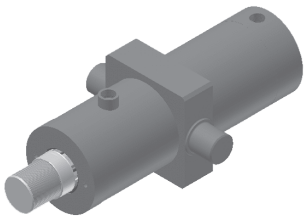
HC5系列油壓缸



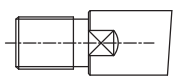
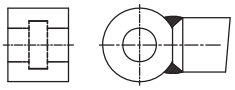
■ 特性

1、本系列油壓缸爲無系柱螺杆式設計，圓形且後蓋爲焊接形式。
2、廣泛應用于車輛，停車場，或專用機械。適宜在苛酷環境中使用：如振動，衝擊瞬間高壓等環境。
3、高加工精度及表面處理，設計時考慮特殊用途之高性能油壓缸。
4、具有多種固定形式。

■ 規格表

項目 \ 型式	HC5系列
缸管內徑 mm	φ40, φ50, φ60, φ63, φ70, φ80, φ90, φ100, φ110, φ125
固定座形式	FA,FB,FD,TC,CA,CD
使用壓力 kgf/cm^2	140
測試壓力 kgf/cm^2	210
最低作動壓力 kgf/cm^2	3
適用作動油	一般礦物性作動油
最高使用速度 mm/sec	500
最低使用速度 mm/sec	10
使用温度範圍 ℃	–10~+80
推杆前端形式	A TYPE 與 B TYPE
最大行程	參考彎曲强度低值（DRAW）

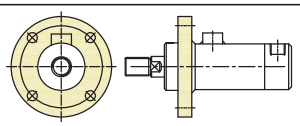
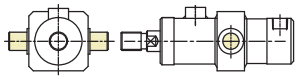
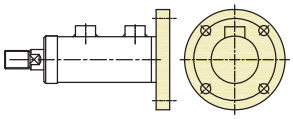
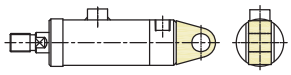
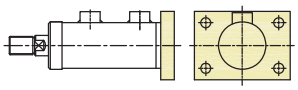
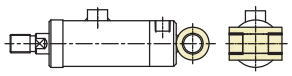
■ 活塞杆前端形式

略圖			
TYPE A		TYPE B	

■ 行程容許差

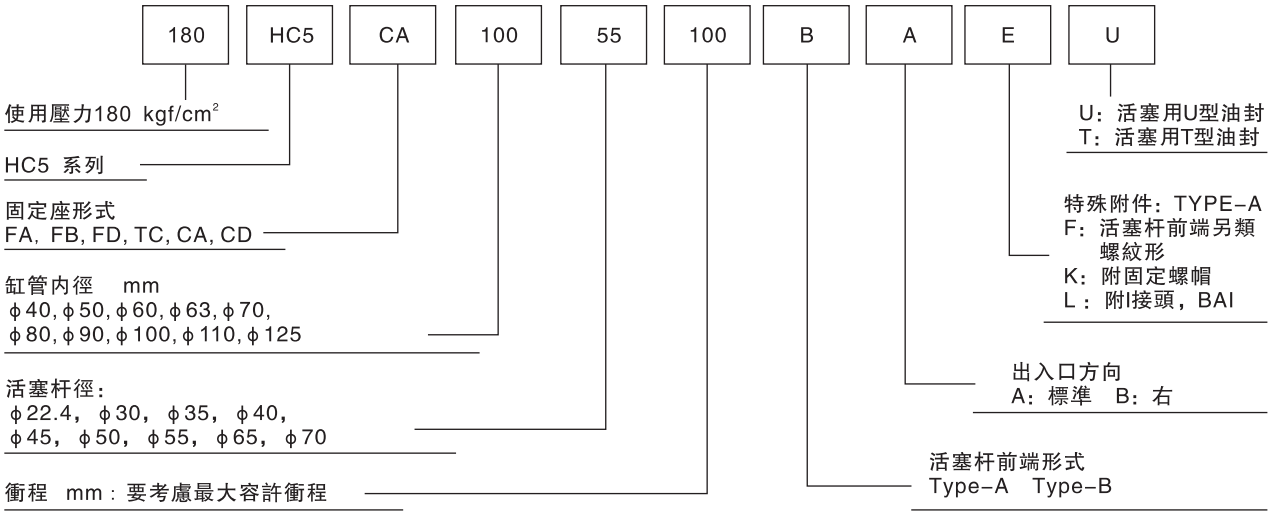
行程 mm	容許差 mm
~100	+0.8
100~250	+1.0
250~630	+1.25
630~1000	+1.4
1000~1600	+1.6
1600~	+1.8

■ 固定座形式

記號	名稱	略圖	記號	名稱	略圖
FA	前蓋端法蘭形		TC	中間固定支撐形	
FB	後蓋端法蘭形		CA	山形座（1山形）	
FD	後蓋端長方形法蘭形		CD	後蓋端圓筒形	

HC4

■ 訂購內容索引



※特殊附件記載于件欄 例如：EK

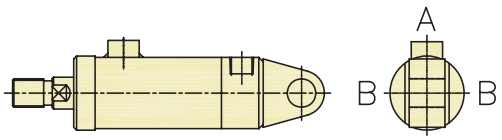
■ 技術參數

缸管內徑 mm	活塞杆徑 mm	動 作	有效面積 cm²	出 力					流量10L/分之速度	速度10mm/秒之流量
				10kgf/cm²	30kgf/cm²	70kgf/cm²	105kgf/cm²	140kgf/cm²		
40	22.4	推力	12.6	126	377	879	1319	1758	132	0.8
		拉力	8.6	86	259	603	905	1207	193	0.5
50	30	推力	19.6	196	589	1374	2061	2748	85	1.2
		拉力	12.6	126	377	879	1319	1758	132	0.8
60	30	推力	28.3	283	848	1978	2967	3956	59	1.7
		拉力	21.2	212	636	1484	2225	2967	79	1.3
63	35	推力	31.2	312	935	2181	3271	4362	53	1.9
		拉力	21.5	215	646	1508	2262	3016	77	1.3
70	40	推力	38.5	385	1154	2693	4039	5385	43	2.3
		拉力	25.9	259	777	1813	2720	3627	64	1.6
80	45	推力	50.3	503	1507	3517	5275	7034	33	3.0
		拉力	34.3	343	1030	2404	3606	4808	49	2.1
90	50	推力	63.6	636	1908	4451	6676	8902	26	3.8
		拉力	44.0	440	1319	3077	4616	6154	38	2.6
100	55	推力	78.5	785	2355	5495	8243	10990	21	4.7
		拉力	54.8	548	1643	3833	5749	7666	30	3.3
110	65	推力	95.0	950	2850	6649	9973	13298	18	5.7
		拉力	61.8	618	1855	4327	6491	8655	27	3.7
125	70	推力	122.7	1227	3680	8586	12879	17172	14	7.4
		拉力	84.2	842	2526	5893	8840	11787	20	5.0

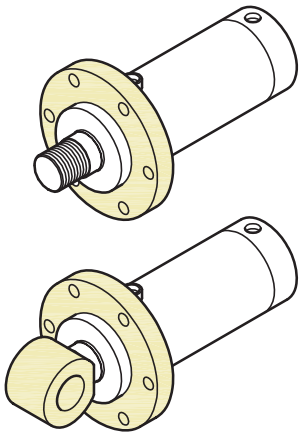
HC5

■ 出入油孔方向

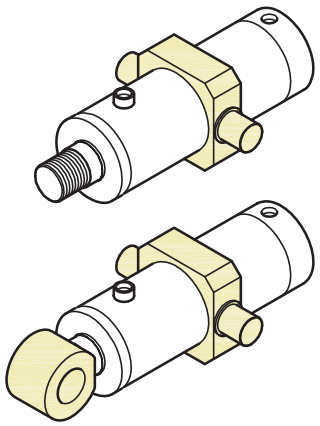
油孔方向分 A、B，標準方向爲 A。



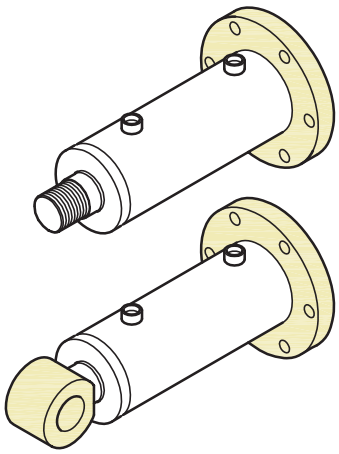
FA



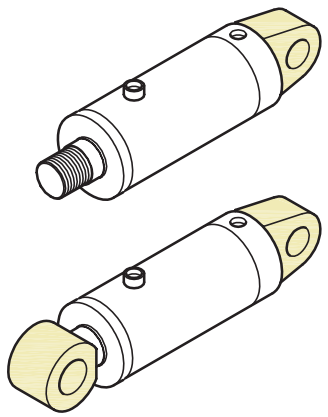
TC



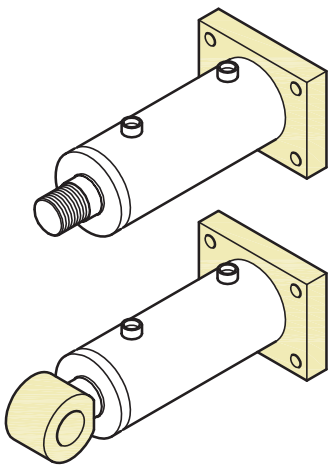
FB



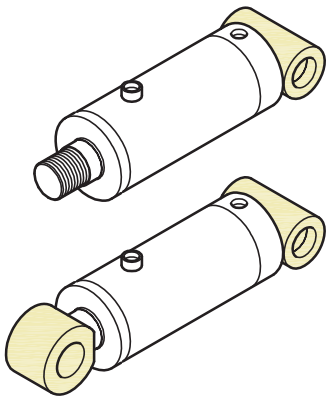
CA



FD



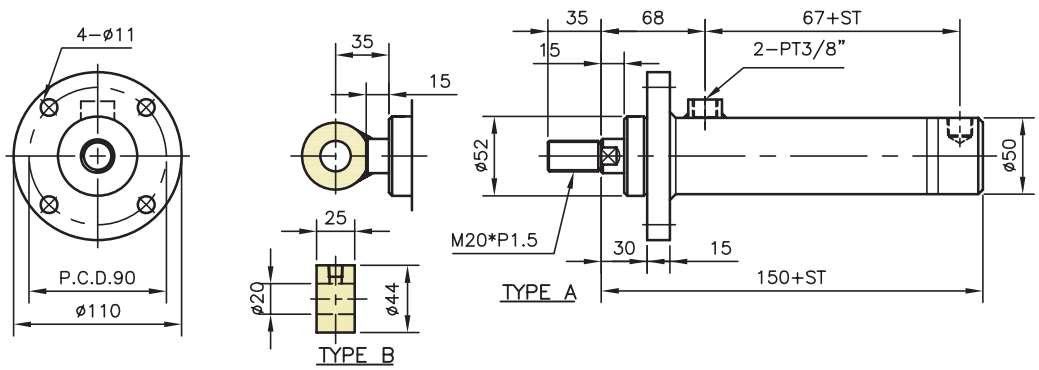
CD



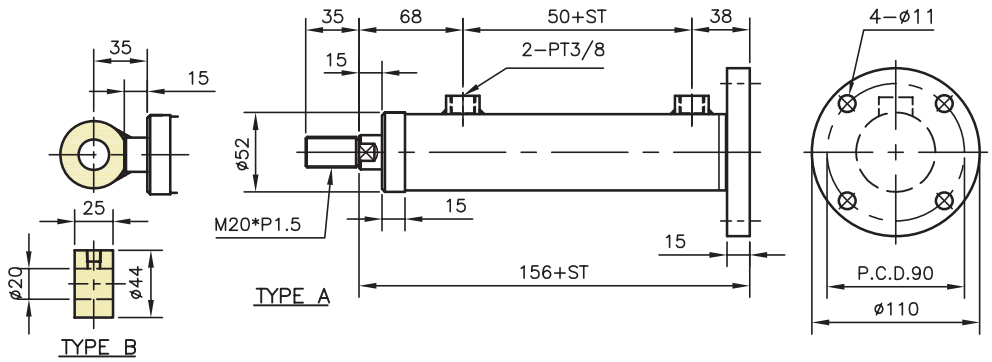
■ 尺寸圖

HC5-ϕ40/ϕ22.4

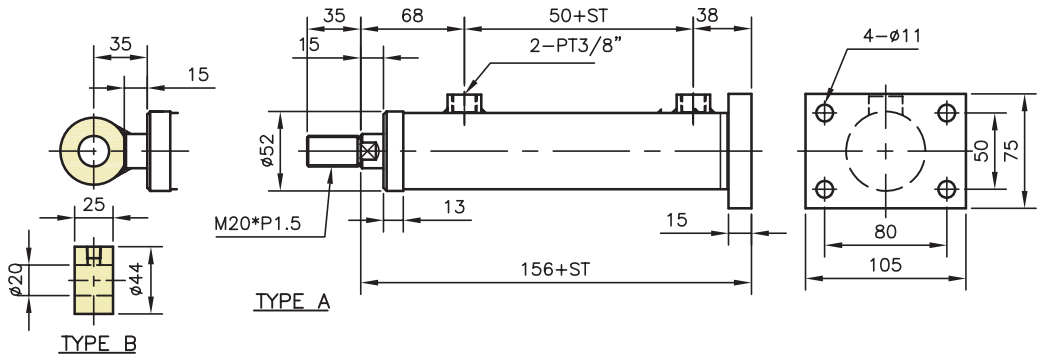
FA



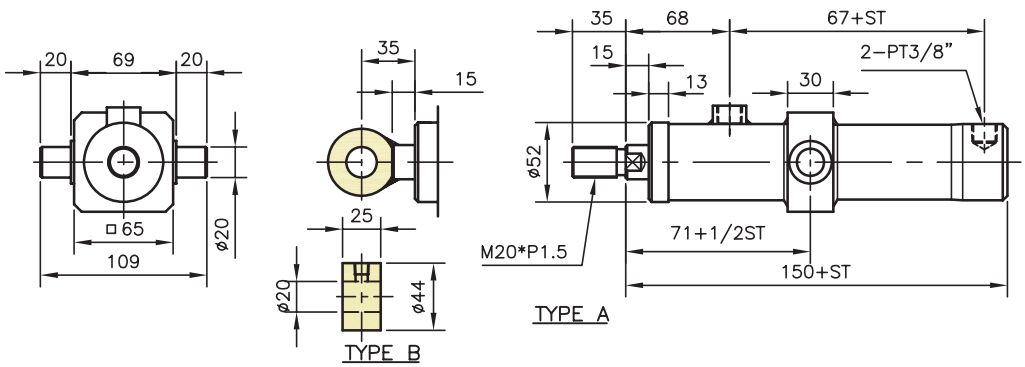
FB



FD



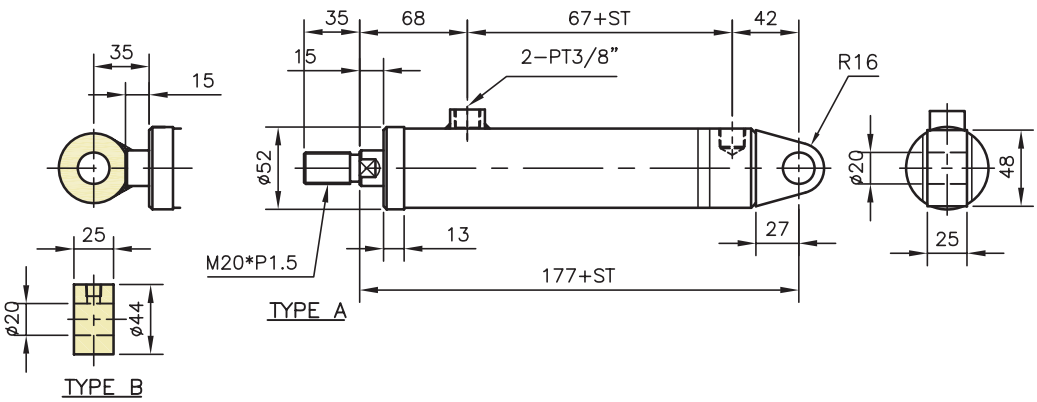
TC



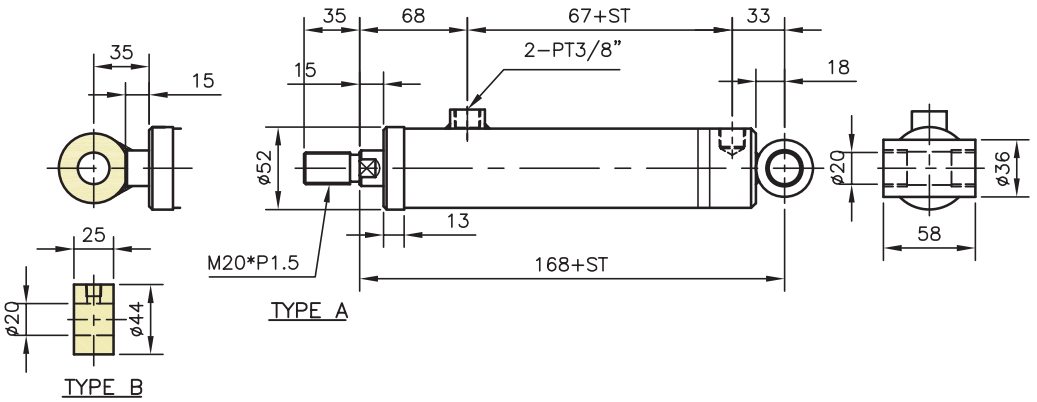
■ 尺寸圖

HC5-ϕ40/ϕ22.4

CA



CD



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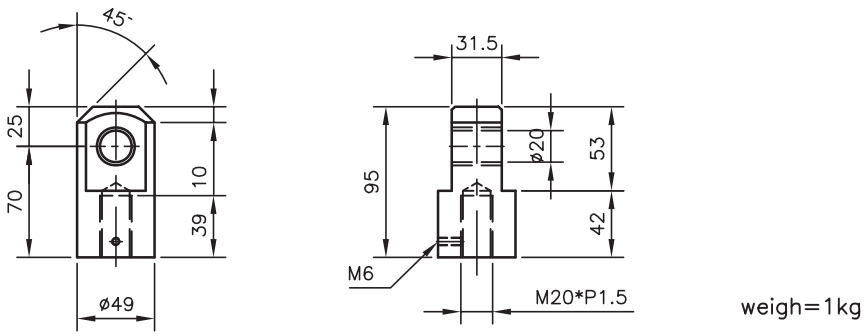


weigh=1kg

■ 油壓缸大概重量計算

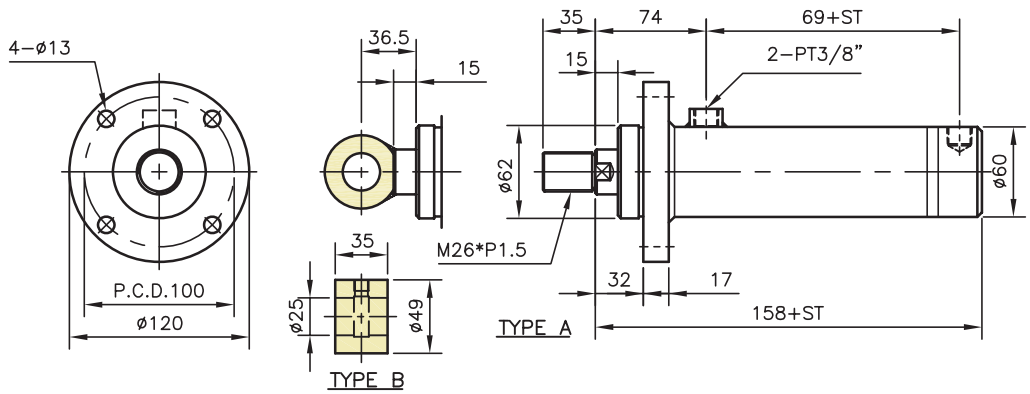
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 3.2 + (0.9 * 2)= 5.0 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	3.2	3.1	2.9	2.8	2.5	2.5
	Type B	3.5	3.4	3.2	3.1	2.8	2.8
W2 (kg/100mm)		0.9					

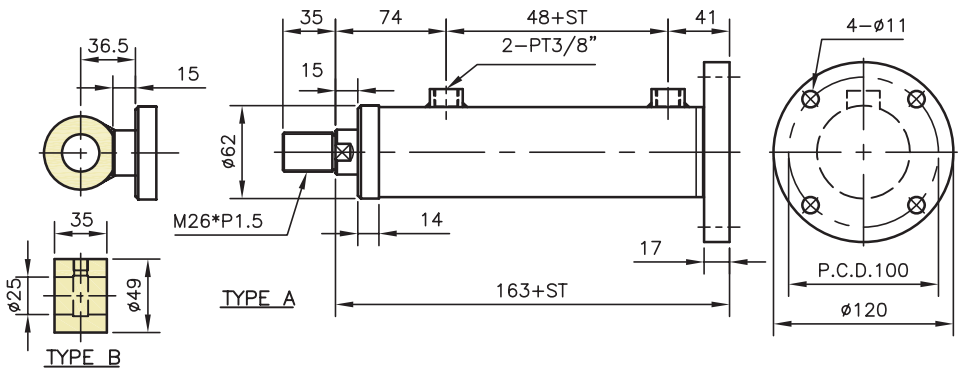
■ 尺寸圖

HC5-ϕ50/ϕ30

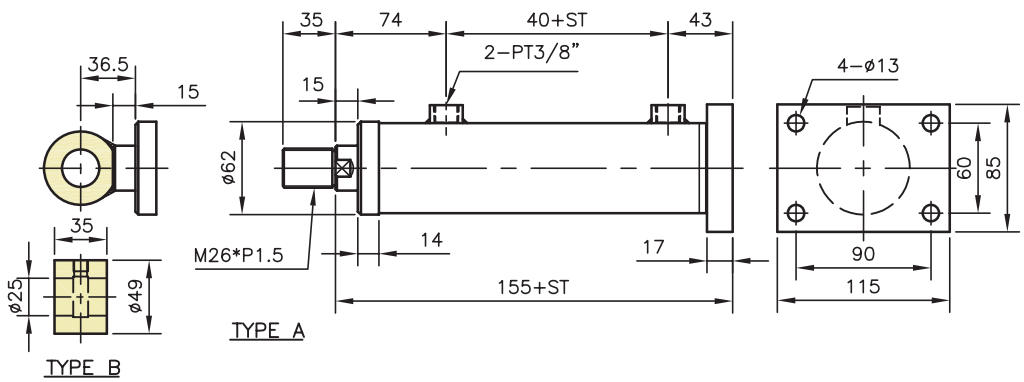
FA



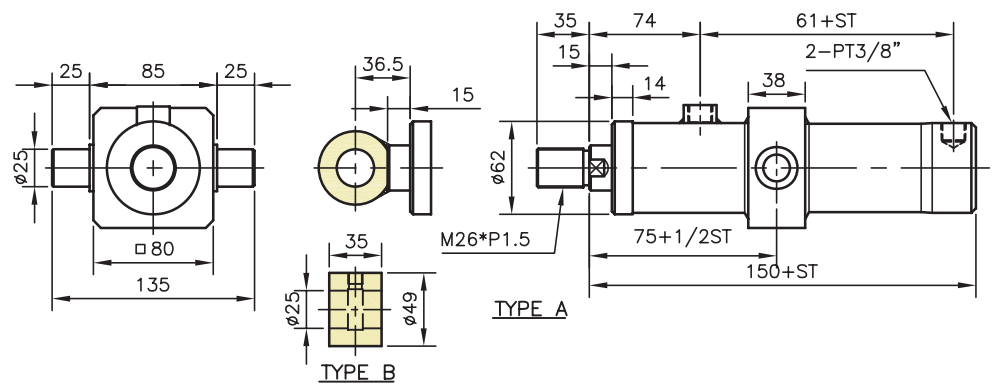
FB



FD



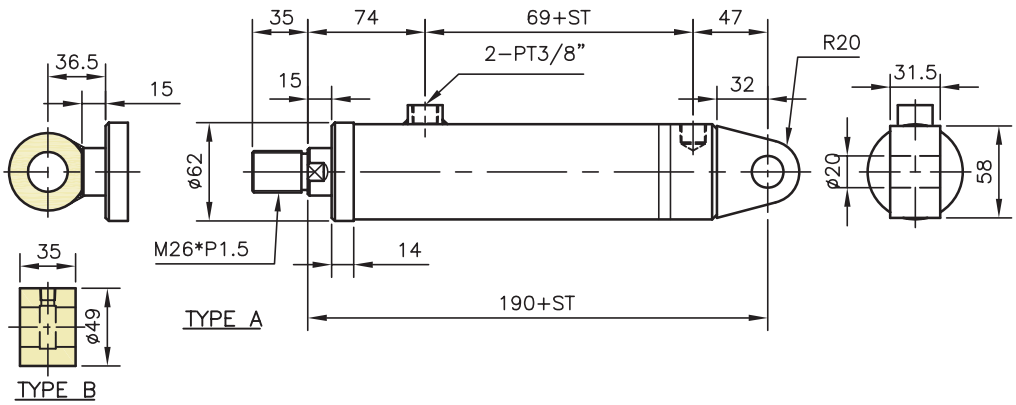
TC



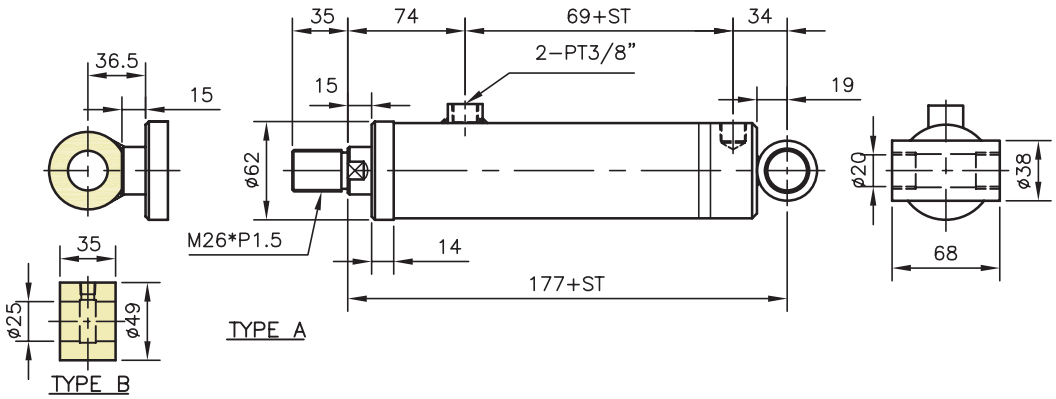
■ 尺寸圖

HC5-ϕ50/ϕ30

CA



CD



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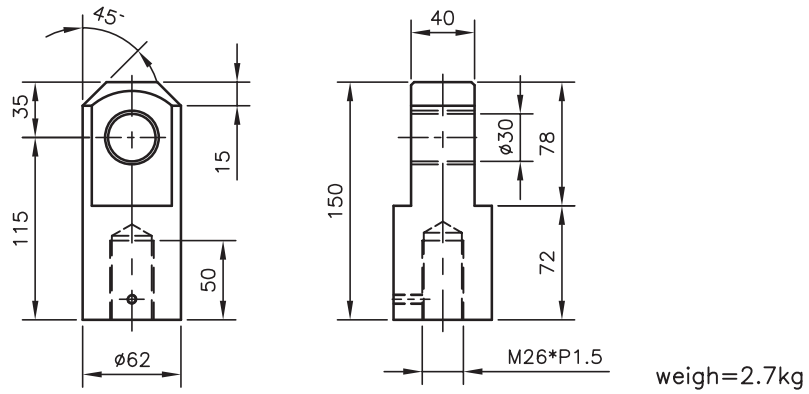


weigh=2.7kg

■ 油壓缸大概重量計算

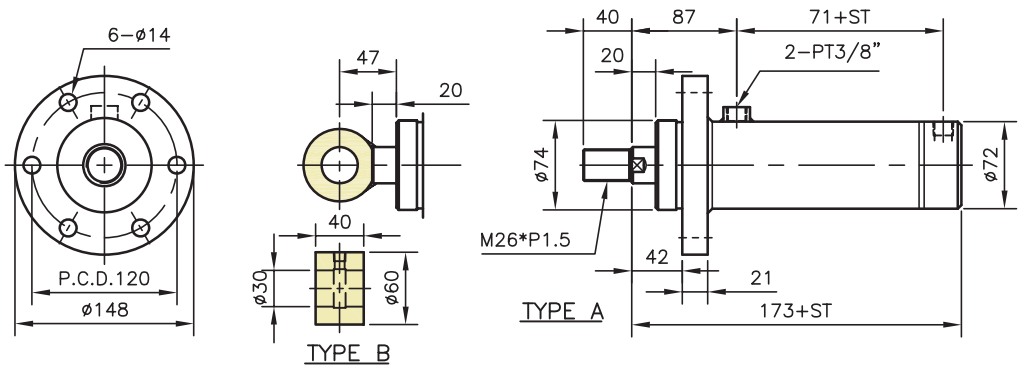
EXP : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 5.0 + (1.3 * 2)= 7.6 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	5.0	5.3	4.7	5.0	4.5	4.4
	Type B	5.3	5.6	5.0	5.3	4.8	4.7
W2 (kg/100mm)		1.3					

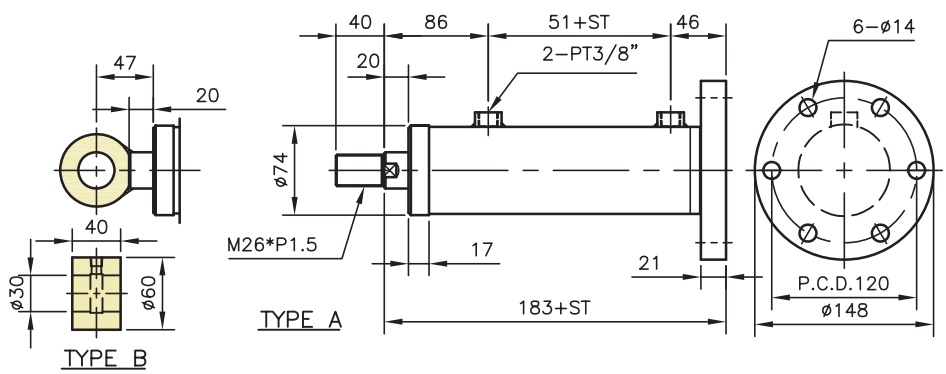
■ 尺寸圖

HC5-ϕ60/ϕ30

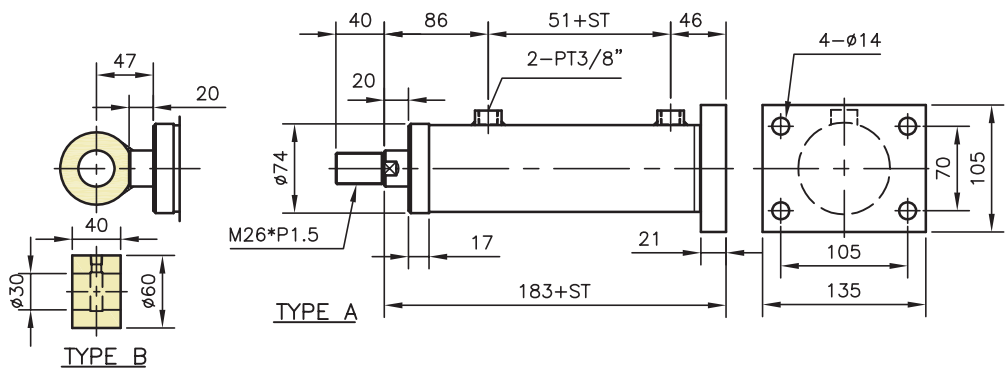
FA



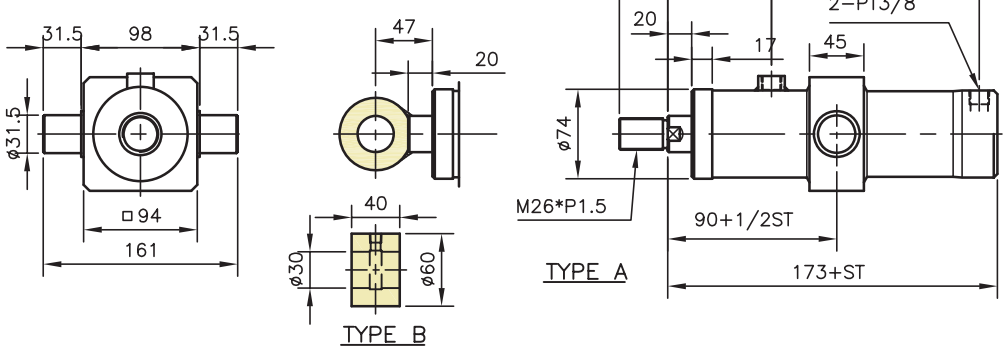
FB



FD



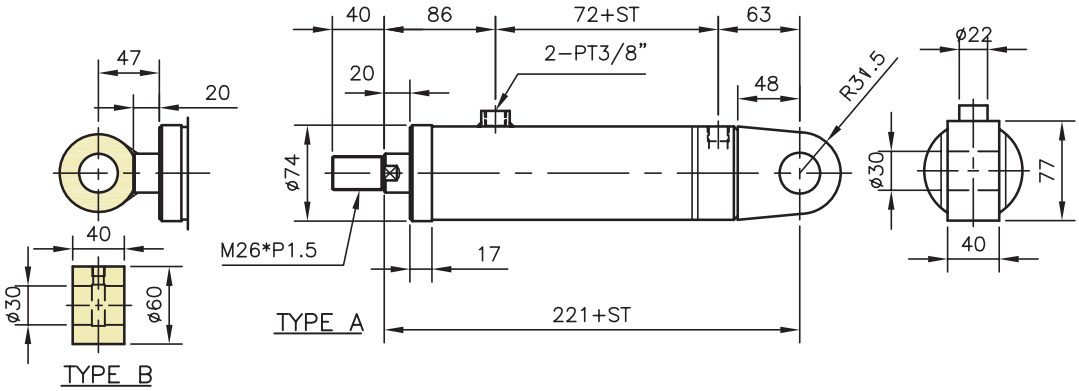
TC



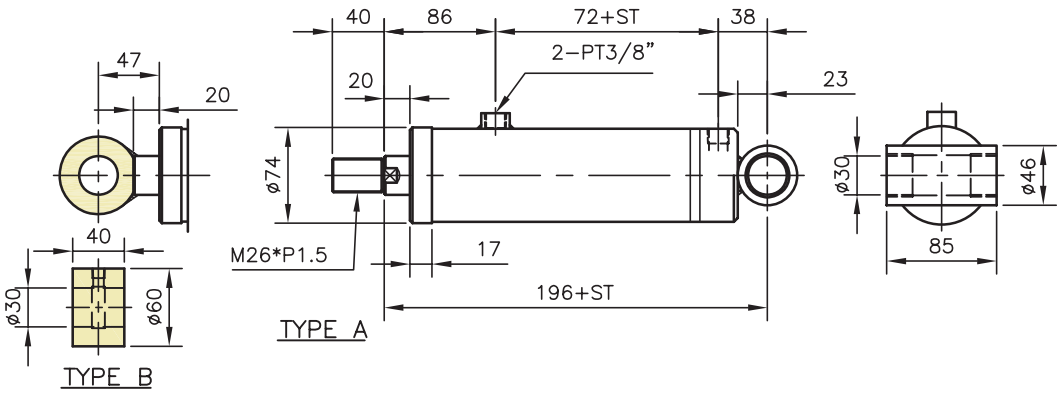
■ 尺寸圖

HC5－ϕ60/ϕ30

CA



CD



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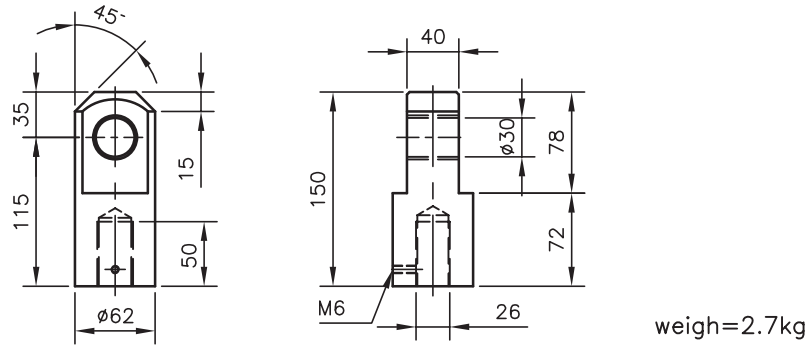


weigh=2.7kg

■ 油壓缸大概重量計算

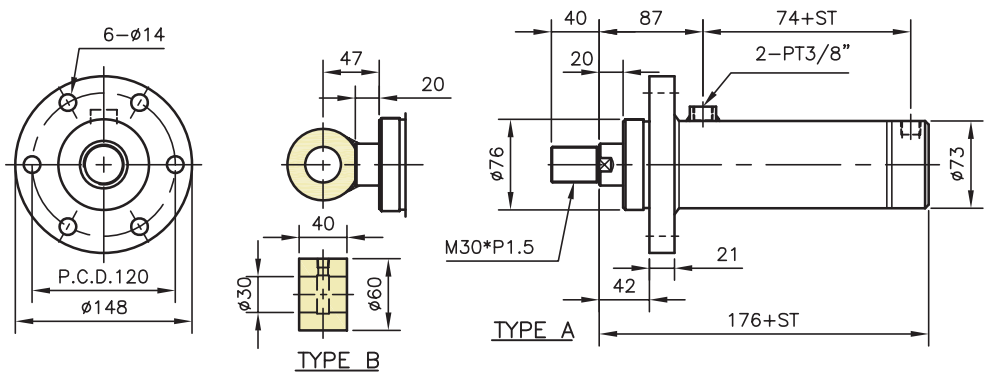
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 7.5 + (1.5 * 2)= 10.5 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	7.5	7.0	7.4	7.5	6.6	5.9
	Type B	8.0	7.5	7.9	8.0	7.1	6.4
W2 (kg/100mm)		1.5					

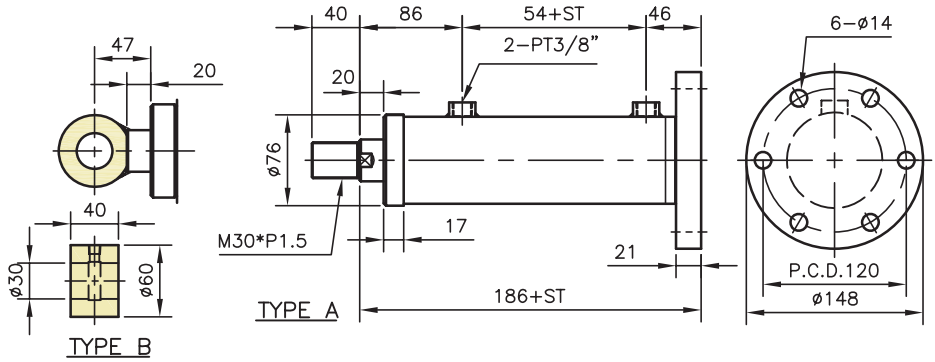
■ 尺寸圖

HC5－ϕ63/ϕ35

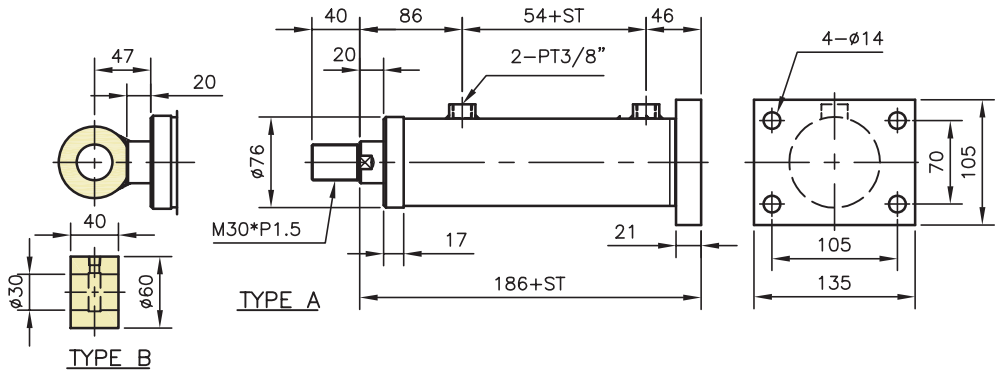
FA



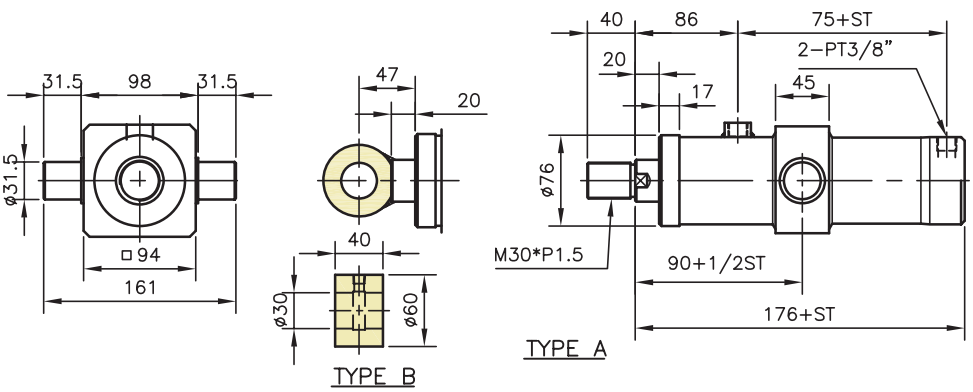
FB



FD



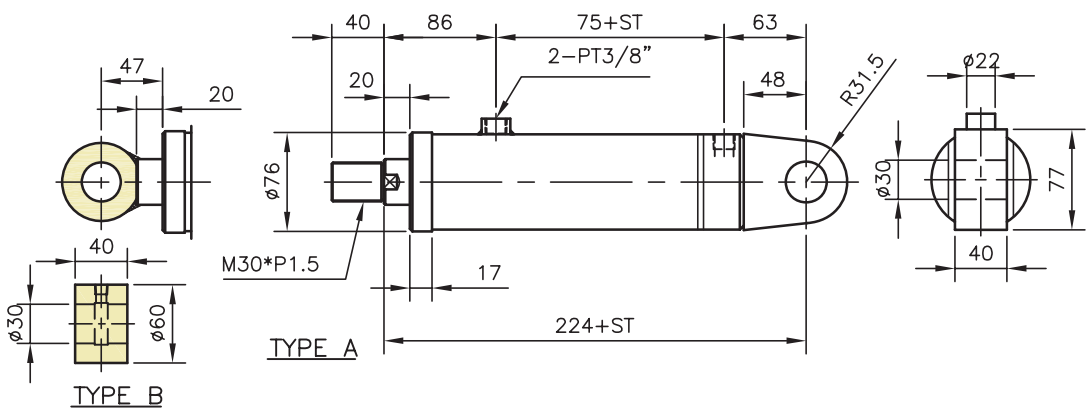
TC



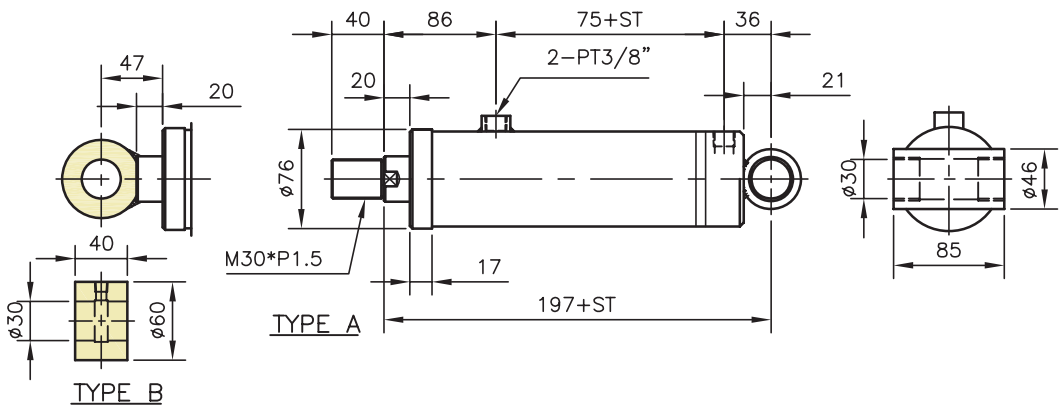
■ 尺寸圖

HC5－ϕ63/ϕ35

CA



CD



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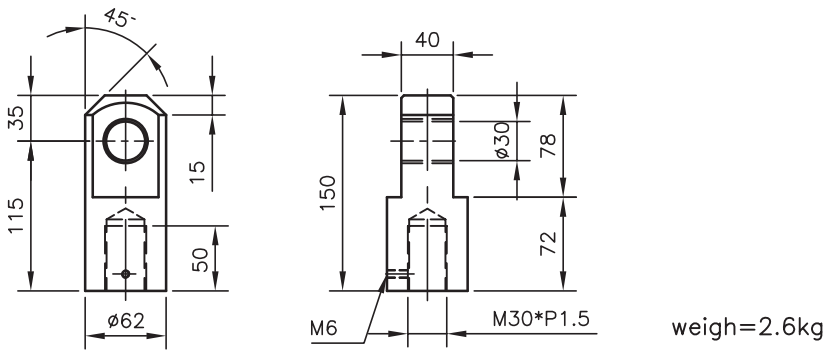


weigh=2.6kg

■ 油壓缸大概重量計算

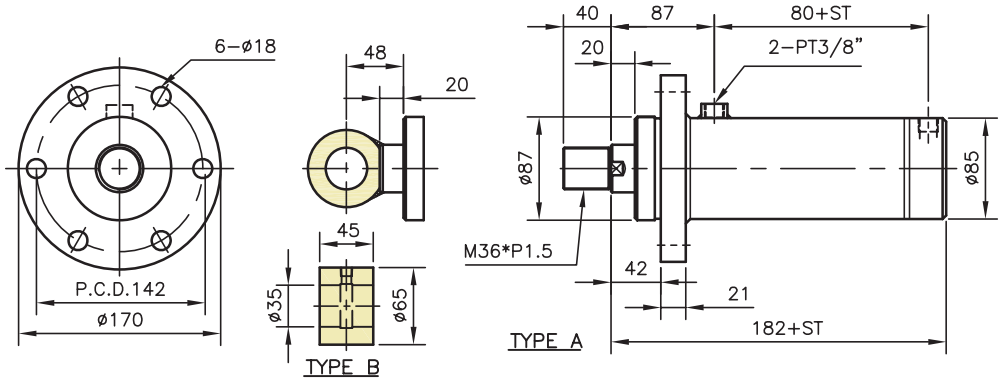
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 8.3 + (1.9 * 2)= 12.1 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	8.3	8.2	7.7	8.1	7.4	6.7
	Type B	8.8	8.7	8.2	8.6	7.9	7.2
W2 (kg/100mm)		1.9					

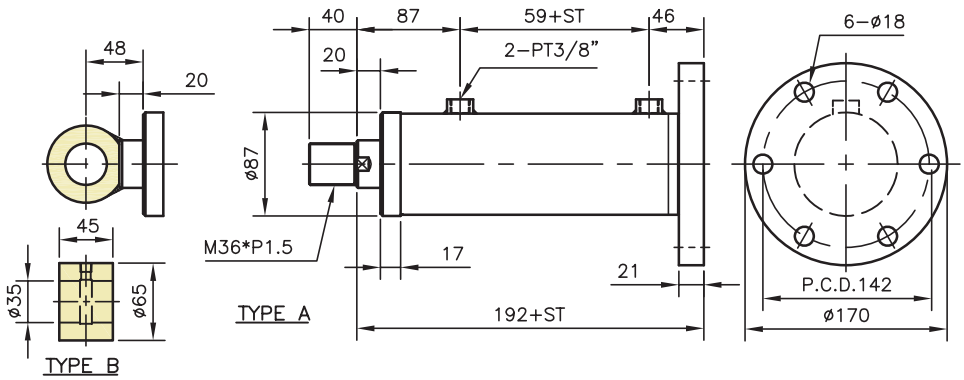
■ 尺寸圖

HC5-ϕ70/ϕ40

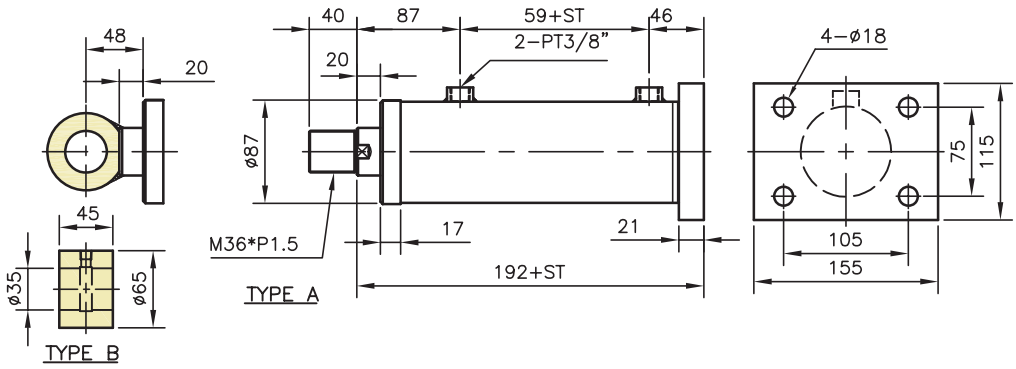
FA



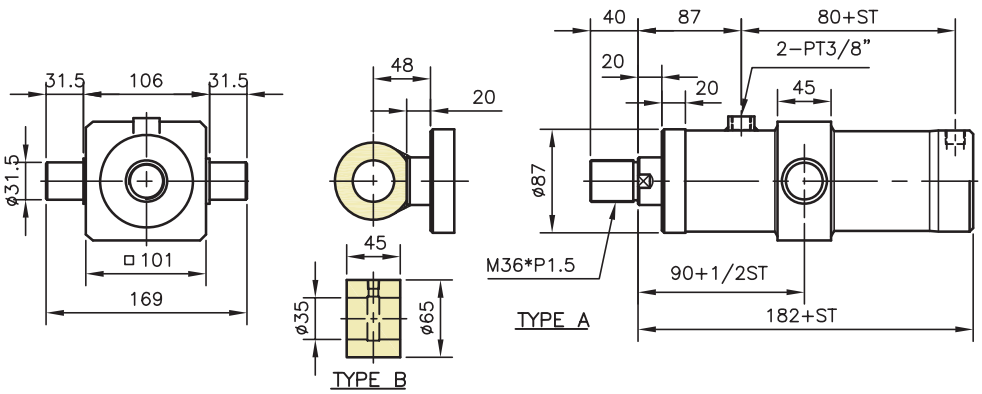
FB



FD



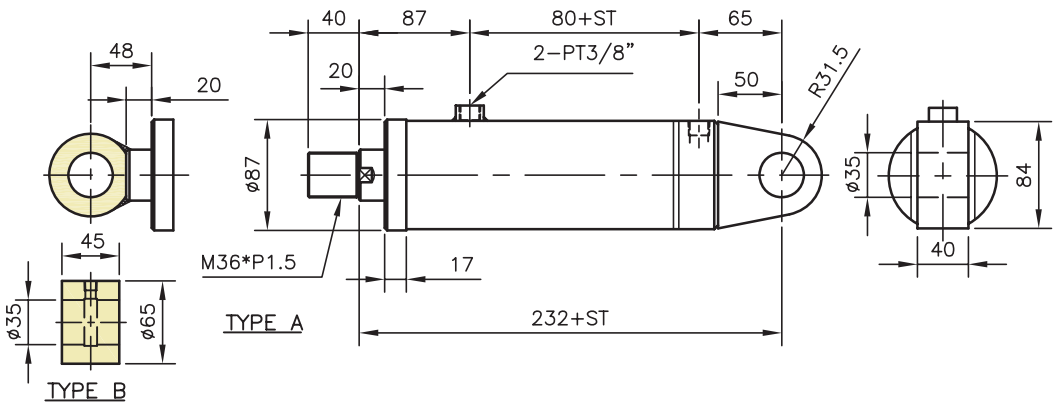
TC



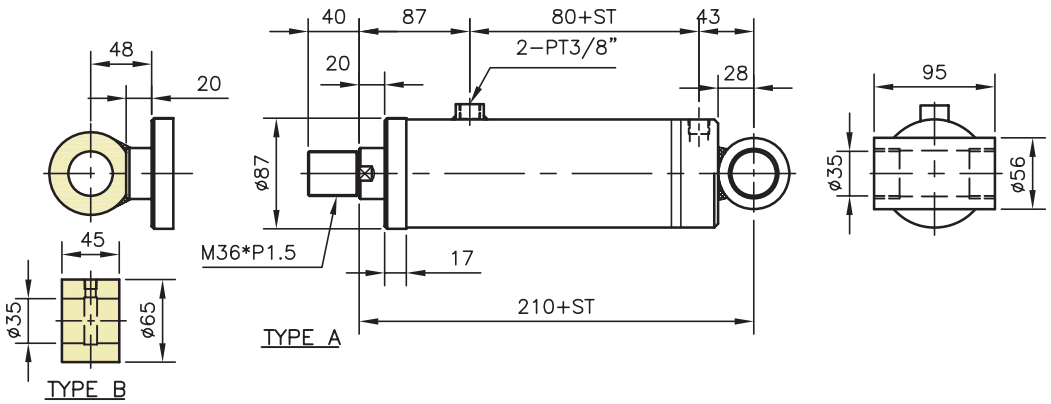
■ 尺寸圖

HC5-ϕ70/ϕ40

CA



CD



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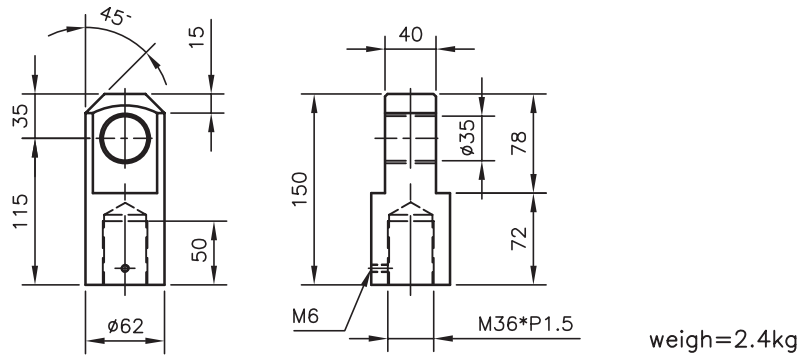


weigh=2.4kg

■ 油壓缸大概重量計算

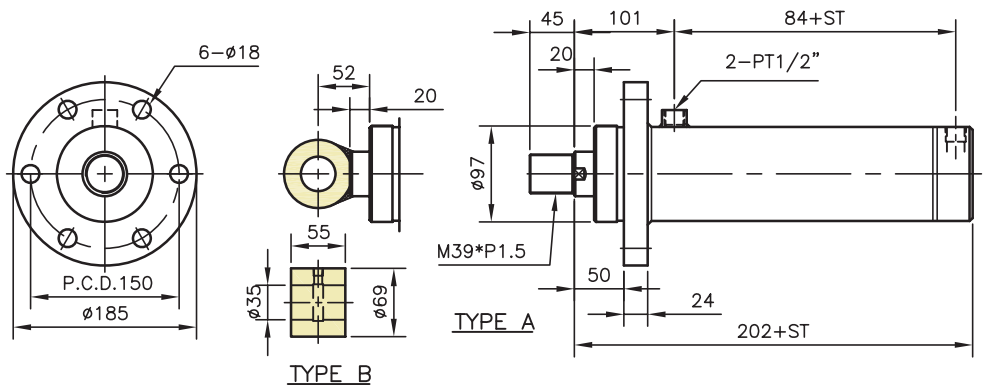
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 10.7 + (2.5 * 2)= 15.7 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	10.7	10.7	9.9	9.9	9.6	8.9
	Type B	11.1	11.1	10.3	10.3	10.0	9.3
W2 (kg/100mm)		2.5					

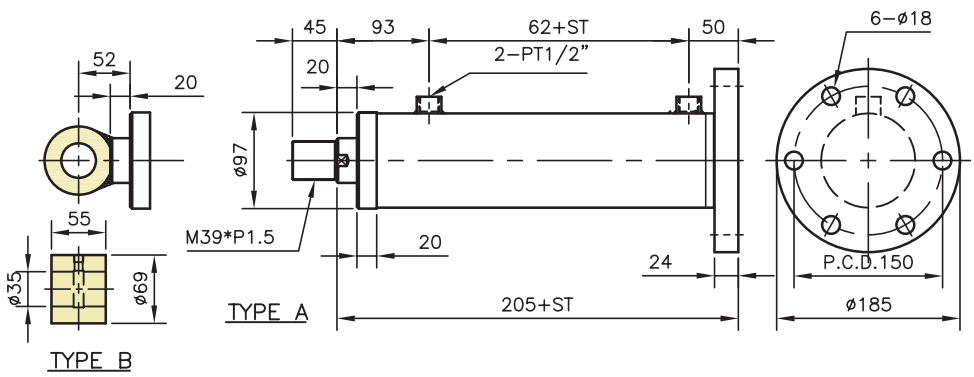
■ 尺寸圖

HC5－ϕ80/ϕ45

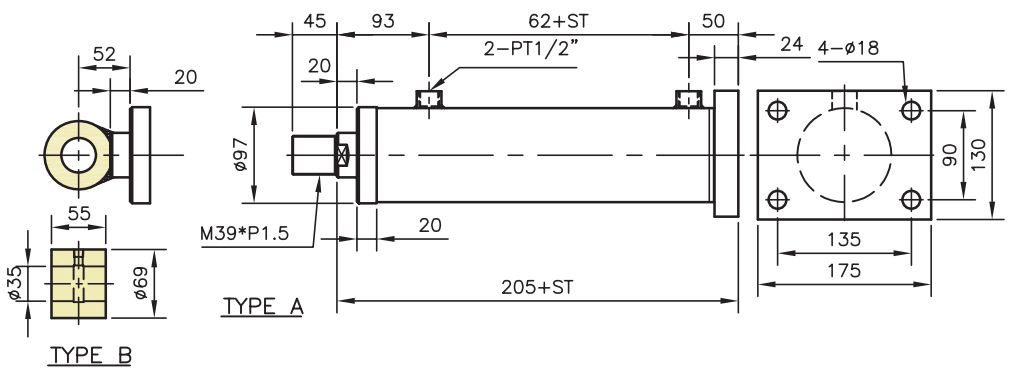
FA



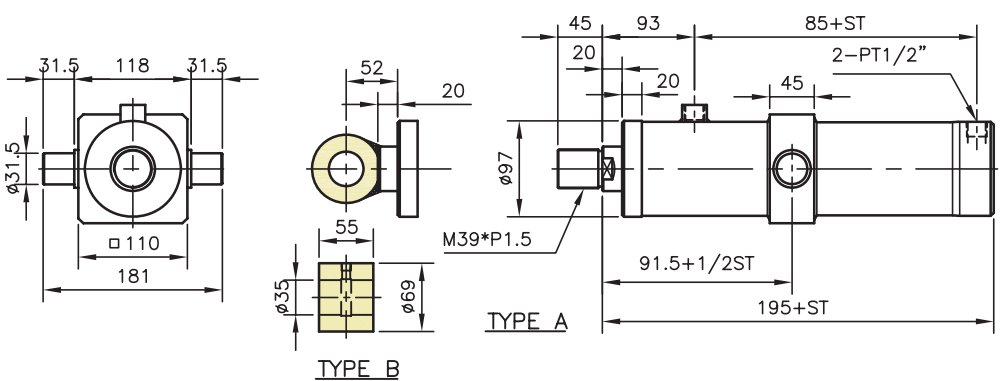
FB



FD



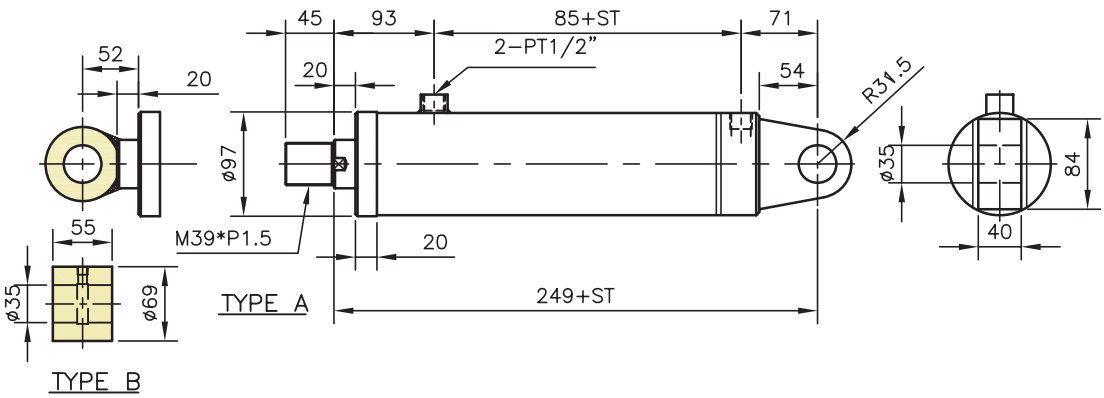
TC



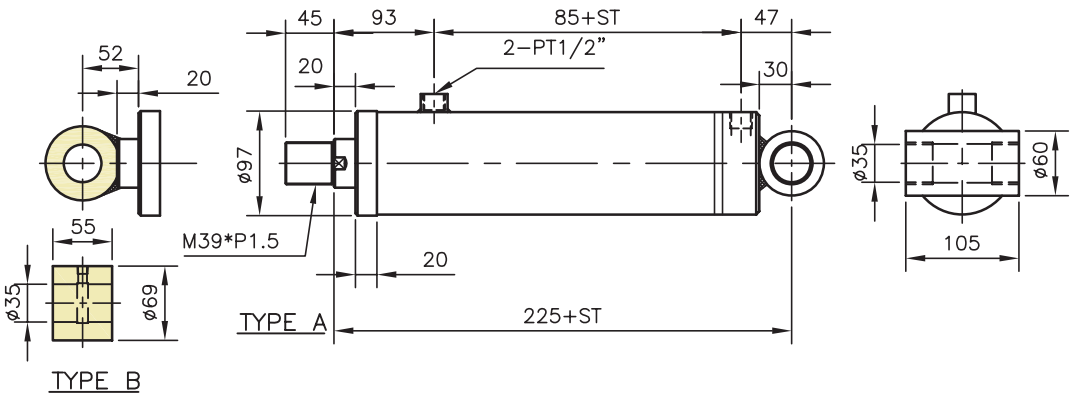
■ 尺寸圖

HC5－ϕ80/ϕ45

CA



CD



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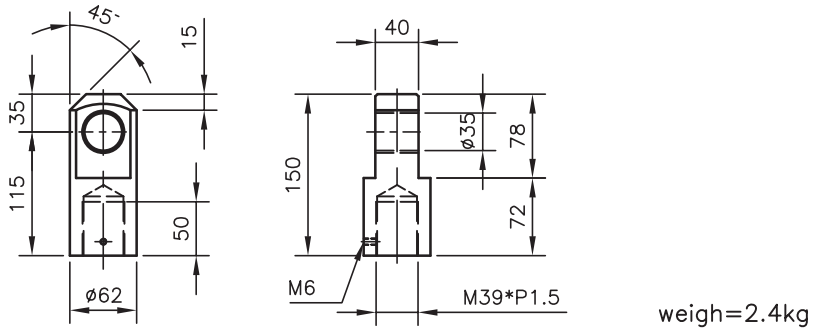


weigh=2.4kg

■ 油壓缸大概重量計算

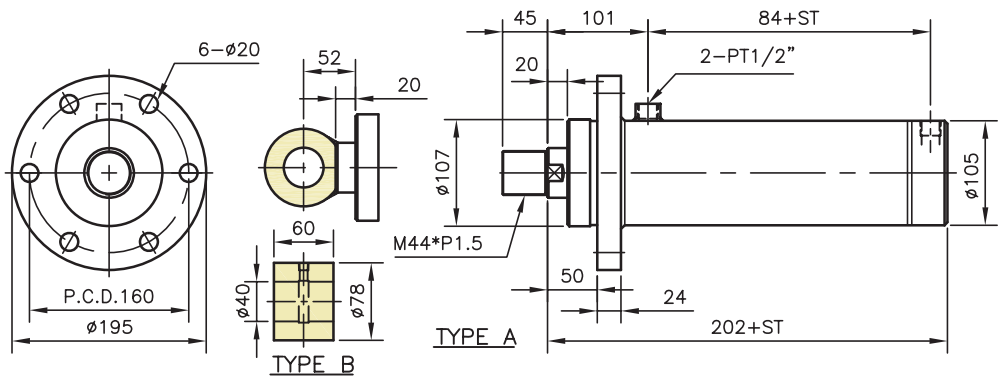
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 15.0 + (2.8 * 2)= 20.6 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	15.0	14.4	13.8	13.2	12.9	12.5
	Type B	15.7	15.1	14.5	13.9	13.6	13.2
W2 (kg/100mm)		2.8					

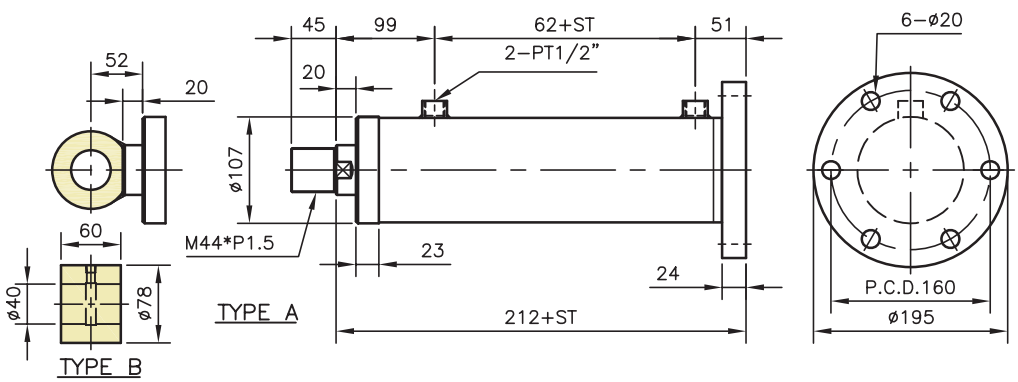
■ 尺寸圖

HC5-ϕ90/ϕ50

FA



FB



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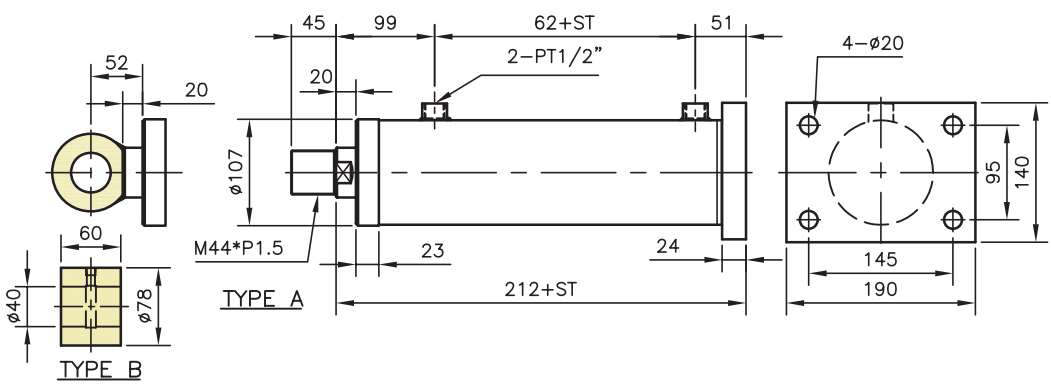
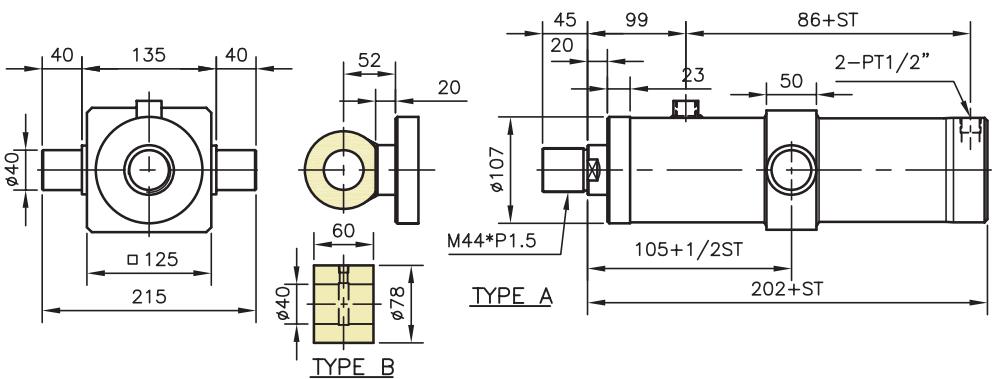


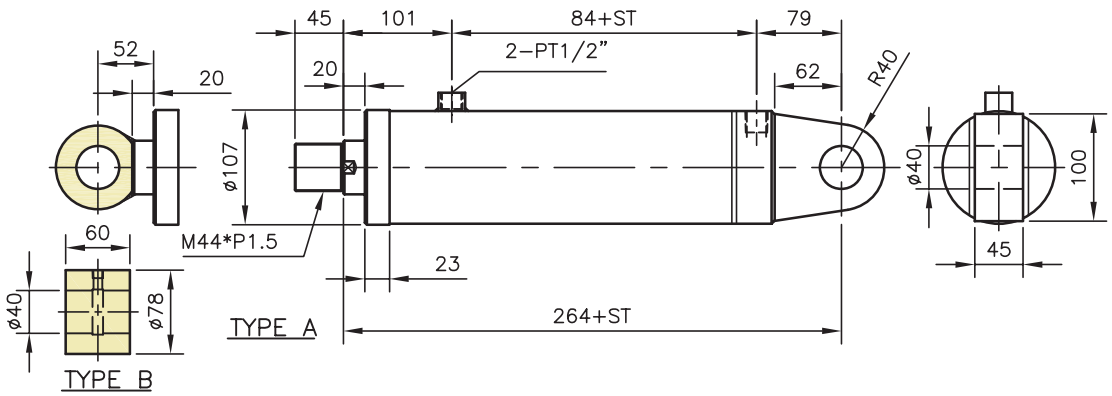
TC



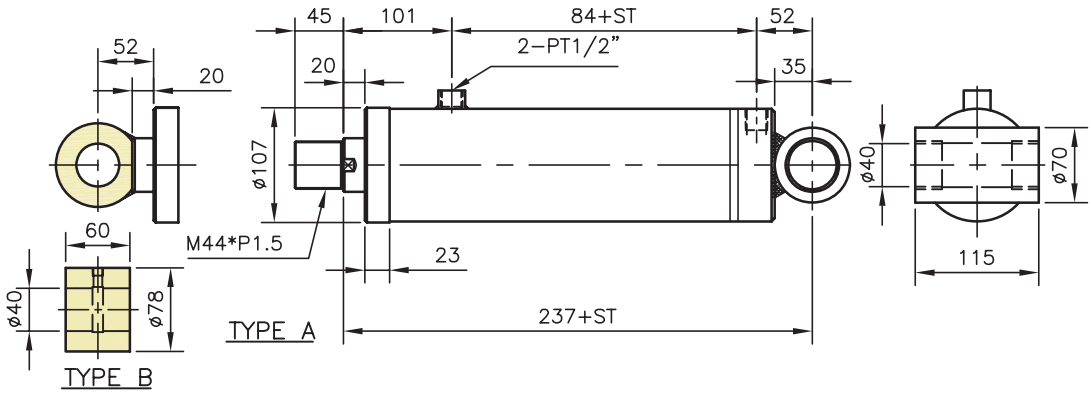
■ 尺寸圖

HC5-ϕ90/ϕ50

CA



CD



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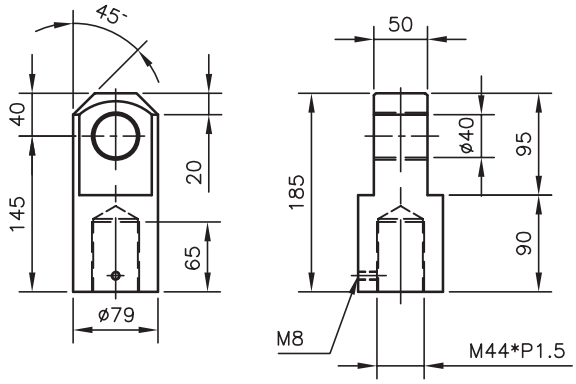


weigh=4.4kg

■ 油壓缸大概重量計算

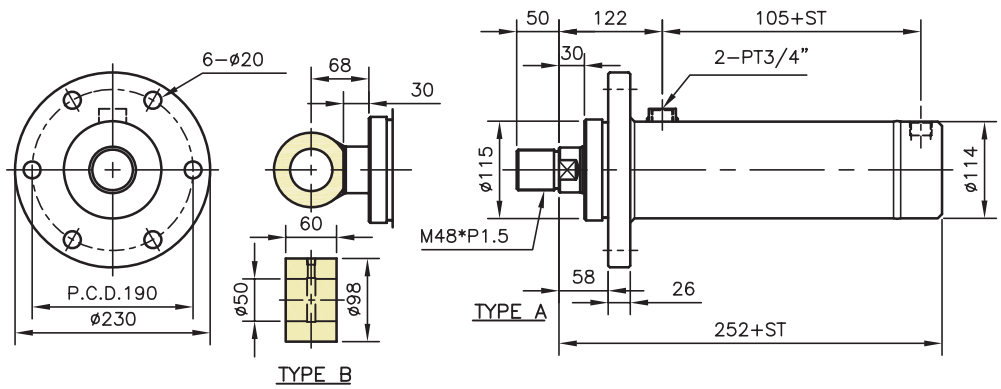
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 21.0 + (3.3 * 2)= 27.6 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	21.0	20.8	20.4	20.3	20.0	19.4
	Type B	22.1	21.9	21.5	21.4	21.1	20.5
W2 (kg/100mm)		3.3					

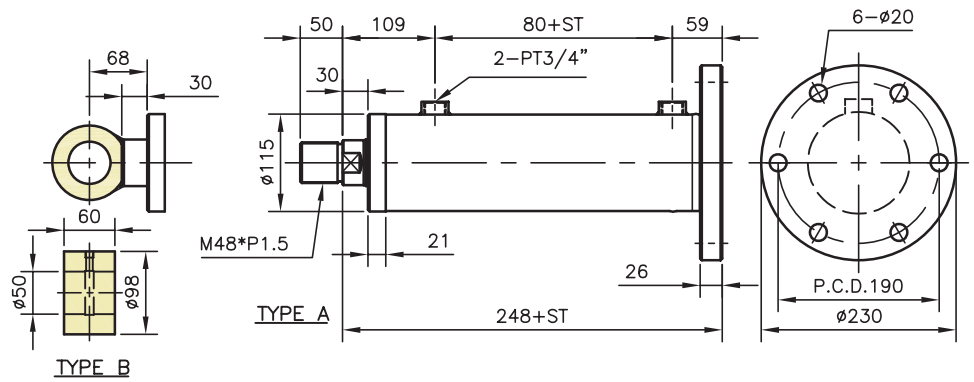
■ 尺寸圖

HC5-ϕ100/ϕ55

FA



FB



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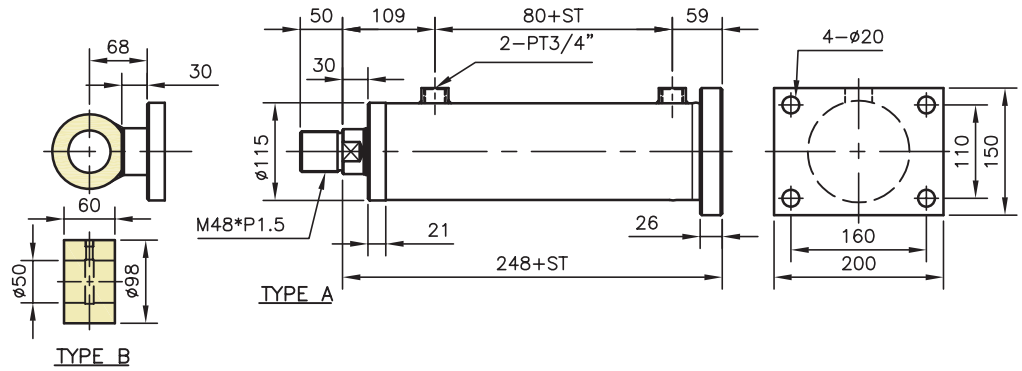
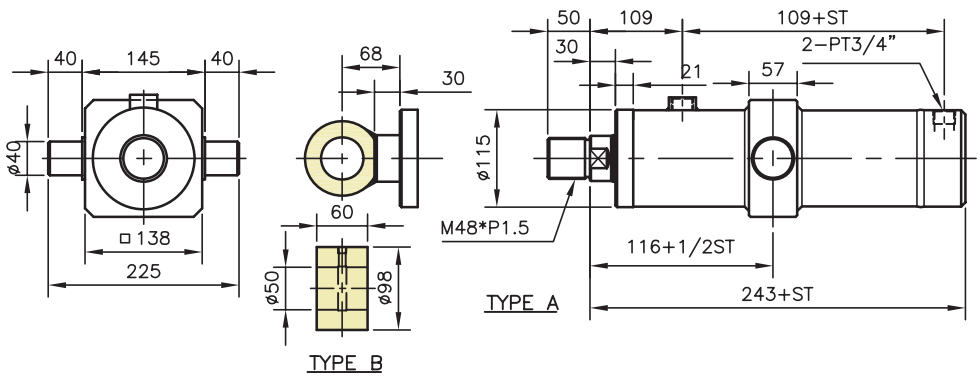


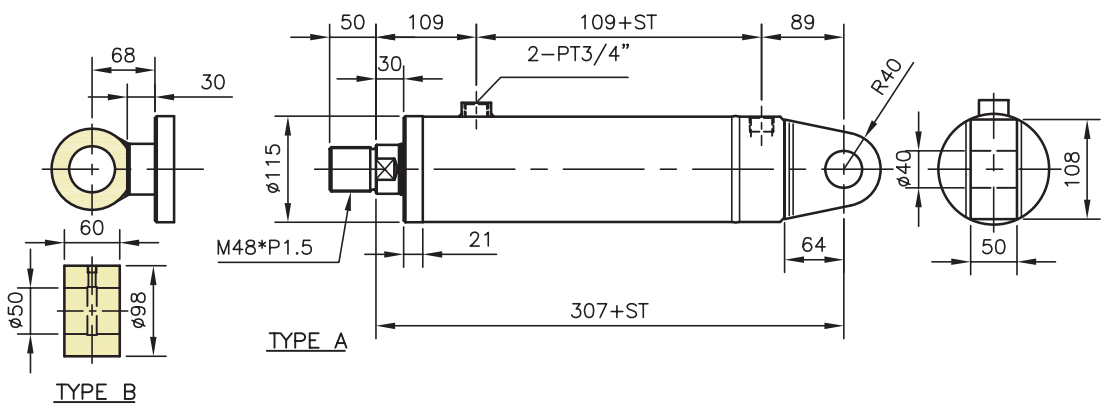
TC



■ 尺寸圖

HC5-ϕ100/ϕ55

CA



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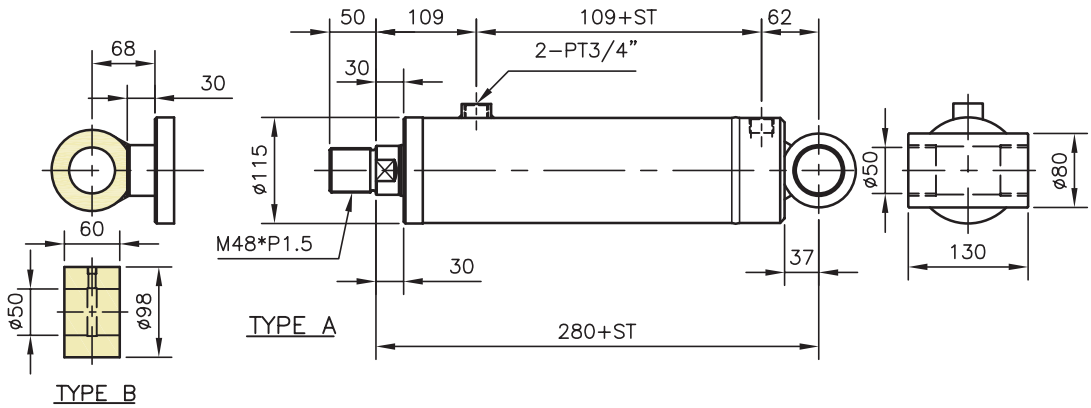

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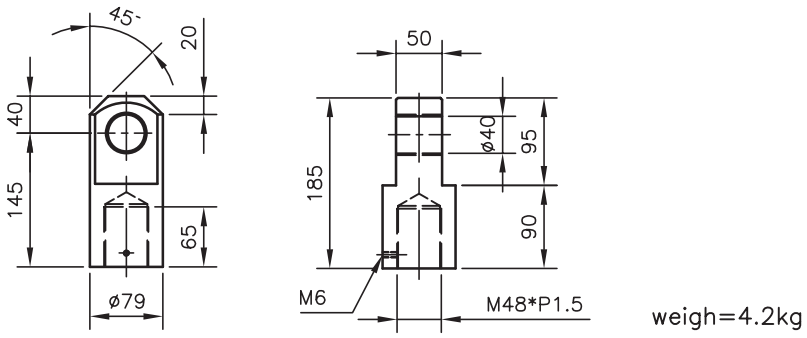


weigh=4.2kg

■ 油壓缸大概重量計算

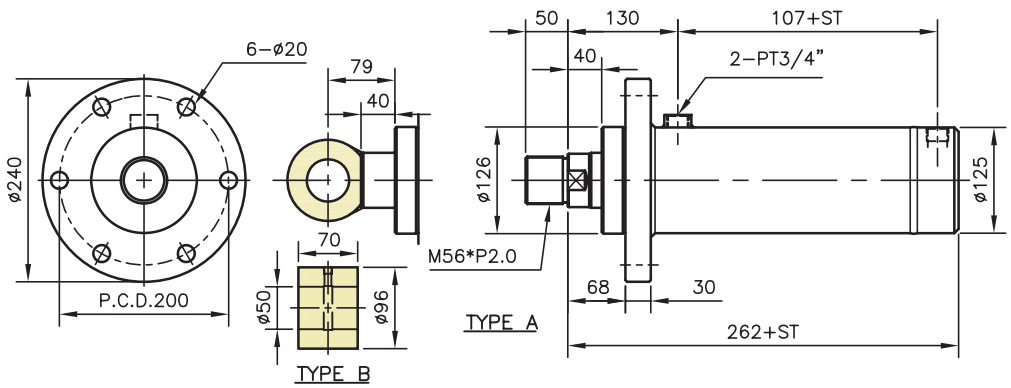
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 26.7 + (4.5 * 2)= 35.7 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	26.7	25.8	23.5	24.4	23.1	23.0
	Type B	27.9	27.0	24.7	25.6	24.3	24.2
W2 (kg/100mm)		4.5					

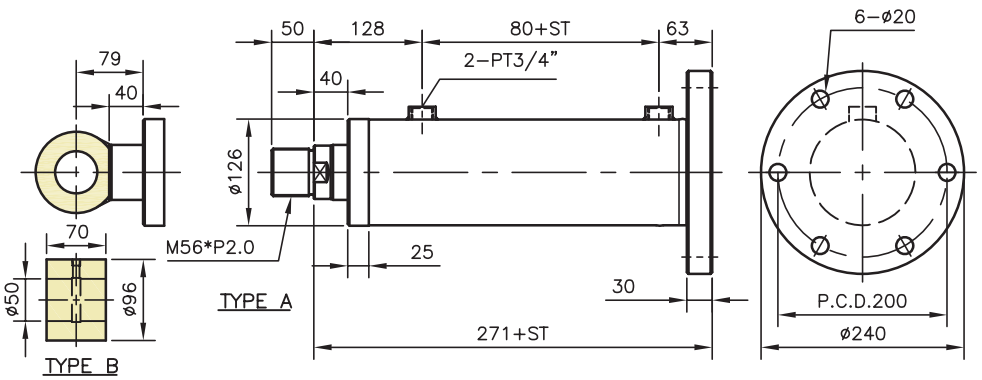
■ 尺寸圖

HC5-ϕ110/ϕ65

FA



FB



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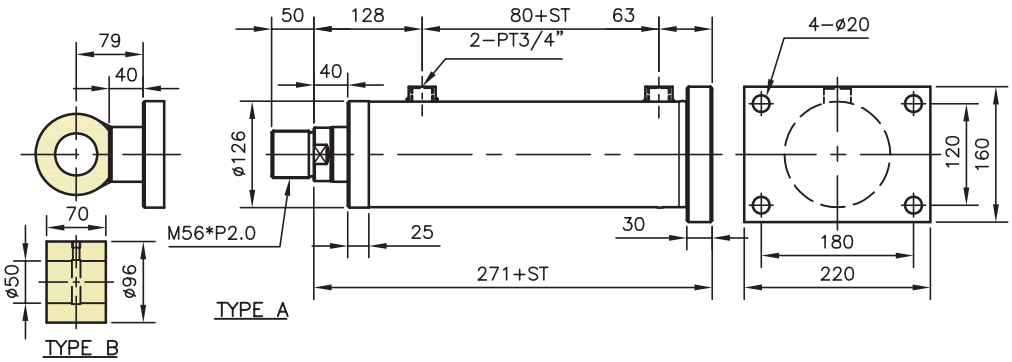
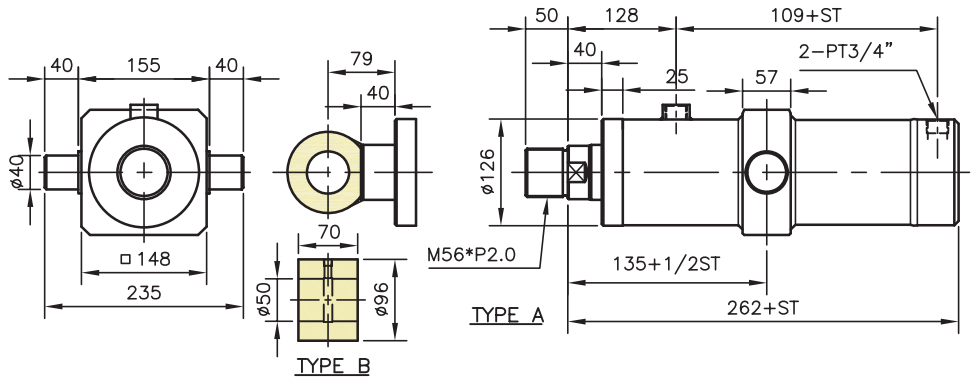


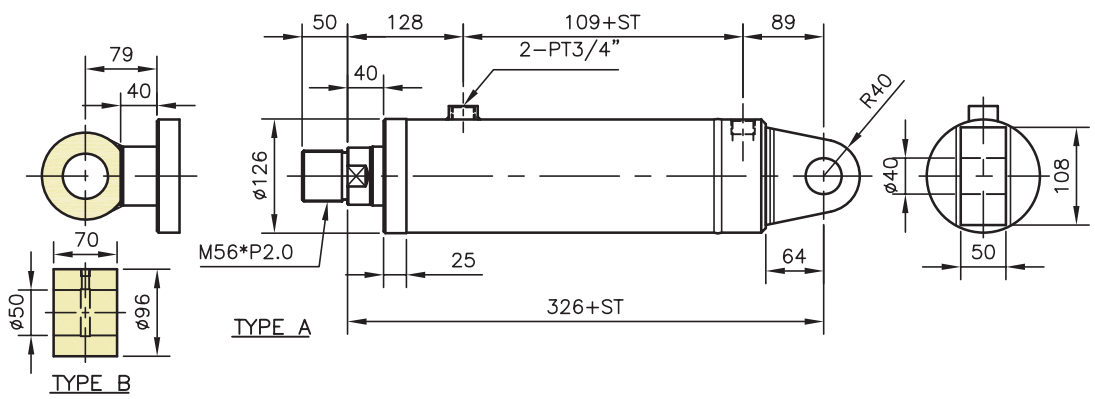
TC



■ 尺寸圖

HC5-ϕ110/ϕ65

CA



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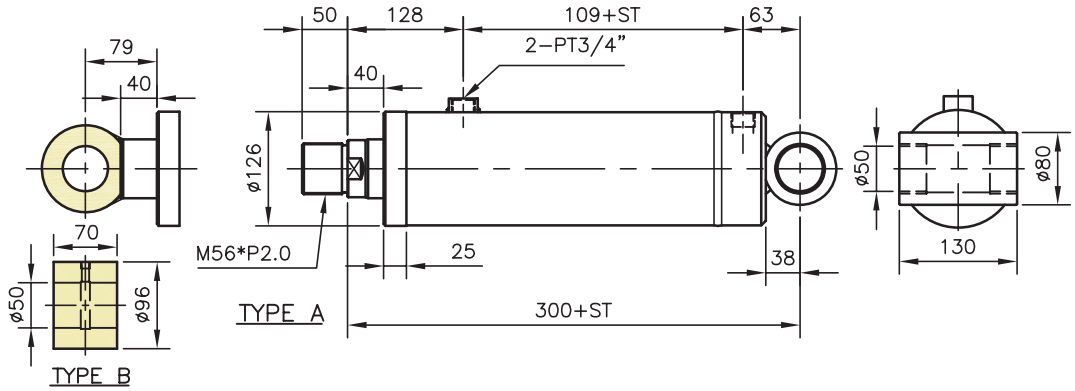
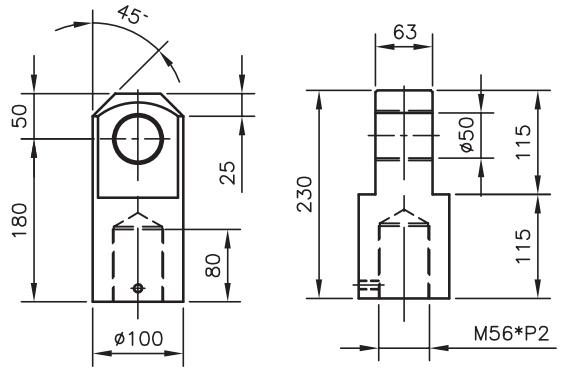


I接頭



weigh=9.8kg

■ 油壓缸大概重量計算

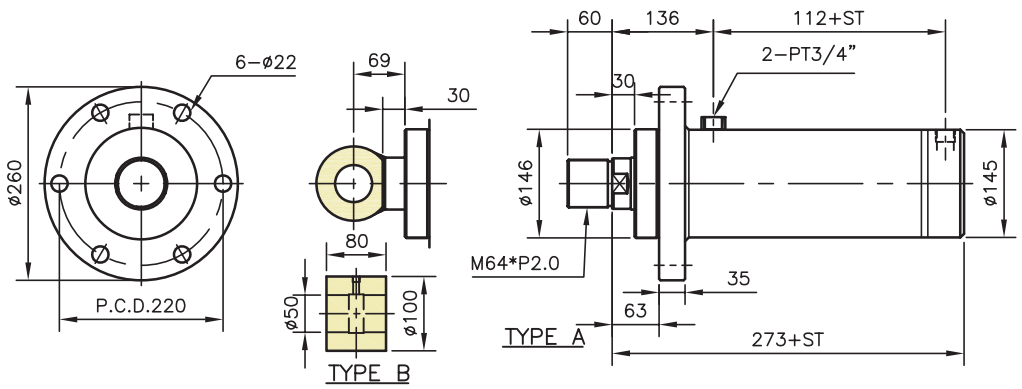
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 32.2 + (5.6 * 2)= 43.4 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	32.2	32.8	30.4	29.5	27.9	27.7
	Type B	34.1	34.7	32.3	31.4	29.8	29.6
W2 (kg/100mm)		5.6					

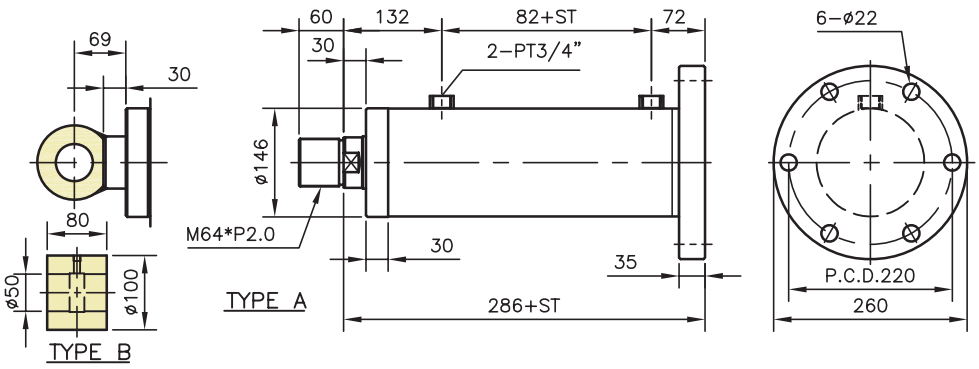
■ 尺寸圖

HC5-ϕ125/ϕ70

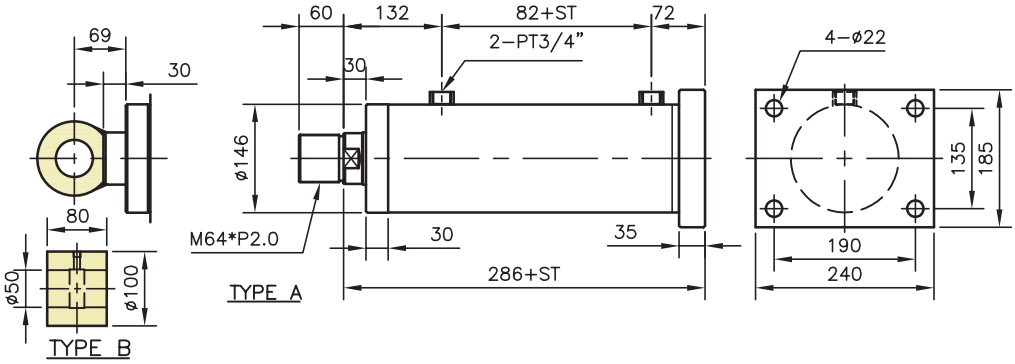
FA



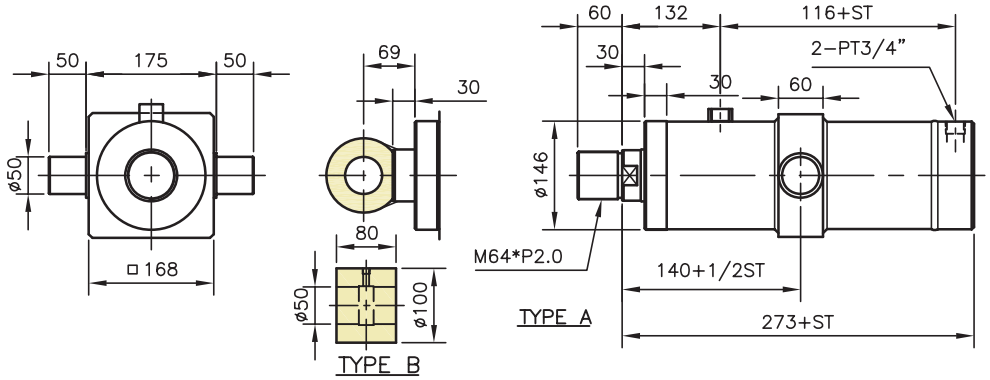
FB



FD



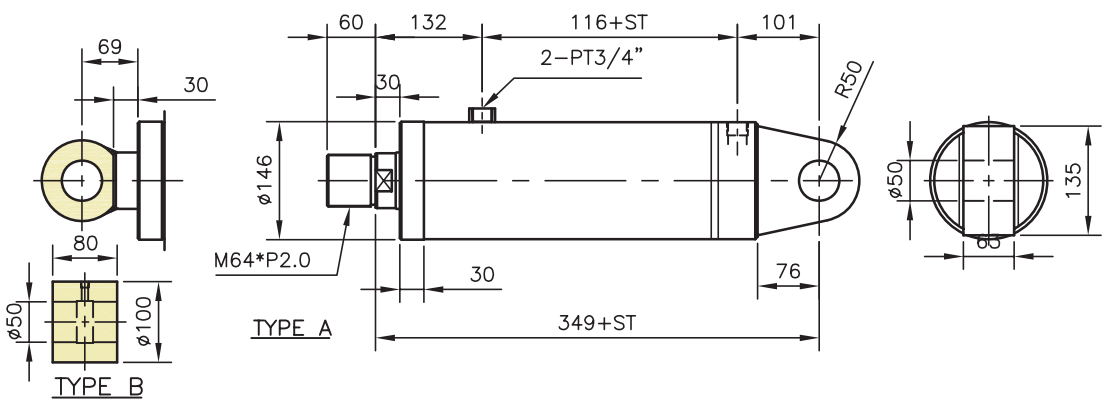
TC



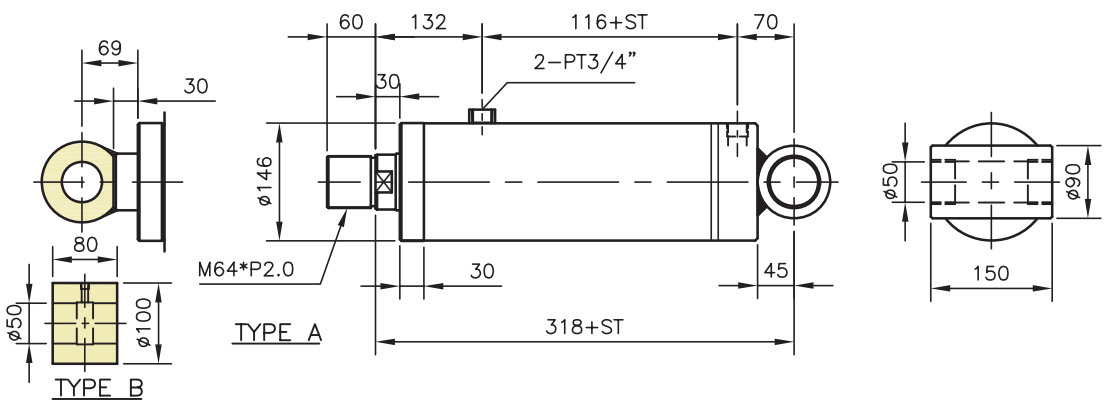
■ 尺寸圖

HC5-ϕ125/ϕ70

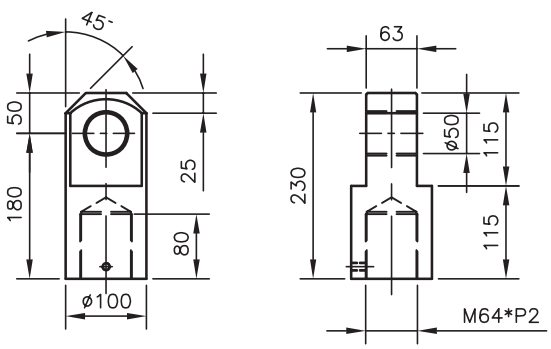
CA



CD



I接頭



weigh=9.3kg

■ 油壓缸大概重量計算

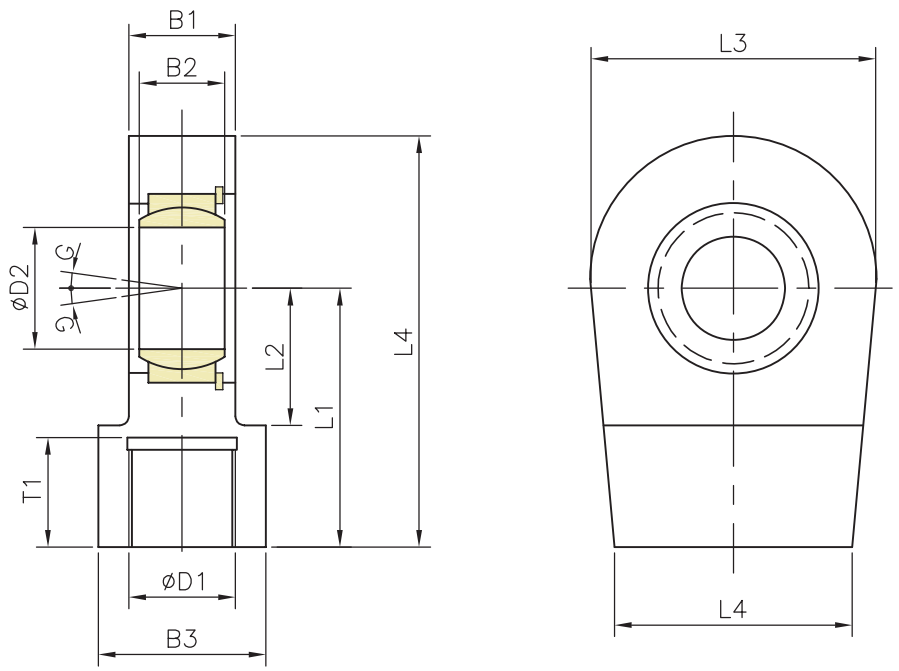
EX : FA , ST=200mm Type A
weight= W1 + (W2 * ST)= 42.3 + (6.3 * 2)= 54.9 kg

連接形式		FA	FB	FD	TC	CA	CD
W1 (kg)	Type A	42.3	42.3	40.1	39.1	38.1	37.0
	Type B	44.4	44.4	42.2	41.2	40.2	39.1
W2 (kg/100mm)		6.3					

■ 接頭 BAI

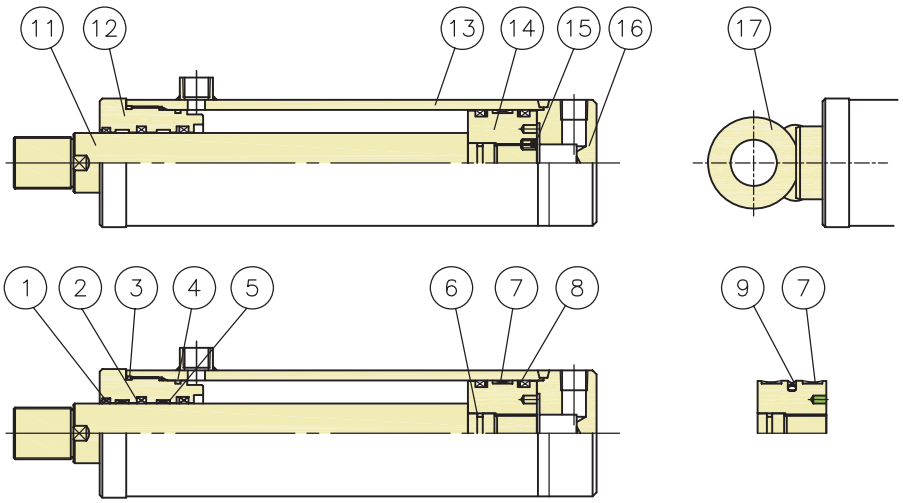
HC5-ϕ40/ϕ22.4

前端球面軸承接頭：BAI



Piston Dia.	B1 $^{0}_{-02}$	B2	B3	D1	ϕD2	L1	L2	L3	L4	R	T1	G	Weigh(kg)
40	19	16 $^{0}_{-0.12}$	25	M 16*1.5	20 $^{0}_{-0.01}$	50	25	56	78	28	17	9°	0.43
50	23	20 $^{0}_{-0.12}$	28	M 16*1.5	25 $^{0}_{-0.01}$	50	25	56	78	28	17	7°	0.48
60	28	22 $^{0}_{-0.12}$	34	M 22*1.5	30 $^{0}_{-0.01}$	60	30	64	92	32	23	6°	0.74
63	28	22 $^{0}_{-0.12}$	34	M 22*1.5	30 $^{0}_{-0.012}$	60	30	64	92	32	23	6°	0.74
70	30	25 $^{0}_{-0.12}$	44	M 28*1.5	35 $^{0}_{-0.012}$	70	38	78	109	39	29	6°	1.2
80	30	25 $^{0}_{-0.12}$	44	M 28*1.5	35 $^{0}_{-0.012}$	70	38	78	109	39	29	6°	1.2
90	35	28 $^{0}_{-0.12}$	55	M 35*1.5	40 $^{0}_{-0.012}$	85	45	94	132	47	36	7°	2.0
100	40	35 $^{0}_{-0.12}$	70	M 45*1.5	50 $^{0}_{-0.015}$	105	55	116	163	58	46	6°	3.8
110	40	35 $^{0}_{-0.12}$	70	M 45*1.5	50 $^{0}_{-0.015}$	105	55	116	163	58	46	6°	3.8
125	50	44 $^{0}_{-0.15}$	87	M 58*1.5	60 $^{0}_{-0.015}$	130	65	130	200	32.5	59	6°	5.4

HC5



■ 零件名稱及材質表

NO	名　稱	材　質	Q'TY	NO	名　稱	材　質	Q'TY
11	活塞杆	機械構造用碳鋼	1	15	防鬆螺絲	機械構造用碳鋼	1
12	前蓋	一般構造用軋鋼	1	16	後蓋	一般構造用軋鋼	1
13	鋼管	機械構造用碳鋼鋼管	1	17	前端接頭	一般構造用軋鋼	1
14	活塞	一般構造用軋鋼	1	18			

■ 油封規格表

NO	1	2	3	4	5	6	7	8	9
名稱	防塵油封	軸心油封	O型環	O型環	耐磨片	O型環	耐磨片	活塞油封	活塞用T型油封
材質	PU	PU	NBR	NBR	PTFE	NBR	PTFE	PU	PTFE+NBR
數量 / 內徑	1 ϕ,ϕ.w mm	1 ϕ,ϕ.w mm +Backup ring	1	1	2	1	1	ϕ,ϕ.w 2 mm +Backup ring	1 ϕ,ϕ.w mm
ϕ40	22.4–30.4–6	22.4–30–5	G–40	G–35	22.4–2.5	P-12	40-2.5	40-30-6	40–29–4.2
ϕ50	35–43–6.5	35–45–9	G–45	G–45	35–2.5	P-16	50-2.5	50-40-6	50–39–4.2
ϕ60	30–38–6.5	30–40–6	G–60	G–55	30–2.5	P-18	60-2.5	60-50.-6	60–49–4.2
ϕ63	40–48–6.5	40–50–9	G–58	G–58	40–2.5	P-18	63-2.5	63-53-6	63–52–4.2
ϕ70	40–48–6.5	40–50–6	G–70	G–65	40–2.5	P-22	70-2.5	70-60-6	70–59–4.2
ϕ80	45–53–6.5	55–65–9	G–75	G–75	55–2.5	G-25	80-2.5	80-70-6	80–64.5–6.3
ϕ90	50–58–6.5	50–60–6	G–90	G–85	50–2.5	P-30	90-2.5	90-80-6	90–74.5–6.3
ϕ100	55–63–6.5	55–65–6	G–100	G–95	55–2.5	G-35	100-2.5	100-85-9	100–84.5–6.3
ϕ110	65–73–6.5	65–75–6	G–110	G–105	65–2.5	G-45	110-2.5	110-95-9	110–94.5–6.3
ϕ125	70–80–8	70–80–6	G–125	G–120	70–2.5	G-45	125-2.5	125-112-9	125–109.5–6.3