

CLL

油壓緊湊型直線缸

CLL HYDRAULIC COMPACT LINEAR CYLINDER



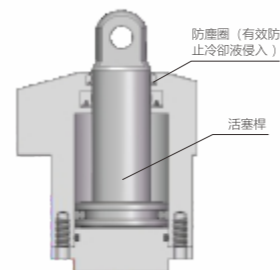
產品特性

以最小空間實現大的行程,CLL/CLLR/CLLU可以以1mm為單位指定行程,又可以在豐富組合中進行選擇。

FEATURES




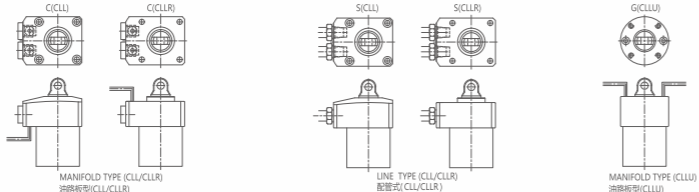
Maximum stroke is available with minimum space. CLL/CLLR/CLLU with 1 mm stroke increments and a variety of styles.

剖面圖 Sectional view



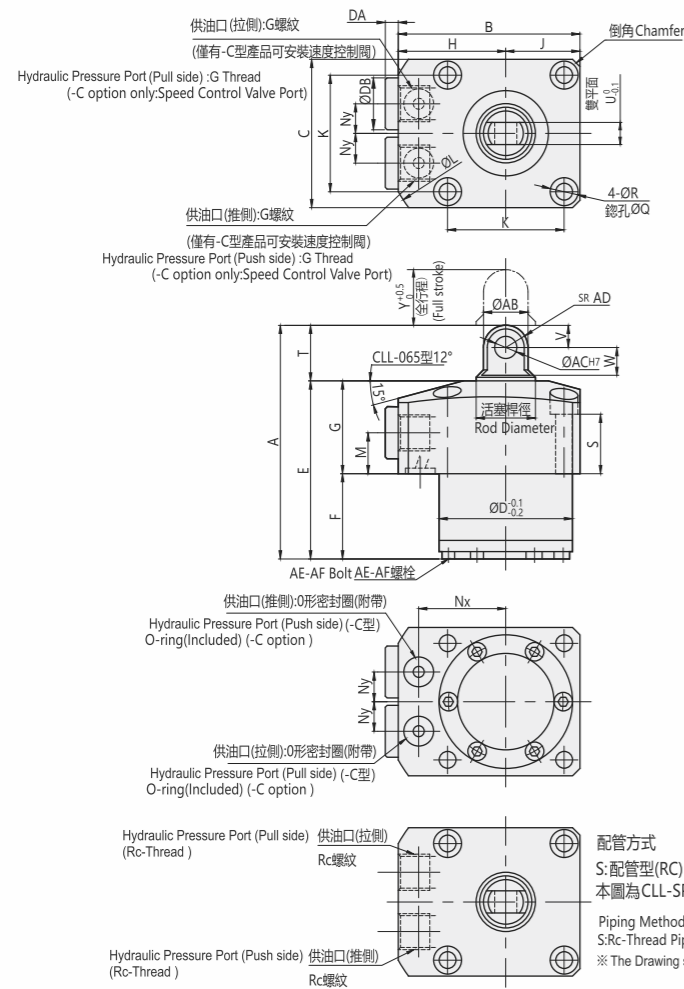
訂購標示法 ORDERING INDICATION

示例: CLL-048CA-050

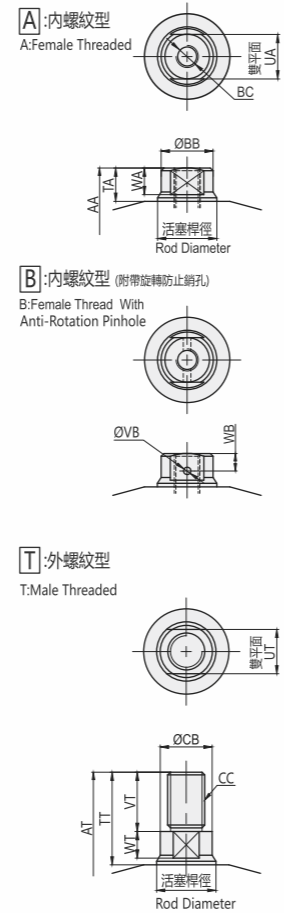
CLL	系列 Series	CLL					
	安裝方式 Mounting Methods	 CLL:法蘭下部安裝型 Top Flange	 CLLR:法蘭上部安裝型 Bottom Flange	 CLLU:法蘭上部安裝型 (節省空間型) Bottom Flange (Compact)			
048	本體尺寸 BodySize	036:ΦD=36 065:ΦD=65	040:ΦD=40 075:ΦD=75	048:ΦD=48 090:ΦD=90	055:ΦD=55 105:ΦD=105	註: ΦD是油缸本體外徑尺寸 Note: ΦD indicates the outer diameter of the Cylinder	
C	配管方式 Piping Method	C: 板式連接型 (附帶G螺紋堵頭, 對應CLL/CLLR型) S: 配管型 (Rc螺紋, 對應CLL/CLLR型) G: 板式連接型 (只有板式供油口, 對應CLLU型)		C: Gasket Option (With G Thread Plug, Apply to CLL/CLLR) S: Piping Option (Rc Thread Port, Apply to CLL/CLLR) G: Gasket Option (Gasket Port only, Apply to CLLU)			
A	活塞前端形狀 Shape of Piston Tip	A: 內螺紋型 T: 外螺紋型 P: 銷孔連接型	B: 內螺紋型 (附帶旋轉防止銷孔)	A	B	T	P
050	行程 Stroke						



C板式連接型(配有G螺紋堵頭):C Gasket Option(with G Thread Plug)
 P:銷孔連接型 本圖表示CLL-CP型P: Pin-Hole Option※This drawing indicates CLL-CP



Tip Shape Refer P Pinhole dimension for not mentioned size below
 柱塞前端形狀 無記載的尺寸請參照銷孔連接型



規格參數表 SPECIFICATIONS

型號	總行程	油缸面積		油缸輸出力		油缸容量 (計算公式)		油缸內徑	活塞桿徑	最高使用壓力	最低動作壓力	耐壓	使用溫度	重量
MODEL	Full Stroke Y (mm)	推側	拉側	推側	拉側	推側	拉側	Cylinder inside diameter (mm)	Rod Diameter(mm)	Operating Pressure(Mpa) Max.	Operating Pressure(Mpa) Min.	Withstanding Pressure(Mpa)	Operating Temperature (°C)	Weight (kg)
CLL-036	1~50	4.5	2.5	P×0.45	P×0.25	Y×0.45	Y×0.25	Φ24	Φ16	7.0	0.5	10.5	0~70	0.6~0.8
CLL-040	1~50	5.3	2.8	P×0.53	P×0.28	Y×0.53	Y×0.28	Φ26	Φ18	7.0	0.5	10.5	0~70	0.7~0.9
CLL-048	1~75	8.0	4.9	P×0.80	P×0.49	Y×0.80	Y×0.49	Φ32	Φ20	7.0	0.5	10.5	0~70	1.0~1.6
CLL-055	1~75	9.6	5.8	P×0.96	P×0.58	Y×0.96	Y×0.58	Φ35	Φ22	7.0	0.5	10.5	0~70	1.3~2.1
CLL-065	1~75	15.9	11.0	P×1.59	P×1.10	Y×1.59	Y×1.10	Φ45	Φ25	7.0	0.5	10.5	0~70	1.9~3.1
CLL-075	1~75	23.8	16.7	P×2.38	P×1.67	Y×2.38	Y×1.67	Φ55	Φ30	7.0	0.5	10.5	0~70	2.8~4.1
CLL-090	1~75	36.3	26.4	P×3.63	P×2.64	Y×3.63	Y×2.64	Φ68	Φ35.5	7.0	0.5	10.5	0~70	4.3~6.1
CLL-105	1~75	50.3	34.4	P×5.03	P×3.44	Y×5.03	Y×3.44	Φ80	Φ45	7.0	0.5	10.5	0~70	5.9~8.0

使用液體: 相當於ISO黏度等級的ISO-VG-32一般液壓油 Usable fluid: General Hydraulic Oil Equivalent to ISO-VG-32

A:內螺紋型 Female Threaded

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
AA	57 Y+42	61 Y+46	64 Y+49	68 Y+53	75 Y+60	83 Y+68	93 Y+78	99 Y+84
TA	9	10	11	12	13	15	16	18
UA	12	13	14	17	19	24	30	36
WA	7.5	7.5	8.5	9	10	12	13	15
BB	14	15	17	19	22	27	33	42
BC(名稱×深度) (Nominal×Depth)	M6×12	M8×16	M8×16	M10×20	M12×24	M16×32	M20×40	M24×48

無記載的尺寸請參照P: 銷孔連接型。
 Refer P pinhole option dimension for not mentioned size below.

Unit:mm

全行程 Y=1~14mm時, 外形尺寸與行程15mm時的油缸是一樣的 (例)
 CLL-036□P-010 [Y=10, A=63, E=48, F=23] CLL-036□P-030 [Y=30, A=78, E=63, F=38]

※ Calculation formula is different between full stroke: Y=1-14 mm and Y= more than 15 mm.Ex.) CLL-036□P-010 [Y=10, A=63, E=48, F=23] CLL-036□P-030 [Y=30, A=78, E=63, F=38]

P:銷孔連接型 Pin-Hole Option

Unit:mm

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
全行程 Full Stroke Y	1~14 15~50	1~14 15~50	1~14 15~75	1~14 15~75	1~14 15~75	1~14 15~75	1~14 15~75	1~14 15~75
A	63 Y+48	70 Y+55	74 Y+59	80 Y+65	90 Y+75	101 Y+86	114 Y+99	127 Y+112
B	49	54	61	69	81	92	107	122
C	40	45	51	60	70	80	95	110
D	36	40	48	55	65	75	90	105
E	48 Y+33	51 Y+36	53 Y+38	56 Y+41	62 Y+47	68 Y+53	77 Y+62	81 Y+66
F	23 Y+8	26 Y+11	25 Y+10	28 Y+13	32 Y+17	31 Y+16	37 Y+22	36 Y+21
G	25	25	28	28	30	37	40	45
H	29	31.5	35.5	39	46	52	59.5	67
J	20	22.5	25.5	30	35	40	47.5	55
K	31.4	34	40	47	55	63	75	88
L	66	73	83	88	106	116	136	152
M	11	11	12	12	13	16	16	17
Nx	23.5	26	30	33.5	39.5	45	52.5	60
Ny	8	9	11	12	15	16	18.5	22.5
Q	7.5	9.5	9.5	11	11	14	17.5	20
R	4.5	5.5	5.5	6.8	6.8	9	11	14
S	16	14	15.5	13	15.5	17.5	16.5	17.5
T	15	19	21	24	28	33	37	46
U	6	8	10	11	13	16	19	22
V	6	8	9	10	12	14	16	21
W	7.5	9.5	10.5	12	14	17	19	23
倒角 Chamfer	C2	C3	C3	C3	C4	C5	C6	C6
AB	12	15	17	19	22	27	32	42
AC	6 ^{+0.012} ₀	8 ^{+0.015} ₀	8 ^{+0.015} ₀	10 ^{+0.015} ₀	12 ^{+0.018} ₀	14 ^{+0.018} ₀	16 ^{+0.018} ₀	20 ^{+0.021} ₀
AD	6	8	9	10	12	14	16	21
AE	-	-	6	4	6	6	8	10
AF	-	-	M4×0.7	M5×0.8	M5×0.8	M6	M6	M6
DA	3.5	3.5	3.5	3.5	4.5	4.5	4.5	4.5
DB	14	14	14	14	19	19	22	22
排氣口 Air Bleed Port	—C型	G1/8	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8
供油口 Hydraulic Port	—S型	RC1/8	RC1/8	RC1/8	RC1/8	RC1/4	RC1/4	RC3/8
O型密封圈 O-ring	1BP5	1BP5	1BP5	1BP5	1BP7	1BP7	1BP7	1BP7

B:內螺紋型 (附帶旋轉防止銷孔) Female Threaded with Anti-Rotation Pin Hole

Unit:mm

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
VB	2	2.5	2.5	2.5	3	4	5	6
WB	5.5	5	6	6.5	7	8.5	9	10.5

無記載的尺寸請參照P: 銷孔連接型。A: 內螺紋型
 Refer P pinhole option / A female thread option, dimensions not mentioned size in the chart below

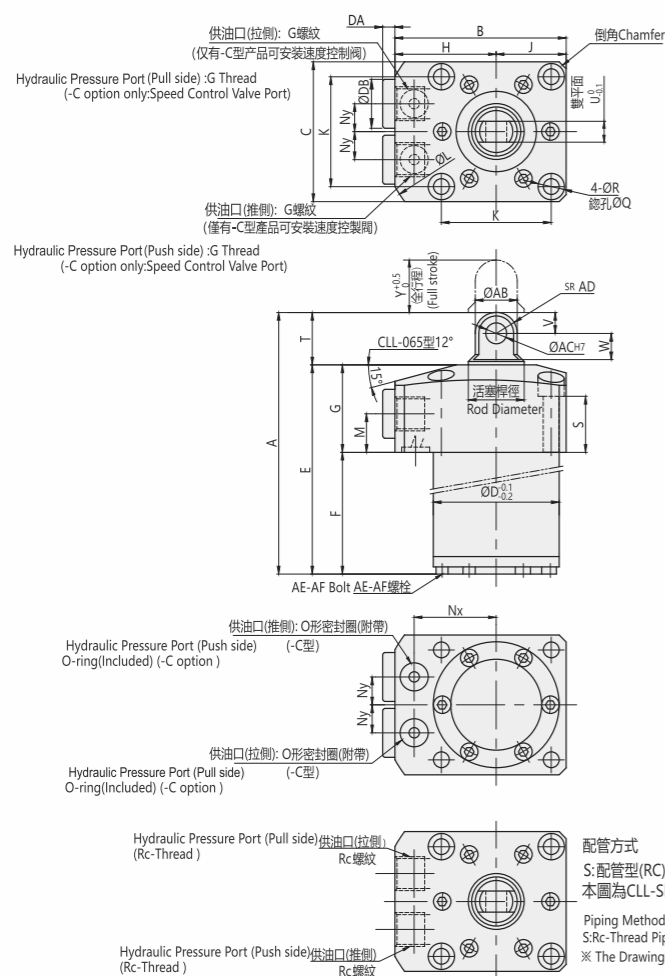
T:外螺紋型 Male Threaded

Unit:mm

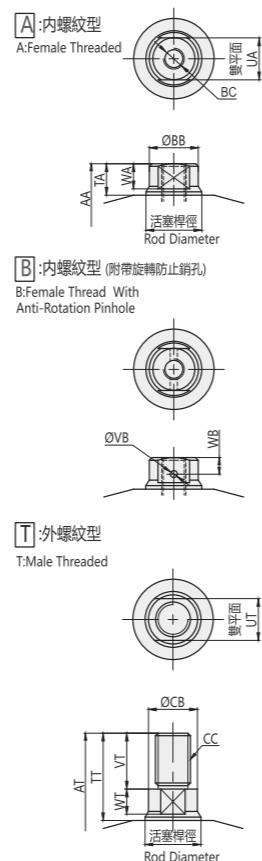
型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
AT	73 Y+58	81 Y+66	88 Y+73	96 Y+81	107 Y+92	118 Y+103	139 Y+124	153 Y+138
TT	25	30	35	40	45	50	62	72
UT	12	14	17	17	19	24	30	36
VT	16	20	24	28	32	35	46	54
WT	7.5	7.5	8.5	9	10	12	13	15
CB	14	17	19	21	24	29	34.5	42
CC(名稱×螺距) (Nominal×Pitch)	M10×1.25	M12×1.25	M14×1.5	M16×1.5	M20×1.5	M24×1.5	M30×1.5	M36×1.5

無記載的尺寸請參照P: 銷孔連接型。
 Refer P pinhole option dimension for not mentioned size below.

C:板式連接型(配有G螺紋堵頭C: Gasket Option(with G Thread Plug)
P:銷孔連接型 本圖表示 CLL-CP型P: Pin-Hole Option ※ This drawing indicates CLL-CP



Tip Shape Refer P Pinhole dimension for not mentioned size below
柱塞前端形狀 無記載的尺寸請參照銷孔連接型



規格參數表 SPECIFICATIONS

型號	總行程	油缸面積		油缸輸出力		油缸容量 (計算公式)		油缸內徑	活塞桿徑	最高使用壓力	最低動作壓力	耐壓	使用溫度	重量
MODEL	Full Stroke Y (mm)	推側	拉側	推側	拉側	推側	拉側	Cylinder inside diameter (mm)	Rod Diameter(mm)	Operating Pressure(Mpa) Max.	Operating Pressure(Mpa) Min.	Withstanding Pressure(Mpa)	Operating Temperature (°C)	Weight (kg)
CLL-036	51~100	4.5	2.5	P×0.45	P×0.25	Y×0.45	Y×0.25	Φ24	Φ16	7.0	0.5	10.5	0~70	0.9~1.2
CLL-040	51~100	5.3	2.8	P×0.53	P×0.28	Y×0.53	Y×0.28	Φ26	Φ18	7.0	0.5	10.5	0~70	1.0~1.4
CLL-048	76~200	8.0	4.9	P×0.80	P×0.49	Y×0.80	Y×0.49	Φ32	Φ20	7.0	0.5	10.5	0~70	1.7~3.0
CLL-055	76~200	9.6	5.8	P×0.96	P×0.58	Y×0.96	Y×0.58	Φ35	Φ22	7.0	0.5	10.5	0~70	2.3~4.1
CLL-065	76~200	15.9	11.0	P×1.59	P×1.10	Y×1.59	Y×1.10	Φ45	Φ25	7.0	0.5	10.5	0~70	3.2~5.4
CLL-075	76~200	23.8	16.7	P×2.38	P×1.67	Y×2.38	Y×1.67	Φ55	Φ30	7.0	0.5	10.5	0~70	4.4~7.1
CLL-090	76~200	36.3	26.4	P×3.63	P×2.64	Y×3.63	Y×2.64	Φ68	Φ35.5	7.0	0.5	10.5	0~70	6.5~10.1
CLL-105	76~200	50.3	34.4	P×5.03	P×3.44	Y×5.03	Y×3.44	Φ80	Φ45	7.0	0.5	10.5	0~70	9.0~13.0

A:內螺紋型 Female Threaded

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
AA	Y+57	Y+61	Y+66	Y+69	Y+76	Y+89	Y+100	Y+110
TA	9	10	11	12	13	15	16	18
UA	12	13	14	17	19	24	30	36
WA	7.5	7.5	8.5	9	10	12	13	15
BB	14	15	17	19	22	27	33	42
BC(名稱×深度) (Nominal×Depth)	M6×12	M8×16	M8×16	M10×20	M12×24	M16×32	M20×40	M24×48

無記載的尺寸請參照P: 銷孔連接型。
Refer P pinhole option dimension for not mentioned size below.

Unit:mm

P:銷孔連接型 Pin-Hole Option

Unit:mm

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
全行程 Full Stroke Y	51~100	51~100	76~200	76~200	76~200	76~200	76~200	76~200
A	Y+63	Y+70	Y+76	Y+81	Y+91	Y+107	Y+121	Y+138
B	49	54	61	69	81	92	107	122
C	40	45	51	60	70	80	95	110
D	36	40	48	55	65	75	90	105
E	Y+48	Y+51	Y+55	Y+57	Y+63	Y+74	Y+84	Y+92
F	Y+23	Y+26	Y+27	Y+29	Y+33	Y+37	Y+44	Y+47
G	25	25	28	28	30	37	40	45
H	29	31.5	35.5	39	46	52	59.5	67
J	20	22.5	25.5	30	35	40	47.5	55
K	31.4	34	40	47	55	63	75	88
L	66	73	83	88	106	116	136	152
M	11	11	12	12	13	16	16	17
Nx	23.5	26	30	33.5	39.5	45	52.5	60
Ny	8	9	11	12	15	16	18.5	22.5
Q	7.5	9.5	9.5	11	11	14	17.5	20
R	4.5	5.5	5.5	6.8	6.8	9	11	14
S	16	14	15.5	13	15.5	17.5	16.5	17.5
T	15	19	21	24	28	33	37	46
U	6	8	10	11	13	16	19	22
V	6	8	9	10	12	14	16	21
W	7.5	9.5	10.5	12	14	17	19	23
倒角 Chamfer	C2	C3	C3	C3	C4	C5	C6	C6
AB	12	15	17	19	22	27	32	42
AC	6 ^{+0.012} ₀	8 ^{+0.015} ₀	8 ^{+0.015} ₀	10 ^{+0.015} ₀	12 ^{+0.018} ₀	14 ^{+0.018} ₀	16 ^{+0.018} ₀	20 ^{+0.021} ₀
AD	6	8	9	10	12	14	16	21
AE	-	-	6	4	6	6	8	10
AF	-	-	M4×0.7	M5×0.8	M5×0.8	M6	M6	M6
DA	3.5	3.5	3.5	3.5	4.5	4.5	4.5	4.5
DB	14	14	14	14	19	19	22	22
排氣口 Air Bleed Port	—C型	G1/8	G1/8	G1/8	G1/8	G1/4	G1/4	G3/8
供油口 Hydraulic Port	—S型	RC1/8	RC1/8	RC1/8	RC1/8	RC1/4	RC1/4	RC3/8
O型密封圈 O-ring	1BP5	1BP5	1BP5	1BP5	1BP7	1BP7	1BP7	1BP7

B:內螺紋型(附帶旋轉防止銷孔) Female Threaded with Anti-Rotation Pin Hole

Unit:mm

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
VB	2	2.5	2.5	2.5	3	4	5	6
WB	5.5	5	6	6.5	7	8.5	9	10.5

無記載的尺寸請參照P: 銷孔連接型。A: 內螺紋型
Refer P pinhole option / A female thread option, dimensions not mentioned size in the chart below

T:外螺紋型 Male Threaded

Unit:mm

型號 Model	CLL-036	CLL-040	CLL-048	CLL-055	CLL-065	CLL-075	CLL-090	CLL-105
AT	Y+73	Y+81	Y+90	Y+97	Y+108	Y+124	Y+146	Y+164
TT	25	30	35	40	45	50	62	72
UT	12	14	17	17	19	24	30	36
VT	16	20	24	28	32	35	46	54
WT	7.5	7.5	8.5	9	10	12	13	15
CB	14	17	19	21	24	29	34.5	42
CC(名稱×螺距) (Nominal×Pitch)	M10×1.25	M12×1.25	M14×1.5	M16×1.5	M20×1.5	M24×1.5	M30×1.5	M36×1.5

無記載的尺寸請參照P: 銷孔連接型。
Refer P pinhole option dimension for not mentioned size below.