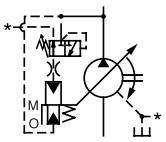
NACHI

VDC SERIES HIGH PRESSURE TYPE
VARIABLE VOLUME VANE PUMP

VDC Series
High-Pressure Type Variable Volume Vane Pump

30 to 120 ℓ /min
14MPa



Features

①Highly efficient and stable high-pressure operation

Innovative pressure control and pressure balance mechanisms combine with an original 3-point ring support system dramatically improves high-pressure operation. The result is outstanding performance at high pressures up to 14MPa.

②Low vibration and noise

A number of innovative new mechanisms are adopted to minimize vibration and noise. In particular, a 3-point support system is used for the control piston and bias piston to increase ring stability. This minimizes ring vibration and delivers quiet operation.

③Outstanding response, high-precision operation

An innovative new ring stopper eliminates excessive ring displacement and improves response. The result is high precision operation at all times, including during starts, stops, and load changes.

④Precise characteristics for a stable discharge rate

A revolutionary new pressure compensator type pressure control mechanism ensures a highly stable fixed discharge rate, even in the high pressure range.

⑤High efficiency operation with minimal power loss

New mechanical innovations minimize power loss, especially at full cutoff.

⑥Simplified maintenance and handling

Pressure adjusting and discharge rate adjusting mechanisms are located on the same side of the pump for simplified maintenance and handling.

Specifications

Model No.	Capacity cm³/rev	No-load Discharge Rate (ℓ /min)				Pressure Adjustment Range MPa {kgf/cm²}	Allowable Peak Pressure MPa {kgf/cm²}	Revolution Speed min⁻¹		Weight kg
		1000min⁻¹	1200min⁻¹	1500min⁻¹	1800min⁻¹			Min.	Max.	
VDC-1A(B) –1A2-20 1A3 1A4 1A5	16.7	16.7	20	25	30	1.5 to 3.5 {15.3 to 35.7} 2 to 7 {20.4 to 71.4} 5 to 10.5 {51 to 107} 7 to 14 {71.4 to 143}	14{143} 21{214}	800	1800	9.5
VDC-1A(B) –2A2-20 2A3	22	22	27	33	40	1.5 to 3.5 {15.3 to 35.7} 2 to 7 {20.4 to 71.4}	14{143}	800	1800	9.5
VDC-2A(B) –1A2-20 1A3 1A4 1A5	30	30	36	45	54	1.5 to 3.5 {15.3 to 35.7} 2 to 7 {20.4 to 71.4} 5 to10.5 {51 to 107} 7 to 14 {71.4 to 143}	14{143} 21{214}	800	1800	25
VDC-2A(B) –2A2-20 2A3	39	39	47	58	70	1.5 to 3.5 {15.3 to 35.7} 2 to 7 {20.4 to 71.4}	14{143}	800	1800	25
VDC-3A(B) –1A2-20 1A3 1A4 1A5	67	67	80	100	120	1.5 to 3.5 {15.3 to 35.7} 2 to 7 {20.4 to 71.4} 5 to 10.5 {51 to 107} 7 to14 {71.4 to 143}	14{143} 21{214}	800	1800	47 (33)

Double Pump

Model No.	Vent Side			Shaft Side			Revolution Speed min⁻¹		Weight kg
Foot Mounting Type (Flange Mounting)	Discharge Rate ℓ /min		Pressure Adjustment Range MPa {kgf/cm²}	Discharge Rate ℓ /min		Pressure Adjustment Range MPa {kgf/cm²}			
	1800min⁻¹	1500min⁻¹		1800min⁻¹	1500min⁻¹		Min.	Max.	
VDC-11A(B)-2A3-2A3-20	40	33	2 to 7 {20.4 to 71.4}	40	33	2 to 7 {20.4 to 71.4}	800	1800	Type A 27
VDC-11A(B)-2A3-1A5-20				30	25	7 to 14 {71.4 to 143}			Type B 20
VDC-12A(B)-2A3-2A3-20	40	33	2 to 7 {20.4 to 71.4}	70	58	2 to 7 {20.4 to 71.4}	800	1800	Type A 42
VDC-12A(B)-2A3-1A5-20				54	45	7 to 14 {71.4 to 143}			Type B 35
VDC-12A(B)-1A5-2A3-20	30	25	7 to 14 {71.4 to 143}	70	58	2 to 7 {20.4 to 71.4}			
VDC-12A(B)-1A5-1A5-20				54	45	7 to 14 {71.4 to 143}			
VDC-22A(B)-2A3-2A3-20	70	58	2 to 7 {20.4 to 71.4}	70	58	2 to 7 {20.4 to 71.4}	800	1800	Type A 62
VDC-22A(B)-2A3-1A5-20				54	45	7 to 14 {71.4 to 143}			Type B 50
VDC-13A(B)-2A3-1A3-20	40	33	2 to 7 {20.4 to 71.4}	120	100	2 to 7 {20.4 to 71.4}	800	1800	Type A 62
VDC-13A(B)-2A3-1A5-20						7 to 14 {71.4 to 143}			Type B 48
VDC-13A(B)-1A5-1A3-20	30	25	7 to 14 {71.4 to 143}			2 to 7 {20.4 to 71.4}			
VDC-13A(B)-1A5-1A5-20						7 to 14 {71.4 to 143}			

Note) 1. VDC-3A, VDC-11A, VDC-12A and VDC-13A are foot mounting types, and come with foot mountings.
2. VDC-1A and VDC-2A are sub plate types. Sub plates are not included.

● Handling

1 Rotation Direction The direction of rotation is always is clockwise (rightward) when viewed from the shaft side.

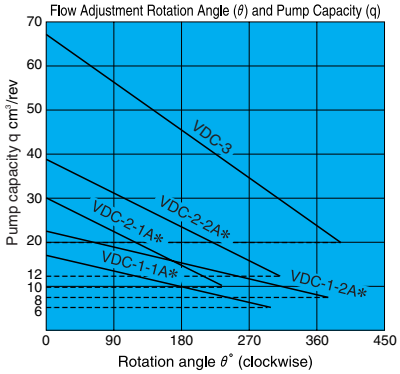
2 Drain Drain piping must be direct piping up to a point that is below the tank fluid level, and piping should comply with the conditions shown in the table below to ensure that back pressure due to pipe resistance does not exceed 0.1MPa. When using a pump that has drain ports at two locations, use the drain port that is higher after the pump is installed.
In the case of a double pump, run separate pipes from both the shaft side and the head side drains directly connect to the tank, so the drain pipe is below the surface of the oil.

3 Discharge Volume Adjustment

Item \ Model No.	VDC-1	VDC-2	VDC-3
Pipe Joint Size	At least 1/4"	At least 1/4"	At least 3/8"
Pipe I.D.	At least ϕ7.6	At least ϕ7.6	At least ϕ9.6
Pipe Length	1m or less	1m or less	1m or less

The discharge flow rate is decreased by clockwise (rightward) rotation of the discharge rate adjusting screw, and increased by counterclockwise (leftward) rotation.
Loosen the lock nut before making adjustments. After adjustment is complete, re-tighten the lock nut. The graph below provides general guidelines for the relationship between the rotation angle of the flow rate adjusting screw and the no-load discharge rate.

However: $Q=q \times N \times 10^{-3}$
Q : No-load Discharge Rate Q ℓ /min
q : Volume cm³/rev
N : Revolution Speed min^{-1}



Note)
The values indicated above are at maximum pump discharge volume with the flow volume adjusting screw at the 0°position.
The broken line shows the flow volume adjustment range lower limit value.

4 Pressure Adjustment Pressure is increased by clockwise (rightward) rotation of the discharge rate adjusting screw, and decreased by counterclockwise (leftward) rotation.
Loosen the lock nut before making adjustments. After adjustment is complete, re-tighten the lock nut.

5 Factory Default P-Q Settings (Standard Model)
- Flow Rate Setting = Maximum flow rate for model as indicated in the catalog
- Pressure Setting = Pressure shown in table below

6 Thrust Screw and Stopper
The thrust screw and stopper are precision adjusted at the factory during assembly. Never touch them.
See callouts 15/43 and 15/38 in the VDC-1A and 2A/3A cross-section diagrams on pages B-33 and B-34.

7 An unload circuit is required when the motor is started under condition λ – Δ. Contact your agent about the unload circuit.

8 Initial Operation Before operating the pump for the first time, put the pump discharge side into the no-load state and then repeatedly start and stop the motor to bleed all air from inside the pump and the suction piping. After confirming that the pump is discharging oil, continue the no-load operation for at least 10 minutes to discharge all the air from the circuit. Provide an air bleed valve in circuits where it is difficult to bleed air before startup.

9 Sub Plate
Use the table below for to specify a sub plate type when one is required.

Factory Default Pressure Settings MPa{kgf/cm²}
2 : 3.5{35.7}
3 : 3 {30.6}
4 : 5 {51 }
5 : 7 {71.4}

10 Foot Mounting
For a double pump with VDC-3 foot mounting, the foot mounting kit and pump are sold as a set. When only the mounting feet are required, pump mounting bolts, washers and other parts are sold together as the Foot Mounting Kit.
See page B-36 for detailed dimensions.

11 For the hydraulic operating fluid, use type ISO VG32 or equivalent (viscosity index of at least 90) for pressures of 7MPa or lower, and type ISO VG68 or equivalent (viscosity index of at least 90) for pressures greater than 7MP.

12 The operating temperature range is 15 to 60°C. When the oil temperature at startup is 15°C or less, perform a warm-up operation at low pressure until the oil temperature reaches 15°C. Use the pump in an area where the temperature is within the range of 0 to 60°C.

13 Suction pressure is -0.03 to +0.03MPa (-0.3 to +0.3kgf/cm²), and the suction port flow rate should be no greater than 2m/sec.

14 Avoid pulley, gear, and other drive systems that impart a radial or thrust load on the end of the pump shaft.
Mount the pump so its pump shaft is oriented horizontally.

15 Provide a suction strainer with a filtering grade of about 100μm (150 mesh). For the return line to the tank, use a 25μm line filter.

16 Manage hydraulic operating fluid so contamination is maintained at class NAS10 or lower. Take care to avoid contamination with water and other foreign matter, and watch out for discoloration. Whitish fluid indicates that air has contaminated the fluid, and brownish fluid indicates the fluid is dirty.

17 Contact your agent about using water- and glycol-based hydraulic operating fluids.

18 At startup, repeat the inching operation (start-stop) to bleed air from the pump and pipes.

(Continued on following page)

Sub Plate Number

Pump Model No.	Sub Plate Number	Motor (kW)
VDC-1A-1A*-20	MVD-1-115-10	0.75 to 1.5
	MVD-1-135-10	2.2 to 3.7
VDC-1A-2A*-20	MVD-1-115Y-10	0.75 to 1.5
	MVD-1-135Y-10	2.2 to 3.7
VDC-2A-*A*-20	MVD-2-135-10	2.2 to 3.7
	MVD-2-160-10	5.5
VDC-2A-2A*-20	MVD-2-160Z-10	5.5

Note) See pages B-17 and B-18 for detailed dimensions.

19 Equip an air bleed valve in circuits where it is difficult to bleed air before startup. See page C-13 for more information.

20 To ensure proper lubrication of the pump's rubbing surfaces, supply oil to the interior of the pump before starting operation.

21 When centering the pump shaft, eccentricity with the motor shaft should be no greater than 0.05mm. Use a pump mounting base of sufficient rigidity.
The angle error should be no greater than 1°.

Understanding Model Numbers

Single Pump

VDC – 2 A – 1 A 2 – 20

- Design number
- Pressure adjustment range
  2: 1.5 to 3.5MPa {15.3 to 35.7kgf/cm²}
  3: 2 to 7MPa {20.4 to 71.4kgf/cm²}
  4: 5 to 10.5MPa {51 to 107kgf/cm²}
  5: 7 to 14MPa {71.4 to 143kgf/cm²}
  Note: Ring size: In the case of 2, maximum setting pressure is 7Mpa (71.4kgf/cm²).
- Flow characteristics A: Constant discharge type
- Ring size

at 1800min⁻¹

Ring size	VDC-1	VDC-2	VDC-3
1	30 ℓ/min	54 ℓ/min	120 ℓ/min
2	40 ℓ/min	70 ℓ/min	–

- Mounting method
  A: Foot type mounting B: Flange type mounting
- Pump size
  1, 2, 3
- Pump Type: VDC Series High-pressure Variable Discharge Rate Vane Pump

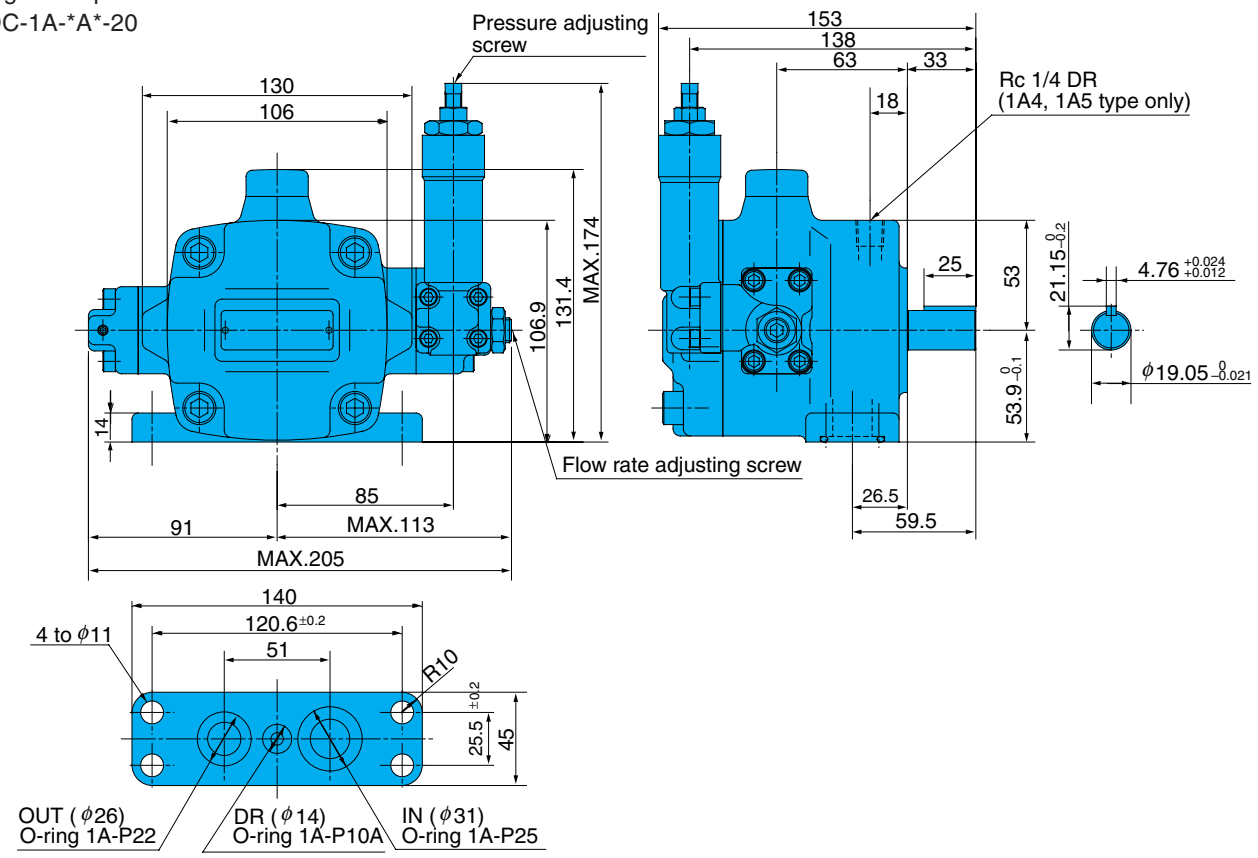
Double Pump

VDC – 1 2 A – 1 A 5 – 2 A 3 – 20

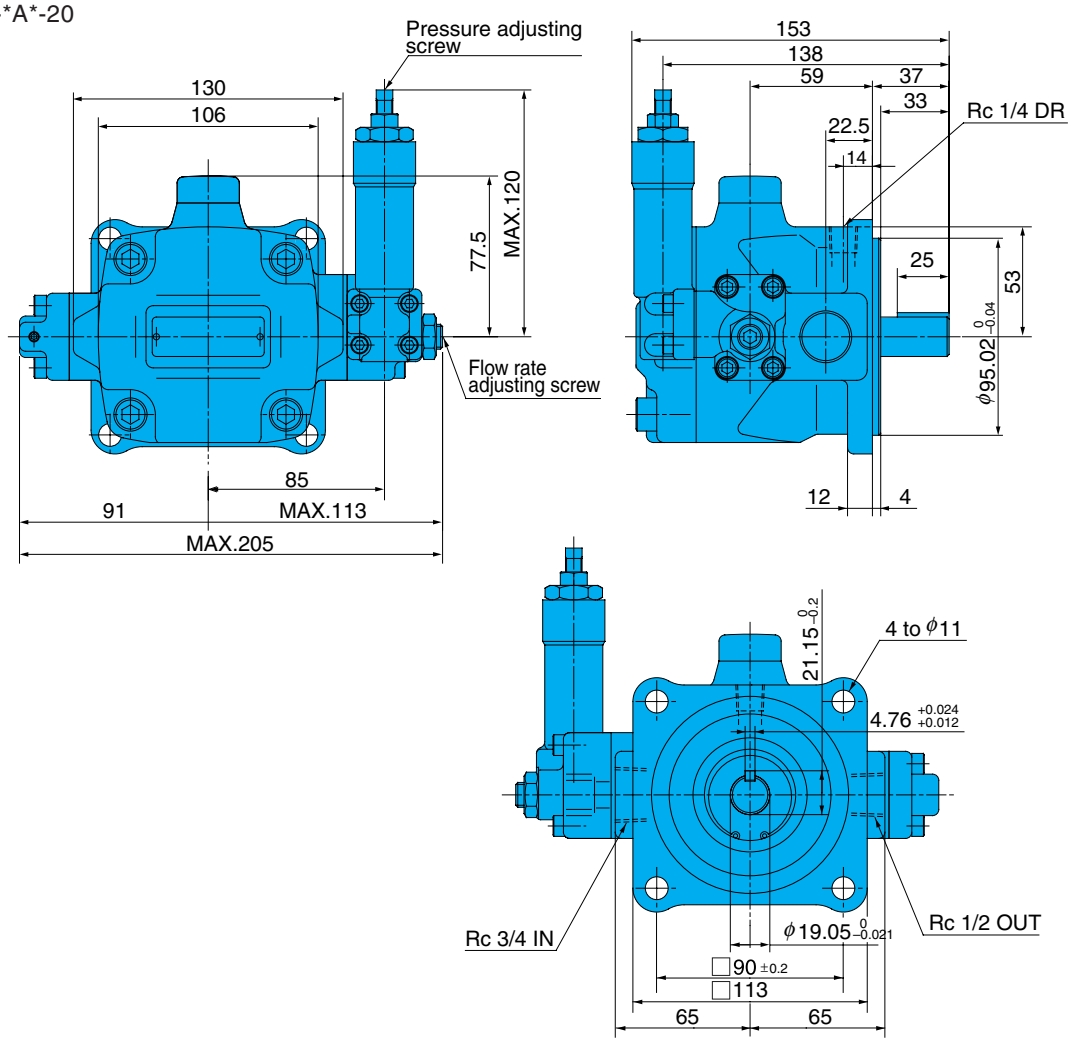
- Design number
- Shaft side pressure adjustment range
  3: 2 to 7MPa {20.4 to 71.4kgf/cm²}
  5: 7 to 14MPa {71.4 to 143kgf/cm²}
- Shaft side flow rate characteristics A: Constant discharge rate type
- Shaft side ring size 1, 2
  (Size 1 only for VDC-3)
- Head side pressure adjustment range 3, 5
- Head side flow rate characteristics A: Constant discharge rate type
- Head side ring size 1, 2
- Mounting method
  A: Foot type mounting B: Flange type mounting
- Shaft side pump size 1, 2, 3
- Head side pump size 1, 2
- Pump Type: VDC Series High-pressure Variable Discharge Rate Vane Pump

Installation Dimension Drawings

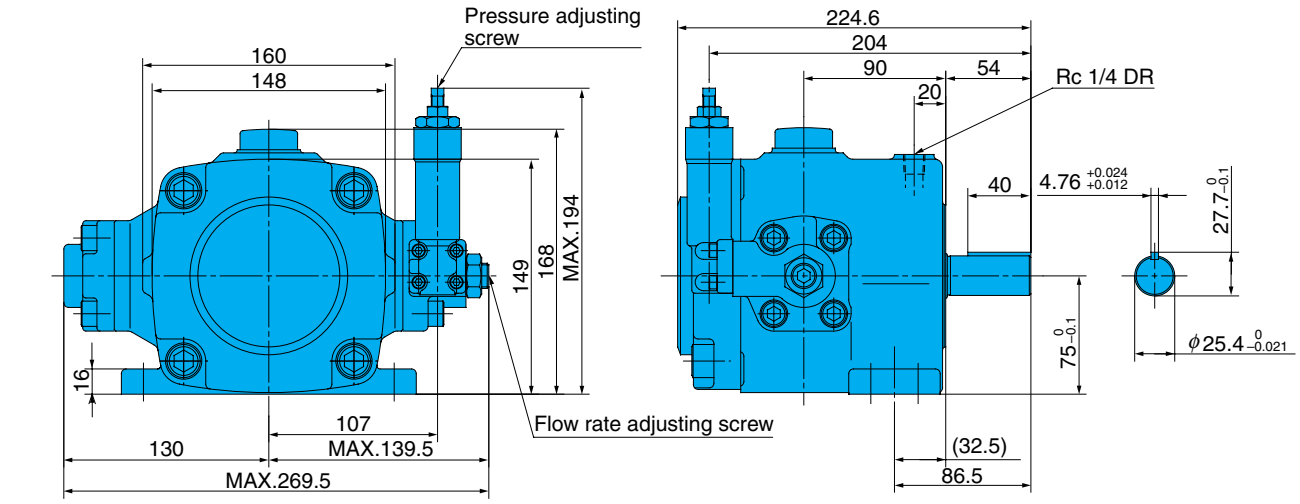
Single Pump
VDC-1A-*A*-20

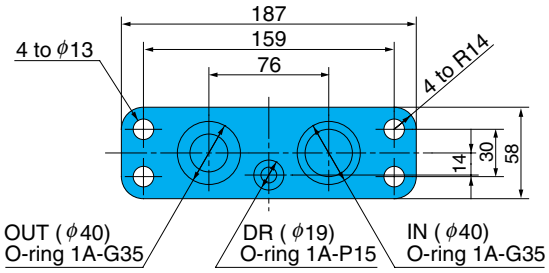


VDC-1B-*A*-20



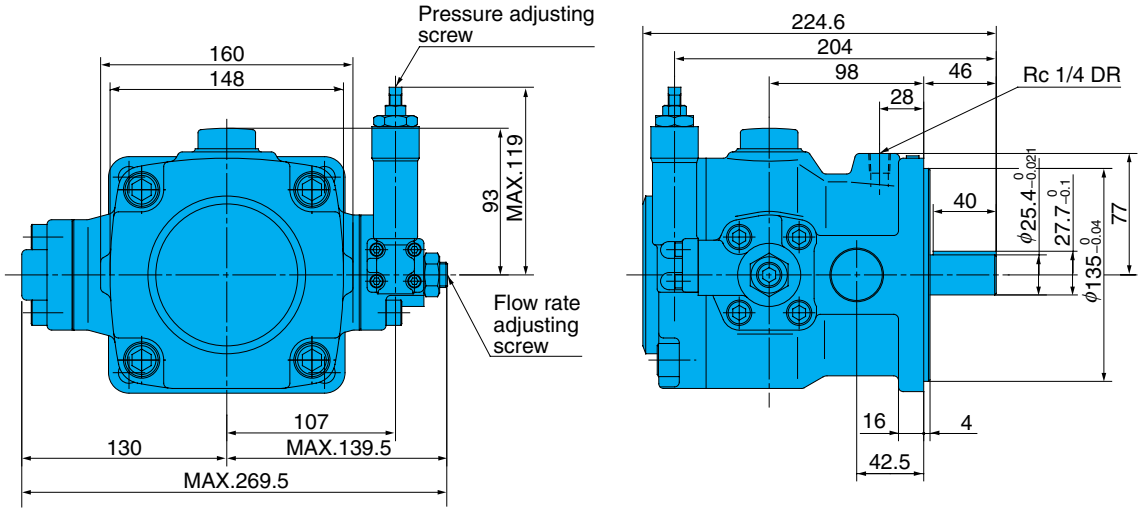
VDC-2A-*A*-20

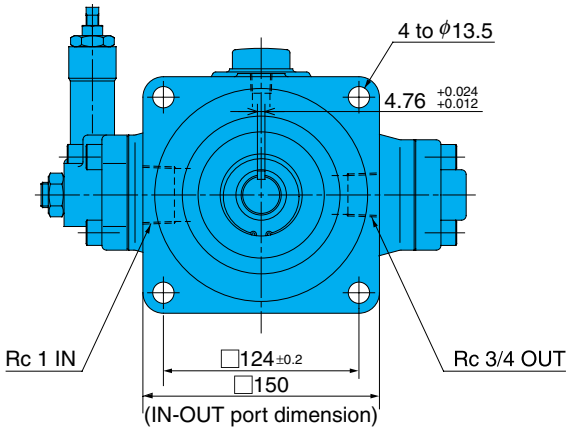




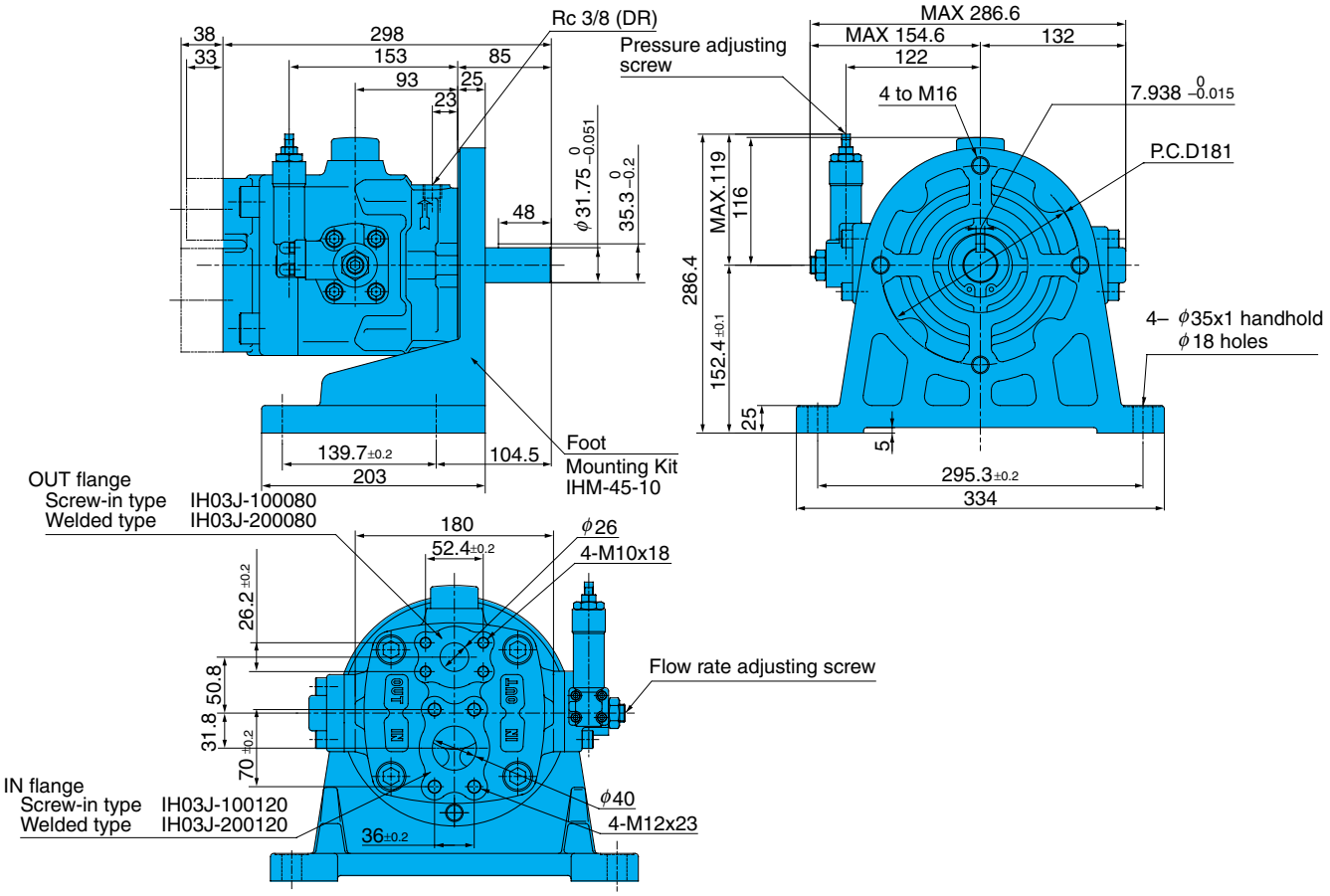
Note)
O-ring 1A-** refers to JIS B2401-1A-**.

VDC-2B-*A*-20

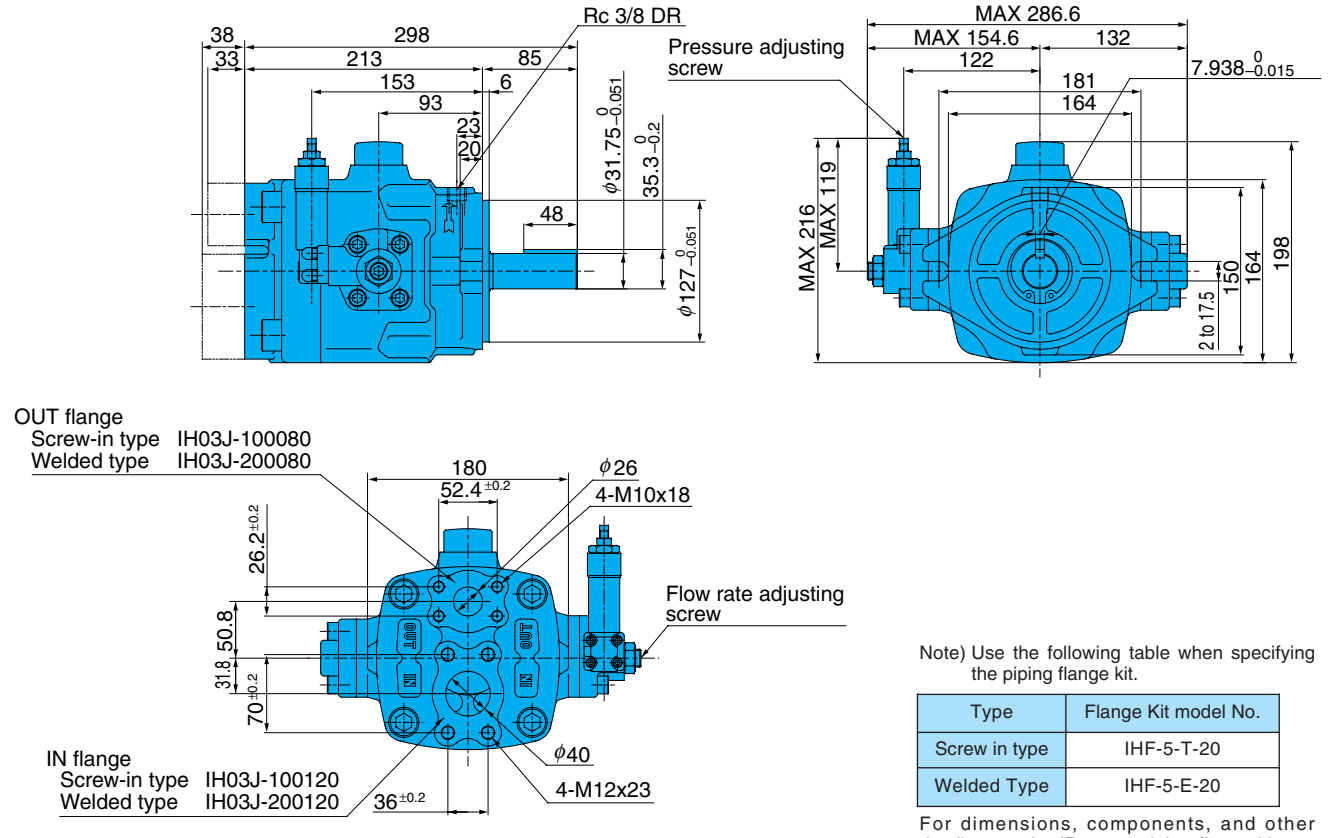




VDC-3A-1A*-20



VDC-3B-1A*-20



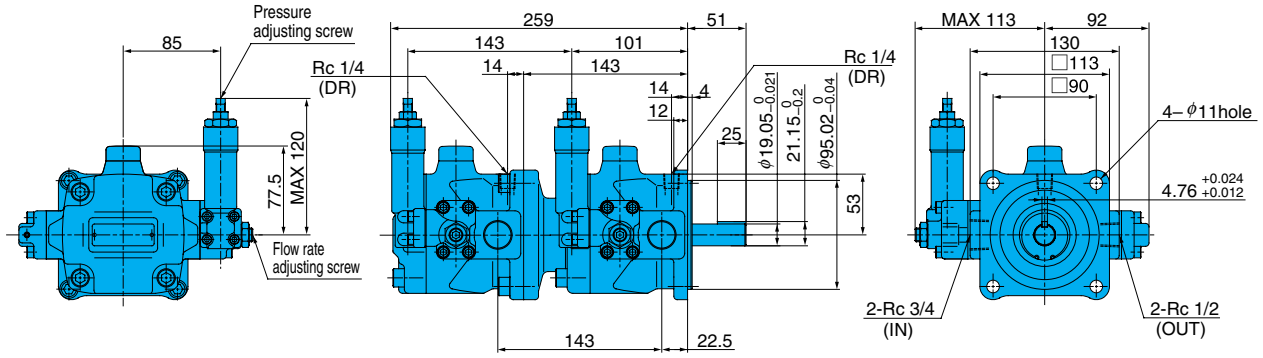
Note) Use the following table when specifying the piping flange kit.

Type	Flange Kit model No.
Screw in type	IHF-5-T-20
Welded Type	IHF-5-E-20

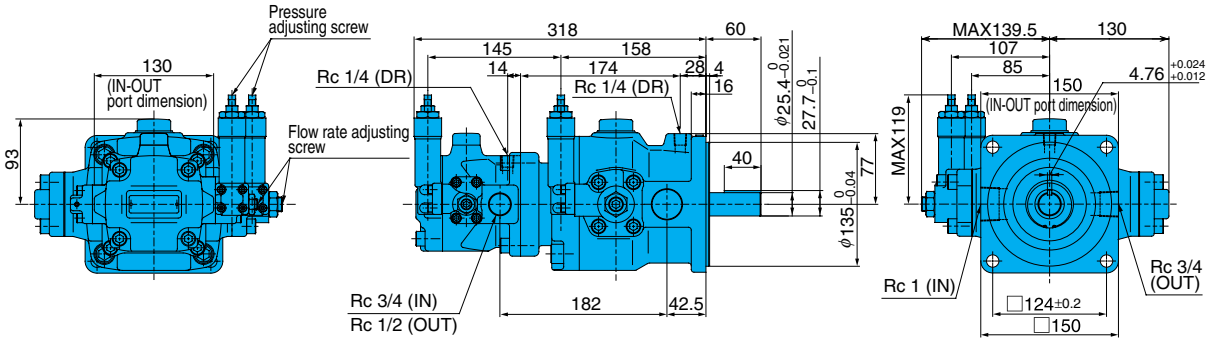
For dimensions, components, and other details, see the IP pump piping flange kits on pages C-10 and C-11.

Double Pump

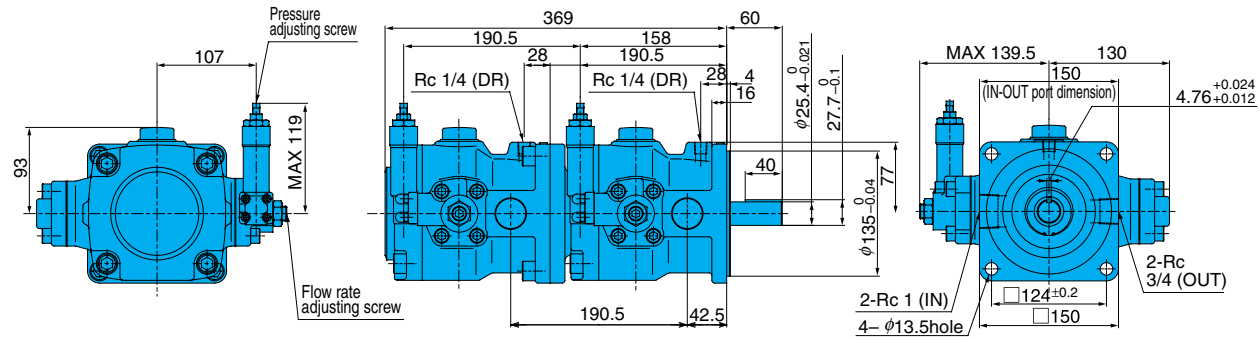
VDC-11B-*A*-*A*-20



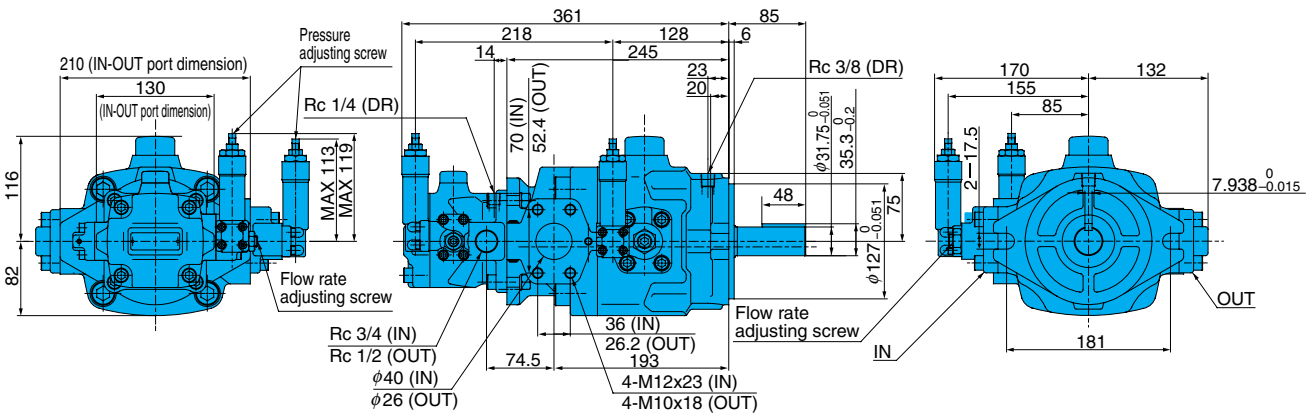
VDC-12B-*A*-*A*-20



VDC-22B-*A*-*A*-20



VDC-13B-*A*-*A*-20

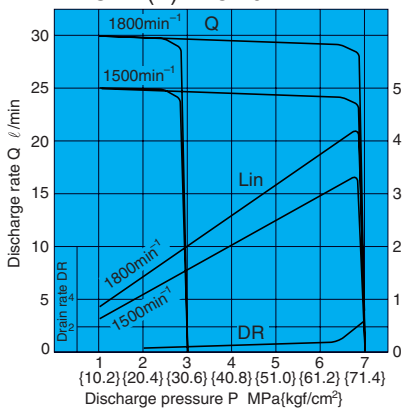


Note) 1. VDC-**A has the foot mounting kit shown on page B-36 installed.
2. Rc-* previously was PT*.

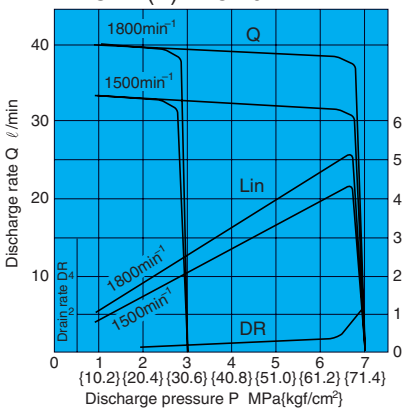
Performance Curves

Typical characteristics at hydraulic operating fluid kinematic viscosity of 32 mm²/s

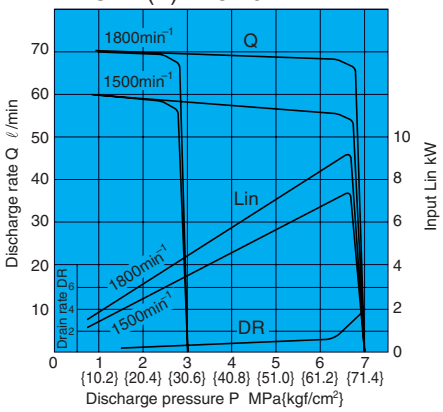
VDC-1A(B)-1A3-20



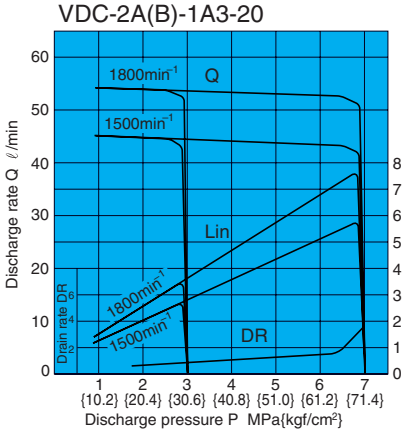
VDC-1A(B)-2A3-20



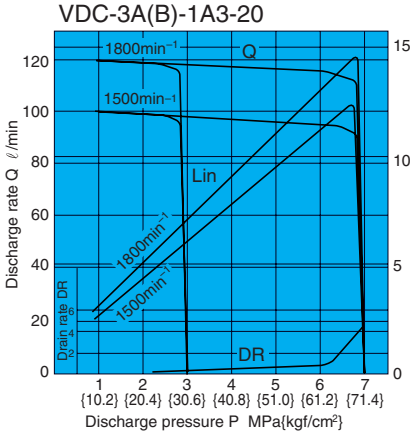
VDC-2A(B)-2A3-20



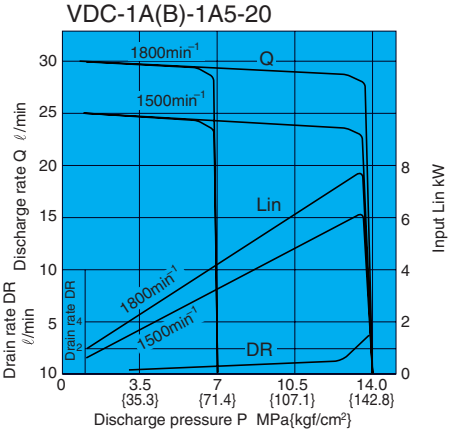
VDC-2A(B)-1A3-20



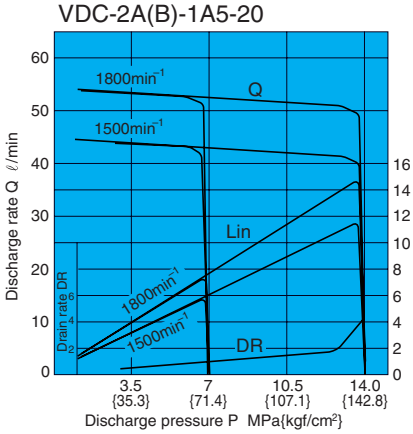
VDC-3A(B)-1A3-20



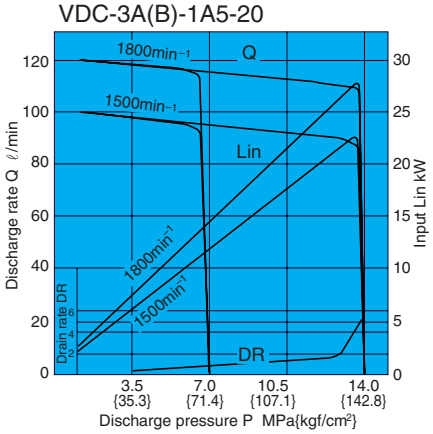
VDC-1A(B)-1A5-20



VDC-2A(B)-1A5-20

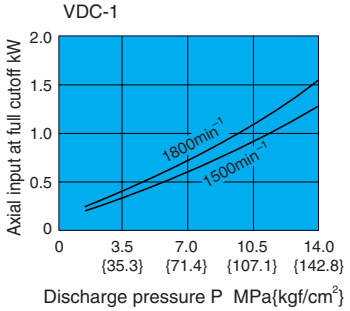


VDC-3A(B)-1A5-20

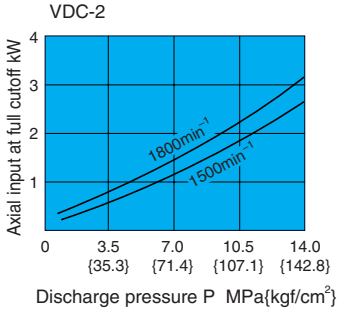


Axial input at full cutoff

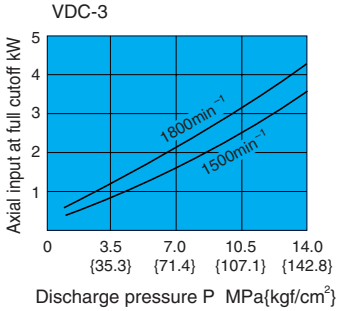
VDC-1



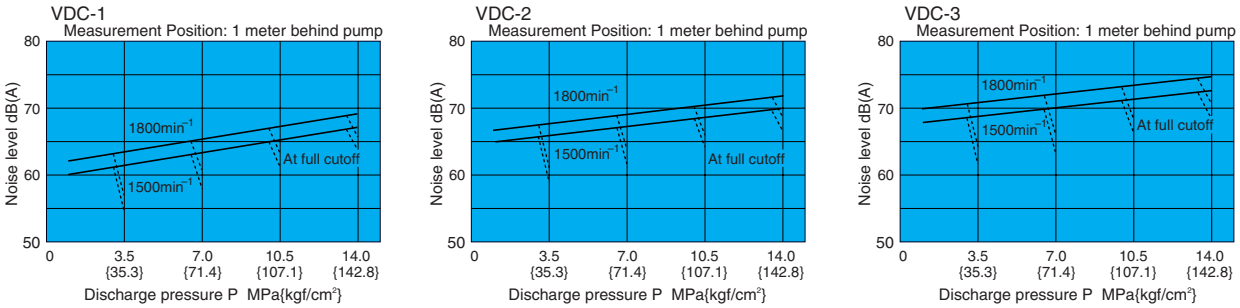
VDC-2



VDC-3

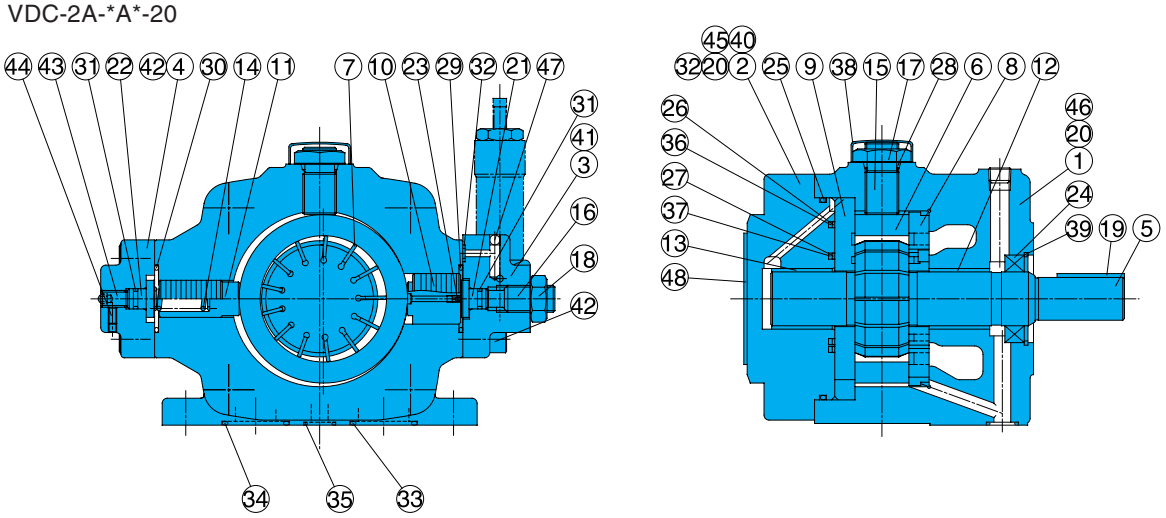


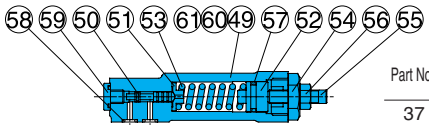
Noise Characteristics



Cross-sectional Drawing

VDC-1A-*A*-20
VDC-2A-*A*-20





Seal Component Table (VDC-1*, VDC-2*)

Part No.	Applicable Pump Model No.	VDC-1A-*-20		VDC-2A-*-20	
	Seal Kit Number	VCBS-101A00		VCBS-102A00	
	Part Name	Part Number	Q'ty	Part Number	Q'ty
24	Oil seal	TCV-224211	1	TCN-325211	1
25	O-ring	S85(NOK)	1	1A-G115	1
26	O-ring	AS568-034	1	AS568-150	1
27	O-ring	AS568-026	1	AS568-134	1
28	O-ring	1A-P14	1	1A-P18	1
29	O-ring	1A-P22	1	1A-G35	1
30	O-ring	1A-P20	1	1A-G35	1
31	O-ring	1A-P5	2	1A-P9	2
32	O-ring	1A-P6	4	1A-P7	4
33	O-ring	1A-P25	1	1A-G35	1
34	O-ring	1A-P22	1	1A-G35	1
35	O-ring	1A-P10A	1	1A-P15	1
36	Backup ring	VCB34-101000	1	VCB34-102000	1
37	Backup ring	VCB34-201000	1	VCB34-202000	1
57	O-ring	1A-P14	1	1A-P14	1
58	O-ring	1B-P6(Hs90)	3	1B-P6(Hs90)	3

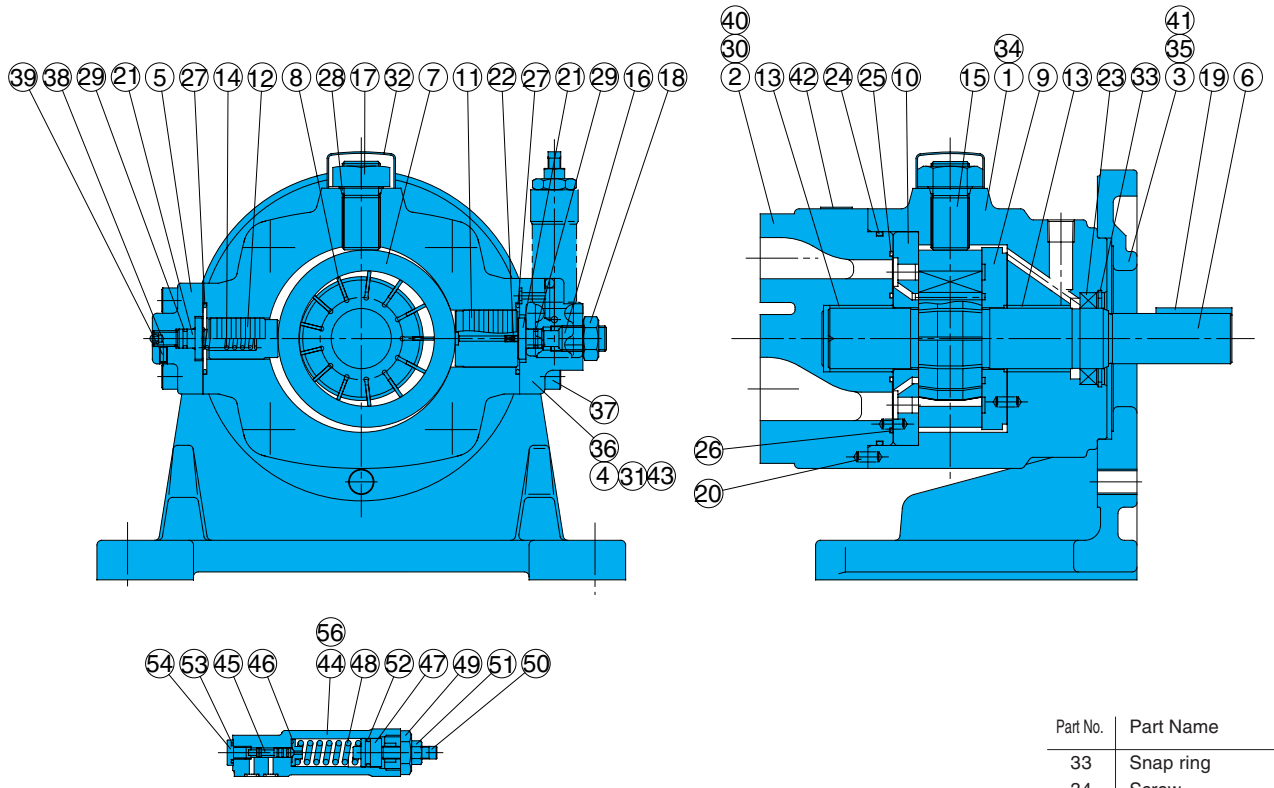
Note) 1. Oil seals are manufactured by Nippon Oil Seal Industry Co. Ltd. (NOK).
2. O-ring 1A-** refers to JIS B2401-1A-**.
3. For VDR-*B-*-20, the seal kit number becomes VDBS-10*B00, without the 33, 24, and 35 O-rings.

Part No.	Part Name
1	Body (1)
2	Body (2)
3	Cover (1)
4	Cover (2)
5	Shaft
6	Ring
7	Vane
8	Plate (S)
9	Plate (H)
10	Piston (1)
11	Piston (2)
12	Bearing
13	Bearing
14	Spring
15	Thrust screw
16	Screw
17	Nut
18	Nut

Part No.	Part Name
19	Key
20	Pin
21	Holder
22	Holder
23	Orifice
24	Oil seal
25	O-ring
26	O-ring
27	O-ring
28	O-ring
29	O-ring
30	O-ring
31	O-ring
32	O-ring
33	O-ring
34	O-ring
35	O-ring
36	Backup ring

Part No.	Part Name
37	Backup ring
38	Cap
39	Snap ring
40	Screw
41	Screw
42	Screw
43	Screw (stopper)
44	Screw
45	Plug
46	Plug
47	Pole
48	Nameplate
49	Valve body
50	Spool
51	Holder
52	Plunger
53	Spring
54	Retainer
55	Screw
56	Nut
57	O-ring
58	O-ring
59	Plug
60	Plug
61	Screw

VDC-3A-1A*-20



Seal Component Table (VDC-3*)

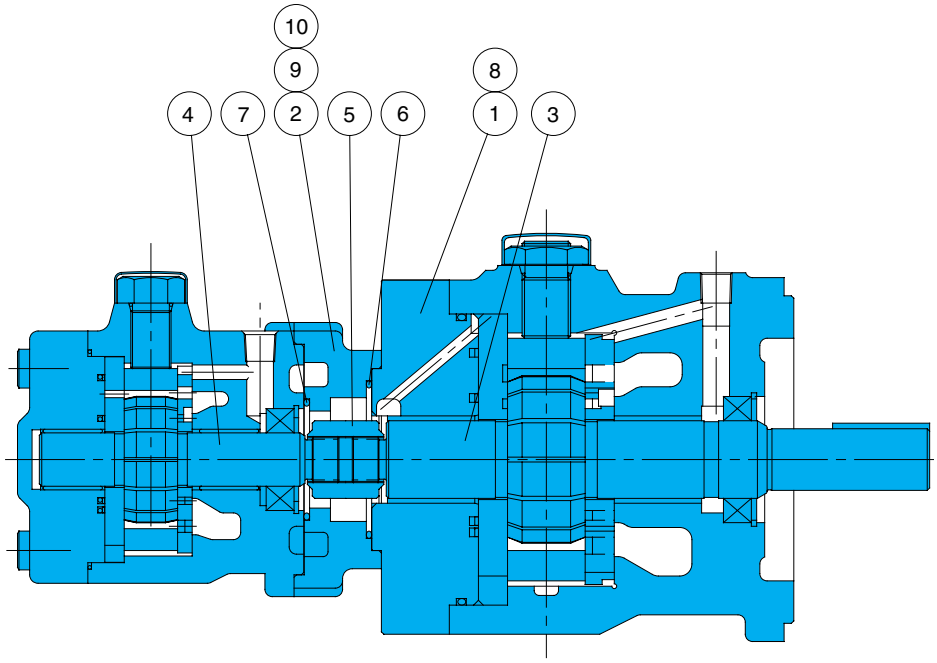
Part No.	Applicable Pump Model No.	VDC-3A(B)-*-20	
	Seal Kit Number	VCBS-103B00	
	Part Name	Part Number	Q'ty
23	Oil seal	TCN-385811	1
24	O-ring	1A-G130	1
25	O-ring	AS568-154(Hs90)	1
26	O-ring	AS568-151(Hs90)	1
27	O-ring	1A-G40	2
28	O-ring	1A-P22	1
29	O-ring	1A-P9	2
30	O-ring	1A-P7	2
31	O-ring	1A-P7	2
52	O-ring	1A-P14	1
53	O-ring	1B-P6(Hs90)	3

Note) 1. Oil seals are manufactured by Nippon Oil Seal Industry Co. Ltd. (NOK).
2. O-ring 1A-** refers to JIS B2401-1A-**.

Part No.	Part Name	Part No.	Part Name
1	Body (1)	17	Nut
2	Body (2)	18	Nut
3	Mounting	19	Key
4	Cover (1)	20	Pin
5	Cover (2)	21	Holder
6	Shaft	22	Orifice
7	Ring	23	Oil seal
8	Vane	24	O-ring
9	Plate (S)	25	O-ring
10	Plate (H)	26	O-ring
11	Piston (1)	27	O-ring
12	Piston (2)	28	O-ring
13	Bearing	29	O-ring
14	Spring	30	O-ring
15	Thrust screw	31	O-ring
16	Screw	32	Cap

Part No.	Part Name
33	Snap ring
34	Screw
35	Screw
36	Screw
37	Screw
38	Screw (stopper)
39	Screw
40	Plug
41	Washer
42	Nameplate
43	Pole
44	Valve body
45	Spool
46	Holder
47	Plunger
48	Spring
49	Retainer
50	Screw
51	Nut
52	O-ring
53	O-ring
54	Plug
55	Plug
56	Screw

VDC Series
Double Pump



Part No.	Part Name
1	Body (2)
2	Body (3)
3	Shaft (S)
4	Shaft (H)
5	Joint
6	O-ring
7	O-ring
8	Screw
9	Screw
10	Screw

Note)
In the case of a double pump, use single pump parts in addition to the 10 parts listed above.

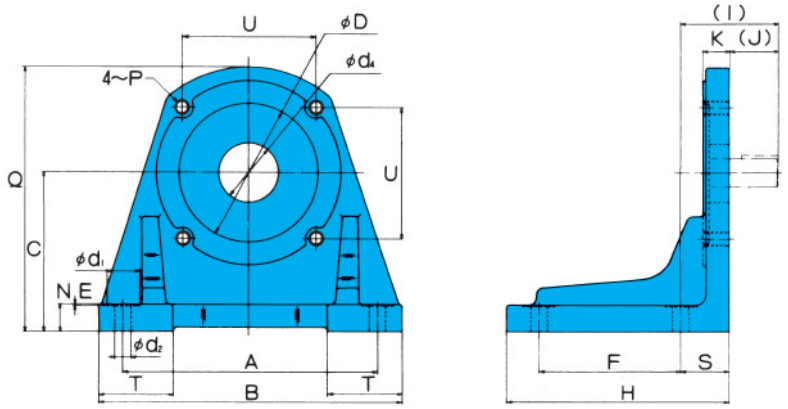
List of Sealing Parts

Part No.	Part Name	VDC-11A-*-*-20		VDC-12A-*-*-20		VDC-22A-*-*-20		VDC-13A-*-*-20	
		Part Number	Q'ty	Part Number	Q'ty	Part Number	Q'ty	Part Number	Q'ty
6	O-ring	—		1A-G60	1	1A-G60	1	—	
7	O-ring	1A-G85	1	1A-G45	1	1A-G60	1	1A-G85	1

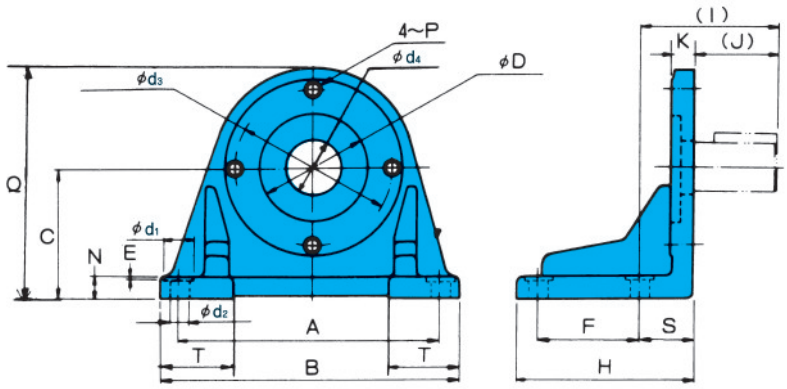
Note)
1. See the description of the single pump for seal parts that are not included in the list.
2. O-ring 1A-** refers to JIS B2401-1A-**.

Foot Mounting Installation Measurement Chart

For VDC-11A, VDC-12 and VDC-22 (for double pump)



For VDC-3A and VDC-13A



Foot Mounting Kit Model No.	Applicable Pump Model No.	Accessories				Dimensions (mm)					
		Bolt	Q'ty	Washer	Q'ty	A	B	C	E	F	H
VCM-11-20	VDC-1 VDC-11	TH-10 × 30	4	WS-B-10	4	171.45	204	107.95	1	95.25	150
VCM-22-20	VDC-2 VDC-12 VDC-22	TH-12 × 35	4	WS-B-12	4	235	267	139.7	1	127	193
IHM-45-10	VDC-3 VDC-13	TB-16 × 40	2	WP-16	2	295.3	334	152.4	1	139.7	203

Foot Mounting Kit Model No.	Dimensions (mm)														Weight kg
	(I)	(J)	K	N	P	Q	S	T	U	φ D	φ d_1	φ d_2	φ d_3	φ d_4	
VCM-11-20	66.5	33	18	18	M10	180	32.5	50	90	95.02	22	11	—	40	6.5
VCM-22-20	84.5	40	20	20	M12	232	44.5	57.5	124	135	22	14	—	40	12.0
IHM-45-10	104.5	60	25	25	M16	259	44.5	61	—	127	35	18	181	86	13.5

Uni-pump Specifications

(CE mark standard compliant)

Single Pump

UVC – 1 A – 2 A 2 – 1.5 – 4 – 30

- Design number
- Number of motor poles: 4(P)
- Motor output (kW)
  0.75, 1.5, 2.2, 3.7
- Pressure adjustment range
  2: 1.5 to 3.5MPa
  {15.3 to 35.7kgf/cm^2}
  3: 2.0 to 7.0MPa
  {20.4 to 71.4kgf/cm^2}
- Flow characteristics A: Constant discharge type
- Ring size
  None: 30 ℓ /min
  2 : 40 ℓ /min
  } at 1800min^{-1}
- A: Foot type mounting
- Pump size 1: VDC-1B(20D)
- Pump Type: VDC Series Uni-pump

Double Pump

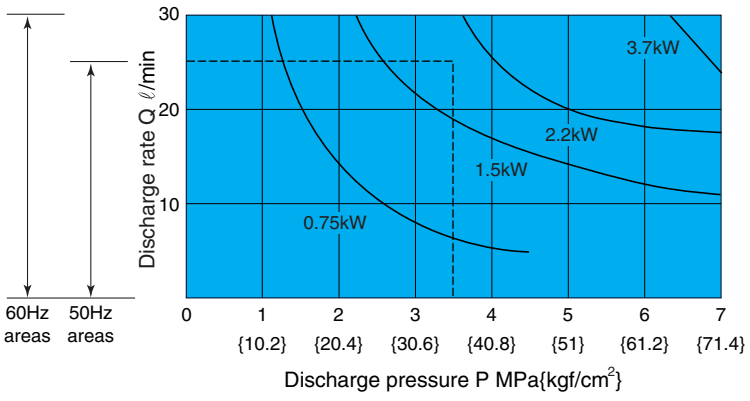
UVC – 11 A – 2 A 2 – 2 A 2 – 3.7 – 4 – 30

- Design number
- Number of motor poles: 4 (P)
- Motor output (kW)
  1.5, 2.2, 3.7
- Shaft side pump pressure adjustment range
  2: 1.5 to 3.5MPa
  {15.3 to 35.7kgf/cm^2}
  3: 2.0 to 7.0MPa
  {20.4 to 71.4kgf/cm^2}
- Shaft side pump flow rate characteristics
  A: Constant discharge type
- Shaft side pump ring size
  None: 30 ℓ /min
  2 : 40 ℓ /min
  } at 1800min^{-1}
- Head side pump pressure adjustment range:
  Same as the shaft side pump
- Head side pump flow rate characteristics
  A: Constant discharge type
- Head side pump ring size
  None: 30 ℓ /min
  2 : 40 ℓ /min
  } at 1800min^{-1}
- A: Foot type mounting
- Pump size 11: VDC-11B (20D)
- Pump Type: VDC Series Uni-pump

Specifications

Model No.	Maximum Working Pressure MPa{kgf/cm^2}	Maximum Flow Rate ℓ /min (A*)		Maximum Flow Rate ℓ /min (2A*)	
		50Hz	60Hz	50Hz	60Hz
UVC- 1A	7{71.4}	25	30	33	39
UVC-11A	7{71.4}	25-25	30-30	33-33	39-39

Motor selection curves



● Selecting a motor

The area under a motor output curve in the graph to the left is the operating range for that motor under the rated output for that motor.

Example:

To find the motor that can produce pressure of 3.5MPa and a discharge rate of 25.0 ℓ /min.

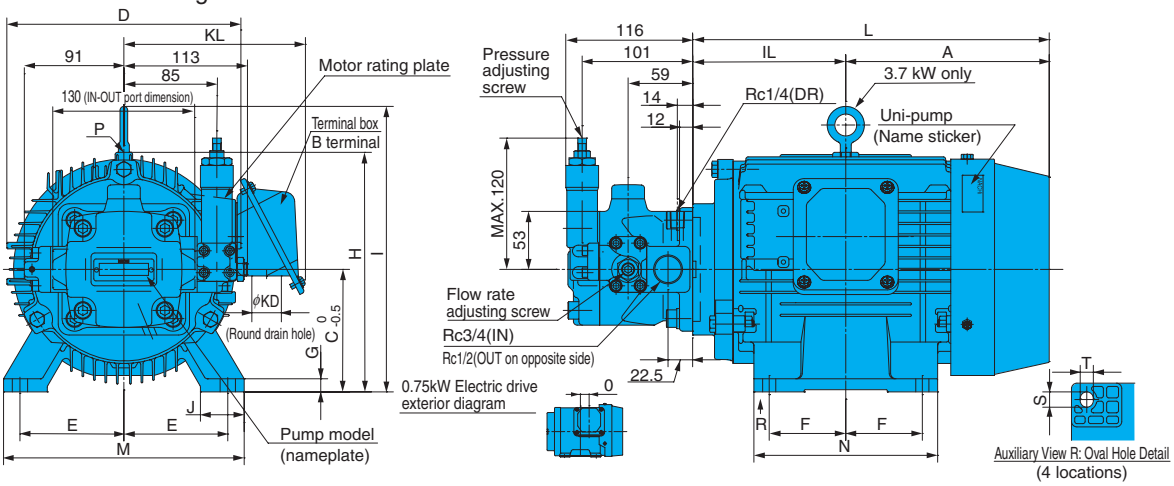
Selection Process

Since the intersection of the two broken lines from a pressure of 3.5MPa and discharge rate of 25.0 ℓ /min intersect in the area under the 2.2kW curve, it means that a 2.2kW motor should be used. In the case of a double pump configuration, select a motor that is larger than the total power required by both pumps.

* Select a uni-pump that has a pressure and flow rate that is within the range of the drive so that the drive will not overload.

Installation Dimension Drawings

UVC-1A

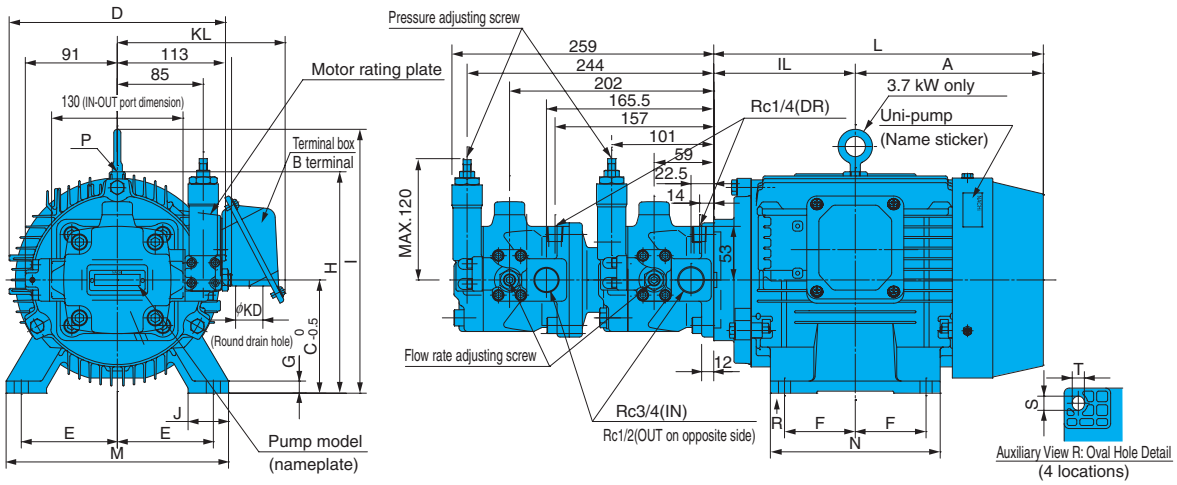


Uni-pump	Motor Dimensions mm																	Frame No.	Output kW (4 poles)	Weight kg
	A	IL	C	D	E	F	G	H	I	J	L	M	N	S ×T	KD	KL	O			
UVC-1A-A2-0.75-4-30	133	105	80	170	62.5	50	4.5	165	–	35	238	165	130	18 × 10	ϕ27	157	27.5	80M	0.75	24
UVC-1A-A2-1.5-4-30	143	118.5	90	198	70	62.5	10	190	–	40	261.5	176	150	12 × 10	ϕ27	159	–	90L	1.5	25.5
UVC-1A-A3-1.5-4-30																				
UVC-1A-2A2-1.5-4-30																				
UVC-1A-A2-2.2-4-30	157.5	133	100	198	80	70	12	200	–	40	290.5	200	168	14 × 12	ϕ27	159	–	100L	2.2	30.5
UVC-1A-A3-2.2-4-30																				
UVC-1A-2A2-2.2-4-30																				
UVC-1A-A3-3.7-4-30	186	140	112	214	95	70	12	–	261	40	326	220	168	14 × 12	ϕ27	166	–	112M	3.7	36.5
UVC-1A-A4-3.7-4-30																				
UVC-1A-2A2-3.7-4-30																				
UVC-1A-2A3-3.7-4-30																				

0.75 to 2.2kW model does not have hangers.

1. Standard drive motor is the fully enclosed fan-cooled B type.
2. Standard voltage for drive motor is 200 VAC, 50/60 Hz or 220 VAC, 60 Hz.
3. Standard terminal box is B terminal (right side viewed from pump).
4. See page A-21 for the characteristics of the drive motor for the unipump (domestic standard 3 rating).

UVC-11A



Uni-pump	Motor Dimensions mm																Frame No.	Output kW (4 poles)	Weight kg
	A	IL	C	D	E	F	G	H	I	J	L	M	N	S ×T	KD	KL			
UVC-11A-A2-A2-1.5-4-30	143	118.5	90	198	70	62.5	10	190	–	40	261.5	176	150	12 × 10	ϕ27	159	90L	1.5	36
UVC-11A-A2-A3-1.5-4-30																			
UVC-11A-A3-A3-1.5-4-30																			
UVC-11A-A2-A2-2.2-4-30	157.5	133	100	198	80	70	12	200	–	40	290.5	200	168	14 × 12	ϕ27	159	100L	2.2	41
UVC-11A-A2-A3-2.2-4-30																			
UVC-11A-A3-A3-2.2-4-30																			
UVC-11A-2A2-2A2-2.2-4-30																			
UVC-11A-A2-A2-3.7-4-30	186	140	112	214	95	70	12	–	261	40	326	220	168	14 × 12	ϕ27	166	112M	3.7	47
UVC-11A-A2-A3-3.7-4-30																			
UVC-11A-A3-A3-3.7-4-30																			
UVC-11A-2A2-2A2-3.7-4-30																			
UVC-11A-2A2-2A3-3.7-4-30																			

No hanger on 1.5 and 2.2 kW models.

1. Standard drive motor is the fully enclosed fan-cooled B type.
2. Standard voltage for drive motor is 200 VAC, 50/60 Hz or 220 VAC, 60 Hz.
3. Standard terminal box is B terminal (right side viewed from pump).
4. See page A-21 for the characteristics of the drive motor for the unipump (domestic standard 3 rating).