



## 5105# ASC 空壓轉角缸 Air Swing Clamp Cylinder

### 產品簡介

- 本產品適用於量產零件之專用機及MC治具，提高生產效率最佳幫手。
- 主要功能為空壓缸作動時，活塞下壓行程中壓板會旋轉到設計的角度，再沿著直線繼續下壓直到壓板夾緊工件。
- 建議使用空壓轉角缸，A,B入氣口請加裝流量控制閥，避免速度過快，以及轉角行程中，請勿夾持工件，導致損壞缸體及內部零件。
- 壓板需增加長度時，請勿大於原長之1.5倍。
- 缸體材質採用鋁合金，表面硬膜處理，內壁表面光滑，使用壽命長。

### Product Introduction

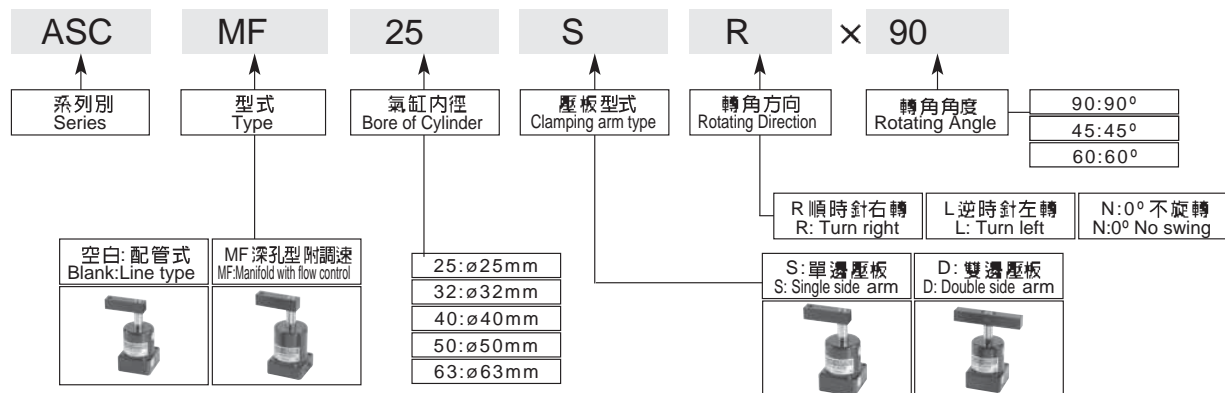
- The product is ideal for mass production on a special purpose machine and jig on machining center. It will greatly upgrade production efficiency.
- When the air cylinder actuate, and the piston moves downward, the clamping arm will swing to a rated angle! Then it lowers until the workpiece is clamped securely.
- To avoid too fast motion a flow control valve is suggested to connect to the air inlet ports (A, B) on the swing clamp cylinder. Do not clamp workpiece while the clamp is swinging to avoid damaging on the cylinder barrel and internal parts.
- When increasing length of clamping arm is required, be sure do not exceed 1.5 times of the original length.
- The cylinder body is manufactured from aluminum alloy. Surface is hard membrane treated for maximum smoothness on inside surface and long service life.



### 特性資料 Specifications

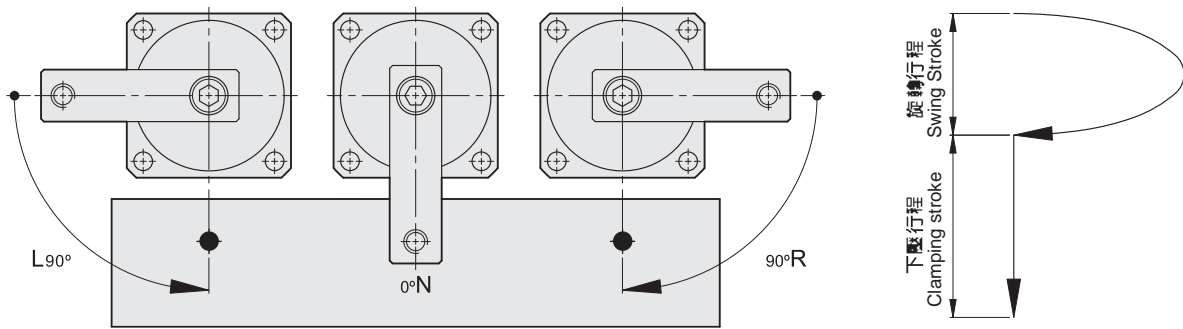
氣缸內徑	Bore of cylinder	mm	φ 25	φ 32	φ 40	φ 50	φ 63
活塞桿徑	Piston rod diameter	mm	φ 14	φ 16	φ 16	φ 20	φ 20
轉角行程	Swing stroke	mm	8	11	11	13	13
垂直行程 標準/加長	Clamping stroke std/incr	mm	14	15 / 30	15 / 30	17 / 34	17 / 34
受壓面積 拉入/推出	Pressure area pull/push	cm <sup>2</sup>	3.37 / 4.91	6.03 / 8.04	10.56 / 12.57	16.49 / 19.63	28.03 / 31.17
理論夾持力	Theoretical clamping force	6kg/cm <sup>2</sup>	20	36	63	99	168
使用流體	Fluid	已壓縮之壓縮空氣 Filtered air					
最大操作壓力	Max operation pressure	10 kg/cm <sup>2</sup>					
操作壓力範圍	Operation pressure range	1-7 kg/cm <sup>2</sup>					
轉角方向	Rotating direction	順時針右轉R或逆時針左轉L Turn right R or turn left L					
轉角角度	Rotating angle	標準角度90° 選擇角度0°、45°、60° Standard angle 90°, Optional angle 0°, 45°, 60°					
動作方式	Acting type	複動式 Double acting					

### 訂購標示法 Ordering Code

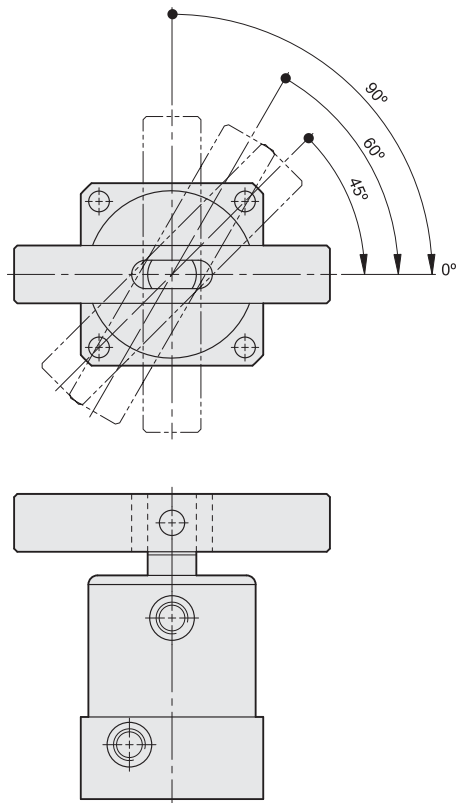


# 5105# ASC 空壓轉角缸 Air Swing Clamp Cylinder

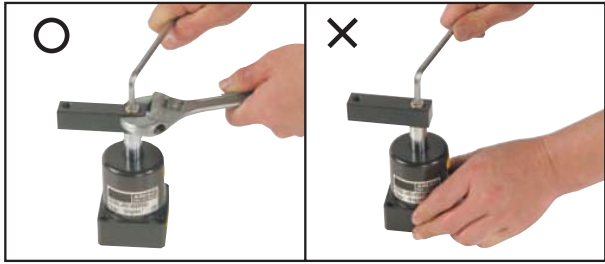
## 單邊壓板旋轉示意圖 Single Side Swing Clamp



## 雙邊壓板旋轉示意圖 Double Side Swing Clamp



## 壓板鎖緊操作方式 Clamping Arm Mounting Methods



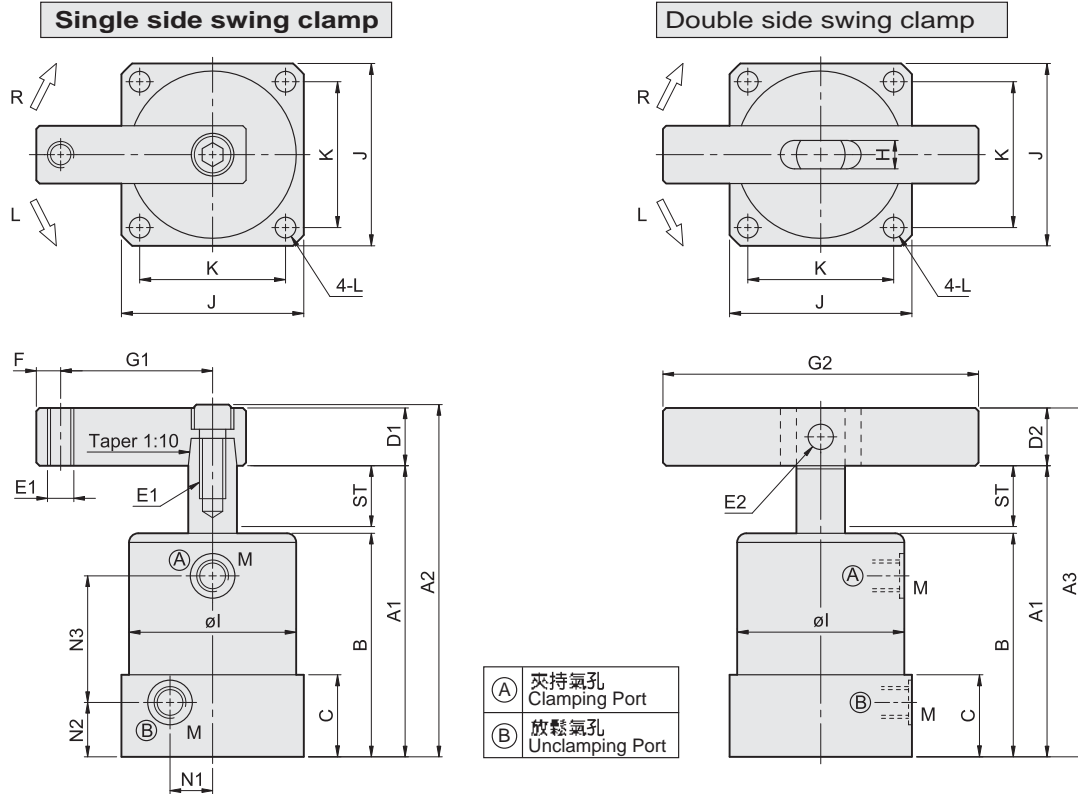
## 壓板拆卸操作方式 Clamping Arm Removing Methods





**HARDY**

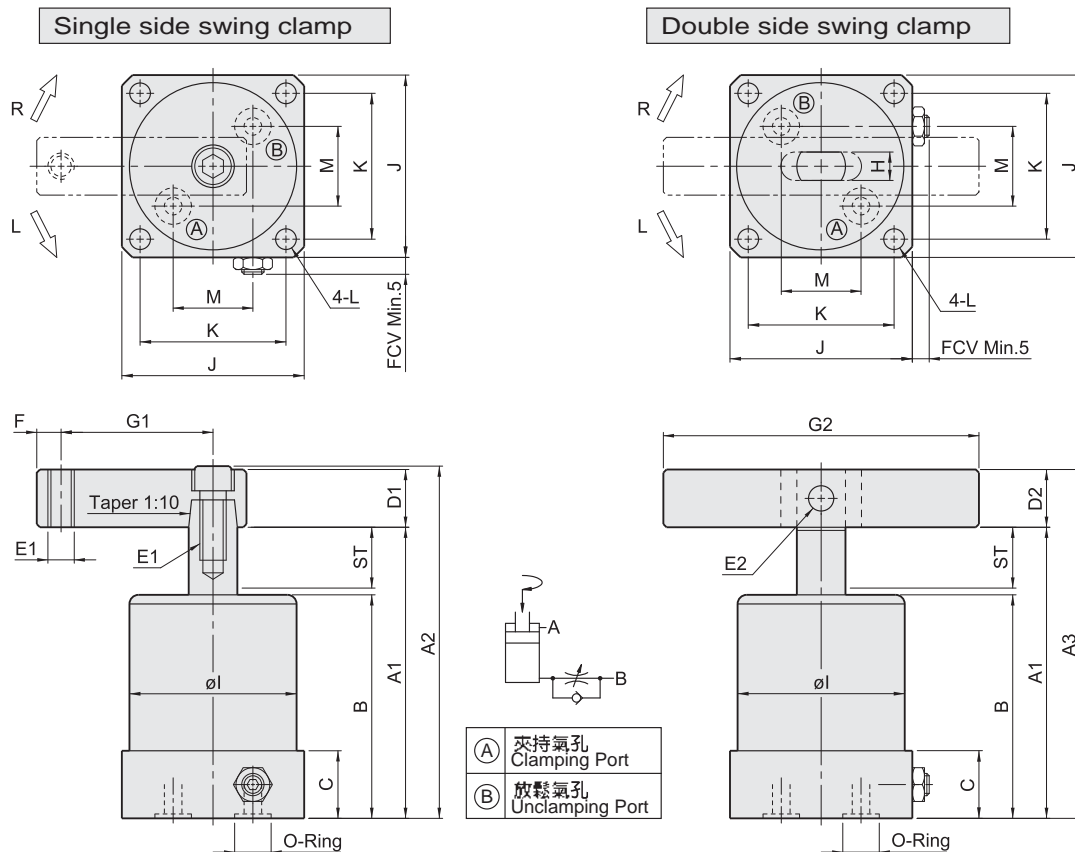
## 5105# ASC 空壓轉角缸 Line type Air Swing Clamp Cylinder



Item	Model	ASC-25	ASC-32	ASC-32L	ASC-40	ASC-40L	ASC-50	ASC-50L	ASC-63	ASC-63L
ST:Swing/Clamping		22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:13/17	47:13/34	30:13/17	47:13/34
A1		89	108	138	108	138	124	158	124	158
A2		(105.9)	(128)	(158)	(128)	(158)	(150.4)	(184.4)	(150.4)	(184.4)
A3		-	127	157	127	157	146.2	180.2	146.2	180.2
B		65	78	93	78	93	90	107	90	107
C		23	28		28		31		31	
D1		φ 15.9	φ 19		φ 19		φ 25.4		φ 25.4	
D2		-	φ 19		φ 19		φ 22.2		φ 22.2	
E1		M6x1.0	M8x1.25		M8x1.25		M10x1.5		M10x1.5	
E2		-	φ 8		φ 8		φ 8		φ 8	
F		6	8		8		10		10	
G1		35	50		55		60		70	
G2		-	140		140		160		160	
H		-	9		9		10		10	
I		φ 35	φ 46		φ 55		φ 65		φ 78	
J		38	50		60		70		83	
K		30	40		48		57		67	
L		φ 4.6	φ 5.6		φ 6.8		φ 6.8		φ 9	
M		M5x0.8	G1/8		G1/8		G1/8		G1/8	
N1		8	11.5		14		17		20	
N2		16.5	19		19		21		21	
N3		39.5	45	60	45	60	54	71	54	71



**5106# ASC 空壓轉角缸 MF 深孔型附調速(免配管路)**  
**Air Swing Clamp Cylinder Manifold with flow control**



Item	Model	ASC-MF32	ASC-MF40	ASC-MF50	ASC-MF63
ST:Swing/Clamping		26:11/15	26:11/15	30:13/17	30:13/17
A1		108	108	124	124
A2		(128)	(128)	(150.4)	(150.4)
A3		127	127	146.2	146.2
B		78	78	90	90
C		22	22	25	25
D1		φ 19	φ 19	φ 25.4	φ 25.4
D2		φ 19	φ 19	φ 22.2	φ 22.2
E1		M8×1.25	M8×1.25	M10×1.5	M10×1.5
E2		φ 8	φ 8	φ 8	φ 8
F		8	8	10	10
G1		50	55	60	70
G2		140	140	160	160
H		9	9	10	10
I		φ 46	φ 55	φ 65	φ 78
J		50	60	70	83
K		40	48	57	67
L		φ 5.6	φ 6.8	φ 6.8	φ 9
M		19	23	28	32
O-Ring		P7	P7	P9	P9



# 5107# HSC 油壓轉角缸 Hydraulic Swing Clamp Cylinder

## 產品簡介

- 本產品適用於量產零件之專用機及MC治具，提高生產效率最佳幫手。
- 主要功能為油壓缸作動時，活塞下壓行程中壓板會旋轉到設計的角度，再沿著直線繼續下壓直到壓板夾緊工件。
- 建議使用油壓轉角缸，請加裝流量控制閥，避免速度過快，以及轉角行程中，請勿夾持工件，避免損壞缸體及內部零件。
- 壓板需增加長度時，請勿大於原長之1.5倍。
- 缸體材質採用機械構造用炭素鋼，內壁特殊加工處理，表面光滑，使用壽命長。

## Product Introduction

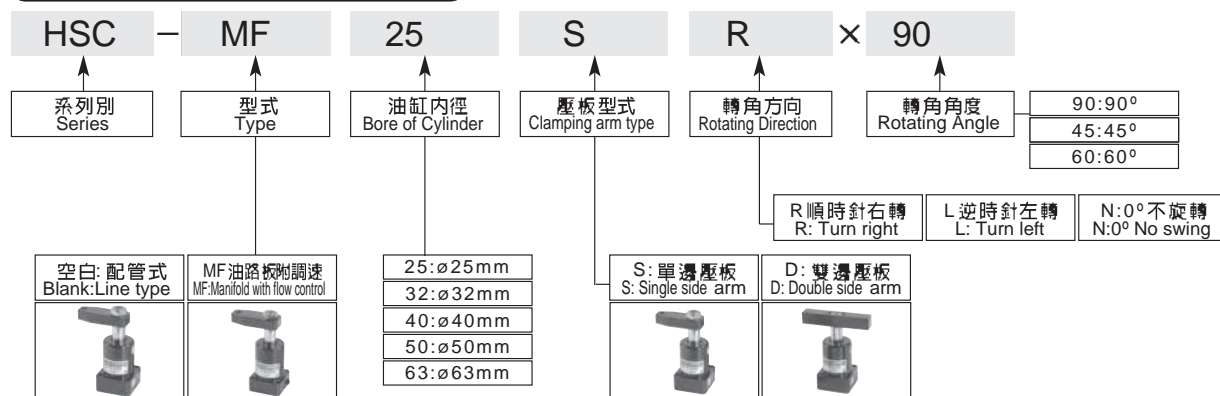
- The product is ideal for mass production on a special purpose machine and jig on machining center. It will greatly upgrade production efficiency.
- When the hydraulic cylinder actuate, and the piston moves downward, the clamping arm will swing to a rated angle. Then it lowers until the workpiece is clamped securely.
- To avoid too fast motion a flow control valve is suggested to connect to the hydraulic swing clamp cylinder. Do not clamp workpiece while the calmp is swinging to avoid damaging on the cylinder barrel and internal parts.
- When increasing length of clamping arm is required, be sure do not exceed 1.5 times of the original length.
- The cylinder body is manufactured from structural carbon steel. Surface is specially treated for maximum smoothness on inside surface and long service life.



## 特性資料 Specifications

氣缸內徑	Bore of cylinder	mm	φ25	φ32	φ40	φ50	φ63
活塞桿徑	Piston rod diameter	mm	φ18	φ20	φ22.4	φ28	φ35
轉角行程	Swing stroke	mm	8	11	11	13	13
垂直行程 標準/加長	Clamping stroke std/incr	mm	14	15 / 30	15 / 30	17 / 34	17 / 34
受壓面積 拉入/推出	Pressure area pull/push	cm <sup>2</sup>	2.37 / 4.91	4.9 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
理論夾持力	Theoretical clamping	30kg/cm <sup>2</sup>	71	147	259	404	647
使用液體	Fluid	已濾清之標準液壓油 Filtered hydraulic oil					
最大操作壓力	Max operation pressure	100 kg/cm <sup>2</sup>					
操作壓力範圍	Operation pressure range	5-70 kg/cm <sup>2</sup>					
轉角方向	Rotating direction	順時針右轉R或逆時針左轉L Turn right R or turn left L					
轉角角度	Rotating angle	標準角度90° 選擇角度0°、45°、60° Standard angle 90°, Optional angle 0°, 45°, 60°					
動作方式	Acting type	複動式 Double acting					

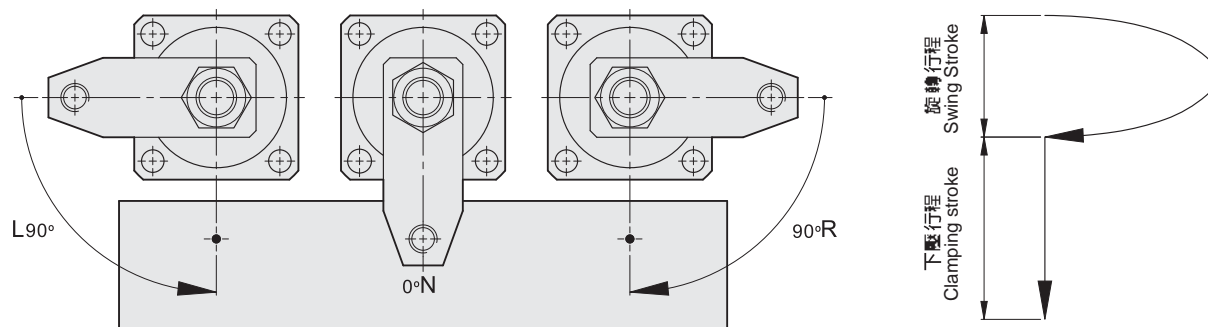
## 訂購標示法 Ordering Code



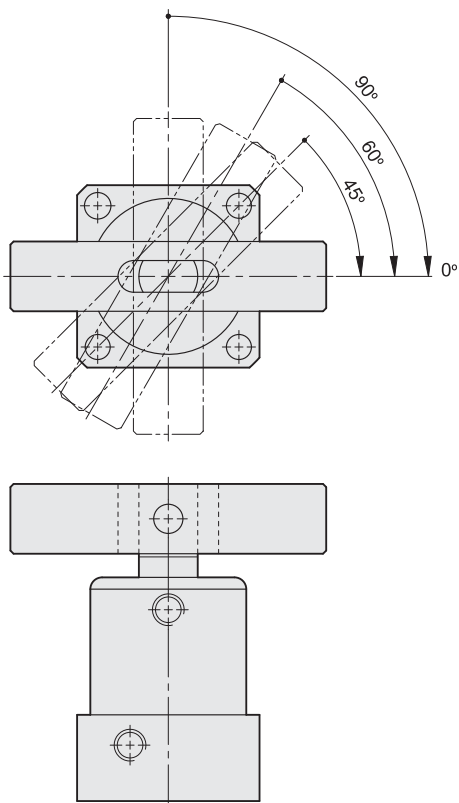


# 5107# HSC 油壓轉角缸 Hydraulic Swing Clamp Cylinder

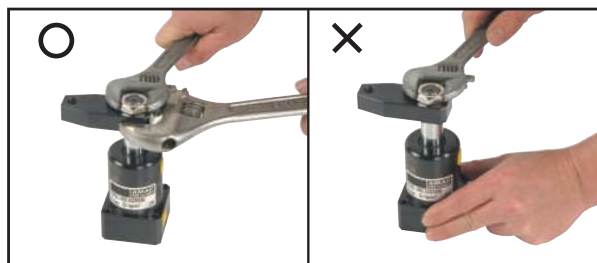
## 單邊壓板旋轉示意圖 Single Side Swing Clamp



## 雙邊壓板旋轉示意圖 Double Side Swing Clamp



## 壓板鎖緊操作方式 Clamping Arm Mounting Methods



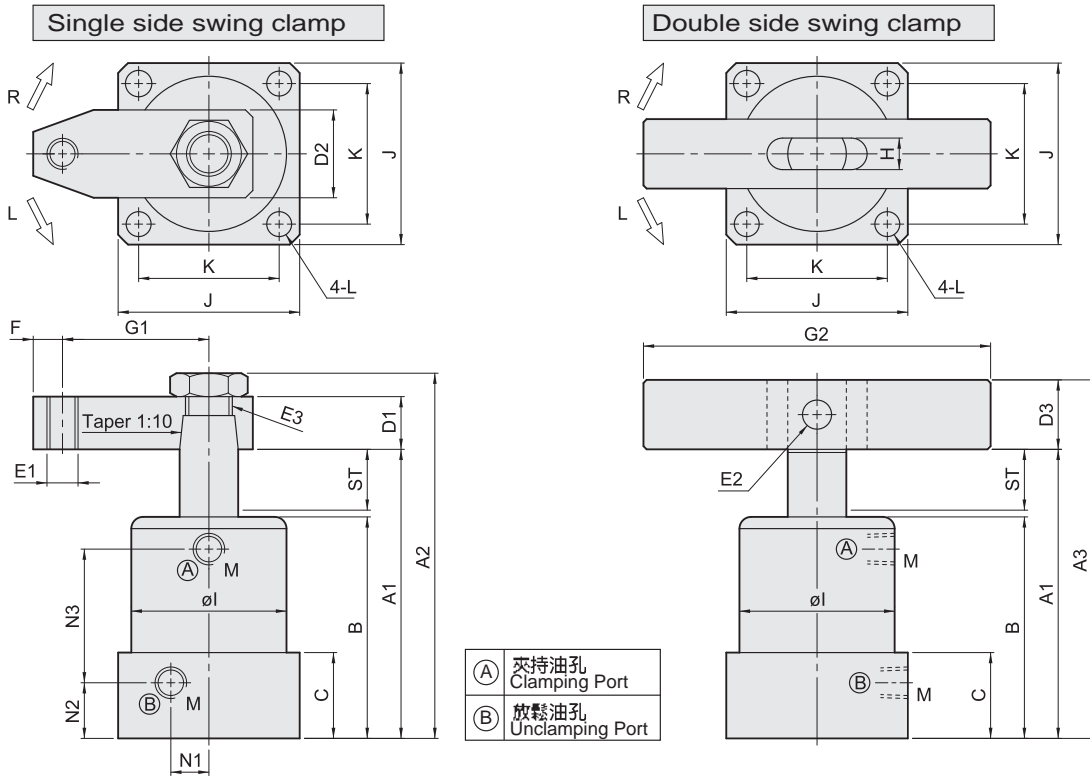
## 壓板拆卸操作方式 Clamping Arm Removing Methods





**HARDY**

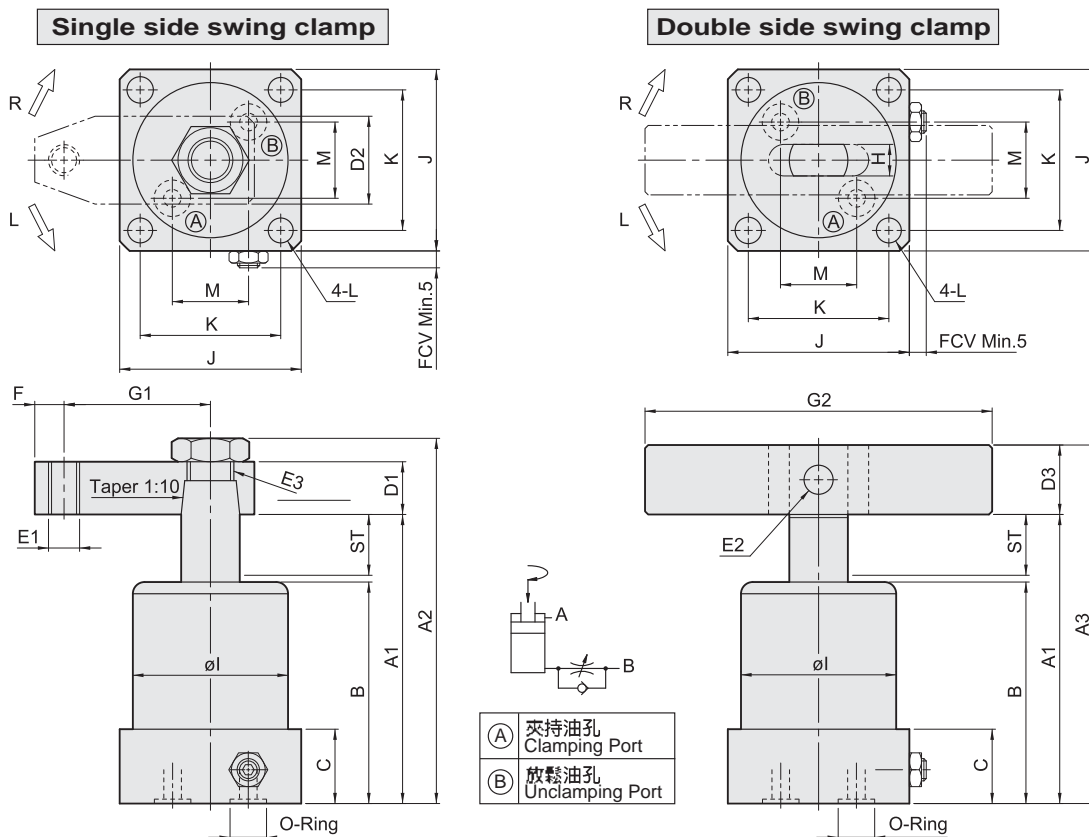
## 5107# HSC 油壓轉角缸 Line type Hydraulic Swing Clamp Cylinder



Item	Model	HSC-25	HSC-32	HSC-32L	HSC-40	HSC-40L	HSC-50	HSC-50L	HSC-63	HSC-63L
ST:Swing/Clamping		22:9/13	26:11/15	41:11/30	26:11/15	41:11/30	30:13/17	47:13/34	30:13/17	47:13/34
A1		101	115	145	120	150	134	168	139	173
A2		(124)	(140)	(170)	(148)	(178)	(166)	(200)	(175)	(209)
A3		120	137.2	167.2	142.2	172.2	159.4	193.4	170.8	204.8
B		76	85	100	90	105	100	117	105	122
C		27	30		30		34		34	
D1		15	17		18		20		23	
D2		27	31		31		37		48	
D3		φ19	φ22.2		φ22.2		φ25.4		φ31.8	
E1		M10x1.5	M10x1.5		M10x1.5		M12x1.75		M16x2.0	
E2		φ8	φ8		φ10		φ12		φ15	
E3		M14x1.5	M16x1.5		M18x1.5		M20x1.5		M26x1.5	
F		10	10		10		12		15	
G1		50	55		60		65		75	
G2		140	160		160		180		200	
H		9	10		10		12		15	
I		φ46	φ50		φ54		φ66		φ80	
J		52	56		63		72		88	
K		40	44		48		57		70	
L		φ6.8	φ6.8		φ9		φ9		φ11	
M		PT1/8	PT1/8		PT1/8		PT1/4		PT1/4	
N1		8	10		12		15		17	
N2		17	19		19		21.5		22	
N3		46	52	67	57	72	63.5	80.5	68	85



**5108# HSC 油壓轉角缸 MF 深孔型附調速(免配管路)**  
**Hydraulic Swing Clamp Cylinder Manifold with flow control**



Item	Model	HSC-MF25	HSC-MF32	HSC-MF40	HSC-MF50	HSC-MF63
ST:Swing/Clamping		22:9/13	26:11/15	26:11/15	30:13/17	30:13/17
A1		101	115	120	1345	139
A2		(124)	(140)	(148)	(166)	(175)
A3		120	137.2	142.2	159.4	170.8
B		76	85	90	100	105
C		22	25	25	30	30
D1		15	17	18	20	23
D2		27	31	31	37	48
D3		φ 19	φ 22.2	φ 22.2	φ 25.4	φ 31.8
E1		M10×1.5	M10×1.5	M10×1.5	M12×1.75	M16×2.0
E2		φ 8	φ 8	φ 10	φ 12	φ 15
E3		M14×1.5	M16×1.5	M18×1.5	M20×1.5	M26×1.5
F		10	10	10	12	15
G1		50	55	60	65	75
G2		140	160	160	180	200
H		9	10	10	12	15
I		φ 46	φ 50	φ 54	φ 66	φ 80
J		55	57	63	72	88
K		42	44	48	57	70
L		φ 6.8	φ 6.8	φ 9	φ 9	φ 11
M		19	21	23	28	32
O-Ring		P7	P7	P9	P9	P9





# 5109# ALC 槓桿式空壓缸 Air lever-type Cylinder

## 產品簡介

- 此型式空壓缸，採用標準規格化治具缸，加裝槓桿式夾持機構，活塞推出為夾緊狀態，主要機構零件安裝於缸體外部，易於維護。
- 缸體材質採用鋁合金，內壁表面光滑，使用壽命長，夾持機構材料均採用機械構造用炭素鋼，堅固耐用。
- 本系列各種型號均可安裝磁性感應。



## Product Introduction

- The series of air cylinder employs the standardized jig cylinder and fitted with lever type clamping mechanism. Piston push forward for clamping. Major parts are mounted outside of the cylinder barrel for convenient maintenance.
- The cylinder barrel is manufactured from aluminum alloy, featuring smooth internal surface and long service life. Clamping mechanism is manufactured from structural carbon steel for maximum durability and long service life.
- All models in this series are available to equip with magnetic proximity switch.



## 訂購標示法 Ordering Code

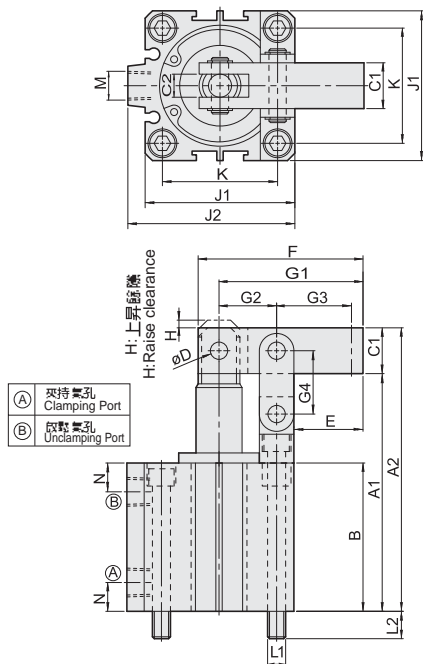


1	系列別 Series	ALC
2	空白 Blank	標準型 Standard type
	MS	附磁石感應 With magnetic induction
3	氣缸內徑 Bore of cylinder	ø25. ø32. ø40. ø50. ø63
4	近接開關 Sensor switch	S1:1個 S2:2個 1Pc of S1,2Pcs of S2

## 特性資料 Specifications

氣缸內徑	Bore of cylinder	mm	φ25	φ32	φ40	φ50	φ63
活塞桿徑	Piston rod diameter	mm	φ10	φ16	φ16	φ20	φ20
總行程	Total stroke	mm	20	23	25	30	35
受壓面積	Pressure area	cm <sup>2</sup>	4.91	8.04	12.57	19.63	31.17
理論夾持力	Theoretical clamping	6kg/cm <sup>2</sup>	15	25	44	71	136
使用流體	Fluid	已壓縮之壓縮空氣 Filtered air					
最大操作壓力	Max operation pressure	10 kg/cm <sup>2</sup>					
操作壓力範圍	Operation pressure range	1-7 kg/cm <sup>2</sup>					
動作方式	Acting type	複動式 Double acting					

Item	Model	ALC-25	ALC-32	ALC-40	ALC-50	ALC-63
標準型 Standard type	A1	65.5	78	82.5	96.6	115.5
	A2	78.2	93.9	98.4	115.6	137.7
	B	41	49	51.5	58.6	72.5
附磁石 With magnet	A1	75.5	93	97.5	106.6	125.5
	A2	88.2	108.9	113.4	125.6	147.7
	B	51	64	66.5	68.6	82.5
C1		φ 12.7	φ 15.9	φ 15.9	φ 19	φ 22.2
C2		6	8	8	10	10
D		φ5	φ6	φ6	φ8	φ8
E		25	31	32	35	38.5
F		50	60	65	75	85
G1		45	54	58	66	76
G2		14	17	20	23	29.5
G3		27.5	33	34	38	40.5
G4		17	20	22	27	32
H		3	3	3	3	3
J1		40	44	52	62	75
J2		-	50	58	71	84.5
K		28	34	40	48	60
L1		M5x0.8	M5x0.8	M6x1.0	M6x1.0	M6x1.0
L2		10.5	11	9.5	11	11
M		M5x0.8	PT1/8	PT1/8	PT1/4	PT1/4
N		8	9	10	11	11



# 5110# HLC 槓桿式油壓缸 Hydraulic lever-type Cylinder

## 產品簡介

- 此型式油壓缸，夾持機構為槓桿原理，活塞推出為夾緊狀態，主要機構零件安裝於缸體外部，易於維護。
- 缸體及夾持機構材料均採用機械構造用炭素鋼，堅固耐用，使用壽命長。



## Product Introduction

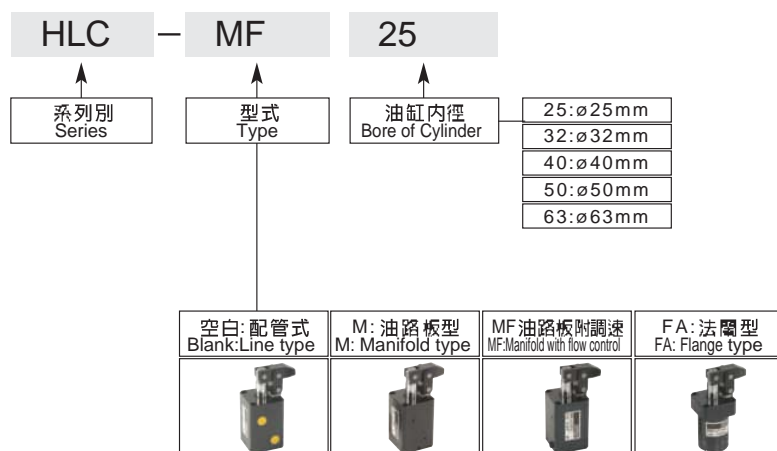
- The clamping mechanism on this series of hydraulic cylinder work with a lever principle. Piston push forward for clamping. It provides greater clamping force than that of swing clamp cylinder. Major parts are mounted outside of the cylinder barrel for convenient maintenance.
- The cylinder barrel and clamping mechanism are manufactured from structural carbon steel for maximum durability and long service life.



## 特性資料 Specifications

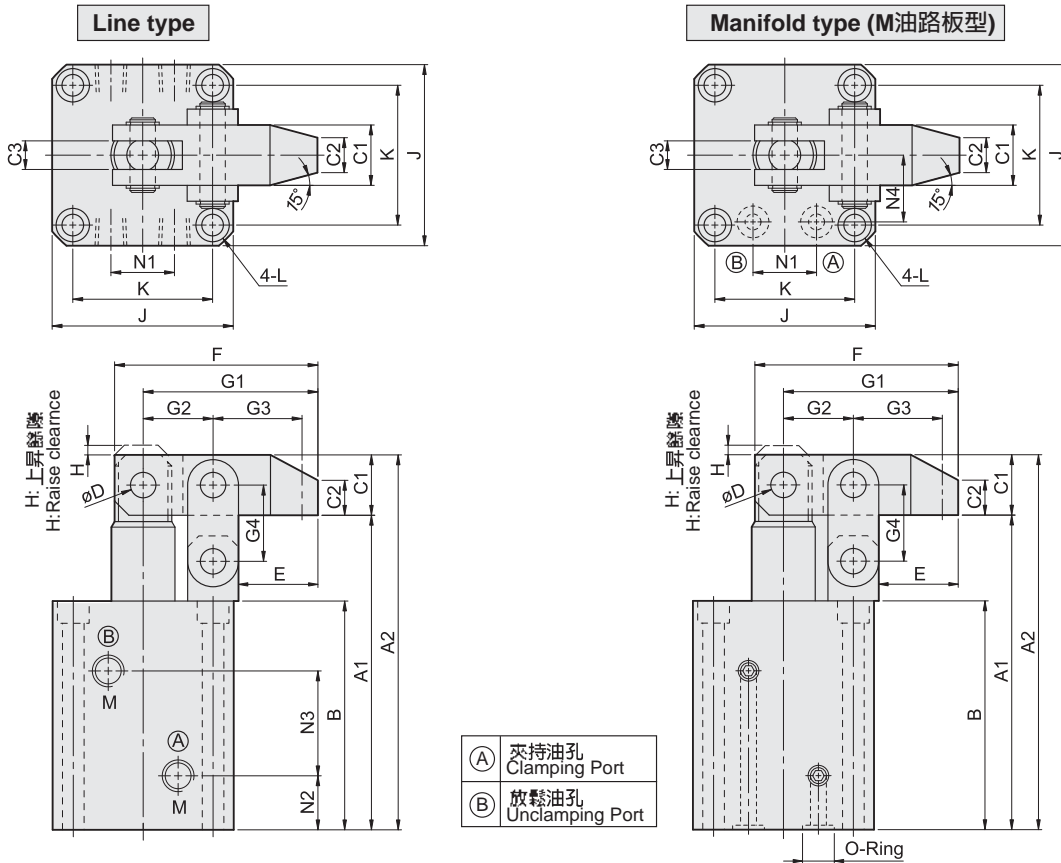
油缸內徑	Bore of cylinder	mm	φ 25	φ 32	φ 40	φ 50	φ 63
活塞桿徑	Piston rod diameter	mm	φ 18	φ 20	φ 22.4	φ 28	φ 35
總行程	Total stroke	mm	25	25	30	34	40
受壓面積 拉入/推出	Pressure area pull/push	cm <sup>2</sup>	2.37 / 4.91	4.9 / 8.04	8.63 / 12.57	13.47 / 19.63	21.55 / 31.17
理論夾持力	Theoretical clamping	30kg/cm <sup>2</sup>	116	190	288	453	701
使用流體	Fluid	已濾清之標準液壓油 Filtered hydraulic oil					
最大操作壓力	Max operation pressure	70 kg/cm <sup>2</sup>					
操作壓力範圍	Operation pressure range	5-50 kg/cm <sup>2</sup>					
動作方式	Acting type	複動式 Double acting					

## 訂購標示法 Ordering Code





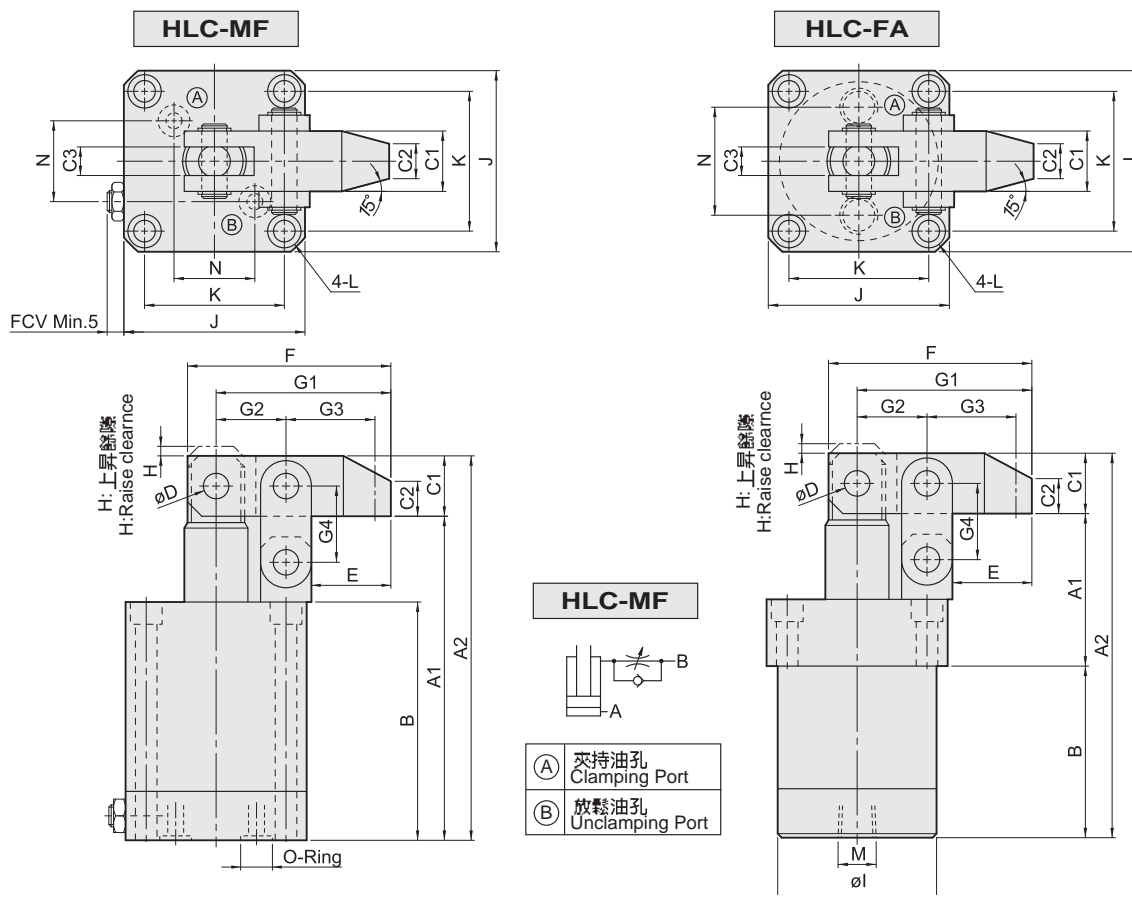
# 5110# HLC 槓桿式油壓缸 Hydraulic lever-type Cylinder



Item	Model	HLC-25 HLC-M25	HLC-32 HLC-M32	HLC-40 HLC-M40	HLC-50 HLC-M50	HLC-63 HLC-M63
A1		103	112	122	137	155
A2		122	131	144.2	162.4	186.8
B		76	85	90	100	111
C1		φ19	φ19	φ22.2	φ25.4	φ31.8
C2		11	11	13	15	19
C3		9	9	10	11	15
D		φ8	φ8	φ10	φ12	φ15
E		25	25	30	35.5	43
F		64	64	77	90	110
G1		55	55	66	77	94
G2		22	22	26	30	36
G3		28	28	34	39	48
G4		24	24	29	33	39
H		3	3	4	4	4
J		55	57	69	75	96
K		42	44	52	58	75
L		φ6.8-φ10.5x6.5D.	φ6.8-φ10.5x6.5D.	φ9-φ14x9D.	φ9-φ14x9D.	φ11-φ18x11D.
M		PT1/8	PT1/8	PT1/4	PT1/4	PT1/4
N1		18	22	26	32	38
N2		17	19	19	21.5	22
N3		33	38	40	45	52
N4		20	22	26	30	38
O-Ring		P7	P7	P8	P8	P9



**5111# HLC 槓桿式油壓缸 MF 油路板附調速/FA 法蘭型**  
**Manifold with flow control / Flange type**  
**Hydraulic lever-type Cylinder**



Item	Model	HLC-MF-25	HLC-MF-32	HLC-MF-40	HLC-MF-50	HLC-FA-25	HLC-FA-32	HLC-FA-40	HLC-FA-50
A1		112	115	130	145	49	52	57	67
A2		131	134	152.2	170.4	131	134	152.2	170.4
B		85	88	98	108	63	63	73	78
C1		φ19	φ19	φ22.2	φ25.4	φ19	φ19	φ22.2	φ25.4
C2		11	11	13	15	11	11	13	15
C3		9	9	10	11	9	9	10	11
D		φ8	φ8	φ10	φ12	φ8	φ8	φ10	φ12
E		25	25	30	35.5	25	25	30	35.5
F		64	64	77	90	64	64	77	90
G1		55	55	66	77	55	55	66	77
G2		22	22	26	30	22	22	26	30
G3		28	28	34	39	28	28	34	39
G4		24	24	29	33	24	24	29	33
H		3	3	4	4	3	3	4	4
I		-	-	-	-	φ45	φ50	φ58	φ68
J		55	57	69	75	55	57	69	75
K		42	44	52	58	42	44	52	58
L		φ6.8-φ10.5x6.5D.		φ9-φ14x9D.		φ6.8-φ10.5x6.5D.		φ9-φ14x9D.	
M		-	-	-	-	PT1/8	PT1/8	PT1/4	PT1/4
N		19	21	23	28	25	32	40	50
O-Ring		P7	P7	P9	P9	-	-	-	-



## 5112# SP 油壓支撐缸 頂持缸 Hydraulic Supporting Cylinder

**SP高壓支撐缸**  
High pressure supporting  
cylinder  
Rod:  $\phi 16-\phi 25\text{mm}$   
Pmax:  $500\text{kg/cm}^2$

Type A Type B



### 產品簡介

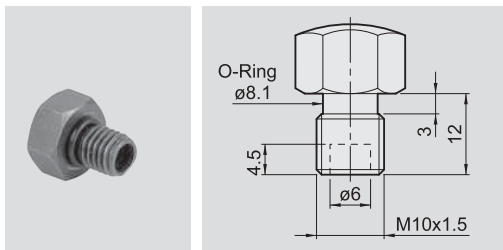
- 油壓支撐缸使用於機械加工時，減少振動，防止變形，以及吸收切削力，提升加工精度與品質。
- 油壓缸採用進口油封及零件，耐高壓，確保品質與使用壽命。
- 操作時充油速度不可太快，以避免接觸工件時，頂桿撞擊工件。
- SP-16螺柱式體積小，使用於夾具上，可在最小空間中排列使用。
- LSP-16低壓支撐缸，使用於低油壓系統，操作壓力  $50\text{kg/cm}^2$  以內即可獲得高壓之頂持力量。
- SP-AH空油兩用型支撐缸，適用於純空壓系統或低油壓之夾治具低壓動力源即可獲得支撐力量。

### 型式簡介

- A型 彈簧頂出型，頂桿伸出於最高頂出位置，工件接觸頂桿時由彈簧控制接觸力量，油壓操作充油將心軸鎖緊，而產生支撐力。
- B型 油壓頂出型，頂桿於最低位置，由油壓操作充油時頂出，並以彈簧控制接觸工件力量，油壓持續加壓將心軸鎖緊而產生支撐力。

### 注意事項

- SP-16及LSP-16頂桿螺帽，可依實際需要，參考下圖製作更換，頸部有一O型環為頂桿中心孔密封用，仍需加工裝配O型環，不得隨意丟棄。
- LSP-16如與其他治具用單動油壓缸，使用於同一套治具時，支撐缸迴路需單獨控制。



### Product Introduction

- The hydraulic supporting cylinder is normally applied for machining, which may reduce vibration, prevent deformation, absorb cutting force while upgrading machining accuracy and quality.
- The hydraulic cylinder employs imported oil seal and parts to resist high pressure, and ensure quality dependability and long service life.
- When operating the supporting cylinder, make sure do not exceed the normal oil feeding speed to avoid the supporting bar bumping against workpiece when it contacts workpiece.
- The SP-16 screw type cylinder compact construction permits several units operated for clamping in a small space.
- The LSP-16 low pressure supporting cylinder achieves a high pressure supporting capability, hydraulic system and with in  $50\text{kg/cm}^2$  of operation pressure.
- The SP-AH series air/hydraulic supporting cylinder is designed for jig and fixture operated by air system or low pressure hydraulic system. It provides proper support capability.

### Model Identification

- A Type: A spring ejecting type. The supporting bar is located at the highest position. The spring controls contact force when the workpiece is contacting the supporting bar. The hydraulic power actuates oil feeding for tightening the shaft, producing a supporting force.
- B Type: A hydraulic ejecting type. The supporting bar is located at the lowest position. The hydraulic power actuates oil feeding for ejecting. The spring controls contact force against the workpiece. The hydraulic power then tightens the shaft to produce a supporting force.

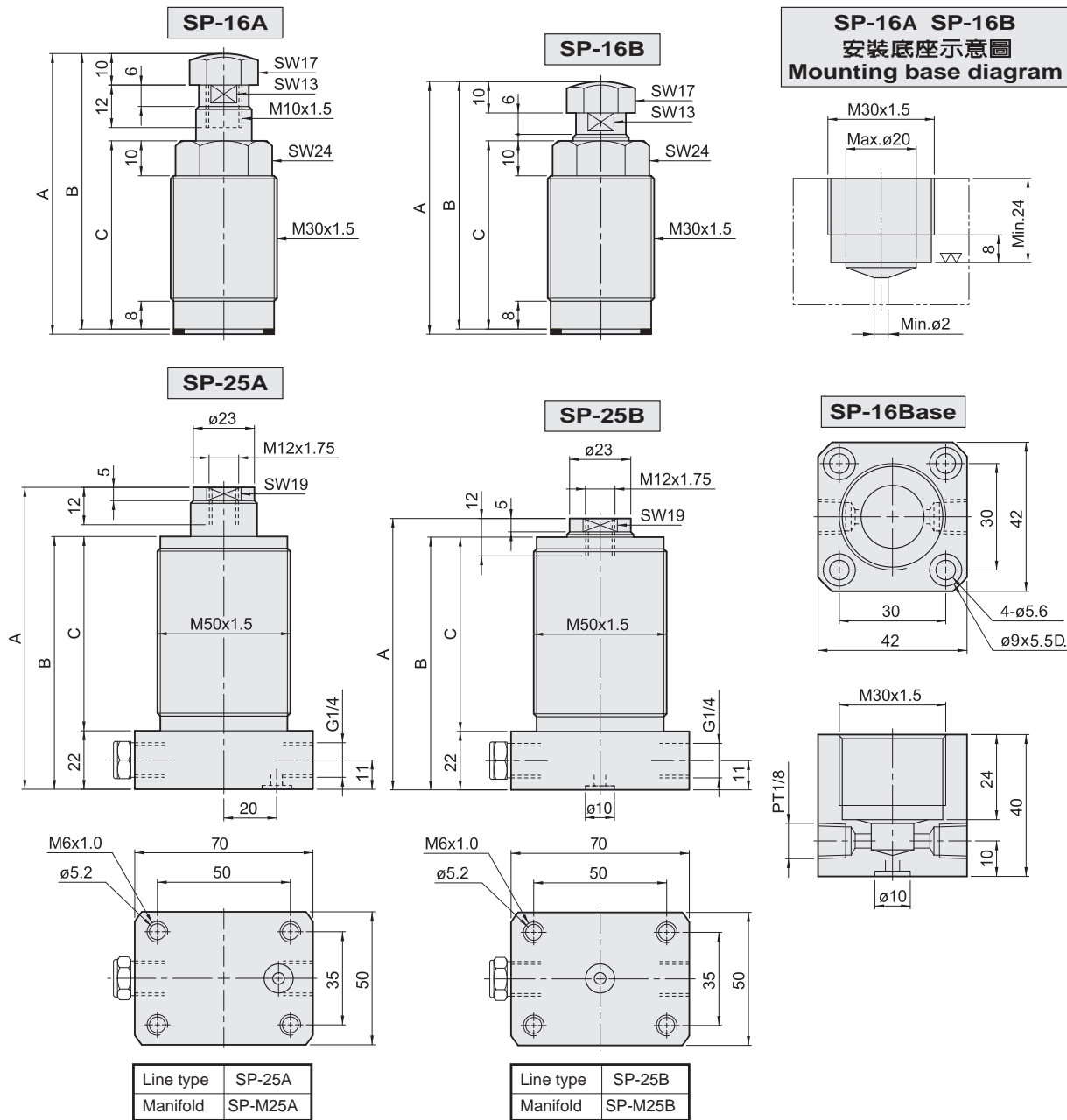
### Notice

- The supporting nut on the SP-16 and LSP-16 can be replaced as shown on the figure right. An O ring provided on the neck is used for sealing the center hole of supporting bar. The O ring must be fitted, which should not be thrown away.
- When the LSP-16 uses the same single acting hydraulic cylinder with other jigs, the circuit for the supporting bar should be controlled individually when applying for the same jig.





# 5112# SP 高壓支撐缸 High Pressure Supporting Cylinder



Item	Model	SP-16A1	SP-16A2	SP-16B1	SP-16B2	SP-25A	SP-25B
頂桿直徑 Rod size	mm	φ 16				φ 25	
頂桿行程 Rod stroke	mm	8				12	
最小操作壓力 Min. pressure		100Kg/cm <sup>2</sup>					
頂桿接觸工件力量 Rod force of touching work-piece		Min=0.8Kg Max=1.3Kg		Min=1Kg Max=2.3Kg		Min=3Kg Max=5Kg	
理論支撐力 Supporting force	500Kg/cm <sup>2</sup>	650Kg	950Kg	650Kg	950Kg	2000Kg	
	A mm	80.5	90.5	72.5	82.5	113	101
	B mm	79	89	71	81	94	94
	C mm	54	64	54	64	72	72

# 5113# TC 螺栓式單動油壓缸

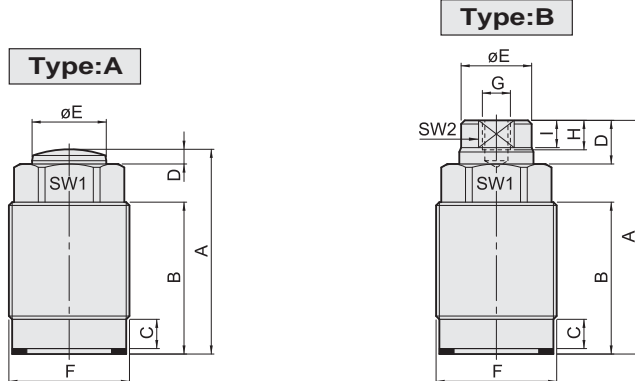
## Threaded-Body Single Acting Hydraulic Cylinder

### 產品簡介

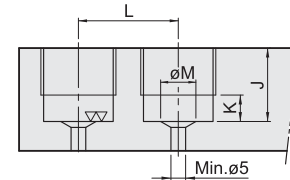
- 螺栓式單動油壓缸採用進口油封及零件，高壓夾持中保持長時間不漏油。
- 螺栓式單動油壓缸體積小，使用於夾具上，能在最小空間中排列使用。
- 此型式油壓缸使用於頂出場合，彈簧退回，無法使用於拉式場合。
- 安裝時頂桿與工件接觸角度請勿大於10°。
- 缸體底部需置放1只鎖緊防漏墊圈。

### Product Introduction

- The threaded body single acting hydraulic cylinder employs imported oil seal and parts to assure quality dependability, which minimizes oil leakage. No oil leakage during high pressure clamping for a long time.
- Compact construction permits several units operated for clamping in a small space.
- This type of hydraulic cylinder is used for ejecting with return by spring, which can not be used for pulling application.
- When installing, keep the contact angle between the rod and workpiece no larger than 10°.
- A leak-proof gasket is required to place under the bottom of cylinder barrel.



安裝底座示意圖  
Mounting base diagram



Item	Model	TC-12A	TC-16A	TC-20A	TC-25A	TC-12B	TC-16B	TC-20B	TC-25B
頂桿直徑 Rod size	mm	12	16	20	25	12	16	20	25
頂桿行程 Rod stroke	mm	10	12	15	16	10	12	15	16
理論支撐力 Supporting force	100Kg/cm <sup>2</sup>	110	200	300	490	110	200	300	490
	500Kg/cm <sup>2</sup>	570	1000	1570	2460	570	1000	1570	2460
彈簧回復力量 Spring restoring force	Min Kg	2.5	5	7	12	2.5	5	7	12
最小操作壓力 Min. pressure	Kg/cm <sup>2</sup>	10	10	10	10	10	10	10	10
需油量 Oil needed	cc/10mm stroke	1.13	2.01	3.14	4.91	1.13	2.01	3.14	4.91
A		38	46.5	56	59.5	45	52.5	65.5	68.5
B		25	33	42	44.5	25	33	42	44.5
C		7	8	8	11	7	8	8	11
D		3	3.5	4	5	10	9.5	13.5	14
E		φ12	φ16	φ20	φ25	φ11	φ15	φ19	φ23
F		M22×1.5	M26×1.5	M30×1.5	M38×1.5	M22×1.5	M26×1.5	M30×1.5	M38×1.5
G		-	-	-	-	M6×1.0	M6×1.0	M8×1.25	M8×1.25
H		-	-	-	-	6	6	8	8
I		-	-	-	-	6.5	5.5	6	7
J	Min/Max	16/24	20/32	24/41	28/44	16/24	20/32	24/41	28/44
K	Max	8	9	9	11	8	9	9	11
L	Min	31	34	40	52	31	34	40	52
M	Min/Max	9/12	12/16	16/24	18/25	9/12	12/16	16/24	18/25
SW1		17	22	24	32	17	22	24	32
SW2		-	-	-	-	10	13	17	19

# 5114# HTB 薄型油壓缸 Hydraulic thin-type Cylinder

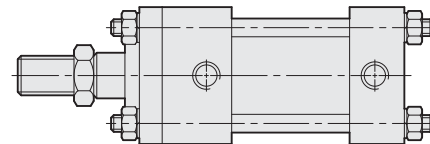
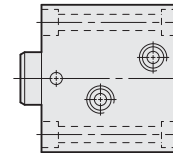
## 產品簡介

- 體積小，節省空間，安裝空間受限制的最佳選擇。
- 標準化規格，直接安裝，不需其它配件，降低成本。
- 缸體材質採用機械構造用炭素鋼，內壁特殊加工處理，表面光滑，使用壽命長。
- 軸向，側向油路板型，免配管提升整體美觀。

## Product Introduction

- Compact construction for space saving. Ideal for application in a restricted space.
- Standardized specifications. Direct installation without need of any further accessories for saving cost.
- The cylinder barrel is manufactured from structural carbon steel. Internal wall is specially treated, featuring maximum smoothness and long service life.
- Axial and side manifold type eliminate the use of piping for upgrading appearance elegance.

傳統油缸與薄型缸總長度之比較  
A comparison of length between the traditional hydraulic cylinder and thin type cylinder.



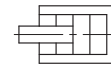
## 特性資料 Specifications

"安裝型式 Installation"	軸向 Axial	SD單軸；SW雙軸 Single end rod SD；Double end rod SW
	側向 Side	LA單軸；LW雙軸 Single end rod LA；Double end rod LW
操作壓力範圍	Operation pressure range	5-140 kg/cm <sup>2</sup>
使用速度範圍	Operation speed range	8-100 mm/sec
使用溫度範圍	Operation temperature range	-10~ + 60°C
使用流體	Fluid	已濾清之標準液壓油 Filtered hydraulic oil
動作方式	Acting type	複動式 Double acting
油缸本體材質	Material of cylinder barrel	炭素鋼 Carbon steel

## 理論出力表 Clamping force

F1: 推出 Push out ←

F2: 拉入 Pull in →



UNIT:kg

油缸內徑 Bore of cylinder (mm)	活塞桿徑 Piston-rod (mm)	受壓面積 Pressure area (cm <sup>2</sup> )		操作壓力 Operation pressure (kg/cm <sup>2</sup> )									
				10		35		70		100		140	
		F1	F2	F1	F2	F1	F2	F1	F2	F1	F2	F1	F2
φ 20	φ 12	3.14	2.01	31	20	110	71	220	141	314	201	440	281
φ 25	φ 14	4.91	3.37	49	34	172	118	344	236	491	337	687	472
φ 32	φ 20	8.04	4.9	80	49	281	172	563	343	804	490	1126	686
φ 40	φ 25	12.57	7.66	126	77	440	268	880	536	1257	766	1760	1072
φ 50	φ 30	19.64	12.57	196	126	687	440	1375	880	1964	1257	2750	1760
φ 63	φ 35	31.17	21.55	312	216	1091	754	2182	1509	3117	2155	4364	3017
φ 80	φ 45	50.27	34.37	503	344	1759	1203	3519	2406	5027	3437	7038	4812

5115# HTB 薄型油壓缸  
Hydraulic thin-type Cylinder

SD 軸向安裝型(單軸)  $\phi 20-\phi 80$   
SD Axial Mounting Type (Single End Rod)



SW 軸向安裝型(雙軸)  $\phi 32-\phi 80$   
SW Axial Mounting Type (Double End Rod)

LA 側向安裝型(單軸)  $\phi 32-\phi 63$   
LA Side Mounting Type (Single End Rod)



LW 側向安裝型(雙軸)  $\phi 32-\phi 63$   
LW Side Mounting Type (Double End Rod)

SDM-A 軸向前油路板型  $\phi 20-\phi 80$   
SDM-A Axial Front Manifold Type



SDM-B 軸向後油路板型  $\phi 20-\phi 80$   
SDM-B Axial Back manifold Type

LAM 側向油路板型(單軸)  $\phi 32-\phi 63$   
LAM Side Manifold Type (Single End Rod)



LWM 側向油路板型(雙軸)  $\phi 32-\phi 63$   
LWM Side manifold Type (Double End Rod)

價格表 SDMA, SDMB, SW, LW, LAM, LWM, 價格另議

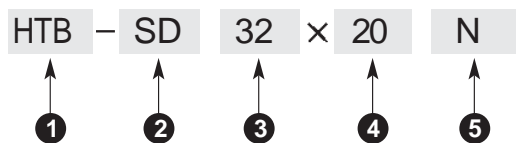
Stroke	Type Bore	SD		SD				LA				LAM LWM			
		$\phi 20$	$\phi 25$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 80$	$\phi 32$	$\phi 40$	$\phi 50$	$\phi 63$	$\phi 32$	$\phi 40$	$\phi 50$
5												--	--	--	--
10												•	•	•	•
15												--	--	--	--
20												•	•	•	•
25												--	--	--	--
30												•	•	•	•
40												•	•	•	•
50												•	•	•	•





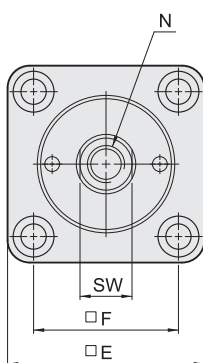
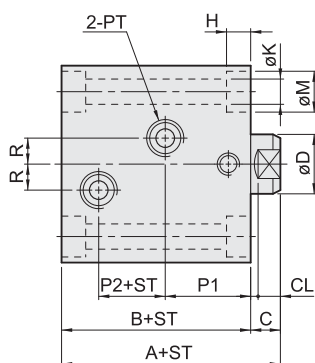
# 5116# HTB 薄型油壓缸 SD.SW Hydraulic thin-type Cylinder - SD.SW

## 訂購標示法 Ordering Code

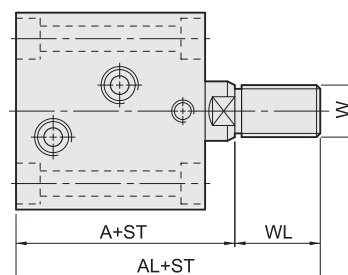


①	系列別 Series	HTB	
②	安裝型式 Mounting type	SD	軸向單軸 Single end rod type
		SW	軸向雙軸 Double end rod type
③	油缸內徑 Bore of cylinder	ø20. ø25. ø32. ø40. ø50. ø63. ø80	
④	標準行程 Standard stroke	請參考行程規格表 Please refer to the stroke specification	
⑤	軸端型式 Rod end type	內牙N: Female thread N 外牙W: Male thread W	

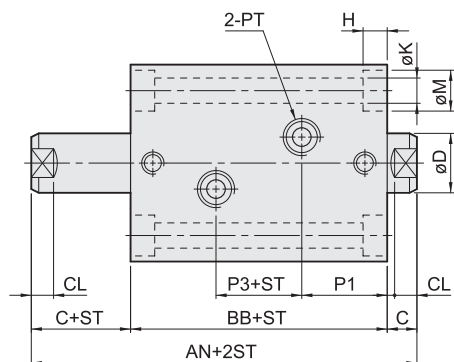
**SD-N**



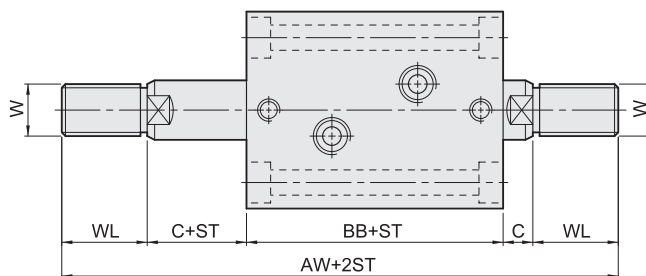
**SD-W**



**SW-N**



**SW-W**



**ST=Stroke**

## Dimensional table

ø20,ø25右列行程之本體長度B尺寸相同 (5,10) (15,20) (25,30)  
ø20,ø25 The length "B" of cylinder body is the same of the stroke:(5,10) (15,20) (25,30)

Bore	A	AL	AN	AW	B	BB	C	CL	D	SW	E	F	H	K	M	N	W	WL	P1	P2	P3	R	PT
ø20	51	71	-	-	43	-	8	6	12	10	42	30	5.5	5.6	9	M8x1.25x12D.	M10x1.25	20	22.5	11	-	5	1/8
ø25	53	75	-	-	45	-	8	6	14	12	48	36	5.5	5.6	9	M10x1.5x15D.	M12x1.25	22	23	12	-	5	1/8
ø32	64	89	89	139	54	69	10	7	20	17	62	47	5.6	6.8	11	M12x1.75x15D.	M16x1.5	25	28	14	13	10	1/4
ø40	65	95	90	150	55	70	10	7	25	22	70	52	9	9	14	M16x2.0x20D.	M22x1.5	30	28	15	14	10	1/4
ø50	71	106	97	167	60	75	11	8	30	27	80	58	11	11	18	M20x2.5x25D.	M26x1.5	35	29.5	18	16	10	1/4
ø63	80	120	108	188	67	82	13	10	35	32	94	69	13	13	20	M27x3.0x35D.	M30x1.5	40	31	20	20	10	3/8
ø80	95	140	127	217	78	93	17	14	45	41	114	86	15	15	22	M30x3.5x35D.	M39x1.5	45	33	27	27	15	3/8





# 5116# HTB 油路板型油壓缸 SDMA. SDMB Manifold Type Hydraulic Cylinder - SDMA. SDMB

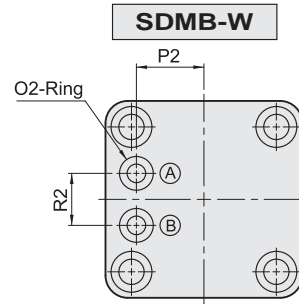
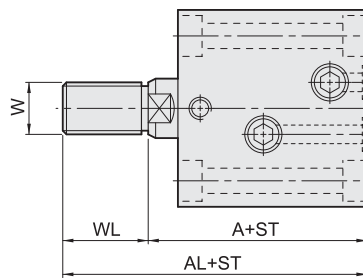
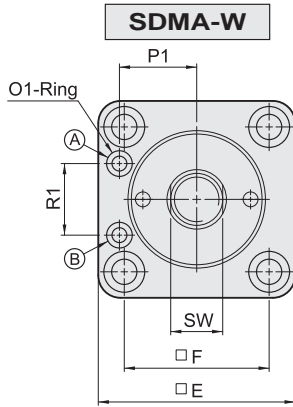
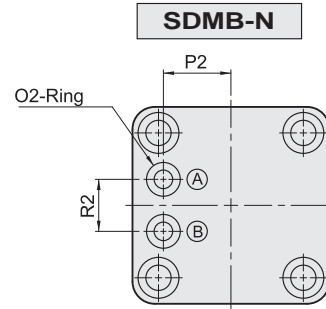
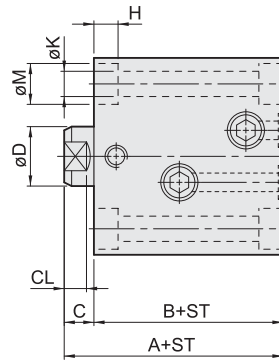
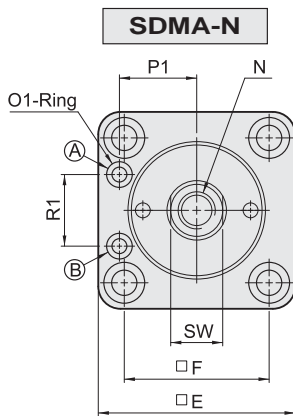
## 訂購標示法 Ordering Code

HTB - SDMA 32 × 20 N

↑            ↑            ↑            ↑            ↑

1            2            3            4            5

1	系列別 Series	HTB	
2	安裝型式 Mounting type	SDMA	軸向前油路板型 Axial front manifold type
		SDMB	軸向後油路板型 Axial back manifold type
3	油缸內徑 Bore of cylinder	ø20 .ø25 .ø32. ø40. ø50. ø63. ø80	
4	標準行程 Standard stroke	請參考行程規格表 Please refer to the stroke specification	
5	軸端型式 Rod end type	內牙 N: Female thread N 外牙 W: Male thread W	



(A) 推出油孔  
Push out

(B) 拉入油孔  
Pull in

ST=Stroke

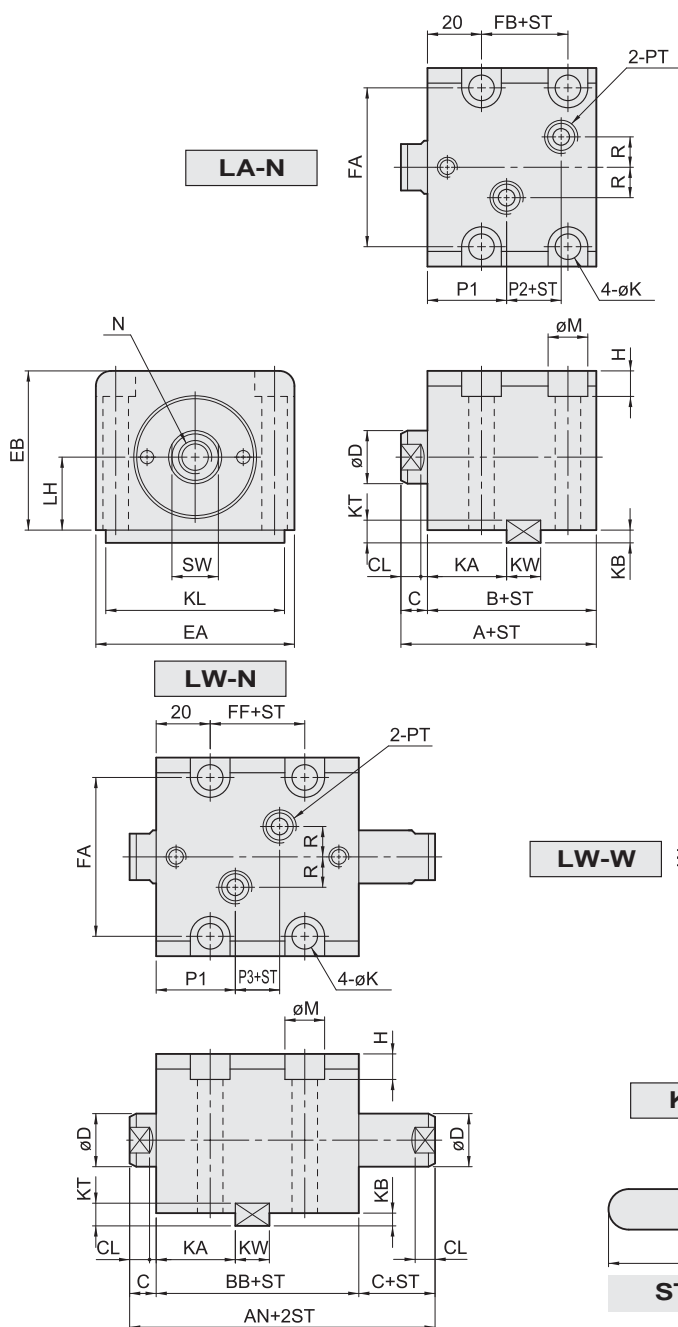
## Dimensional table

ø20.ø25右列行程之本體長度B尺寸相同 (5,10) (15,20) (25,30)  
ø20.ø25 The length "B" of cylinder body is the same of the stroke:(5,10) (15,20) (25,30)

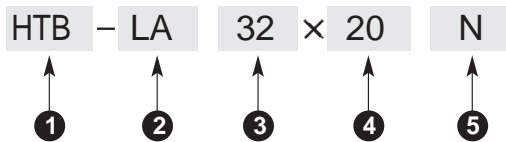
Bore	A	AL	B	C	CL	D	SW	E	F	H	K	M	N	W	WL	SDMA			SDMB		
																P1	R1	O1	P2	R2	O2
ø20	51	71	43	8	6	12	10	42	30	5.5	5.6	9	M8x1.25x12D.	M10x1.25	20	16.5	13	P4	13	11	P5
ø25	53	75	45	8	6	14	12	48	36	5.5	5.6	9	M10x1.5x15D.	M12x1.25	22	19.5	18	P4	15	13	P7
ø32	64	89	54	10	7	20	17	62	47	6.5	6.8	11	M12x1.75x15D.	M16x1.5	25	24	24	P6	20	20	P9
ø40	65	95	55	10	7	25	22	70	52	9	9	14	M16x2.0x20D.	M22x1.5	30	27	26	P6	24	20	P9
ø50	71	106	60	11	8	30	27	80	58	11	11	18	M20x2.5x25D.	M26x1.5	35	32	27	P8	29	20	P9
ø63	80	120	67	13	10	35	32	94	69	13	13	20	M27x3.0x35D.	M30x1.5	40	38	35	P8	35	26	P11
ø80	95	140	78	17	14	45	41	114	86	15	15	22	M30x3.5x35D.	M39x1.5	45	47	45	P11	44	30	P11

# 5117# HTB 薄型油壓缸 LA. LW

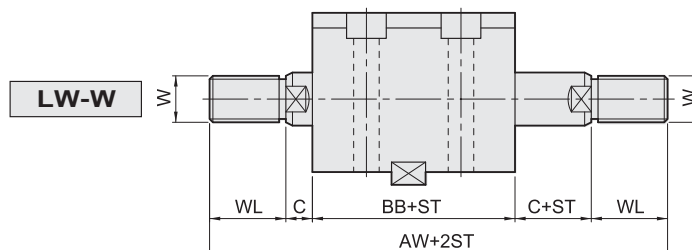
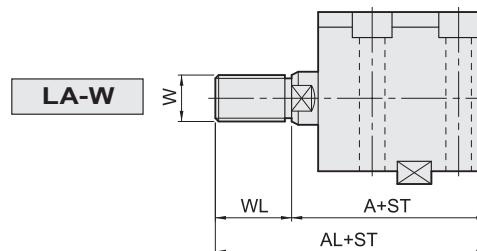
## Hydraulic thin-type Cylinder - LA. LW



### 訂購標示法 Ordering Code



1	系列別 Series	HTB	
2	安裝型式 Mounting type	LA 側向單軸 Single end rod type	LW 側向雙軸 Double end rod type
3	油缸內徑 Bore of cylinder	ø32. ø40. ø50. ø63.	
4	標準行程 Standard stroke	10. 20. 30. 40. 50	
5	軸端型式 Rod end type	內牙N: Female thread N 外牙W: Male thread W	



### Key size

UNIT:mm

Bore	KW	KT	KL	KA	KB
ø32	12	8	63	28	4.5
ø40	12	8	70	28	4.5
ø50	14	9	80	29	5
ø63	16	10	100	31	5.5

### Dimensional table

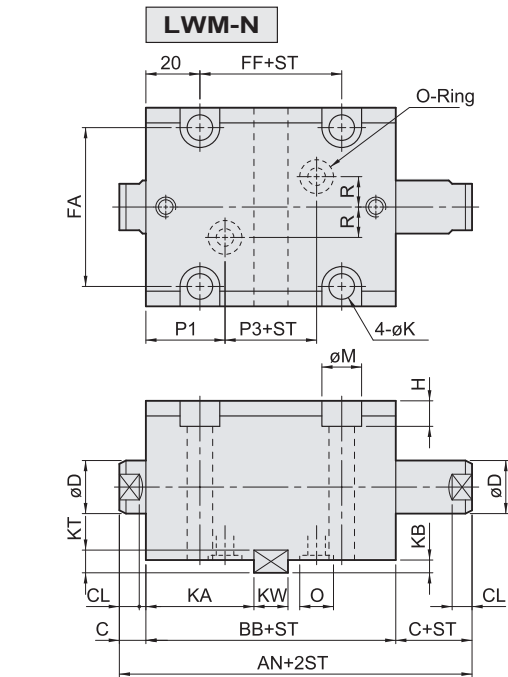
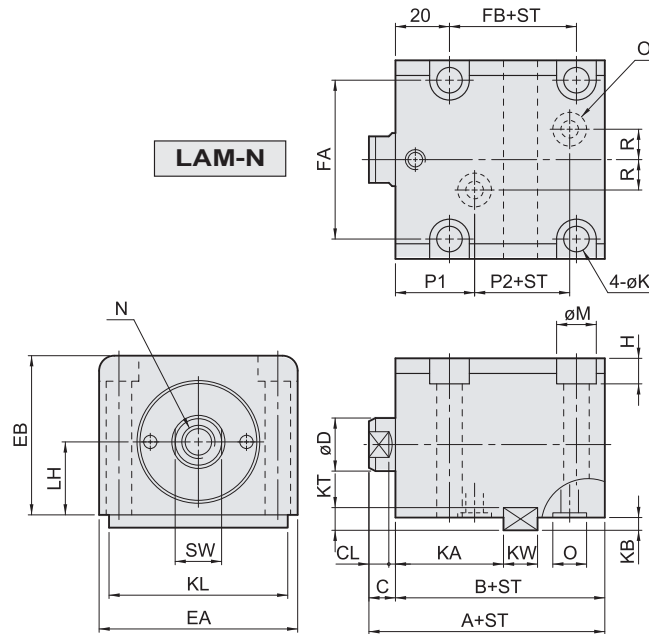
右列行程之本體長度B及BB尺寸相同 (5,10) (15,20) (25,30) (35,40) (45,50)

The length "B" and "BB" of cylinder body is the same of the stroke: (5,10) (15,20) (25,30) (35,40) (45,50)

Bore	A	AL	AN	AW	B	BB	C	CL	D	SW	EA	EB	LH	FA	FB	FF	H	K	M	N	W	WL	P1	P2	P3	R	PT
ø32	64	89	89	139	54	69	10	7	20	17	70	56	25	56	24	32	9	9	14	M12x1.75x15D.	M16x1.5	25	28	14	13	10	1/4
ø40	65	95	90	150	55	70	10	7	25	22	80	64	29	62	23	32	11	11	18	M16x2.0x20D.	M22x1.5	30	28	15	14	10	1/4
ø50	71	106	97	167	60	75	11	8	30	27	94	74	34	74	27	35	13	13	20	M20x2.5x25D.	M26x1.5	35	29.5	18	16	10	1/4
ø63	80	120	108	188	67	82	13	10	35	32	114	89	42	90	32	42	15	15	22	M27x3.0x35D.	M30x1.5	40	31	20	20	10	3/8

# 5118# HTB 油路板型油壓缸 LAM. LWM

## Manifold Type Hydraulic Cylinder - LAM. LWM



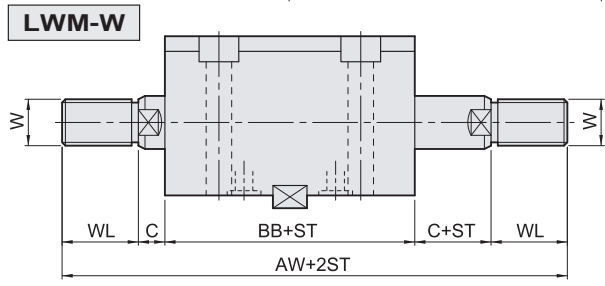
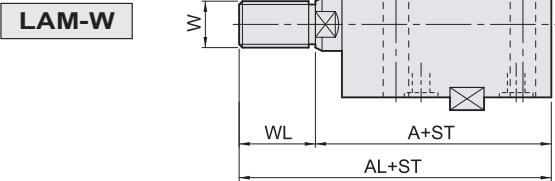
### 訂購標示法 Ordering Code

HTB - LAM 32 × 20 N

1 2 3 4 5

1	系列別 Series	HTB
2	安裝型式 Mounting type	LAM 側向單軸 Single end rod type LWM 側向雙軸 Double end rod type
3	油缸內徑 Bore of cylinder	ø32. ø40. ø50. ø63
4	標準行程 Standard stroke	10. 20. 30. 40. 50
5	軸端型式 Rod end type	內牙: Female thread N 外牙: Male thread W

註行程10mm 無附鍵槽及平鍵。  
Stroke: 10mm without key.



### KEY Key size



ST=Stroke

UNIT:mm

Bore	KW	KT	KL	KA	KB
ø32	12	8	63	38	4.5
ø40	12	8	70	38	4.5
ø50	14	9	80	40	5
ø63	16	10	100	42	5.5

### Dimensional table

右列行程之本體長度B及BB尺寸相同 (5, 10)(15, 20)(25, 30)(35, 40)(45, 50)  
The length "B" and "BB" of cylinder body is the same of the stroke: (5, 10)(15, 20) (25, 30) (35, 40) (45, 50)

Bore	A	AL	AN	AW	B	BB	C	CL	D	SW	EA	EB	LH	FA	FB	FF	H	K	M	N	W	WL	P1	P2	P3	R	O
ø32	64	89	89	139	54	69	10	7	20	17	70	56	25	56	24	32	9	9	14	M12x1.75x15D.	M16x1.5	25	28	14	13	10	P9
ø40	65	95	90	150	55	70	10	7	25	22	80	64	29	62	23	32	11	11	18	M16x2.0x20D.	M22x1.5	30	28	15	14	10	P9
ø50	71	106	97	167	60	75	11	8	30	27	94	74	34	74	27	35	13	13	20	M20x2.5x25D.	M26x1.5	35	29.5	18	16	10	P11
ø63	80	120	108	188	67	82	13	10	35	32	114	89	42	90	32	42	15	15	22	M27x3.0x35D.	M30x1.5	40	31	20	20	10	P11

## 5119# HB 油壓增壓器 TC. SP 用低壓轉高壓 Hydraulic Booster

### 產品簡介

- 本產品機構內附油壓順序閥，預壓式特性操作時可將作動缸充滿油，達到預先設定之壓力順序閥動作，即可獲得倍數增壓。
- 適用於油壓專用機，MC 治具低壓迴路中，部份油壓缸需高壓操作之場合，僅需一只電磁閥或安裝於管路中，即可操作HB增壓器，可將低油壓自動轉換成高油壓，獲得高壓夾持。

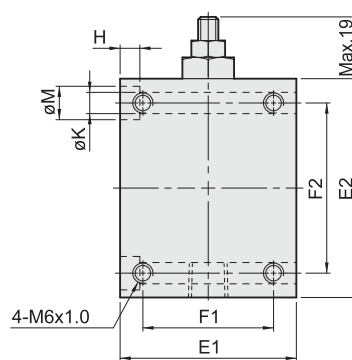
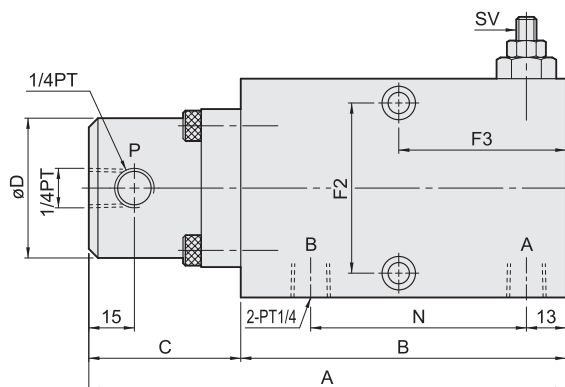


### Product Introduction

- A hydraulic sequential valve is attached to the structure of this unit. When operating, it may oil to cylinder and makes it be at the dual pressure and let the sequential valve act, and then it will provide multi-boosting pressure.
- It's fit for hydraulic special purpose machine and MC clamp in low pressure circuit. It needs a solenoid valve installed in the circuit, and then it will be able to operate HB super-charger. The super-charger may be converted automatically from low oil-pressure to high oil-pressure and obtain a high pressure clamping.

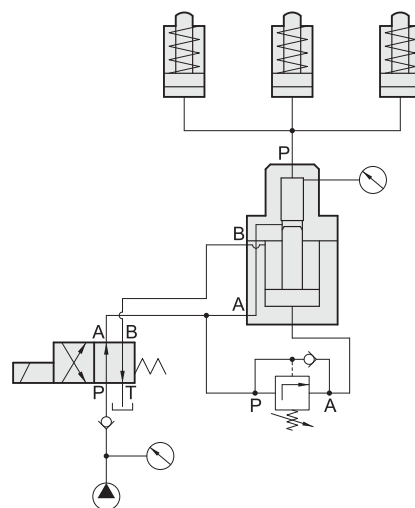


**最高操作壓力50kg/cm<sup>2</sup>  
Max. operation pressure**



### 迴路圖 Circuit diagram

Model	HB-9x6	HB-8x22	HB-5x35	HB-3.8x45
增高倍出 Multiple boost	9	8	5	3.8
高壓吐油量 High pressure output	6cc	22cc	35cc	45cc
A	157		210	
B	107		139	
C	50		71	
D	φ46		φ58	
E1	58		82	
E2	72		100	
F1	43		62	
F2	56		80	
F3	55		70	
H	7		9	
K	φ7		φ9	
M	φ11		φ14	
N	71		96	





# 5120# SV 油壓順序閥 Hydraulic Sequence Valve

## 產品簡介

- 此型式油壓順序閥，特別適用於夾具迴路，由壓力決定油壓缸之順序動作，體積小，耐高壓，安裝於迴路中，不需其他控制，即可得到順序動作確實之效果。
- 本產品提供A: 油路板型B: 配管型兩種型式，可依夾具體設計安裝方式需要作適當選擇。

## Product Introduction

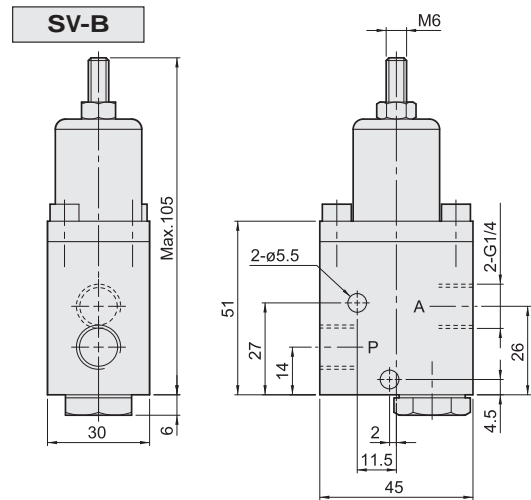
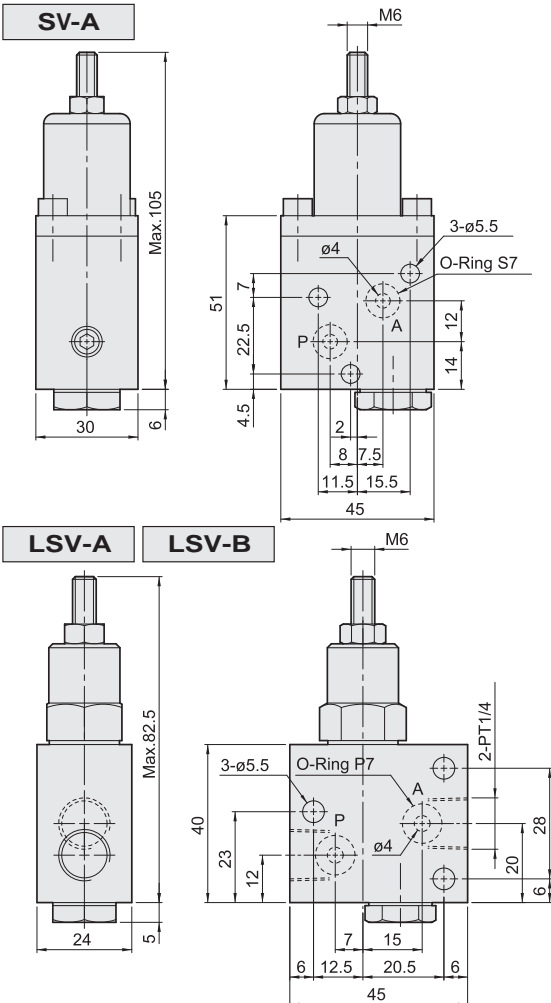
- The series of hydraulic sequence valve is especially ideal for fitting on the circuit of fixture. The hydraulic cylinder motion sequences are decided by the pressure. The sequence valve features compact construction and high pressure resistance. It requires no further control when fitting on the circuit, and provides a positive sequential motion control.
- The series provides two types of mounting type for choice. A type is a manifold mounting type and B type is a line mounting type. You get a flexible choice of mounting types to suit your fixture design.



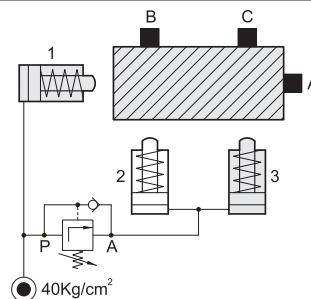
## 型式與壓力調整範圍

### Type and Pressure Range

油路板型	Manifold type	配管式	Line type	價格
LSV-A	10-70Kg/cm <sup>2</sup>	LSV-B	10-70Kg/cm <sup>2</sup>	
SV-A1		SV-B1		
SV-A2	50-350Kg/cm <sup>2</sup>	SV-B2	50-350Kg/cm <sup>2</sup>	



## 迴路圖 Circuit diagram



油壓缸1 將工件推向A。壓力達到SV設定40kg/cm<sup>2</sup>。

油壓缸2、3同時將工件推向B、C，獲得順序夾持動作。

The hydraulic cylinder 1 pushes workpiece to A. The pressure reaches to the setting value 40kg/cm<sup>2</sup> on SV.

The hydraulic cylinders 2 and 3 push workpiece to B and C to provide sequential clamping motion.



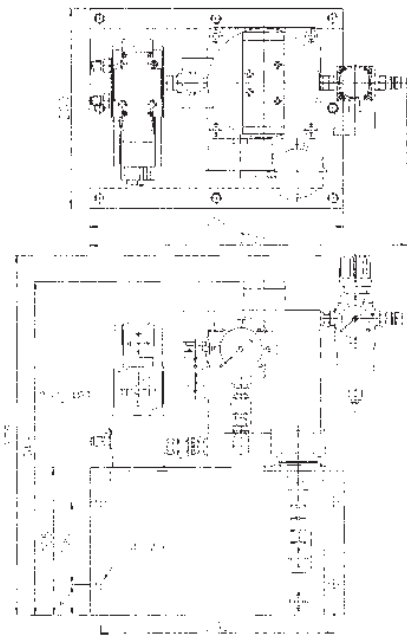
## 5121# 氣動增壓泵浦 Air Drive Booster Pump

- 最大操作壓力 6kg/cm<sup>2</sup> ● Max. pressure: 6kg/cm<sup>2</sup>



1. 利用空氣壓驅動增壓泵浦，輸出油壓壓力，作為油壓缸之動力源，流量大於一般增壓器，連續式增壓，作動缸無增壓行之限制。
2. 以空氣調壓閥調整壓力，達到增壓倍數即停止驅，油壓降時，泵浦將會自動補償，特別適用於長時間油壓夾持，省能源，不產生油溫，經濟方便。
3. A型：安裝ISO規格油路板及電磁閥，適用於單動或複動油壓缸，可依實際需要追加電磁閥。
4. B型：附配管座P.T孔，可連接油壓手動閥操作。
5. 雙泵浦安裝組合可選購增壓比，特別適用於低壓與高壓同時使用之夾治具。

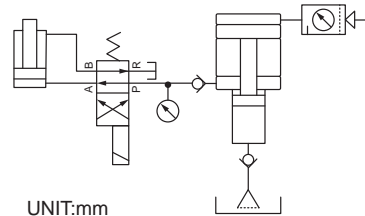
### 外型尺寸 Outer size



### 特色資料 Specification

使用流體 Fluid	已濾清之壓縮空氣 Filtered air			
使用壓力範圍 The range of operation pressure	1-6 kg/cm <sup>2</sup>			
增壓比 Boost pressure rate	6:1	10:1	25:1	44:1
空壓供給 Air pressure supply 5kg/cm <sup>2</sup> 油壓吐出量 Hydraulic fluid expelled l/min	16	10	4.5	2.8
油箱容量 Oil tank capacity	單泵浦 Single pump51,			
使用液壓油 Oil	ISO-VG68			

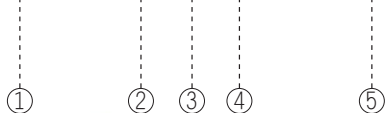
### 迴路圖 Circuit diation



① 系列別 Series	ABP	
② 增壓比 Boost pressure rate	6, 10, 25, 44	
③ 控制型式 Control type	A	ISO規格油路板，電磁閥ISO manifold, magnet valve
	B	配管座P, T孔 Distributing tube seat P.T. port
④ 控制迴路 Control circuit	電磁閥個數 Magnet valve	
⑤ 線圈型式 Coil type	AC110V, AC220V, AC380V, DC12V, DC24V	

### 訂購規格 How to order:

ABP - 10 A 1 X AC110V



Model	增壓比
ABP-6	6:1
ABP-10	10:1
ABP-25	25:1
ABP-44	44:1

## 5122# 美國白馬穩速器 DESCHNER KINECHEK SPEED REGULATOR

- 美國白馬Slimline系列液壓穩速器產品提供了12.7mm, 25.4mm, 50.8mm與76.2mm行程，最高支援5450N推力。KINECHEK專利的雙層起伏式密封膠囊設計，已通過1,000萬次使用的耐久測試，保證不會漏油。
- The SLIMLINE KINECHEK speed regulator available in stroke lengths of 12.7mm, 25.4mm, 50.8mm and 76.2mm; all with a 5450 N maximum capacity. KINECHEK rolling diaphragm seals successfully withstand endurance tests of 10,000,000 cycles without leaking.



### 產品規格 SPECIFICATIONS

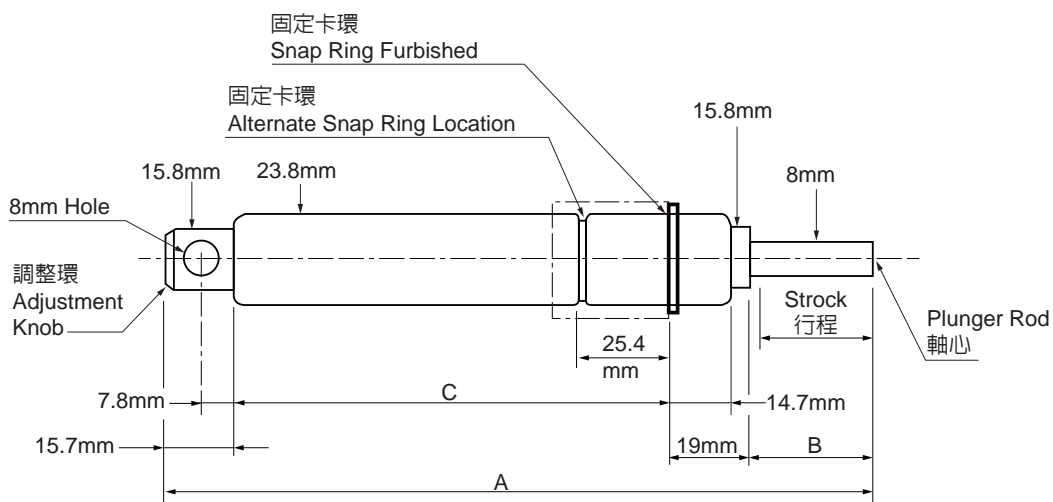
1 Model No. 型號	2 Description 類型	3 Stroke 行程 (mm)	4 Minimum Force 最低推力 (N)	5 Plunger Return Force 軸心回原點推力 (N)	6 Time for Plunger Return 軸心回原點時間 (sec/秒)	7 Time for Full Stroke of Plunger at Slowest Adjustment 全行程最慢速度所花費時間 (sec/秒)		
						4400N Load 推力	2200N Load 推力	440N Load 推力
1001-31-1/2	extra fast	12.7	22.7	18	0.015	0.5	1	5
1003-31-1/2	fast	12.7	22.7	18	0.020	4	9	50
1002-31-1/2	standard	12.7	22.7	18	0.031	8	18	150
1004-31-1/2	slow speed	12.7	22.7	18	0.186	38	90	750
1001-31-1	extra fast	25.4	22.7	18	0.030	1	2	10
1003-31-1	fast	25.4	22.7	18	0.041	8	18	100
1002-31-1	standard	25.4	22.7	18	0.063	15	35	300
1004-31-1	slow speed	25.4	22.7	18	0.378	75	180	1500
1001-31-2	extra fast	50.8	22.7	18	0.052	2	5	20
1003-31-2	fast	50.8	22.7	18	0.070	15	35	200
1002-31-2	standard	50.8	22.7	18	0.106	30	70	600
1004-31-2	slow speed	50.8	22.7	18	0.730	150	180	3000
1001-31-3	extra fast	76.2	22.7	18	0.115	3	7	30
1003-31-3	fast	76.2	22.7	18	0.155	23	55	300
1002-31-3	standard	76.2	22.7	18	0.235	45	105	900
1004-31-3	slow speed	76.2	22.7	18	1.620	225	540	4500



5122# 美國白馬穩速器  
 DESCHNER KINECHEK SPEED REGULATOR

尺寸/重量 DIMENSIONS AND WEIGHTS

Model No.	Stroke	Weight	A	B	C
1__-31-1/2	12.7 mm	0.34 kg	160.8 mm	17.5 mm	108.7 mm
1__-31-1	25.4 mm	0.40 kg	198.9 mm	30.1 mm	134.1 mm
1__-31-2	50.8 mm	0.52 kg	276.1 mm	55.5 mm	185.7 mm
1__-31-3	76.2 mm	0.62 kg	352.3 mm	81.0 mm	236.5 mm

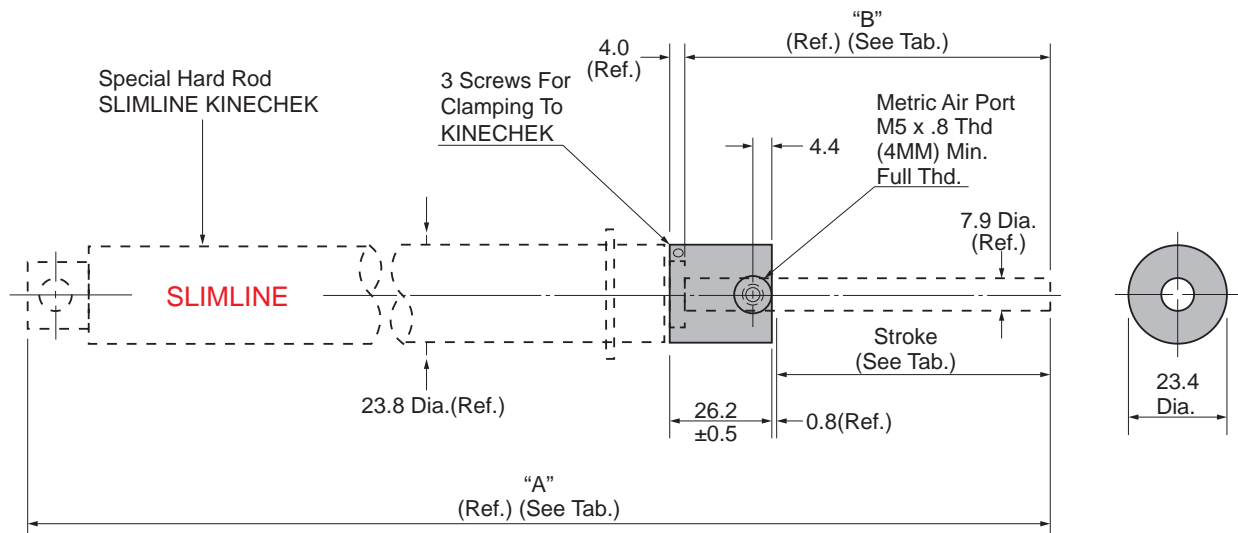


KINECHEK SLIMLINE (MODEL 1\_\_)



## 5123# 美國白馬多段式穩速器 DESCHNER PECKCHEK CONTROLS

- 自動化加工經常須要深孔或堅硬的物體等鑽孔加工，但無法一次完成加工時，就必須分多段鑽孔，為了節省加工時間，PECKCHEK CONTROL 多段式穩速器提供了此類型加工的最佳方案。
- Drilling to a depth of more than three drill diameters often requires peck drilling where the drill is repeatedly withdrawn to remove waste cuttings while being advanced in steps deeper and deeper during each feed movement. KINECHEKs with PECKCHEK CONTROL are designed to operate in this manner.



All dimension in MM. NOTE: Drawings not to scale

### A13031 (FOR 1, 2, 3" SLIMLINE KINECHEKS) PECKCHEK COMPATIBLE SLIMLINE KINECHECKS\*

Part No.	Model No.	Stroke	A	B
A13031	1202U-31-1	25.4mm	217.2mm	48.5mm
	1202U-31-2	50.8mm	294.4mm	73.9mm
	1202U-31-3	76.2mm	370.6mm	99.3mm