

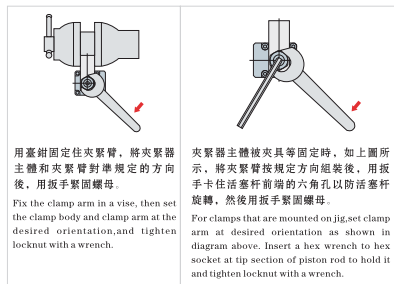
## 夾緊臂的安裝、拆卸

- 旋轉式夾緊器採用帶導向槽的凸輪機構進行旋轉。如果向活塞杆上施加過大的扭矩，將會損壞夾緊器。安裝或拆卸夾緊臂時，為了防止旋轉扭矩作用在活塞杆上，請按照下列要領進行作業。
- 請務必按照規定的扭矩緊固鎖緊螺母。緊固扭矩不充分時，使用時夾緊臂有可能滑落。

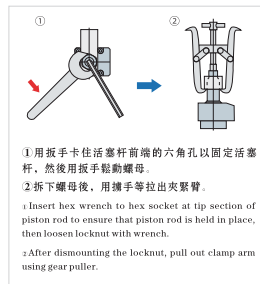
## Mounting &amp; dismounting of clamp arm

- Swing clamp may be damaged if excessive torque is applied, since structure is intended for swinging using cam mechanism with lead grooves. Follow instructions shown below to prevent excessive torque from being applied on piston rod when mounting or dismounting clamp arm.
  - Be sure to tighten locknut with recommended tightening torque.
- If the tightening torque is insufficient, clamp arm may slip during operation.

## 夾緊臂的安裝/Mounting of clamp arm



## 夾緊臂的拆卸/Dismounting of clamp arm



## 夾緊器、工件支撐器的安裝

安裝夾緊器、工件支撐器時，請使用強度分級為12.9的螺絲，並參考下列安裝螺絲的推薦緊固扭矩。

Clamp and work supports have been developed for the purpose of clamping workpiece for machine tools. Do not use them for other purposes.

Always protect them with a cover to ensure sliding surfaces are not exposed to weld slags when using them as jig for welding.

## 安裝螺絲的推薦緊固扭矩（強度分類12.9）

Recommended tightening torque (strength classification 12.9) for mounting screws

安裝螺絲尺寸 Mounting screw size	緊固扭矩 Fastening torque
M4 × 0.7	2.8 N·m
M5 × 0.8	7 N·m
M6 × 1	11 N·m
M8 × 1.25	25 N·m
M10 × 1.5	49 N·m
M12 × 1.75	60 N·m

## 使用注意事項

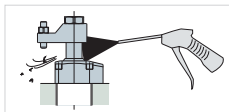
- 夾緊器、工件支撐器是以夾緊機床相關項目為目的而開發的，請勿用於其它用途。
- 用于焊接夾具時，為了避免滑動部接觸到火花，請務必使用覆蓋等進行保護。
- 為確保順暢動作，請通過吸吹空氣等方式定期清除滑動部及法蘭盤表面。

## Caution for hydraulic piping

Most problems that occur with hydraulic equipment are caused by foreign substances such as metal chips and dust that enter into hydraulic circuits. Refer to "Piping Hydraulic & Pneumatic Equipment—Practical Notes" provided with the product for mounting and hydraulic piping of the product.

2. After performing hydraulic piping, always be sure to blow out air in the hydraulic circuit. Insufficient bleeding can lead to malfunction.

3. When using multiple clamps, operating speeds and timings vary due to variance in pipe resistance and internal resistance of clamps. Adjust operating speeds and timings using flow control valve.



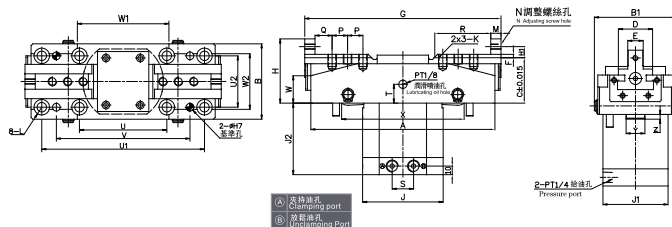
## 產品簡介

曲柄型二滑塊同步油缸，滑塊行程長。  
折動面均硬化及精密研磨，並直接潤滑。  
高夾持精度，防塵效果特佳。



## Introduction of product

Crank type two slide block synchronous oil cylinder, the length of the slide block.  
All the surfaces are hardened and precision grinding, and are lubricated directly.  
High clamping precision, dust effect is particularly good.



## 特性資料 Specification

單位 (Unit) : mm

型號Model	HCP-20	HCP-30A	HCP-30	HCP-50
壓面面積(推出)Pressure area push(cm)	28.27	28.27	28.27	38.48
滑塊行程Slider stroke(mm)	20	30	30	50
最大夾持力Max clamping(kgf)	1653	1806	1806	2071
使用流量Flow	已過濾之標準液壓油Filtered oil			
使用溫度範圍Range of temperature(°C)	-10~70(°C)			
使用壓力Max preggure(kg/cm <sup>2</sup> )	10~35kg/cm <sup>2</sup>			

## 外形尺寸表 Dimension table

單位 (Unit) : mm

SIZE MODEL	A	B	B1	C	D	E(h6)	F	G		H	H1	J	J1	J2	K	L
								Max	min							
HCP-20	215					18	4	249	229					83.5	M10x1.5	
HCP-30A	250	88	96	53	40			295	265	75	13	94	76	96		M10
HCP-30	280					22		327	297							
HCP-50	300	110	115	65	50	28	5	369	319	90	15	105	-	120		M12x1.75

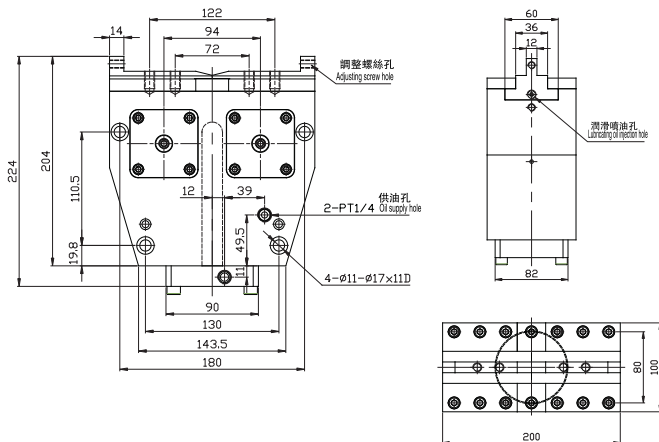
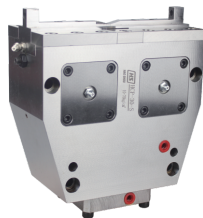
SIZE MODEL	M	N	P	Q	R	S	T	U	U1	U2	V	W	W1	W2	X	Y	Z
HCP-20	12		18	20	66		25	22	102	190	60	156	32	110		150	4
HCP-30A		14	m6x1	20	24										65	156	22
HCP-30																6	
HCP-50	16	M8x1.25	21	28		30	32	105	230	85	195				80	180	30

## 產品簡介

曲柄型二滑塊同步油缸，滑塊行程長；  
折動面均經硬化及精密研磨，並直接潤滑；  
高夾持精度，防塵效果特佳；  
可調行程。

## Introduction of product

Crank type two slide block synchronous oil cylinder, the length of the slide block;  
All the surfaces are hardened and precision grinding, and are lubricated directly;  
High clamping precision, dust effect is particularly good;  
Adjustable stroke.



### 特性資料 Specification

型號Model	HCP-30-S
受壓面積(推出)Pressure area push(cm)	28.27
滑塊行程Slider stroke(mm)	30
最大夾持力Max clamping(kgf)	1806
使用液量Fluid	已濾清之標準液態Filtered oil
使用溫度範圍Range of temoerature(°C)	-10~70(°C)
使用壓力Max preggure(kg/cm <sup>2</sup> )	10~35kg/cm <sup>2</sup>

單位 (Unit) : mm



## 產品簡介

- ◆ 符合GB/T15622-2995
- ◆ 產品使用了高性能的密封圈，避免了油缸的泄漏，且使用壽命長。
- ◆ 端蓋採用45鋼，活塞杆表面鍍硬鉻，結構堅固耐用。
- ◆ 安裝方式有SD, FA, FB, LB, TC, CA, CB, CBP, CAB，供設計者依據需求選擇。
- ◆ 任何特殊油缸皆可訂做，歡迎來電諮詢。



## Introduction of product

- ◆ Standard:GB/T 15622-2995
- ◆ Use high-quality seal to avoid leakage and have long service life.
- ◆ The rod cover and rear cover make from No45 Steel, and the piston is chromeplate.  
With the compact structure, more durable.
- ◆ There are several mounting types,SD, FA, FB, LB, TC, CA, CB, CBP, andCAB.  
The designer could choose it according to the demand.
- ◆ Anyother special cylinder could order, welcome to contact with us.

## 特性資料 Specification

油缸缸內徑 bore sizes of cylinder(mm)	Φ30	Φ40	Φ50	Φ63	Φ80	Φ100	Φ125
使用液體 Fluid	以澄清之標準度液油filtered oil						
缸管材質 material of cylinder barrel	碳鋼管 carbon steel STKM-13C/不銹管 stainless tubes SUS 304/AL lubre A6063TDS-T5						
使用壓力範圍 the range of pressure(MPa)	0.3~7.0MPa(3~70kg/cm2)						
使用溫度範圍 the range of temperature(℃)	-10~+60(℃)						
使用速度範圍 the of the speed(mm/sec)	8~300(mm/sec)						
標準活塞長度 (PM) length of standard piston	30	30	30	30	35	50	50
訂制行程于1501~2500mm間活塞長度 (PM) piston length when the stroke is between 1501~2500mm	60	60	60	60	70	100	100
訂制行程于2501~4000mm間活塞長度 (PM) piston length when the stroke is between 2501~4000mm	120	120	120	120	140	150	150

**訂購標示法 Ordering code**

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