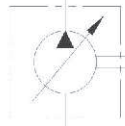
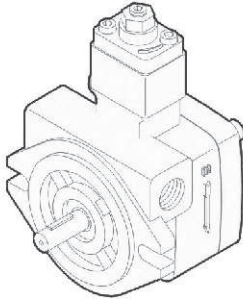
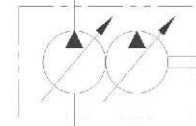
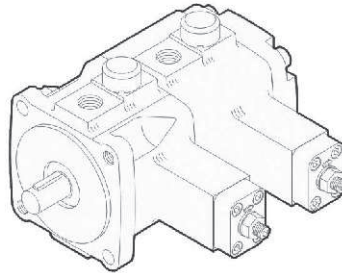


PVF-***



PVDF-**



PVF Ordering Code - Single Pumps

PVF	-12		-70		-11
Series No.	Outlet flow at 3.5bar,1800rpm lpm		Operating pressure range bar		Design No.
PVF Flange mounting	Code	Outlet flow	Code	Pressure range	
	12	12lpm	20	8~20bar	
	20	20lpm	35	15~35bar	
	30	30lpm	55	30~55bar	
	40	40lpm	70	50~70bar	
	Factory setting Qmax.		Factory setting Pmin.		

PVDF Ordering Code - Double Pumps

PVDF	-3		70		-3		70		-11
Series No,	Shaft end pump				Cover end pump				Design No.
	Outlet flow at 3.5bar,1800rpm lpm		Operating pressure range bar		Outlet flow at 3.5bar,1800rpm lpm		Operating pressure range bar		
PVDF Flange mounting	Code	Outlet flow	Code	Pressure range	Code	Outlet flow	Code	Pressure range	11:PT(Rc) 1180:PF(G) 1190:NPT
	3	30lpm	20	8~20bar	3	30lpm	20	8~20bar	
	4	40lpm	35	15~35bar	4	40lpm	35	15~35bar	
	Factory setting Qmax.		55	30~55bar	Factory setting Qmax.		55	30~55bar	
			70	50~70bar			70	50~70bar	
		Factory setting Pmin.				Factory setting Pmin.			

PVF/PVDF Pumps Speed Limits

Minimum speed:800rpm
Maximum speed:1800rpm

PVF/PVDF Pumps Weight

MODEL	Weight kg(ib)
PVF-12-**-11	5(11.01)
PVF-20-**-11	6(13.22)
PVF-30-**-11	9(19.82)
PVF-40-**-11	9(19.82)
PVDF-3**-3**-11	17(37.44)
PVDF-4**-4**-11	17(37.44)

PV(D)F / TPF Operating Data

ROTARY DIRECTION.

Clockwise rotation viewed from shaft end is standard.

FLUIDS PERMISSIBLE.

When working pressure lower than 70 bar , hydraulic oil with a viscosity ranging from 30~50 cSt(ISO VG32).
When working pressure higher than 71bar ,hydraulic oil with a viscosity ranging from 50~70 cSt(ISO VG68)
at 40°C is recommended.(ISO VG32) at 40 °C is recommended.

DRAIN PORT PIPING.

Drain connection must be piped directly to tank and below the oil level with a back pressure not exceed 0.3 bar.

OIL TEMPERATURE RANGE.

Oil temperature range should be between 15~60°C for continuous operation and should be higher than 7°C at starting.

ALIGNMENT AND INSTALLATION OF PUMP.

The shaft alignment for pump and electric motor shall be limited to 0.05mm TIR. and 1 degree angular error.

INLET PORT PRESSURE.

Inlet port pressure should be -0.3 bar to +0.3 bar .

FLOW ADJUSTMENT.

The flow will be reduced when the flow adjusting screw is turned clockwise and increased when anti-clockwise.

PRESSURE ADJUSTMENT.

The pressure will be increased when the pressure adjusting screw is turned clockwise and reduced when anti-clockwise.

P-Q CHARACTERISTICS (EX-WORK SET)

Flow setting:The max. flow as catalogue shown.

Pressure setting:The min. operating pressure range.

SLIDE SCREW.

The slide screw is non-adjustable and set at factory.

Unauthorized persons cannot tamper with the desired setting.

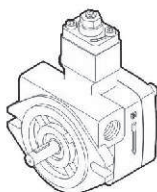
CAUTIONS FOR STARTING.

Start up the pump under No-Load condition and repeat to start and stop the motor several times to extract the air from inside of the pump and piping.Then keep a 10 minutes continuous running for a better de-airing.

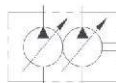
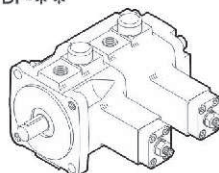
PEAK-PRESSURE.

The peak pressure is 140 bar for code * 2 & * 3,and 210 bar for A4 & A5.

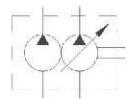
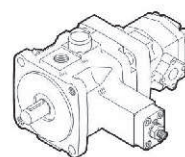
PVF-***



PVDF-***

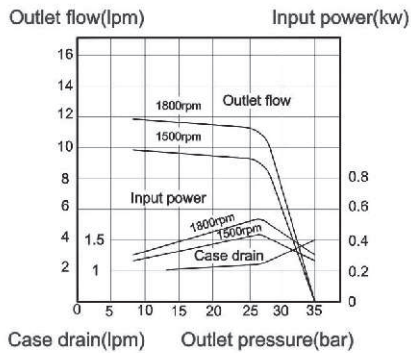


TPF-VL***-GH*

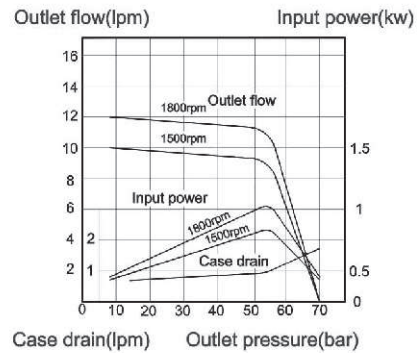


PVF Series Pumps Curve

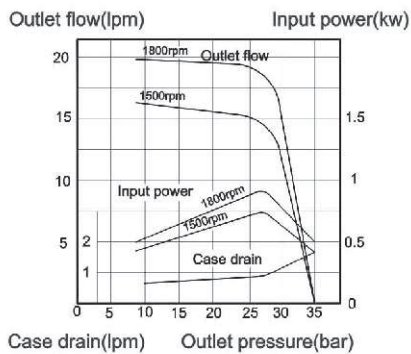
PVF-12-35-11



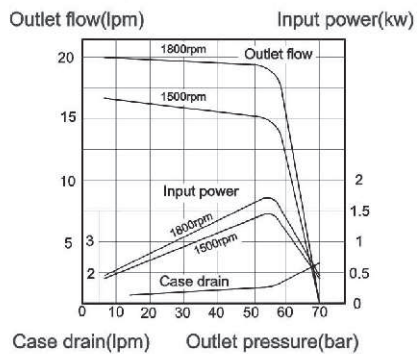
PVF-12-70-11



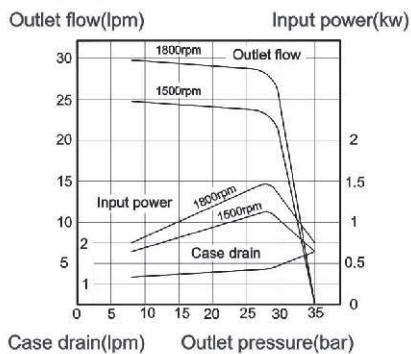
PVF-20-35-11



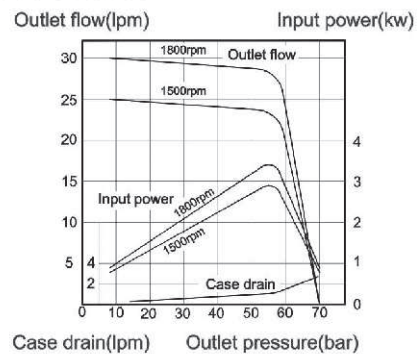
PVF-20-70-11



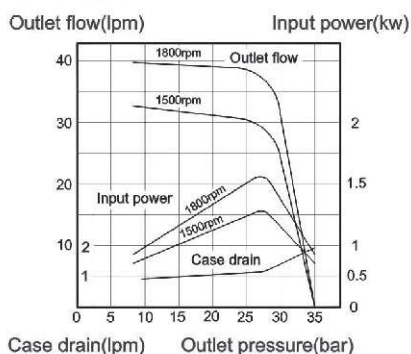
PVF-30-35-11



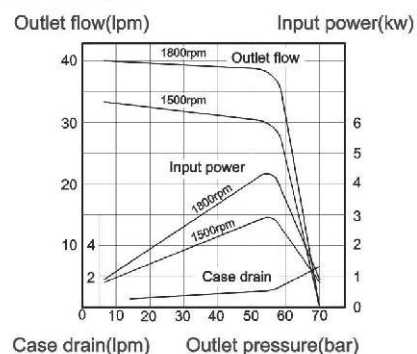
PVF-30-70-11



PVF-40-35-11



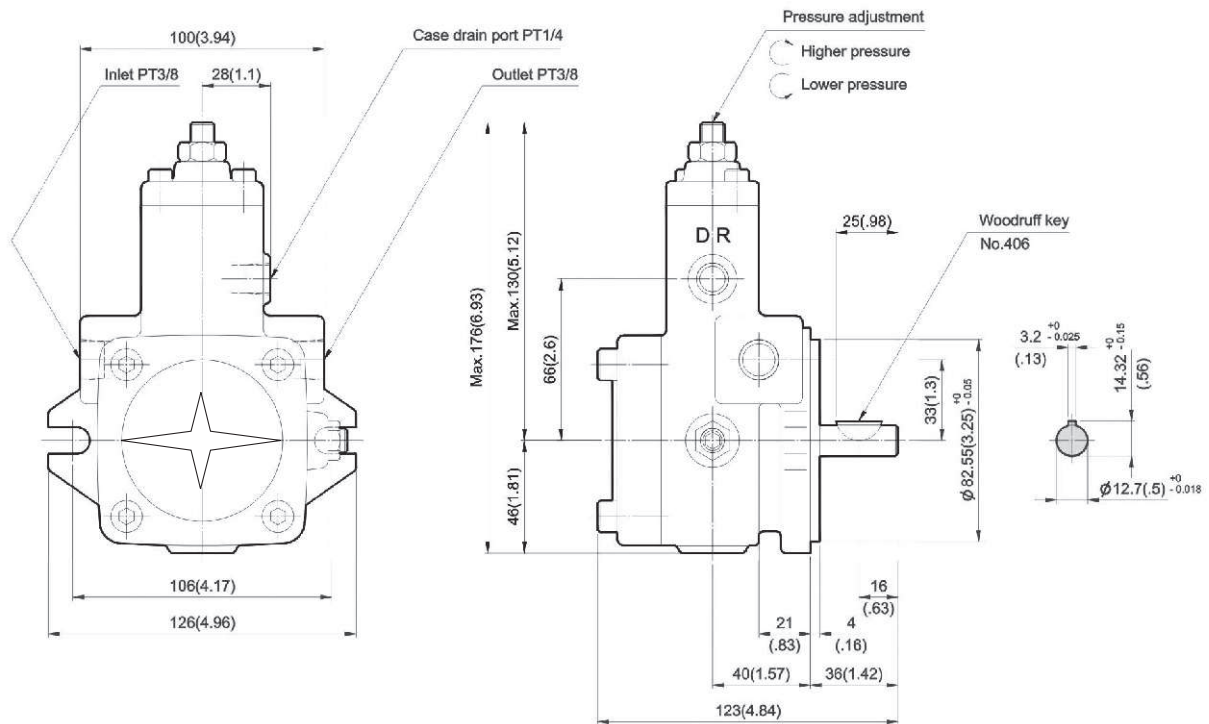
PVF-40-70-11



DIMENSIONS

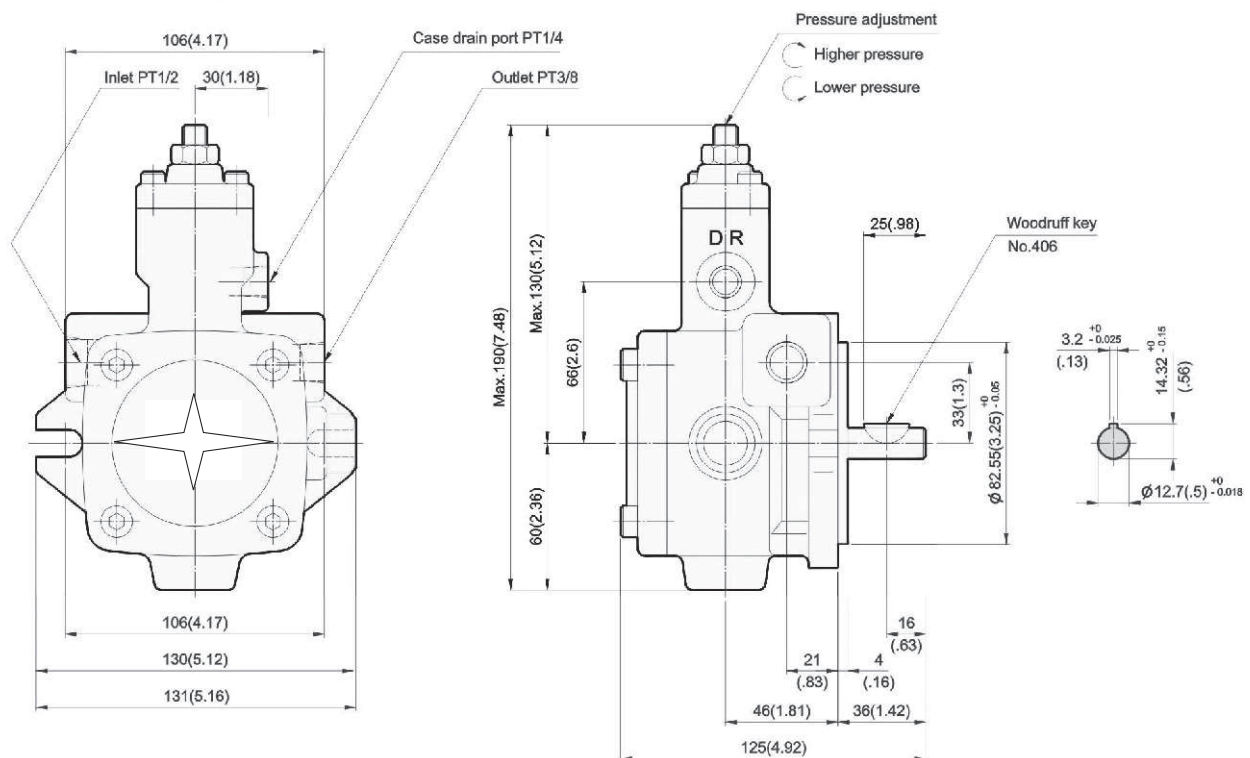
MILLIMETERS(INCHES)

PVF-12- * *-11



Note: Above type, without flow adjustment equipment.

PVF-20- * *-11

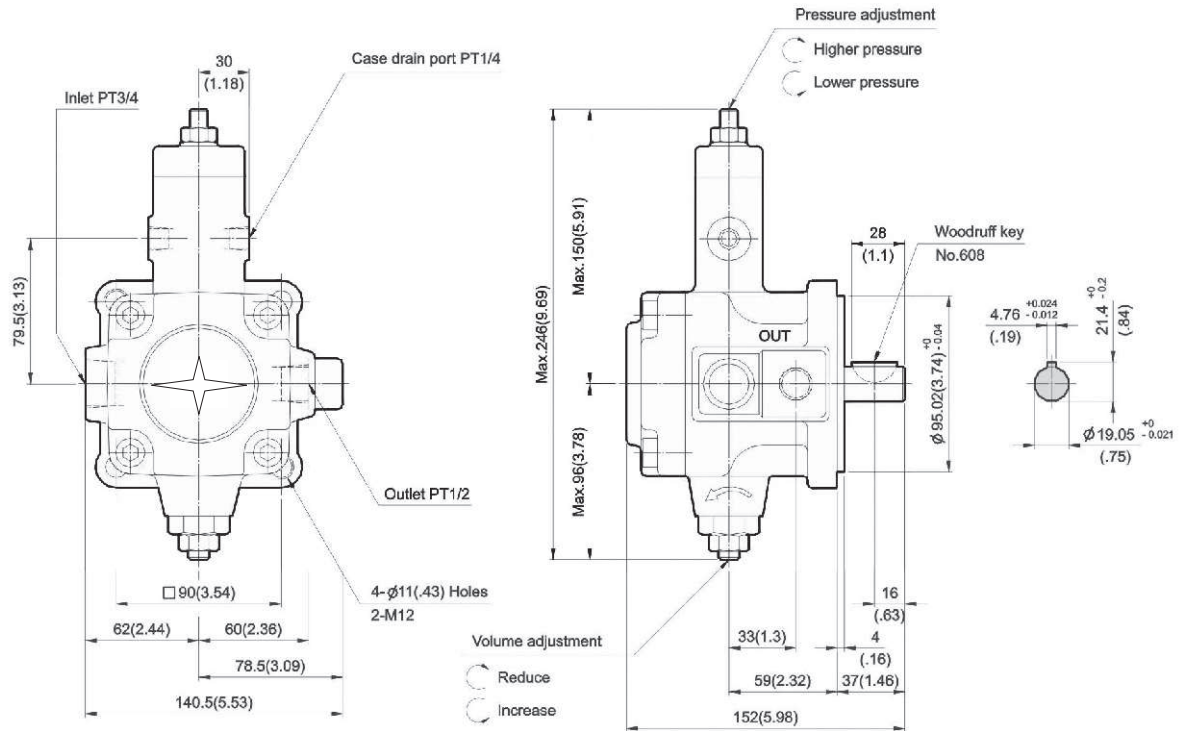


Note: Above type, without flow adjustment equipment.

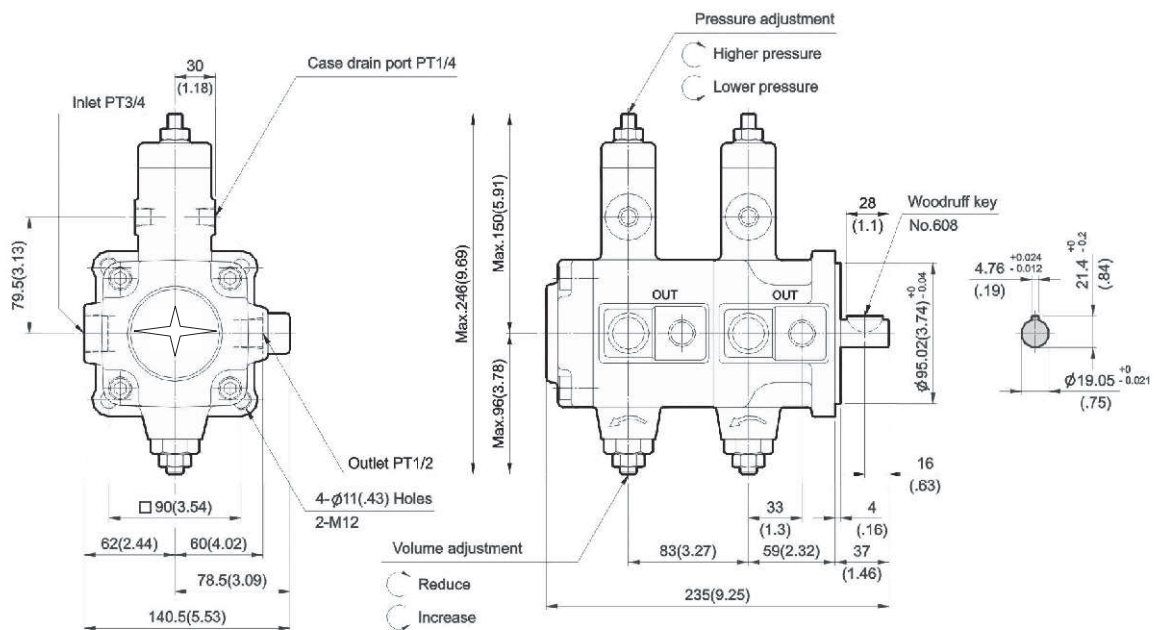
DIMENSIONS

MILLIMETERS(INCHES)

PVF-30(40)-* *-11



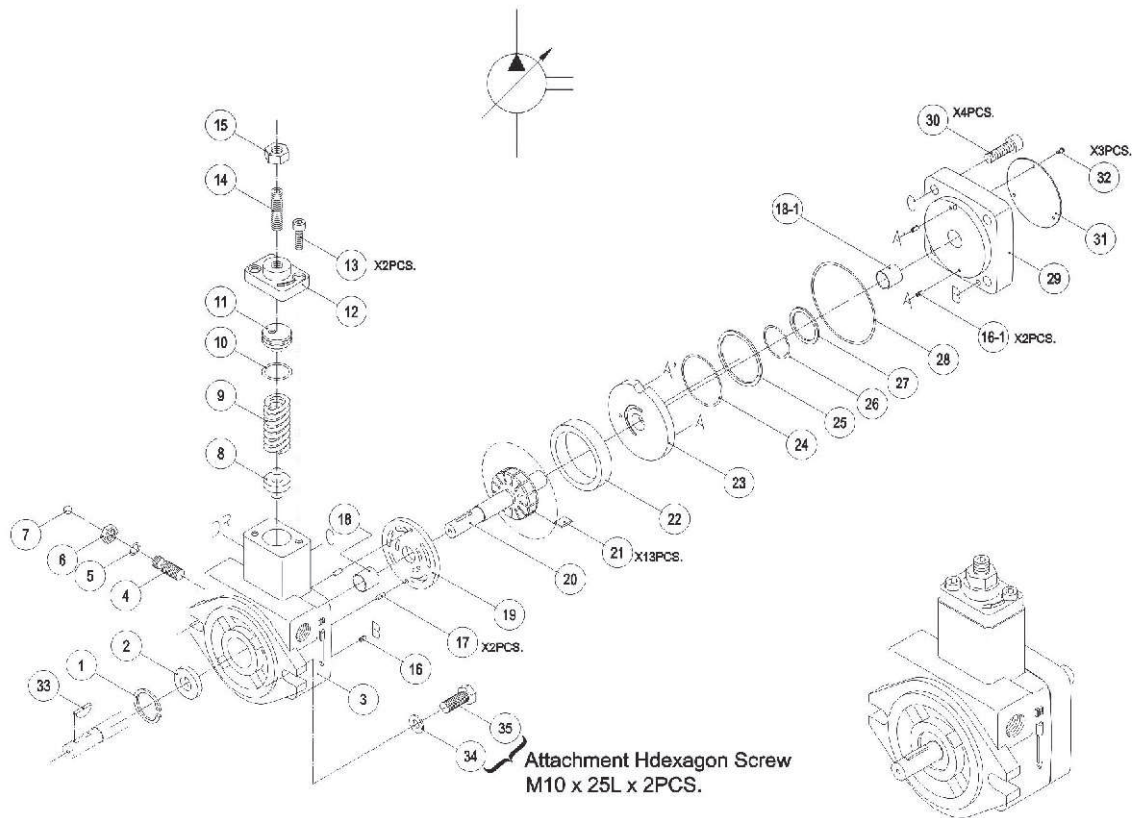
PVDF-* *-11



ASSEMBLY AND PARTS LIST

PVF-12-**-**-11

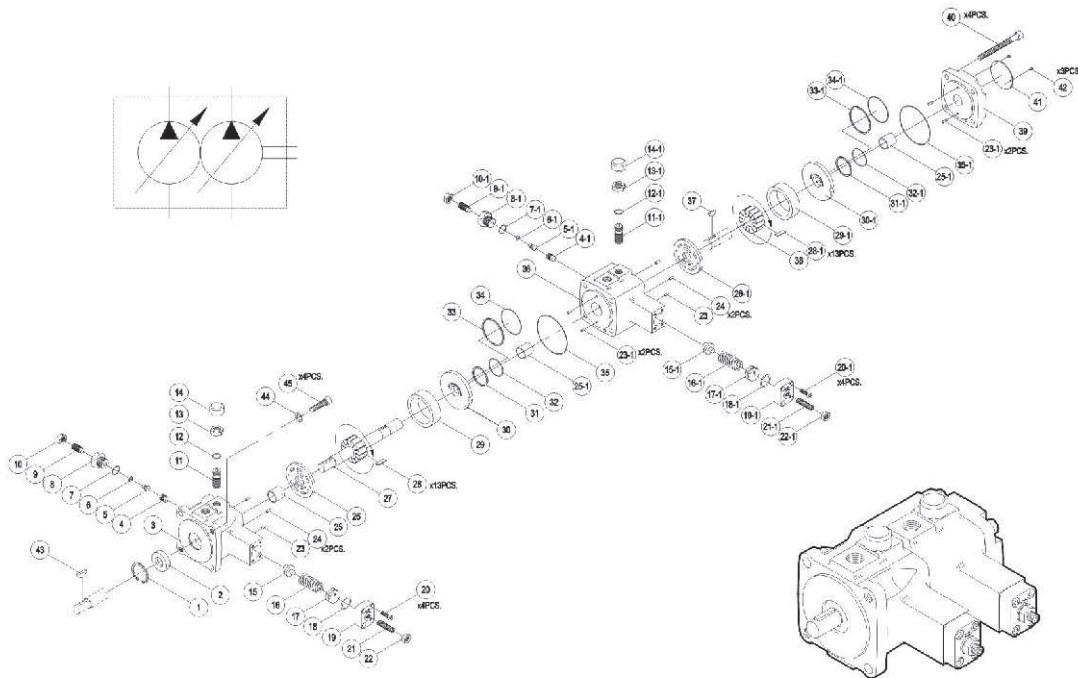
A4



No.	Part Name	Specification	Q'ty	No.	Part Name	Specification	Q'ty
				18-1	Engine Bush	DIADO(JAPAN)DD1415	1
				18	Engine Bush	DIADO(JAPAN)DD1415	1
				17	Straight Pin	φ3x8	2
35	Hexagon Screw	M10xP1.5x25L	2	16-1	Spring Pin	φ3x8	2
34	Washer	M10	2	16	Spring Pin	φ3x8	1
33	Woodruff Key	NO.406	1	15	Hexagon Nut	M10xP1.5	1
32	Fixing Screw		3	14	Socket Set Screw	M10xP1.5x35L	1
31	Name Plate		1	13	Socket Head Cap Screw	M6xP1.0x20L	2
30	Socket Head Cap Screw	M8xP1.25x30L	4	12	Cover		1
29	Cover		1	11	Spring Retainer		1
28	O-Ring	1A-S71	1	10	O-Ring	1A-P20	1
27	Endless Back-up Ring		1	9	Spring		1
26	O-Ring	AS568-023	1	8	Piston		1
25	Endless Back-up Ring		1	7	Plastic Plug		1
24	O-Ring	AS568-031	1	6	Hexagon Nut		1
23	Thrust Plate		1	5	O-Ring	1A-P8	1
22	Cam Ring		1	4	Slide Screw		1
21	Vanes		13	3	Pump Body		1
20	Rotorshaft		1	2	Shaft Seal	TCV 14287	1
19	Port Plate		1	1	Retainer Ring	R28	1

ASSEMBLY AND PARTS LIST

PVDF



No.	Description	Specification	Q'ty
1	Retainer Ring	R42	1
2	Shaft Seal	TCV 224211	1
3	Pump Body		1
4	Piston		2
5	Piston		2
6	O-Ring	1A-P5	2
7	O-Ring	1A-P22	2
8	Thrust Screw		2
9	Socket Set Screw	M12xP1.75x25L	2
10	Hexagon Nut	M12xP1.75	2
11	Slide Screw		2
12	O-Ring	1A-P14	2
13	Hexagon Nut	M16xP1.0	2
14	Cap		2
15	Piston		2
16	Spring		1
16-1	Spring		1
17	Spring Retainer		2
18	O-Ring	1A-P22A	2
19	Cover		2
20	Skt. HD. Cap Scr.	M6xP1.0x20L	8
21	Socket Set Screw	M10xP1.5x35L	2
22	Hexagon Nut	M10xP1.5	2
23	Spring Pin	φ4x10	2
23-1	Spring Pin	φ4x10	4
24	Straight Pin	φ4x10	4
25	Engine Bush	DIADO(JAPAN)DD2225	1
25-1	Engine Bush	DIADO(JAPAN)DD2225	2

No.	Description	Specification	Q'ty
26	Port Plate		2
27	Rotorshaft		1
28	Vaness		26
29	Cam Ring		1
29-1	Cam Ring		1
30	Thrust Plate		2
31	O-Ring	AS568-030	2
32	Endless Back-up Ring		2
33	O-Ring	AS568-035	2
34	Endless Back-up Ring		2
35	O-Ring	1A-S85	2
36	Pump Body		1
※ 4 & 4-1; 26 & 26-1 is same kits (Without spring 16-1)			
37	Woodruff Key	NO.406	1
38	Rotor		1
※ 23 & 23-1; 28 & 28-1 is same kits (Without Cam-ring 29-1)			
39	Cover		1
40	Skt. HD. cap Scr.	M10xP1.5x110L	4
41	Name Plate		1
42	Fixing Screw		3
43	Woodruff Key	NO.608	1
44	Spring Washer	M10	4
45	Skt. HD. cap Scr.	M10xP1.5x30L	4
※ 44~45 are Accessories.			