



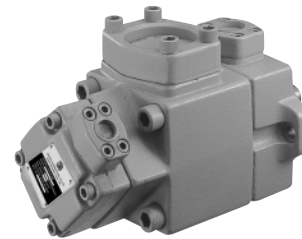
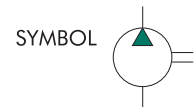
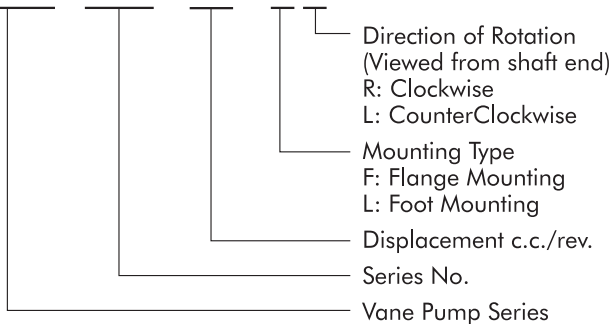
# Fixed Displacement Vane Pump

## Features:

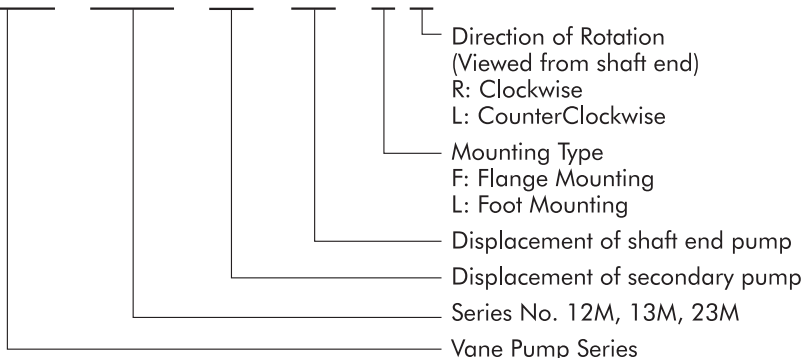
1. High pressure fixed vane pump with high working efficiency.
2. Very low noise when operation even under high pressure working.
3. Wide range of displacement from 5.8 c.c.to 116 c.c. Double pumps are available for system demand.
4. Cartridge designed, very easy for maintenance.

## ■ HOW TO ORDER

**DFVP - 2M - 33 - L R**



**DFVP - 12M - 23 - 41 - L R**



## Handling:

1. Keep hydraulic oil clean and prevent any contamination. Polluted hydraulic oil will causes the malfunction of the pump. As a result, decreasing the service life of pump . In order to maintain hydraulic oil within the standard of NAS 10, it is necessary to install a 100 mesh suction strainer and it has at least to be kept 50mm from the bottom of tank.
2. Precise axial alignment: When centering the pump shaft eccentricity with motor shaft should be smaller then 0.05 mm. When use a pump mounting base of sufficient rigidity, the angle error should be within 1°. We strongly suggested to use coupling when installing pump to avoid any off center or distortion.
3. Star-up Operation: When the pump is to be operated for the first time or re-start after stop a long period of time. The bleed valve should be mounted in the outlet side or screw off a little bit of the nipple. The motor should be started on and off a number of times in no-load state in order to bleed the air from the pump.
4. Others: When the rotation speed is lower then 1200 rpm for DFVP-\*M series, it is suggested to keep the suction port in the up side when mounting.
5. Suction Pressure: Please refer to following table.

Model No.	Suction Pressure	
	Minimum	Maximum
1M, 2M, 3M	-20kPa(-150mmHG) <sup>1</sup>	+30kPa(0.3 kgf/cm <sup>2</sup> ) <sup>1</sup>
12M, 13M, 23M		



# Fixed Displacement Vane Pump

## ■ TECHNICAL DATA

Model No.	Displacement cm <sup>3</sup> /rev	Maximum Pressure kgf/cm <sup>2</sup>	Operating Characteristics at 1200 rpm w/20cst fluid								Shaft Speed		Weight		
			Delivery L/min				Power Input kw				rpm	Max	Min	Foot	Flange
			10	140	175	210	10	140	175	210					
DFVP-1M-6	5.8	210	6.7	4.8	4.3	3.8	0.3	2.5	3.1	3.7	1800	750	11.2	9.0	
1M-8	8.0	210	9.5	7.6	7.1	6.6	0.4	3.3	4.1	4.8	1800	750	11.2	9.0	
1M-10	9.4	210	10.4	9.3	8.8	8.2	0.4	3.6	4.5	5.4	1800	750	11.2	9.0	
1M-12	12.2	210	14.5	11.4	11.0	10.6	0.5	5.3	6.4	7.3	1800	750	11.2	9.0	
1M-14	13.7	210	16.0	14.0	13.2	12.9	0.5	5.4	6.5	7.5	1800	750	11.2	9.0	
1M-17	16.6	210	18.4	17.2	16.8	15.9	0.5	5.8	7.0	8.4	1800	750	11.2	9.0	
1M-19	18.6	210	22.0	19.4	18.9	17.6	0.8	6.8	7.8	9.4	1800	750	11.2	9.0	
1M-23	22.7	210	26.2	24.3	23.8	23.3	0.8	7.0	9.6	11.8	1800	750	11.2	9.0	
1M-25	25.3	210	28.9	27.6	26.3	25.8	1.0	8.2	10.9	12.8	1800	750	11.2	9.0	
1M-31	31.0	160	36.5	33.8	-	-	1.0	10.2	-	-	1800	750	11.2	9.0	
2M-41	41.3	210	48.0	44.0	42.8	41.6	1.1	13.2	16.1	19.5	1800	600	23.3	19.0	
2M-47	47.2	210	54.2	50.8	49.6	48.2	1.2	15.1	18.2	21.8	1800	600	23.3	19.0	
2M-53	52.5	210	61.6	55.4	54.3	52.8	1.4	16.6	20.8	24.2	1800	600	23.3	19.0	
2M-59	58.2	210	67.6	65.0	62.2	59.8	1.8	18.2	23.4	25.6	1800	600	23.3	19.0	
2M-65	64.7	210	75.2	70.2	67.3	65.5	1.9	20.6	25.4	30.6	1800	600	23.3	19.0	
3M-76	76.4	210	90.4	76.6	74.3	70.4	2.3	26.2	28.1	34.6	1800	600	46.7	36.7	
3M-94	93.6	210	111.4	95.3	93.6	90.1	3.0	28.4	35.2	43.6	1800	600	46.7	36.7	
3M-116	115.6	160	135.2	123.6	-	-	3.5	35.3	-	-	1800	600	46.7	36.7	
DFVP-12M			refer to single pump								1800	750	29.3	25.0	
DFVP-13M			refer to single pump								1800	750	55.6	45.6	
DFVP-23M			refer to single pump								1800	600	56.0	51.0	

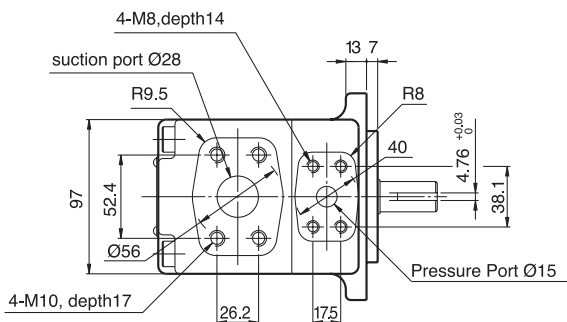
### Remark:

1. Test value of maximum pressure is based on petroleum base hydraulic oil.
2. Maximum oil viscosity when operating with low speed  
 Speed 750 / 100mm<sup>2</sup>/cSt.  
 Speed 950 / 200mm<sup>2</sup>/cSt.
3. When the pressure is higher than 160 kgf/cm<sup>2</sup>, the rotation speed should be higher than 1450 rpm.

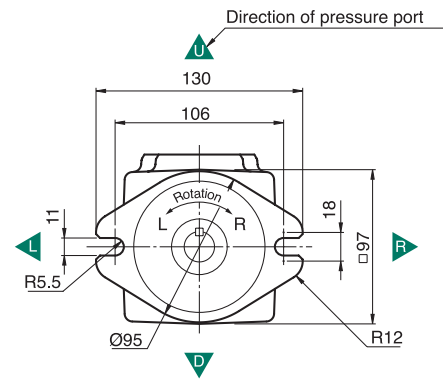
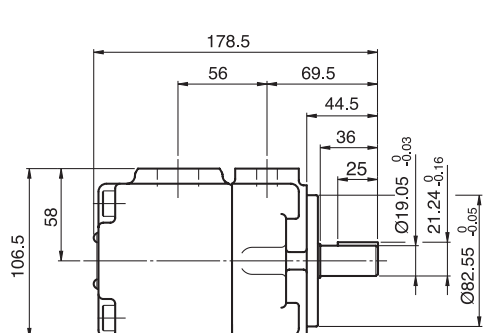
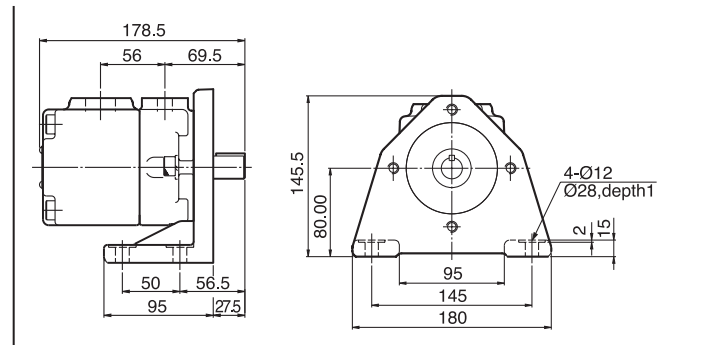
## ■ DIMENSIONS:

UNIT: mm

1M-\*\*-F Flange type



1M-\*\*-L Foot type



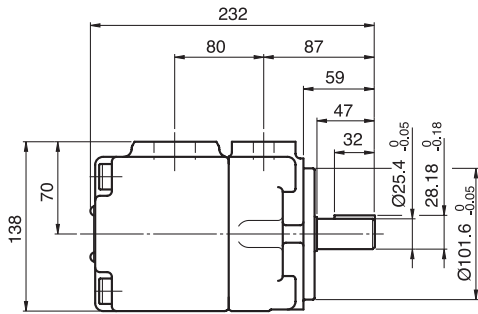
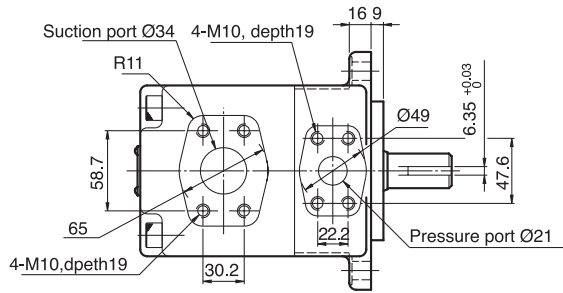


# Fixed Displacement Vane Pump

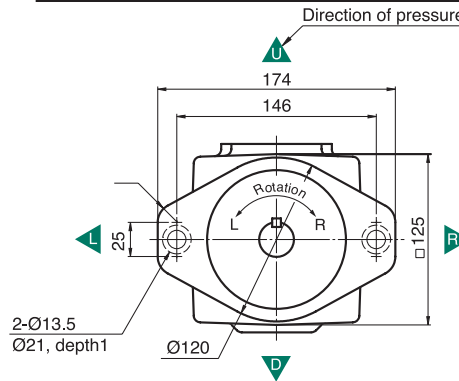
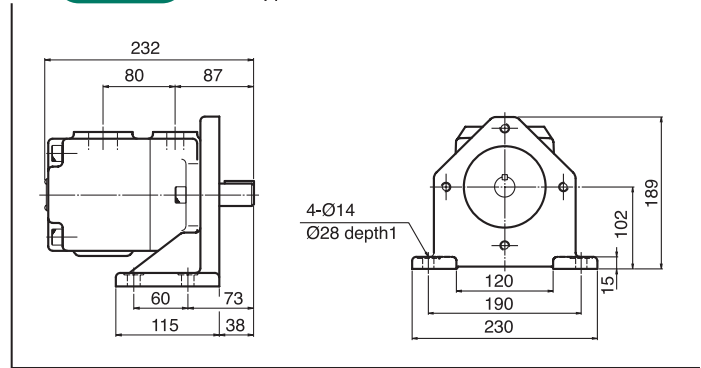
## ■ DIMENSIONS:

UNIT: mm

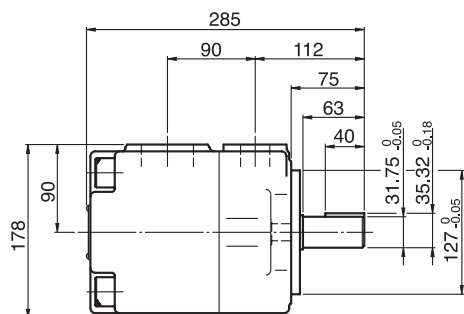
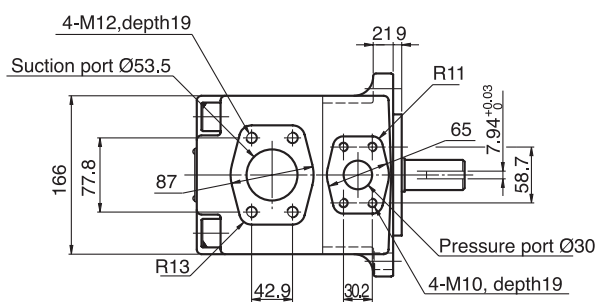
### 2M- $\times$ -F Flange type



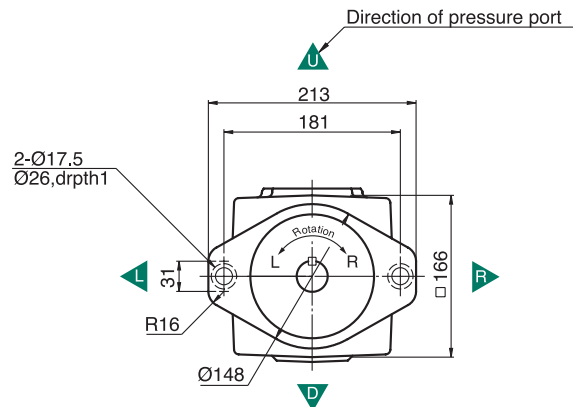
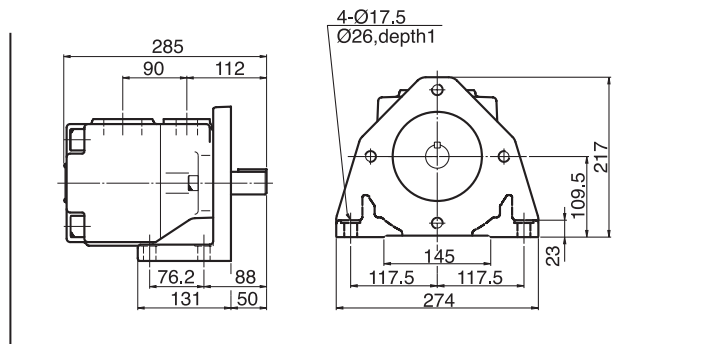
### 2M- $\times$ -L Foot type



### 3M- $\times$ -F Flange type



### 3M- $\times$ -L Foot type



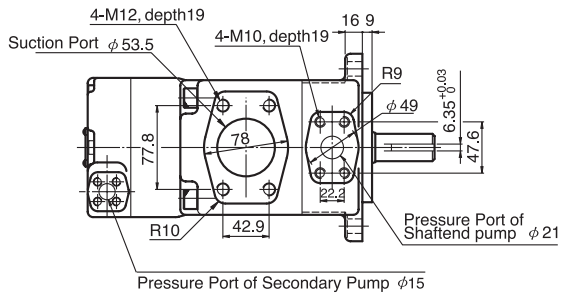


# Fixed Displacement Vane Pump

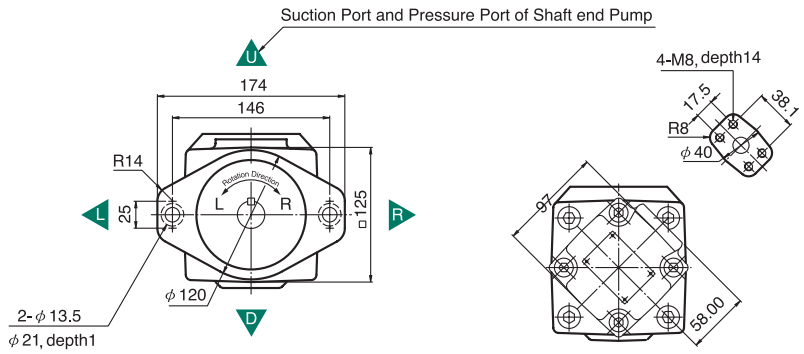
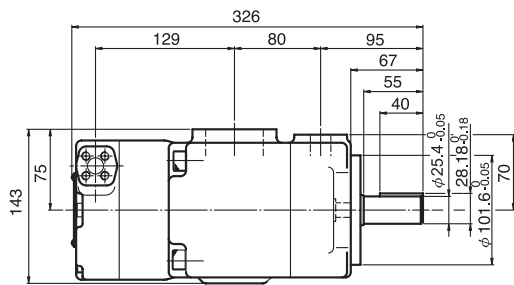
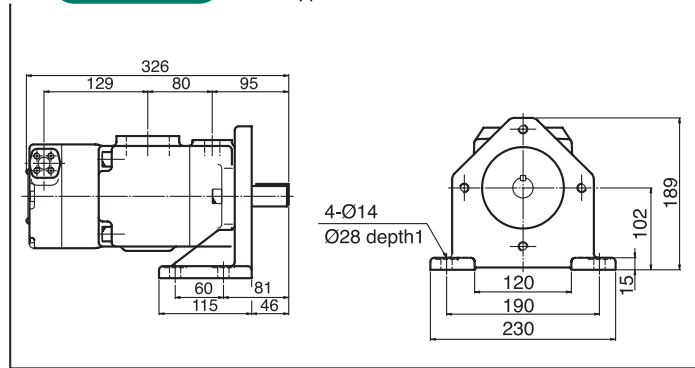
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UNIT: mm

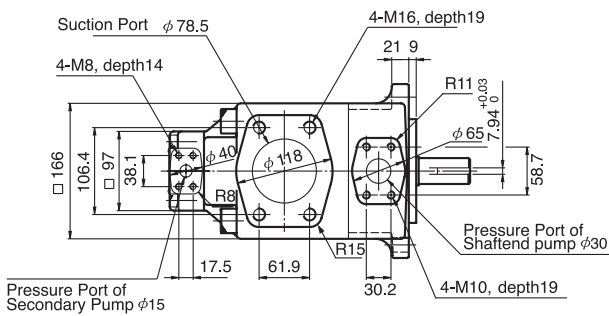
12M-\*\*-F Flange type



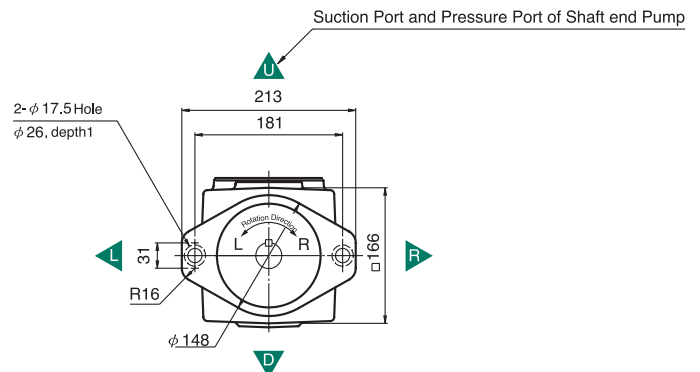
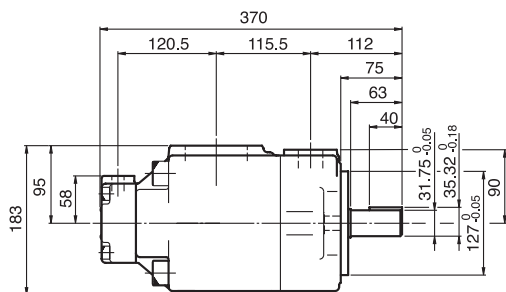
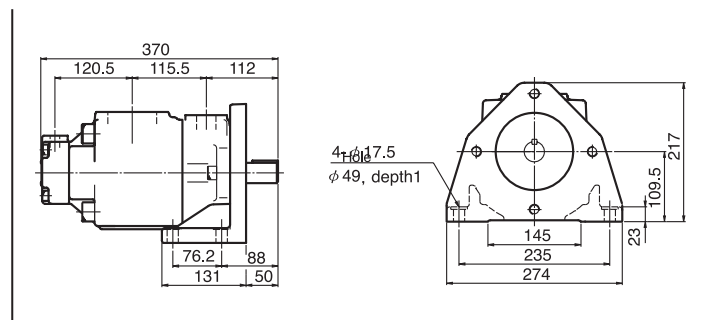
12M-\*\*-L Foot type



13M-\*\*-F Flange type



13M-\*\*-L Foot type



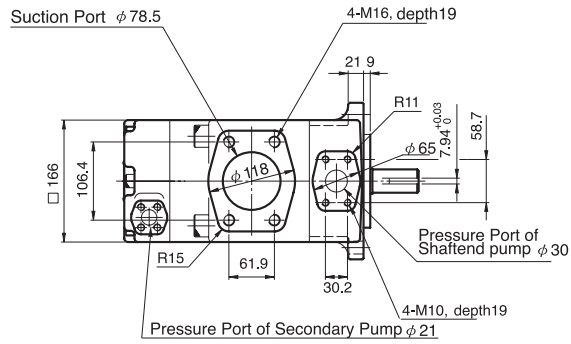


# Fixed Displacement Vane Pump

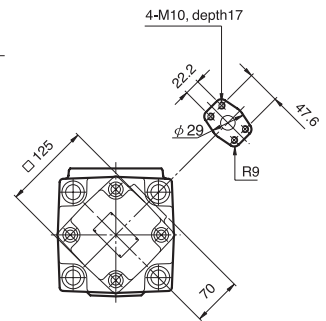
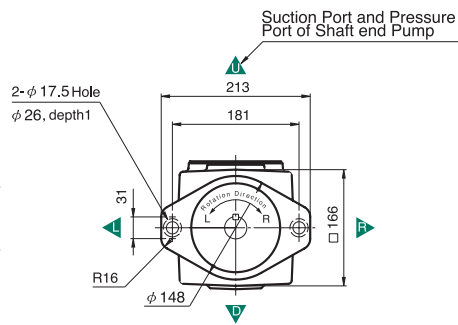
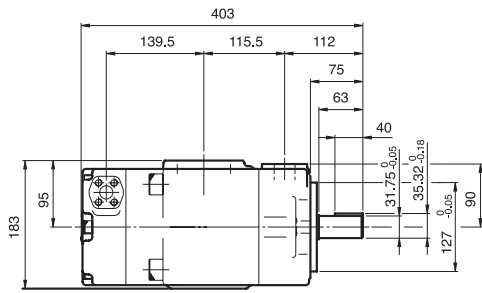
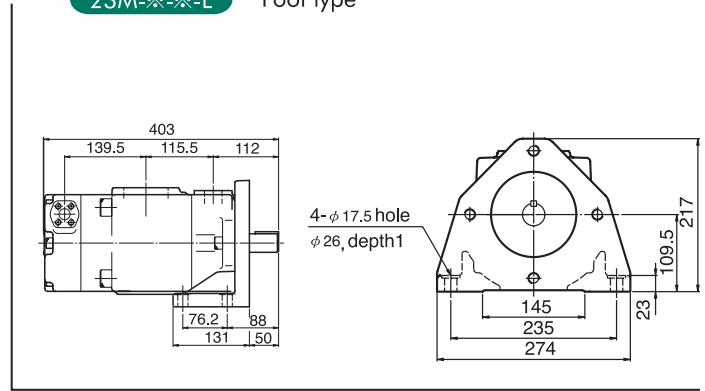
## ■ DIMENSIONS:

UNIT: mm

**23M-\*\*-\*\*F** Flange type



**23M-\*\*-\*\*L** Foot type

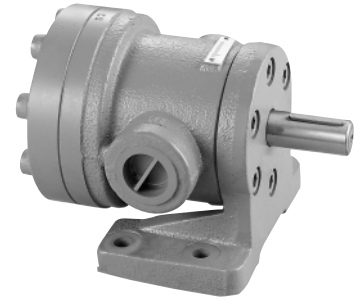




# Fixed Displacement Vane Pump -50T,150T series

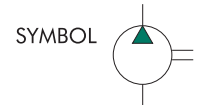
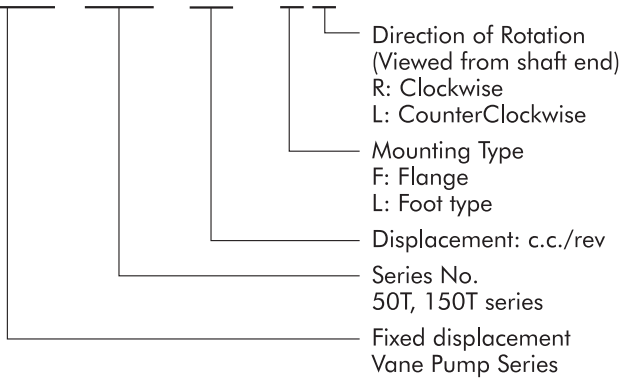
## Features:

1. DFVP-50T & 150T pumps have the characteristics of diminishing the whirl in the hydraulic oil. It is quiet and efficient when operating Suitable for being a low pressure pump in high-low Pressure system.
2. Pressure balance structure produces lower axial loading pressure, and longer service life.
3. Pump structure is simple and easy for maintenance.



## HOW TO ORDER

**DFVP - 50T - 36 - F R**



## Handling:

1. Keep hydraulic oil clean and prevent contamination.
2. Precise axial alignment: When centering the pump shaft eccentricity with motor shaft should be smaller than 0.05 mm. When use a pump mounting base of sufficient rigidity, the angle error should be within 1°.
3. Suction Pressure: Please refer to following table.

Model No.	Suction Pressure	
	Minimum	Maximum
DFVP-50T, 150T	-20kPa(-150mmHG) <sup>1</sup>	+30kPa(0.3 kgf/cm2) <sup>1</sup>

## RATINGS

Model No.	Maximum Pressure cm <sup>3</sup> /rev	Rotation Speed RPM	Operating Characteristics						Rotation Speed		Weight	
			Delivery L/min			Power Input kw			RPM		kg	
			3.5	35	70	3.5	35	70	Max	Min	Foot	Flange
			kgf/cm <sup>2</sup>			kgf/cm <sup>2</sup>						
DFVP-50T-7	70	1200	7.9	6.9	5.7	0.20	0.82	1.51	2000	800	10.5	9.2
		1500	9.9	8.9	7.7	0.30	1.05	1.87				
		1800	11.9	10.9	9.7	0.34	1.26	2.28				
DFVP-50T-12	70	1200	13.5	12.5	11.3	0.21	1.12	2.13	2000	600	10.5	9.2
		1500	16.8	15.8	14.6	0.31	1.42	2.70				
		1800	20.2	19.2	18.0	0.39	1.73	3.23				
DFVP-50T-17	70	1200	19.2	18.2	17.0	0.30	1.48	2.80	1800	600	10.5	9.2
		1500	24.0	23.0	21.8	0.39	1.86	3.50				
		1800	28.8	27.8	26.6	0.52	2.28	4.23				
DFVP-50T-23	70	1200	27.0	25.7	24.1	0.32	1.94	3.75	1800	600	10.5	9.2
		1500	33.7	32.4	30.8	0.47	2.50	4.73				
		1800	40.4	39.1	37.5	0.58	3.01	5.71				
DFVP-50T-26	70	1200	30.0	28.5	26.6	0.40	2.33	4.47	1800	600	10.5	9.2
		1500	37.5	36.0	34.1	0.52	2.92	5.60				
		1800	45.0	43.5	41.6	0.71	3.57	6.73				
DFVP-50T-36	70	1200	42.0	40.4	38.4	0.52	3.18	6.15	1800	600	10.5	9.2
		1500	52.5	50.9	48.9	0.72	3.95	7.60				
		1800	63.0	61.0	59.4	0.98	4.83	9.18				
DFVP-150T-48	70	1200	47.0	43.5	40.0	0.90	3.90	7.20	1500	600	26.0	25.0
		1500	56.5	53.0	49.5	1.10	4.70	8.60				
		1800	70.5	67.0	63.5	1.40	5.80	10.70				
DFVP-150T-61	70	1200	60.0	56.5	50.0	1.10	4.80	8.80	1500	600	26.0	25.0
		1500	72.0	68.5	65.0	1.30	5.70	10.50				
		1800	90.0	86.5	83.0	1.70	7.10	13.10				
DFVP-150T-75	70	1200	73.7	70.5	66.0	1.30	5.60	10.30	1500	600	26.0	25.0
		1500	88.5	84.5	81.0	1.50	6.70	12.40				
		1800	111.0	107.0	103.5	1.90	8.30	15.50				
DFVP-150T-94	70	1200	92.5	88.0	82.5	1.40	6.80	12.80	1200	600	26.0	25.0
		1500	111.0	106.5	101.0	1.70	8.30	15.40				
		1200	116.0	110.0	103.0	1.70	8.50	16.10				
DFVP-50T-116	70	1200	116.0	110.0	103.0	1.70	8.50	16.10	1200	600	26.0	25.0
		1500	139.0	133.0	126.0	2.00	10.30	19.30				

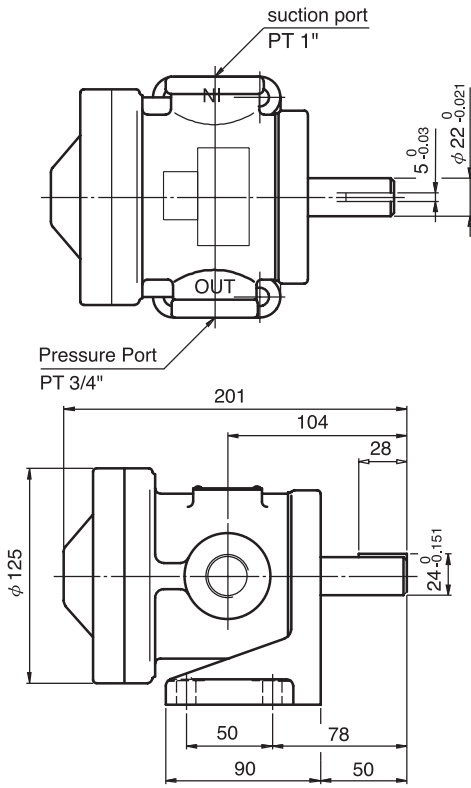


# Fixed Displacement Vane Pump -50T,150T series

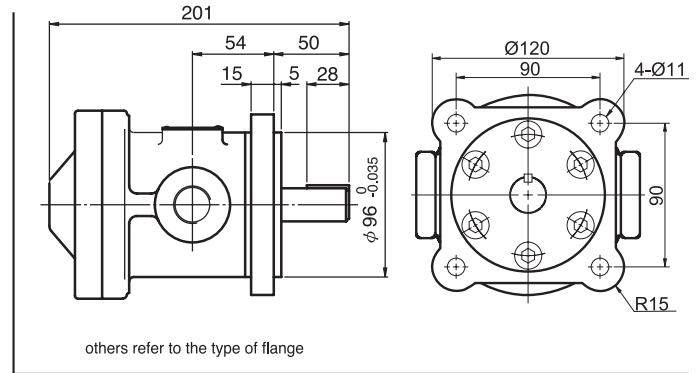
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UNIT: mm

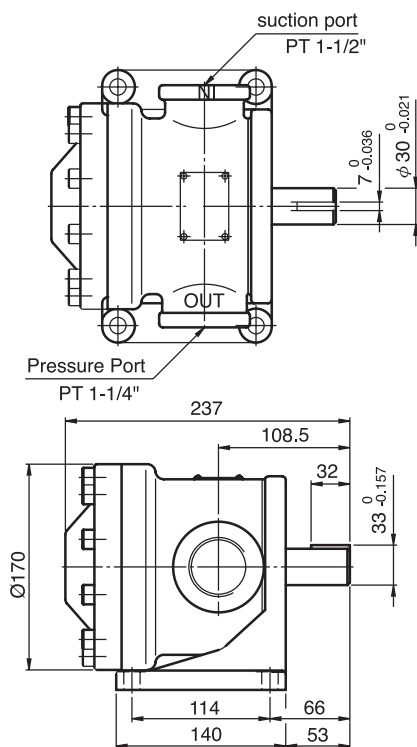
**50T-※-L** Foot type



**50T-※-F** Flange type



**150T-※-L** Foot type



**150T-※-F** Flange type

