

## Contact Details

Before using the product, please check the guide pages at the front of this catalog.

Internet

<https://www.daikinpmc.com/en/>

For latest information, PDF catalogs and operation manuals

# Compact Single Stage Vane Pump

PDF Compressor Free Version



## Features

- **Low noise**  
Large suction port reduces the suction resistance and realizes low-noise operation.
- **High efficiency**  
The cushion plate system keeps the side clearances constant at all times and maintains stable high efficiency without burn or wear even in the high speed range.
- **Low pulsation**  
The cam ring minimizes the fluctuation of the discharge rate and achieves quiet operation sound and stable performance with little pulsation.

## Nomenclature

※ - DS ※※ P - 20 - ※  
1 2 3 2 4 5

### 1 Applicable fluid code

No designation: Petroleum-based hydraulic fluid, water-glycol hydraulic fluid  
Water/oil emulsion type hydraulic fluid  
F: Phosphate ester hydraulic fluid

### 2 Model No.

DS\_P: Compact single stage vane pump

### 3 Pump capacity code

11: DS11 type  
12: DS12 type  
13: DS13 type  
14: DS14 type

### 4 Design No.

(The design No. is subject to change)

### 5 Direction of rotation, when viewed from the shaft end

No designation: Clockwise (rightward)

L: Counterclockwise (leftward)

\* The direction of rotation (rightward or leftward) cannot be changed.

## Specifications

Model No.	[Conditions] Input rotational speed: 1800 min <sup>-1</sup> , Fluid used: equivalent to ISO VG32, Fluid temperature: 40°C								
	Discharge rate L/min				Shaft input kW				
	0.4 MPa {4 kgf/cm <sup>2</sup> }	3 MPa {30 kgf/cm <sup>2</sup> }	5 MPa {50 kgf/cm <sup>2</sup> }	7 MPa {70 kgf/cm <sup>2</sup> }	0.4 MPa {4 kgf/cm <sup>2</sup> }	1 MPa {10 kgf/cm <sup>2</sup> }	3 MPa {30 kgf/cm <sup>2</sup> }	5 MPa {50 kgf/cm <sup>2</sup> }	7 MPa {70 kgf/cm <sup>2</sup> }
DS 11P	5.0	4.5	4.1	3.9	0.15	0.28	0.55	0.82	1.1
DS 12P	7.7	7.2	6.7	6.5	0.20	0.40	0.75	1.12	1.5
DS 13P	12.6	11.8	11.5	11.0	0.25	0.50	1.05	1.55	2.1
DS 14P	22.1	21.2	20.5	20.0	0.35	0.77	1.65	2.50	3.4

Refer to pages D-6 to D-7 for the operating conditions and handling precautions with fire-resistant hydraulic oil.

## Mass (kg)

Pump model	Flange mount type	Foot support mount type
DS1×P	3	4.4

## Foot support model codes

- Foot supports are not provided with the pump. Order them separately as required by specifying the model code given in the table below.

Pump model	Foot support model codes
DS1×P	DS-10M

Refer to Page S-3 for the dimensions of the foot supports.

## Contact Details

Before using the product, please check the guide pages at the front of this catalog.

Internet

<https://www.daikinpmc.com/en/>

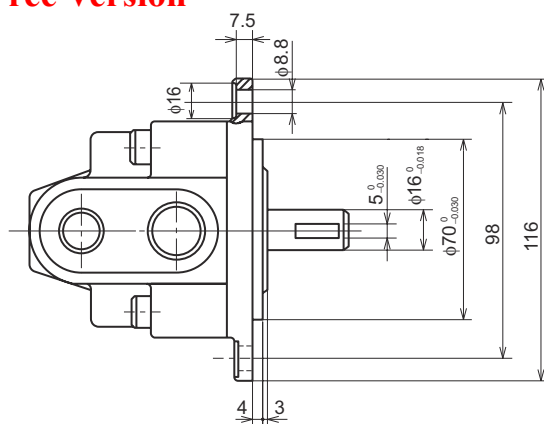
For latest information, PDF catalogs and operation manuals

VANE PUMPS

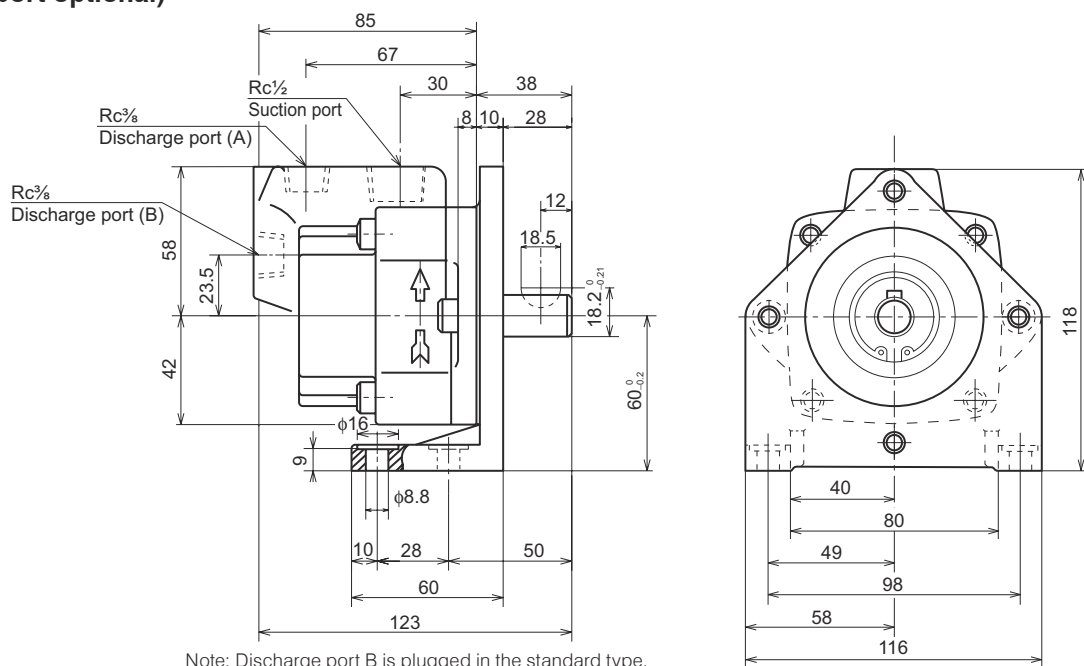
## External dimension diagram

PDF Compressor Free Version

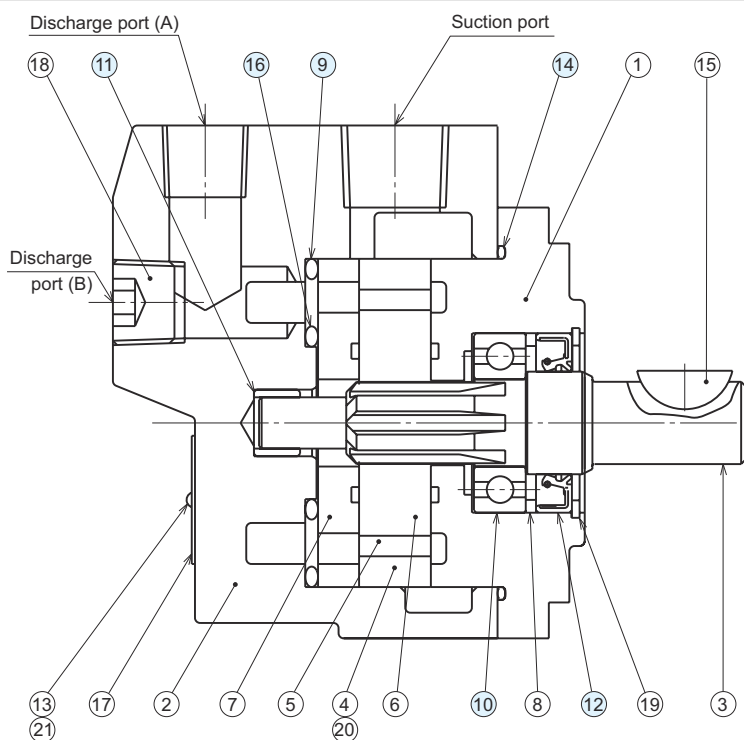
### Flange mount type



### Foot support mount type (the foot support optional)



## Sectional structural diagram



DS10P Seal/bearing table

Part No.	Name	Quantity	Part specifications	Material
9	O-ring	1	JIS B 2401 1B-G60	NBR
10	Ball bearing	1	6003	
11	Journal bearing	1	HP5235 (special part)	
12	Oil seal	1	TC20357	NBR
14	O-ring	1	KN1AS065 (special part)	NBR
16	O-ring	1	JIS B 2401 1B-G30	NBR