

CHA

油壓轉角缸

CHA HYDRAULIC SWING CLAMP



產品特性

此系列產品配件採用優化設計，使體積更加緊湊，提高了產品強度。產品採用了專用防塵設計，提高了防塵和密封性，實現了高密封性。產品結構設計具有高抗扭矩性，實現了高耐久性。

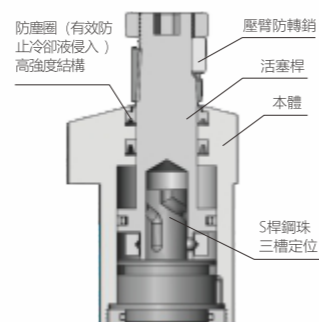
最大操作壓力：70 kgf/cm²
 最小操作壓力：15 kgf/cm²
 作動方式：複動式

FEATURES

The accessories of the CHA series are optimally designed to create a more compact-sized product with enhanced strength. With its special dust-proof design, this product has improved its sealing performance and protects against any particles or debris while in use. The product's structure design has a high torsion resistance that achieves maximum durability.

Max. operating pressure : 70 kgf/cm²
 Min. operating pressure : 15 kgf/cm²
 Double acting

剖面圖 Sectional view



注意事項

夾緊及放鬆作動速度需適當放緩。
 壓臂安裝拆卸方式，請參見第4頁。
 可接受訂製，歡迎與本公司洽詢。

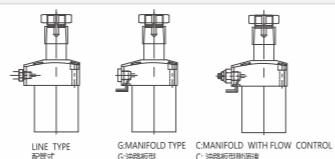
NOTE

The action and the speed of clamping / unclamping needs to be slowed down appropriately.
 Please refer to Page 4 for installation instructions or removal methods of the clamping arm. Customization is available upon request, please contact us for more info.

訂購標示法 ORDERING INDICATION

示例：CHA-040SL-90GM

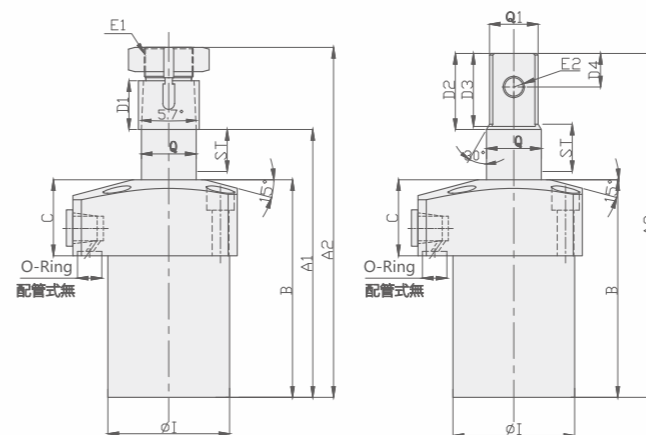
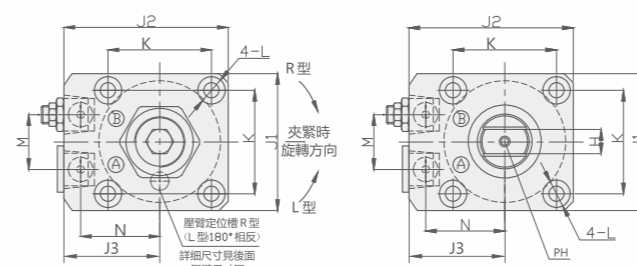
CHA	系列 Series	CHA
040	主體尺寸 Body size	036: Φ1=36 040: Φ1=40 048: Φ1=48 055: Φ1=55 065: Φ1=65 075: Φ1=75 090: Φ1=90 105: Φ1=105
S	壓臂型式 Clamping arm type	S:單邊壓臂 D:雙邊壓臂 S: Single side arm D: Double side arm (註：雙壓臂的無雙出桿型)
L	轉角方向 Swing direction	L: 左 R: 右 L: Left R: Right
90	轉角角度 Swing angle	標準角度 可訂做角度 Standard angle 90°(±2°) Order angle 30°(±2°),45°(±2°),60°(±2°)
G	型式 Type	空白：配管式 G：油路板型 C：油路板式附調速 Blank: Line type G: Manifold type C: Manifold with flow control
M	無符號：空白 (標準) M：空氣感測器板式連接型 N：空氣感測器管式連接型 ※D：雙出桿型	Blank: Standard M: Air sensor manifold option N: Air sensor piping option ※D: Double end rod option



SINGLE SIDE SWING CLAMP

DOUBLE SIDE SWING CLAMP

註：下圖為轉角90°鬆開狀態



Ⓐ 夾持油孔 Clamping port
 Ⓑ 放鬆油孔 Unclamping port

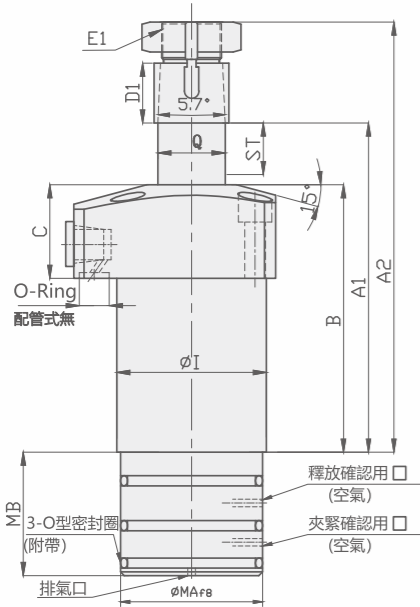
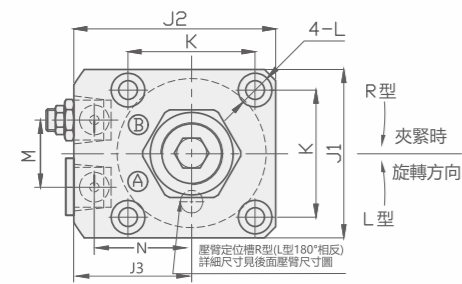
Unit:mm

MODEL ITEM	CHA-036	CHA-040	CHA-048	CHA-055	CHA-065	CHA-075	CHA-090	CHA-105
ST:Swing /Clamp	13.5:5.5/8	14.5:6.5/8	15.5:7.5/8	18.5:8.5/10	20:10/10	24:12/12	26:14/12	32:16/16
A1鬆開狀態 Unclamping	80	88	96.5	109.5	116	135	148	178
A2鬆開狀態 Unclamping	104	115	128.5	145.5	156	181	203	240
A3鬆開狀態 Unclamping	102	113	126.5	143.5	156	181	203	238
B	64.5	71.5	79	89	94	109	120	144
C	25	25	28	30	31	38	46	56
D1	14	16	19	22	25	31	38	44
D2	22	25	29	33	40	45	54	60
D3	21	24	27.5	31.5	38.5	43.5	52.5	58.5
D4	9	11	12	12.5	16.5	19	23.5	25.5
E1	M14X1.5	M16X1.5	M20X1.5	M22X1.5	M27X1.5	M30X1.5	M39X1.5	M48X1.5
E2	Φ6	Φ6	Φ8	Φ10	Φ13	Φ13	Φ16	Φ20
H	7	8	10	12	14	16	22	26
ΦI	Φ36	Φ40	Φ48	Φ55	Φ65	Φ75	Φ90	Φ105
J1	40	45	51	60	70	80	95	110
J2	49	54	61	69	81	92	107	122
J3	29	31.5	35.5	39	46	52	59.5	67
K	□31.4	□34	□40	□47	□55	□63	□75	□88
L	Φ4.5-Φ7.5 X5D	Φ5.5-Φ9 X6D	Φ5.5-Φ9 X6D	Φ6.8-Φ11 X7D	Φ6.8-Φ11 X7D	Φ9-Φ14 X9D	Φ11-Φ17.5 X11D	Φ14-Φ20 X14D
M	16	18	22	24	30	32	37	45
N	23.5	26	30	33.5	39.5	45	52.5	60
Q	Φ15	Φ18	Φ22	Φ25	Φ30	Φ35.5	Φ45	Φ55
Q1	Φ13.5	Φ16	Φ20	Φ23	Φ28	Φ33.5	Φ43	Φ53
PH	M3	M3	M4	M5	M6	M6	M8	M8
配管式油口 Port with Line type	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/4	2-PT1/4	2-PT3/8	2-PT3/8
O型圈(僅G/C型) O-Ring(G/Ctype)	P5	P5	P5	P5	P7	P7	P7	P7

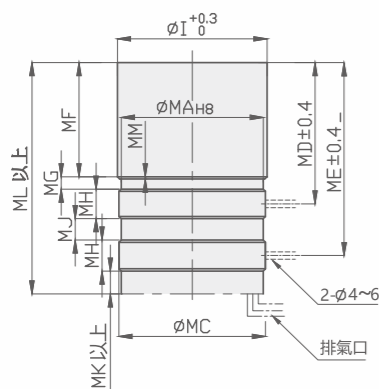
規格參數表 SPECIFICATIONS

型號	理論夾持力 (70 kgf/cm ²)	轉角行程	夾緊行程	總行程	推出容積	拉入容積	推出受壓面積	拉入受壓面積	使用溫度範圍	使用流體
MODEL	CLAMPING FORCE AT 70 kgf/cm ² (kgf)	SWING STROKE (mm)	CLAMPING STROKE (mm)	TOTAL STROKE(mm)	CYLINDER CAPACITY UNCLAMP(cm ³)	CYLINDER CAPACITY CLAMP(cm ³)	EFFPISTON AREA UNCLAMP(cm ²)	EFFPISTON AREA CLAMP(cm ²)	RANGE OF TEMPERATURE(°C)	USABLE FLUID
CHA-036	220	5.5	8	13.5	6.63	4.24	4.91	3.14	-10~+70°C	相當於 ISO黏度 等級的 ISO-VG- 32 一般液壓油 Recommended: ISO-VG-32 hydraulic oil equivalent to ISO viscosity grade
CHA-040	284.2	6.5	8	14.5	9.57	5.89	6.6	4.06	-10~+70°C	
CHA-048	445.9	7.5	8	15.5	15.76	9.87	10.17	6.37	-10~+70°C	
CHA-055	721	8.5	10	18.5	28.12	19.06	15.2	10.3	-10~+70°C	
CHA-065	880	10	10	20	38.60	25.14	19.63	12.57	-10~+70°C	
CHA-075	1421	12	12	24	72.46	48.7	30.19	20.3	-10~+70°C	
CHA-090	1978	14	12	26	114.82	73.48	44.16	28.26	-10~+70°C	
CHA-105	2789	16	16	32	203.50	127.5	63.59	39.84	-10~+70°C	

註：下圖以CHA-M型鬆開狀態



註：安裝部位加工尺寸

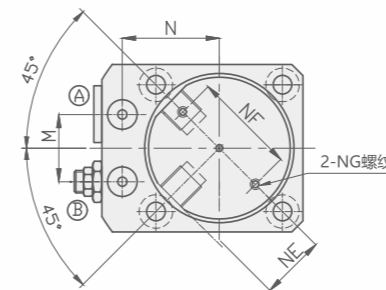
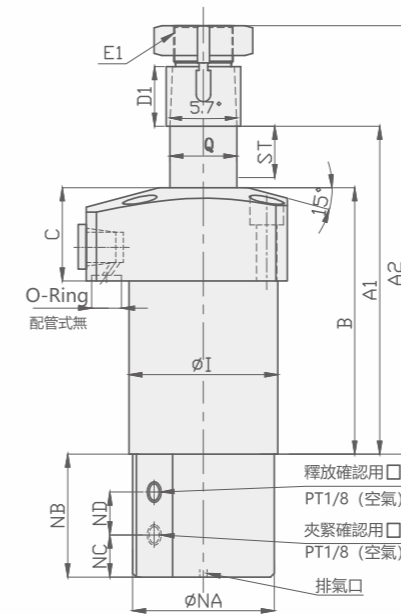
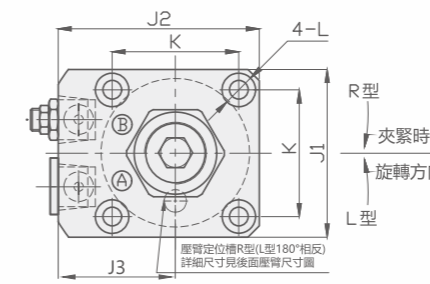


- Ⓐ 夾持油孔 Clamping port
- Ⓑ 放鬆油孔 Unclamping port

Unit:mm

MODEL ITEM	CHA-036M	CHA-040M	CHA-048M	CHA-055M	CHA-065M	CHA-075M	CHA-090M	CHA-105M
ST:Swing /Clamp	13.5:5.5/8	14.5:6.5/8	15.5:7.5/8	18.5:8.5/10	20:10/10	24:12/12	26:14/12	32:16/16
A1鬆開狀態 Unclamping	80	88	96.5	109.5	116	135	148	178
A2鬆開狀態 Unclamping	104	115	128.5	145.5	156	181	203	240
B	64.5	71.5	79	89	94	109	120	144
C	25	25	28	30	31	38	46	56
D1	14	16	19	22	25	31	38	44
E1	M14X1.5	M16X1.5	M20X1.5	M22X1.5	M27X1.5	M30X1.5	M39X1.5	M48X1.5
φI	φ36	φ40	φ48	φ55	φ65	φ75	φ90	φ105
J1	40	45	51	60	70	80	95	110
J2	49	54	61	69	81	92	107	122
J3	29	31.5	35.5	39	46	52	59.5	67
K	□31.4	□34	□40	□47	□55	□63	□75	□88
L	φ4.5-φ7.5 X5D	φ5.5-φ9 X6D	φ5.5-φ9 X6D	φ6.8-φ11 X7D	φ6.8-φ11 X7D	φ9-φ14 X9D	φ11-φ17.5 X11D	φ14-φ20 X14D
M	16	18	22	24	30	32	37	45
N	23.5	26	30	33.5	39.5	45	52.5	60
Q	φ15	φ18	φ22	φ25	φ30	φ35.5	φ45	φ55
配管式油口 Port with Line type	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/4	2-PT1/4	2-PT3/8	2-PT3/8
O型圈(僅G/C型) O-Ring(G/Ctype)	P5	P5	P5	P5	P7	P7	P7	P7
MAf8	34.5 ^{-0.03/-0.06}	38 ^{-0.03/-0.06}	45 ^{-0.03/-0.06}	45 ^{-0.03/-0.06}	45 ^{-0.03/-0.06}	53 ^{-0.03/-0.07}	53 ^{-0.03/-0.07}	53 ^{-0.03/-0.07}
MAH8	34.5 ^{+0.04/0}	38 ^{+0.04/0}	45 ^{+0.04/0}	45 ^{+0.04/0}	45 ^{+0.04/0}	53 ^{+0.04/0}	53 ^{+0.04/0}	53 ^{+0.04/0}
MB	32	33	38.5	38.5	40.5	49	49	57.5
MC	35.7	39.2	46.2	46.2	46.2	54.2	54.2	54.2
MD	49.4	57.5	65.4	73.4	79.4	86.5	89.5	106.5
ME	62.4	70.5	78.9	86.9	92.9	106	109	126
MF	40	47	53	61	65	74	77	94
MG	4.9	6	7.9	7.9	9.9	7.5	7.5	7.5
MH	9	9	9	9	9	10	10	10
MJ	4	4	4.5	4.5	4.5	9.5	9.5	9.5
MK	6.5	6.5	8	8	8	11	11	16.5
ML	73.4	81.5	91.4	99.4	105.4	122	125	147.5
MM	1.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5

註：下圖以CHA-N型鬆開狀態

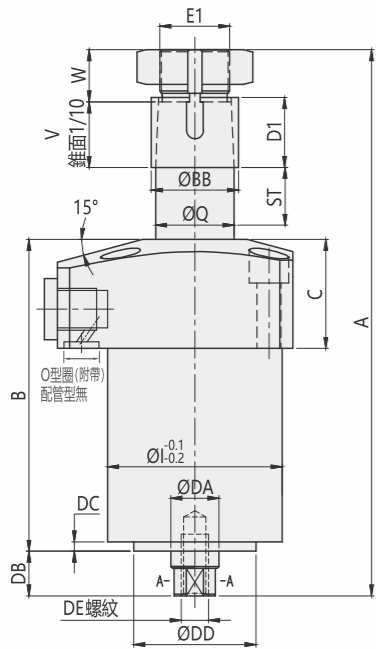
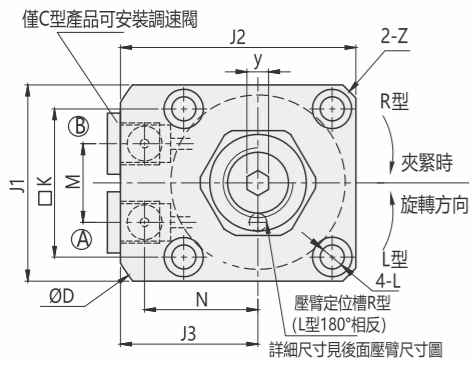


- Ⓐ 夾持油孔 Clamping port
- Ⓑ 放鬆油孔 Unclamping port

Unit:mm

MODEL ITEM	CHA-036N	CHA-040N	CHA-048N	CHA-055N	CHA-065N	CHA-075N	CHA-090N	CHA-105N
ST:Swing /Clamp	13.5:5.5/8	14.5:6.5/8	15.5:7.5/8	18.5:8.5/10	20:10/10	24:12/12	26:14/12	32:16/16
A1鬆開狀態 Unclamping	80	88	96.5	109.5	116	135	148	178
A2鬆開狀態 Unclamping	104	115	128.5	145.5	156	181	203	240
B	64.5	71.5	79	89	94	109	120	144
C	25	25	28	30	31	38	46	56
D1	14	16	19	22	25	31	38	44
E1	M14X1.5	M16X1.5	M20X1.5	M22X1.5	M27X1.5	M30X1.5	M39X1.5	M48X1.5
φI	φ36	φ40	φ48	φ55	φ65	φ75	φ90	φ105
J1	40	45	51	60	70	80	95	110
J2	49	54	61	69	81	92	107	122
J3	29	31.5	35.5	39	46	52	59.5	67
K	□31.4	□34	□40	□47	□55	□63	□75	□88
L	φ4.5-φ7.5 X5D	φ5.5-φ9 X6D	φ5.5-φ9 X6D	φ6.8-φ11 X7D	φ6.8-φ11 X7D	φ9-φ14 X9D	φ11-φ17.5 X11D	φ14-φ20 X14D
M	16	18	22	24	30	32	37	45
N	23.5	26	30	33.5	39.5	45	52.5	60
Q	φ15	φ18	φ22	φ25	φ30	φ35.5	φ45	φ55
配管式油口 Port with Line type	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/4	2-PT1/4	2-PT3/8	2-PT3/8
O型圈(僅G/C型) O-Ring(G/Ctype)	P5	P5	P5	P5	P7	P7	P7	P7
φNA	35.5	39.5	45	45	45	53	53	53
NB	32	33	38.5	38.5	40.5	49	49	57.5
NC	9.8	9	11	11	11	13	13	17
ND	11.7	13	14.5	14.5	14.5	20.5	20.5	24
NE	17	19	21	21	21	24.5	24.5	24.5
NF	25	29	29	29	29	38	38	38
NG (公稱×深度) (Nominal x Depth)	M3×0.5 x5	M3×0.5 x5	M3×0.5 x5	M3×0.5 x5	M3×0.5 x5	M4×0.7 x6	M4×0.7 x6	M4×0.7 x6

註：本圖為CHA-G※D型鬆開狀態



- Ⓐ 夾持油孔 Clamping port
- Ⓑ 放鬆油孔 Unclamping port



Unit:mm

MODEL ITEM	CHA-036※D	CHA-040※D	CHA-048※D	CHA-055※D	CHA-065※D	CHA-075※D	CHA-090※D	CHA-105※D
ST:Swing/Clamp	13.5:5.5/8	14.5:6.5/8	15.5:7.5/8	18.5:8.5/10	20:10/10	24:12/12	26:14/12	32:16/16
A鬆開狀態 Unclamping	114.5	128	141.5	158.5	169	194	216	253
B	67	74.5	82	92	97	112	123	147
C	25	25	28	30	31	38	46	56
D1	14	16	19	22	25	31	38	44
W	11	12	14	15	16	16	18	19
V	13	15	18	21	24	30	37	43
ΦBB	Φ17	Φ20	Φ25	Φ28	Φ34	Φ40	Φ49	Φ60
ΦD	Φ66	Φ73	Φ83	Φ88	Φ106	Φ116	Φ136	Φ152
ΦDA	Φ8	Φ12	Φ14	Φ14	Φ14	Φ18	Φ18	Φ18
DB	8	10	10	10	10	10	10	10
DE	M4X10	M6X15	M8X18	M8X18	M8X18	M10X21	M10X21	M10X21
DF	6	10	12	12	12	16	16	16
E1	M14X1.5	M16X1.5	M20X1.5	M22X1.5	M27X1.5	M30X1.5	M39X1.5	M48X1.5
DC	2.5	3	3	3	3	3	3	3
ΦDD	Φ25	Φ29	Φ36	Φ36	Φ43	Φ50	Φ65	Φ80
ΦI	Φ36	Φ40	Φ48	Φ55	Φ65	Φ75	Φ90	Φ105
J1	40	45	51	60	70	80	95	110
J2	49	54	61	69	81	92	107	122
J3	29	31.5	35.5	39	46	52	59.5	67
K	□31.4	□34	□40	□47	□55	□63	□75	□88
L	Φ4.5-Φ7.5 X5D	Φ5.5-Φ9 X6D	Φ5.5-Φ9 X6D	Φ6.8-Φ11 X7D	Φ6.8-Φ11 X7D	Φ9-Φ14 X9D	Φ11-Φ17.5 X11D	Φ14-Φ20 X14D
M	16	18	22	24	30	32	37	45
N	23.5	26	30	33.5	39.5	45	52.5	60
Q	Φ15	Φ18	Φ22	Φ25	Φ30	Φ35.5	Φ45	Φ55
Y	5	6	8	8	10	10	14	14
配管式油口 Port with Line type	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/8	2-PT1/4	2-PT1/4	2-PT3/8	2-PT3/8
O型圈 (僅G/C型) O-Ring (G/Ctype)	P5	P5	P5	P5	P7	P7	P7	P7
Z(倒角)	C2	C3	C3	C3	C4	C5	C6	C6

規格參數表 SPECIFICATIONS

型號	理論夾持力 (70 kgf/cm ²)	轉角行程	夾緊行程	總行程	推出容積	拉入容積	推出受壓面積	拉入受壓面積	使用溫度範圍	使用流體
MODEL	CLAMPING FORCE AT 70 kgf/cm ² (kgf)	SWING STROKE (mm)	CLAMPING STROKE (mm)	TOTAL STROKE(mm)	CYLINDER CAPACITY UNCLAMP(cm ³)	CYLINDER CAPACITY CLAMP(cm ³)	EFFPISTON AREA UNCLAMP(cm ²)	EFFPISTON AREA CLAMP(cm ²)	RANGE OF TEMPERATURE(°C)	USABLE FLUID
CHA-036※D	247.8	5.5	8	13.5	6.48	4.78	4.8	3.54	-10~+70°C	相當於ISO黏度等級的 ISO-VG-32 一般液壓油 Recommended: ISO-VG-32 hydraulic oil equivalent to ISO viscosity grade
CHA-040※D	350	6.5	8	14.5	9.29	7.25	6.41	5.0	-10~+70°C	
CHA-048※D	486.5	7.5	8	15.5	14.27	10.77	9.21	6.95	-10~+70°C	
CHA-055※D	721	8.5	10	18.5	25.27	19.06	13.66	10.3	-10~+70°C	
CHA-065※D	938	10	10	20	37.76	26.8	18.88	13.4	-10~+70°C	
CHA-075※D	1421	12	12	24	66.34	48.7	27.64	20.3	-10~+70°C	
CHA-090※D	2065	14	12	26	111.28	76.7	42.8	29.5	-10~+70°C	
CHA-105※D	2891	16	16	32	119.87	132.2	62.46	41.3	-10~+70°C	

