SCA 空壓轉角缸

Swing Clamp Air Cylinder

Bore:Φ25–Φ63
Pmax：7kg/cm²

產品簡介
Product Introduction

・本產品適用于量產品零件之專用機及MC治具，提高生產效率最佳幫手。
The Product is ideal for mass production on a special purpose machine and jig on machining center. It will greatly upgrade production efficiency.

・主要功能爲空壓缸作動時，活塞下壓行程中壓板會旋轉到設計的角度，再沿着直綫繼續下壓直到壓板夾緊工件。
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.

・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。
To avoid too fast motion a flow control valve is suggested to connect to the air inler 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.

・壓板須增加長度時，請勿大于原長之1.5倍。
When increasong length of clamping arm is required.be sure do not exceed 1.5 times of the ariginal length.

・缸體材質采用鋁合金，表面硬膜處理，內壁表面光滑，使用壽命長。
The cylinder body is manufactured from aluminum allog.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	Φ25	Φ32	Φ40	Φ50	Φ63
活塞杆徑 Piston rod diameter	mm	Φ14	Φ16	Φ16	Φ20	Φ20
轉角行程 Swing storke	mm	9	11	11	13	13
垂直行程 標準/加長 Clamping stroke std/lner	mm	12	14	14	17	17
受壓面積 拉入/推出 Pressure area pull/push	cm²	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/cm²	20	36	63	99	168

使用流體 Fluid	已濾清之壓縮空氣 Filtered air
最大操作壓力 Max operation pressure	10Kg/cm²
操作壓力範圍 Operation pressure range	1–7Kg/cm²
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 angle0° .45° .60°
作動方式 Acting type	復動式 Double acting

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Swing Clamp Air Cylinder
Bore:Φ25–Φ63
Pmax：7kg/cm²

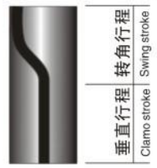
訂購標示法
Ordering Code

SCA - MF 25 S R x 90 - E

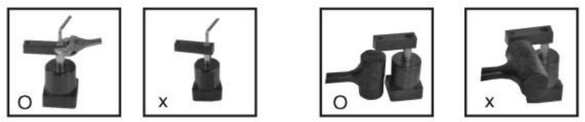
- SCA：系列別 Series
- MF：型式 Type
- 25：氣缸內徑 Bore of Cylinder
  - 25:Φ25
  - 30:Φ32
  - 40:Φ40
  - 50:Φ50
  - 63:Φ63
- S：壓板型式 Clamping arm type
  - S:單邊壓板 S.Single side arm
  - D:雙邊壓板 D.Double side arm
- R：轉角方向 Rotating Direction
  - R:順時針右轉 R:Turn right
  - L:逆時針左轉 L:Turn left
  - N:0° 不旋轉 N:0°No swing
- 90：轉角角度 Rotating Angle
- E：行程加長型 Stroke extensiion Line type

安裝與使用注意事項
Sketch and cautions

垂直行程與轉角行程示意圖
Clamp stroke and swing stroke sketch



夾緊臂鎖與拆卸方式
Clamp arm installation and removing



附注: Remark

・使用本產品前，請仔細閱讀安裝與使用說明。
Please read the installation instructions before use.

・如果您需要加長夾緊臂，請不要大于標準長度的1.5倍。
When extends the clamping arm,do not eaceed 1.5time of standard length.

・請不要在夾緊臂下行時的轉角行程段夾持工件。
Don't clamp the work piece during swong stroke.

・請將您的進氣（液壓）源過濾趕幹淨，以避免損壞缸內密封件。
Use the filtered gas (oil) to avoid the sealpartsfailure.

・您使用的工作壓力請不要超過產品允許工作壓力的最大值。
The operation pressure should not exceed the rated max pressure.

・轉角缸的轉角精度爲±1°。
The angle precision of the swong clamp cylinder is ±1°.

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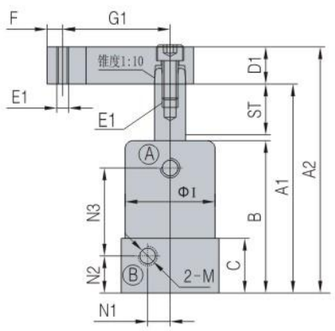
配管型
Line Type

Swing Clamp Air Cylinder

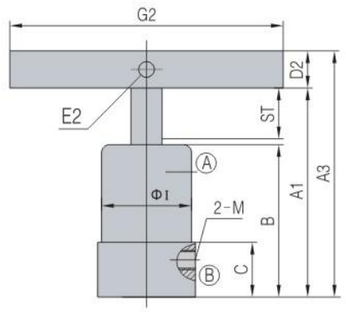
Bore:Φ25–Φ63
Pmax: 7kg/cm²

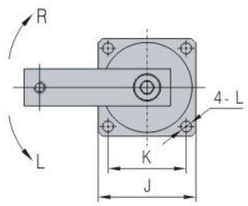
外形尺寸圖

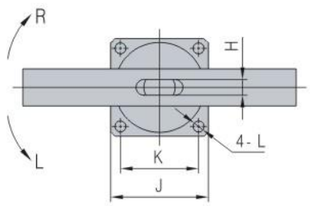
Single side



Double side







A–夾持孔 Clamping port
B–放鬆孔 Unclamping port
圖爲放鬆狀態

尺寸 Dimension / Model 型號	SCA–25	SCA–32		SCA–40		SCA–50		SCA–63	
ST=Stroke/加長	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	90	108	138	108	138	125	158	125	158
A2	(107.3)	(129.5)	(159.5)	(129.5)	(159.5)	(152.4)	(186.4)	(152.4)	(186.4)
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	□15.9	□19		□19		□25.4		□25.4	
D2	---	□19		□19		□22.2		□22.2	
E1	M6*1.0	M8*1.25		M8*1.25		M10*1.5		M10*1.5	
E2	---	Φ8		Φ8		Φ8		Φ8	
F	6	8		8		10		10	
G1	35	55		55		70		70	
G2	---	140		140		160		160	
H	---	9		9		10		10	
ΦI	Φ35	Φ46		Φ55		Φ65		Φ78	
J	38	50		60		70		83	
K	30	40		48		57		67	
L	Φ4.6	Φ5.6		Φ6.8		Φ6.8		Φ9	
M	M5*0.8	RP1/8		RP1/8		RP1/8		RP1/8	
N1	7	11		11.5		17		20	
N2	16.5	19		19		21		21	
N3	39.5	45	60	45	60	53	70	53	70

注：※□表示正方形
※夾緊臂尺寸請參照 → P 96頁

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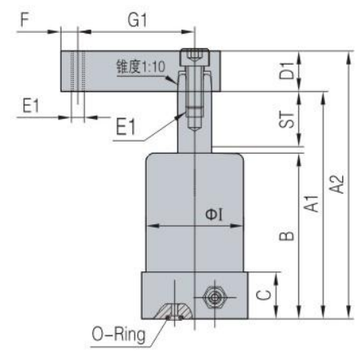
MF:深孔型附調速
Manifold with filw control

Swing Clamp Air Cylinder MF

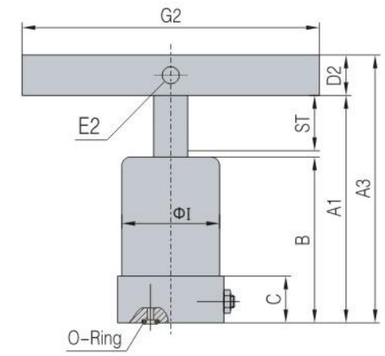
Bore:Φ32–Φ63
Pmax: 7kg/cm²

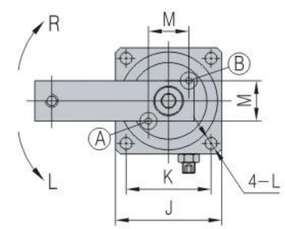
外形尺寸圖

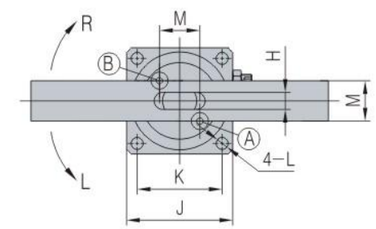
Single side

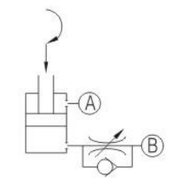


Double side









A–夾持孔 Clamping port
B–放鬆孔 Unclamping port
圖爲放鬆狀態

尺寸 Dimension / Model 型號	SCA–M32 SCA–MF32	SCA–M40 SCA–MF40	SCA–M50 SCA–MF50	SCA–M63 SCA–MF63
ST:Swing/clamping	26(11/15)	26(11/15)	30(13/17)	30(13/17)
A1	108	108	125	125
A2	(128)	(128)	(152.4)	(152.4)
A3	127	127	146.2	146.2
B	78	78	90	90
C	22	22	25	25
D1	□19	□19	□25.4	□25.4
D2	□19	□19	□22.2	□22.2
E1	M8*1.25	M8*1.25	M10*1.5	M10*1.5
E2	Φ8	Φ8	Φ8	Φ8
F	8	8	10	10
G1	55	55	70	70
G2	140	140	160	160
H	9	9	10	10
ΦI	Φ46	Φ55	Φ65	Φ78
J	50	59	70	83
M	19	23	28	32
K	40	48	57	67
L	Φ5.6	Φ6.8	Φ6.8	Φ9
O-Ring	P7	P7	P7	P7

注：※□表示正方形
※夾緊臂尺寸請參照 → P 96頁

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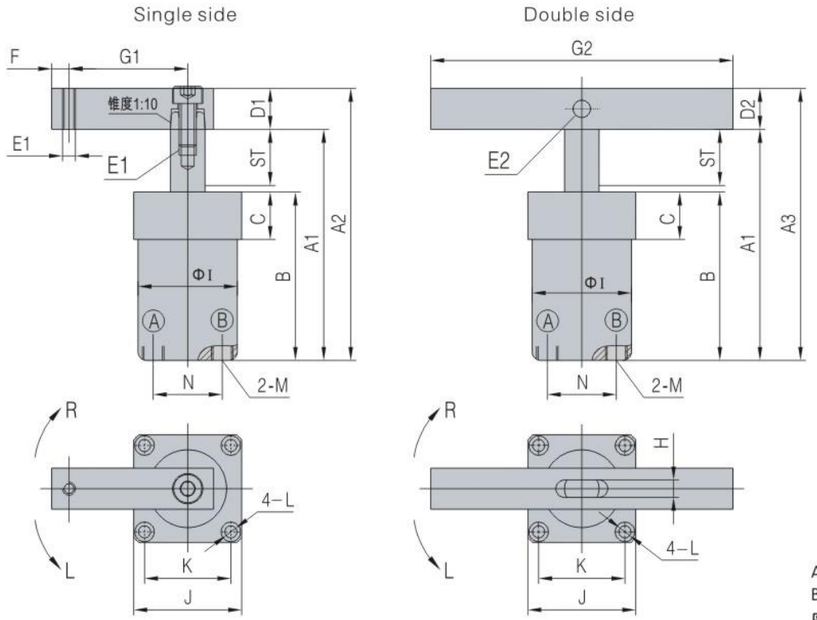
SCA 空壓轉角缸

FA法蘭型
Flange Type

Swing Clamp Air Cylinder FA

Bore:Φ32-Φ63
Pmax: 7kg/cm²

外形尺寸圖



A-夾持孔 Clamping port
B-放鬆孔 Unclamping port
圖爲放鬆狀態

尺寸 Dimension \ Model 型號	SCA-FA32	SCA-FA40	SCA-FA50	SCA-FA63
ST:Swing/clamping	26(11/15)	26(11/15)	30(13/17)	30(13/17)
A1	108	108	125	125
A2	(128)	(128)	(152.4)	(152.4)
A3	127	127	146.2	146.2
B	78	78	90	90
C	22	22	25	25
D1	□19	□19	□25.4	□25.4
D2	□19	□19	□22.2	□22.2
E1	M8*1.25	M8*1.25	M10*1.5	M10*1.5
E2	Φ8	Φ8	Φ8	Φ8
F	8	8	10	10
G1	55	55	70	70
G2	140	140	160	160
H	9	9	10	10
ΦI	Φ46	Φ55	Φ65	Φ78
J	50	60	70	83
K	40	48	57	67
L	Φ5.6-Φ9*5.5D	Φ6.8-Φ10.5*6.5D	Φ6.8-Φ10.5*6.5D	Φ9-Φ14*9D
M	RP1/8	RP1/8	RP1/8	RP1/8
N	32.5	41	51	64

注：※□表示正方形
※夾緊臂尺寸請參照 → P 96頁

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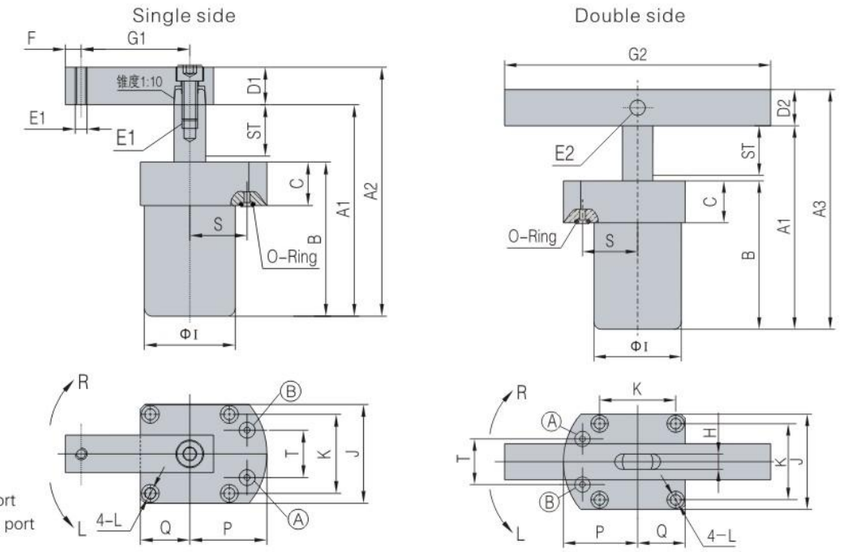
SCA 空壓轉角缸

FAM法蘭型氣路板
Flange type

Swing Clamp Air Cylinder FAM

Bore:Φ32-Φ63
Pmax: 7kg/cm²

外形尺寸圖



A-夾持孔 Clamping port
B-放鬆孔 Unclamping port
圖爲放鬆狀態

尺寸 Dimension \ Model 型號	SCA-FAM32	SCA-FAM40	SCA-FAM50	SCA-FAM63
ST:Swing/clamping	26(11/15)	26(11/15)	30(13/17)	30(13/17)
A1	108	108	125	125
A2	(128)	(128)	(152.4)	(152.4)
A3	127	127	146.2	146.2
B	78	78	90	90
C	22	22	25	25
D1	□19	□19	□25.4	□25.4
D2	□19	□19	□22.2	□22.2
E1	M8*1.25	M8*1.25	M10*1.5	M10*1.5
E2	Φ8	Φ8	Φ8	Φ8
F	8	8	10	10
G1	55	55	70	70
G2	140	140	160	160
H	9	9	10	10
ΦI	Φ46	Φ55	Φ65	Φ78
J	52	62	72	85
K	40	48	57	67
L	Φ5.6-Φ9*5.5D	Φ6.8-Φ10.5*6.5D	Φ6.8-Φ10.5*6.5D	Φ9-Φ14*9.5D
P	39	43	49	59
Q	26	31	36	42.5
S	29	32	38	46
T	24	26	28	38
O-Ring	P5	P5	P7	P7

注：※□表示正方形
※夾緊臂尺寸請參照 → P 96頁

SCA 空壓轉角缸

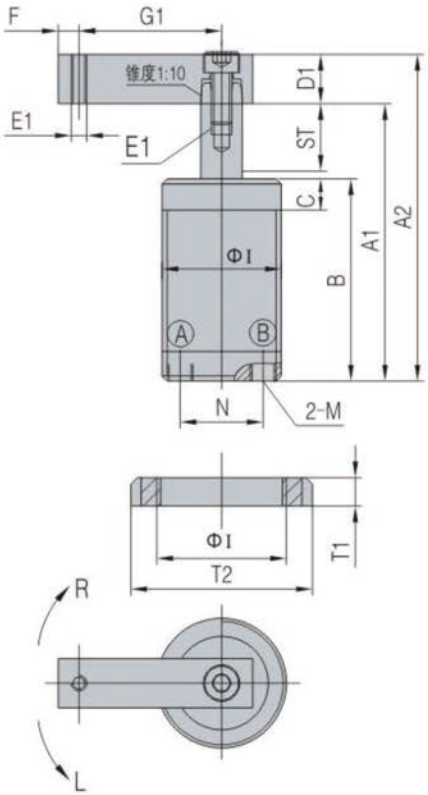
TB全牙型
Threaded body Type

Swing Clamp Air Cylinder TB

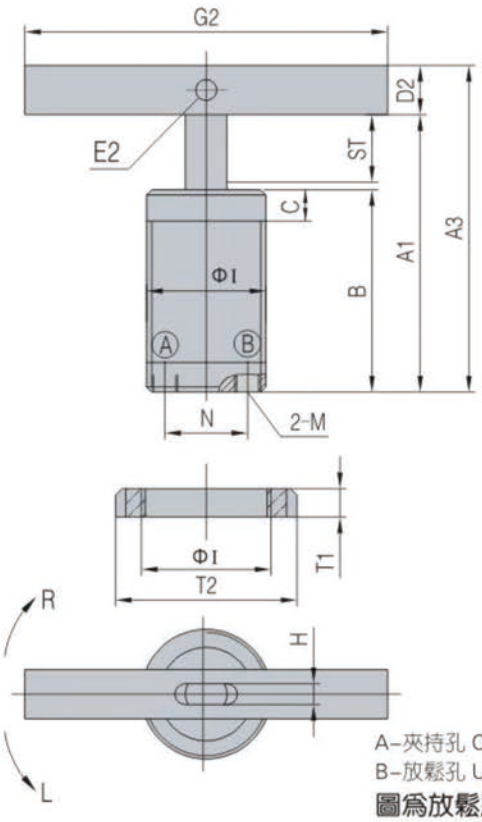
Bore:Φ32-Φ50
Pmax: 7kg/cm²

外形尺寸圖

Single side



Double side



A-夾持孔 Clamping port
B-放鬆孔 Unclamping port
圖爲放鬆狀態

尺寸 Dimension / Model 型號	SCA-TB32	SCA-TB40	SCA-TB50
ST:Swing/clamping	26(11/15)	26(11/15)	30(13/17)
A1	108	108	125
A2	(128)	(128)	(152.4)
A3	127	127	146.2
B	78	78	90
C	12	12	10
D1	□19	□19	□25.4
D2	□19	□19	□22.2
E1	M8*1.25	M8*1.25	M10*1.5
E2	Φ8	Φ8	Φ8
F	8	8	10
G1	55	55	70
G2	140	140	160
H	9	9	10
I	M50*1.5	M55*1.5	M65*1.5
M	RP1/8	RP1/8	RP1/8
N	32.5	40.5	50.5
T1*2PCS	11	11	12
T2	Φ69	Φ74	Φ85

注：※□表示正方形
※夾緊臂尺寸請參照 → P 96頁