

CLKW

傳感器內置式杠桿缸

AIR SENSING LINK CLAMP



產品特性

此系列產品動作端內置有動作確認機構，最適用於實現設備的自動化。通過連接空氣傳感器，檢出壓差，實現 確認動作。通過夾緊動作確認，能實現安全可靠地工件搬入搬出。內置傳感閥，可實現超薄型的夾具設計。 簡單的油路孔設計。

最大操作壓力：70 kgf/cm²
 最小操作壓力：5 kgf/cm²

注意事項

夾緊及放松作動速度需適當放緩。為進行確認動作，須設置空氣傳感器。氣口須進行大氣開放，務必防止冷卻液、切削渣的侵入。使用時請保持向氣口常態供氣狀態。

訂購標示法 ORDERING INDICATION

示例：CLKW-048CRE

CLKW	系列 Series	CLKW
048	主體尺寸 Body size	040: ΦD=40mm 065: ΦD=65mm ΦD表示本體油缸外徑尺寸 048: ΦD=48mm 075: ΦD=75mm Outer diameter ΦD of the cylinder 055: ΦD=55mm
C	板式連接型(附帶G螺紋堵頭) Gasket Option(With G Thread Plug)	附帶G螺紋堵頭可安裝速度控制閥(CZL)(用戶另行購買) With G Thread Plug(able to attach Speed Control Valve) (Order the valve separately Recommended:CZL)
R	壓臂安裝方向 Lever direction	L: 左 L: Left 空白: 中央 Blank: Center R: 右 R: Right
E	傳感閥符號 Sensing Valve	E: 夾緊·釋放動作確認型 E: Clamp-Unclamp Confirmation (Both) H: 夾緊動作確認型 H: Clamp Confirmation Only J: 釋放動作確認型 J: Unclainp Confirmation Only

注：推薦使用氣缸0.1-0.2MPa，空氣感測器為SMC的ISA2-HE45N
 Note: Recommended Operating Air Pressure 01~0.2MPa. Air Sensor: ISA2-HE45N(SMC)

FEATURES

The CLKW series utilizes air sensing mechanisms by detecting the differential pressure to achieve action confirmation, allowing safe and efficient loading/unloading of the workpiece. With the integration of the built-in sensor valves, the CLKW series has taken a new and improved compact design and is most suitable for achieving automation.

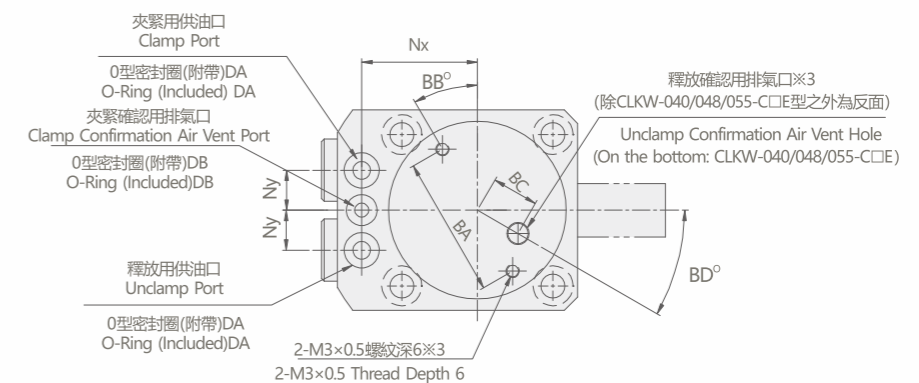
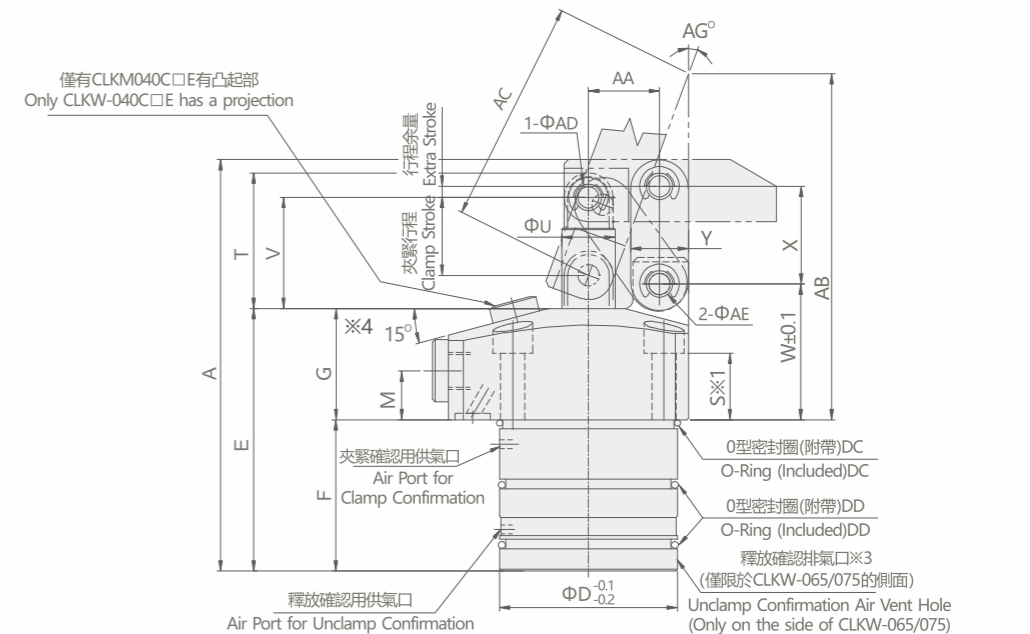
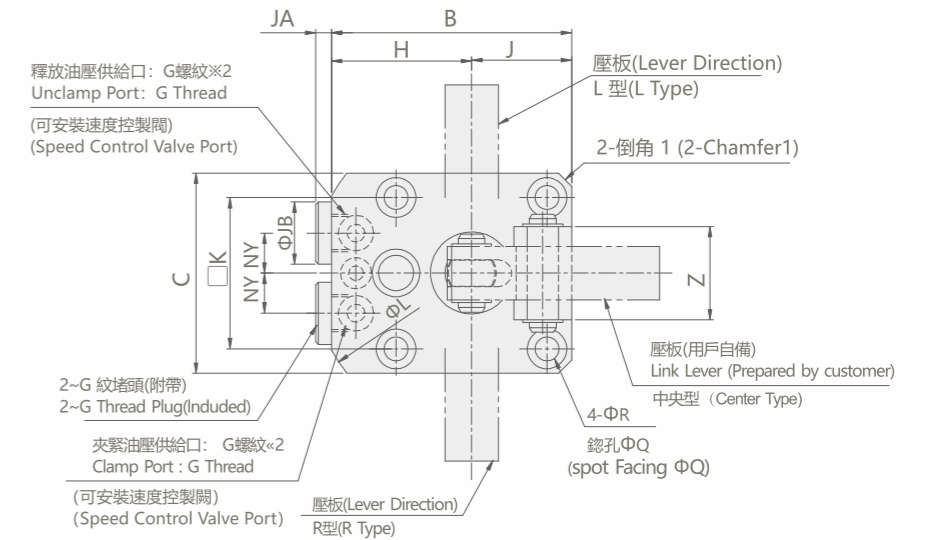
Max. operating pressure: 70 kgf/cm²
 Min. operating pressure: 5 kgf/cm²

NOTE

The speed of clamping and unclamping action needs to be slowed down appropriately. Action confirmation can be conducted by detecting differential pressure with the air sensor. Please keep clearance of the air exhaust hole to prevent the intrusion of coolant and chips. Make sure to supply constant air pressure to the air port when in use.

夾緊·釋放動作確認型 CLAMP-UNCLAMP CONFIRMATION

※本圖表示CLKW-CE的夾緊狀態
 The drawing shows the Clamped state of CLKW-CE



注意事項

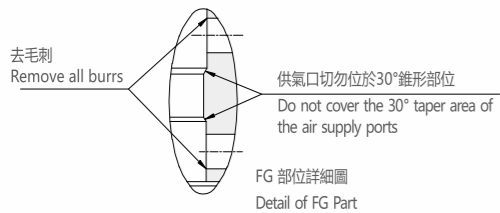
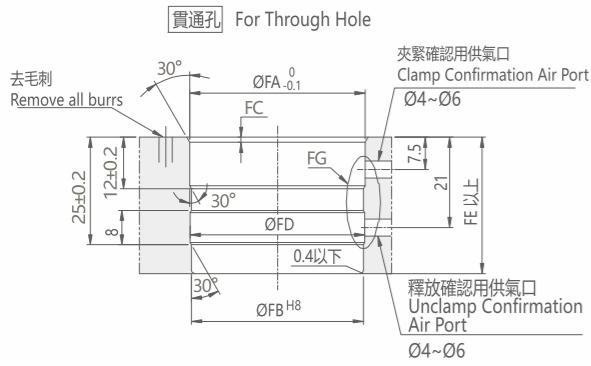
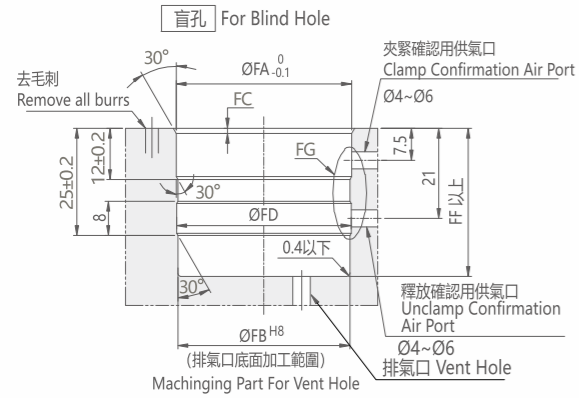
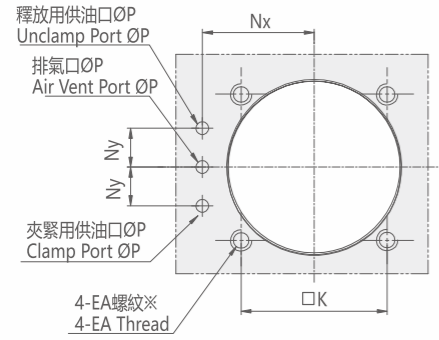
- ※1.本產品未附帶安裝緊栓。請用戶參考S尺寸並根據安裝高度自行配備。
- ※2.本產品未附帶速度控制閥。請用戶自行配備。
- ※3.排氣孔必須進行大氣開放，且務必防止冷卻液-切削物的侵入。冷卻液會直接飛濺時，請在M3螺紋上設置墊塊兒，有效防止冷卻液的侵入。且務必保證排氣孔不被堵塞。
- ※4.只有CLKW-065法蘭的傾斜角度為12°。

NOTE

- ※1. This product does not come with mounting bolts. Please prepare them according to the mounting height, refer to dimension "S".
- ※2. Speed control valve is sold separately.
- ※3. Please keep the air vent hole clear and open to prevent the intrusion of coolant and chips. If exposed to coolant, place a blocker on the M3 thread to prevent coolant and chips from entering. Please ensure the air vent hole is not blocked.
- ※4. Flange inclination angle is 12° only for CLKW-065.

Unit:mm

安裝部位加工尺寸
MACHINING DIMENSIONS OF MOUNTING AREA



MODEL ITEM	CLKW-040C□E	CLKW-048C□E	CLKW-055C□E	CLKW-065C□E	CLKW-075C□E
A	92.5	103.5	110.5	124.5	145.5
B	54	61	69	81	94.5
C	45	51	60	70	85
D	40	48	55	65	75
E	59	64.5	65	70.5	78.5
F	34	36.5	37	40.5	41.5
G	25	28	28	30	37
H	31.5	35.5	39	46	52
J	22.5	25.5	30	35	42.5
K	34	40	47	55	63
L	72	81	88	106	116
M	11	12	12	13	16
Nx	26	30	33.5	39.5	45
Ny	9	11	12	15	16
P	3	3	3	5	5
Q	9	9	11	11	14
R	5.5	5.5	6.8	6.8	9
S	15	16	13.5	16	17.5
T	30.5	35	37.5	45	55
U	12	14	16	20	22
V	25	29	31.5	37	45
W	30.5	34.5	35.5	39	48
X	22	26	30	35.5	43.5
Y	13	13	16	19	25
Z	21	24	28	37	40
倒角1	C3	C3	C3	C4	C10
AA	16	18.5	21	24.5	30
AB	77.7	92.4	101.9	111.4	130.8
AC	50.2	61.2	71.7	78.7	90.8
AD	6	6	6	8	10
AE	6	6	8	10	12
AG	20.2	18.9	19.9	20.5	21.4
BA	31.6	38	43	54	64
BB	0°	0°	0°	0°	30°
BC	R10.5	R10.5	R10.5	-	-
BD	30°	30°	30°	30°	22.5°
EA	M5X0.8	M5X0.8	M6	M6	M8
FA	40.8	49	56	66	76
FB	40 ^{+0.04} ₀	48 ^{+0.04} ₀	55 ^{+0.04} ₀	65 ^{+0.046} ₀	75 ^{+0.046} ₀
FC	1.2	1.2	1.5	1.5	1.5
FD	40.6	48.6	55.6	65.6	75.6
FE	30	32	30	30	30
FF	34.5	37	37.5	41	42
JA	4	4	4	4.5	4.5
JB	14	14	14	19	19
夾緊用供油口: G螺紋 Clamp Port: G Thread	G1/8	G1/8	G1/8	G1/4	G1/4
釋放用供油口: G螺紋 Unclamp Port: G Thread	G1/8	G1/8	G1/8	G1/4	G1/4
0型密封圈 O-Ring	DA AS568-007(90°)	DB 1BP5	DC 1BP5	DD 1BP5	1BP7
	38x1.5 (內徑×線徑)	AS568-031(70°)	AS568-034(70°)	AS568-037(70°)	AS568-040(70°)
	AS568-028(70°)	AS568-031(70°)	AS568-033(70°)	AS568-036(70°)	AS568-039(70°)

NOTE

※EA tapping depth the mounting bolt should be decided according to the mounting height referring to dimensions "S".

注意事項

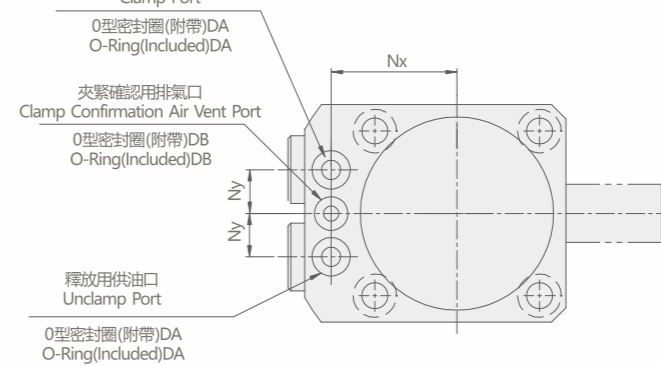
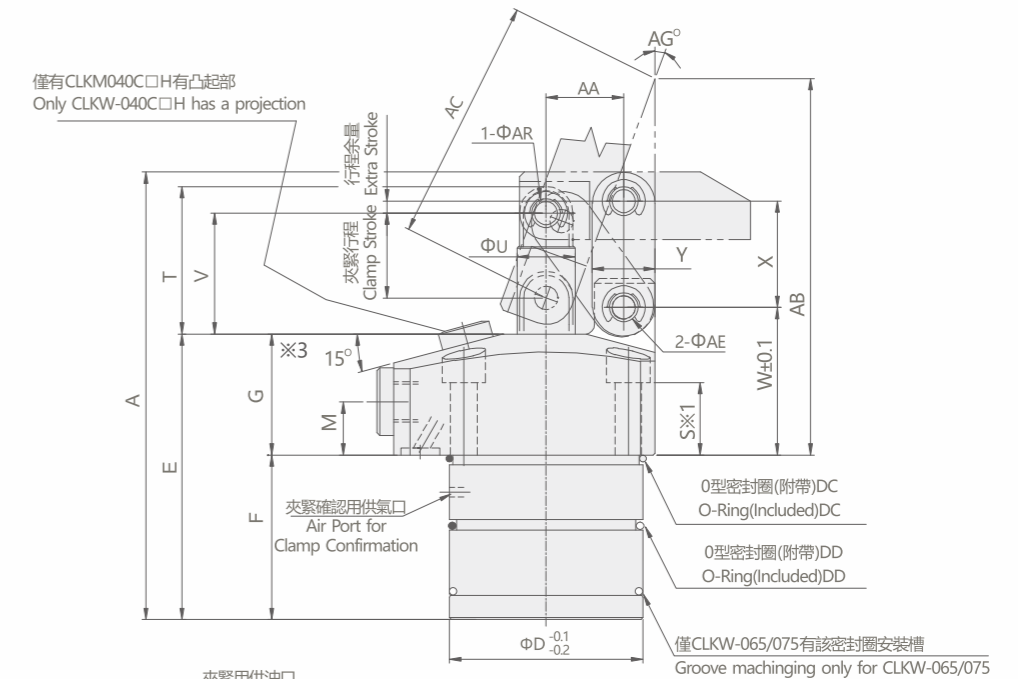
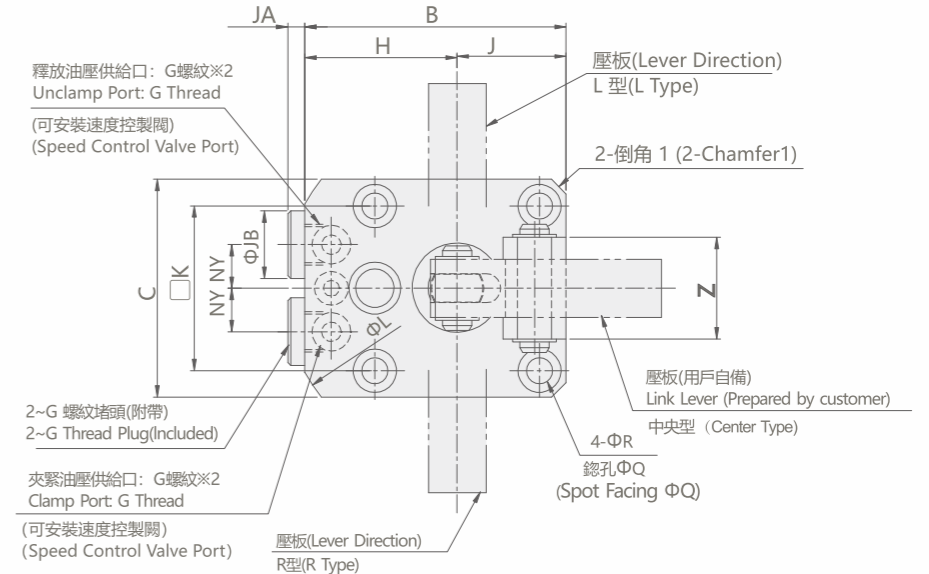
※請參考S尺寸並根據安裝高度決定安裝螺栓的EA螺紋孔的深度。

規格參數表 SPECIFICATIONS

型號	理論夾持力 (70 kgf/cm ²)	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	使用液體
MODEL	CLAMPING FORCE AT 70 kgf/cm ² (kgf)	CLAMPING STROKE (mm)	TOTAL STROKE(mm)	CYLINDER CAPACITY CLAMP(cm ³)	CYLINDER CAPACITY UNCLAMP(cm ³)	EFF.PISTON AREA CLAMP(cm ²)	EFF.PISTON AREA UNCLAMP(cm ²)	RANGE OF TEMPERATURE(°C)	USABLE FLUID
CLKW-040	290	17.5	20.5	10.9	8.6	5.31	4.17	0~+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
CLKW-048	389	20.5	23.5	16.6	13	7.07	5.52	0~+70°C	
CLKW-055	487	23	26	25.0	19.8	9.62	7.62	0~+70°C	
CLKW-065	852	26.5	29.5	46.9	37.7	15.9	11.76	0~+70°C	
CLKW-075	1332	32	35	83.2	69.8	23.8	20	0~+70°C	

夾緊動作確認型
CLAMP CONFIRMATION ONLY

※本圖表示CLKW-CH的夾緊狀態
The drawing shows the clamped state of CLKW-CH



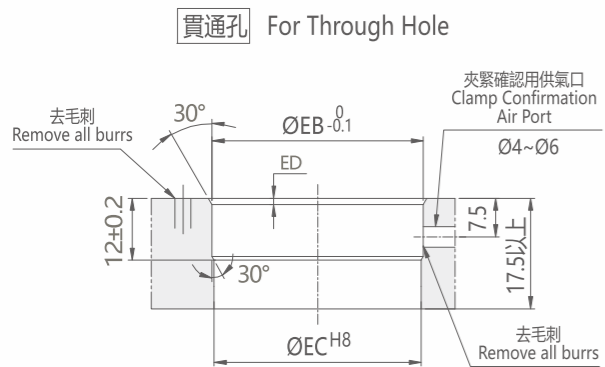
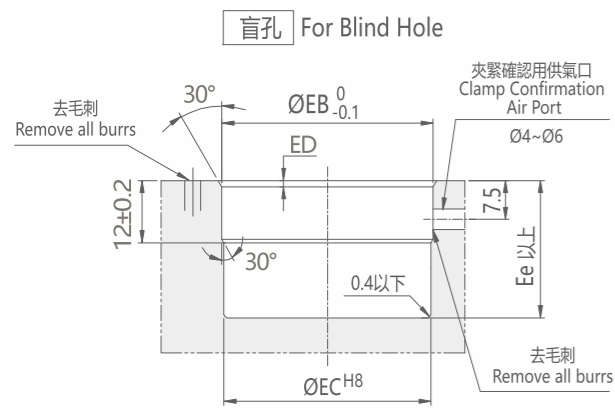
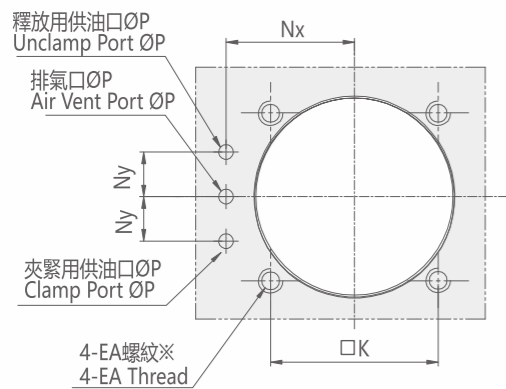
注意事項

※1.本產品未附帶安裝螺栓。請用戶參考S尺寸並根據安裝高度自行配備。
※2.本產品未附帶速度控制閥。請用戶自行配備。
※3.只有CLKW-065法蘭的傾斜角度為12°。

NOTE

※1. Mounting bolts are not provided with the product. Please prepare them according to the mounting height referring to dimension "S".
※2. Speed control valve is sold separately.
※3. Flange inclination angle is 12 ° only for CLKW-065.

安裝部位加工尺寸
MACHINING DIMENSIONS OF MOUNTING AREA



Unit:mm

MODEL ITEM	CLKW-040C□H	CLKW-048C□H	CLKW-055C□H	CLKW-065C□H	CLKW-075C□H
A	88.5	99.5	109	124.5	145.5
B	54	61	69	81	94.5
C	45	51	60	70	85
D	40	48	55	65	75
E	55	60.5	63.5	70.5	78.5
F	30	32.5	32.5	40.5	41.5
G	25	28	28	30	37
H	31.5	35.5	39	46	52
J	22.5	25.5	30	35	42.5
K	34	40	47	55	63
L	72	81	88	106	116
M	11	12	12	13	16
Nx	26	30	33.5	39.5	45
Ny	9	11	12	15	16
P	3	3	3	5	5
Q	9	9	11	11	14
R	5.5	5.5	6.8	6.8	9
S	15	16	13.5	16	17.5
T	30.5	35	37.5	45	55
U	12	14	16	20	22
V	25	29	31.5	37	45
W	30.5	34.5	35.5	39	48
X	22	26	30	35.5	43.5
Y	13	13	16	19	25
Z	21	24	28	37	40
倒角1	C3	C3	C3	C4	C10
AA	16	18.5	21	24.5	30
AB	77.7	92.4	101.9	111.4	130.8
AC	50.2	61.2	71.7	78.7	90.8
AD	6	6	6	8	10
AE	6	6	8	10	12
AG	20.2	18.9	19.9	20.5	21.4
EA	M5X0.8	M5X0.8	M6	M6	M8
EB	40.8	49	56	66	76
EC	40 ^{+0.04}	48 ^{+0.04}	55 ^{+0.04}	65 ^{+0.04}	75 ^{+0.04}
ED	1.2	1.2	1.5	1.5	1.5
EE	30.5	33	36	41	42
JA	4	4	4	4.5	4.5
JB	14	14	14	19	19
夾緊用油口: G螺紋 Clamp Port: G Thread	G1/8	G1/8	G1/8	G1/4	G1/4
釋放用油口: G螺紋 Unclamp Port: G Thread	G1/8	G1/8	G1/8	G1/4	G1/4
0型密封圈 O-Ring	DA AS568-007(90°)	DB 1BP5	DC AS568-031(70°)	DD AS568-033(70°)	1BP5 1BP7

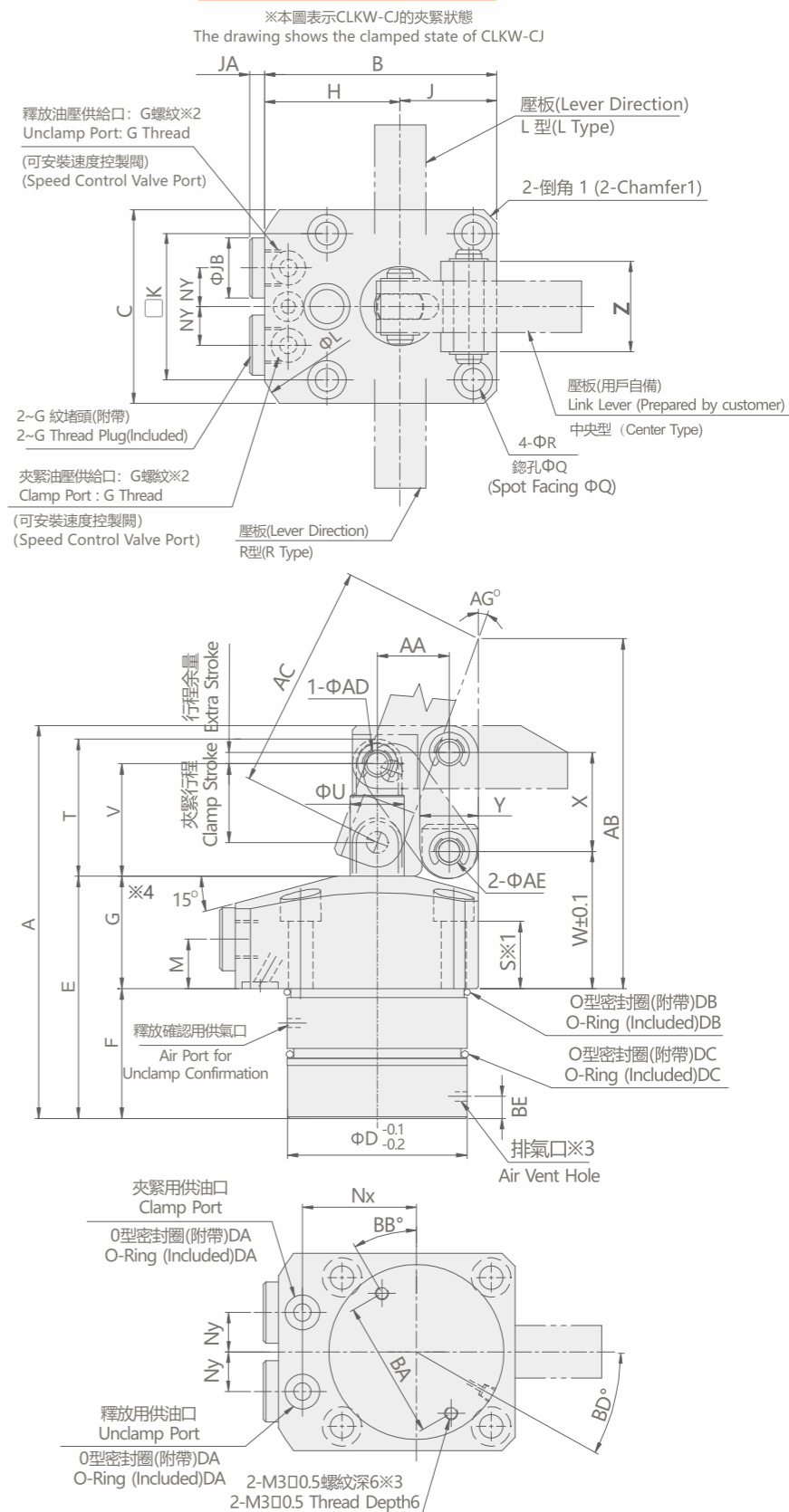
注意事項

※請參考S尺寸並根據安裝高度決定安裝螺栓的EA螺紋孔的深度。

NOTE

※EA tapping depth the mounting bolt should be decided according to the mounting height referring to dimensions "S".

釋放動作確認型
UNCLAMP CONFIRMATION ONLY



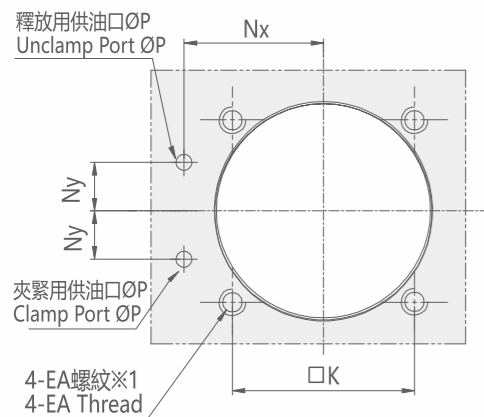
注意事項

- ※1. 本產品未帶安裝螺栓。請用戶參考S尺寸並根據安裝高度自行配備。
- ※2. 本產品未帶速度控制閥。請用戶自行配備。
- ※3. 排氣孔必須進行大氣開放，且務必防止冷卻液-切削物的侵入。冷卻液會直接飛濺時，請在M3*S紋上設置墊塊兒，有效防止冷卻液的侵入。且務必保證排氣孔不被堵塞。
- ※4. 只有CLKW-065法蘭的傾斜角度為12°。

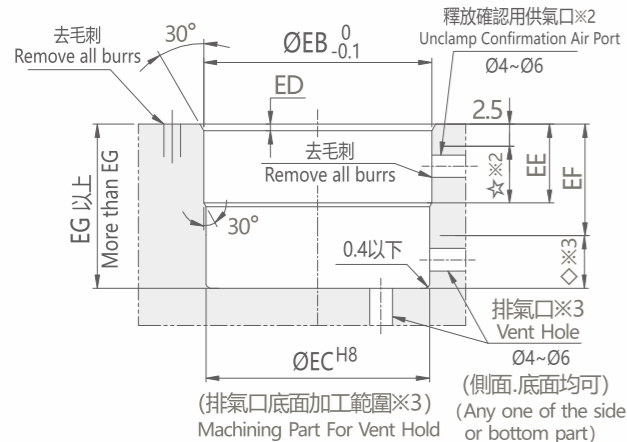
NOTE

- ※1. Mounting bolts are not provided with the product. Please prepare them according to the mounting height referring to dimension "S".
- ※2. Speed control valve is sold separately.
- ※3. Please keep clear condition at the air vent hole, If exposed to coolant, place a blocker on the M3 thread to prevent coolant and chips from entering. But do not block the air vent hole.
- ※4. Flange inclination angle is 12° only for CLKW-065.

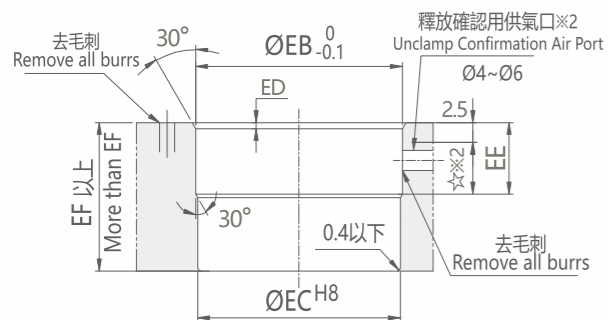
安裝部位加工尺寸
MACHINING DIMENSIONS OF MOUNTING AREA



盲孔 For Blind Hole



貫通孔 For Through Hole



Unit:mm

MODEL ITEM	CLKW-040C□J	CLKW-048C□J	CLKW-055C□J	CLKW-065C□J	CLKW-075C□J
A	84.5	95	104	121.5	144.5
B	54	61	69	81	94.5
C	45	51	60	70	85
D	40	48	55	65	75
E	51	56	58.5	67.5	77.5
F	26	28	30.5	37.5	40.5
G	25	28	28	30	37
H	31.5	35.5	39	46	52
J	22.5	25.5	30	35	42.5
K	34	40	47	55	63
L	72	81	88	106	116
M	11	12	12	13	16
Nx	26	30	33.5	39.5	45
Ny	9	11	12	15	16
P	3	3	3	5	5
Q	9	9	11	11	14
R	5.5	5.5	6.8	6.8	9
S	15	16	13.5	16	17.5
T	30.5	35	37.5	45	55
U	12	14	16	20	22
V	25	29	31.5	37	45
W	30.5	34.5	35.5	39	48
X	22	26	30	35.5	43.5
Y	13	13	16	19	25
Z	21	24	28	37	40
倒角1	C3	C3	C3	C4	C10
AA	16	18.5	21	24.5	30
AB	77.7	92.4	101.9	111.4	130.8
AC	50.2	61.2	71.7	78.7	90.8
AD	6	6	6	8	10
AE	6	6	8	10	12
AG	20.2	18.9	19.9	20.5	21.4
BA	31.6	38	43	54	64
BB	0°	0°	0°	0°	30°
BD	30°	30°	30°	30°	22.5°
BE	4.5	4.5	4.5	5	5
EA	M5X0.8	M5X0.8	M6	M6	M8
EB	40.8	49	56	66	76
EC	40 ^{+0.04} ₀	48 ^{+0.04} ₀	55 ^{+0.04} ₀	65 ^{+0.04} ₀	75 ^{+0.04} ₀
ED	1.2	1.2	1.5	1.5	1.5
EE	12	14	16.5	23	24.5
EF	17.5	19.5	22	28.5	30
EG	26.5	28.5	31	38	41
JA	4	4	4	4.5	4.5
JB	14	14	14	19	19
夾緊用供油口: G螺紋 Clamp Port: G Thread	G1/8	G1/8	G1/8	G1/4	G1/4
釋放確認用供氣口: G螺紋 Unclamp Port: G Thread					
O型密封圈 O-Ring	DA 1BP5	1BP5	1BP5	1BP7	1BP7
	DB 38x1.5 (內徑×線徑)	AS568-031(70°)	AS568-033(70°)	AS568-036(70°)	AS568-040(70°)
	DC AS568-028(70°)	AS568-031(70°)	AS568-033(70°)	AS568-036(70°)	AS568-039(70°)

注意事項

- ※1.請參考S尺寸並根據安裝高度決定安裝螺絲的EA螺紋孔的深度。
- ※2.請將釋放確認用供氣口設置於圖示☆範圍內。
- ※3.排氣口可設置在側面或底面。
從側面加工時，請設置在圖示◇範圍內。
從底面加工時，請設置在圖示ØEC範圍內。

NOTE

- ※1. EA tapping depth of the mounting bolt should be decided according to the mounting height referring to dimensions "S".
- ※2. Prepare the air port for unclamp confirmation within the range of ☆ mark.
- ※3. Prepare the vent hole at either side or bottom.
When machining the vent hole at the side, it should be prepared within the ranger of ◇ mark. When machining the vent hole at the bottom, it should be prepared within the ranger of ØEC.

