

# 가

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Variable displacement piston pumps

		MPa	min <sup>-1</sup>	cm <sup>3</sup> /rev											Page	
				1	2	3	4	5	10	20	50	100	200			
P**V	P16V	21	1800							16					A6	
	P21V										21					
	P31V											31				
	P40V											40				
	P70V												70			
	P100V													100		
	P130V															130

P\*\*V

가

: 21MPa(210kgf/cm<sup>2</sup>) 1800min-1  
68.5dB(A) (P70V )

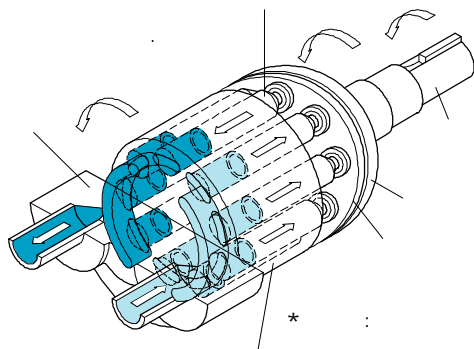
:( , )

가

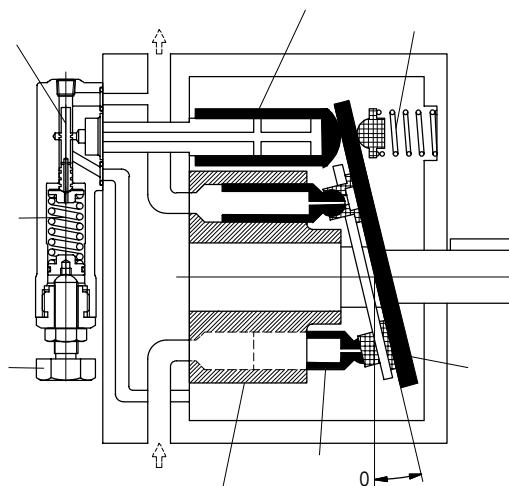
가

( )

\* :



\*



가

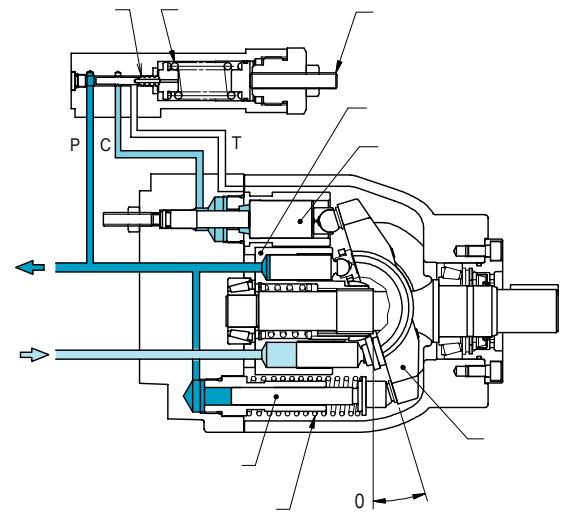
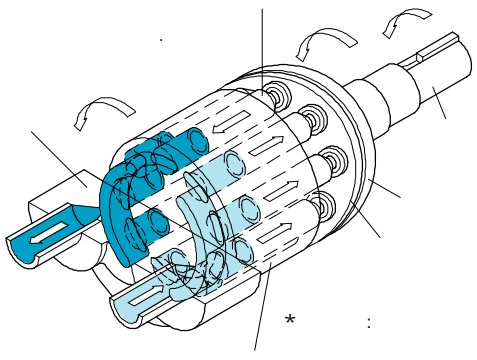
		MPa	min <sup>-1</sup>	cm <sup>3</sup> /rev							
				1	5	10	20	50	100	200	
PH	PH80							80			A21
	PH100	※2 28 ※1 30	1800					100			
	PH130							130			

( ) 1. 10% ( 6 ) 가 .

2. EDHS 21MPa 가 P\*\*V : 가 .

28MPa : 가 .

● : 28MPa 2, 3 가

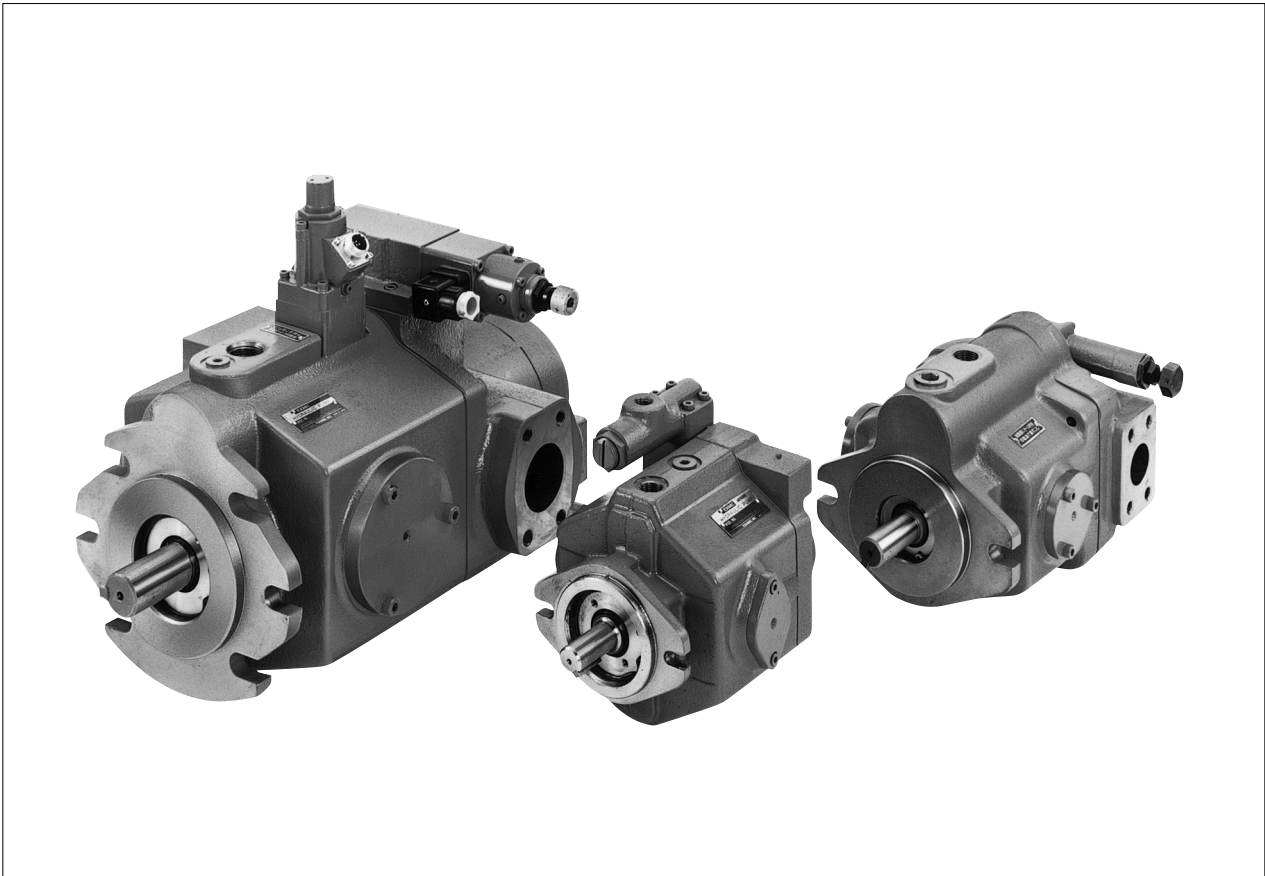


가

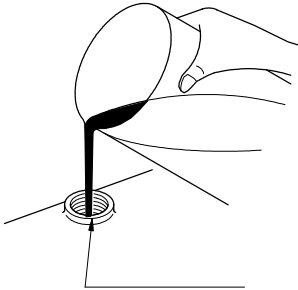
가  
가  
( , )  
TIR(Total Indicator Reading) 0.05mm  
가  
가  
가  
가  
가  
가

100 $\mu$ m(150 )  
(Suction filter)  
20 $\mu$ m 10 $\mu$ m  
( )  
+35~ -16.7  
kPa{+0.35kgf/cm<sup>2</sup>~-125mmHG},

1.5m/s  
가 가  
1. 가  
2. 1m  
50mm  
가  
가  
가  
50kPa{0.5kgf/cm<sup>2</sup>}  
가



가



	mL
P16V	700
P21/31V	800
P40V	1000
P70V	1500
P100V	2000
P130V	2300
PH80	1600
PH100	2500
PH130	3700

가

가

R5 page

가 (54mm<sup>2</sup>/s{cSt})  
가 54mm<sup>2</sup>/s{cSt} 가 가 ½

1

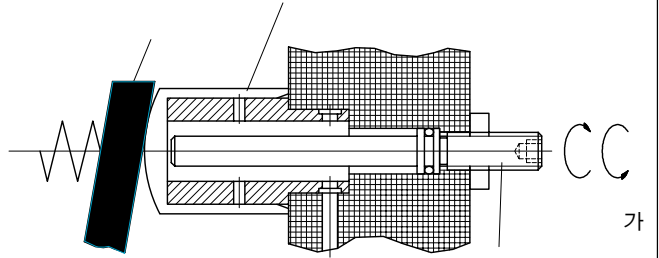
JIS K2213-2 ( 가) ISO VG32-68( #90-#180)

13-54mm<sup>2</sup>/s{cSt} 가

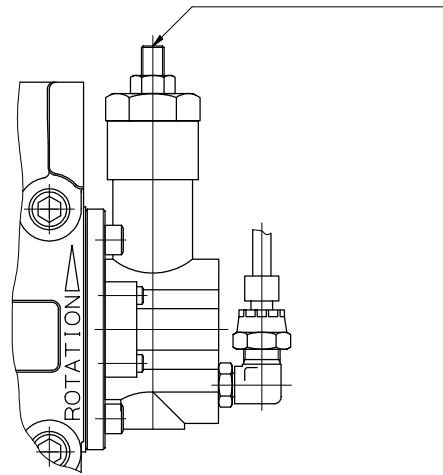
220mm<sup>2</sup>/s{cSt} 가

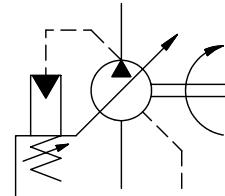
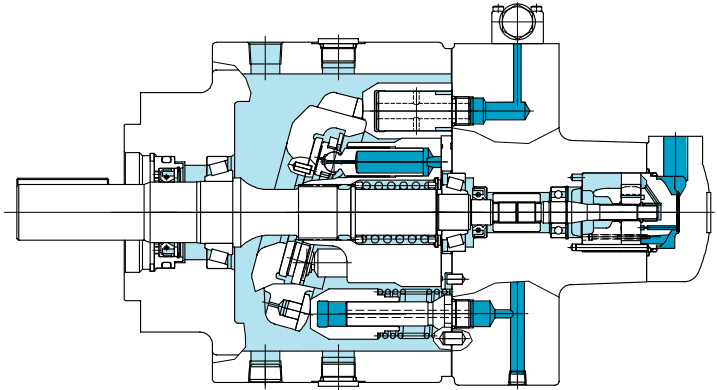
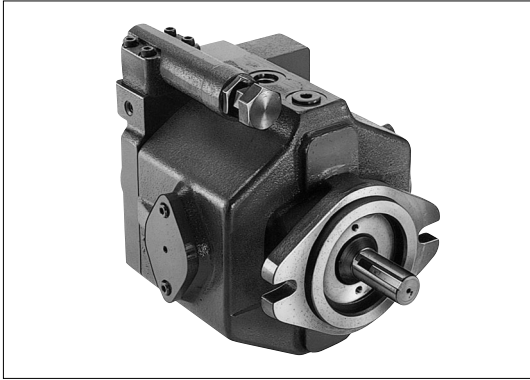
0-60

가



가





**P16V-(F)RS(G)-11-CCG-10-J**

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8

1 가  
P 1 6 V

2  
:  
F : FOOT

3 ( )  
R : ( )  
L : ( )

4 S :

5 ( JIS )

: SAE 0  
G : SAE 4

6 ( )

7 ( )  
C : (1.5~21MPa{15~210kgf/cm<sup>2</sup>})  
CM : (1.5~10.5MPa{15~105kgf/cm<sup>2</sup>})  
CG:  
CV:  
2P: 2 2  
EP:  
\*C:  
(CC,CMC,CCG,CVC)

8

# (F11)-P70V(3)(F)R(62)-(2)(C)11-EDQS-10-J

1 2 3 4 5 6 7 8 9 10 11

1  
F11 : ,  
2 P \* \* V 가  
P21V P31V P40V P70V P100V P130V  
3 2 PUMP  
3 : (P40V, P70V, P100V, P130V)  
4 : SQP1  
(P100V, P130V)  
5 : SQP2  
(P70V, P100V, P130V)  
6 : SQP3  
(P100V, P130V)  
7 : 가 P16V  
(P40V P70V P100V P130V)  
SQP1, SQP2, SQP3  
4 : FOOT  
F : FOOT  
5 ( )  
R : ( )  
L : ( )  
6 가  
( P70V 62cm<sup>3</sup>/rev )  
7 ( 3 )

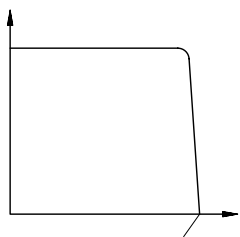
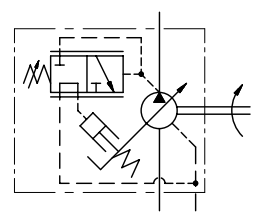
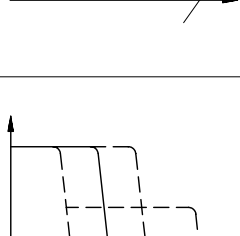
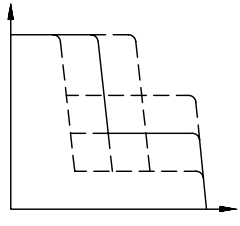
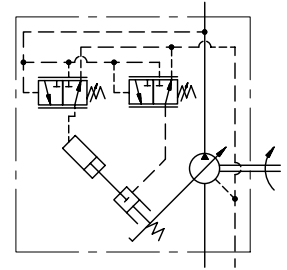
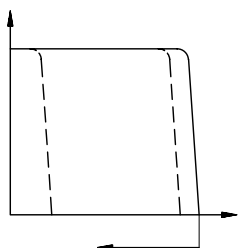
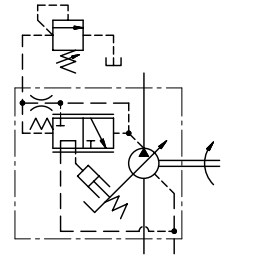
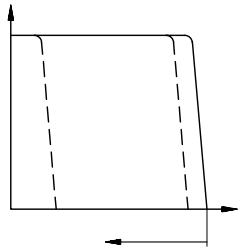
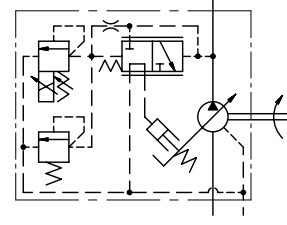
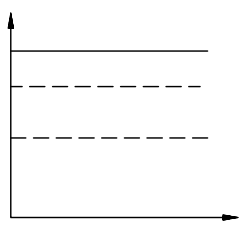
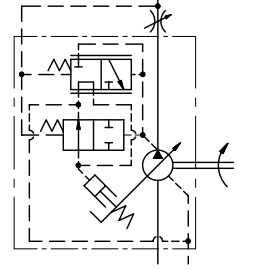
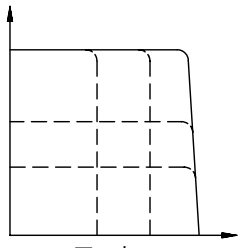
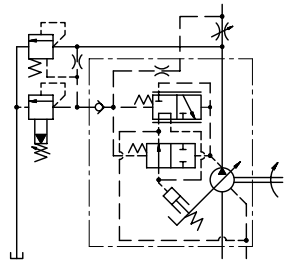
8 ( 3 )  
A:  
B:  
C:  
D:  
9 ( )  
10 C: (P21V P31V P40V P70V P100V P130V)  
CG: (P21V P31V P40V P70V P100V , P130V)  
CV: (P21V P31V)  
CGVF: (P40V P70V , P100V P130V)  
2P: 2 2 (P31V P40V)  
EP: (P21V, P31V, P40V, P70V, P100V P130V)  
MC1U: [1 ]P21V P31V , P40V P70V P100V P130V )  
MC2: [2 ](P21V P31V P40V P70V , P100V P130V )  
MC2U: [ 2 ] (P21V P31V , P40V P70V P100V P130V )  
MC3: [ 3 ] (P21V P31V P40V P70V , P100V P130V )  
\*C: 最大押しのけ容積調整機能付き  
(CC, CMC, CCG, CVC, MC1UC, MC2C, MC2UC, MC3C)  
EDQS: [ P40V P70V P100V P130V )  
EDS: [ , P40V P70V P100V )  
11



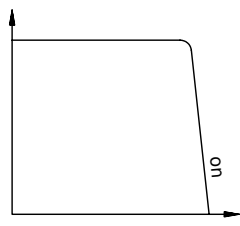
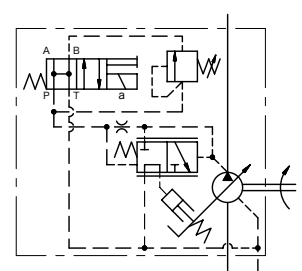
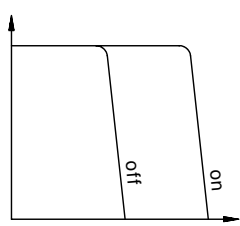
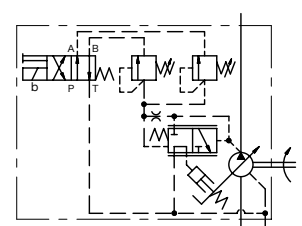
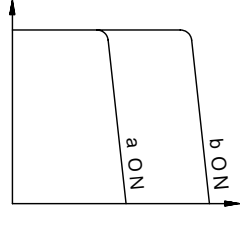
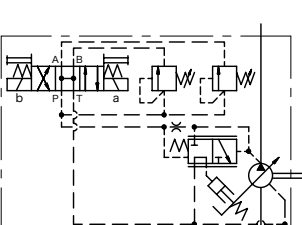
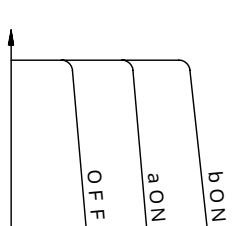
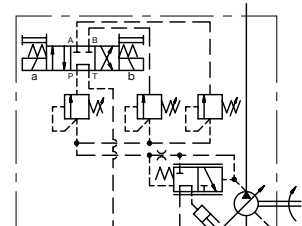
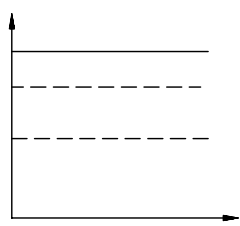
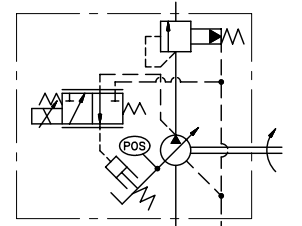
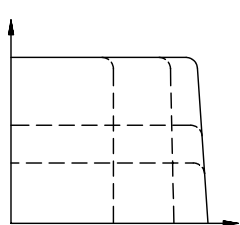
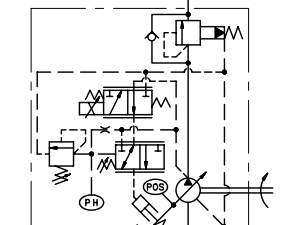
	cm <sup>3</sup> /rev	MPa	min <sup>-1</sup>	min <sup>-1</sup>	kg
P16V	16	21	1800	600	15
P21V	21				23
P31V	31				23
P40V	40				37
P70V	70				63
P100V	100				91
P130V	130				112

c ( )

7	cm <sup>3</sup> /rev	MPa
2	6.3	16
3	9.4	
4	12.5	
5	15.6	

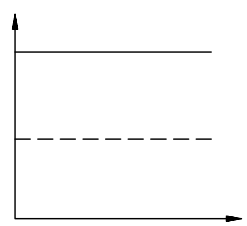
				( )
	C		가	
	CM			
2 2	2 P		2	
	CG			
	EP			
	CVF (CV)		( )	
	CGVF	 압력	(cut-off ) 가 0	



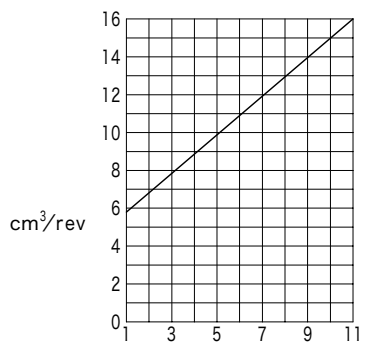
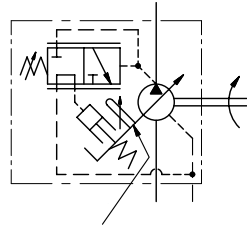
			( )
MC 1 U	 <p>) off</p>		
MC 2		가 가 2	
MC 2 U	 <p>) off</p>	가 가 2	
MC 3		가 가 3	
EDQS		●	
EDS		가	

( )

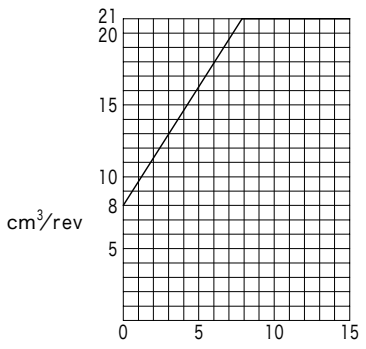
\* C  
\*\* C



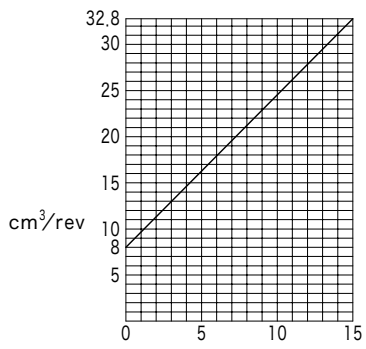
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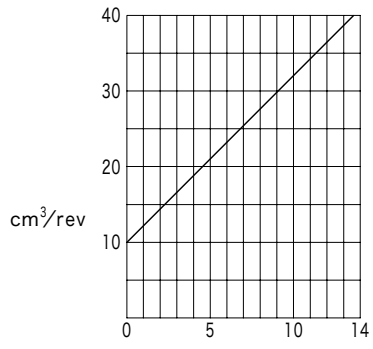
**P 16 V**



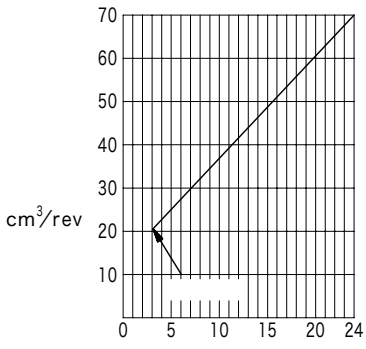
**P 21 V**



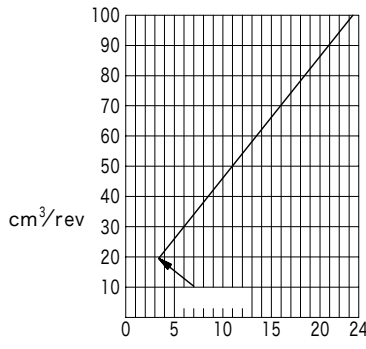
**P 31 V**



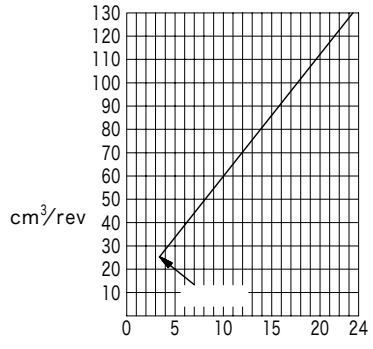
**P 40 V**



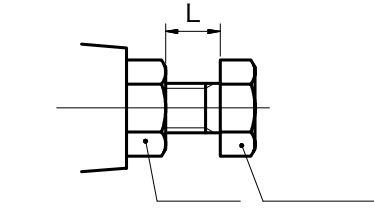
**P 70 V**



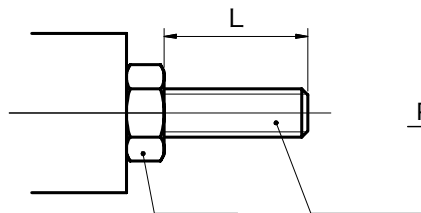
**P 100 V**



**P 130 V**



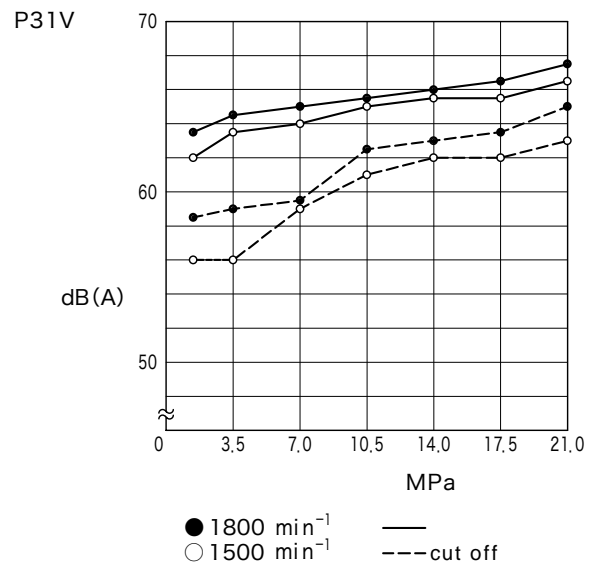
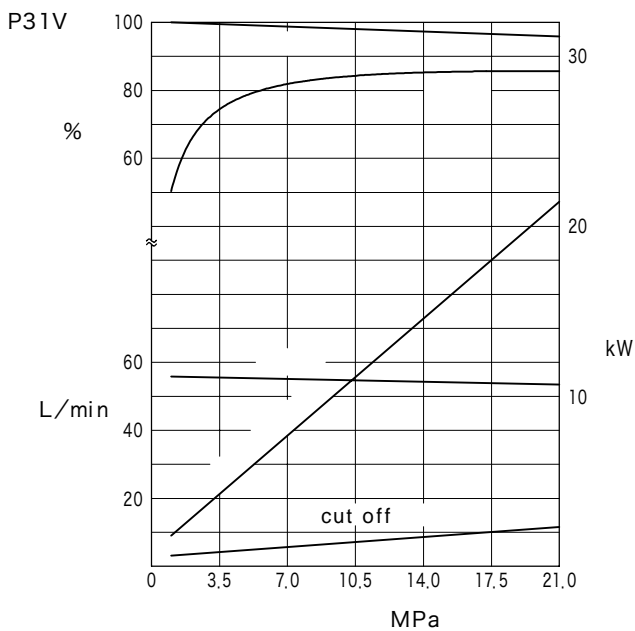
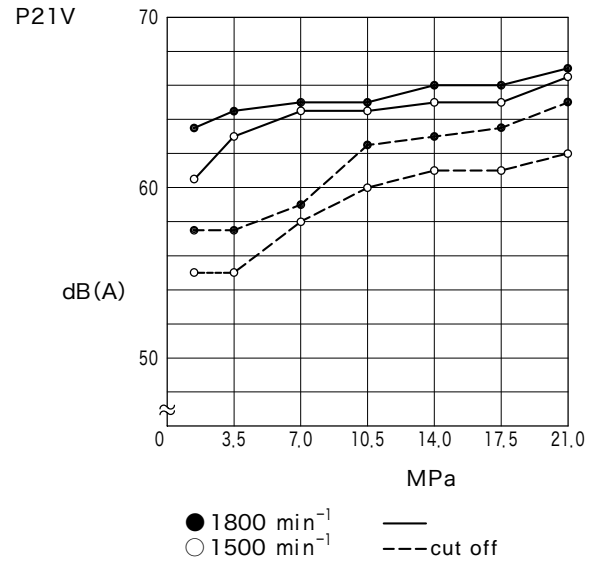
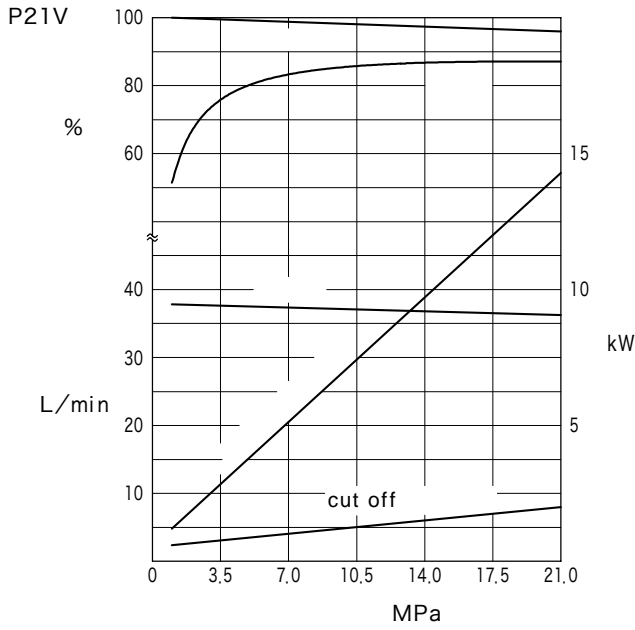
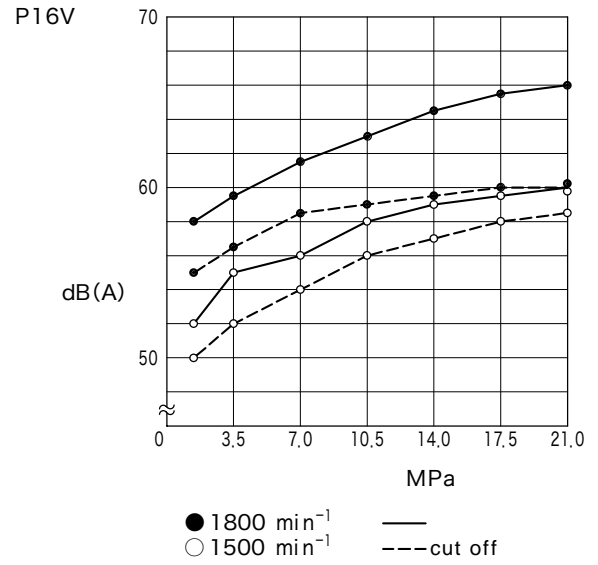
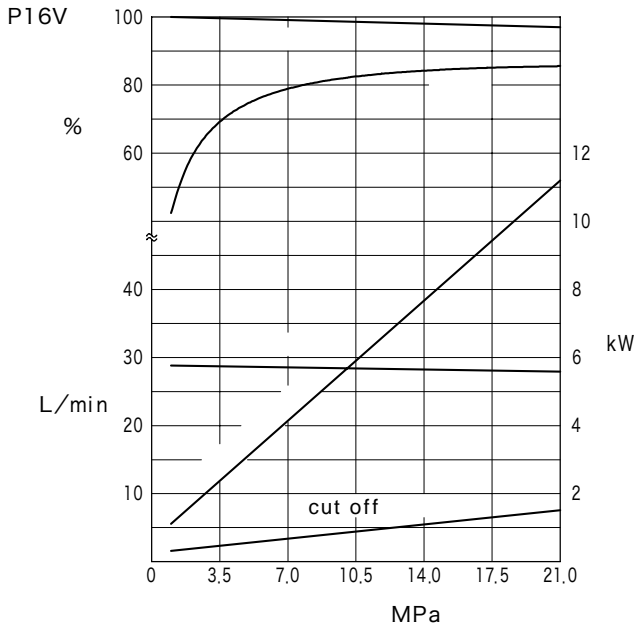
**P 16 V**

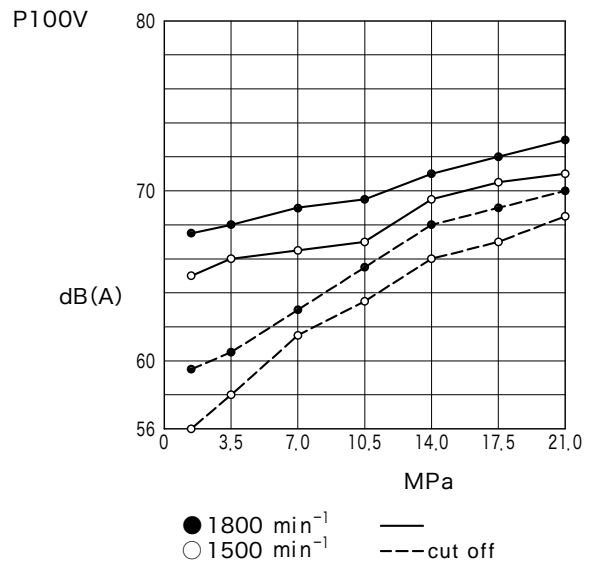
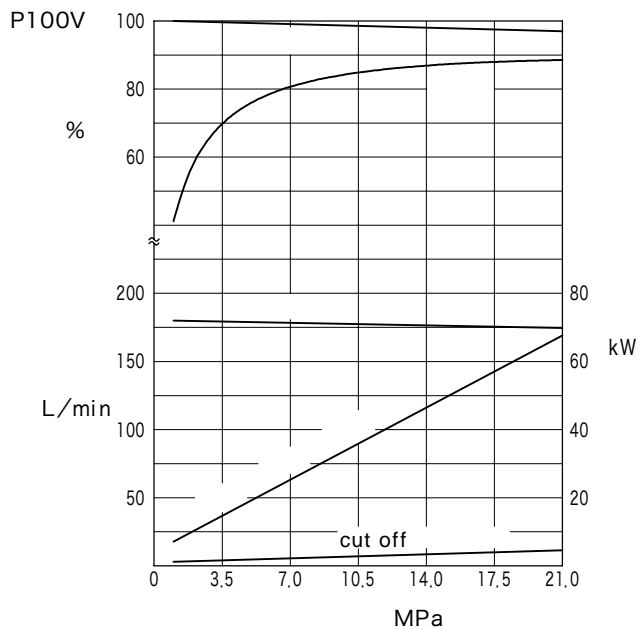
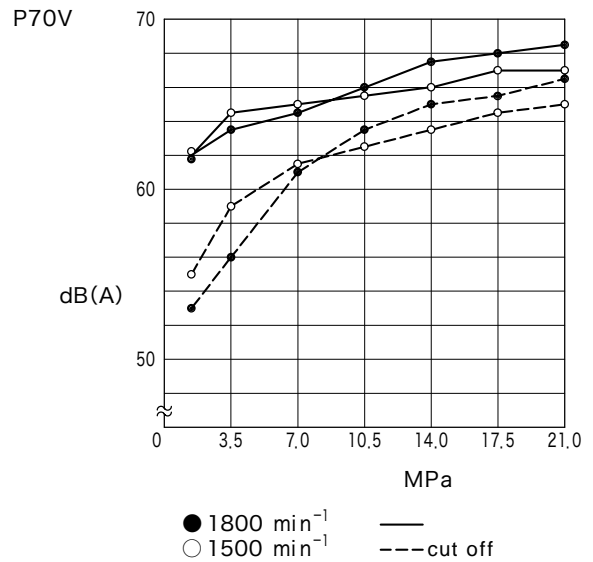
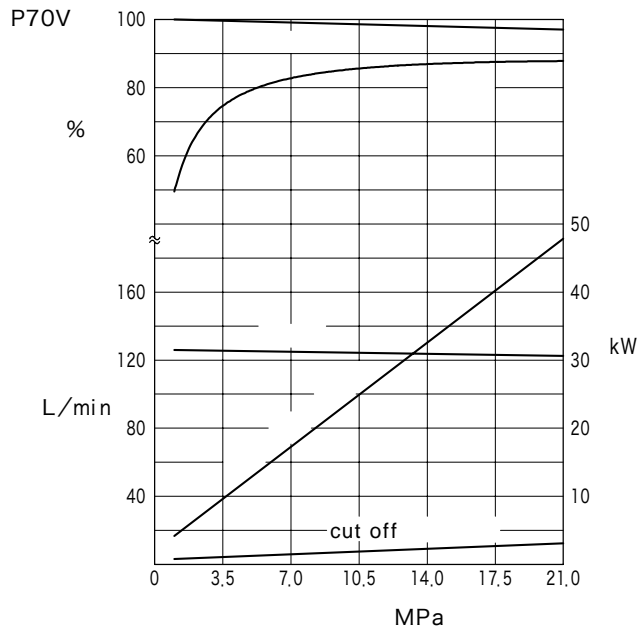
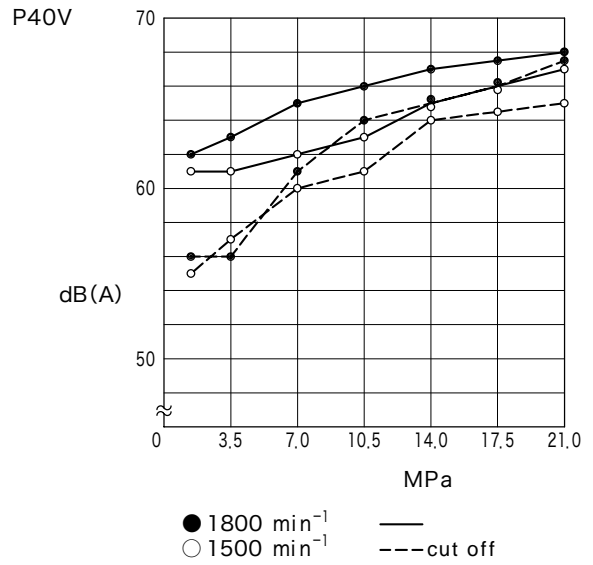
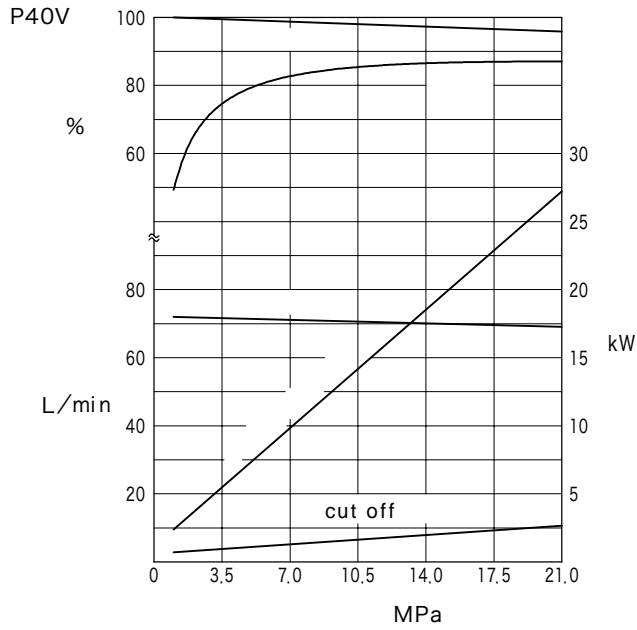


**P 21 V ~ P 130 V**

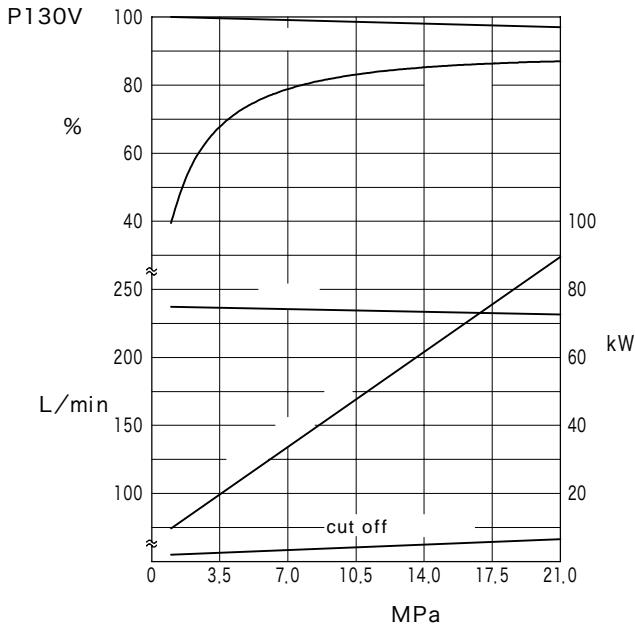
(1800min<sup>-1</sup>)

( 1m )

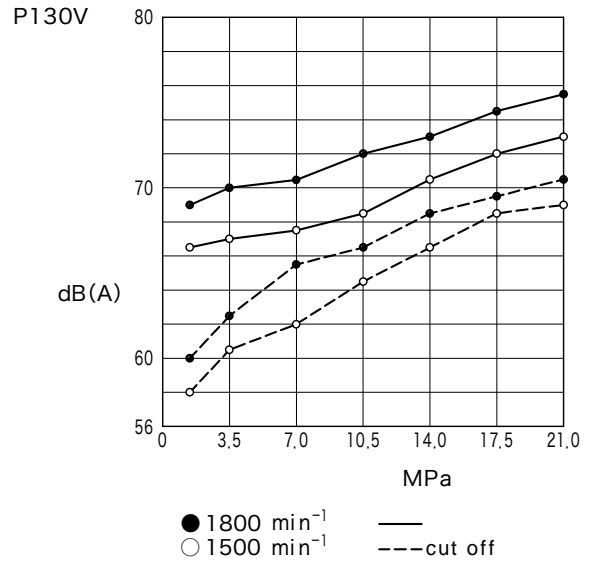




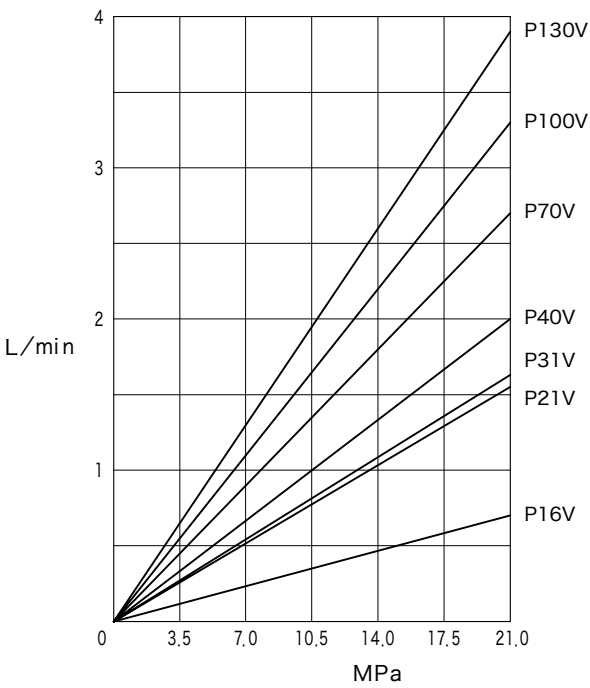
(1800min<sup>-1</sup>)



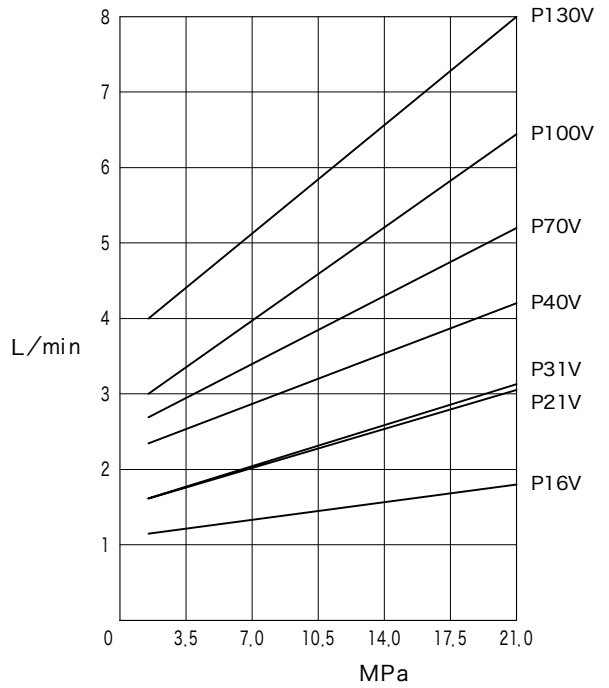
( 1m )

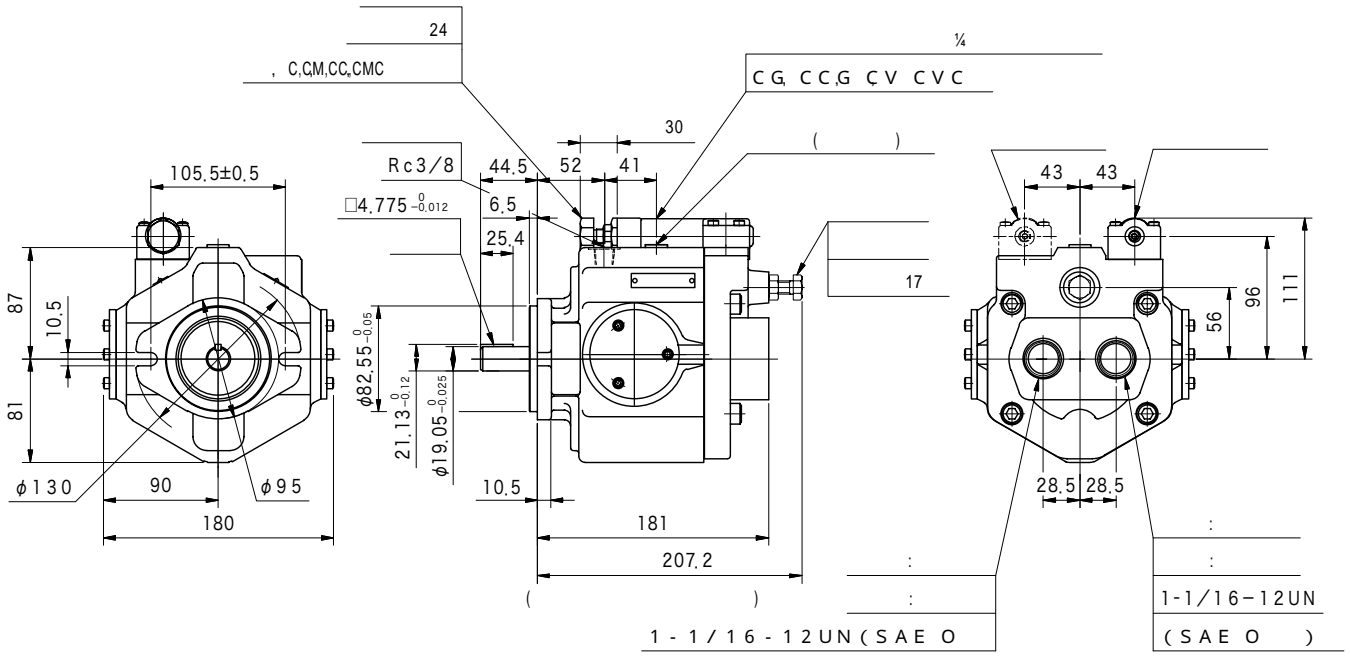


( 1800min<sup>-1</sup> 20mm<sup>2</sup>/s{cSt} )

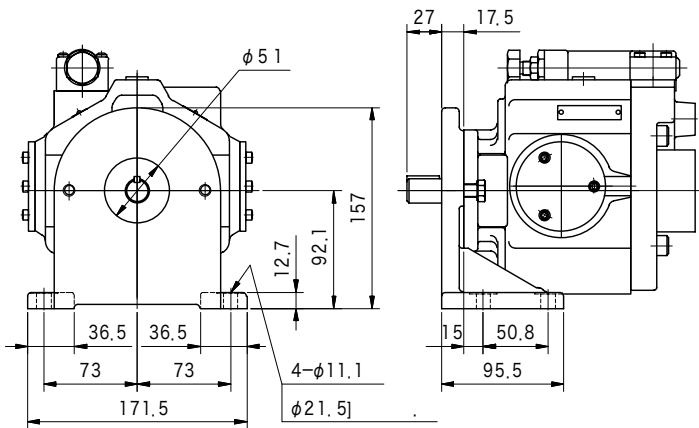


cut off (C: )

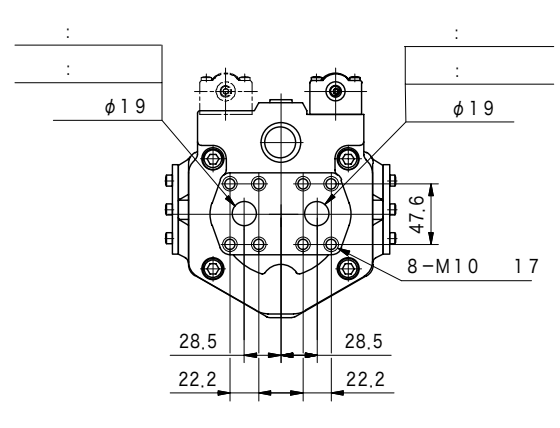




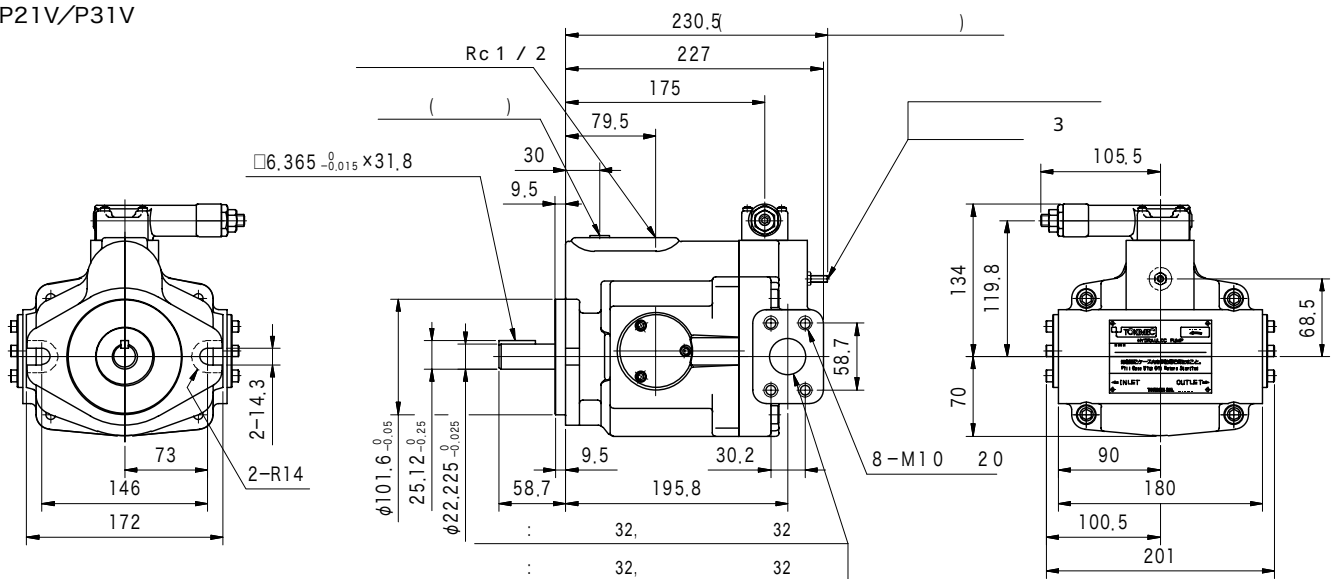
FOOT



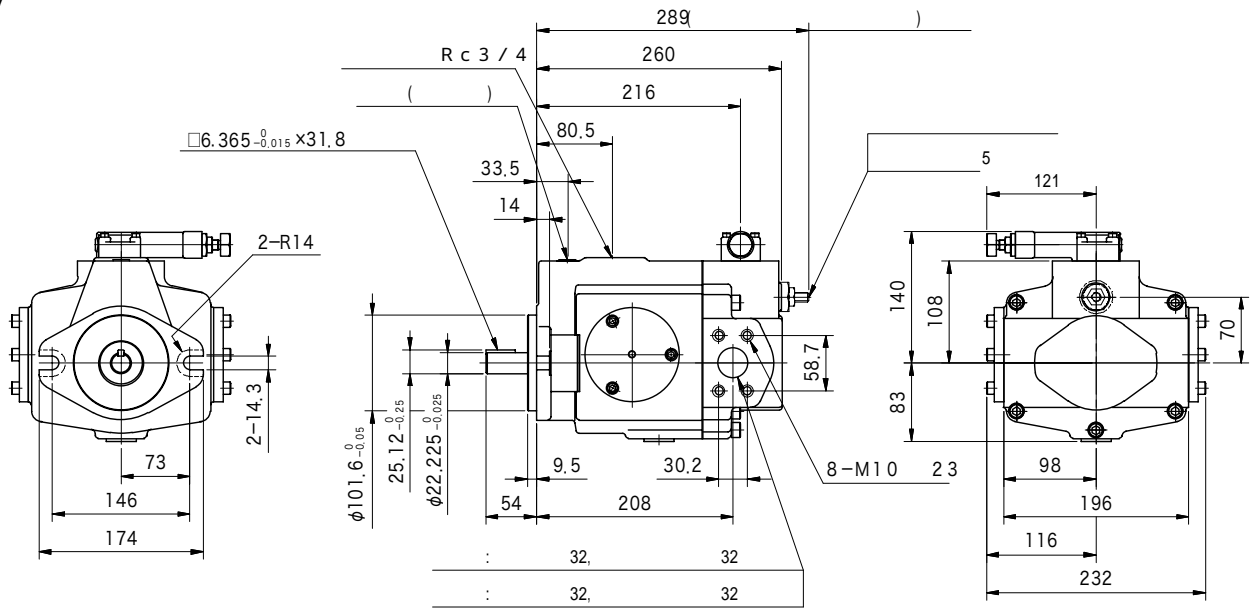
G



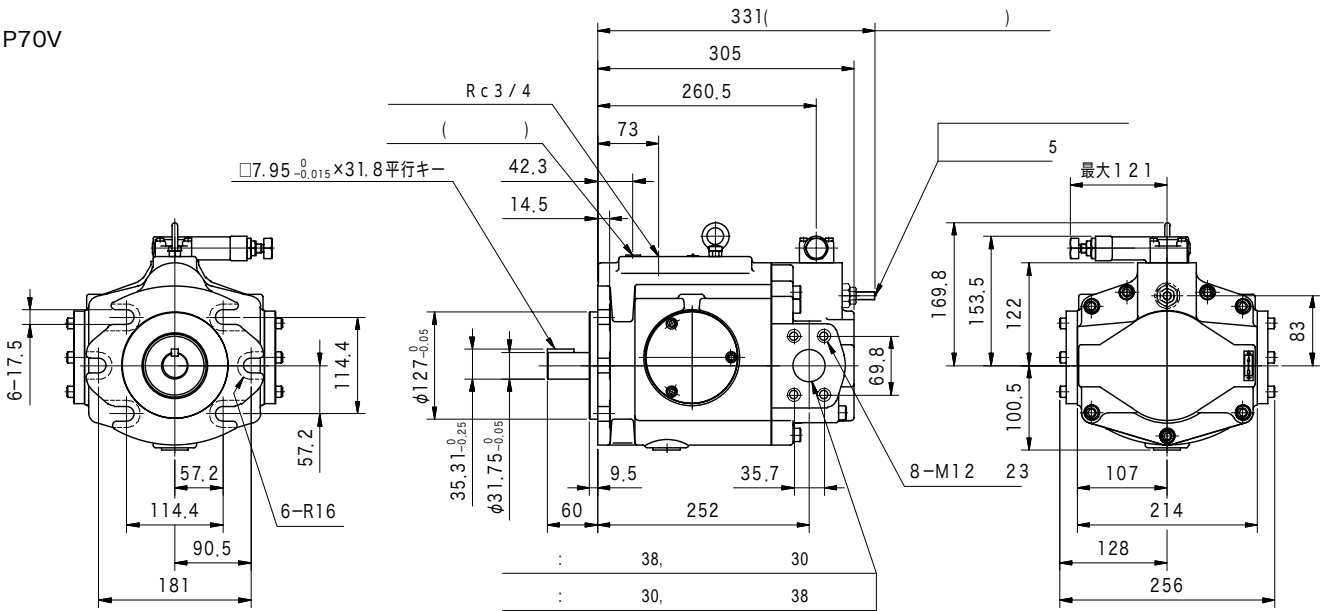
P21V/P31V



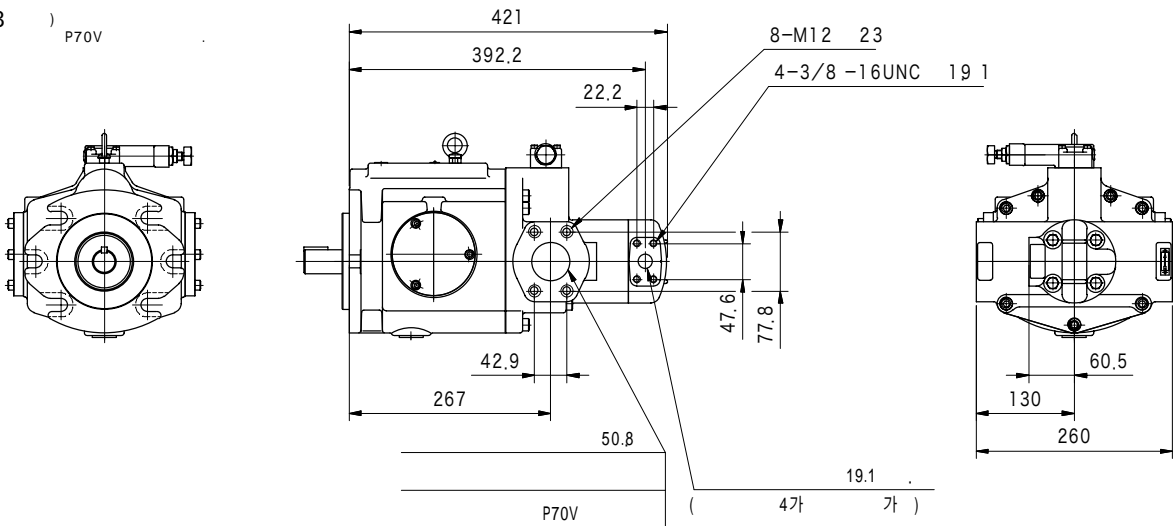
P40V



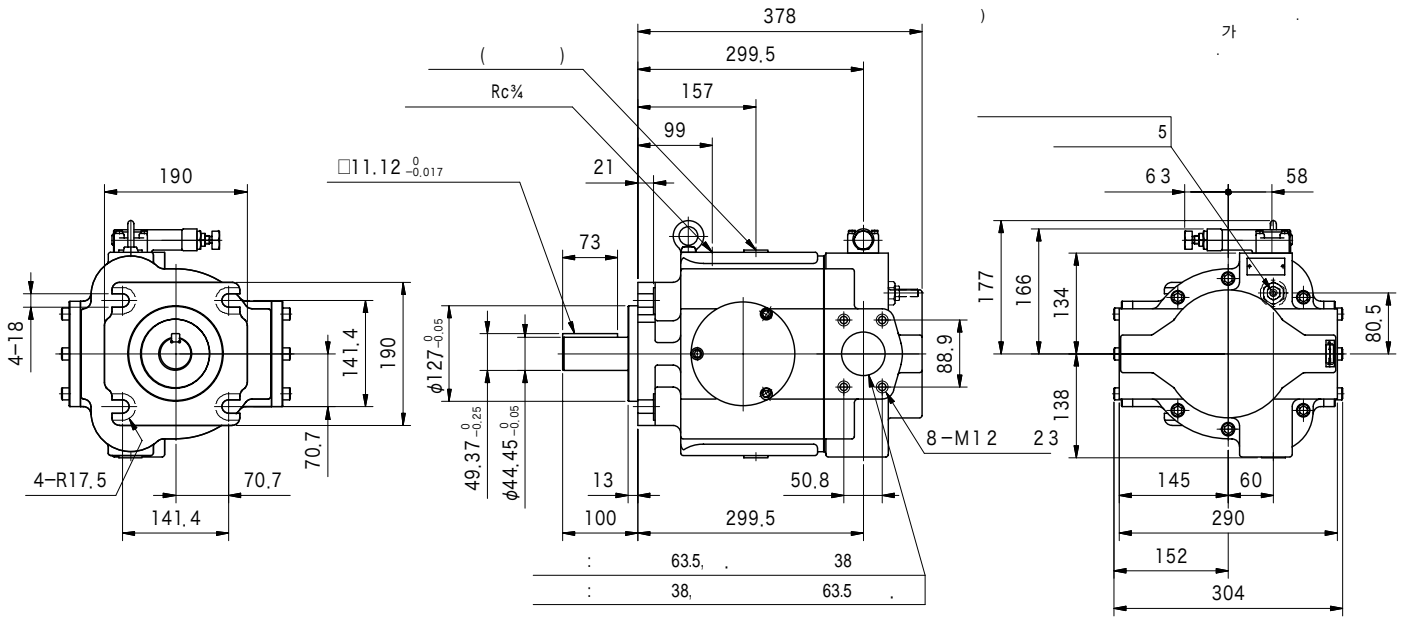
P70V



P70V3

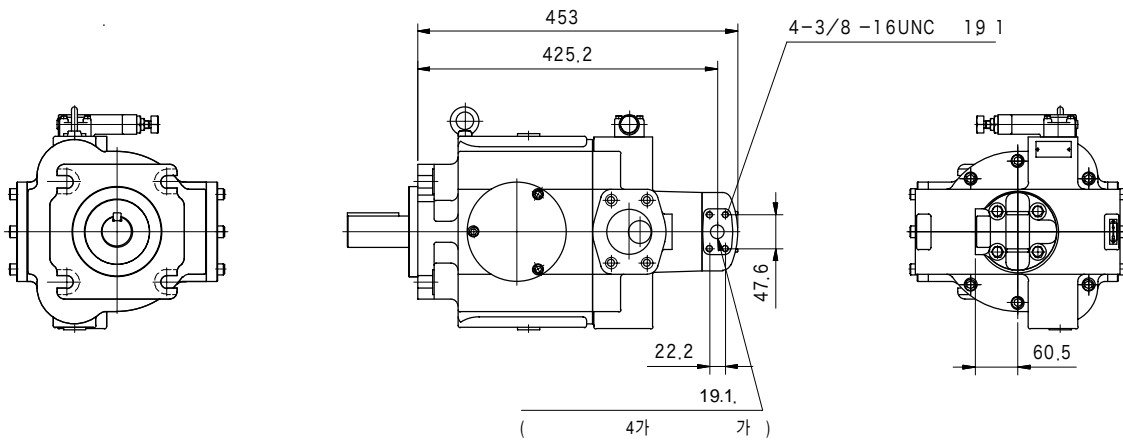


P100V

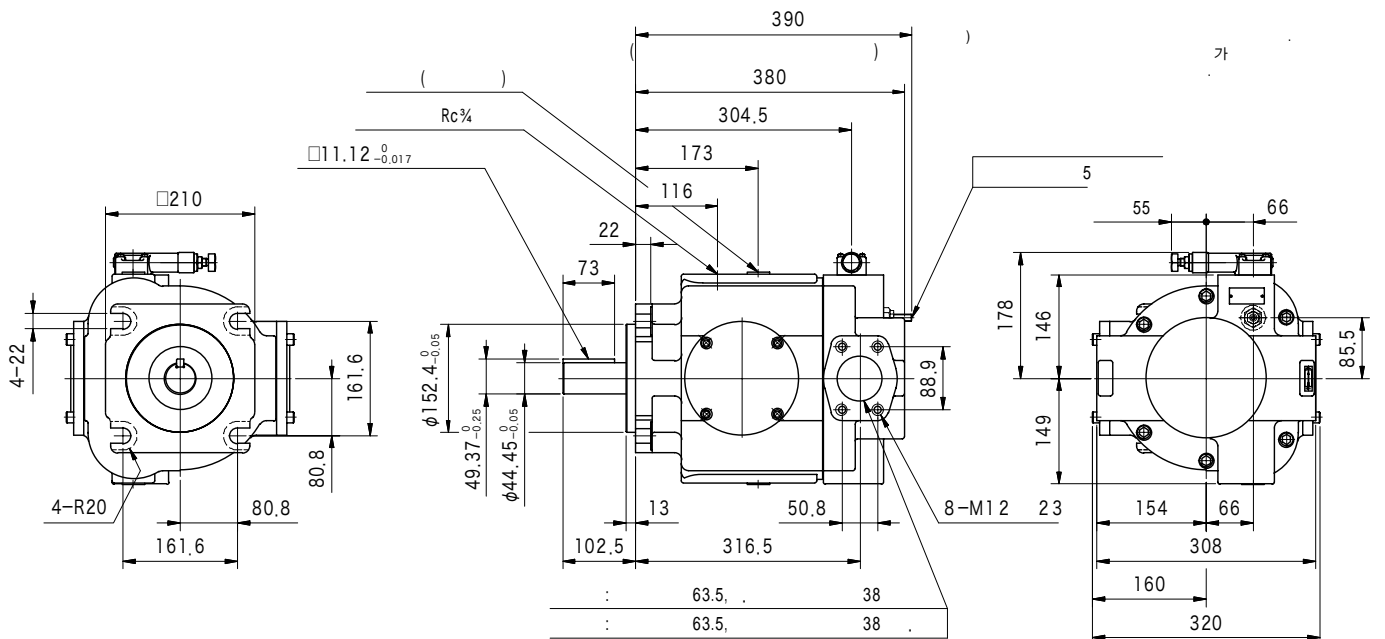


P100V3

P100V



P130V

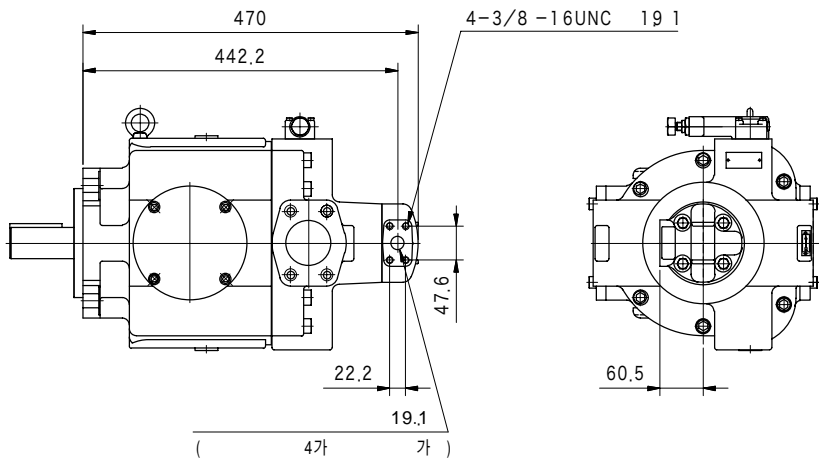
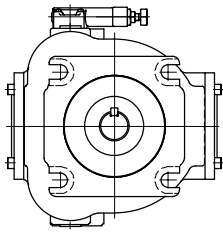




P130V3

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P130V



(A6~A7 Page)

( 「 SAE J 518 c 」 )

		フランジ形式		
P16V	Rc3/4	FL1-6-06P-10-JA-S4-M	20A	FL1-6-06W-10-JA-M
P21V, P31V P40V	Rc1-1/4	FL1-10-10P-10-JA-S4-M	32A	FL1-10-10W-10-JA-M
P70V	Rc1-1/2	FL1-12-12P-10-JA-S4-M	40A	FL1-12-12W-10-JA-M
P70V3	Rc1-1/2	FL1-12-12P-10-JA-S4-M	40A	FL1-12-12W-10-JA-M
	Rc2	FL1-16-16P-10-JA-S4-M	50A	FL1-16-16W-10-JA-M
P100V (3) P130V (3)	Rc2-1/2	FL1-20-20P-10-JA-S4-M	65A	FL1-20-20W-10-JA-M

Rc3/4	FL1-6-06P-10-JA-S4-J	20A	FL1-6-06W-10-JA
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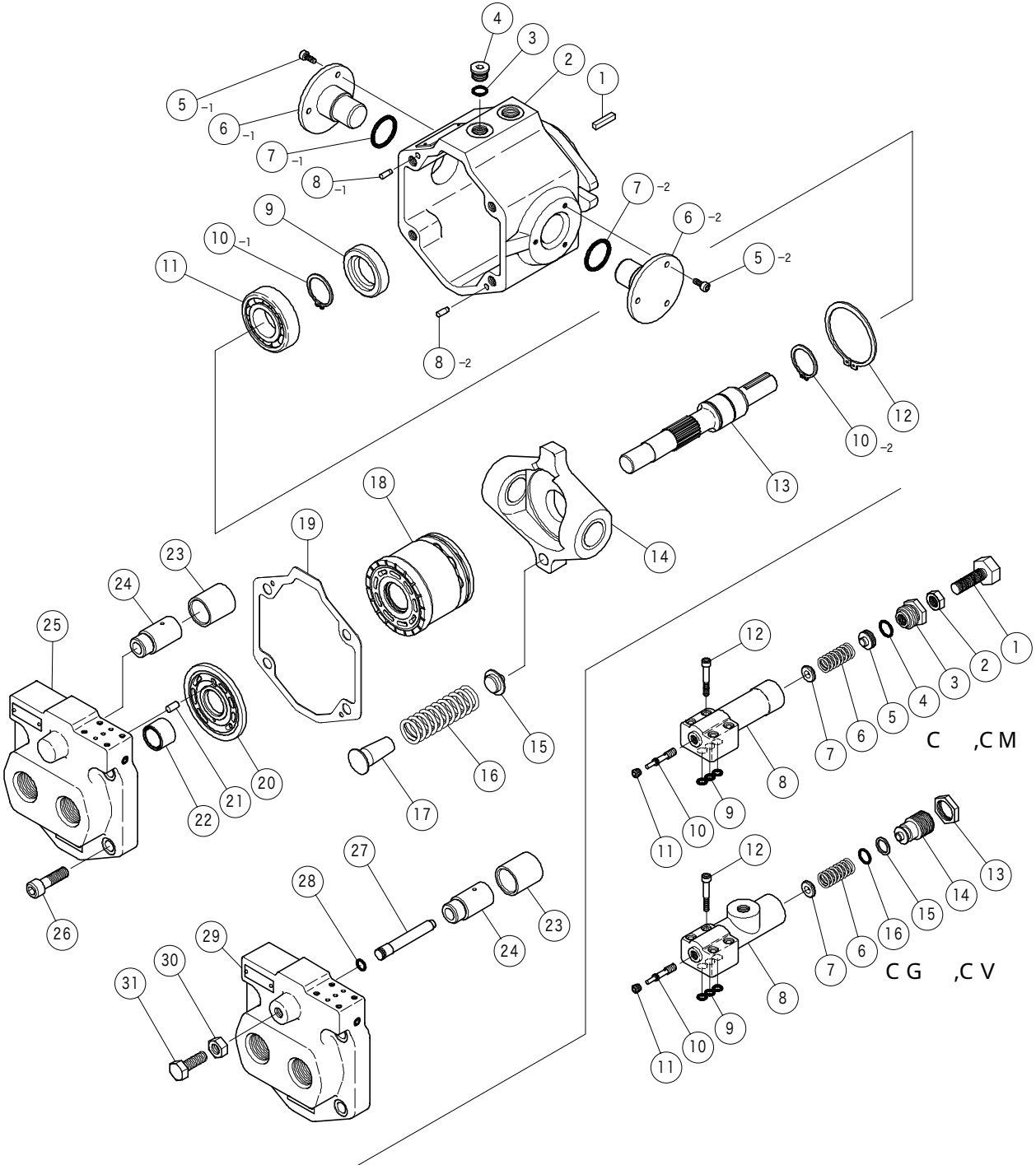
( SAE O )

P16V	1-1/16-12UN	Rc3/8	VPA36051
		Rc1/2	VPA36873
		Rc3/4	VPA31817
		Rc1	VPA39410

P16V

3	Oリング	007990619	AS568-906 (NBR, Hs90)	1
7	Oリング	007991619	AS568-916 (NBR, Hs90)	2
9	シャフトシール	VA29405	_____	1
19	ガスケット	VA29431	_____	1
28	Oリング	008000617	JIS B 2401 1A-P8	1

- : VA12268A  
- 18 : VA14144A



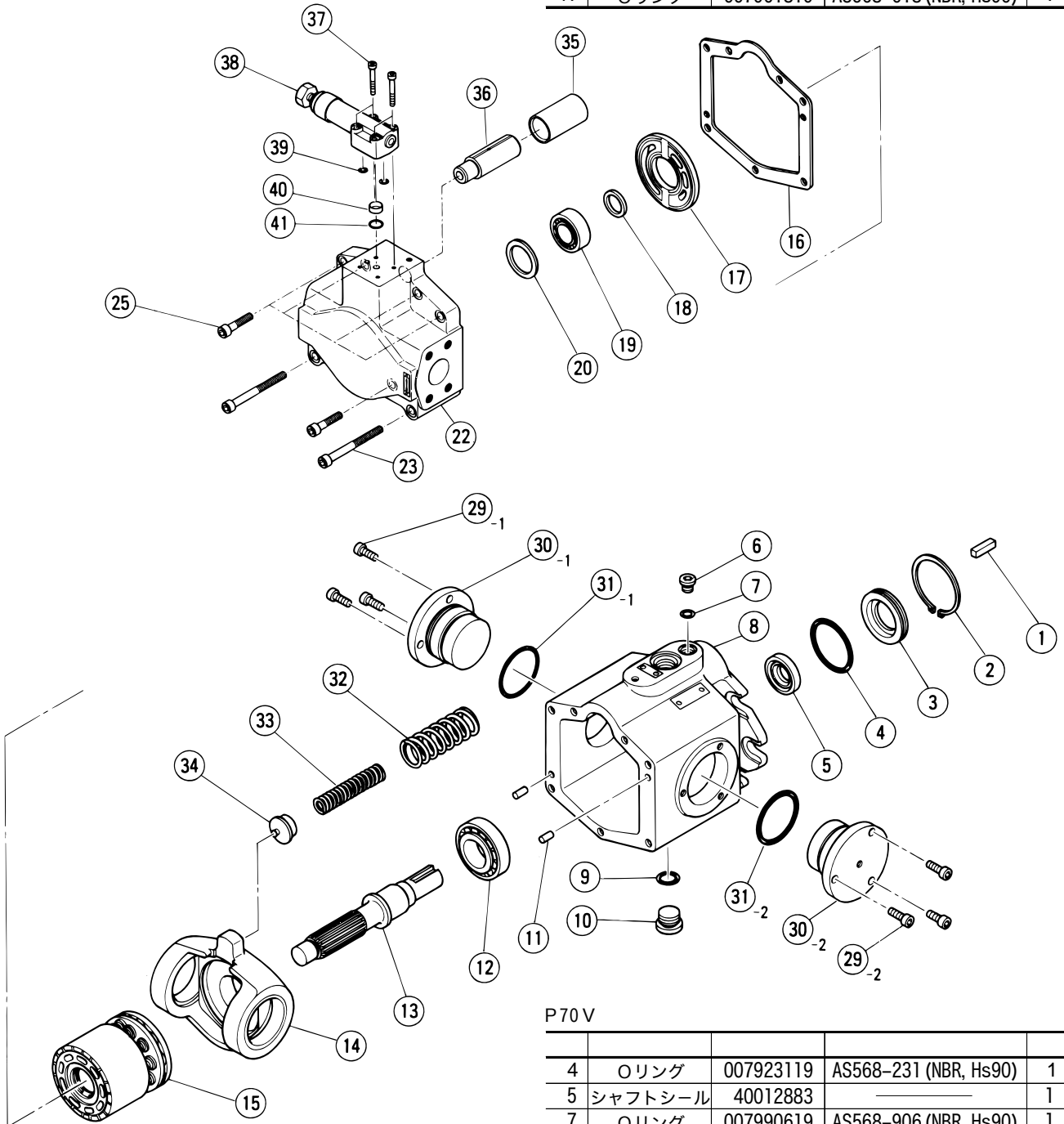
4	Oリング	007901517	AS568-015 (NBR, Hs70)	1
9	Oリング	007901019	AS568-010 (NBR, Hs90)	3
15	バックアップ リング	40022325	_____	1
16	Oリング	007911217	AS568-112 (NBR, Hs70)	1

P21V, P31V, P40V, P70V  
P21V/P31V

5	シャフトシール	VA29405	—————	1
7	Oリング	007990619	AS568-906 (NBR, Hs90)	1
16	ガスケット	40012493	—————	1
31	Oリング	007912719	AS568-127 (NBR, Hs90)	2
39	Oリング	007901119	AS568-011 (NBR, Hs90)	2
41	Oリング	007901819	AS568-018 (NBR, Hs90)	1

P40V

4	Oリング	007913817	AS568-138 (NBR, Hs70)	1
5	シャフトシール	VA29405	—————	1
7	Oリング	007990619	AS568-906 (NBR, Hs90)	1
9	Oリング	007991219	AS568-912 (NBR, Hs90)	1
16	ガスケット	40012857	—————	1
31	Oリング	007914117	AS568-141 (NBR, Hs70)	2
39	Oリング	007901119	AS568-011 (NBR, Hs90)	2
41	Oリング	007901819	AS568-018 (NBR, Hs90)	1



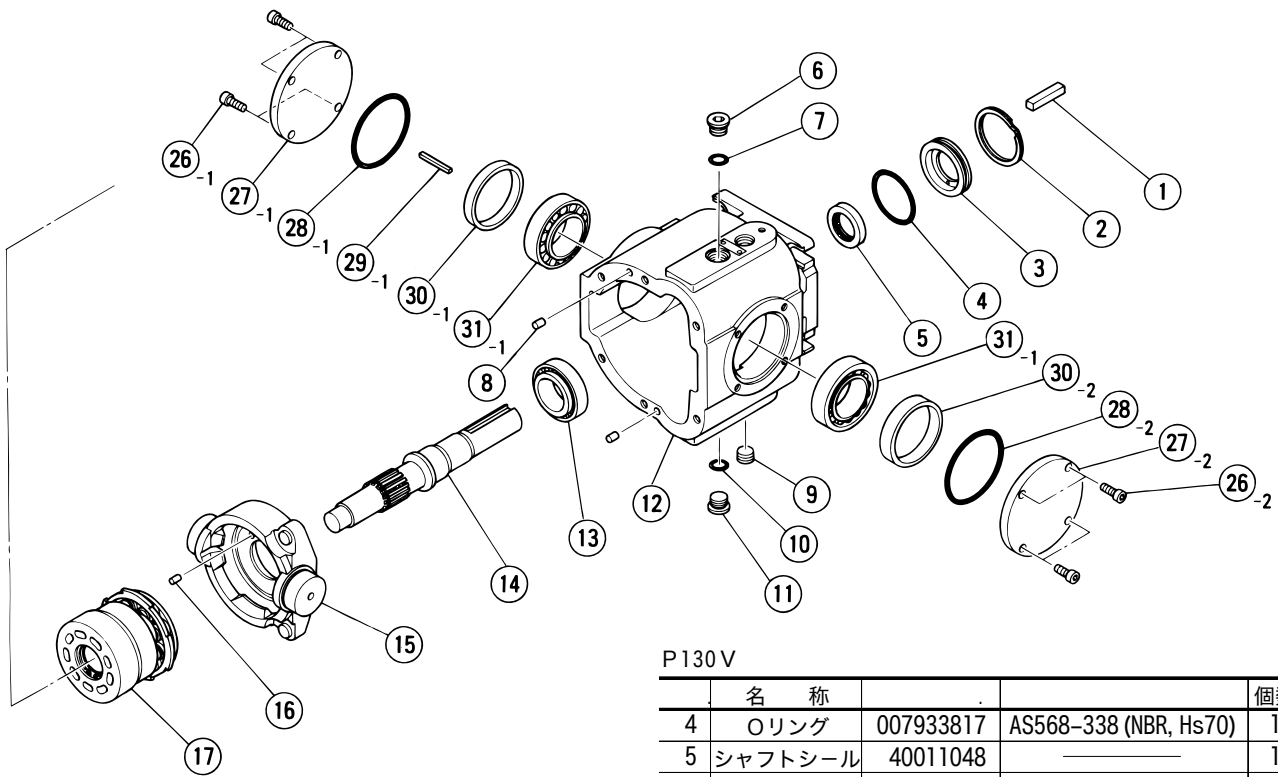
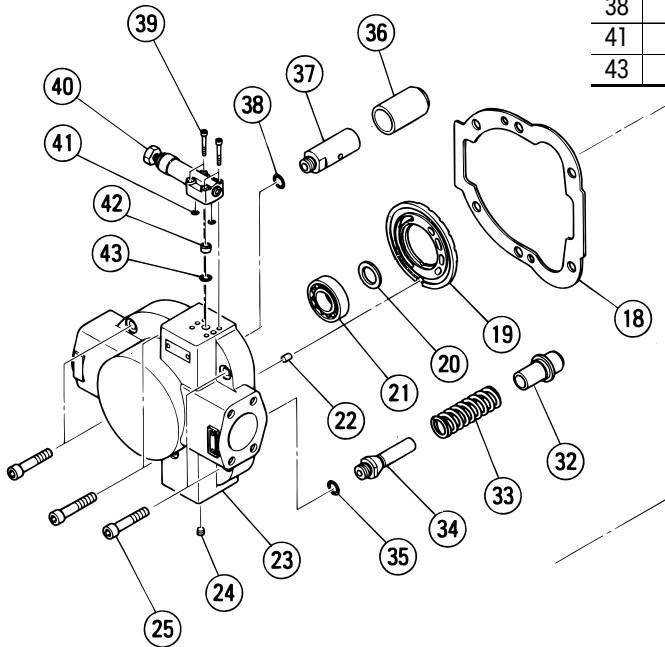
P70V

4	Oリング	007923119	AS568-231 (NBR, Hs90)	1
5	シャフトシール	40012883	—————	1
7	Oリング	007990619	AS568-906 (NBR, Hs90)	1
9	Oリング	007991219	AS568-912 (NBR, Hs90)	1
16	ガスケット	VA30439	—————	1
31	Oリング	007914917	AS568-149 (NBR, Hs70)	2
39	Oリング	007901119	AS568-011 (NBR, Hs90)	2
41	Oリング	007901819	AS568-018 (NBR, Hs90)	1

	P21V	P31V	P40V	P70V
	40058739	40058739	40058728	40048024
R 17.	40058258		40058726	40048805
L 17.	40058259		40058727	40048806

P100V

	名 称			
4	Oリング	007933817	AS568-338 (NBR, Hs70)	1
5	シャフトシール	40011048	—	1
7	Oリング	007991219	AS568-912 (NBR, Hs90)	1
10	Oリング	007991219	AS568-912 (NBR, Hs90)	1
18	ガスケット	40011573	—	1
28	Oリング	007924119	AS568-241 (NBR, Hs90)	2
35	Oリング	007991019	AS568-910 (NBR, Hs90)	1
38	Oリング	007991019	AS568-910 (NBR, Hs90)	1
41	Oリング	007901119	AS568-011 (NBR, Hs90)	2
43	Oリング	007901819	AS568-018 (NBR, Hs90)	1



P130V

	名 称			個数
4	Oリング	007933817	AS568-338 (NBR, Hs70)	1
5	シャフトシール	40011048	—	1
7	Oリング	007991219	AS568-912 (NBR, Hs90)	1
10	Oリング	007991219	AS568-912 (NBR, Hs90)	1
18	ガスケット	40011616	—	1
28	Oリング	007924719	AS568-247 (NBR, Hs90)	2
35	Oリング	007991019	AS568-910 (NBR, Hs90)	1
38	Oリング	007991019	AS568-910 (NBR, Hs90)	1
41	Oリング	007901119	AS568-011 (NBR, Hs90)	2
43	Oリング	007901819	AS568-018 (NBR, Hs90)	1

	P100V	P130V
	40038744	40058363
R	40048836	40058361
L	40048837	40058362