



HFC系列氣動手指

平行開閉型

HFC系列產品概覽



夾持力與行程

型號		單個氣動手指夾持力有效值(N)		開閉行程 (兩側)(mm)
		張開夾持力	閉合夾持力	
兩爪	HFCI16	23	21	4
	HFCI20	42	37	4
	HFCI25	71	63	6
	HFCI32	123	111	8
	HFCI40	195	177	8
	HFCI50	306	280	12
	HFCI63	537	502	16
三爪	HFCY16	16	14	4
	HFCY20	28	25	4
	HFCY25	47	42	6
	HFCY32	82	74	8
	HFCY40	130	118	8
	HFCY50	204	187	12
	HFCY63	359	335	16
四爪	HFCX16	12	10	4
	HFCX20	21	19	4
	HFCX25	35	31	6
	HFCX32	61	55	8
	HFCX40	97	88	8
	HFCX50	153	140	12
	HFCX63	268	251	16

注：上表中的夾持力是在工作氣壓為0.5MPa，Φ16~Φ25夾持點L=20mm、
Φ32~Φ63夾持點L=30mm狀態時的值。
另：L的具體定義請參考P282頁中圖示內容。

安裝與使用(通用性)



- 1、氣動手指配管前，必須清除管內雜物，防止雜物進入氣缸內；
- 2、氣動手指使用介質應經過40μm以上濾芯過濾後方可使用；
- 3、在低溫環境下，應採取抗凍措施，防止系統中的水分凍結；
- 4、氣動手指拆下長時間不使用，要注意表面防銹，進排氣口應加防塵堵塞帽，活塞杆及運動部位塗防銹油。



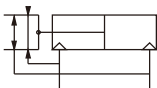
氣動手指(平行開閉型)



HFC系列



符號



成品訂購碼

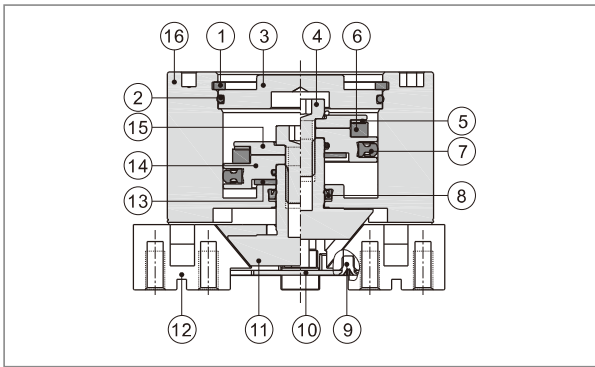
HFC Y 20

1 2 3

① 規格代號	② 夾爪可選種類			③ 缸徑
HFC: 復動平行開閉型氣動手指	I: 兩爪 	Y: 三爪 	X: 四爪 	16 20 25 32 40 50 63

[注] HFC全系列均為附磁型。

內部結構及主要零件材質



序號	名稱	材質	序號	名稱	材質
1	C形扣環	彈簧鋼	9	十字埋頭螺絲	不銹鋼
2	O型環	NBR	10	蓋板	不銹鋼
3	後蓋	鋁合金	11	活塞杆	不銹鋼
4	內六角沉頭螺絲	合金鋼	12	夾爪	不銹鋼
5	磁鐵墊片	NBR	13	防撞墊(環)	TPU
6	磁鐵	燒結鈦鐵矽/塑膠	14	活塞	鋁合金
7	活塞O令	NBR	15	磁鐵座	鋁合金
8	軸芯O令	NBR	16	本體	鋁合金

規格

內徑(mm)	16	20	25	32	40	50	63
動作型式	復動型						
工作介質	空氣(經40 μ m以上濾網過濾)						
使用壓力範圍	0.2~0.7MPa(28~100psi)(2.0~7.0bar)			0.15~0.7MPa(22~100psi)(1.5~7.0bar)			
工作溫度 °C	-20~70						
給油	不需要						
重複精度 mm	± 0.01						
最高使用頻率	120(c.p.m)			60(c.p.m)			
所配傳感器	CM5H、DM5H(S)						
接管口徑	M3×0.5	M5×0.8					

另：傳感器的選配詳見P348頁。

產品特性

- 1、內部採用楔形結構，可得到較大的夾持力；
- 2、活塞前端設有防撞墊設計，于夾爪釋放時有效降低金屬撞擊聲音；
- 3、本體底部設有定位銷孔，有效提升安裝精度，并提高重複拆裝定位的一致性；
- 4、夾持重複精度高，有利于自動化設備安裝使用；
- 5、多種系列、規格的氣動手指型式可供客戶選擇使用，用來夾持各種形體工作物。

氣動手指(平行開閉型)

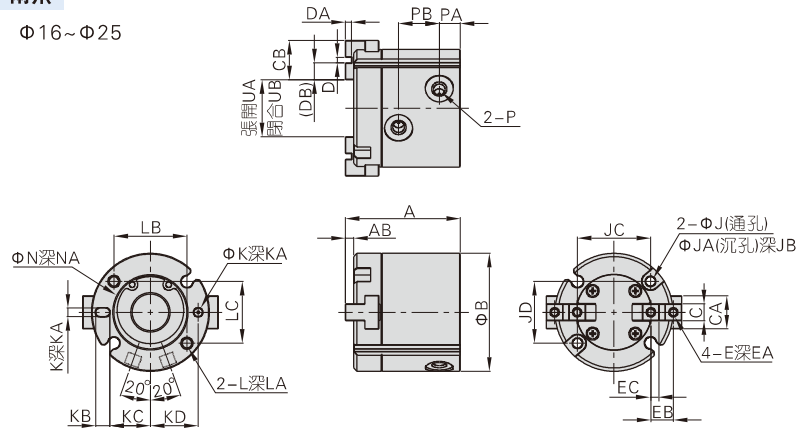
Airtac

HFC系列

外部規格

兩爪

Φ16~Φ25

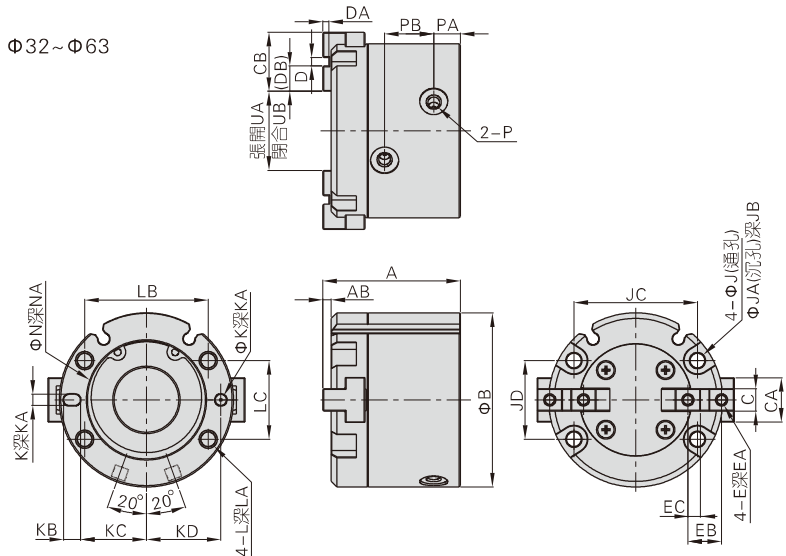


型號符號	A	AB	B	C	CA	CB	D	DA	DB	E	EA
HFC116	35	3	30	$5_{-0.03}^{+0.01}$	8	10	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	4	M3×0.5	5
HFC120	39	3	36	$6_{-0.03}^{+0.01}$	10	12	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	5	M3×0.5	5
HFC125	41	3	42	$6_{-0.03}^{+0.01}$	12	14	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	6	M3×0.5	5

型號符號	EB	EC	J	JA	JB	JC	JD	K	KA	KB	KC	KD
HFC116	6	2	3.4	6	6	18	16	$2_{+0.01}^{+0.04}$	2	3	11	12.5
HFC120	7	2.5	3.4	6	6	24	18	$2_{+0.01}^{+0.04}$	2	3	13	14.5
HFC125	8	3	3.4	6	6	26	22	$3_{+0.01}^{+0.04}$	3	5	14.5	17

型號符號	L	LA	LB	LC	N	NA	P	PA	PB	UA	UB
HFC116	M4×0.7	8	18	16	$17_{+0.05}^{+0.05}$	1.5	M3×0.5	7	10	14	10
HFC120	M4×0.7	8	24	18	$21_{+0.05}^{+0.05}$	1.5	M5×0.8	7	13	16	12
HFC125	M4×0.7	8	26	22	$26_{+0.05}^{+0.05}$	1.5	M5×0.8	7.5	14.5	20	14

Φ32~Φ63

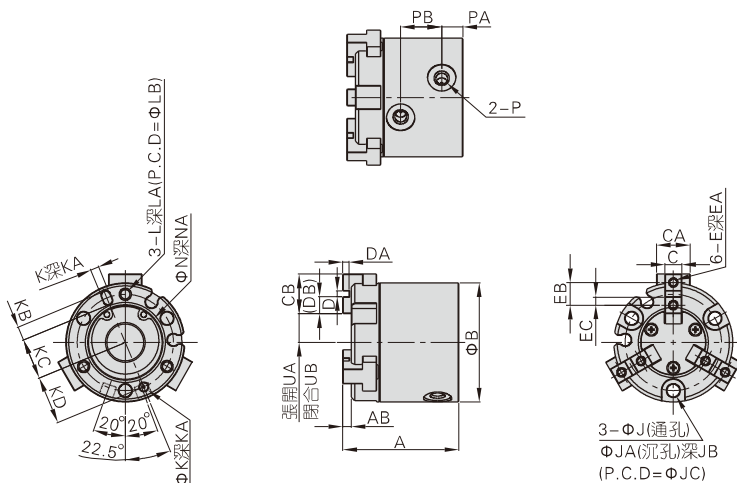


型號符號	A	AB	B	C	CA	CB	D	DA	DB	E	EA
HFC132	45	3	55	$8_{-0.03}^{+0.01}$	14	20	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	9	M4×0.7	8
HFC140	49	3	62	$8_{-0.03}^{+0.01}$	16	21	$3_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	9	M4×0.7	8
HFC150	57	3	70	$10_{-0.03}^{+0.01}$	18	24	$4_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	10	M5×0.8	9
HFC163	68	4	86	$12_{-0.03}^{+0.01}$	24	28	$6_{+0.01}^{+0.04}$	$3_{+0.01}^{+0.2}$	11	M5×0.8	9

型號符號	EB	EC	J	JA	JB	JC	JD	K	KA	KB	KC	KD
HFC132	11	4.5	4.2	8	9	38	25	$3_{+0.01}^{+0.04}$	3	5	20.5	23
HFC140	12	4.5	5.2	9.5	9	44	28	$4_{+0.01}^{+0.04}$	4	6	23.5	26.5
HFC150	14	5	5.2	9.5	12	52	34	$4_{+0.01}^{+0.04}$	4	6	28	31
HFC163	17	5.5	5.2	9.5	14	66	38	$5_{+0.01}^{+0.04}$	5	7	34.5	38

型號符號	L	LA	LB	LC	N	NA	P	PA	PB	UA	UB
HFC132	M5×0.8	10	38	25	$34_{+0.05}^{+0.05}$	2	M5×0.8	8.5	16	24	16
HFC140	M6×1.0	12	44	28	$42_{+0.05}^{+0.05}$	2	M5×0.8	9.5	17.5	28	20
HFC150	M6×1.0	12	52	34	$52_{+0.05}^{+0.05}$	2	M5×0.8	9.5	21	34	22
HFC163	M6×1.0	12	66	38	$65_{+0.05}^{+0.05}$	2.5	M5×0.8	12	24	46	30

三爪



型號符號	A	AB	B	C	CA	CB	D	DA	DB	E	EA
HFCY16	35	3	30	$5_{-0.03}^{+0.01}$	8	10	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	4	M3×0.5	5
HFCY20	39	3	36	$6_{-0.03}^{+0.01}$	10	12	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	5	M3×0.5	5
HFCY25	41	3	42	$6_{-0.03}^{+0.01}$	12	14	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	6	M3×0.5	5
HFCY32	45	3	52	$8_{-0.03}^{+0.01}$	14	20	$2_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	9	M4×0.7	8
HFCY40	49	3	62	$8_{-0.03}^{+0.01}$	16	21	$3_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	9	M4×0.7	8
HFCY50	57	3	70	$10_{-0.03}^{+0.01}$	18	24	$4_{+0.01}^{+0.04}$	$2_{+0.01}^{+0.2}$	10	M5×0.8	9
HFCY63	68	4	86	$12_{-0.03}^{+0.01}$	24	28	$6_{+0.01}^{+0.04}$	$3_{+0.01}^{+0.2}$	11	M5×0.8	9

型號符號	EB	EC	J	JA	JB	JC	K	KA	KB	KC	KD	L
HFCY16	6	2	3.4	6	6	25	$2_{+0.01}^{+0.04}$	2	3	11	12.5	M3×0.5
HFCY20	7	2.5	3.4	6	6	29	$2_{+0.01}^{+0.04}$	2	3	13	14.5	M3×0.5
HFCY25	8	3	4.5	8	9	34	$3_{+0.01}^{+0.04}$	3	5	14.5	17	M4×0.7
HFCY32	11	4.5	4.5	8	9	44	$3_{+0.01}^{+0.04}$	3	5	19.5	22	M4×0.7
HFCY40	12	4.5	5.5	9.5	9	53	$4_{+0.01}^{+0.04}$	4	6	23.5	26.5	M5×0.8
HFCY50	14	5	5.5	9.5	12	62	$4_{+0.01}^{+0.04}$	4	6	28	31	M5×0.8
HFCY63	17	5.5	6.6	11	14	76	$5_{+0.01}^{+0.04}$	5	7	34.5	38	M6×1.0

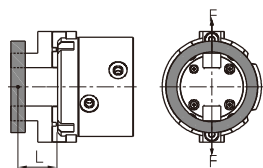
型號符號	LA	LB	N	NA	P	PA	PB	UA	UB
HFCY16	6	25	$17_{+0.05}^{+0.05}$	1.5	M3×0.5	7	10	7	5
HFCY20	6	29	$21_{+0.05}^{+0.05}$	1.5	M5×0.8	7	13	8	6
HFCY25	8	34	$26_{+0.05}^{+0.05}$	1.5	M5×0.8	7.5	14.5	10	7
HFCY32	8	44	$34_{+0.05}^{+0.05}$	2	M5×0.8	8.5	16	12	8
HFCY40	10	53	$42_{+0.05}^{+0.05}$	2	M5×0.8	9.5	17.5	14	10
HFCY50	10	62	$52_{+0.05}^{+0.05}$	2	M5×0.8	9.5	21	17	11
HFCY63	12	76	$65_{+0.05}^{+0.05}$	2.5	M5×0.8	12	24	23	15

氣動手指(平行開閉型)

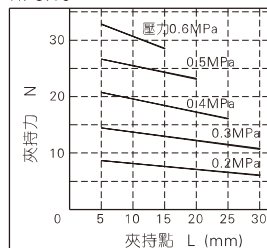
AIRTAC

HFC系列

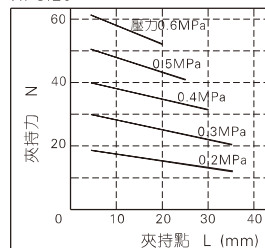
I型張開夾持力



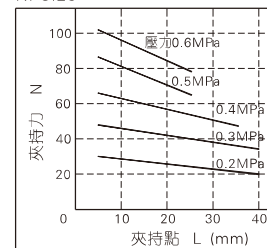
HFC116



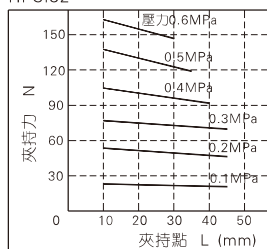
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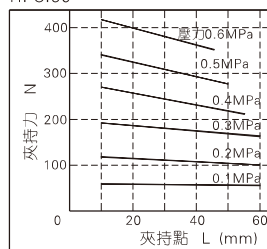
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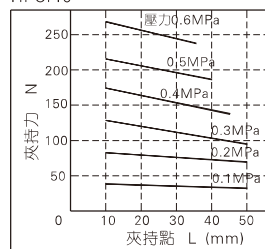
HFC132



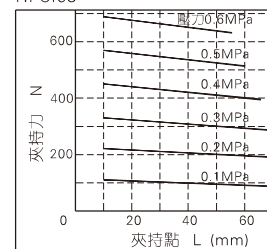
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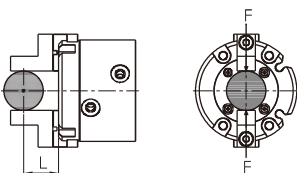
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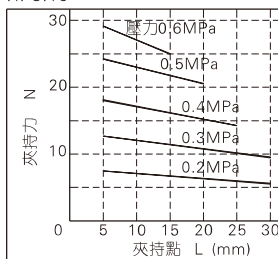
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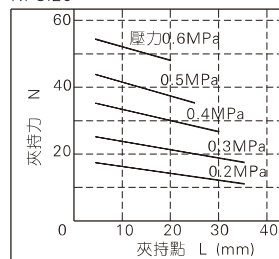
I型閉合夾持力



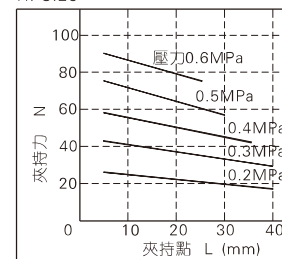
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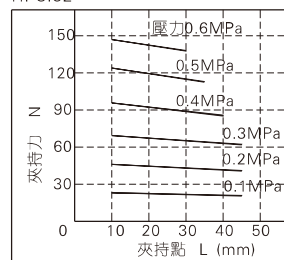
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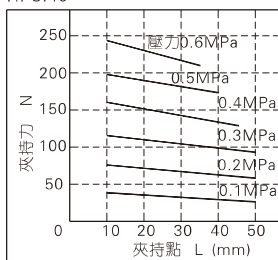
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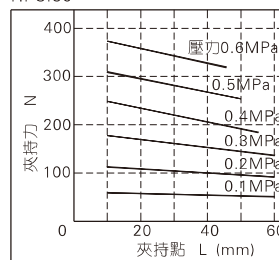
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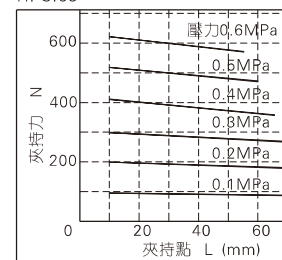
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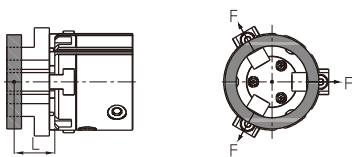
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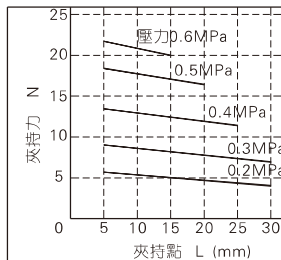
HFC163



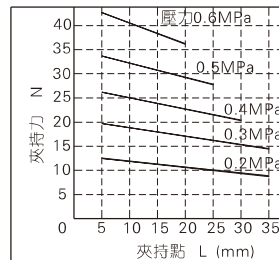
Y型張開夾持力



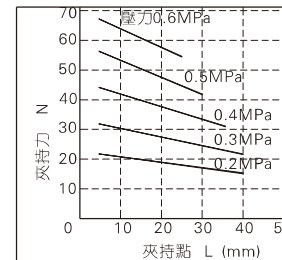
HFCY16



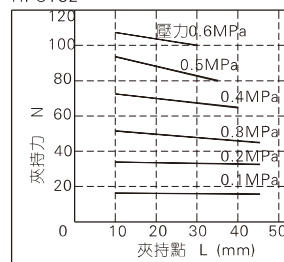
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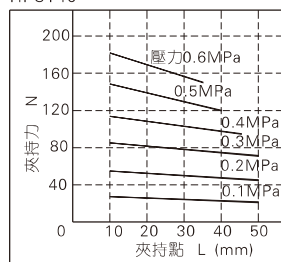
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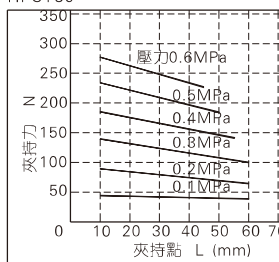
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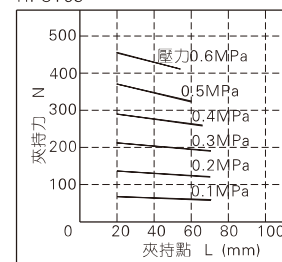
HFCY40



HFCY50



HFCY63

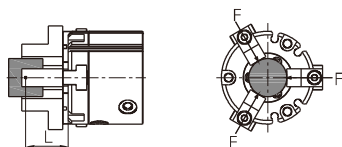


氣動手指(平行開閉型)

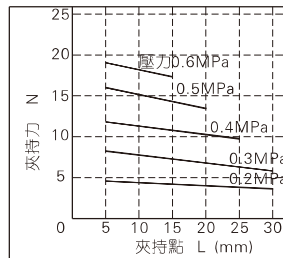
AIRTAC

HFC系列

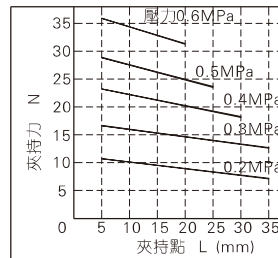
Y型閉合夾持力



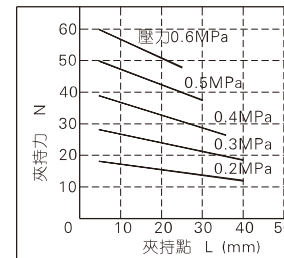
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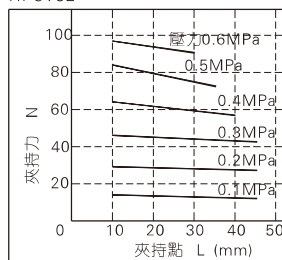
HFCY20



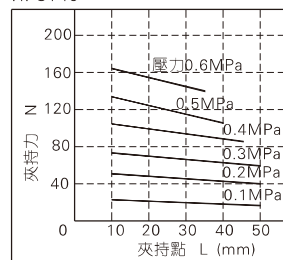
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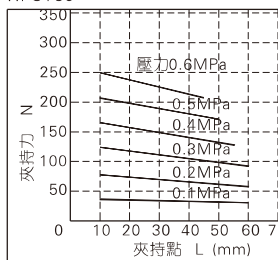
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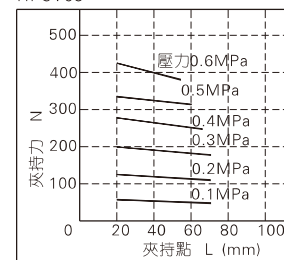
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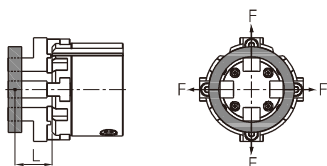
HFCY50



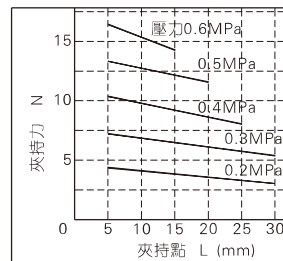
HFCY63



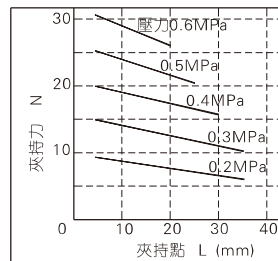
X型張開夾持力



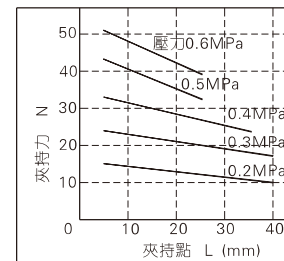
HFCX16



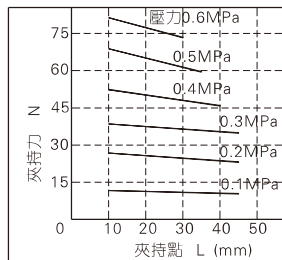
HFCX20



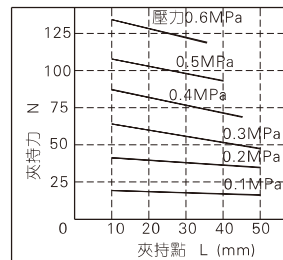
HFCX25



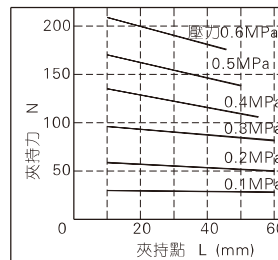
HFCX32



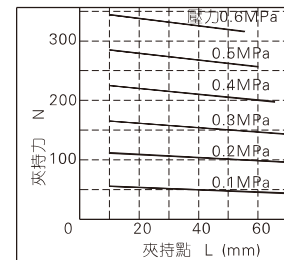
HFCX40



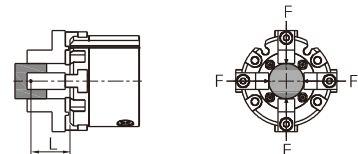
HFCX50



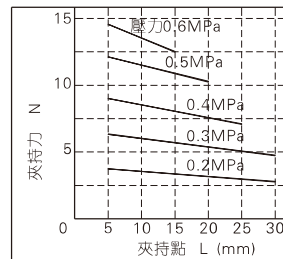
HFCX63



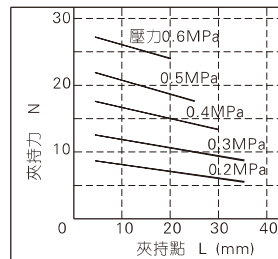
X型閉合夾持力



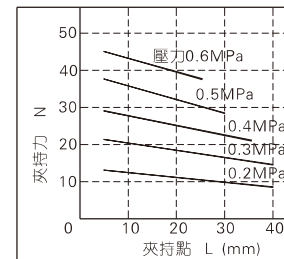
HFCX16



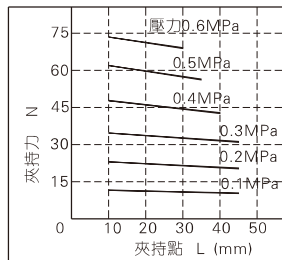
HFCX20



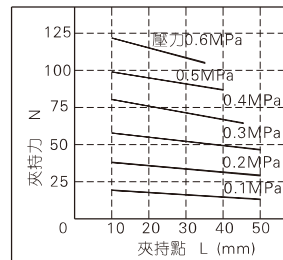
HFCX25



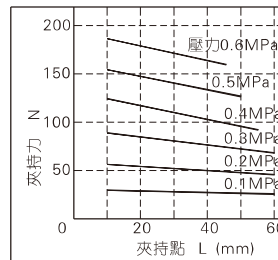
HFCX32



HFCX40



HFCX50

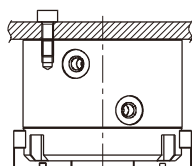


HFC系列

安裝與使用

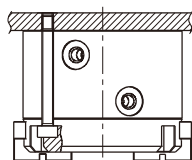
- 1、因突發情況而回路壓力低下時，會發生夾持力減少及工件落下之可能，為避免傷害人體或損壞設備，必須加裝防落下裝置。
- 2、不要在過大外力及衝擊力作用下使用氣動手指。
- 3、安裝及固定氣動手指時注意不可使其掉落、碰撞及損傷。
- 4、在固定夾爪配件時，請不要扭轉夾爪。
- 5、氣動手指有以下幾種安裝方法，且緊固螺絲鎖緊力矩必須在下表規定的扭矩範圍以內，太大會引起運轉不良，太小會造成位置偏差與掉落。

尾部安裝型



適用產品系列	缸徑	使用螺栓規格	最大鎖緊扭矩(Nm)	螺栓最大深度(mm)	尾部定位孔孔徑(mm)	尾部定位孔孔深(mm)
HFCI HFCX	16	M4×0.7	2.1	8	$\Phi 17^{+0.05}_0$	1.5
	20	M4×0.7	2.1	8	$\Phi 21^{+0.05}_0$	1.5
	25	M4×0.7	2.1	8	$\Phi 26^{+0.05}_0$	1.5
	32	M5×0.8	4.3	10	$\Phi 34^{+0.05}_0$	2
	40	M6×1.0	7.3	12	$\Phi 42^{+0.05}_0$	2
	50	M6×1.0	7.3	12	$\Phi 52^{+0.05}_0$	2
HFCY	63	M6×1.0	7.3	12	$\Phi 65^{+0.05}_0$	2.5
	16	M3×0.5	0.88	6	$\Phi 17^{+0.05}_0$	1.5
	20	M3×0.5	0.88	6	$\Phi 21^{+0.05}_0$	1.5
	25	M4×0.7	2.1	8	$\Phi 26^{+0.05}_0$	1.5
	32	M4×0.7	2.1	8	$\Phi 34^{+0.05}_0$	2
	40	M5×0.8	4.3	10	$\Phi 42^{+0.05}_0$	2
	50	M5×0.8	4.3	10	$\Phi 52^{+0.05}_0$	2
	63	M6×1.0	7.3	12	$\Phi 65^{+0.05}_0$	2.5

正面通孔安裝

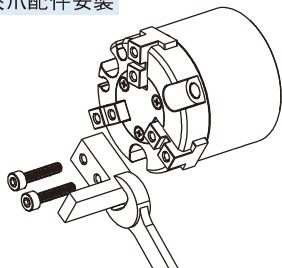


適用產品系列	缸徑	使用螺栓規格	最大鎖緊扭矩(Nm)
HFCI HFCX	16	M3×0.5	0.88
	20	M3×0.5	0.88
	25	M3×0.5	0.88
	32	M4×0.7	2.1
	40	M5×0.8	4.3
	50	M5×0.8	4.3
HFCY	63	M5×0.8	4.3
	16	M3×0.5	0.88
	20	M3×0.5	0.88
	25	M4×0.7	2.1
	32	M4×0.7	2.1
	40	M5×0.8	4.3
	50	M5×0.8	4.3
	63	M6×1.0	7.3

6、夾爪配件安裝方法：

安裝夾爪配件時特別注意，僅可用開口扳手固定夾爪再用內六角扳手鎖緊螺絲，切勿施加外力于本體夾爪，否則容易損壞部件。

夾爪配件安裝



缸徑	使用螺栓規格	最大鎖緊扭矩(Nm)
16	M3×0.5	0.59
20	M3×0.5	0.59
25	M3×0.5	0.59
32	M4×0.7	1.4
40	M4×0.7	1.4
50	M5×0.8	2.8
63	M5×0.8	2.8