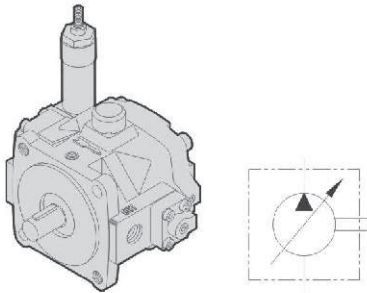
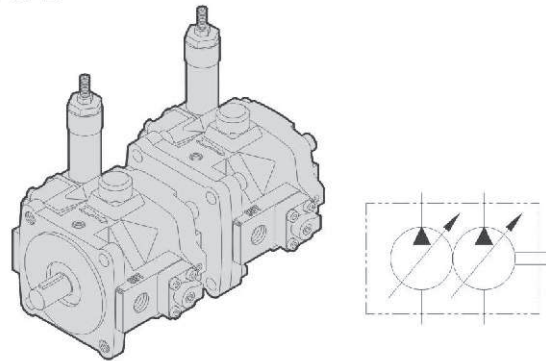


VP5F(D) Operating Data

VP5F



VP5FD



High Efficiency Operation With High Pressure.

Under the conditions of pressure 140 bar, the 5 pump is stable and highly efficient. Due to our improvement designs "THREE POINT RING" support systems.

No Vibration And Quiet.

The cam ring is specifically designed to have a special curve so the noise level (dB) is very low, even in the high pressure operations.

Sharp Characteristics And Quick Response.

Quick response displayed in both "ON-OFF" control of operation, due to use special design "BIAS PISTON" stable and accurate operation can be attained in an instant.

Stable Flow.

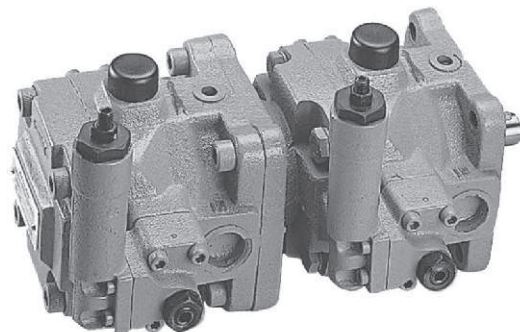
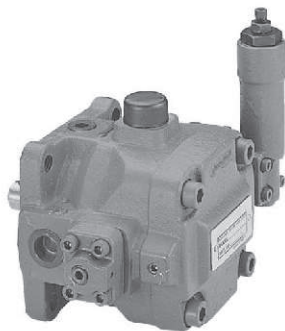
Due to use new design "PRESSURE BALANCE MECHANISM" the output flow pressure control systems, the output flow is very stable even in the high pressure ranges.

Energy Saving Type.

Power loss has been reduced further by application of our highly advanced precision machining technology to assure the same high efficiency performance. As the "VP5" series with many new mechanisms of our improvement designs. And the power loss at the "dead head" has been reduced by a large degree.

Easy Testing And Maintenance.

Pressure adjusting screw, and the volume adjusting screw were located at the same side, and ensure easy testing at a glance.



VP5F Ordering Code - Single Pumps

VP5F	-A		5		-50
Series No.	Outlet flow at 3.5bar,1800rpm lpm		Operating pressure range bar		Design No.
VP5F Flange mounting	Code	Outlet flow	Code	Pressure range	50:PT(Rc) 5080:PF(G) 5090:NPT
	A	30lpm	2	15~35bar	
	★B	40lpm	3	20~70bar	
	Factory setting Qmax.		4	50~105bar	
			5	70~140bar	
			Factory setting Pmin.		

PS: ★ code B(40lpm),maximum pressure 70 bar.

VP5FD Ordering Code - Double Pumps

VP5FD	-A		5		-A		5		-50
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		
VP5FD Flange mounting	Code	Outlet flow	Code	Pressure range	Code	Outlet flow	Code	Pressure range	50:PT(Rc) 5080:PF(G) 5090:NPT
	A	30lpm	2	15~35bar	A	30 lpm	2	15~35bar	
	★B	40lpm	3	20~70bar	★B	40 lpm	3	20~70bar	
	Factory setting Qmax.		4	50~105bar	Factory setting Qmax.		4	50~105bar	
			5	70~140bar			5	70~140bar	
			Factory setting Pmin.				Factory setting Pmin.		

PS: ★ code B(40lpm),maximum pressure 70 bar.

VP5F/VP5FD Pumps Speed Limits

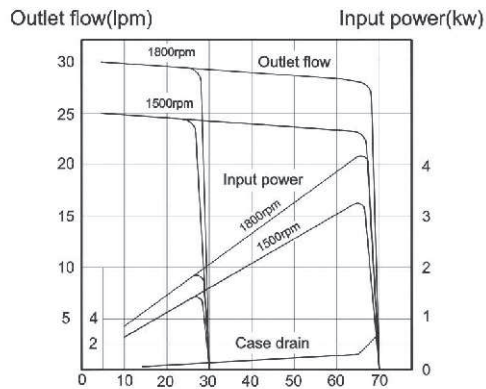
Minimum speed:800rpm
Maximum speed:1800rpm

VP5F/VP5FD Pumps Weight

MODEL	Weight kg(ib)
VP5F- * *-50	9.5(20.93)
VP5FD- * *- * *-50	27(59.47)

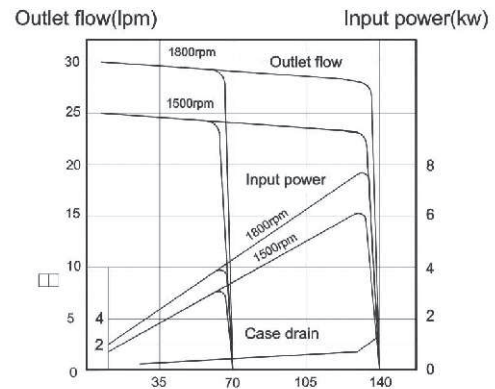
VP5F SERIES PUMPS CURVE

VP5F-A3-50



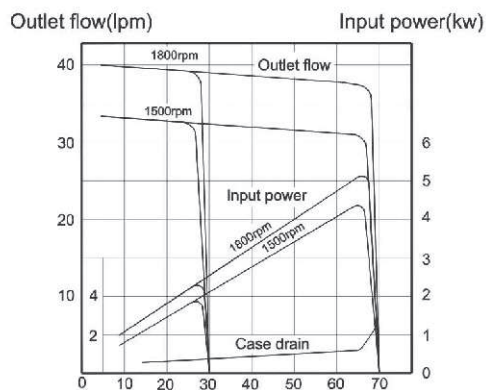
Case drain(lpm) Outlet pressure(bar)

VP5F-A5-50

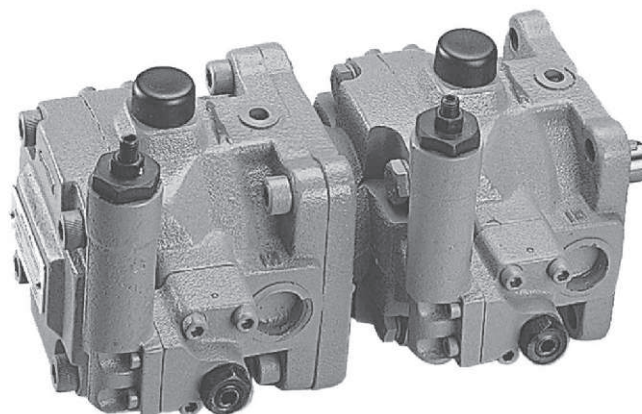
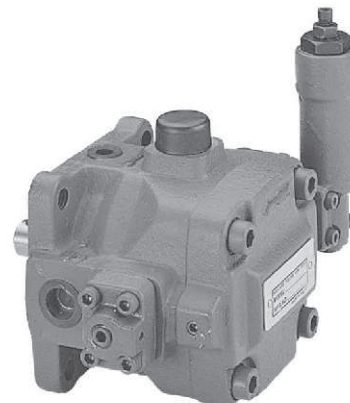


Case drain(lpm) Outlet pressure(bar)

VP5F-B3-50



Case drain(lpm) Outlet pressure(bar)

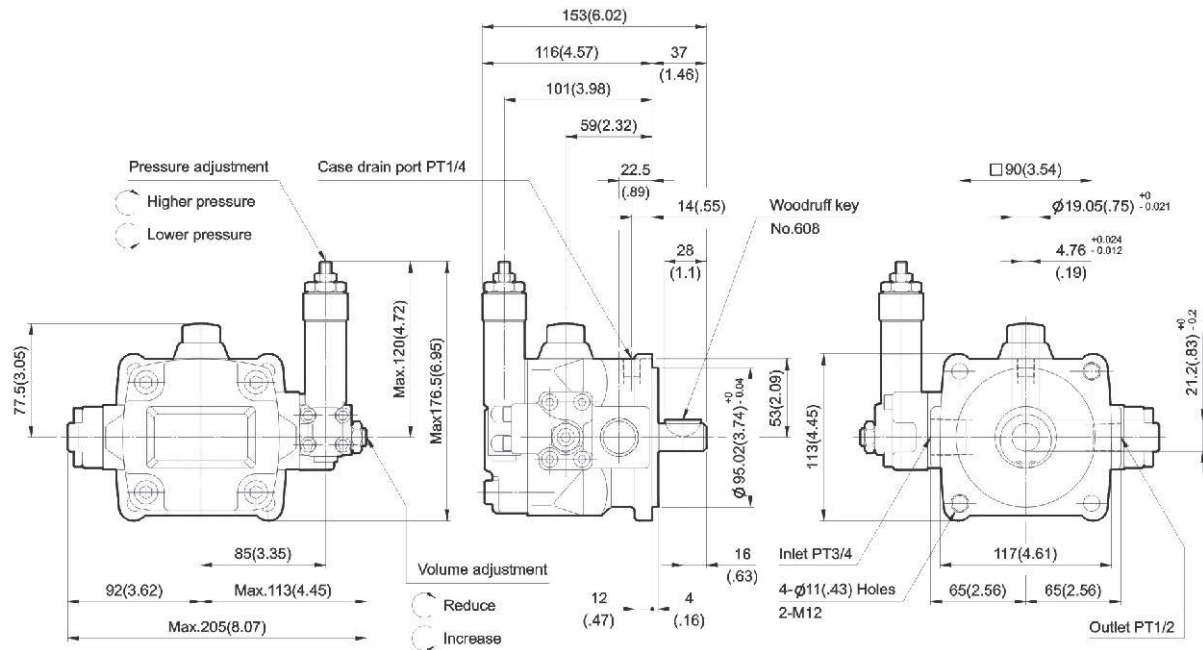


Variable Vane Pumps

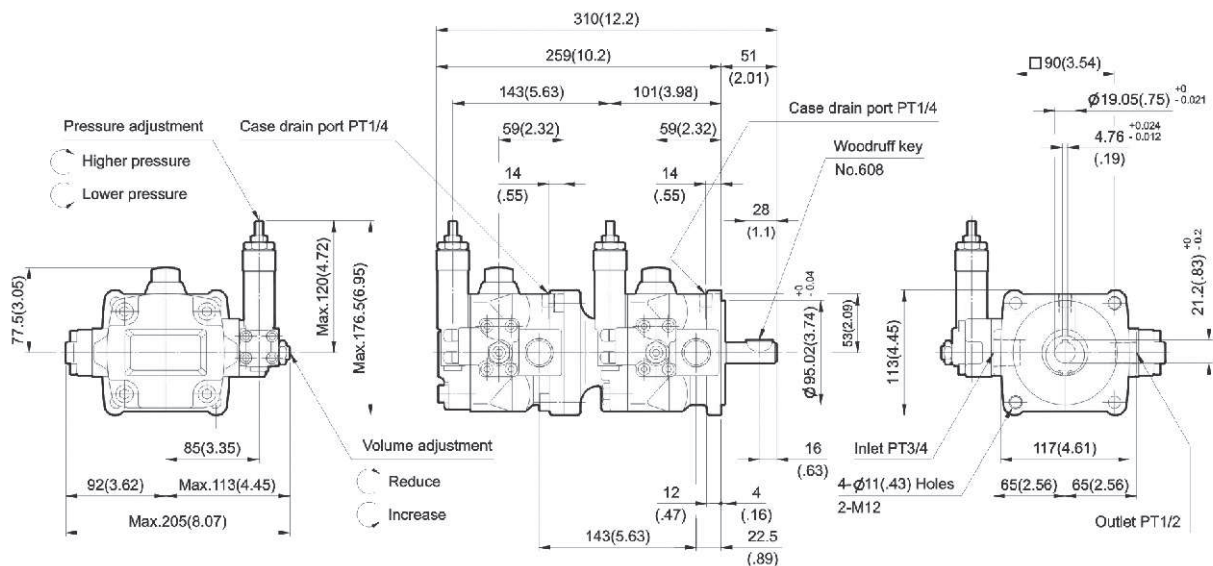
DIMENSIONS

MILLIMETERS(INCHES)

VP5F- * * -50

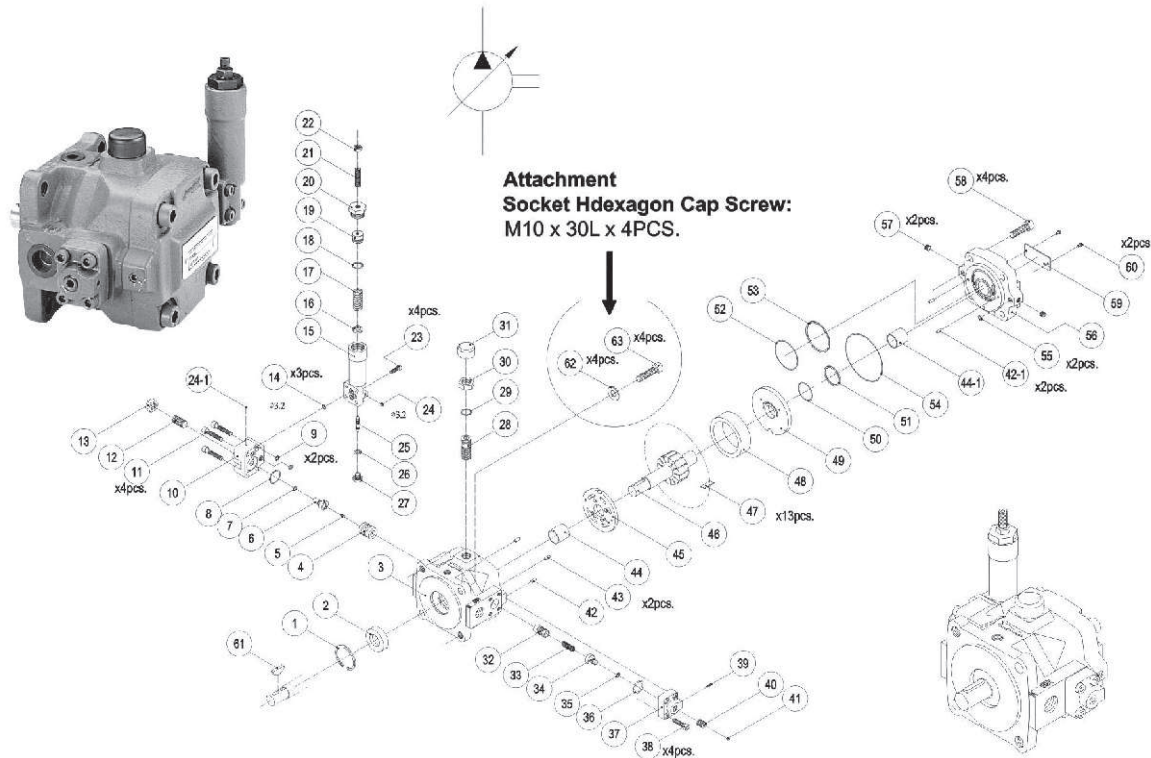


VP5FD- * * - * -50



ASSEMBLY AND PARTS LIST

VP5F-***-50

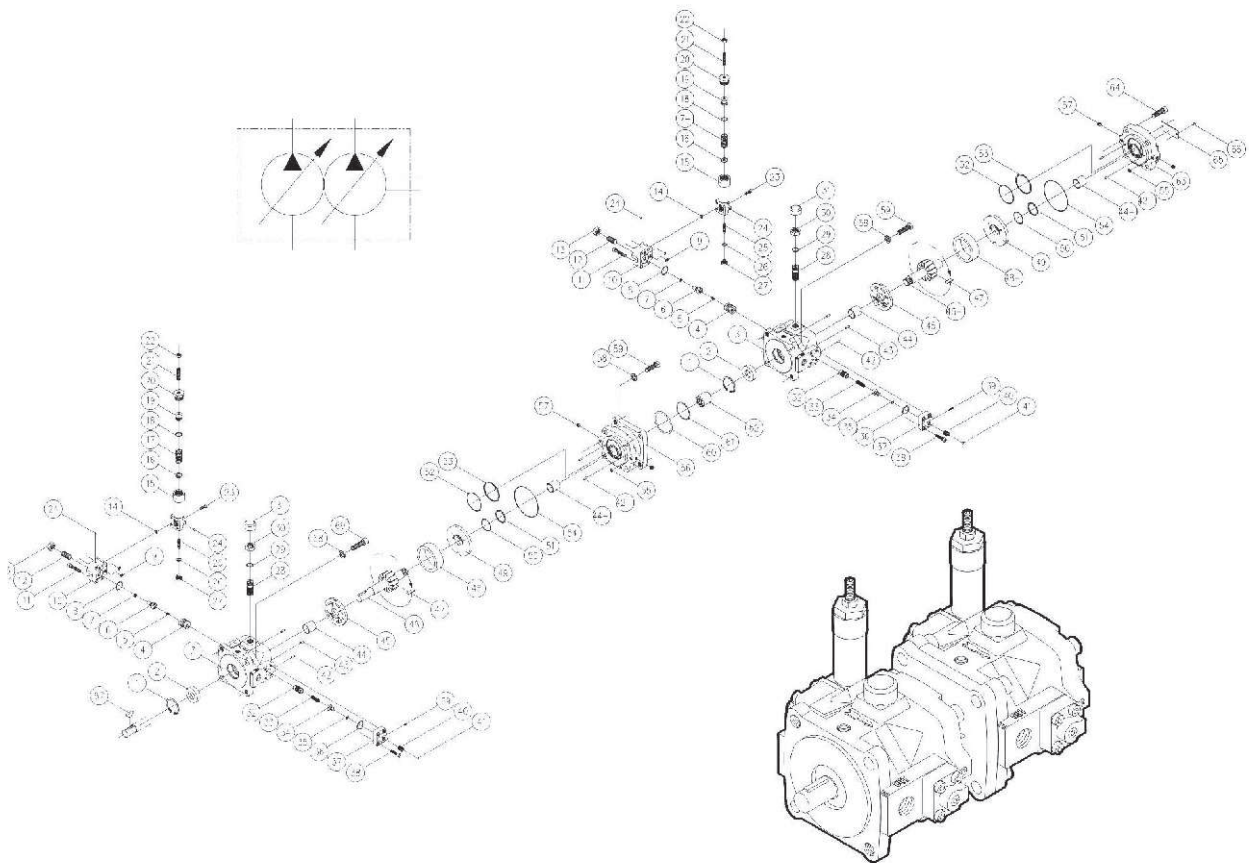


63	Socket Head Cap Screw	M10xP1.5x30L	4	33	Spring		1
62	Spring Washer	M10	4	32	Piston		1
61	Woodruff Key	NO.608	1	31	Cap		1
60	Fixing Screw		2	30	Hexagon Nut	M16xP1.0	1
59	Name Plate		1	29	O-Ring	1A-P14	1
58	Socket Head Cap Screw	M10xP1.5x35L	4	28	Slide Screw		1
57	Plug	1/16"	2	27	Plug		1
56	Cover		1	26	O-Ring	1A-P10	1
55	O-Ring	1A-P6	2	25	Spool		1
54	O-Ring	1A-S85	1	24	Plug		1
53	Endless Back-up Ring		1	23	Socket Set Screw	M5xP0.8x25L	4
52	O-Ring	AS568-034	1	22	Hexagon Nut	M8xP1.25	1
51	Endless Back-up Ring		1	21	Socket Set Screw	M8xP1.25x35L	1
50	O-Ring	AS568-026	1	20	Screw		1
49	Thrust Plate		1	19	Spring Retainer		1
48	Cam Ring		1	18	O-Ring	1A-P14	1
47	Vanes		13	17	Spring		1
46	Rotorshaft		1	16	Hold		1
45	Port Plate		1	15	Body		1
44-1	Engine Bush	DIADO(JAPAN)DD2225	1	14	O-Ring	1A-P6	3
44	Engine Bush	DIADO(JAPAN)DD2225	1	13	Hexagon Nut	M12xP1.75	1
43	Straight Pin	φ4x10	2	12	Socket Set Screw	M12xP1.75x25L	1
42-1	Spring Pin	φ4x10	2	11	Socket Head Cap Screw	M6xP1.0x35L	4
42	Spring Pin	φ4x10	1	10	Cover		1
41	Plug		1	9	O-Ring	1A-P6	2
40	Socket Set Screw	M10xP1.5x12L	1	8	O-Ring	1A-P20	1
39	Socket Set Screw	M5xP0.8x10L	1	7	O-Ring	1A-P5	1
38	Socket Head Cap Screw	M6xP1.0x25L	4	6	Piston		1
37	Cover		1	5	Socket Set Screw	M4xP0.7x5L	1
36	O-Ring	1A-P22	1	4	Piston		1
35	O-Ring	1A-P5	1	3	Pump Body		1
34	Piston		1	2	Shaft Seal	TCV 224211	1
No.	Part Name	Specification	Q'ty	No.	Part Name	Specification	Q'ty
				1	Retainer Ring	R42	1

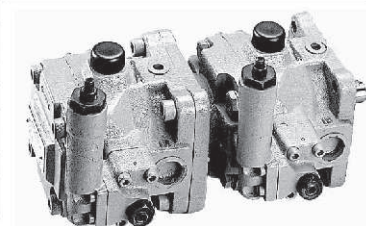
ASSEMBLY AND PARTS LIST

VP5FD

A4



No.	Description	Specification	Q'ty	No.	Description	Specification	Q'ty	No.	Description	Specification	Q'ty
1	Retainer Ring	R42	1+1	30	Hexagon Nut	M16xP1.0	1+1	56	Cover		1
2	Shaft Seal	TCV 224211	1+1	31	Cap		1+1	57	Plug	1/16"	2+2
3	Pump Body		1+1	32	Piston		1+1	58	Spring Washer	M10	4+4
4	Piston		1+1	33	Spring		1+1	59	Hexagon Head Screw	M10xP1.5x30L	4+4
5	Socket Set Screw	M4xP0.7x5L	1+1	34	Piston		1+1	60	O-Ring	1A-G45	1
6	Piston		1+1	35	C-Ring	1A-P5	1+1	61	O-Ring	1A-G60	1
7	O-Ring	1A-P5	1+1	36	C-Ring	1A-P22	1+1	62	Coupling		1
8	O-Ring	1A-P20	1+1	37	Cover		1+1				
9	O-Ring	1A-P6	2+2	38	Skt. HD. Cap Scr.	M6xP1.0x25L	4+4				
10	Cover		1+1	39	Socket Set Screw	M5xP0.8x10L	1+1				
11	Skt. HD. Cap Scr.	M6xP1.0x35L	4+4	40	Socket Set Screw	M10xP1.5x12L	1+1	63	Cover		1
12	Socket Set Screw	M12xP1.75x25L	1+1	41	Plug		1+1	64	Skt. HD. cap Scr.	M10xP1.5x35L	4
13	Hexagon Nut	M12xP1.75	1+1	42	Spring Pin	ø4x10	1+1	65	Name Plate		1
14	O-Ring	1A-P6	3+3	42-1	Spring Pin	ø4x10	2+2	66	Fixing Screw		2
15	Body		1+1	43	Straight Pin	ø4x10	2+2	67	Woodruff Key	NO.608	1
16	Hold		1+1	44	Engine Bush	DIADO(JAPAN)DD2225	1+1	68	Spring Washer	M10	4
17	Spring		1	44-1	Engine Bush	DIADO(JAPAN)DD2225	1+1	69	Skt. HD. cap Scr.	M10xP1.5x30L	4
17-1	Spring		1	45	Port Plate		1+1				
18	O-Ring	1A-P14	1+1	46	Rotorshaft(A)		1				
19	Spring Retainer		1+1	46-1	Rotorshaft(B)		1				
20	Screw		1+1	47	Vanes		13+13				
21	Socket Set Screw	M8xP1.25x35L	1+1	48	Cam Ring		1				
22	Hexagon Nut	M8xP1.25	1+1	48-1	Cam Ring		1				
23	Socket Set Screw	M5xP0.8x25L	4+4	49	Thrust Plate		1+1				
24	Plug		2+2	50	C-Ring	AS588-026	1+1				
25	Spool		1+1	51	Endless Back-up Ring		1+1				
26	O-Ring	1A-P10	1+1	52	C-Ring	AS588-034	1+1				
27	Plug		1+1	53	Endless Back-up Ring		1+1				
28	Slide Screw		1+1	54	O-Ring	1A-S85	1+1				
28	O-Ring	1A-P14	1+1	55	O-Ring	1A-P6	2+2				



※ 62~63 are Accessories.