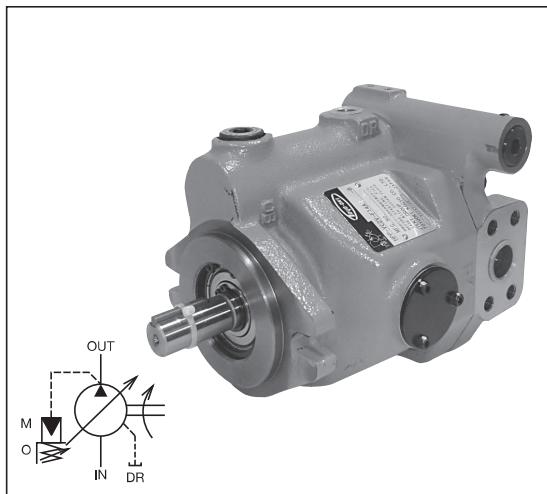


## VARIABLE-DISPLACEMENT PISTON PUMP (HPP-VC2V)



This swash plate type piston pump features low noise, high efficiency and high response. It provides specifications that assure ease of use, such as discharge rate, pressure adjustment range and pipe connection directions, and ensures excellent durability.

## ■ Features

## 1. Low noise

14 MPa, at cut-off: 53 dB (A), before cut-off: 58 dB (A) (at 1 m from 1,200 min<sup>-1</sup> pump)

## 2. High efficiency (energy saving)

Volumetric efficiency: 95%, whole efficiency: 90% (at 13.5 MPa, 1,800 min<sup>-1</sup>)

## 3. High response

Response time from 14 MPa cut-off to 13.5 MPa: 0.06 sec

Response time from 13.5 MPa to 14 MPa cut-off: 0.03 sec

## ⚠ Cautions on use

Please read the Operating Manual carefully to ensure correct usage.

● Direction of rotation is to right (CW) viewed from the shaft end.

● Connect the drain pipe from where the drain outlet will become the highest.

● Before starting the pump, supply hydraulic fluid through the oil filler port so that the pump is filled with the hydraulic fluid. (0.5ℓ)

● When mounting a check valve at the pump outlet side, use a valve with a cracking pressure of 0.005 MPa.

● For the value of discharge rate set by the discharge rate adjustment screw, refer to the graph on K-12 page.

● Installation of a line filter of 20µm is recommended in the return line to the reservoir.

● The pump can be used for R&O type and abrasion-resistant type hydraulic fluid applications.

● When using the water-glycol hydraulic fluid, specify -G at the end of model designation. The maximum speed becomes 1,800 min<sup>-1</sup>. For brand names of water-glycol hydraulic fluid, please consult us.

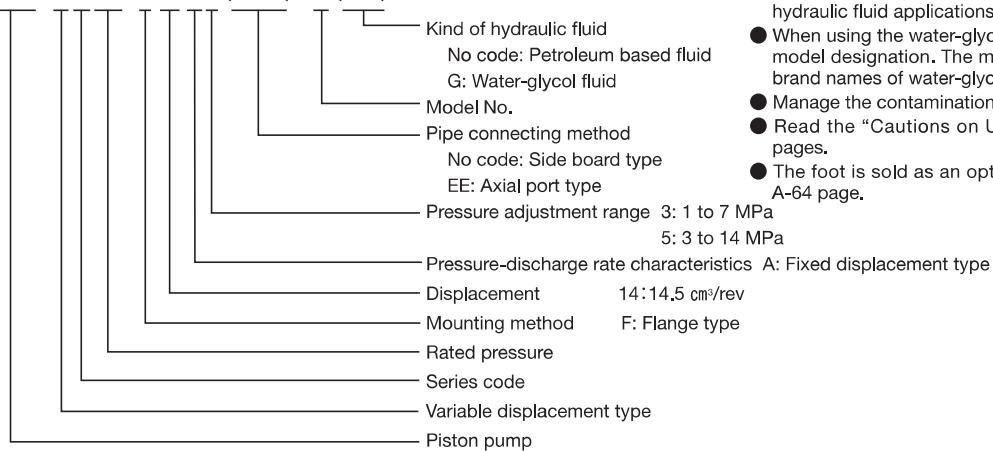
● Manage the contamination level of the fluid at NAS11 or better.

● Read the "Cautions on Using Pumps and Motors", A-2 and A-3 pages.

● The foot is sold as an optional single parts. Refer to "About foot", A-64 page.

## ■ Description of the model designation

HPP-VC2V-F14A3(-EE)-B(-G)



## ■ Specifications

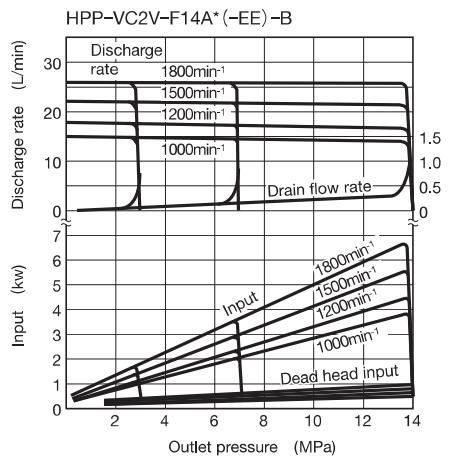
Model	Displacement (cm <sup>3</sup> /rev)	Pressure adjustment range (MPa)	Rotating speed (min <sup>-1</sup> )		
			Rated	Max.	Lowest
HPP-VC2V-F14A3(-EE)-B	*to 14.5	1 to 7	1,800	3,000	500
HPP-VC2V-F14A5(-EE)-B		3 to 14			

-EE indicates the pipe connecting method of axial port type.

Symbol “\*”: Set the minimum discharge rate at 5 L/min. or more, regardless of rotating speed.

## ■ General performance characteristics

Performance curve for hydraulic fluid viscosity of 20 mm<sup>2</sup>/s



## ■ Pipe flange

(Specify separately by selecting from this table.)

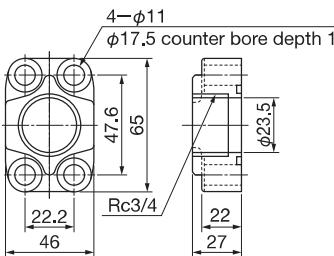
Name	Screw joint pipe flange	Welding pipe flange
Model	FHPP-06PT	FHPP-06WE
Bolt	M10x35	M10x35
O-ring	1BG30	1BG30

(Note) This flange comes with mounting bolts and O-ring.

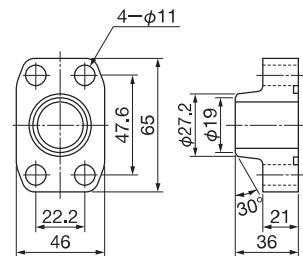
Bolts of strength capacity according to JIS B 1176 standard are used.

The applicable standard for O-ring is JIS B 2401 standard.

FHPP-06PT (3/4 thread type)

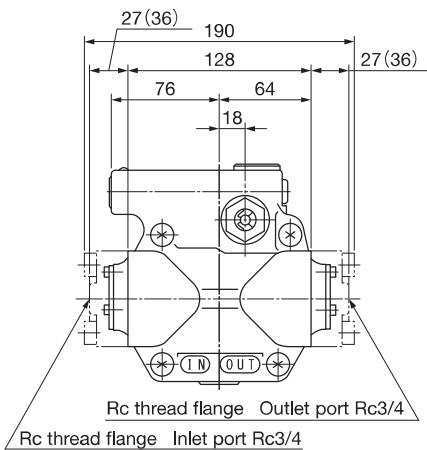
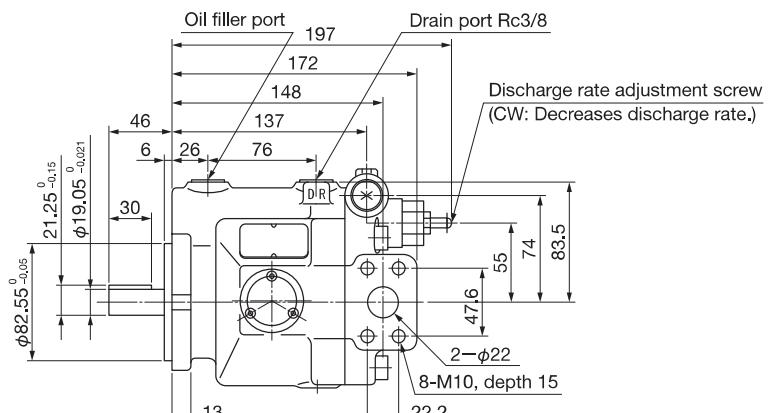
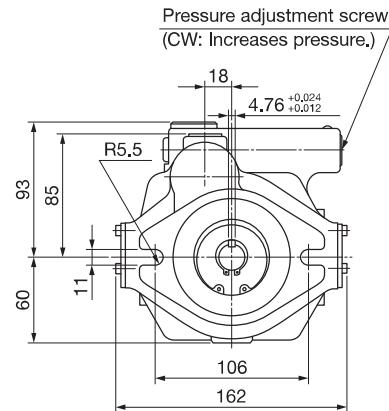


FHPP-06WE (3/4 welding type)



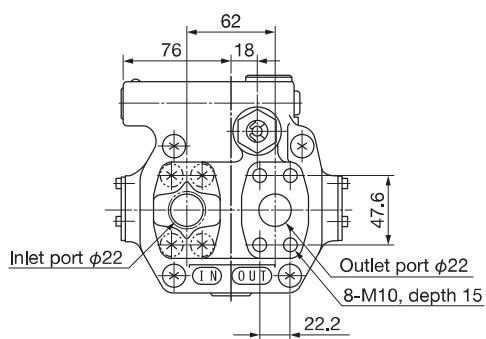
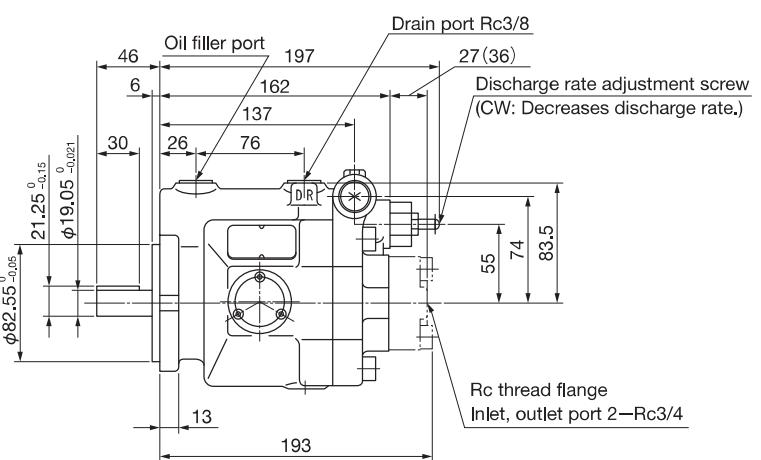
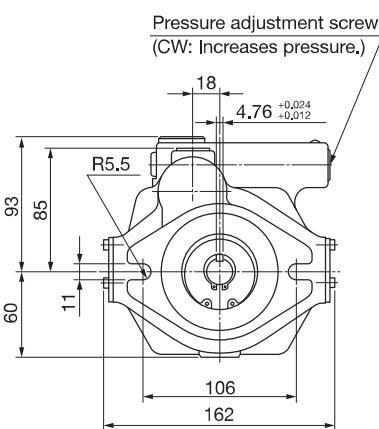
## ■ Outside dimensions

HPP-VC2V-F14A\*-B (Side port type)



Mass: 11.5kg

HPP-VC2V-F14A\*-EE-B (Axial port type)



Mass: 11.5kg

(Note) Dimension in parentheses indicates the welding flange dimension, dimensions without parentheses indicate Rc thread flange dimension.