

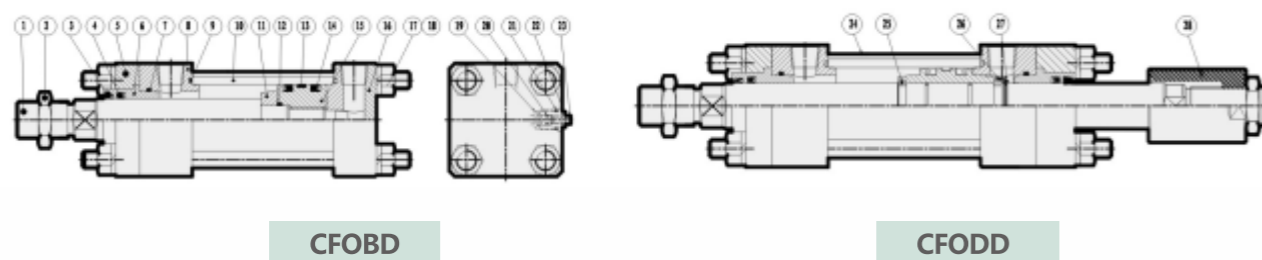
CFO

系列可調緩衝油壓缸

CFO SERIES 14 MPA ADJUSTABLE CUSHIONING HYDRAULIC CYLINDER



可調緩衝油壓缸結構圖 INSIDE STRUCTURE



NO	零件名 Part name	數量 Quantity	NO	零件名 Part name	數量 Quantity	NO	零件名 Part name	數量 Quantity
1	活塞桿 Piston rod	1	10	缸筒 Cylinder tube	1	19	可調螺母 Adjustable nut	1
2	鎖緊螺母 Locking nut	1	11	緩衝套 Cushion collar	1	20,21	O型圈 Gasket	2
3	防塵油封 Dustproof seal	1	12	O型圈 Gasket	1	22	六角螺母 Hexagon nut	1
4	軸用油封 Oil seal for shaft	1	13	耐磨環 Wearing ring	1	23	調節絲桿 Adjustable lead screw	1
5	壓蓋 Gland	1	14	活塞油封 Piston seal	2	24	拉桿 Tie rod	4
6	導向套 Guide sleeve	1	15	活塞 Piston	1	25	半卡環 Half snap ring	2
7	O型圈 Gasket	1	16	後端蓋 End cover	1	26	擋環 Baffle ring	1
8	前端蓋 Rod cover	1	17	螺母 Nut	8	27	軸用擋圈 Rod baffle ring	1
9	O型圈 Gasket	2	18	彈性墊圈 Spring washer	8	28	可調螺母 Adjustable nut	1

可調緩衝油壓缸特性資料 Specifications

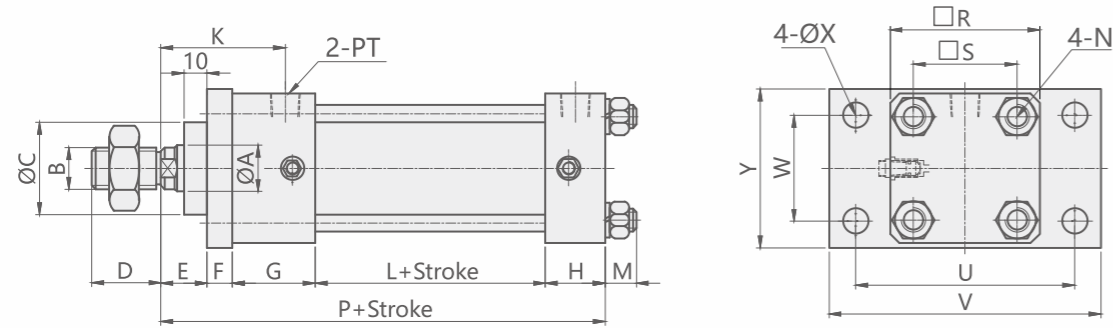
油缸內徑 Hydraulic cylinder inside diameter (mm)	Φ40	Φ50	Φ63	Φ80	Φ100	Φ125
工作流體 Power Fluid	以濾清之標準液壓油 Filtered Oil					
缸管材質 Material of cylinder barrel	碳鋼管 Carbon steel STKM-13c / 白鐵管 Stainless tubes SUS 304					
使用壓力範圍 The range of pressure (MPa)	0.3-14 MPA (3-140kg/cm ²)					
使用速度範圍 The range of speed (mm/sec)	8~300 (mm/sec)					
使用溫度範圍 Range of temperature (°C)	-10 ~ + 60 (°C)					
緩衝行程 Cushion stroke (mm)	25	25	25	25	30	30
標準活塞長度 Length of standard piston (PM)	30	32	36	40	59	59
訂製行程於 1501-2500mm 間 活塞長度 (PM) Piston length when the stroke is between 1501-2500 mm	60	65	65	80	120	120

訂購標示法 ORDERING INDICATION

示例: CFOB-R-D-63/35-100-LB-Y

CFOB	系列 Series	CFOB 標準型 Standard type	CFOD 雙軸型 Double Rods type
R	磁性感應 Magnetic	無記號: 不附磁石 Blank: No magnet R: 內附磁石 (適用Φ40-Φ100) With magnet	本系列適用Φ40-Φ100 apply to bore Φ40-Φ100
D	固定緩衝型式 Fixed Cushioning Type	無記號: 無 Blank: No cushion D: 雙側緩衝 cushions on both ends F: 前蓋側緩衝 cushion on head cover B: 後蓋側緩衝 cushion on end cover	
63	油缸內徑 Hydraulic cylinder inside diameter	Φ40 Φ50 Φ63 Φ80 Φ100 Φ125	
35	軸心 Rod	Φ20 Φ30 Φ35 Φ40 Φ50 Φ60 無記號: 標準軸心 Blank: standard rod	
100	行程 Stroke	鋼管 Steel barrel (Φ40-Φ200) 最大行程: 4米 Max:4m 白鋼管 Iron barrel (Φ40-Φ100) 最大行程: 2.8米 Max:2.8m 標準行程 Standard stroke: 50, 100, 150, 200, 250, 300, 350, 400, 450, 500, 600, 700, 800, 900, 1000.	
LB	缸體固定型式 Accessories for body	FA 前法蘭型 Front flange type FB 後法蘭型 Rear flange type LB 腳座型 Foot type CB 雙耳環型 Double trunnion type CBP CB 附 Pin CB with pin	LA 腳座型 Foot type TC 耳軸型 Trunnion type CA 單耳型 Single trunnion type CAB CA+P+CB
Y	軸心固定型式 Accessories for rod	Y Y型接頭 Y joint YP Y+Pin Y with pin I I型接頭 I joint KG 浮動接頭 Floating joint	PHS 魚眼接頭 Rod-eye joint T T型接頭 T joint H 焊套接頭 Welding sleeve joint A 可調螺帽 Adjustable nut

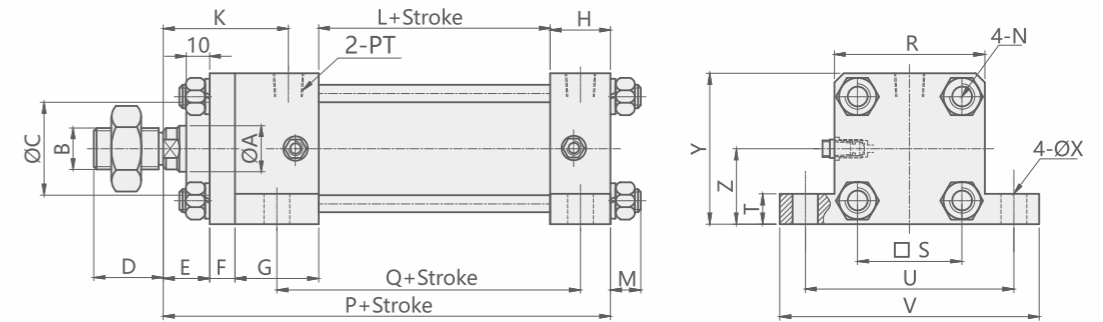
標準 CFOBD+FA型 前法蘭型 Front Flange Mounting Type



Unit:mm

本體尺寸dimensions													安裝相關尺寸mounting dimensions									
BORE	A	B	D	E	F	G	H	K	L	M	N	P	R	S	PT	I	C	U	V	W	X	Y
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	143	65	45	1/4"	11	40	95	118	46	11	69
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	169	75	52	3/8"	13	45	115	145	58	13	85
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	176	90	63	3/8"	15	55	132	165	69	15	98
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	189	110	80	1/2"	18	55	155	190	87	18	118
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	219	135	98	1/2"	20	65	185	224	109	20	145
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	244	165	122	3/4"	24	75	224	272	132	24	175

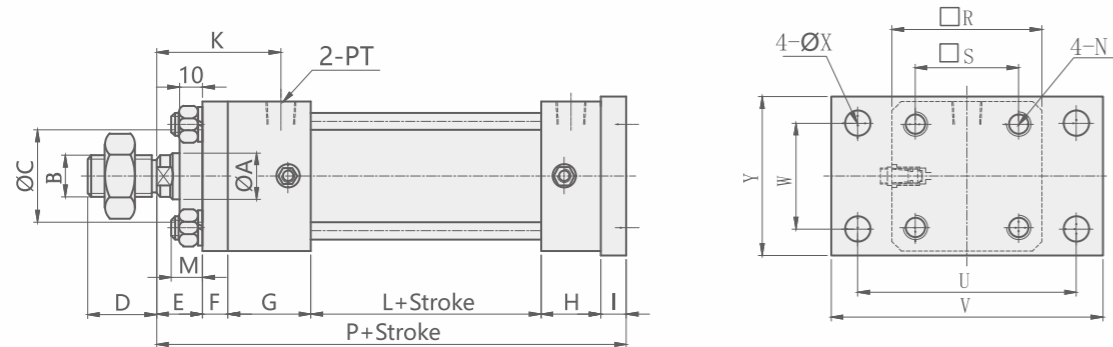
標準 CFOBD+LA型 左右腳座型 Right & Left Foot Mounting Type



Unit:mm

本體尺寸dimensions													安裝相關尺寸mounting dimensions										
BORE	A	B	D	E	F	G	H	K	L	M	N	C	R	S	PT	P	Q	T	U	V	X	Y	Z
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	40	65	45	1/4"	143	81	13	90	112	11	65	32.5
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	45	75	52	3/8"	169	88	15	109	132	13	75	37.5
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	55	90	63	3/8"	176	88	18	128	154	15	90	45
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	55	110	80	1/2"	189	93	20	152	184	18	110	55
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	65	135	98	1/2"	219	114	24	178	210	20	135	67.5
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	75	165	122	3/4"	244	122	28	211	250	24	165	82.5

標準 CFOBD+FB型 後法蘭型 Rear Flange Mounting Type



Unit:mm

本體尺寸dimensions													安裝相關尺寸mounting dimensions									
BORE	A	B	D	E	F	G	H	K	L	M	N	C	R	S	PT	I	P	U	V	W	X	Y
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	40	65	45	1/4"	11	154	95	118	46	11	69
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	45	75	52	3/8"	13	182	115	145	58	13	85
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	55	90	63	3/8"	15	191	132	165	69	15	98
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	55	110	80	1/2"	18	207	155	190	87	18	118
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	65	135	98	1/2"	20	239	185	224	109	20	145
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	75	165	122	3/4"	24	268	224	272	132	24	175

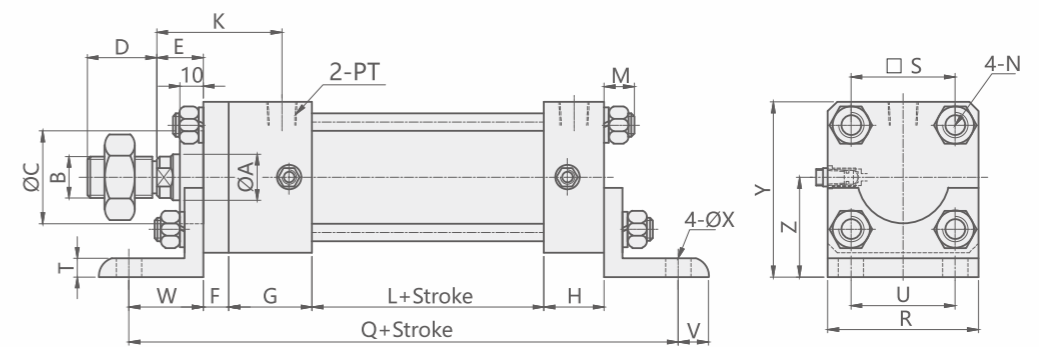
注意事項

- 1.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.CFO系列行程未超過1500mm時，活塞長度 (PM) 如附表，訂製行程如超過1500mm時，活塞長度(PM)請參閱特性資料表。
- 3.本系列行程如超過2000(含) mm時，須加裝桿中間固定座。
- 4.本系列軸心螺帽規格M50mm (含) 以上時，其外徑為圓形。
- 5.AST為客戶指定之可調行程。

NOTE

- 1.For axis extending processing,if the length is not specified,then it should follow our company's stipulation for processing.
2. For the CFO series whose stroke is less than 1500mm,the length of the piston is shown in the affiliated table,for those customized CFO whose stroke is more than 1500mm,the length of piston conforms to product specification.
3. Middle rod holder must be installed for those HO whose stroke is equal to or more than 2000mm.
- 4.The external diameter would be round when the size of rod nut is equal to or more than M50mm.
- 5.AST stands for the adjustable stroke designated by customers.

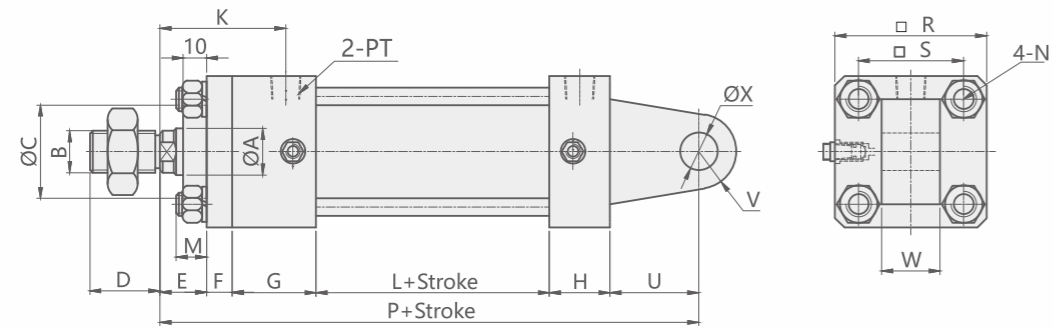
標準 CFOBD+LB型 前後腳座型 Front & Rear Foot Mounting Type



Unit:mm

本體尺寸dimensions													安裝相關尺寸mounting dimensions										
BORE	A	B	D	E	F	G	H	K	L	M	N	C	R	S	PT	Q	T	U	V	W	X	Y	Z
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	40	65	45	1/4"	187	8	45	13	32	11	75.5	43
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	45	75	52	3/8"	209	8	52	15	35	13	87.5	50
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	55	90	63	3/8"	225	10	63	18	42	15	105	60
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	55	110	80	1/2"	254	12	80	20	50	18	127	72
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	65	135	98	1/2"	289	12	98	23	55	20	152.5	85
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	75	165	122	3/4"	331	15	122	29	66	24	187.5	105

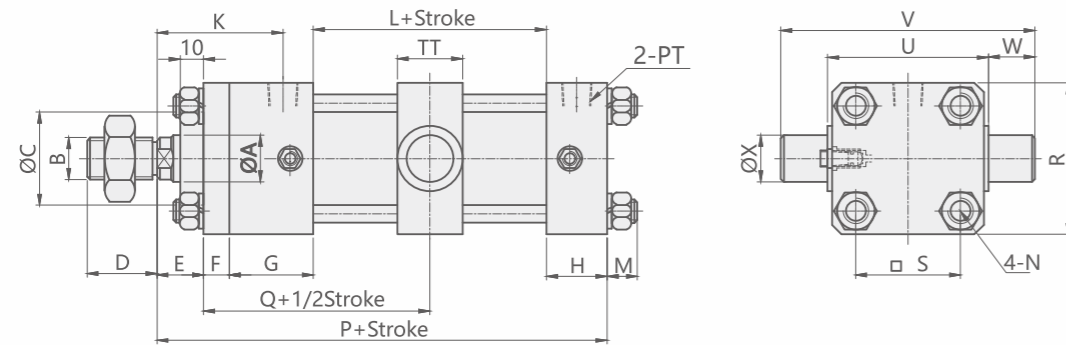
標準 CFOBD+CA型 單耳型 Single Trunion Mounting Type



Unit:mm

本體尺寸dimension													安裝相關尺寸mounting dimension						
BORE	A	B	D	E	F	G	H	K	L	M	N	R	S	PT	P	U	V	W	X
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	65	45	1/4"	181	38	16	25	16
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	75	52	3/8"	214	45	20	31.5	20
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	90	63	3/8"	239	63	31.5	40	31.5
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	110	80	1/2"	261	72	31.5	40	31.5
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	135	98	1/2"	303	84	40	50	40
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	165	122	3/4"	307	63	50	53	50

標準 CFOBD+TC型 耳軸型 Trunion Mounting Type



Unit:mm

本體尺寸dimension													安裝相關尺寸mounting dimension								
BORE	A	B	D	E	F	G	H	K	L	M	N	R	S	PT	P	Q	U	V	W	X	TT
Φ40	20	M18x1.5	30	20	11	36	26	54	50	13	M10x1.5	65	45	1/4"	143	72	69	109	20	20	28
Φ50	30	M26x1.5	35	30	13	42	34	68	50	13	M10x1.5	75	52	3/8"	169	80	85	135	25	25	33
Φ63	35	M30x1.5	40	35	15	42	34	75	50	15	M12x1.75	90	63	3/8"	176	82	98	161	31.5	31.5	40
Φ80	40	M35x1.5	45	35	18	46	40	79	50	17	M16x1.5	110	80	1/2"	189	89	118	181	31.5	31.5	43
Φ100	50	M45x1.5	55	40	20	50	40	90	69	19	M18x1.5	135	98	1/2"	219	104.5	145	225	40	40	53
Φ125	60	M50x2.0	65	45	24	58	48	104	69	21	M22x1.5	165	122	3/4"	244	116.5	175	275	50	50	58

注意事项

1. 軸心加大或縮小時如未註明長度尺寸時，依照本公司規定自行加工。
2. CFO40系列行程超過500mm以上時，軸心牙加大為M18xP1.5。
3. CFO系列行程未超過1499mm時，活塞長度 (PM) 依據表組裝，行程如超過1500mm以上時，活塞長度 (PM) 請參閱特性資料表。
4. 前蓋螺帽 (ΦJ) 與軸心螺帽 (W) 規格大於M50時，其外徑為圓型，W, J指其外徑。
5. AST為客戶指定之可調行程。

NOTE

1. For rods extending or reducing processing, if the length is not specified, then it should follow our company's stipulation for processing.
2. Rod thread tooth should be extending into M18*P1.5 for CFO series bore size 40 whose stroke is more than 500mm.
3. For the CFO series whose stroke is not exceeding 1499mm, the length of piston conforms to specification table for assembling. For those whose stroke is more than 1500mm, the length of piston conforms to characteristics table.
4. The external diameter should be round when the size of rod cover nut (ΦJ) and rod nut (ΦW) is more than M50, W, J refer to its external diameter.
5. AST stands for adjustable stroke designated by customers.

