

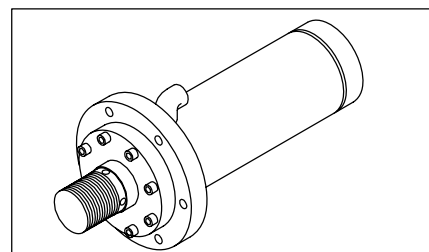
HC7系列油壓缸 HC7 Series Hydraulic Cylinders

橡膠加硫機與壓床機械等多種用途 Which employed in rubber vulcanizing M/C punching presses etc., machinery

- * HC7形油壓缸內徑從 $\phi 125 \sim \phi 350$,適用於橡膠加硫機或壓床,剪床機械等,多種用途的油壓缸
- * 振動,衝擊和瞬間極壓等均安全,因此形油壓缸為特殊機種用途,故其固定式只有一種,且此形油壓缸其最主要功能為推出,所以縮回時要注意壓力不可過高
- * 加工精度,表面處理,油封材料等各零件之設計均朝向特殊用途為基準之高性能油壓缸
- * The HC7 hyd cylinder with bore dia. $\phi 125 \sim \phi 350$ and employed in rubber vulcanizing M/C. press power shears etc., so that there are multi-purpose hyd cylinders.
- * Since, this is a special purpose for which just one mounting style furthermore, with vibration resistant impulse resistant & anti-instantaneous burst press. etc., features especially this series hyd cylinder is aim at extending force so that the retracting force will not larged during retracting.
- * The processing accuracy surface treatment & oil sealer's material etc selecting & manufacturing are emphasised on special applications.

規範 Specifications

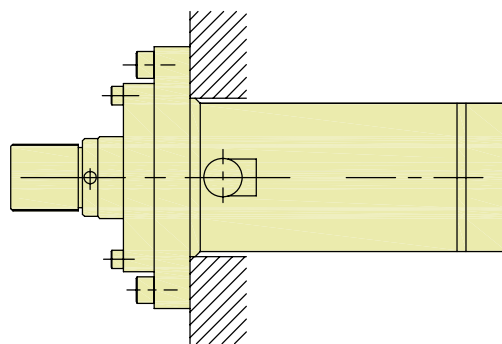
項目 Item	型式 Model	HC7系列 HC7 Series
缸管內徑 mm Cylinder Bore		$\phi 125, \phi 150, \phi 180, \phi 200$ $\phi 220, \phi 250, \phi 280, \phi 300$ $\phi 320, \phi 350$
固定座形式 Mounting		FA
使用壓力 Operating Pressure		160 kgf/cm ²
測試壓力 Testing Pressure		230 kgf/cm ²
最低作動壓力 Min. Operating Pres.		3 kgf/cm ²
適用作動油 Fluid		一般礦物性作動油 Mineral oil
最高使用速度 Max. Operating Speed		500 mm/sec
最低使用速度 Min. Operating Speed		20 mm/sec
使用溫度範圍 Range of Ambient Temperature		-10°C ~ +80°C (油溫及周圍)
推桿前端形式 Rod end type		A TYPE & B TYPE
最大行程 Max. Stroke		參考彎曲強度低值 (DRAW)
行程容許差 Tolerance of Stroke		JIS B 8354 A級



* 活塞桿前端形式 Rod End Type

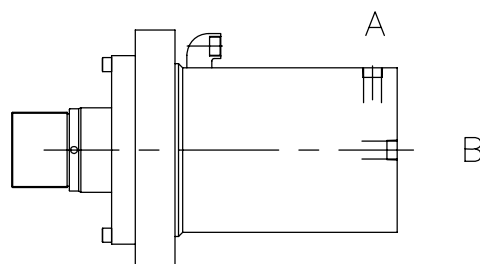
略圖 Configuration	
TYPE A	TYPE B

* 按裝要領 Installations



* 出入口形式 Port Position

- * 後蓋端出入口形式可分,管用斜牙螺紋,油壓用凸緣兩種 位置為A,B
- * 選購時須和目錄位置相同,如不同時長度會改變,請洽詢
- * The port position of cylinder cap can be divided into pipe threading & flange two models and the position as A,B
- * Beware, the port position which must same as fig shown if want another position which must consulted us.



HC7

訂購內容索引 Ordering Index :

180 HC7 FA 125 90 100 B A P E

使用壓力 180 kgf/cm²
Max. Operating Pres.

HC7:系列
HC7:Series Number

固定座形式Mounting
FA, FD

缸管內徑 Cylinder Bore mm
ø125,ø150,ø180,ø200,ø220
ø250,ø280,ø300,ø320,ø350

活塞桿徑 Rod Dia mm
ø80,ø90,ø110,ø125,ø140
ø150,ø170,ø180,ø190,ø200

衝程 Stroke mm
要考慮最大容許衝程
Max. Permissible stroke

特殊附件

E:另類螺紋形K:固定螺帽

L:固定法蘭

Optional Attachment

E:Other threading L:Fixed flange

K:Fixed screw nut

後蓋出入口位置

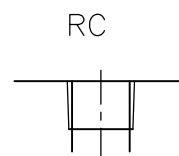
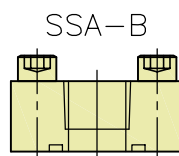
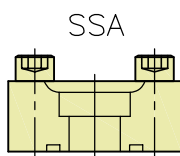
Cap Port Position A, B

出入口形式 Port Type

SSA,SSA-B, RC

活塞桿前端形式 Rod End Type
Type-A Type-B

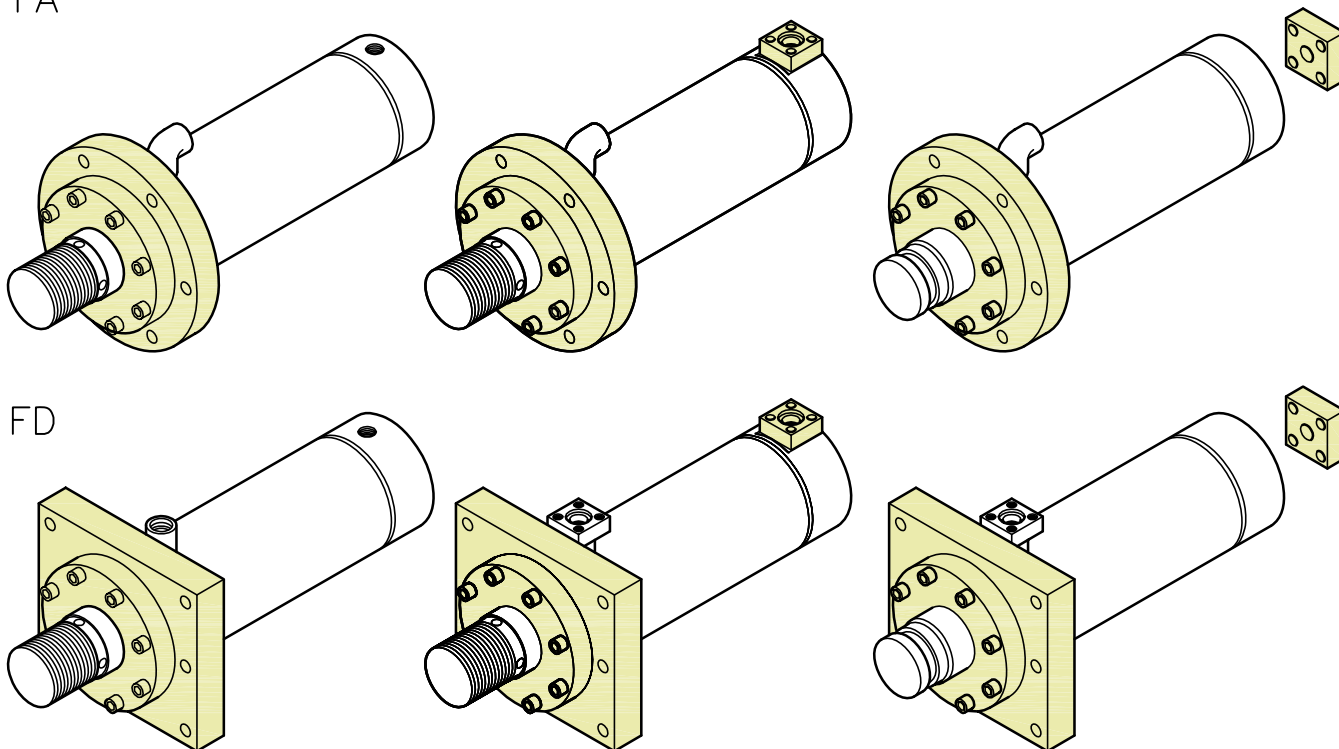
出入口油壓凸緣 Port Flange Kite



* 技術參數 Technical Data :

缸管內徑 Cylinder Bore mm	活塞桿徑 Rod Dia. mm	動 作 Action	有效面積 Effective Area cm ²	出 力 Output Power kgf				流量10L/分 之速度 Flow Rate at Speed 10L/min mm/sec	速度10mm/秒 之流量 Speed at Flow Rate 10mm/sec L/min
				30 kgf/cm ²	70 kgf/cm ²	140 kgf/cm ²	210 kgf/cm ²		
125	80	推力 Extend	122.7	3680	8586	17181	25771	14.0	7.4
		拉力 Retract	72.4	2172	5069	10143	15215	23.0	4.3
150	90	推力 Extend	176.6	5299	12364	24740	37110	9.0	10.6
		拉力 Retract	113.0	3391	7913	15834	23750	15.0	6.8
180	110	推力 Extend	254.3	7630	17804	35626	53438	7.0	15.3
		拉力 Retract	159.4	4781	11161	22321	33482	10.0	9.6
200	125	推力 Extend	314.2	9420	21980	43982	65973	5.3	18.8
		拉力 Retract	191.3	5740	13401	26802	40203	8.7	11.5
220	140	推力 Extend	380.0	11398	26596	53219	79828	4.4	22.8
		拉力 Retract	226.1	6782	15834	31667	47501	7.4	13.6
250	150	推力 Extend	490.6	14719	34344	68722	103084	3.4	29.4
		拉力 Retract	314.0	9420	21991	43982	65973	5.3	18.8
280	170	推力 Extend	615.4	18463	43081	86205	129308	2.7	36.9
		拉力 Retract	388.6	11657	27214	54428	81642	4.3	23.3
300	180	推力 Extend	706.5	21195	49455	98960	148440	2.4	42.4
		拉力 Retract	452.2	13565	31667	63335	95000	3.7	27.1
320	190	推力 Extend	804.2	24115	56269	112595	168892	2.1	48.2
		拉力 Retract	520.5	15614	36450	72900	109351	3.2	31.2
350	200	推力 Extend	961.6	28849	67314	134696	202044	1.7	57.7
		拉力 Retract	647.6	19429	45357	90713	136070	2.6	38.9

FA



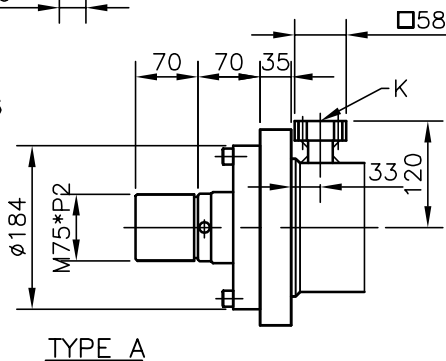
Technical drawing of a circular plate with 12 holes. The plate has an outer diameter of 256 mm and a central hole with a diameter of 16 mm. There are 12 holes in total, arranged in two concentric circles of 6 holes each. The pitch circle diameter (PCD) for the outer holes is 220 mm. The holes are labeled 6-Ø16.

[illegible]

Technical drawing of a square plate with a central circular hole and six smaller holes arranged in a circle. Dimensions: outer square 256x256, inner square 180x180, central hole 220 diameter, six holes 6-Ø16 arranged in a circle with 90mm spacing.

Technical drawing of a shaft with dimensions: 85, 45, 75, 65, 15, 30.

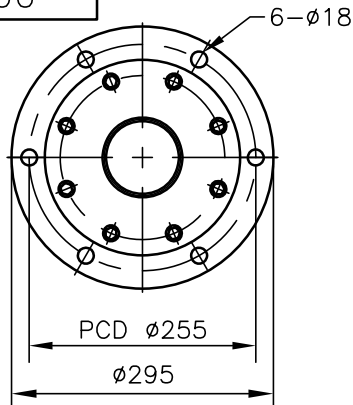
TYPE B



Technical drawing (B) shows the front view of a circular part. It features a central hole with a diameter of 58 and four smaller holes with a diameter of 40. The distance between the centers of the four small holes is 67. The part is labeled with '4-M10*P1.5' and 'P'.

DIMENSION		
P		L
RC-3/4"	A,B	45
SSA-20	A	73
SSA-20	B	45

HC7- $\phi 150$ -FA
 $\phi 150/\phi 90$



DIMENSION

K

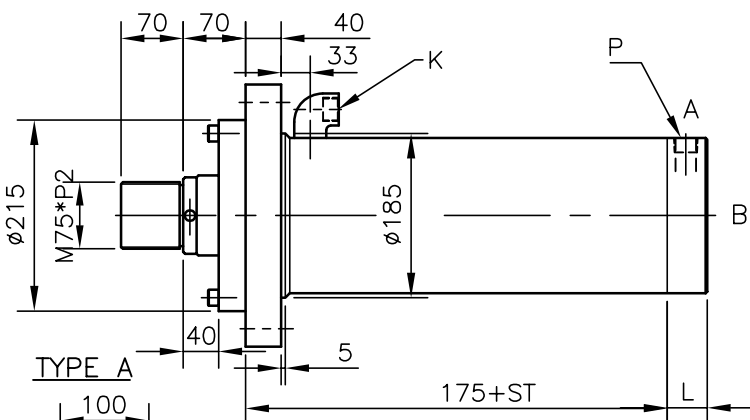
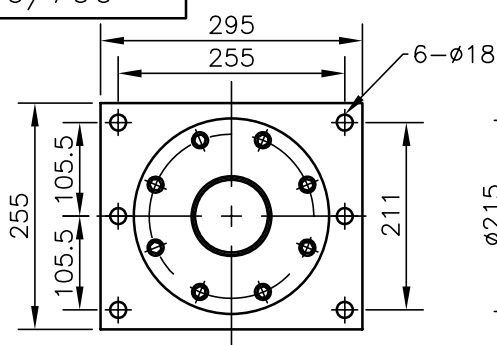
PT3/4"-90°

RC-3/4"

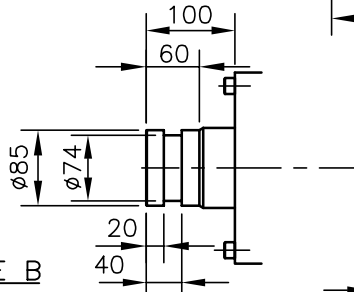
G-3/4"

SSA-20

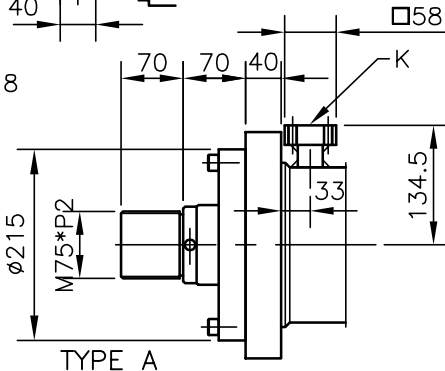
HC7- $\phi 150$ -FD
 $\phi 150/\phi 90$



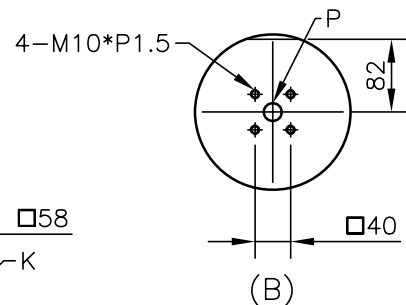
TYPE A



TYPE B



TYPE A



(B)

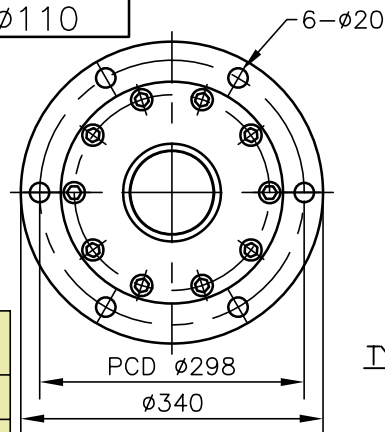
DIMENSION

P

L

RC-3/4"	A,B	45
SSA-20	A	73
SSA-20	B	45

HC7- $\phi 180$ -FA
 $\phi 180/\phi 110$



DIMENSION

K

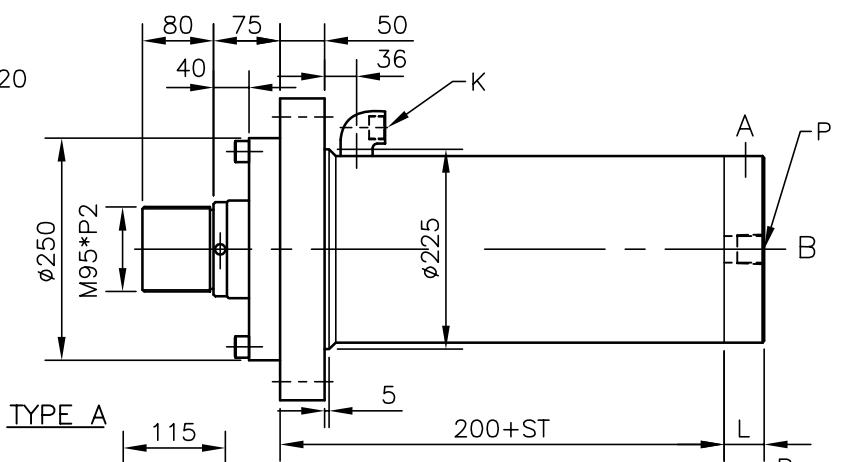
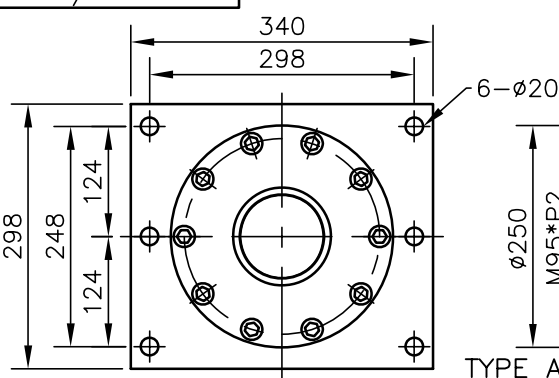
PT3/4"-90°

RC-3/4"

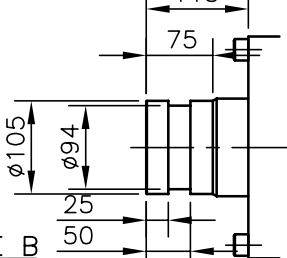
G-3/4"

SSA-20

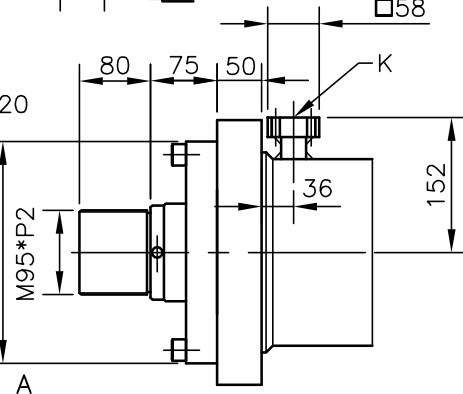
HC7- $\phi 180$ -FD
 $\phi 180/\phi 110$



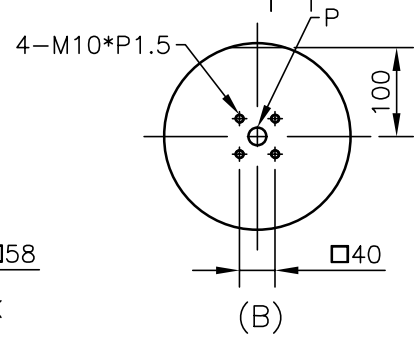
TYPE A



TYPE B



TYPE A



(B)

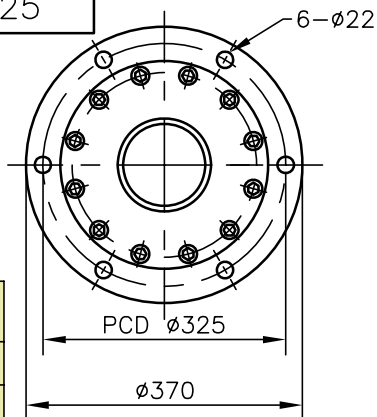
DIMENSION

P

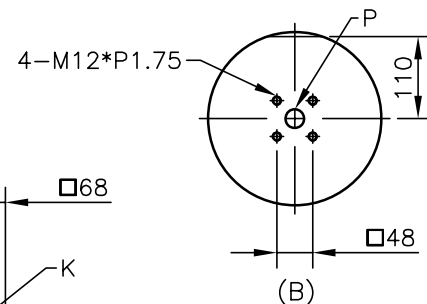
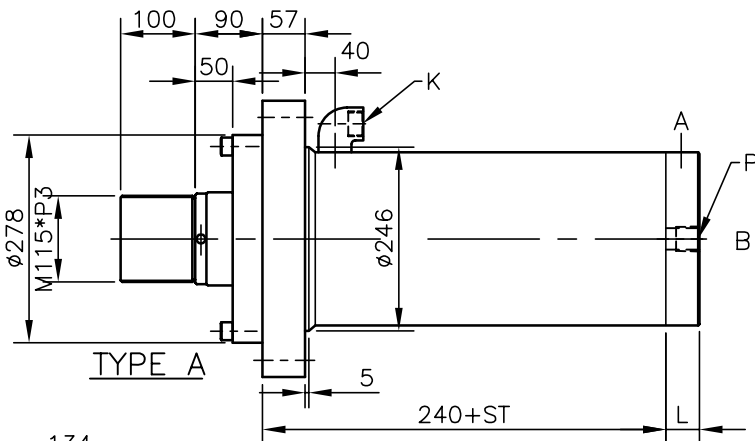
L

RC-3/4"	B	35
RC-3/4"	A	45
SSA-20	B	35
SSA-20	A	75

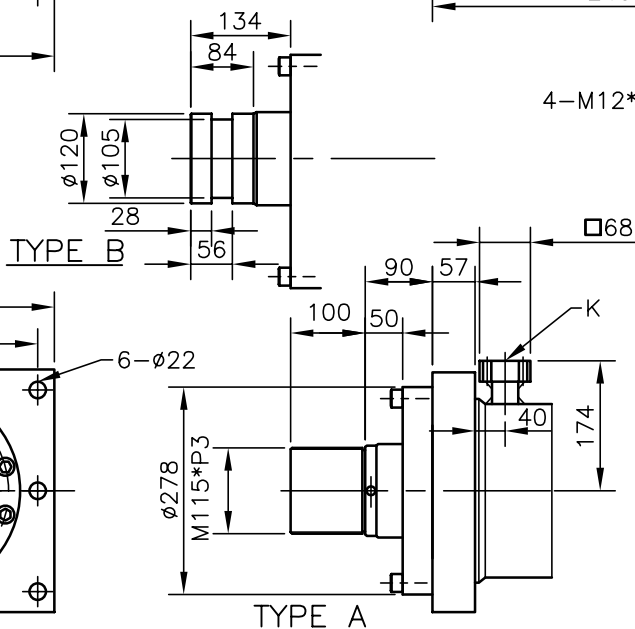
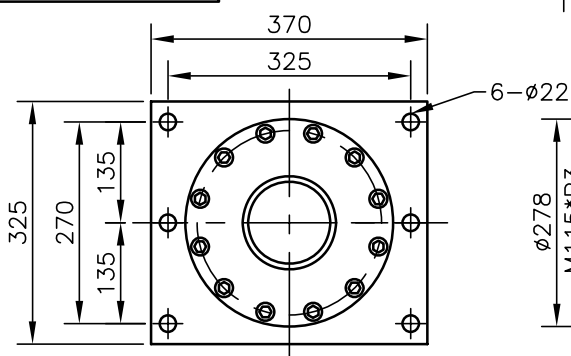
HC7- $\phi 200$ -FA
 $\phi 200/\phi 125$



DIMENSION K
RC 1"-90°
RC 1"
G- 1"
SSA-25

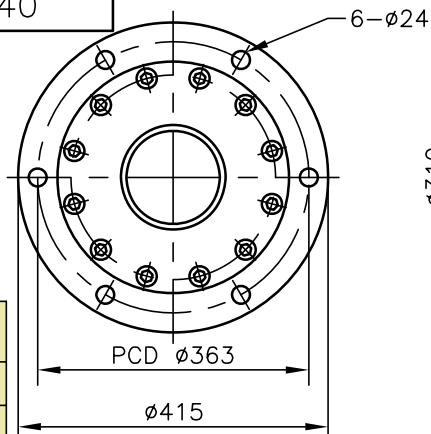


HC7- $\phi 200$ -FD
 $\phi 200/\phi 125$

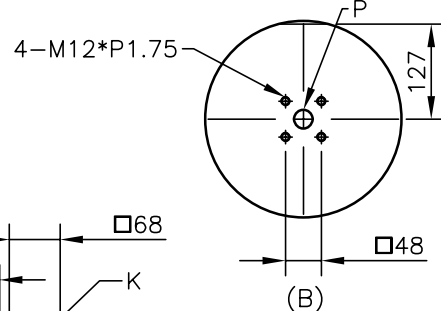
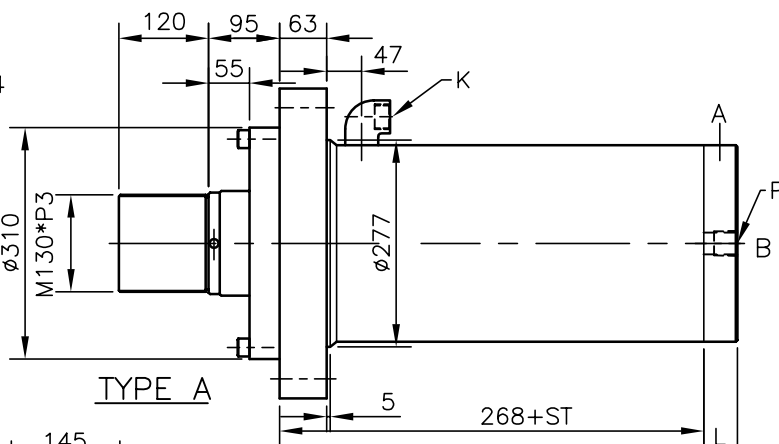


DIMENSION P		L
RC- 1"	B	45
RC- 1"	A	50
SSA-25	B	45
SSA-25	A	85

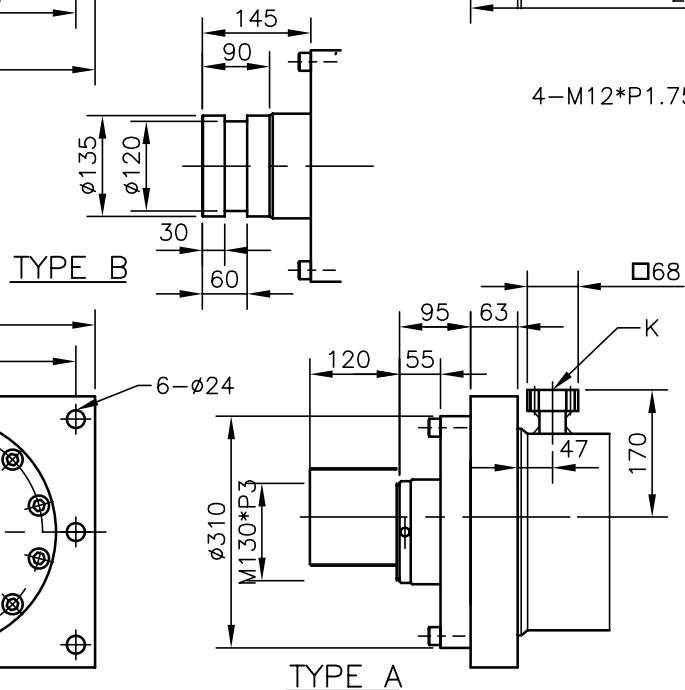
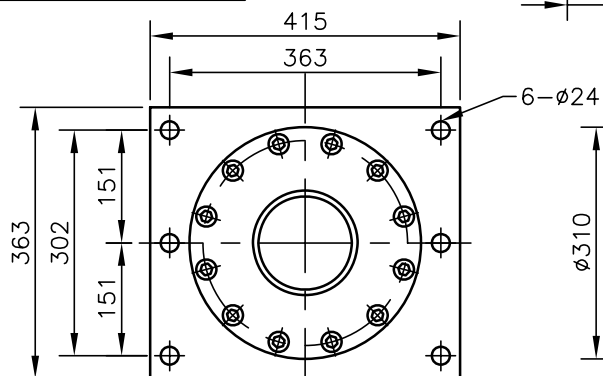
HC7- $\phi 220$ -FA
 $\phi 200/\phi 140$



DIMENSION K
RC 1"-90°
RC 1"
G- 1"
SSA-25



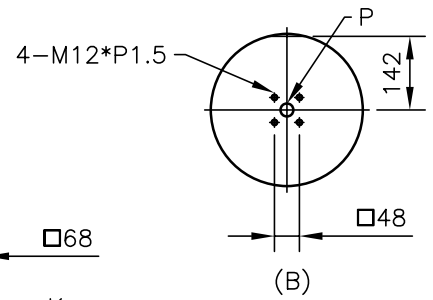
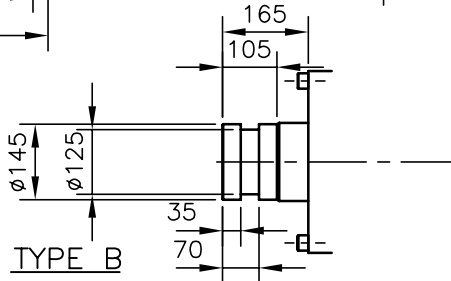
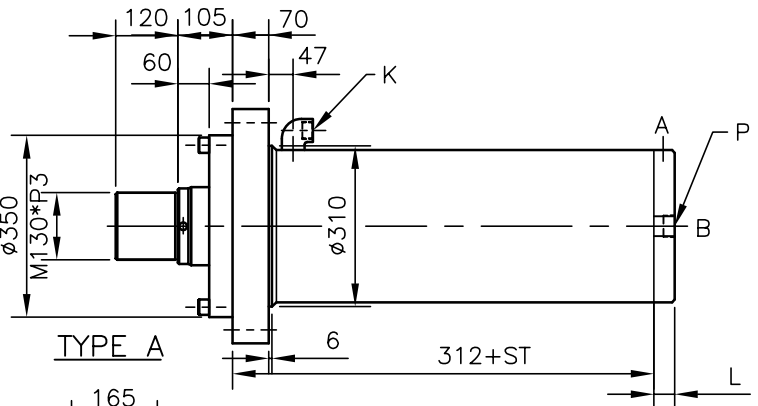
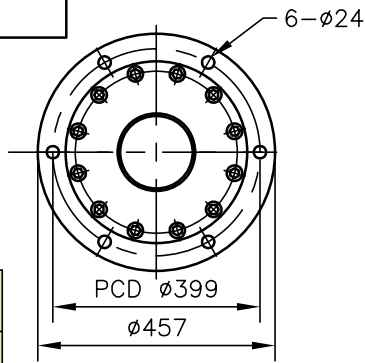
HC7- $\phi 220$ -FD
 $\phi 200/\phi 140$



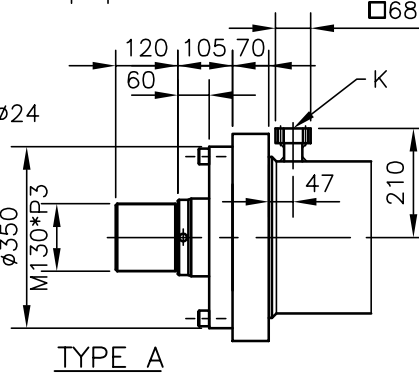
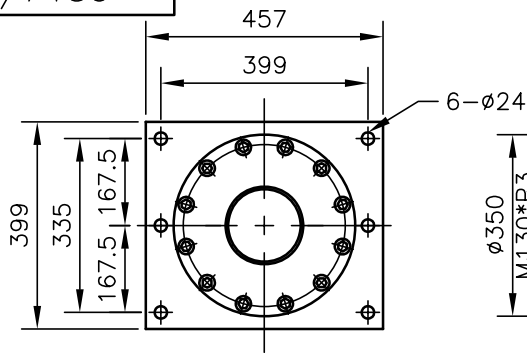
DIMENSION P		L
RC- 1"	B	45
RC- 1"	A	50
SSA-25	B	45
SSA-25	A	85

HC7- $\phi 250$ -FA
 $\phi 250/\phi 150$

DIMENSION K
RC-1"-90°
RC- 1"
G- 1"
SSA-25



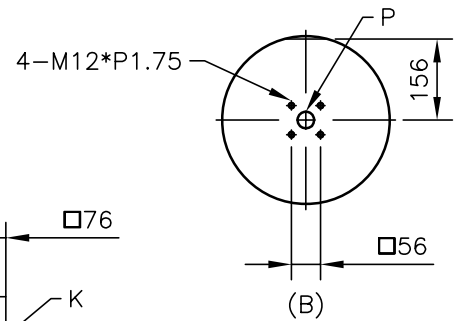
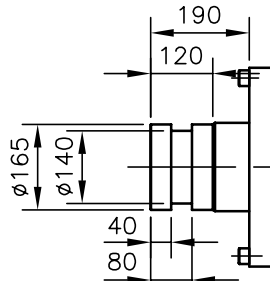
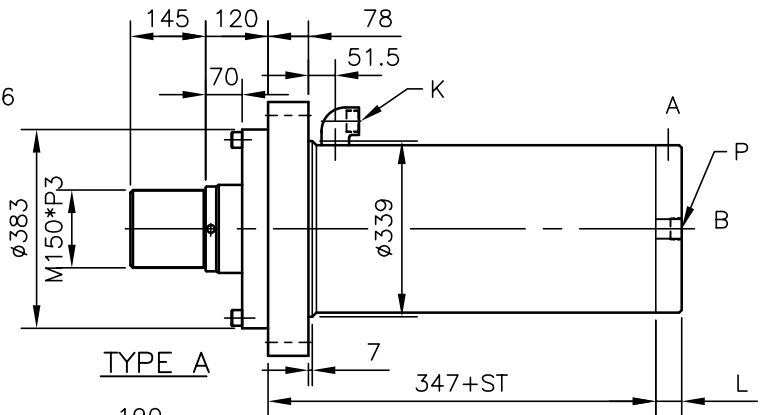
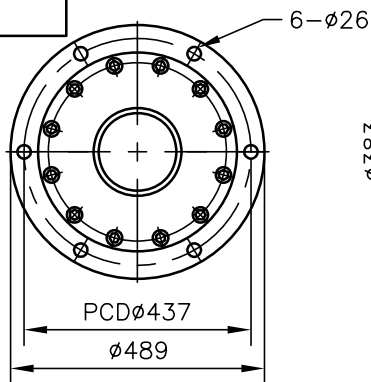
HC7- $\phi 250$ -FD
 $\phi 250/\phi 150$



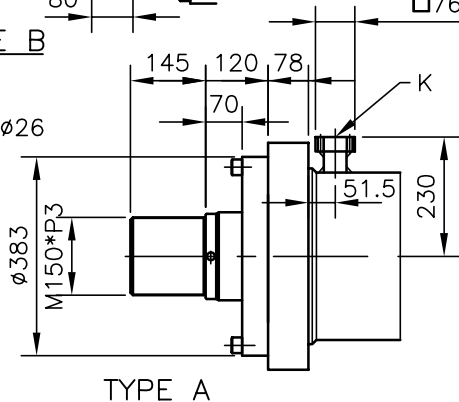
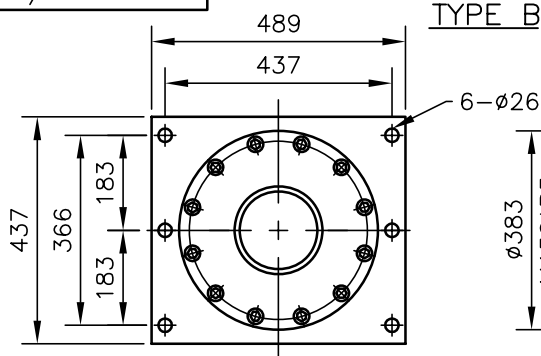
DIMENSION P		L
RC-1"	B	45
RC-1"	A	50
SSA-25	B	45
SSA-25	A	85

HC7- $\phi 280$ -FA
 $\phi 280/\phi 170$

DIMENSION K
RC1-1/4"-90°
RC1-1/4"
G1-1/4"
SSA-32

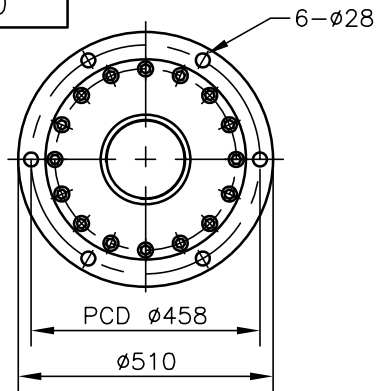


HC7- $\phi 280$ -FD
 $\phi 280/\phi 170$

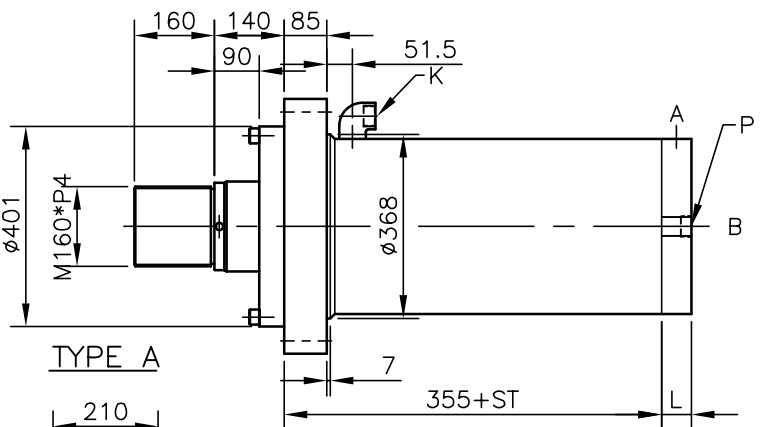


DIMENSION P		L
RC1-1/4"	B	50
RC1-1/4"	A	60
SSA-32	B	50
SSA-32	A	95

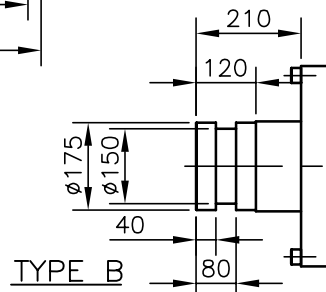
HC7- $\phi 300$ -FA
 $\phi 300/\phi 180$



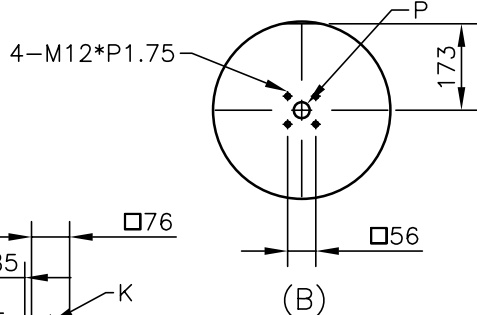
DIMENSION K
RC1-1/4"-90°
RC1-1/4"
G1-1/4"
SSA-32



TYPE A

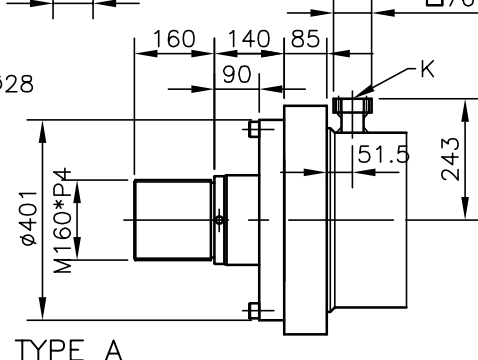
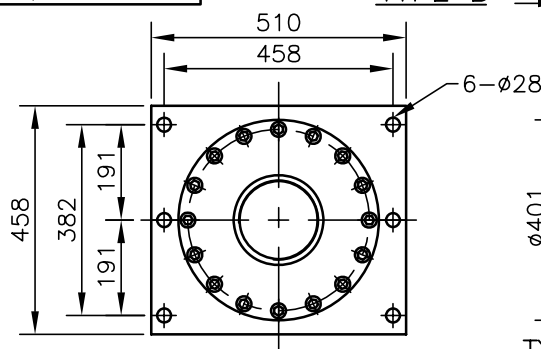


TYPE B



(B)

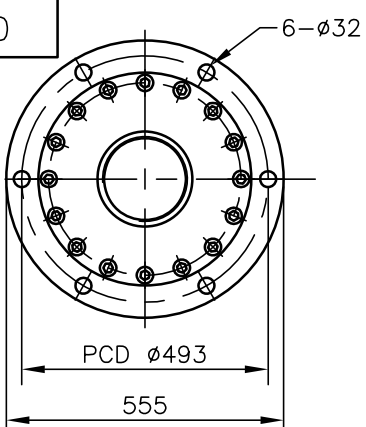
HC7- $\phi 300$ -FD
 $\phi 300/\phi 180$



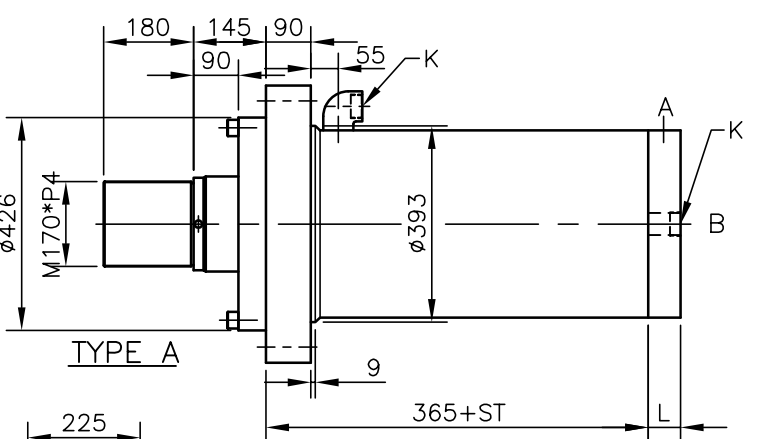
TYPE A

DIMENSION P		L
RC1-1/4"	B	60
RC1-1/4"	A	60
SSA-32	B	60
SSA-32	A	95

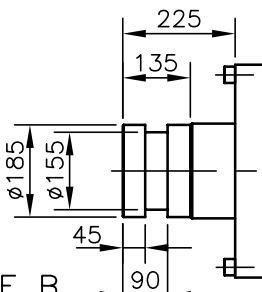
HC7- $\phi 320$ -FA
 $\phi 320/\phi 190$



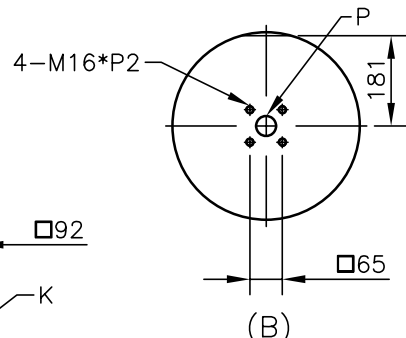
DIMENSION K
RC1-1/2"-90°
RC1-1/2"
G1-1/2"
SSA-40



TYPE A

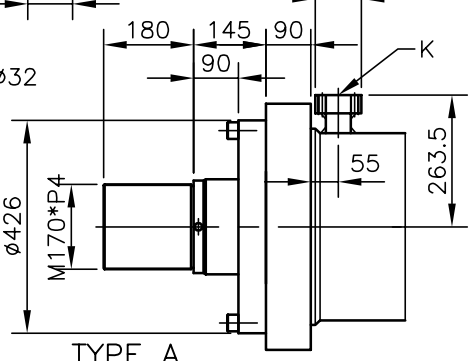
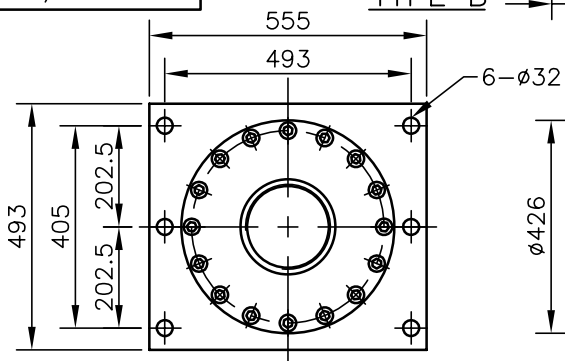


TYPE B



(B)

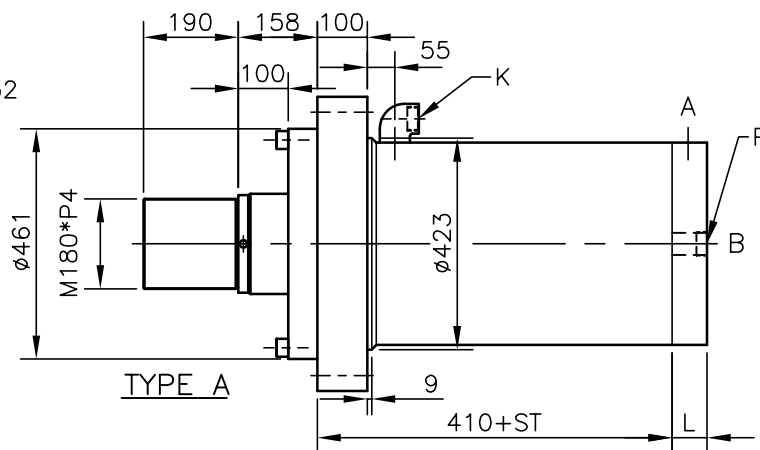
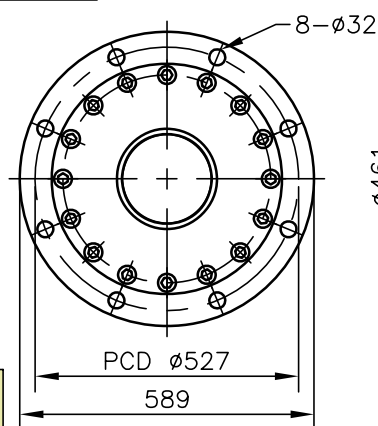
HC7- $\phi 320$ -FD
 $\phi 320/\phi 190$



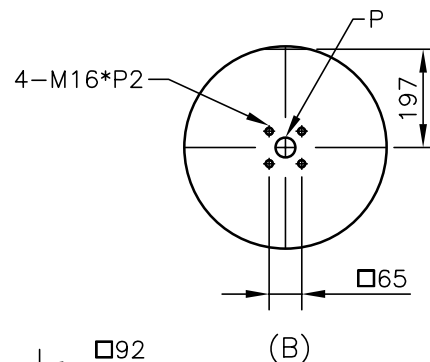
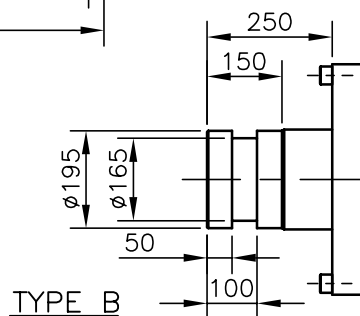
TYPE A

DIMENSION P		L
RC1-1/2"	B	65
RC1-1/2"	A	75
SSA-40	B	65
SSA-40	A	118

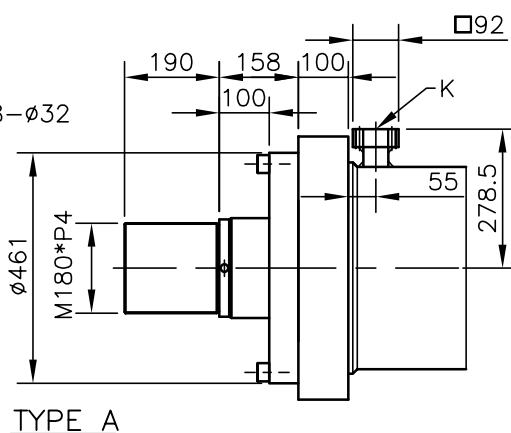
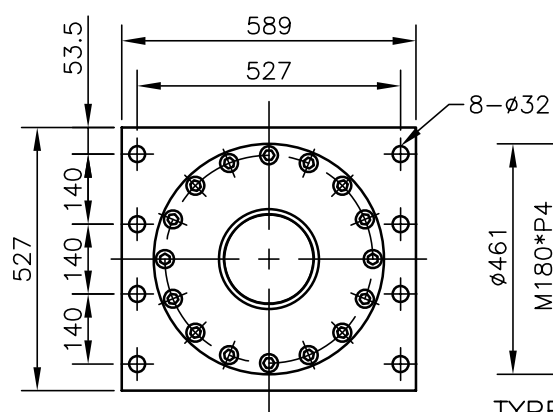
HC7- $\phi 350$ -FA
 $\phi 350/\phi 200$



DIMENSION K
RC1-1/2"-90°
RC1-1/2"
G1-1/2"
SSA-40



HC7- $\phi 350$ -FD
 $\phi 350/\phi 200$



DIMENSION P		L
RC1-1/2"	B	70
RC1-1/2"	A	75
SSA-40	B	70
SSA-40	A	118

HC7, HC8

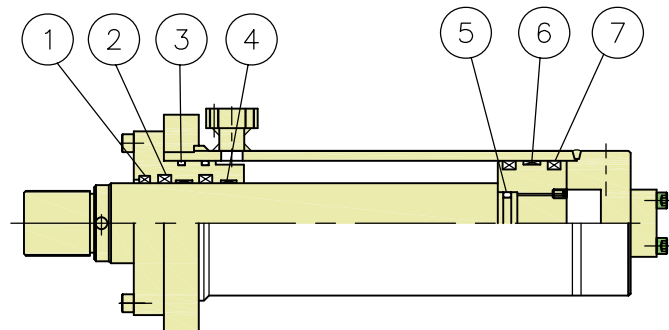
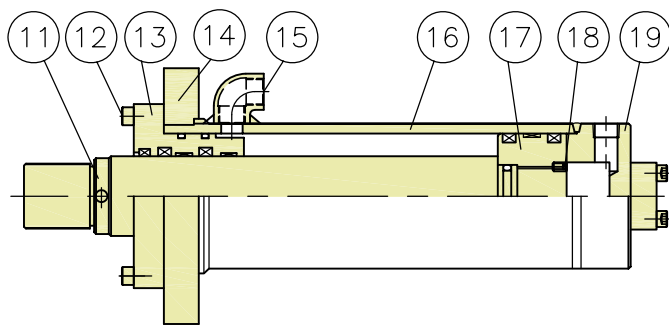
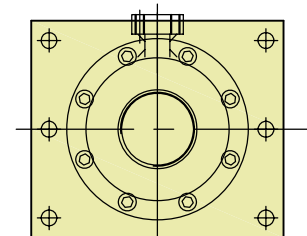
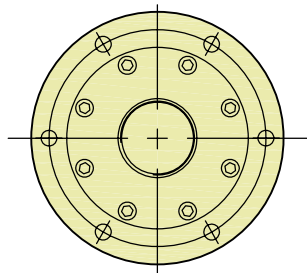
油壓缸大概重量計算

Estimated weight of hyd.

EX. : $\phi 125$, ST=200mm , HC7

$$\begin{aligned} \text{weight} &= W1 + (W2 * ST) \\ &= 43.5 + (7.2 * 2) \\ &= 69.3 \text{ kg} \end{aligned}$$

HC7 HC8	W1 (kg)			W2 (kg/100mm)
	HC7	HC8-FA	HC8-FC	
$\phi 125$	43.5	43.3	52.7	7.2
$\phi 150$	65.5	65	77.5	10
$\phi 180$	103.7	98.8	117.5	14.7
$\phi 200$	144.8	131.6	151	18.2
$\phi 220$	202.5	180	207.5	24.9
$\phi 250$	264.7	233.6	267.8	28.3
$\phi 280$	360	319	355.7	33.8
$\phi 300$	434.9	381	425.9	40
$\phi 320$	537.5	478	526.2	45.8
$\phi 350$	658	573	620.8	50.3



零件名稱及材質表 Parts Description & Material List:

NO	名 稱 Description.	材 質 Material.	Q'TY	NO	名 稱 Description.	材 質 Material.	Q'TY
11	活塞桿 Piston Rod	機械構造用碳鋼 Carbon Steel for Mechanical Structure	1	16	缸管 Cylinder Tube	機械構造用碳鋼鋼管 Carbon Steel Pipe for Mechanical Structure	1
12	前蓋 Head	一般構造用軋鋼 Rolled Steel for General Structure	1	17	活塞 Piston	一般構造用軋鋼 Rolled Steel for General Structure	1
13	六角承窩螺絲 Scket Head Cap Screw	機械構造用碳鋼 Carbon Steel for Mechanical Structure	8	18	防鬆螺絲 Set Screw	機械構造用碳鋼 Carbon Steel for Mechanical Structure	1
14	法蘭 Flange	一般構造用軋鋼 Rolled Steel for General Structure	1	19	後蓋 Cylinder Cap	一般構造用軋鋼 Rolled Steel for General Structure	1
15	活塞 Piston	一般構造用軋鋼 Rolled Steel for General Structure	1				

油封規格表 Specifications of Oil Seal:

NO	1	2	3	4	5	6	7
名 稱	防塵油封 Dust Seal	軸心油封 Rod Seal	O型環 O Ring	耐磨片 Wear Ring	O型環 O Ring	耐磨片 Wear Ring	活塞油封 Piston Seal
材質	PU	PU	NBR	PTFE	NBR	PTFE	PU
數 量	1	2	1	2	1	1	2
內徑	ø,ø.w mm	ø,ø.w mm					ø,ø.w mm
ø125	80-90-8	80-90-6	G-120	80-2.5	G-55	125-2.5	125-112-13
ø150	90-100-8	90-105-9	G-145	90-2.5	G-65	150-2.5	150-136-13
ø180	110-120-8	110-125-9	G-170	110-2.5	G-95	180-2.5	180-165-13
ø200	125-138-9.5	125-140-9	G-190	125-2.5	G-105	200-2.5	200-180-16
ø220	140-153-9.5	140-155-9	G-210	140-2.5	P-115	220-2.5	220-200-16
ø250	150-163-9.5	150-165-9	G-240	150-2.5	P-125	250-2.5	250-230-16
ø280	170-185-14	170-185-9	G-270	170-2.5	P-145	280-2.5	280-255-20
ø300	180-194-9.5	180-200-12	G-290	180-2.5	G-155	300-2.5	300-270-23
ø320	190-203-9.5	190-210-12	P-300	190-2.5	G-165	320-2.5	320-290-24
ø350	200-214-9.5	200-220-12	P-335	200-2.5	G-175	350-2.5	350-320-24