

RSP低壓油壓支撐缸 RSP Hydraulic Supporting Cylinder

● 活塞杆徑 $\Phi 10-\Phi 16$ ● 最大操作壓力 70kg/cm^2 ● Bore of piston (mm): $\Phi 10-\Phi 16$ ● Max pressure: 70kg/cm^2



RSP產品特性

- 1、採用夾套及雙活塞結構而實現的2~7MPa規格支撐缸
- 2、以較低液壓油壓力（2~7MPa）即可獲得高支撐力。
- 3、安裝尺寸與目前常見市售產品相容。
- 4、結構緊湊設計合理、性能穩定、使用壽命長。
- 5、活塞杆與工作物接觸力量小（0.3~0.8kgf以內）、適用於各種類型工作物。
- 6、採用本產品可避免在同一套夾具中混用高低壓元件，未來保養的維護困擾。
- 7、體積小巧（M26~M45四種，大口徑活塞，支撐力強勁，在低壓範圍內也能穩定工作）
- 8、無需改變夾具基板的尺寸，在狹小的空間即可配置。

產品簡介

A型： 夾縮支撐，在初始位置時，支撐頭在內部彈簧的作用下處於最上端，工作時依靠工件在下放時的重力下壓支撐頭使之同步向下，在工件穩妥的放在治具上時就停止下行，支撐頭也停止下行，加油壓後支撐缸鎖死給工件提供支撐並停止運行。

B型： 上行支撐，在初始位置時，支撐頭位於最下端，工件放好後，給支撐缸加油壓使支撐頭上行，至碰到工件時支撐頭立刻停止上行並繼續加壓至鎖死，這樣支撐頭就在當前位置給工件提供支撐並且停止。

Introduction of product

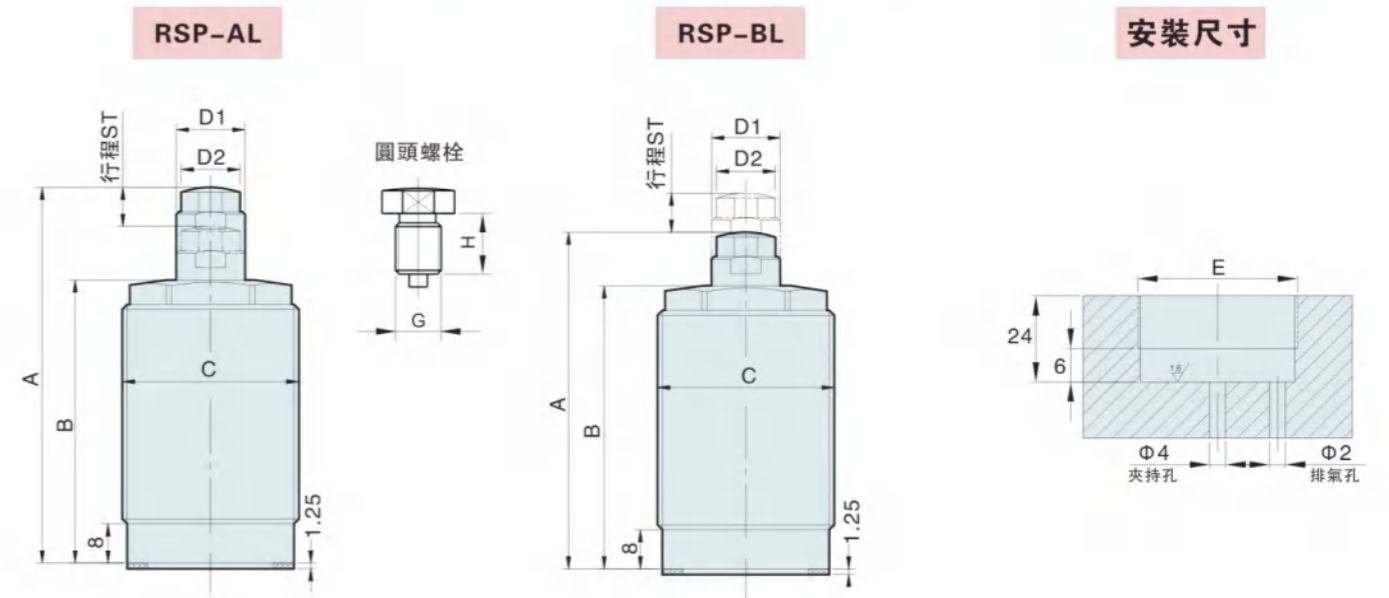
- ◆ Type A: Knocking-out with a spring, the spring is used to control a clamping force when the knocking-out rod (piston rod) extends to a highest knocking-out position and clamps the workpiece
- ◆ Type B: Knocking-out with oil pressure, it is operated by means of oil pressure and is knocked out when being filled with oil and clamp the workpiece.

特性資料 Specification

類 型	RSP-26AL	RSP-26BL	RSP-30AL	RSP-30BL	RSP-36AL	RSP-36BL	RSP-45AL	RSP-45BL
使用壓力範圍 (kgf/cm ²)	20 ~ 70							
壓緊行程 (mm)	5.5		8				10	
活塞杆徑 (mm)	$\Phi 10$		$\Phi 12$		$\Phi 14$		$\Phi 16$	
支撐力 (kgf)/工作壓力(kgf/cm ²)	170/50		220/50		330/50		530/50	
作動方式	單動式							

RSP低壓油壓支撐缸 RSP Hydraulic Supporting Cylinder

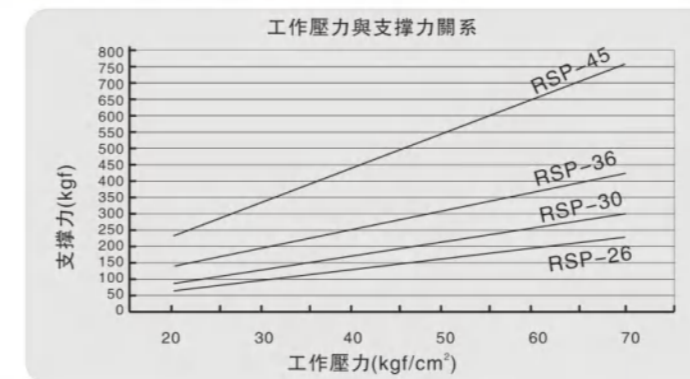
● 活塞杆徑 $\Phi 10-\Phi 16$ ● 最大操作壓力 70kg/cm^2 ● Bore of piston (mm): $\Phi 10-\Phi 16$ ● Max pressure: 70kg/cm^2



外形尺寸表 Dimension table

類 型	RSP-26AL	RSP-26BL	RSP-30AL	RSP-30BL	RSP-36AL	RSP-36BL	RSP-45AL	RSP-45BL
A	70.1	64.6	79.6	71.6	77	69	91	81
B	55.6		60.6		58		70	
C	M26x1.5		M30x1.5		M36x1.5		M45x1.5	
D1	$\Phi 10$		$\Phi 12$		$\Phi 14$		$\Phi 16$	
D2	$\Phi 9$		$\Phi 11.5$		$\Phi 12$		$\Phi 12.5$	
ST	5.5		8		10		10	
E	M26x1.5		M30x1.5		M36x1.5		M45x1.5	
F	$\Phi 4$		$\Phi 4$		$\Phi 4$		$\Phi 4$	
G	M8		M8		M10		M10	
H	10		10		10		10	

特性曲綫圖 RSP-***L



訂購標示法 Ordering Code

RSP -- 30 -- A -- L

RSP高壓油壓支撐缸 RSP Hydraulic Supporting Cylinder

●活塞杆徑Φ10-Φ16 ●最大操作壓力250kg/cm² ●Bore of piston (mm):Φ10-Φ16 ●Max pressure:250kg/cm²



產品簡介

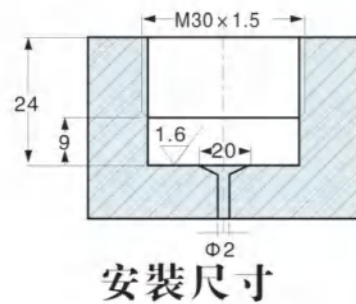
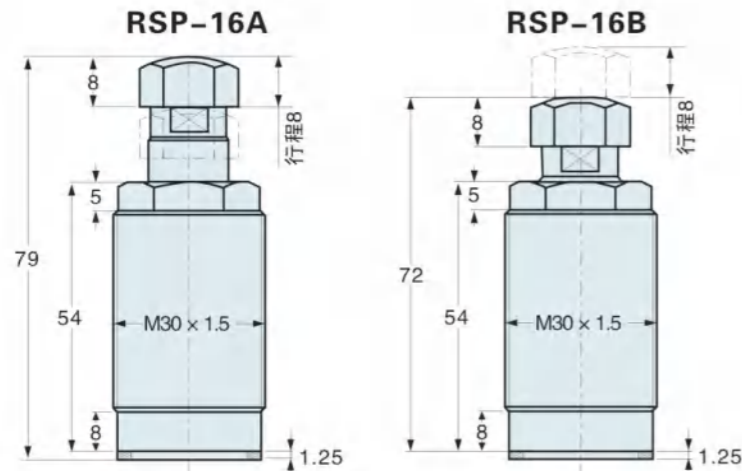
A型: 夾縮支撐, 在初始位置時, 支撐頭在內部彈簧的作用下處於最上端, 工作時依靠工件在下放時的重力下壓支撐頭使之同步向下, 在工件穩妥的放在治具上時就停止下行, 支撐頭也停止下行, 加油壓後支撐缸鎖死給工件提供支撐并停止運行。
B型: 上行支撐, 在初始位置時, 支撐頭位于最下端, 工件放好後, 給支撐缸加油壓使支撐頭上行, 至碰到工件時支撐頭立刻停止上行并繼續加壓至鎖死, 這樣支撐頭就在當前位置給工件提供支撐并且停止。

Introduction of product

◆Type A: Knocking-out with a spring, the spring is used to control a clamping force when the knocking-out rod (piston rod) extends to a highest knocking-out position and clamps the workpiece
◆Type B: Knocking-out with oil pressure, it is operated by means of oil pressure and is knocked out when being filled with oil and clamp the workpiece.

注意: ◆支持力與轉角缸的支持力要相匹配, 支持力至少為單個轉角缸夾持力的150%
◆不能超過最大流速, 避免過早鎖死。
◆基本上在中間位置放置支撐缸
◆安裝時盡可能垂直于工作面, 傾斜勿超過10°。

Attention:
◆The supporting force must match the clamp force of the swing clamp.
The supporting force at least is equal to 150% of the clamp force of a swing clamp.
◆Do not exceed the maximum velocity of flow and avoid clamping it too early
◆Install the supporting cylinder in the middle place best.
◆The angle degree between the supporting cylinder and working face could not be larger than 10° while installing.



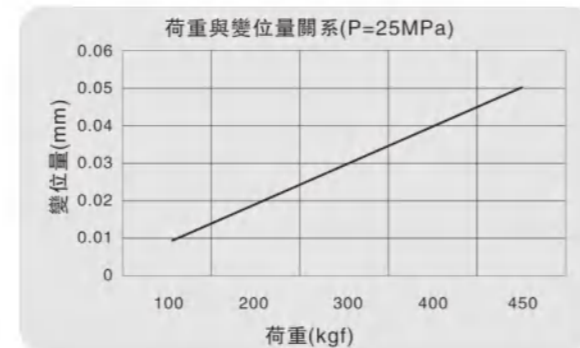
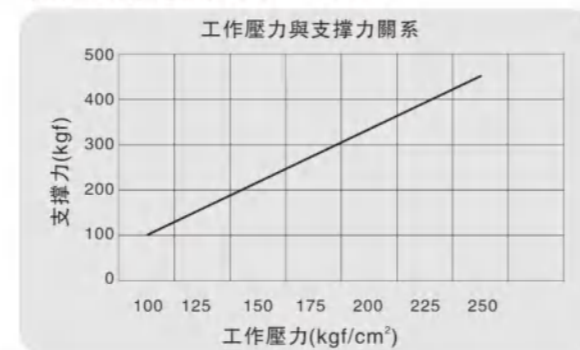
訂購標示法 Ordering Code

RSP -- 16 -- A

特性資料 Specification

類 型	RSP-16A	RSP-16B
使用壓力範圍 (kgf/cm ²)	100 ~ 250	
壓緊行程 (mm)		8
活塞杆徑 (mm)		Φ 16
支撐力 (kgf) / 工作壓力 (kgf/cm ²)	320/200	
作動方式		單動式

特性曲綫圖 RSP-16★



RSF上法蘭油壓支撐缸 RSF Hydraulic Supporting Cylinder

●活塞杆徑Φ15-Φ30 ●最大操作壓力70kg/cm² ●Bore of piston (mm):Φ15-Φ30 ●Max pressure:70kg/cm²



RSF產品特性

◆此系列產品結構緊湊, 設計合理, 使用壽命長, 在2-7MPa工作條件下性能穩定。
◆根據不同厚薄工件, 可調節活塞杆伸出彈簧強弱。
◆活塞杆伸出接觸力小, 0.4-0.8KG範圍內, 適用於各種類型工件。
◆本產品支撐力大, 在切削過程中能徹底消除機械負載及工件震動。
◆安裝尺寸與目前市面銷售產品相容, 可互換。

RSF Product features

◆This series of products with compact structure, reasonable design, long service life, in 2-7MPa working conditions stable performance.
◆According to the different thickness of workpiece, which can adjust the piston rod out spring strength.
◆Piston rod out of contact force is small, 0.4-0.8KG range, suitable for all kinds of workpiece.
◆This product support, in the cutting process can eliminate mechanical load and working vibration.
◆Installation size and at present on market sales products compatible, interchangeable.

產品簡介

A型: 夾縮支撐, 在初始位置時, 支撐頭在內部彈簧的作用下處於最上端, 工作時依靠工件在下放時的重力下壓支撐頭使之同步向下, 在工件穩妥的放在治具上時就停止下行, 支撐頭也停止下行, 加油壓後支撐缸鎖死給工件提供支撐并停止運行。
B型: 上行支撐, 在初始位置時, 支撐頭位于最下端, 工件放好後, 給支撐缸加油壓使支撐頭上行, 至碰到工件時支撐頭立刻停止上行并繼續加壓至鎖死, 這樣支撐頭就在當前位置給工件提供支撐并且停止。

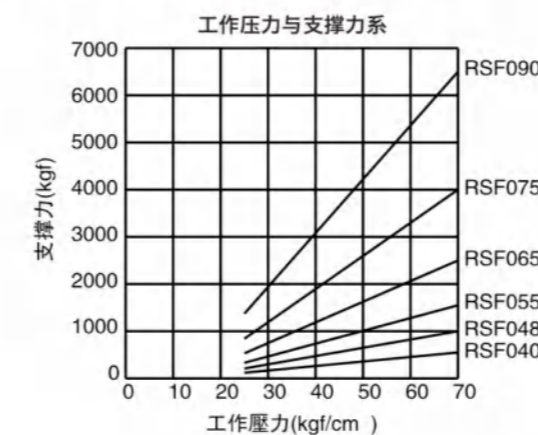
Introduction of product

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◆Type B: Knocking-out with oil pressure, it is operated by means of oil pressure and is knocked out when being filled with oil and clamp the workpiece.

特性資料 Specification

類型Type	RSF-040AL RSF-040BL	RSF-048AL RSF-048BL	RSF-055AL RSF-055BL	RSF-065AL RSF-065BL	RSF-075AL RSF-075BL	RSF-090AL RSF-090BL
使用壓力範圍Range of pressure(kg/cm ²)	20 ~ 70kg/cm ²					
行程 Stroke(mm)	8	10	12	14	16	20
活塞杆徑Bore of piston(mm)	Φ 15	Φ 16	Φ 20	Φ 22	Φ 25	Φ 30
支撐力(kgf)/工作壓力(kg/cm ²) Support(kgf)/Pressure of work(kg/cm ²)	360/50	650/50	1000/50	1600/50	2600/50	4200/50
作動方式Acting type	單動式 Single acting					

特性曲綫圖 RSF-★★L



訂購標示法 Ordering Code

RSF 040 B L -- C

① ② ③ ④ ⑤

- 系列號 Series
- 本體外徑尺寸
- A: 彈簧頂出型 A:Spring extended piston
B: 油壓頂出型 B:Hydraulic extended piston
- L: 低壓
- C: 板式 (配有G螺紋堵, 帶排氣功能)
G: 板式 (配有R螺紋堵)
S: 配管式 (RC螺紋)

RSF油壓支撐缸 RSF Hydraulic Supporting Cylinder

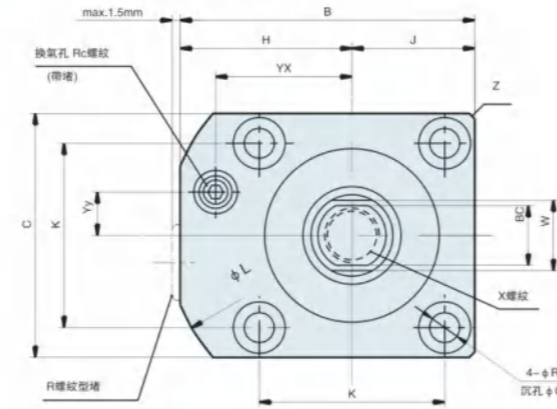
RSF油壓支撐缸 RSF Hydraulic Supporting Cylinder

●活塞杆徑Φ15-Φ30 ●最大操作壓力70kg/cm² ●Bore of piston (mm):Φ15-Φ30 ●Max pressure:70kg/cm²

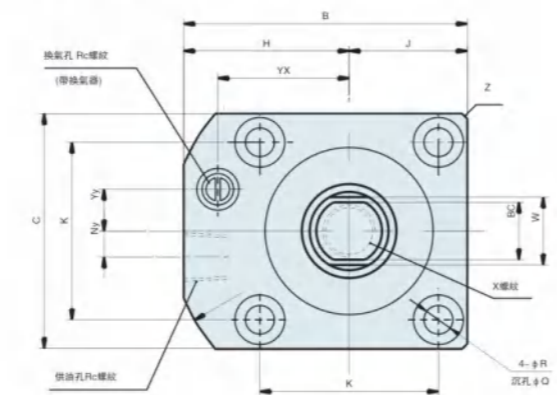
●活塞杆徑Φ15-Φ30 ●最大操作壓力70kg/cm² ●Bore of piston (mm):Φ15-Φ30 ●Max pressure:70kg/cm²

RSF-AL

※本圖所示為***AL-G

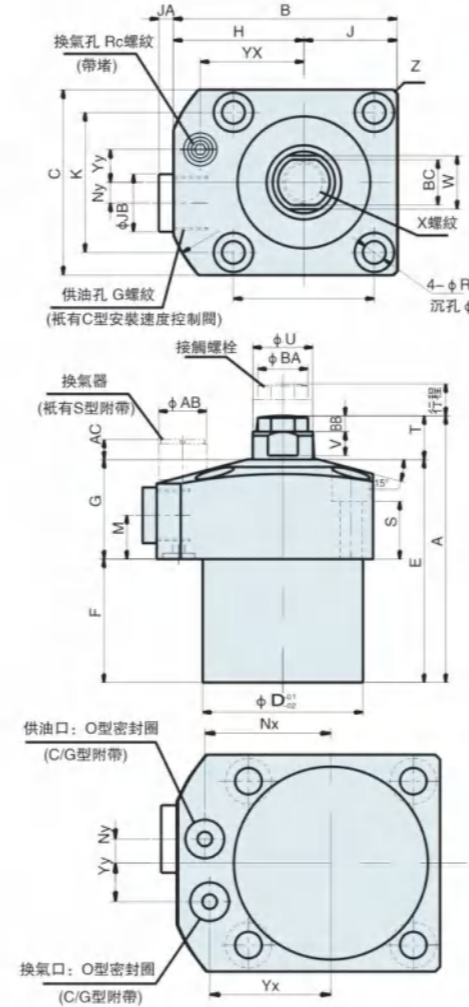


※本圖所示為***AL-S

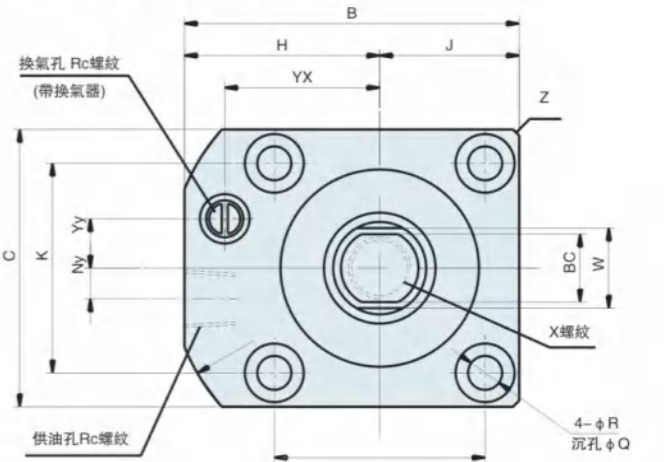


RSF-BL

※本圖所示為***BL-G



※本圖所示為***BL-S



外形尺寸表 Dimension table

ITEM	MODEL	RSF-040AL	RSF-048AL	RSF-055AL	RSF-065AL	RSF-075AL	RSF-090AL
A		75	85	97	115	142	169
B		54	61	69	81	92	107
C		45	51	60	70	80	95
D		40	48	55	65	75	90
E		56	64	70	85	107	128
F		31	39	45	56	72	88
G		25	25	25	29	35	40
H		31.5	35.5	39	46	52	59.5
J		22.5	25.5	30	35	40	47.5
K		34	40	47	55	63	75
L		68	73	80	94	106	126
M		11	11	11	11	13	13
Nx		26	30	33.5	39.5	45	52.5
Ny		5	0	0	0	0	0
P		3	3	3	5	5	5
O		9.5	9.5	11	11	14	17.5
R		5.5	5.5	6.8	6.8	9	11
S		14.5	13.5	11.5	14.5	17	18
T		19	21	27	30	35	41
U		15	16	20	22	25	30
V		6	6	8	9	10.5	12.5
W		13	13	17	19	22	24
X(公稱直徑x深度)		M10x11	M10x11	M12x13	M12x13	M16x20	M16x20
Yx		25	28	31	37	42.5	50
Yy		8	11	13	14	15	15
Z		c1	C3	R40	R47	R53	R63
AB		12	12	12	12	12	12
AC		5	4	3.5	2	1.5	0
BA		12.5	12.5	16.5	16.5	21.5	21.5
BB		4	4	6	6	9	9
BC		11	11	14	14	19	19
CA		M5x0.8	M5x0.8	M6	M6	M8	M10
JA		3.5	3.5	3.5	3.5	4.5	4.5
JB		14	14	14	14	19	19
行程		8	10	12	14	16	20
供油孔	-C型	G1/8	G1/8	G1/8	G1/8	G1/4	G1/4
	-S型	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
R螺紋堵頭	-G型	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
口型密封圈 (-C/-G型)		P5	P5	P5	P7	P7	P7
換氣孔		Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/8

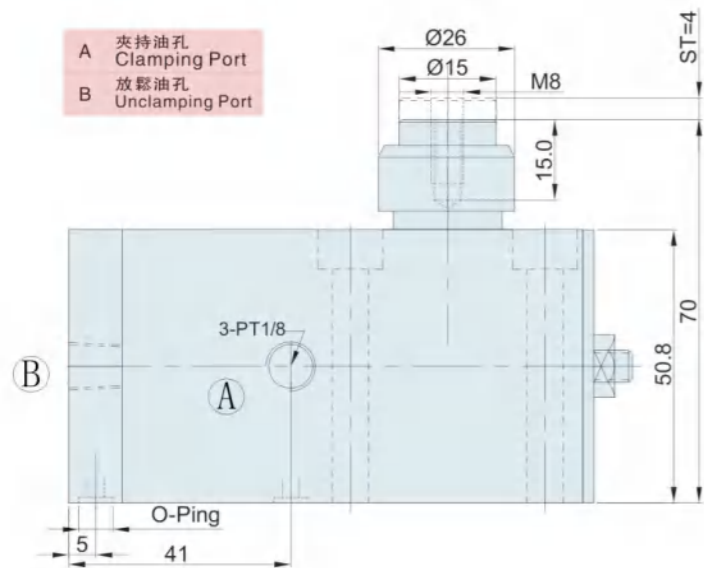
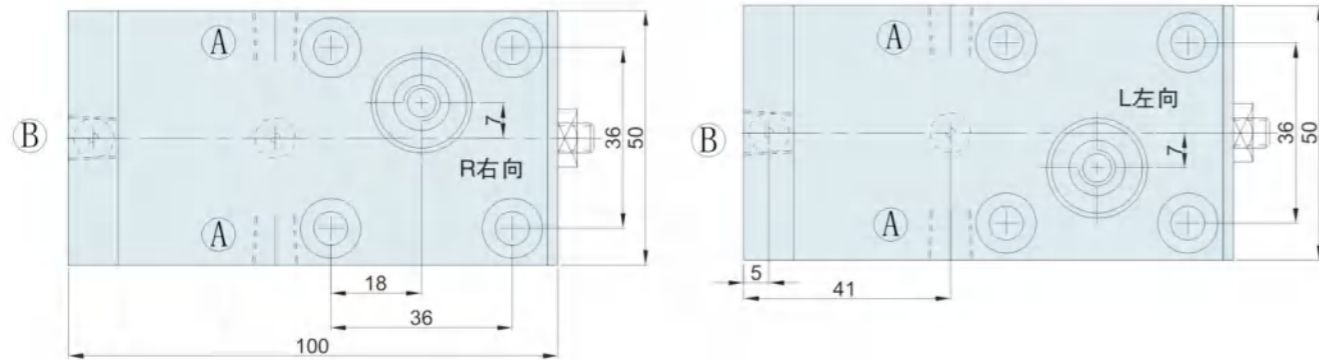
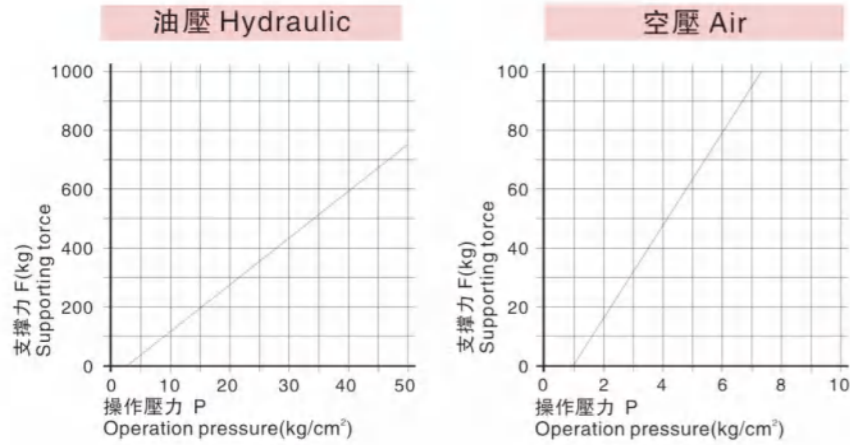
外形尺寸表 Dimension table

ITEM	MODEL	RSF-040BL	RSF-048BL	RSF-055BL	RSF-065BL	RSF-075BL	RSF-090BL
A		67	75	85	101	126	149
B		54	61	69	81	92	107
C		45	51	60	70	80	95
D		40	48	55	65	75	90
E		56	64	70	85	107	128
F		31	39	45	56	72	88
G		25	25	25	29	35	40
H		31.5	35.5	39	46	52	59.5
J		22.5	25.5	30	35	40	47.5
K		34	40	47	55	63	75
L		68	73	80	94	106	126
M		11	11	11	11	13	13
Nx		26	30	33.5	39.5	45	52.5
Ny		5	0	0	0	0	0
P		3	3	3	5	5	5
O		9.5	9.5	11	11	14	17.5
R		5.5	5.5	6.8	6.8	9	11
S		14.5	13.5	11.5	14.5	17	18
T		19	21	27	30	35	41
U		15	16	20	22	25	30
V		6	6	8	9	10.5	12.5
W		13	13	17	19	22	24
X(公稱直徑x深度)		M10x11	M10x11	M12x13	M12x13	M16x20	M16x20
Yx		25	28	31	37	42.5	50
Yy		8	11	13	14	15	15
Z		C1	C3	R40	R47	R53	R63
AB		12	12	12	12	12	12
AC		5	4	3.5	2	1.5	0
BA		12.5	12.5	16.5	16.5	21.5	21.5
BB		4	4	6	6	9	9
BC		11	11	14	14	19	19
CA		M5x0.8	M5x0.8	M6	M6	M8	M10
JA		3.5	3.5	3.5	3.5	4.5	4.5
JB		14	14	14	14	19	19
行程		8	10	12	14	16	20
供油孔	-C型	G1/8	G1/8	G1/8	G1/8	G1/4	G1/4
	-S型	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
R螺紋堵頭	-G型	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc1/4
口型密封圈 (-C/-G型)		P5	P5	P5	P7	P7	P7
換氣孔		Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/8

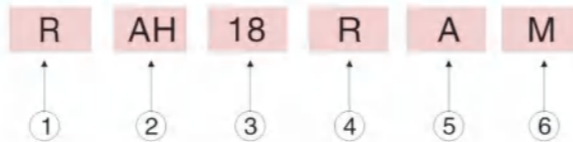
RAH空油壓兩用型支撐缸 Air-Hydraulic Supporting Cylinder

RK 30底部法蘭轉角缸 RK 30 Hydraulic Swing Clamp Bottom Flange

• Rod: $\Phi 18\text{mm}$ • Pmax: 70kg/cm^2



訂購標示法 Ordering Code



①	系列別 Series
②	空油壓兩用型 Air-hydraulic type
③	頂杆軸徑 Diameter of the extended piston rod
④	R右向; L左向 Turn right R; Turn left L
⑤	A彈簧頂出型 A: Extended by spring B油壓頂出型 B: Extended by oil
⑥	油路板型

*注: 附A.B型式調整螺絲
A:彈簧頂出型.往內調整
B:油壓頂出型.往外調整

●油缸內徑 $\Phi 14-\Phi 45$ ●最大操作壓力 250kg/cm^2 ●Bore of cylinder(mm): $\Phi 14-\Phi 45$ ●Max pressure: 250kg/cm^2

產品簡介

- ◆無須預留孔;直接用螺栓將轉角缸固定到工作臺面,缸體的主結構在工作臺面上,可夾緊較厚的工件,允許超大件的夾持。
- ◆往復式特點:夾緊與鬆卸全靠油路來控制,按照換向閥的方向交替來控制轉角缸的夾緊和鬆卸行程,壓臂形狀與單動缸相同。
- ◆單動式特點:內部系統化比較簡單,沒有卸載系統,卸載時靠彈簧回力完成鬆卸行程;外部管路的閥門及附件較少使配套系統比較簡單。創新的壓臂設計能滿足多種場合。
- ◆缸體材質合用碳鋼,經滲碳氮化處理,表面硬度高,缸體內面硬度高耐磨損。
- ◆壓板需增加長度時,請勿大於原長度之1.5倍。

Introduction of product

- ◆It is not necessary to manufacture hole for the installing and you just need to use bolt to fix the swing clamp on the fixture plate. It is helpful for you to clamp thick workpiece because the main structure of the cylinder body is on the fixture plate.
- ◆Feature of the doubling acting type. Oil circuits control clamping and unclamping, you can control the clamping and unclamping by changing the direction value.
- ◆Feature of the single acting type. The design of the interior system is simple. It is not necessary to design for unclamping. It can return back to original position by spring and the system design is simple because of few accessories.
- ◆The material of the cylinder body is carbon steel and treated by nitrating. The hardness of the outside and inside surface of the cylinder is high and the cylinder is antiabrasive.
- ◆Please don't exceed 1.5 times of the original length, if you need to increase the length of the clamping arm.

特性資料 Specification 單動系列 Single Acting

油缸類型 Type of cylinder	RK 30LS-22	RK 30LS-52	RK 30LS-92	RK 30LS-121	RK 30LS-202
	RK 30RS-22	RK 30RS-52	RK 30RS-92	RK 30RS-121	RK 30RS-202
油缸內徑 Bore of cylinder(mm)	$\Phi 14$	$\Phi 22$	$\Phi 32$	$\Phi 32$	$\Phi 45$
活塞桿徑 Bore of piston(mm)	$\Phi 10$	$\Phi 16$	$\Phi 25$	$\Phi 22$	$\Phi 32$
垂直行程 Clamping stroke(mm)	8	10	12	13	14
總行程 Total stroke (mm)	16.5	22.6	22.1	28.4	27.9
受壓面積拉入 Pressure area pull cm^2	0.75	1.79	3.13	4.24	7.86
理論夾持力 Theoretical clamping 250kg/cm^2	173kg	380kg	710kg	970kg	1830kg
使用流體 Fluid	已濾清之標準液壓油 Filtered oil				
使用溫度範圍 Range of temperature	$-10\sim+60^\circ\text{C}$				
使用壓力範圍 Range of pressure(kg/cm^2)	70-- 250kg/cm^2				
轉角角度 Rotating angle	標準角度 Standard angle $90^\circ(\pm 2^\circ)$ 訂做角度 order angle $30^\circ(\pm 2^\circ)$ 、 $45^\circ(\pm 2^\circ)$ 、 $60^\circ(\pm 2^\circ)$				

特性資料 Specification 復動系列 Double Acting

油缸類型 Type of cylinder	RK 30LD-22	RK 30LD-52	RK 30LD-92	RK 30LD-121	RK 30LD-202
	RK 30RD-22	RK 30RD-52	RK 30RD-92	RK 30RD-121	RK 30RD-202
油缸內徑 Bore of cylinder(mm)	$\Phi 14$	$\Phi 22$	$\Phi 32$	$\Phi 32$	$\Phi 45$
活塞桿徑 Bore of piston(mm)	$\Phi 10$	$\Phi 16$	$\Phi 25$	$\Phi 22$	$\Phi 32$
垂直行程 Clamping stroke (mm)	8	10	12	13	14
總行程 Total stroke (mm)	16.5	22.6	22.1	28.4	27.9
受壓面積拉入/推出 Pressure area pull/push cm^2	0.75/1.53	1.79/3.79	3.13/8.03	4.24/8.03	7.86/15.89
理論夾持力 Theoretical clamping 250kg/cm^2	180kg	445kg	780kg	1060kg	1960kg
使用流體 Fluid	已濾清之標準液壓油 Filtered oil				
使用溫度範圍 Range of temperature	$-10\sim+60^\circ\text{C}$				
使用壓力範圍 Range of pressure(kg/cm^2)	70-- 250kg/cm^2				
轉角角度 Rotating angle	標準角度 Standard angle $90^\circ(\pm 2^\circ)$ 訂做角度 order angle $30^\circ(\pm 2^\circ)$ 、 $45^\circ(\pm 2^\circ)$ 、 $60^\circ(\pm 2^\circ)$				