

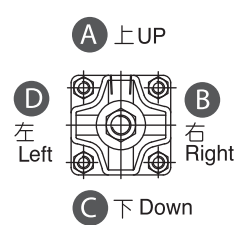
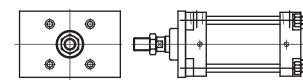
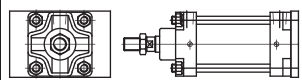


鋁合金氣缸特性資料 Specification

氣壓缸內徑 Bore sizes of cylinder(mm)	Ø40	Ø50	Ø63	Ø80	Ø100	Ø125	Ø150
缸管材質 Material of cylinder barrel	鋁合金管 Aluminum alloy tubes						
使用壓力範圍 The range of pressure(MPa)	0.3-0.99MPa (3-9.9kgf/cm <sup>2</sup> )						
使用溫度範圍 The range of temperature(°C)	NBR{-20°~+80°(C°)} / VITON{-10°~150°(C°)}						
使用速度範圍 The range of speed(mm/sec)	8~400 mm/sec						
標準衝程/活塞(PM)的長度 Standard stroke of the piston (PM) length	30	30	30	30	30	30	40
標準緩衝長度 Standard Cushion length	17	25	25	30	30	30	35
各缸徑最大容許衝程 STROKE .mm Max.Permissible	本系列鋁管最長衝程為2000mm,如需更長衝程請來電洽詢						
衝程之容許公差/Tolerance of stroke	衝程/STROKE	100 以下	100~250	250~630	631~1000	1001~1600	1601以上
JIS B 8354 B級/Refer to Right Table	容許差/Tolerance	0~+0.8	0~+1.0	0~+1.25	0~+1.4	0~+1.6	0~+1.8
活塞螺紋加工精度/Accuracy of Threading at Rod End	JIS 6g/6H(相當JIS 2級)						

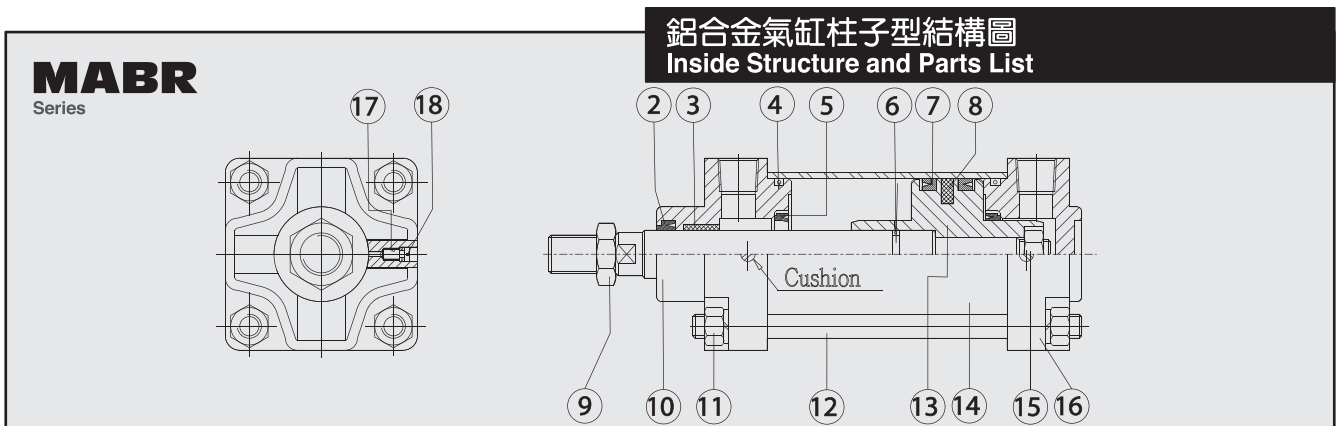
**MA - B - N - 000 - A - A - 000 - N - 0000 - N - N - AST000 - N**



1	型式 / TYPE	B: 標準型 B: Standard type		D: 雙軸型 D: Double-Rod type				
2	磁石/MAGNET	R: 內加磁石 N: 沒有 R: with magnet inside N: No symbol						
3	鋁管內徑/外徑 ALUMINUM TUBES	Ø40 / Ø45	Ø50 / Ø55	Ø63 / Ø68	Ø80 / Ø86	Ø100 / Ø106	Ø125 / Ø135	Ø150 / Ø160
	備註:如採用鋼管時,標準處理內徑無電鍍處理,如需電鍍時請下單註明							
4	油封選用 SEAL SYMBOL 油封材質/Seal material	A	NBR 丁晴橡膠 Nitrile rubber			B	VITON 氟素橡膠 Fluoro elastomer	
5	入油口位置填入 Port position	前蓋端 Head A:上(標準型)/B:右/C:下/D:左 A:UP(Standard)/B:Right/C:Down/D:Left	後蓋端 Cap A:上(標準型)/B:右/C:下/D:左 A:UP(Standard)/B:Right/C:Down/D:Left					
		A=AA / B=BB / C=CC / D=DD E=AB / F=AC / G=AD / H=BA I=BC / J=BD / K=CA / L=CB M=CD / N=DA / O=DB / P=DC						
6	軸心/ROD	標準	Ø16	Ø20	Ø25	Ø30	Ø35	Ø40
		最大	—	Ø25	Ø30	Ø35	Ø45	Ø50
7	緩衝/CUSHION	A:標準緩衝 N:沒有 A: with cushion inside N: No symbol						
8	行程/STROKE	填入需要之衝程 Max Permissible stroke						
	備註:本系列鋁管訂製最大衝程,內徑Ø40~Ø150衝程為2000mm,訂製衝程超過1000mm以上時,因考量活塞側向支撐力與繫緊柱子鎖固強度,建議活塞加長與追加中座,補強強度增加產品壽命,如有其他考量請參閱技術資料或敬請與我們相關人員洽詢							
	缸體 固定方式	名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION		名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION
	BORE ACCESSORY	前蓋矩形法蘭 Rectangular flange at cylinder head	<b>FA</b>			後蓋矩形法蘭 Rectangular flange at cylinder cap	<b>FB</b>	

#### 鋁合金氣缸特性資料 Specification

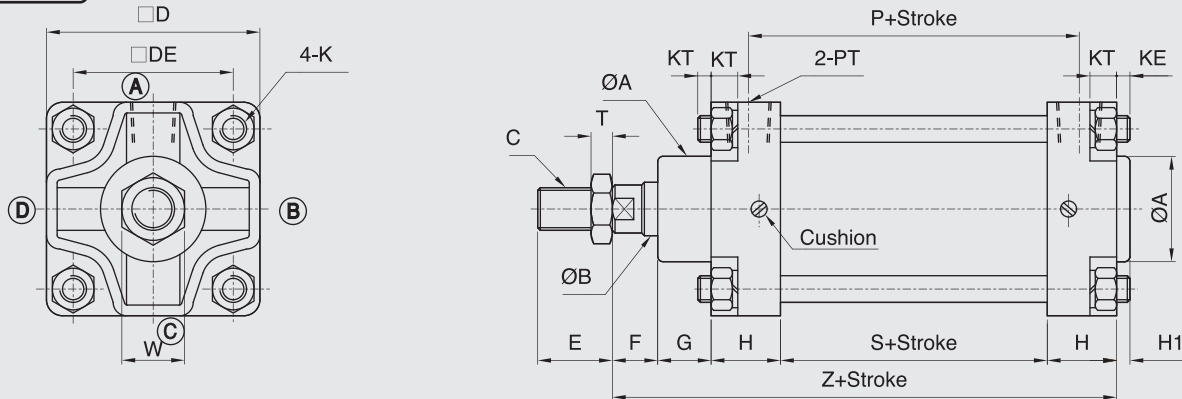
9	缸體 固定方式 BORE ACCESSORY	名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION	名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION
		前後端凸耳形 Foot mounting side end angles	<b>LB</b>		中間固定 耳軸型 Centre trunnion mounting	<b>TC</b>	
		後蓋可拆 單山型 Plate clevis at cylinder cap	<b>CA</b>		後蓋可拆 雙山型 Clevis fork at cylinder cap	<b>CB</b>	
備註:缸體固定如有其它方式,可繪製草圖或與我們營業人員洽詢 Note: If the cylinder is fixed in other ways, you can draw a sketch or contact our sales staff							
10	軸心 用配件 ROD ACCESSORY	名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION	名稱 DESCRIPTION	記號 SYMBOL	略圖 CONFIGURATION
		Y型接頭 Rod Clevis	<b>TY</b>		Y型接頭附 插銷 Rod Clevis With Pin	<b>TYP</b>	
		I型接頭 I Rod end mounting	<b>TI</b>		浮動接頭 Compensating Joint	<b>KG</b>	
		魚眼接頭 Oscillating Eye	<b>PH</b>		T型接頭 T Rod end mounting	<b>MT</b>	
		焊接接頭 H Rod end mounting	<b>MH</b>		可調螺帽 Adjustable nut	<b>AST</b>	
備註:軸心固定如有其它方式,可繪製草圖或與我們營業人員洽詢 Note: If the axis is fixed in other ways, you can draw a sketch or contact our sales staff							
11	雙軸 可調行程	填入需要的可調行程 <b>AST</b> <input type="text"/> <input type="text"/> <input type="text"/> mm 無記號:沒有 / NO Symbol Adjustable Stroke					
12	近接開關 SENSOR SWITCH	無記號:無裝置(標準型)/B:兩端近接開關/X:近接在前/Y:近接在後/T:近接*3/U:近接*4 N:NO symbol /B:Double side sensor switch/X:Rod-cover side sensor switch/ Y:End-cover side sensor switch/T:sensor switch*3/U:sensor switch*4					



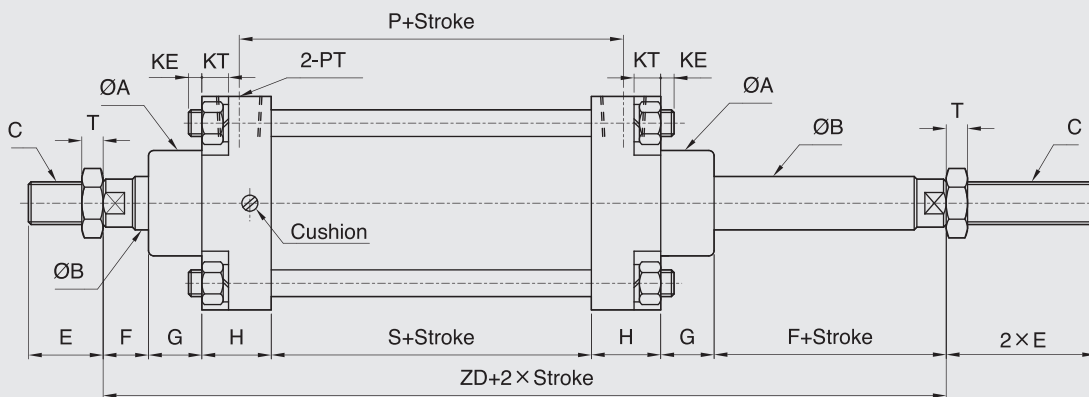
NO	零件品名 Part mane	數量Quantity	NO	零件品名 Part mane	數量Quantity	NO	零件品名 Part mane	數量Quantity
1	活塞桿 Piston rod	1	7	橡膠活塞環 Piston packing	2	13	氣缸本體 Cylinder tube	1
2	刮塵環 Dust wiper	1	8	磁石 Magnet	1	14	活塞本體 Piston	1
3	含油軸承 Oilless bearing	1	9	軸心螺帽 Rod nut	1	15	軸心螺帽 Rod nut	1
4	O型環 Cylinder gasket	2	10	前蓋 Rod cover	1	16	後蓋 End cover	1
5	緩衝橡皮 Cushion packing	2	11	繫緊螺帽 Tie nut	8	17	緩衝針 Cushion needle	2
6	O型環 Cylinder gasket	1	12	繫緊螺絲 Tie bolt	4	18	O型環 Gasket	2

## 鋁合金氣缸尺寸圖 MA Series Dimensional Features(0.99Mpa)

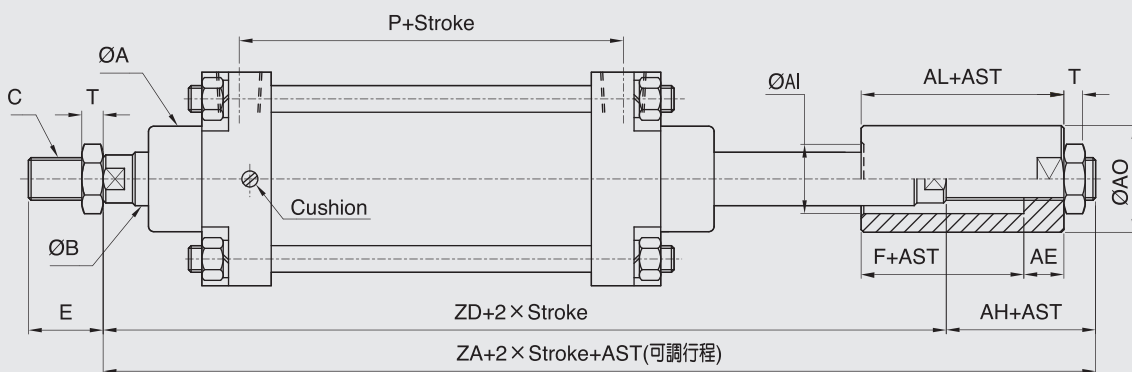
### MAB MA+B (標準型) TYPE



### MAD MA+D (雙軸型) TYPE



### MAD MAD+AST (雙軸型附可調帽) TYPE



#### MAB-MAD TYPE

BORE	SIZE	ØA	ØB	C	□D	□DE	E	F	G	H	H1	P	PM	PT	K	KE	KT	S	T	W	Z	ZA	ZD	AH	A (可調帽) TYPE			
																									AE	ØAI	ØAO	AL
Ø40	30	16	M14XP1.5	59	44	28	13	15	26	5	67	30	1/4	M8XP1.25	10	8.5	45	8	22	125	178	153	25	15	20	30	30	
Ø50	39.5	20	M16XP1.5	66	48	28	17	15	28	5	72	30	1/4	M8XP1.25	10	8.5	46	8	23.5	134	191	166	25	15	25	35	35	
Ø63	39.5	20	M16XP1.5	80	60	28	17	20	26	5	74	30	3/8	M10XP1.25	10	10.5	50	8	23.5	139	201	176	25	15	25	35	35	
Ø80	44.5	25	M22XP1.5	96	74	40	20	15	34	7.5	84	30	3/8	M10XP1.25	10	10.5	50	13	32	153	223	188	35	20	30	45	40	
Ø100	54.5	30	M26XP1.5	116	89	40	20	20	36	7	82	30	1/2	M12XP1.5	12	13	50	13	35	162	237	202	35	20	35	50	40	
Ø125	60	35	M30XP1.5	148	116	45	20	23	42	10	84	30	1/2	M14XP1.5	12	14.5	50	13	41	177	260	220	40	25	40	50	45	
Ø150	70	40	M30XP1.5	172	134	50	20	27	48	5	96	40	1/2	M16XP1.5	15	17	60	13	41	203	290	250	40	25	50	60	45	

#### 備註:

1. 本系列軸心加大如未註明長度尺寸時, 依照本公司規定自行加工。
2. 本系列MA50, MA63行程超過500mm(含)以上, 軸心牙加大為M18XP1.5。
3. 本系列行程超過1500mm(含)以上時, 活塞(PM)長度須加倍長(尺寸P, S, Z, ZA, ZD須再加PM尺寸長度乙次)。
4. 本系列行程超過2000mm(含)以上時, 須加拉桿中間固定座。
5. AST 為客戶指定之可調行程。

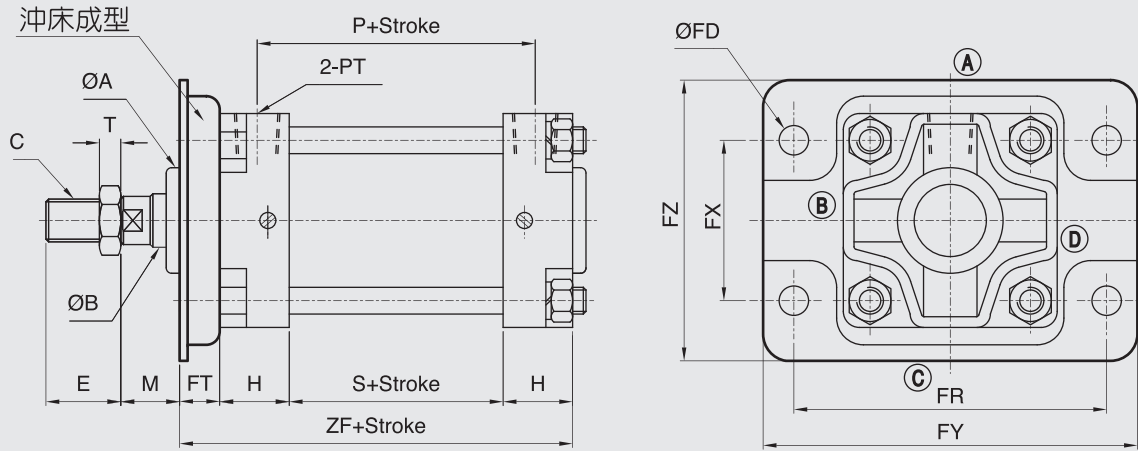
1. The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
2. The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
3. The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice length PM of size: P, S, Z, ZA, ZD).
4. When this series of stroke exceeds (includes) 2000mm, the fixed base of the pull rod must be added in the middle.
5. AST: Adjustable stroke by customer assignment.

# MA-FA

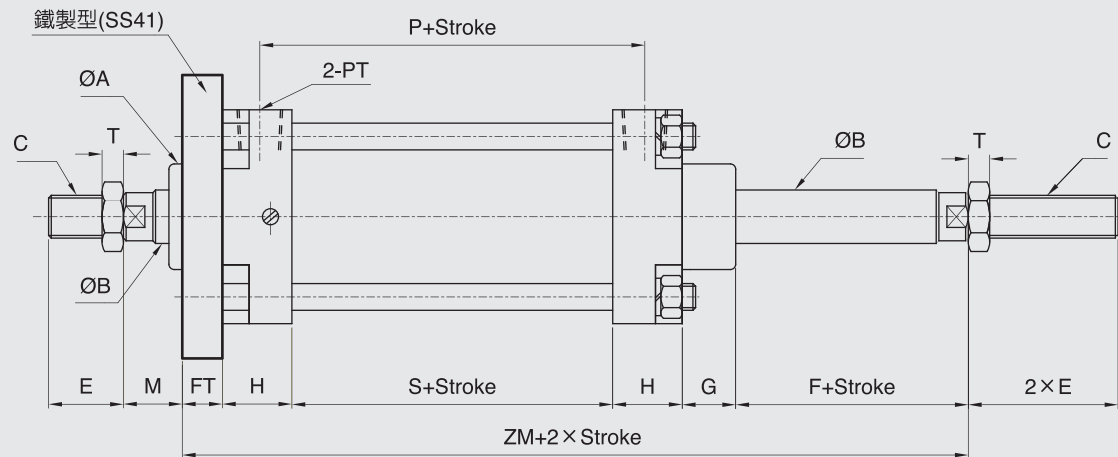
Series

## 鋁合金氣缸FA板尺寸圖 MA Series FA Dimensional Features(0.99Mpa)

### MAB MAB+FA TYPE



### MAD MAD+FA TYPE



MAB-MAD TYPE															FA TYPE							
BORE	SIZE	$\varnothing A$	$\varnothing B$	C	E	F	G	H	M	P	PM	PT	S	T	ZF	ZM	$\varnothing FD$	FT	FR	FX	FY	FZ
$\varnothing 40$	30	16	M14XP1.5	28	13	15	26	17	67	30	1/4	45	8	108	136	9	11	88	44	104	75	
$\varnothing 50$	39.5	20	M16XP1.5	28	17	15	28	21	72	30	1/4	46	8	113	145	9	11	104	46	125	80	
$\varnothing 63$	39.5	20	M16XP1.5	28	17	20	26	22	74	30	3/8	50	8	117	154	11.5	15	117	60	140	105	
$\varnothing 80$	44.5	25	M22XP1.5	40	20	15	34	15	84	30	3/8	50	13	138	173	14	20	131	74	161	121	
$\varnothing 100$	54.5	30	M26XP1.5	40	20	20	36	20	82	30	1/2	50	13	142	182	16	20	151	92	183	137	
$\varnothing 125$	60	35	M30XP1.5	45	20	23	42	23	84	30	1/2	50	13	154	197	16	20	183	123	220	155	
$\varnothing 150$	70	40	M30XP1.5	50	20	27	48	27	96	40	1/2	60	13	176	223	18	20	230	134	275	185	

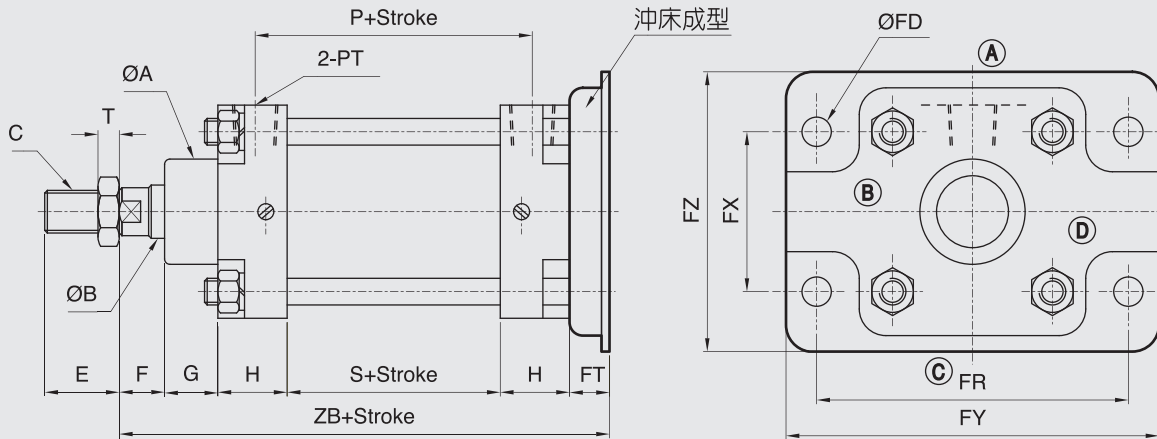
**備註:**

- 1.本系列軸心加大如未註明長度尺寸時,依照本公司規定自行加工。
- 2.本系列MA50,MA63行程超過500mm(含)以上,軸心牙加大為M18XP1.5。
- 3.本系列行程超過1500mm(含)以上時,活塞(PM)長度須加倍長(尺寸P,S,ZF,ZM,須再加PM尺寸長度乙次)。
- 4.本系列MA40-MA63標準安裝FA為沖床成型之FA(五彩),平均板厚為3mm,另有鐵製(SS41)FA可供選擇。
- 5.本系列MA80-MA100標準安裝FA為鑄造成型之FA(FCD-45),另有鐵製(SS41)FA可供選擇。
- 6.MA125-MA150之FA配件標準型均為鐵製(材質SS41)

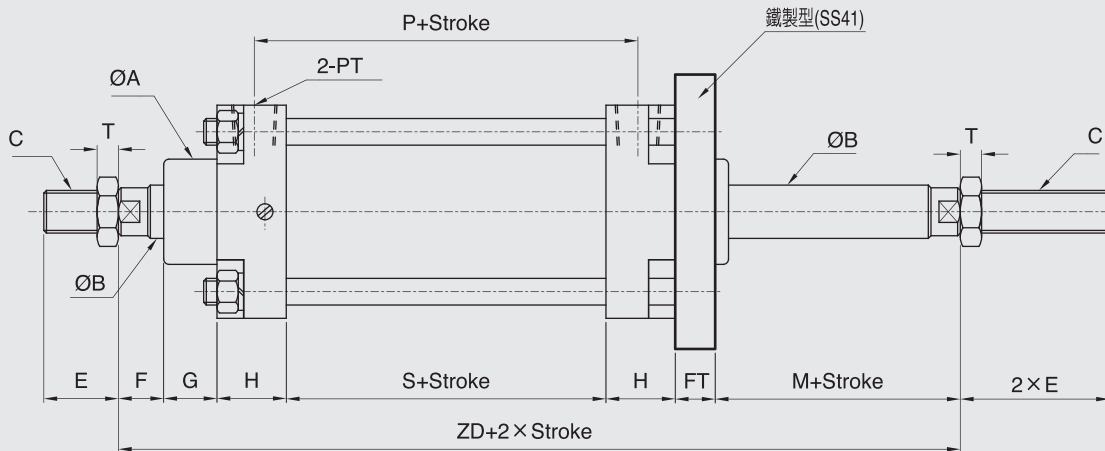
- 1.The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
- 2.The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
- 3.The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice length PM of size:P,S,ZF,ZM).
- 4.The series MA40-MA63 is standard setting by FA punching machine shape,thickness 3mm,(5 colors) and also have material is iron (SS41) of FA for optional.
- 5.The series MA80-MA100 is standard setting by FA cast type (FCD-45), material iron (SS41) for optional.
- 6.MA125-MA150 of FA for standard accessories type all is material iron (SS41).

## 鋁合金氣缸FB板尺寸圖 MA Series FB Dimensional Features(0.99Mpa)

### MAB MAB+FB TYPE



### MAD MAD+FB TYPE



MAB-MAD TYPE															FB TYPE							
BORE	SIZE	$\varnothing A$	$\varnothing B$	C	E	F	G	H	M	P	PM	PT	S	T	ZB	ZD	$\varnothing FD$	FT	FR	FX	FY	FZ
$\varnothing 40$	30	16	M14XP1.5	28	13	15	26	17	67	30	1/4	45	8	136	153	9	11	88	44	104	75	
$\varnothing 50$	39.5	20	M16XP1.5	28	17	15	28	21	72	30	1/4	46	8	145	166	9	11	104	46	125	80	
$\varnothing 63$	39.5	20	M16XP1.5	28	17	20	26	22	74	30	3/8	50	8	154	176	11.5	15	117	60	140	105	
$\varnothing 80$	44.5	25	M22XP1.5	40	20	15	35	15	84	30	3/8	50	13	173	188	14	20	131	74	161	121	
$\varnothing 100$	54.5	30	M26XP1.5	40	20	20	36	20	82	30	1/2	50	13	182	202	16	20	151	92	183	137	
$\varnothing 125$	60	35	M30XP1.5	45	20	23	42	23	84	30	1/2	50	13	197	220	16	20	183	123	220	155	
$\varnothing 150$	70	40	M30XP1.5	50	20	27	48	27	96	40	1/2	60	13	223	250	18	20	230	134	275	185	

#### 備註:

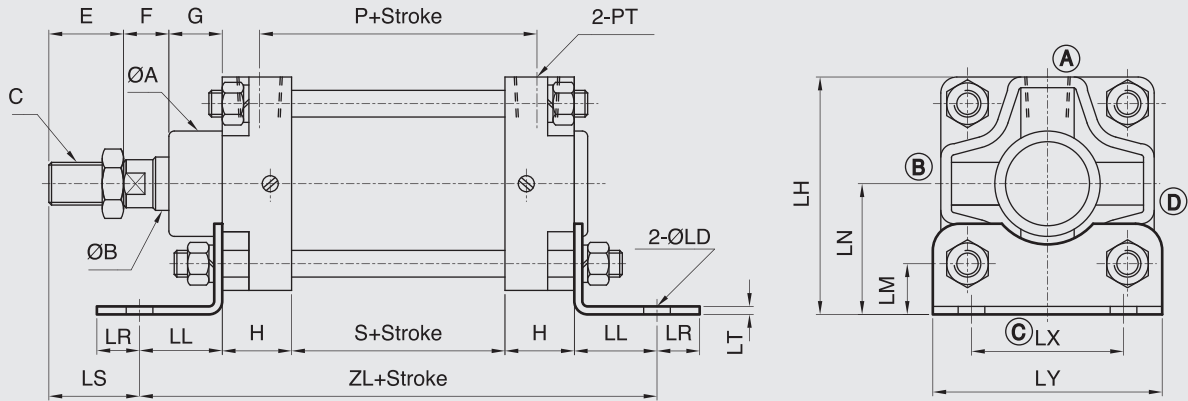
1. 本系列軸心加大如未註明長度尺寸時, 依照本公司規定自行加工。
  2. 本系列MA50, MA63行程超過500mm(含)以上, 軸心牙加大為M18XP1.5。
  3. 本系列行程超過1500mm(含)以上時, 活塞(PM)長度須加倍長(尺寸P, S, ZB, ZD, 須再加PM尺寸長度乙次)。
  4. 本系列MA40-MA63標準安裝FB為沖床成型之FB(五彩), 平均板厚為3mm, 另有鐵製(SS41)FA可供選擇。
  5. 本系列MA80-MA100標準安裝FB為鑄造成型之FB(FCD-45), 另有鐵製(SS41)FA可供選擇。
  6. MA125-MA150之FB配件標準型均為鐵製(材質SS41)
1. The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
  2. The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
  3. The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice length PM of size:P, S, ZB, ZD).
  4. The series MA40-MA63 is standard setting by FB punching machine shape, thickness 3mm, (5 colors) and also have material is iron (SS41) of FB for optional.
  5. The series MA80-MA100 is standard setting by FB cast type (FCD-45), material iron (SS41) for optional.
  6. MA125-MA150 of FB for standard accessories type all is material iron (SS41).

# MA-LB

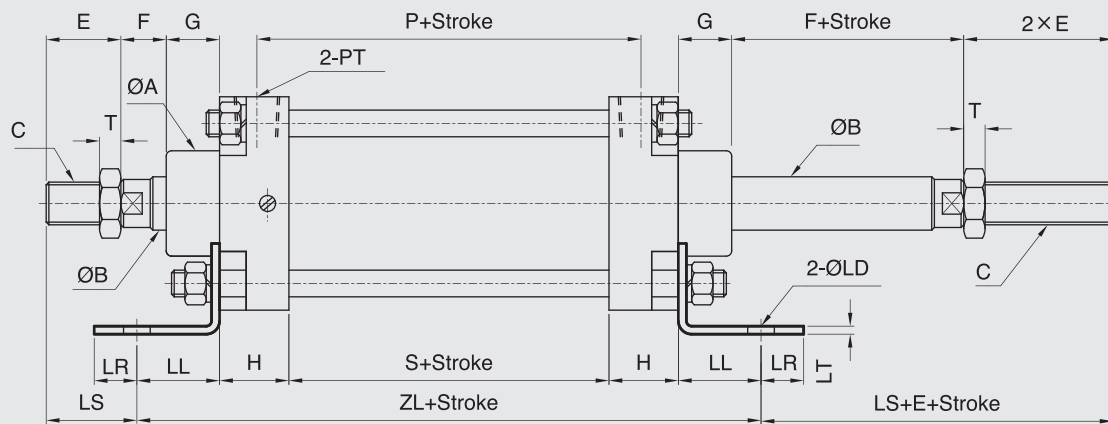
Series

## 鋁合金氣缸LB架尺寸圖 MA Series LB Dimensional Features(0.99Mpa)

### MAB MAB+LB TYPE



### MAD MAD+LB TYPE



#### MAB-MAD TYPE

#### LB TYPE

BORE	SIZE	ØA	ØB	C	E	F	G	H	LH	LN	LS	P	PM	PT	S	T	ZL	ØLD	LL	LM	LR	LT	LX	LY
Ø40	30	16	M14XP1.5	28	13	15	26	68	39	29	67	30	1/4	45	8	151	9	27	17	15	3	42	59	
Ø50	39.5	20	M16XP1.5	28	17	15	28	71	38	29	72	30	1/4	46	8	164	10	31	14	11	3	40	65	
Ø63	39.5	20	M16XP1.5	28	17	20	26	89	49	34	74	30	3/8	50	8	164	10	31	19	16	3	57	86	
Ø80	44.5	25	M22XP1.5	40	20	15	34	108	60	40	84	30	3/8	50	13	188	13	35	23	15	6	74	105	
Ø100	54.5	30	M26XP1.5	40	20	20	36	131	73	30	82	30	1/2	50	13	222	14	50	28.5	15	6	89	115	
Ø125	60	35	M30XP1.5	45	20	23	42	160	86	40	84	30	1/2	50	13	230	16	48	30	17	6	116	152	
Ø150	70	40	M30XP1.5	50	20	27	48	185	99	42	96	40	1/2	60	13	266	18	55	32	18	9	134	178	

**備註:**

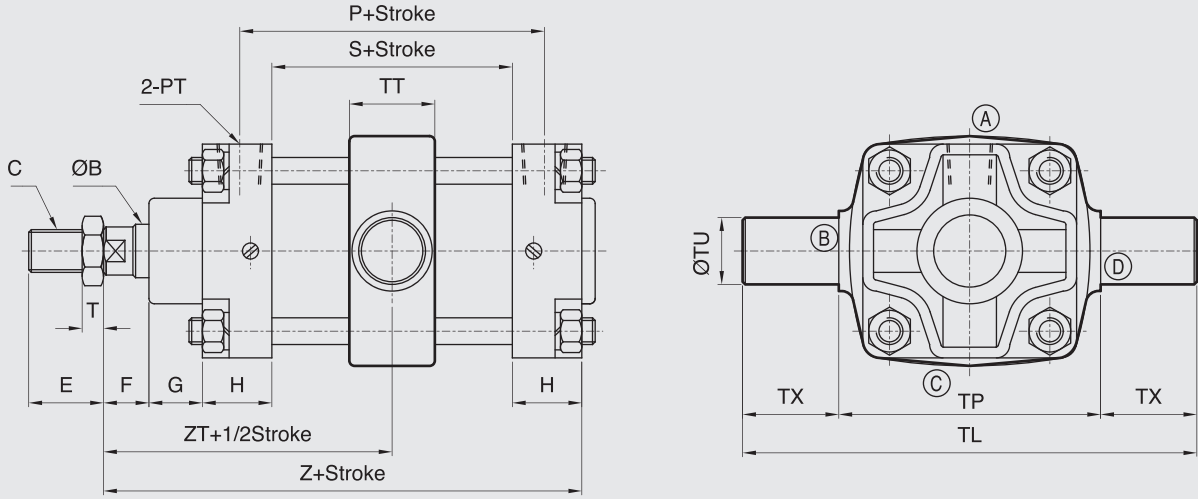
- 1.本系列軸心加大如未註明長度尺寸時,依照本公司規定自行加工。
- 2.本系列MA50,MA63行程超過500mm(含)以上,軸心牙加大為M18XP1.5。
- 3.本系列行程超過1500mm(含)以上時,活塞(PM)長度須加倍長(尺寸P,S,ZL須再加PM尺寸長度之次)。
- 4.本系列行程超過2000mm(含)以上時,須加拉桿中間固定座。
- 5.MA40-MA63 LB配件標準型安裝沖床成型之LB(五彩),MA80-MA150 LB配件標準型安裝角鐵成型之LB(烤漆)。

- 1.The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
- 2.The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
- 3.The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice length PM of size:P,S,ZL).
- 4.When this series of stroke exceeds(includes) 2000mm,the fixed base of the pull rod must be added in the middle.
- 5.The series MA40-MA63 of LB is standard accessories type setting by LB punching machine shape, (5 colors) and also MA80-MA150 of LB standard accessories type setting by angle iron shape(coating).

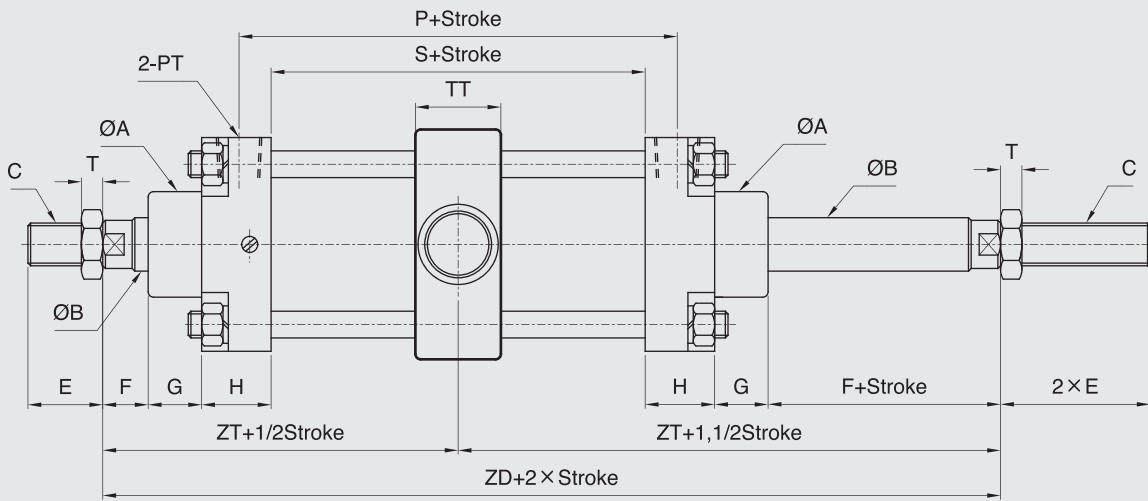


## 鋁合金氣缸TC尺寸圖 MA Series TC Dimensional Features(0.99Mpa)

### MAB MAB+TC TYPE



### MAD MAD+TC TYPE



BORE	SIZE	MAB-MAD TYPE															TC TYPE				
		ØA	ØB	C	E	F	G	H	P	PM	PT	S	T	Z	ZD	ZT	ØTU	TL	TP	TT	TX
Ø40	30	16	M14XP1.5	28	13	15	26	67	30	1/4	45	8	125	153	76.5	18	127	69	25	29	
Ø50	39.5	20	M16XP1.5	28	17	15	28	72	30	1/4	46	8	134	166	83	20	153	83	28	35	
Ø63	39.5	20	M16XP1.5	28	17	20	26	74	30	3/8	50	8	139	176	88	25	170	98	32	36	
Ø80	44.5	25	M22XP1.5	40	20	15	34	84	30	3/8	50	13	153	188	94	28	194	124	35	35	
Ø100	54.5	30	M26XP1.5	40	20	20	36	82	30	1/2	50	13	162	202	101	30	222	142	38	40	
Ø125	60	35	M30XP1.5	45	20	23	42	84	30	1/2	50	13	177	220	110	32	255	175	40	40	
Ø150	70	40	M30XP1.5	50	20	27	48	96	40	1/2	60	13	203	250	125	35	280	200	40	40	

**備註:**

- 1.本系列軸心加大如未註明長度尺寸時,依照本公司規定自行加工。
- 2.本系列MA50,MA63行程超過500mm(含)以上,軸心牙加大為M18XP1.5。
- 3.本系列行程超過1500mm(含)以上時,活塞(PM)長度須加倍長(尺寸P,S,Z,ZD須再加PM尺寸長度乙次,ZT加1/2PM尺寸長度)。
- 4.本系列TC配件材質為FCD-45。
- 5.本系列TC配件位置(ZT尺寸),可依據客戶指定尺寸裝配。

- 1.The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
- 2.The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
- 3.The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice and ZT 1/2 length PM of size:P,S,Z,ZD).
- 4.The series TC accessories material is FCD-45.
- 5.The series TC accessories position(ZT size) could be adjustable for customer require.

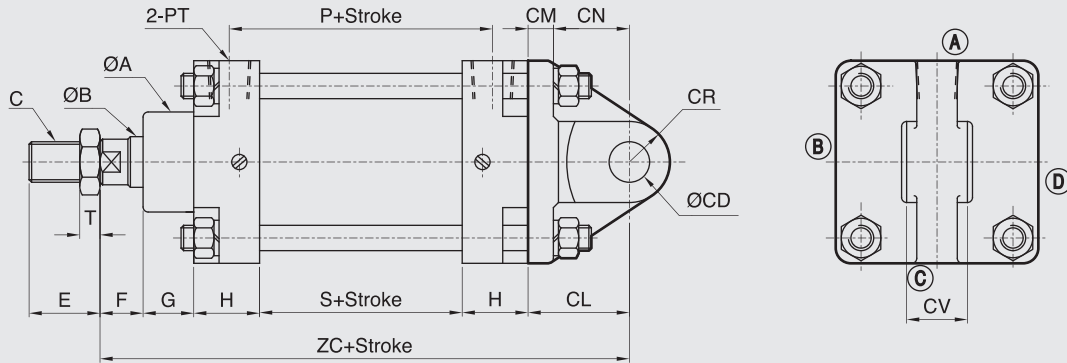
# MA-CA, CB

Series

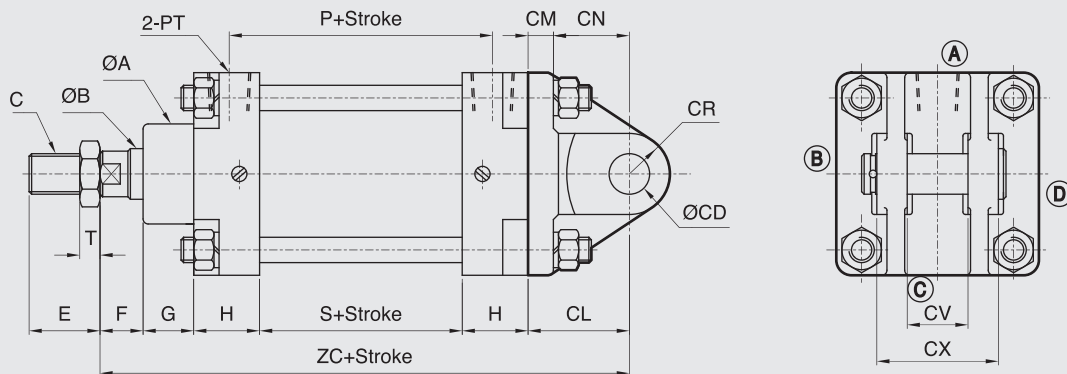
## 鋁合金氣缸CA, CB尺寸圖

MA Series CA, CB Dimensional Features(0.99Mpa)

### MAB MAB+CA TYPE



### MAB MAB+CB TYPE



BORE	SIZE	MAB TYPE												CA-CB TYPE							
		ØA	ØB	C	E	F	G	H	P	PM	PT	S	T	ZC	CL	CM	CN	ØCD	CR	CV	CX
Ø40	30	16	M14XP1.5	28	13	15	26	67	30	1/4	45	8	155	30	10	20	12	12	14	32	
Ø50	39.5	20	M16XP1.5	28	17	15	28	72	30	1/4	46	8	169	35	10	25	12	12	16	44	
Ø63	39.5	20	M16XP1.5	28	17	20	26	74	30	3/8	50	8	179	40	10	30	16	16	24	48	
Ø80	44.5	25	M22XP1.5	40	20	15	34	84	30	3/8	50	13	203	50	15	35	20	22	32	62	
Ø100	54.5	30	M26XP1.5	40	20	20	36	82	30	1/2	50	13	224	62	18	44	25	26	35	73	
Ø125	60	35	M30XP1.5	45	20	23	42	84	30	1/2	50	13	244	67	20	47	25	27	43	83	
Ø150	70	40	M30XP1.5	50	20	27	48	96	40	1/2	60	13	283	80	20	60	30	35	40	80	

#### 備註:

- 1.本系列軸心加大如未註明長度尺寸時,依照本公司規定自行加工。
- 2.本系列MA50,MA63行程超過500mm(含)以上,軸心牙加大為M18XP1.5。
- 3.本系列行程超過1500mm(含)以上時,活塞(PM)長度須加倍長(尺寸P, S,ZC,須再加PM尺寸長度乙次)。
- 4.本系列行程超過2000mm(含)以上時,須加拉桿中間固定座。
- 5.MA40-MA125CA與MA40-MA100CB配件標準安裝為鑄造型(材質 FCD-45)之CA與CB,另有鐵製(材質SS41)焊接式之CA與CB可供選擇。
- 6.MA150之CA與MA125-MA150CB為鐵製(材質SS41)CA,CB焊接型。

- 1.The length and size of axis were not specific to constructed must be according to our company design's modify without prior notice.
- 2.The series stroke exceed 500mm (includes), axletree broaden be M18xP1.5.
- 3.The series stroke exceed (includes) 1500mm, should redouble length (PM) of piston. (Add twice and ZT 1/2 length PM of size:P,S,ZC,).
- 4.When this series of stroke exceeds(includes) 2000mm,the fixed base of the pull rod must be added in the middle.
- 5.MA40-MA125 of CA & MA40-MA100 of CB standard accessories is cast type (material FCD-45) and also material iron SS41 of welding type for optional.
- 6.MA150 of CA & MA125-MA150 of CB accessories is iron welding type. (material SS41).