Mount Type)



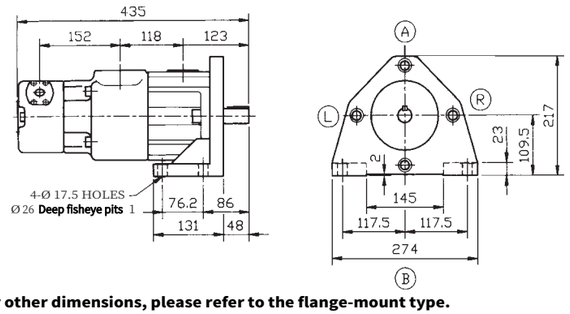
For other dimensions, please refer to the flange-mount type.



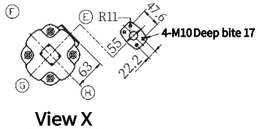
S-PV2R12-※-※-F (Flange-Mount Type)

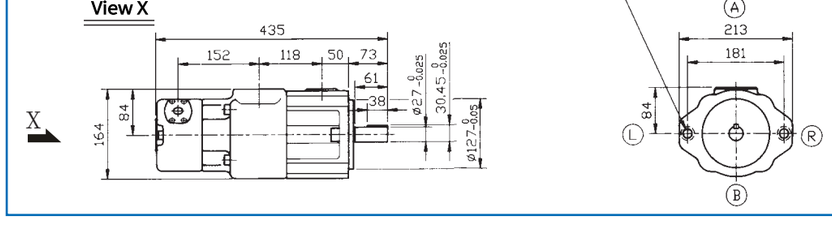


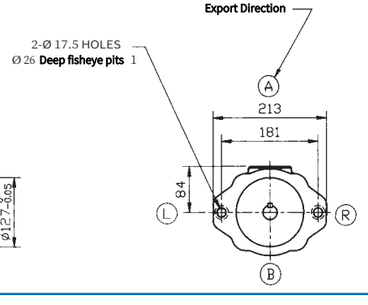
S-PV2R12-※-※-L (Base-Mount Type)



For other dimensions, please refer to the flange-mount type.

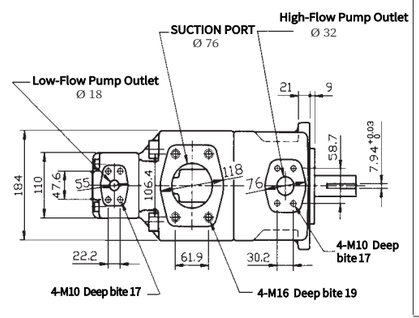




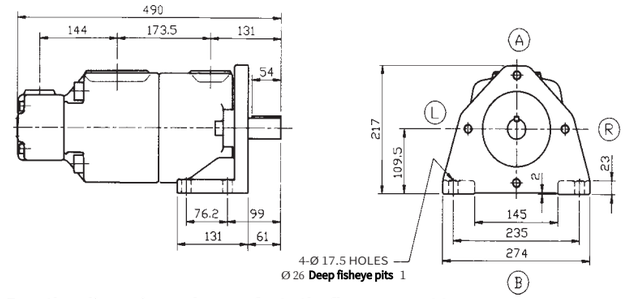


S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

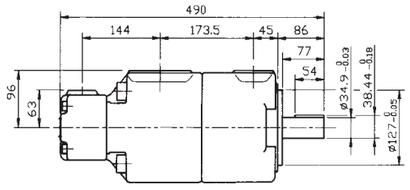
S-PV2R13-※-※-F (Flange-Mount Type)

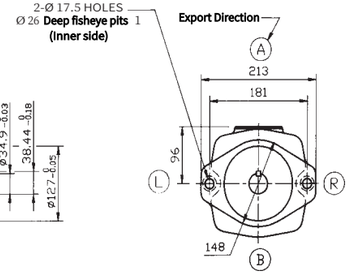


S-PV2R13-※-※-L (Base-Mount Type)

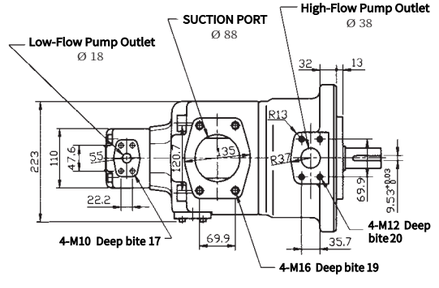


For other dimensions, please refer to the flange-mount type.

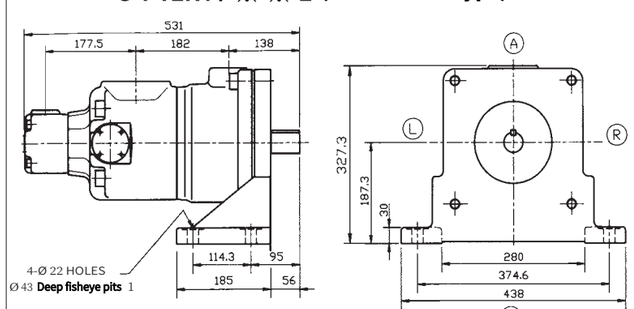




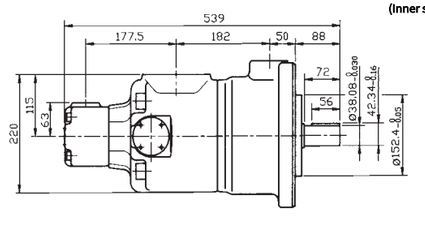
S-PV2R14-※-※-F (Flange-Mount Type)

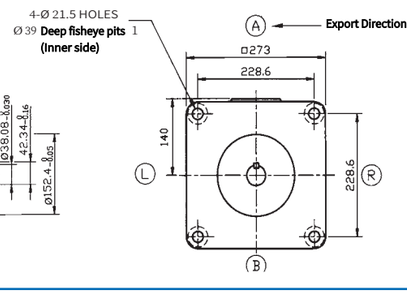


S-PV2R14-※-※-L (Base-Mount Type)



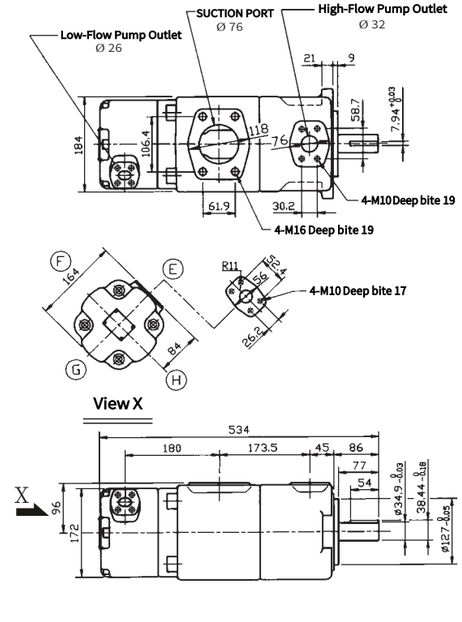
For other dimensions, please refer to the flange-mount type.



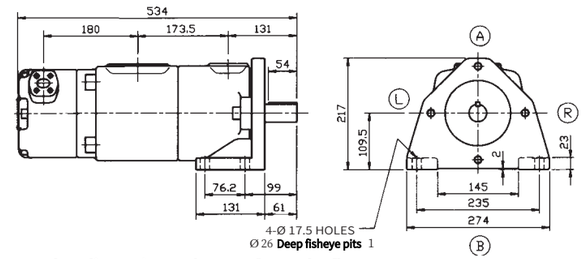


S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

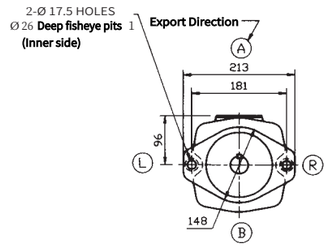
S-PV2R23-※-※-F (Flange-Mount Type)



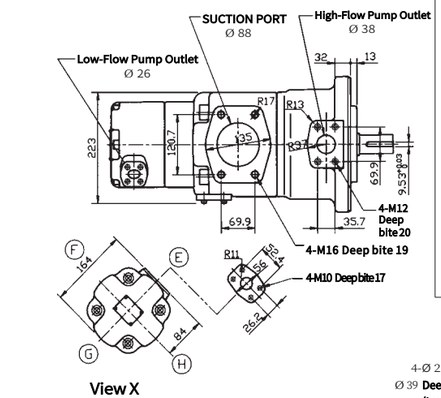
S-PV2R23-※-※-L (Base-Mount Type)



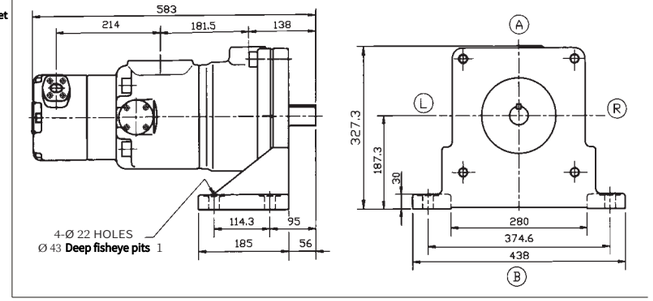
For other dimensions, please refer to the flange-mount type.

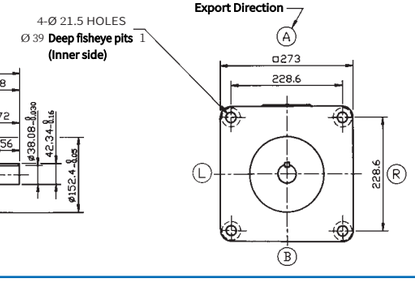


S-PV2R24-※-※-F (Flange-Mount Type)



S-PV2R24-※-※-L (Base-Mount Type)

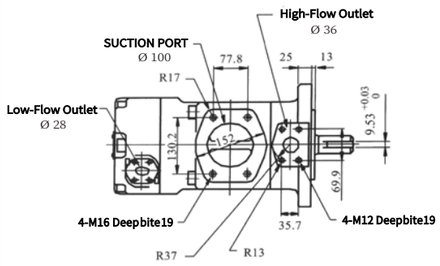




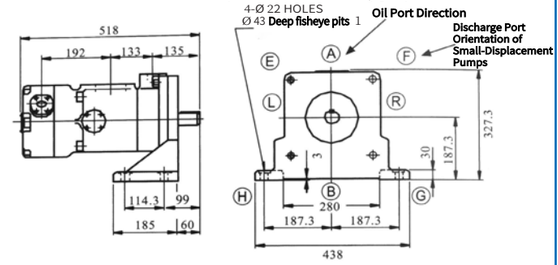
JINPINLUB.NET Hydraulic Industrial Vane Pump

S-PV2R Series Double Vane Pumps — Maximum pressure 210 bar

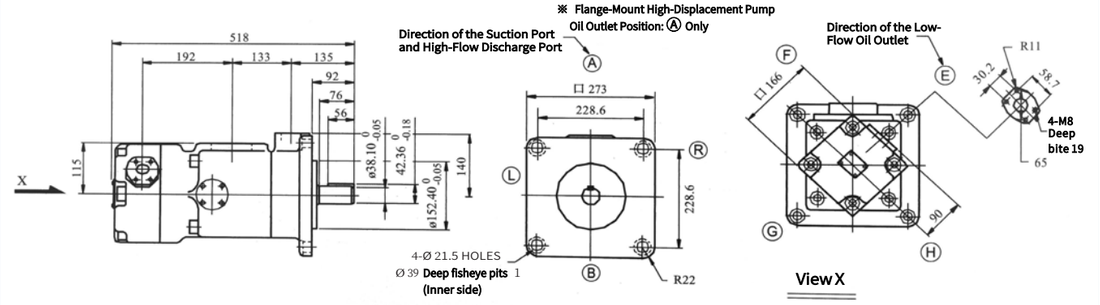
S-PV2R33-※-※-F (Flange-Mount Type)



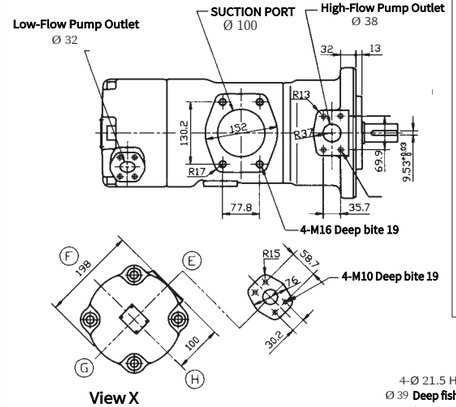
S-PV2R33-※-※-L (Base-Mount Type)



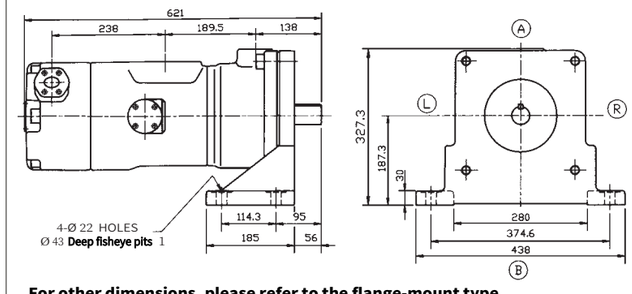
For other dimensions, please refer to the flange-mount type.



S-PV2R34-※-※-F (Flange-Mount Type)



S-PV2R34-※-※-L (Base-Mount Type)



For other dimensions, please refer to the flange-mount type.