

CFP

油壓鋼球鎖緊下拉缸

CFP HYDRAULIC PULL STUD CLAMP



產品特性

使用工件的通孔或螺紋孔，下拉牽引螺栓的油缸。
除著座面外，一次裝卡就可實現5面加工（工序集約化）。

低壓（1~7MPa）
單動式

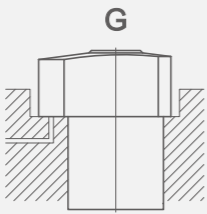
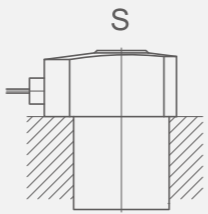
FEATURES

Pulling clamp using pull-bolt for workpiece through hole or screw hole. Five sided surface machining is possible for workpiece. (This drastically reduces the number of operations needed.)

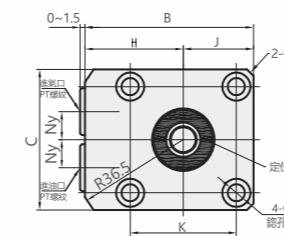
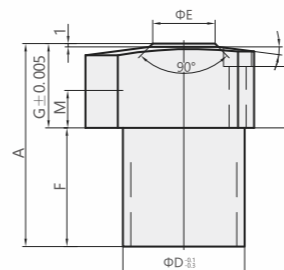
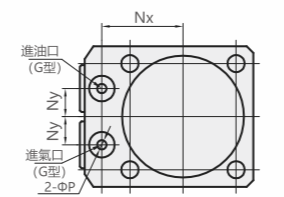
Low pressure (1~7mpa)
Single acting

訂購標示法 ORDERING INDICATION

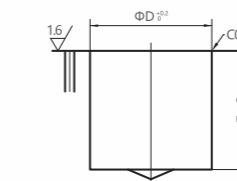
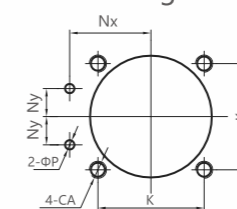
示例: CFP-39G

CFP	系列 Series	CFP
39	油缸外徑 Body Size	39: $\Phi D=39\text{mm}$ 55: $\Phi D=55\text{mm}$ 65: $\Phi D=65\text{mm}$ 75: $\Phi D=75\text{mm}$ 90: $\Phi D=90\text{mm}$
G	配管方式 Piping Method	 G: 板式連接型（配有 R 螺紋堵頭）  S: 外配管型（Rc 螺紋）

外形尺寸 External Dimensions



安裝部位加工尺寸 Machining Dimensions of Mounting Area



注意事項

- ※1. R 螺紋堵頭的突出量存在 0~1.5mm 的差異。
- ※2. 本產品未附帶安裝螺絲。
- ※3. 請參考 S 尺寸，並根據安裝高度決定安裝螺絲用 CA 螺絲深度。
- ※4. 請參考 F 尺寸，並根據安裝高度決定本體安裝孔 ϕD 的深度。
- ※5. 本加工表示 G：板式連接時的情況。
- ※6. 使用液體：相當於 ISO 黏度等級的 ISO-VG-32 一般液壓油。請用戶參照 S 尺寸並根據安裝高度自行配備。

Notes

- ※1. The protrusion of R thread plug is between 0 to 1.5 mm
- ※2. Mounting bolts are not provided.
- ※3. The CA thread depth for mounting bolts is to be decided by the customer according to the mounting height using the S dimensions as a reference.
- ※4. The depth of diameter D for the mounting hole on the unit should be decided by customer according to the mounting height using the F dimensions as a reference
- ※5. This machining drawing shows G: Gasket option.
- ※6. Usable fluid: General Hydraulic Oil Equivalent to ISO-VG-32. Prepare mounting bolts according to the mounting height. Please refer to S dimensions.

規格參數表 SPECIFICATIONS

型號	油缸夾緊側面積	夾緊力 (計算公式)※1	全行程	夾緊行程	油缸夾緊側容量	釋放彈簧力	導套側彈簧力	容許偏心量	最高使用壓力	最低動作壓力	耐壓	推薦氣壓 (噴氣清潔用)	使用溫度	重量
MODEL	CYLINDER AREA FOR LOCKING (cm ²)	CLAMPING FORCE (CALCULATION FORMULA)※1 (kN)	FULL STROKE (mm)	LOCK STROKE (mm)	CYLINDER CAPACITY (LOCK SIDE) (cm ³)	RELEASE SPRING FORCE (N)	SLEEVE RETURN SPRING FORCE (N)	ALLOWABLE OFFSET (mm)	MAX. OPERATING PRESSURE (MPa)	MIN. OPERATING PRESSURE (MPa)	WITHSTANDING PRESSURE (MPa)	Withstanding Pressure (MPa)	OPERATING TEMPERATURE (°C)	WEIGHT (kg)
CFP-39	6.0	$F=0.60 \times P-0.20$	6.7	3.8	4.0	116~215	6.1	±0.5	7.0	1.0	10.5	0.4~0.5	0~70	0.7
CFP-55	9.9	$F=0.99 \times P-0.29$	7.5	5	7.4	198~318	9.3	±0.7	7.0	1.0	10.5	0.4~0.5	0~70	1.5
CFP-65	15.7	$F=1.57 \times P-0.42$	8.5	5.3	13.4	306~475	11.3	±1	7.0	1.0	10.5	0.4~0.5	0~70	2.3
CFP-75	23.3	$F=2.33 \times P-0.69$	10	7	23.3	459~763	18.0	±1	7.0	1.0	10.5	0.4~0.5	0~70	3.5
CFP-90	36.4	$F=3.64 \times P-1.10$	12	8.7	43.7	733~1214	21.6	±1.2	7.0	1.0	10.5	0.4~0.5	0~70	6.0

注意事項 ※1. 在夾緊力（計算公式）中，符號，F：夾緊力（kN），P：供給液壓（MPa）。

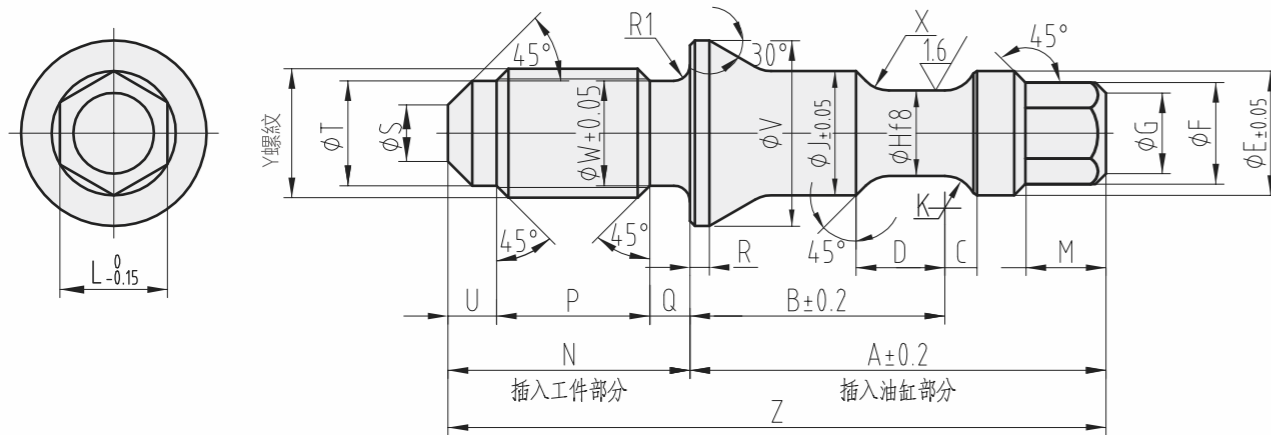
Note ※1. Clamping force (Calculation formula) symbols show F: Clamping Force (kN), P: Supply Hydraulic Pressure (MPa).

Unit:mm

型號 Model No	CFP-39	CFP-55	CFP-65	CFP-75	CFP-90
全行程 Full Stroke Y	6.7	7.5	8.5	10	12
夾緊行程 Clamping Stroke	3.8	5	5.3	7	8.7
A	65	74	85	100	120
B	54	69	81	92	107
C	45	60	70	80	95
D	39	55	65	75	90
E	20	25	30	38	47.5
F	38	47	57	68	83
G	27	27	28	32	37
H	31.5	39	46	52	59.5
J	22.5	30	35	40	47.5
K	34	47	55	63	75
L	73	88	106	116	136
M	12	12	12	16	16
Nx	26	33.5	39.5	45	52.5
Ny	9	12	15	16	18.5
P	3	3	5	5	5
Q	9	11	11	14	17.5
R	5.5	6.8	6.8	9	11
S	18.5	16.5	17	19	21
倒角 Chamfer	3	3	4	5	6
CA (Nominal×Pitch)	M5×0.8	M6×1.0	M6×1.0	M8×1.25	M10×1.25
供油口 Hydraulic Port Rc 螺紋 (Rc-Thread)	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
噴氣清潔用供氣口 Air Blow Port Rc 螺紋 (Rc-Thread)	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
冷卻液排出口 Coolant Discharge Port Rc 螺紋 (Rc-Thread)	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
O形密封圈 O-ring	G 型 G option 1BP5	1BP5	1BP7	1BP7	1BP7
R 螺紋堵頭 R-Thread Plug	R1/8	R1/8	R1/8	R1/4	R1/4

選配項：牽引螺栓
Accessories: Pull Bolt

CLZ - 39 - CFP1



Unit:mm

型號 Model	CLZ-39 -CFP1	CLZ-55 -CFP1	CLZ-65 -CFP1	CLZ-75 -CFP1	CLZ-90 -CFP1
對應機器型號 Corresponding Product Model	39	55	65	75	90
A	25.8	30	35.5	45	56
B	15.8	18	21.5	27	33.5
C	2	2.6	3	3.8	5
D	5.5	7.5	8	10.5	12.5
E	7.7	9.7	11.5	14.5	18.5
F	6.3	9.1	9.1	11.3	14.8
G	5	7.5	7.5	9.5	12.2
H	5.3 ^{-0.010 -0.028}	6.5 ^{-0.013 -0.035}	8 ^{-0.013 -0.035}	10 ^{-0.013 -0.035}	12.5 ^{-0.016 -0.043}
J	7.7	9.7	11.5	14.5	18.5
K	R2	R2.5	R3	R3.75	R4.76
L	5.5	8	8	10	13
M	5	7	7	8.5	11
N	15	18	20	26	33
P	9.5	12	13.5	18	22
Q	2.5	2.5	2.5	3	4
R	1.2	1.2	1.5	2	2.5
S	3.5	4	5	7	8.5
T	6.5	8.2	10	13.5	17
U	3	3.5	4	5	7
V	11.5	13.5	16	21	26
W	6.5	8.2	10	13.5	17
X	R2	R2.5	R3	R4	R5
Y (標稱×間距) (Nominal×Pitch)	M8×1.25	M10×1.5	M12×1.75	M16×2	M20×2.5
Z	40.8	48	55.5	71	89

大於Greater than	小於less than	公差Tolerance
-	6	±0.1
6	30	±0.2
30	120	±0.3

注意事項

- 牽引螺栓 (CLZ-CFP1) 的設計應滿足油缸著座面與工件底面間隙在 0 (密接) ~ 0.3mm 以內。
- 設計製作牽引螺栓時，請參考本圖。· 無公差尺寸表示的請按右表的要求進行加工

Notes

- When using CLZ-CFP1 pull bolt, the space between the top of the clamp and the bottom of the work piece must be 0 (firm contact) to 0.3 mm
- Refer to this figure when manufacturing pull bolts. · Dimensions for clamp mounting must be strictly followed. · If tolerance is not specified, dimensions should refer to the graph on the right.

