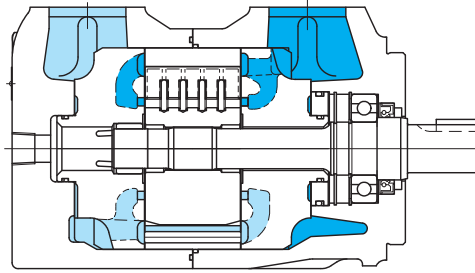
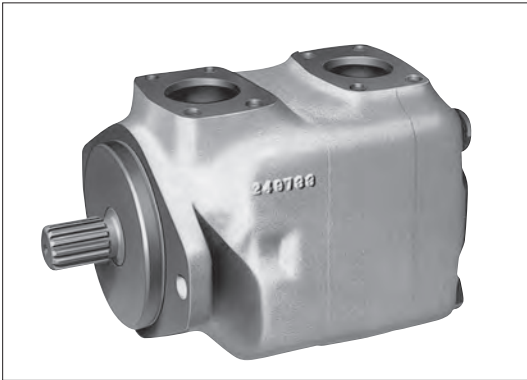


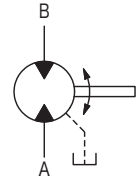
# High speed vane motors

## \*\*M series



- These motors can be used over a wide speed range from low to high speed and is suitable for various applications including mobile machinery.
- Cartridge kit rotating section enables easy replacement.

Functional Symbol



### Model Code

25M65A(2)-1C20-JA-J

1 2 3 4 5 6 7

1 Vane motor

25M Series  
35M Series  
45M Series

2 Displacement code

25M: 42, 55, 65  
35M: 80, 95, 115  
45M: 130, 155, 185

3 Porting

A: SAE 4 bolt flange

4 Mounting

Omit: flange mounting  
2: Foot mounting

5 Shaft end configuration

1: Parallel shaft with square key  
11: Involute spline shaft

6 B port position (viewed from cover end)

A: 180° from shaft side A port  
B: 90° counterclockwise from shaft side A port  
C: In line with shaft side A port  
D: 90° clockwise from shaft side A port

7 Design no.

### Specifications

Model Code	Displacement cm <sup>3</sup> /rev		Rated Max. Pressure MPa	Rated Torque N·m	Rated Max. Speed min <sup>-1</sup>	Minimum Speed min <sup>-1</sup>	Weight kg	
							Flange Mount	Foot Mount
25M	42	44.0	15.7	103	2600	100	18	24
	55	57.7		135				
	65	68.7		162				
35M	80	83.6		196			29	35
	95	100		236				
	115	122		287				
45M	130	138	317	38.5	44.5			
	155	163	395					
	185	193	453					

### Max. Speed and Max. Working Pressure

Model Code	Maximum Speed min <sup>-1</sup>	Max. Working Pressure MPa
25M	3600	3.5
	3300	7
35M	2800	14
45M	2600	15.7

N  
1-1

Motors (Vane)

## Notes on Operation

- Rotation direction  
Motor can rotate in either direction. Oil flow to A port will result in right (CW) rotation as viewed from shaft end and oil flow to B port will result in left (CCW) rotation.
- Shaft end configuration  
Use spline shaft (no. 11 shaft end configuration) in applications subject to shock load.
- Drain piping  
Connect drain piping directly to tank. Drain line allowable back pressure is 0.07 MPa.  
(Surge pressure allowed up to 0.18 MPa)

- Consult Tokyo Keiki in the following cases.
  - When using at speeds below 100min<sup>-1</sup>.
  - When using motor as brake (pump).
  - When using motor in indirect drive.
- See Vane Motor Notes on Operation (page N0-1).

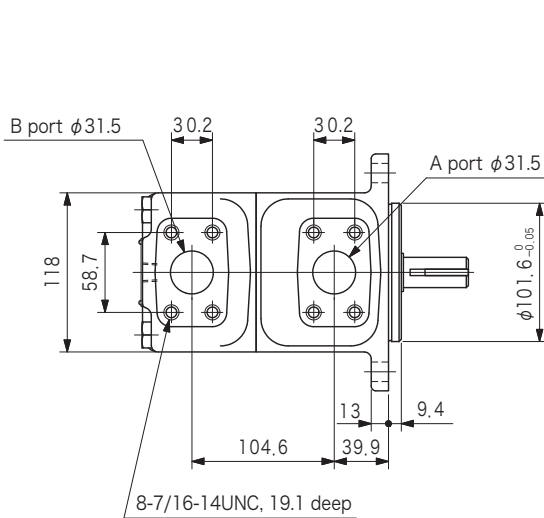
## Piping Flanges (Compliant to SAE J 518c Standard Pressure)

Motor Model	Size	Flange Model	
25M	1-1/4	Threaded	FL1-10-10P-10-JA-S4-J
		Welded	FL1-10-10W-10-JA
35M	1-1/2	Threaded	FL1-12-12P-10-JA-S4-J
		Welded	FL1-12-12W-10-JA
45M	2	Threaded	FL1-16-16P-10-JA-S4-J
		Welded	FL1-16-16W-10-JA

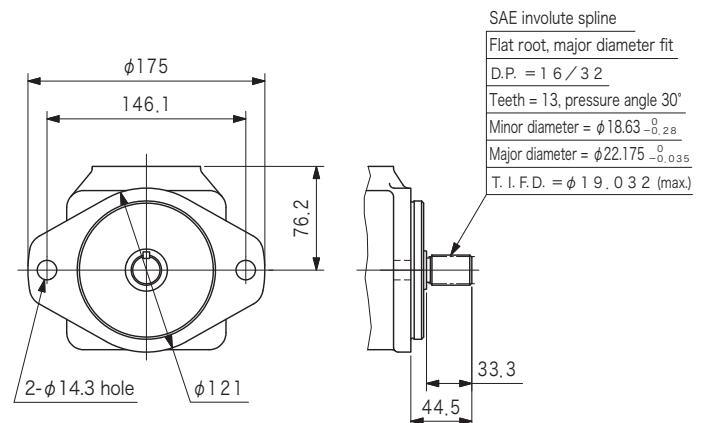
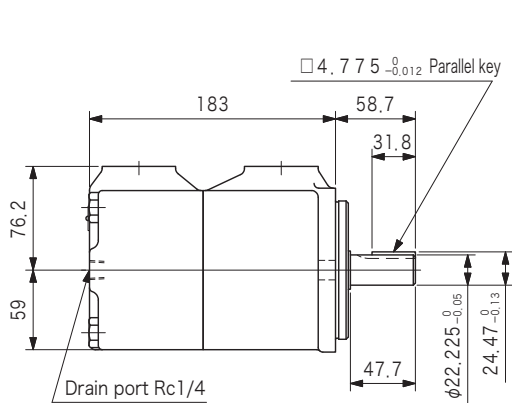
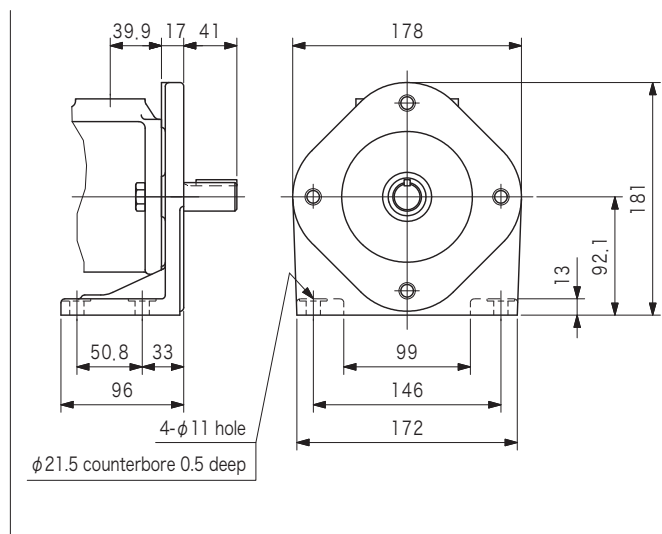
- Hex socket bolts, spring washers, O-rings are included.
- Flanges must be ordered separately.
- See page R7-1 for dimensions.

## Dimensions

### 25M Flange Mounting

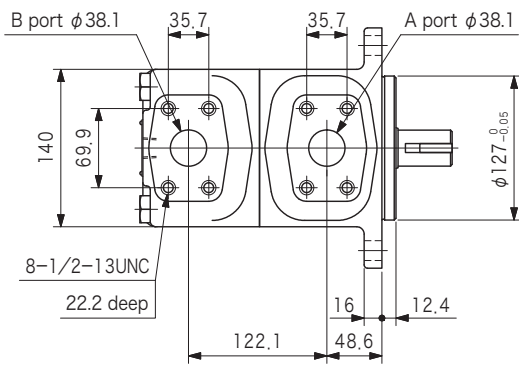


### 25M Foot Mounting

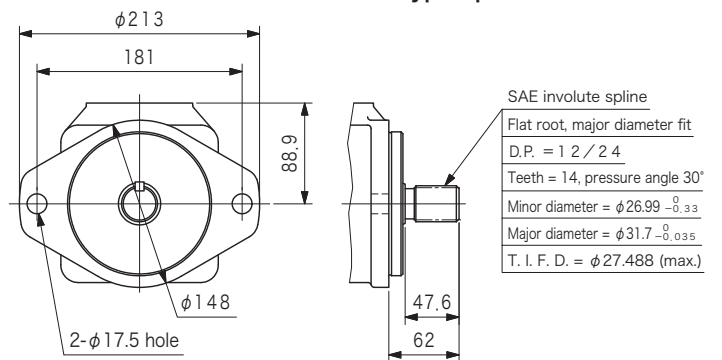
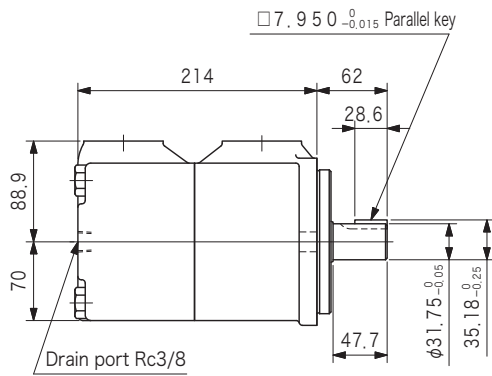
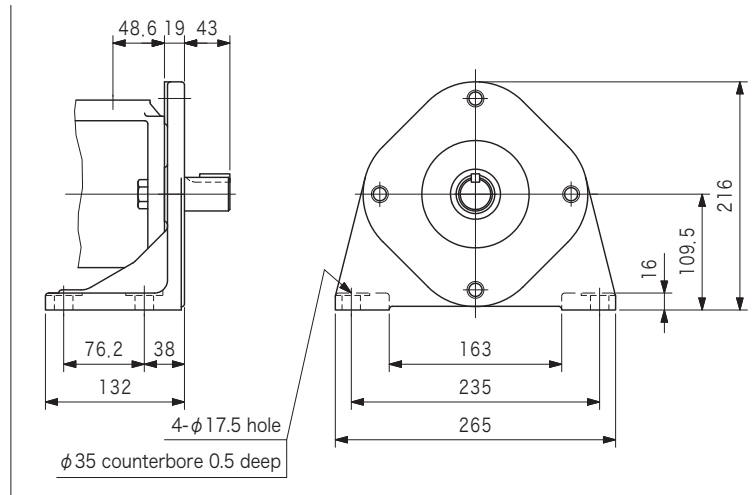


# Dimensions

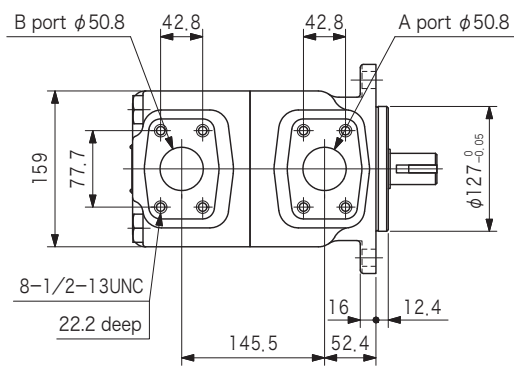
## 35M Flange Mounting



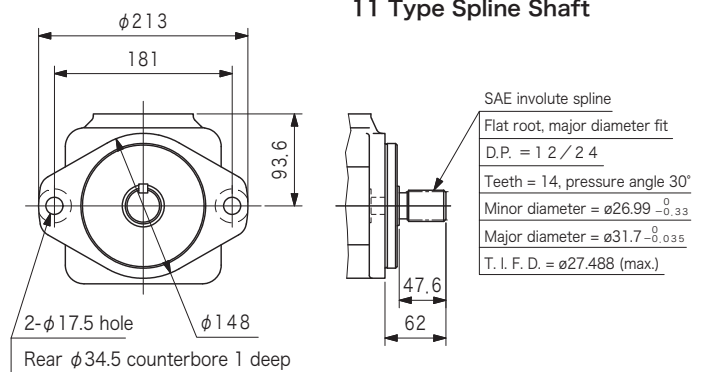
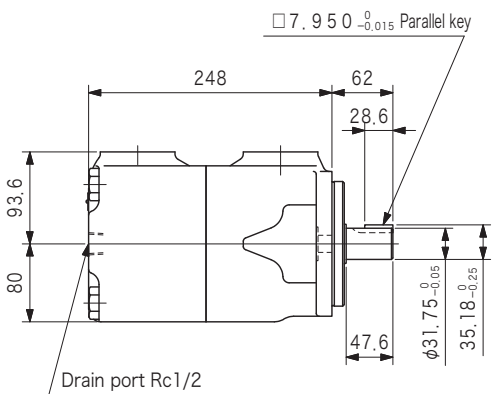
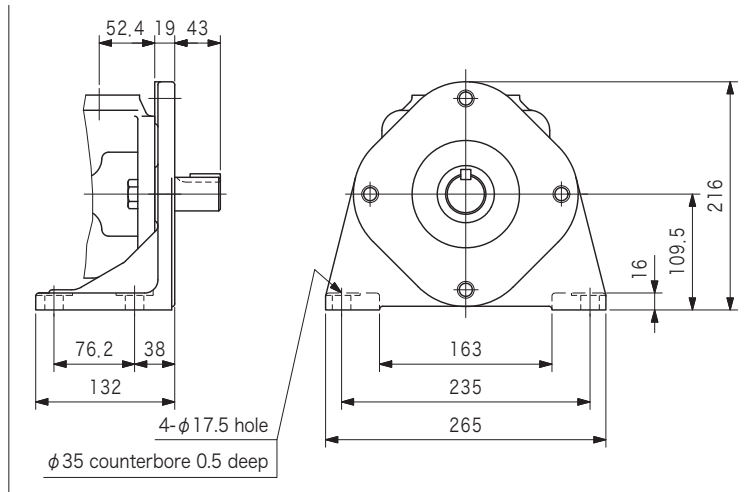
## 35M Foot Mounting

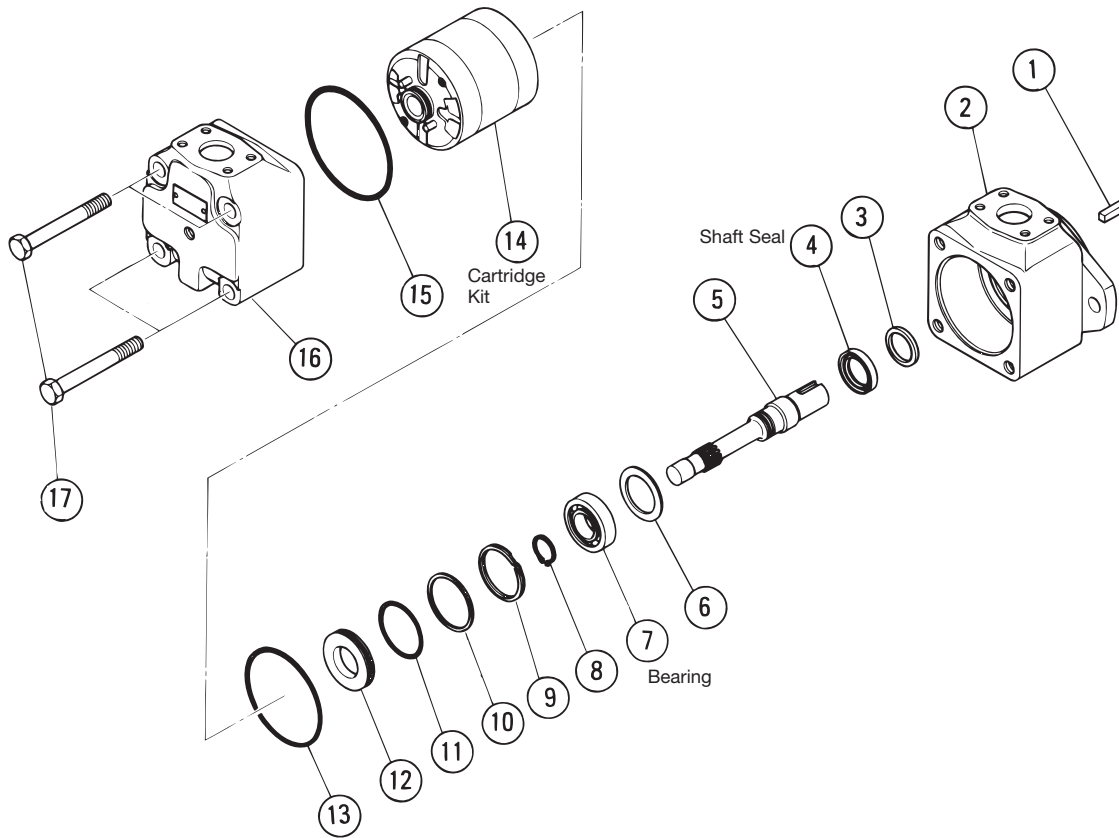


## 45M Flange Mounting



## 45M Foot Mounting





Seals, Bearings, Cartridge Kit

Model Code	25M		35M		45M	
Seal Kit No.	VP923157A		VP923163A		VP923106A	
Shaft Seal Part No.	VP191668		VP193428		VP195287	
Bearing Part No.	007062051		007062061		007062071	
Cartridge Kit No.	42	VP923160A	80	VP923165A	130	VP923111A
	55	VP923161A	95	VP923166A	155	VP923110A
	65	VP923162A	115	VP923167A	185	VP923109A

Note:

- Shaft seal included in seal kit.
- Bearing numbers in bold correspond to JIS B 1521.