

## 執行元件

## EXECUTION ELEMENT



ASC 系列 標準氣缸 ASC Series Standard Cylinder	01-05
ASI 系列 標準氣缸 (符合 ISO15552 標準) ASI Series Standard Cylinder (Conforms to ISO15552 Standard)	06-09
AMC 系列 鋁合金迷你缸 AMC Series Aluminum alloy Mini Cylinder	10-13
SMC 系列 不銹鋼迷你缸 SMC Series Stainless Steel Mini Cylinder	14-17
FA 系列 迷你氣壓缸 FA Series Miniature Cylinders	18-27
FI 系列 不銹鋼迷你缸 FI Series Stainless Steel Mini Cylinder	28-32
FMJ 系列 筆型氣壓缸 FMJ Series Pen Cylinders	33-43

FCMBR* 系列 迷你氣壓缸 FCMBR* Series Miniature Cylinders	-----	44-46
STCDFA 系列 薄型氣缸 STCDFA Series Thin Type Cylinder	-----	47-50
DFFA 系列 自由安裝氣壓缸 DFFA Series Multi-mount Cylinders	-----	51-55
TN 系列 雙軸氣缸 TN Series Double Rod Cylinder	-----	56-58
DPC 系列 雙缸氣缸 DPC Series Double Piston Cylinders	-----	59-62
FCGB 系列 迷你雙導桿氣壓缸 FCGB Series Twin-guide Cylinder	-----	63-67
FGT* 系列 雙導桿氣壓缸 FGT* Series Twin-guide Cylinders	-----	68-78
FPRCL* 系列 無桿缸 FPRCL* Series Rodless Cylinder	-----	79-86
ACH 系列 氣壓夾爪 ACH Series Air Chuck Hand	-----	87-90
FCHA 系列 夾爪 FCHA Series Grippers	-----	91-92
FCRB 系列 旋轉氣壓缸 FCRB Series Rotary Actuator	-----	93-95
FRT* 系列 迴轉氣缸 FRT* Series Rotary Actuator	-----	96-100
FTA* 系列 氣壓轉角下壓缸 FTA* Series Pneumatic-Swing Clamp Cylinders	-----	101-108
磁感應開關 / 固定鋼帶 Magnetism Sensor Switch/Fixed Metal Band	-----	109
固定夾具 Fixed Clamp	-----	110

## 規格 Specification

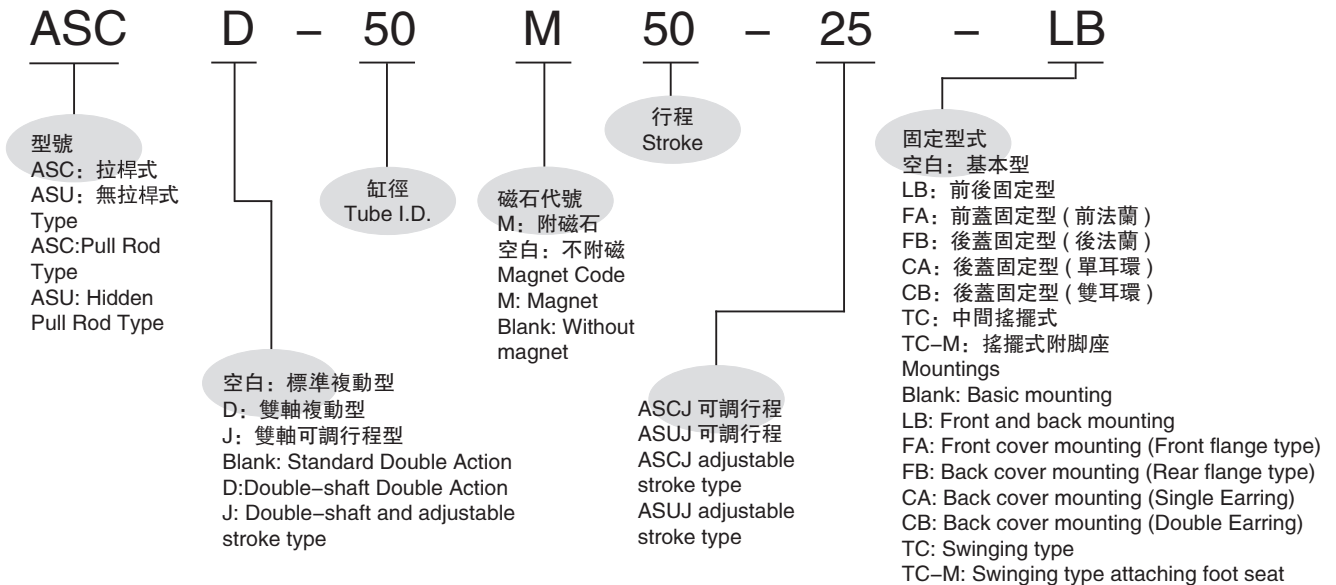


內徑 Tube I.D. (mm)	32	40	50	63	80	100	125	160	200
動作形式 Motion Pattern	複動型 Double Action								
工作介質 Working Medium	空氣 Air								
固定型式 Mountings	基本型 /Basic type FA 型 /type FB 型 /type CA 型 /type CB 型 /type LB 型 /type TC 型 /type TC-M 型 /type								
使用壓力範圍 Operating Voltage Range	1 ~ 9.0 Kg/cm <sup>2</sup>								
保證耐壓力 Ensured Pressure Resistance	13.5 Kg/cm <sup>2</sup>								
使用溫度範圍 Operating Temperature Range	0 ~ 70°C								
使用速度範圍 Operating Speed Range	50 ~ 800 mm/s								
緩沖型式 Buffer Type	可調緩沖 Adjustable Buffer								
緩沖行程 mm Buffer Stroke	20			26			45		
配管口徑 Port Size	G1/8"	G1/4"	G3/8"		G1/2"		G3/4"		

\*ASC、ASCJ 的固定型式為：FA、FB、LB、TC 和 TC-M 型。

\*ASC、ASCJ mountings: FA、FB、LB、TC & TC-M type.

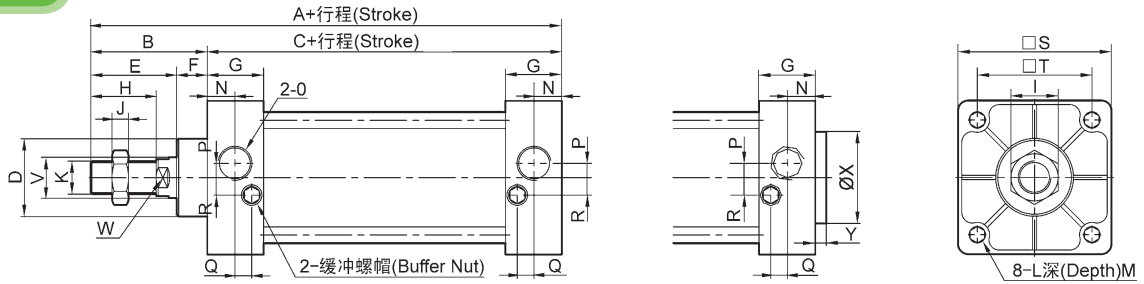
## 氣缸訂購代碼 Ordering Code



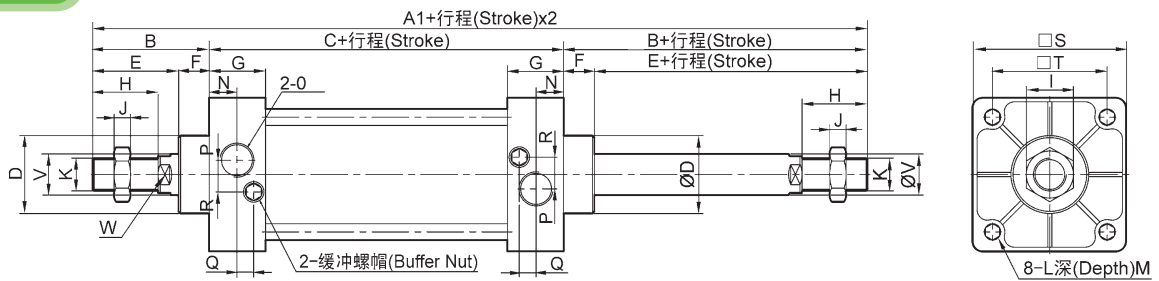
## 行程 Stroke

內徑 Tube I.D. (mm)	標準行程 Standard Stroke																最大行程 Max. Stroke	容許行程 Permissible Stroke					
32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	1000	2000					
40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	1200	2000		
50	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1200	2000
63	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
80	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
100	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
125	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
160	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000
200	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	600	700	800	900	1000	1500	2000

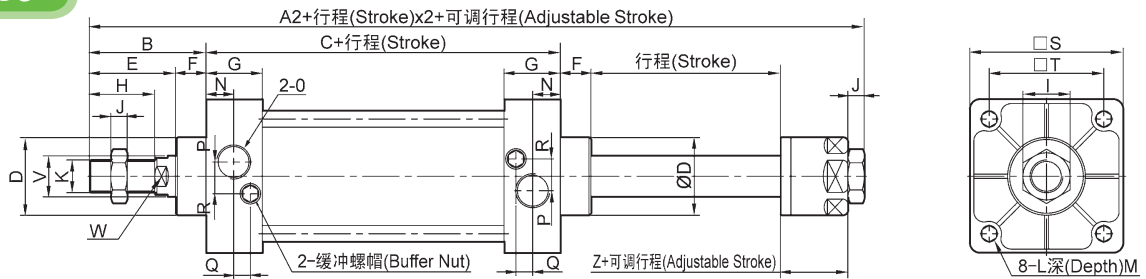
## ASC



## ASCD



## ASCJ



符號 Symbol 內徑 Tube I.D.	A	A1	A2	B	C	D	E	F	G	H	I	J	K	L
32	140	187	182	47	93	28	32	15	27.5	22	17	6	M10 × 1.25	M6 × 1
40	142	191	185	48	93	32	34	15	27.5	24	19	7	M12 × 1.25	M6 × 1
50	150	207	196	57	93	38	42	15	27.5	32	23	8	M16 × 1.5	M6 × 1
63	153	210	199	57	96	38	42	15	27.5	32	23	8	M16 × 1.5	M8 × 1.25
80	183	258	243	75	108	47	54	21	33	40	26	10	M20 × 1.5	M10 × 1.5
100	189	264	249	75	114	47	54	21	33	40	26	10	M20 × 1.5	M10 × 1.5
125	226	/	/	104	122	55	70	34	33	54	40	10	M27 × 2	M12 × 1.75
160	291	/	/	123	168	62	91	32	50	72	55	18	M36 × 2	M16 × 2
200	347	/	/	167	180	80	112	55	50	72	55	18	M36 × 2	M16 × 2

符號 Symbol 內徑 Tube I.D.	M	N	O	P	Q	R	S	T	V	W	Z
32	9.5	13.5	G1/8	3.5	7.5	7	45	33	12	12	21
40	9.5	13.5	G1/4	6	8.2	9	50	37	16	14	21
50	9.5	13.5	G1/4	8.5	8.2	9	62	47	20	17	23
63	9.5	13.5	G3/8	7	8.2	8.5	75	56	20	17	23
80	11.5	16.5	G3/8	10	9.5	14	94	70	25	22	29
100	11.5	16.5	G1/2	11	9.5	14	112	84	25	22	29
125	15.5	16.5	G1/2	/	/	/	140	110	32	27	/
160	17.5	25	G1/2	/	/	/	180	140	40	36	/
200	17.5	25	G3/4	/	/	/	220	175	40	36	/



### 訂購代碼 Ordering Code

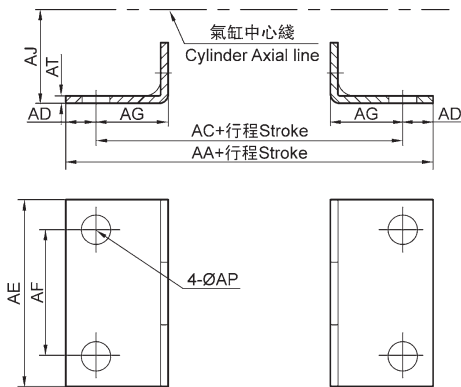
ASC - 50 - FA

ASC 標準氣缸  
ASC Standard  
Cylinder

缸徑  
Tube I.D.

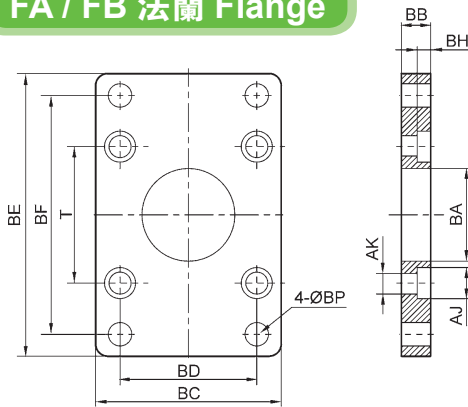
附件代號  
Accessory Code

### LB 腳架 Foot



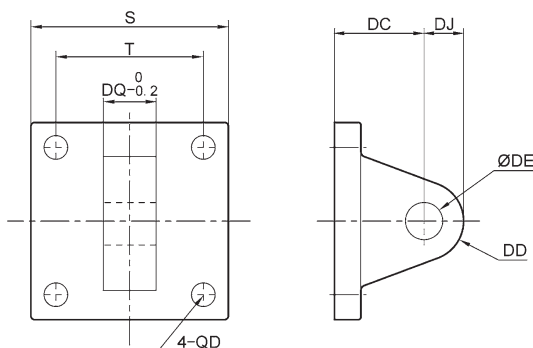
缸徑 Tube I.D.	32	40	50	63	80	100	125	160	200
符號 Symbol									
AA	153	169	173	184	200	210	249	328	380
AC	134	140	149	158	168	174	213	288	320
AD	9.5	14.5	12	12	16	18	18	20	30
AE	50	57	68	80	97	112	140	180	220
AF	33	36	47	56	70	84	90	115	135
AG	20.5	23.5	28	31	30	30	45	60	70
AJ	28	30	36.5	41	49	57	90	115	135
AP	9	12	12	12	14	14	16	18	22
AT	3.2	3.2	3.2	3.2	4	4	8	8	10

### FA / FB 法蘭 Flange



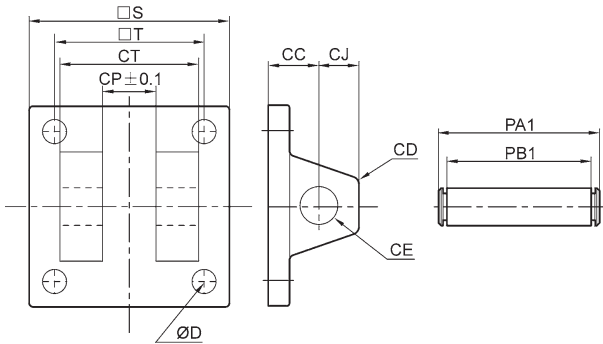
缸徑 Tube I.D.	32	40	50	63	80	100	125	160	200
符號 Symbol									
BA	28.3	32.3	38.3	338.3	347.3	347.3	56	63	81
BB	10	10	10	12	16	16	20	25	25
BC	47	52	65	76	95	115	140	180	220
BD	33	36	47	56	70	84	90	115	135
BE	72	84	104	116	143	162	224	280	320
BF	58	70	86	98	119	138	180	230	270
BH	6.5	6.5	6.5	8.5	10.5	10.5	15	20	20
AJ	10.5	10.5	10.5	13.5	16.6	16.6	19	25	25
AK	6.5	6.5	6.5	8.5	10.5	10.5	12.5	16.5	16.5
BP	7	7	9	9	12	12	16	18	22
T	33	37	47	56	70	84	110	140	175

### CA 單耳環 Hinge



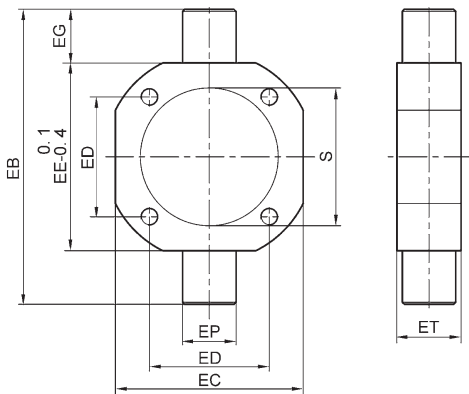
缸徑 Tube I.D.	32	40	50	63	80	100	125	160	200
符號 Symbol									
S	48	50	62	75	94	112	140	180	220
T	33	37	47	56	70	84	110	140	175
DC	34	34	34	34	48	48	50	55	60
DD	14	14	15	15	20	20	25	30	30
DE	12	14	14	14	20	20	25	30	30
DJ	14	14	15	15	20	20	25	30	30
DQ	16	20	20	20	32	32	70	90	90

## CB 雙耳環 Hinge



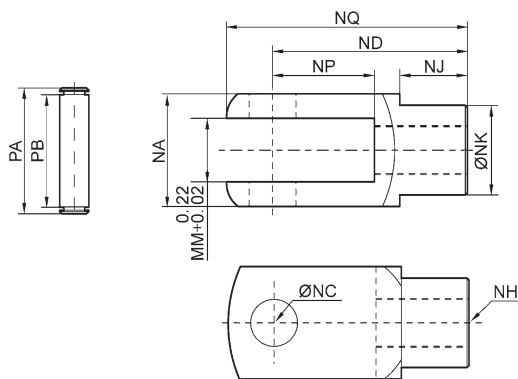
缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125	160	200
<b>CC</b>	19	19	19	19	32	32	50	55	60
<b>CD</b>	5	5	3	3	8	8	25	30	30
<b>CE</b>	12	14	14	14	20	20	25	30	30
<b>CJ</b>	13	13	15	15	21	21	25	30	30
<b>CP</b>	16.3	20.5	20.3	20.3	32.3	32.3	70	90	90
<b>CT</b>	32	44	52	52	64	64	120	160	160
<b>PAI</b>	41	51.8	60.3	60.3	73.8	73.8	130	170	170
<b>PBI</b>	33.5	45.8	54	54	65.5	65.5	121.5	161.5	161.5
<b>S</b>	48	50	62	75	94	112	140	180	220
<b>T</b>	33	37	47	56	70	84	110	140	175

## TC 中擺 Center Trunion

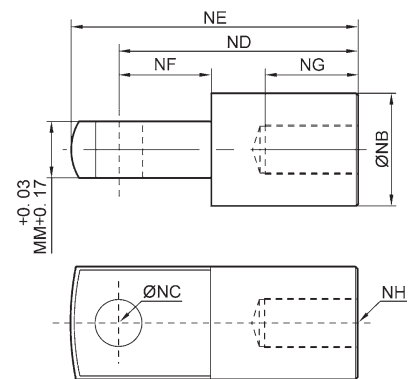


缸徑 Tube I.D. 符號 Symbol	40	50	63	80	100	125	160	200
<b>EB</b>	113	126	138	164	182	210	264	336
<b>EC</b>	63	76	88	114	132	160	200	245
<b>ED</b>	37	47	56	70	84	110	140	175
<b>EE</b>	63	76	88	114	132	160	200	245
<b>EG</b>	25	25	25	25	25	25	32	35
<b>EP</b>	25	25	25	25	25	30	32	32
<b>ET</b>	30	30	30	35	40	38	38	52
<b>S</b>	45.5	55.5	68.5	87.5	107.5	134.5	172.5	212.5

## Y 接頭 / Y Connector



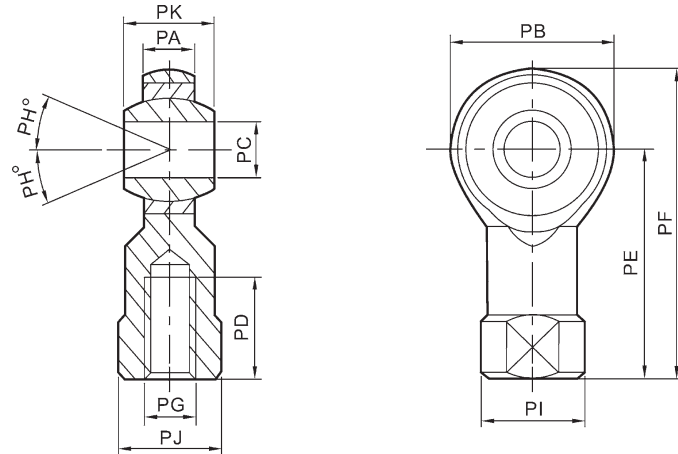
## I 接頭 / I Connector



缸徑 Tube I.D. 符號 Symbol	NA	NB	NC	ND	NE	NF	NG	NH	NJ	NK	NM	NP	NQ	PA	PB
<b>32</b>	19	20	10	40	52	15	20	M10×1.25	12	18	10	20	52	26.2	20
<b>40</b>	25.4	24	12	48	67	24	20	M12×1.25	20	23	12	24	62	32.8	26.5
<b>50</b>	32	32	16	64	89	32	23	M16×1.5	22	30	16	32	83	39.3	33
<b>63</b>	32	32	16	64	89	32	23	M16×1.5	22	30	16	32	83	39.3	33
<b>80</b>	44.4	40	20	80	112	40	30	M20×1.5	30	39	20	40	105	53.3	45
<b>100</b>	44.4	40	20	80	112	40	30	M20×1.5	30	39	20	40	105	53.3	45

## PHSA 魚眼接頭

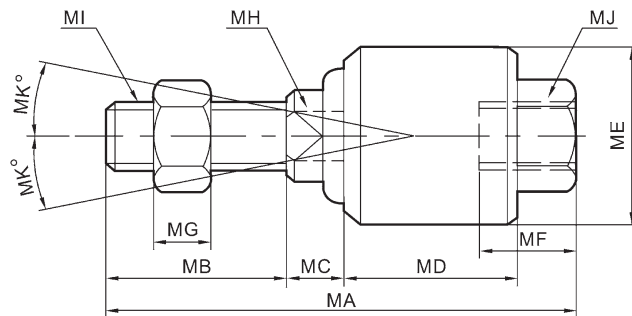
### PHSA Universal Piston Rod Eye



符號 Symbol 缸徑 Tube I.D.	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
<b>32</b>	11	26	10	20	43	56	M10 × 1.25	13	19	17	14
<b>40</b>	12	32	12	24	50	66	M12 × 1.25	13	22	19	16
<b>50</b>	15	40	16	28	64	84	M16 × 1.5	15	27	22	21
<b>63</b>	15	40	16	28	64	84	M16 × 1.5	15	27	22	21
<b>80</b>	18	46	20	35	77	100	M20 × 1.5	15	34	30	25
<b>100</b>	18	46	20	35	77	100	M20 × 1.5	15	34	30	25

## FDJT 浮動接頭

### FDJT Piston Floating Jiont



符號 Symbol 缸徑 Tube I.D.	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK
<b>32</b>	58	22	7	21	26	11.5	7	10	M10 × 1.25	M10 × 1.25	12
<b>40</b>	58	22	8	21	28	11.5	8	12	M12 × 1.25	M12 × 1.25	12
<b>50</b>	90	27	10	41	44.5	20	10	17	M16 × 1.5	M16 × 1.5	7
<b>63</b>	90	27	10	41	44.5	20	10	17	M16 × 1.5	M16 × 1.5	7
<b>80</b>	102	29	13	46	53	24	13	22	M20 × 1.5	M20 × 1.5	10
<b>100</b>	102	29	13	46	53	24	13	22	M20 × 1.5	M20 × 1.5	10

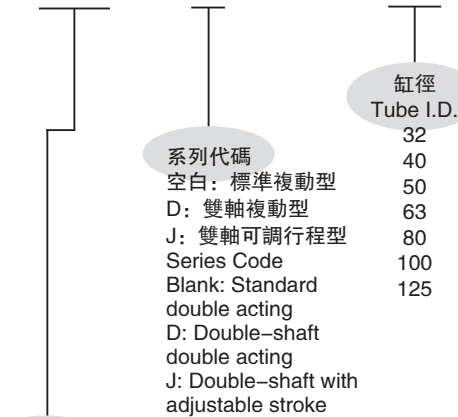
## 規格 Specification



內徑 Tube I.D. (mm)	32	40	50	63	80	100	125
動作形式 Operation	複動型 Double Acting						
工作介質 Working Medium	空氣 Air						
固定型式 Mountings	基本型 Basic FA型/type FB型/type CA型/type CB型/type LB型/type YB型/type						
使用壓力範圍 Operating Pressure Range	1 ~ 9.0 Kg/cm <sup>2</sup>						
保證耐壓力 Proof Pressure	13.5 Kg/cm <sup>2</sup>						
使用溫度範圍 Operating Temperature Range	0 ~ 70°C						
使用速度範圍 Operating Speed Range	50 ~ 800mm/s						
緩衝型式 Cushion	可調緩衝 Adjustable Cushion						
緩衝行程 Adjustable Cushion Stroke	20mm			26mm			
接管口徑 Port Size	G1/8"	G1/4"	G3/8"		G1/2"		

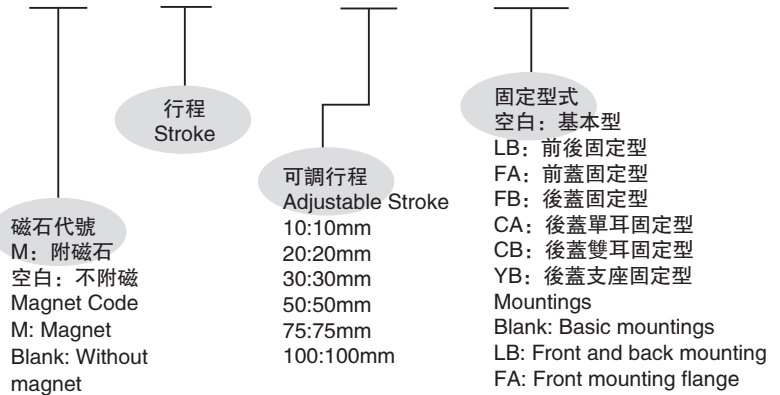
## 氣缸訂購代碼 Ordering Code

ASI - D - 50



型號  
ASI: ISO15552 標準氣缸  
Series  
ASI: ISO 15552  
Standard cylinder

M 50 - 10 - LB



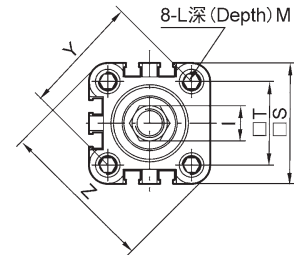
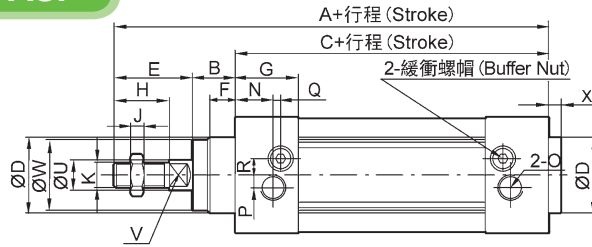
\*ASI系列標準氣缸全部為附磁型  
\*All ASI series standard cylinder are with magnet.

## 行程 Stroke

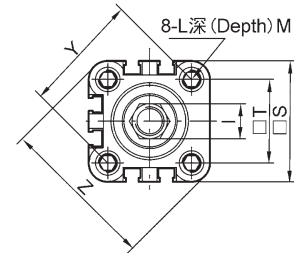
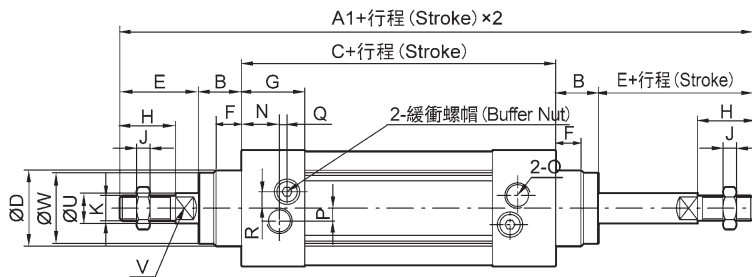
內徑 Tube I.D.	標準行程 Standard Stroke	最大行程 Max. Stroke	容許行程 Allowable Stroke
32	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500	1000	2000
40	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800	1200	2000
50	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1200	2000
63	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
80	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
100	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000
125	25 50 75 80 100 125 150 160 175 200 250 300 350 400 450 500 600 700 800 900 1000	1500	2000



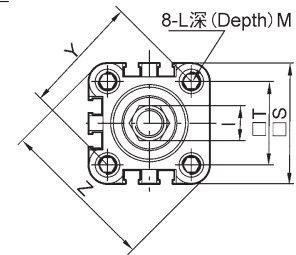
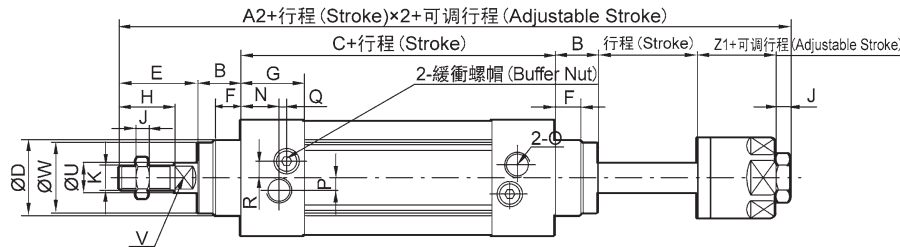
### ASI



### ASID



### ASIJ

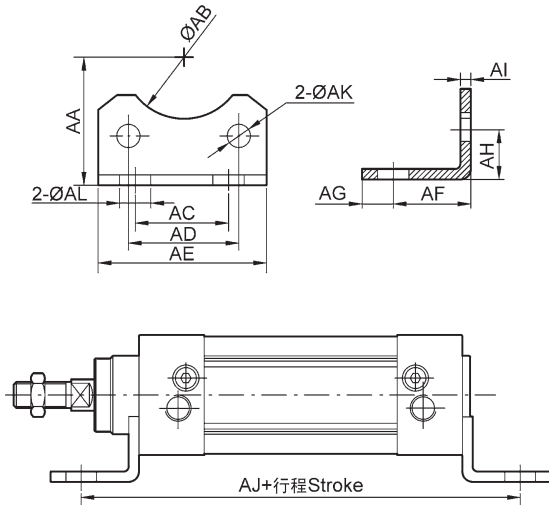


## 尺寸表 Dimension

符號 Symbol 缸徑 Tube I.D.	A	A1	A2	B	C	D	E	F	G	H	I	J	K	L
32	142	190	185	16	94	30	33	10	25	22	17	6	M10x1.25	M6
40	159	213	207	20	105	35	34	10	29.5	24	17	7	M12x1.25	M6
50	175	244	233	27	106	40	42.5	10	32	32	23	8	M16x1.5	M8
63	190	258	247	26	122	45	42	10	36	32	23	8	M16x1.5	M8
80	214	301	288	35	127	45	53	10	37	40	26	10	M20x1.5	M10
100	229	321	308	40	137	55	52	10	39	40	26	10	M20x1.5	M10
125	277	394	378	46	160	60	71	10	43.5	54	40	10	M27x2	M12

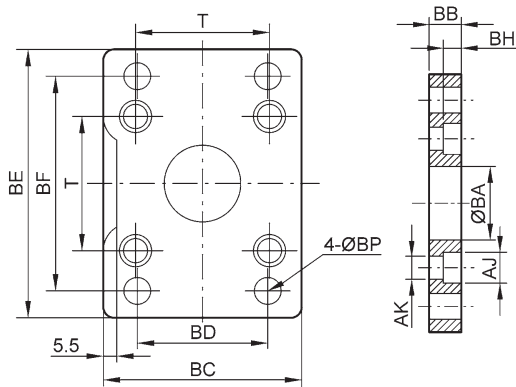
符號 Symbol 缸徑 Tube I.D.	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Z1
32	12	15	G1/8	5	3	6.5	45	32.5	12	10	28	4	46	58.7	21
40	12	17.5	G1/4	7	3	7	52	38	16	13	33	4	53.7	68	21
50	12	20	G1/4	7	3	9	65	46.5	20	17	38	4	65.8	84.5	23
63	12	22	G3/8	8	5	9	76	56.5	20	17	38	4	79.9	99.6	23
80	15	23	G3/8	10	5	12	94	72	25	22	43.5	5	101.8	123.8	29
100	15	26	G1/2	10	5	14	112	89	25	22	47	6	125.9	148.9	29
125	20	29	G1/2	10	5	14	134	110	32	27	53	7	156.9	179.6	40.5

## LB 腳架 Foot



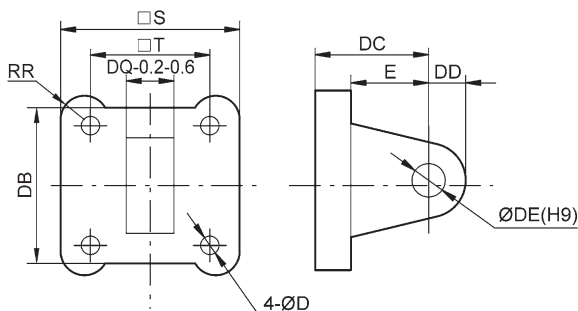
缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125
AA	32	36	45	50	63	71	90
AB	30	35	40	45	45	55	60
AC	32	36	45	50	63	75	90
AD	32.5	38	46.5	56.5	72	89	110
AE	46.5	52.5	65	75	94.5	114.5	140
AF	24	28	32	32	41	41	45
AG	9	11	11	14	14	16	18
AH	15.8	17	21.8	21.8	27	26.5	35
AI	3.2	3.2	3.2	3.6	4.5	4.5	8
AJ	142	161	170	185	210	220	250
AK	6.5	6.5	8.5	8.5	10.5	10.5	12.5
AL	7	10	10	10	12	14.5	16.5

## FA / FB 法蘭 Flange



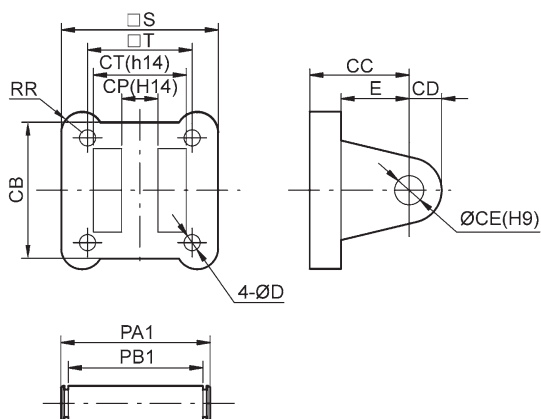
缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125
BA	30.3	35.3	40.3	45.3	45.3	55.3	60.3
BB	10	10	12	12	16	16	20
BC	45	52	65	76	94	112	140
BD	32	36	45	50	63	75	90
BE	80	90	110	120	150	175	224
BF	64	72	90	100	126	150	180
BH	6.5	6.5	8.5	8.5	10.5	10.5	15
AJ	10.5	10.5	13.5	13.5	16.5	16.5	19
AK	6.5	6.5	8.5	8.5	10.5	10.5	12.5
BP	7	9	9	9	12	14	16
T	32.5	38	46.5	56.5	72	89	110

## CA 單耳環 Hinge



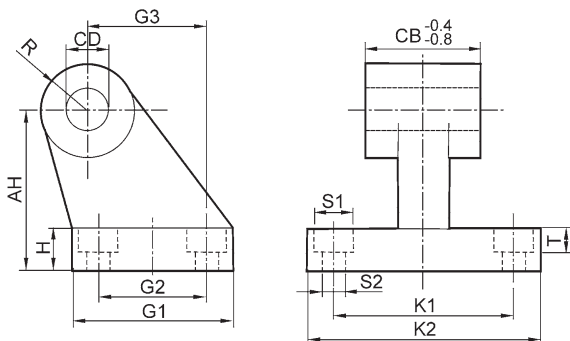
缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125
S	45	52	65	76	94	112	140
T	32.5	38	46.5	56.5	72	89	110
RR	6.5	6.5	9	9.5	11	11.5	12
DB	34	41	54	65	83	101	123
DC	22	25	27	32	36	41	50
DD	10	11	13	16	16	20	25
DE	10	12	12	16	16	20	25
DQ	26	28	32	40	50	60	70
D	6.5	6.5	8.5	8.5	10.5	10.5	12.5
E	14	17	17	22	24	25	30

### CB 雙耳環 Hinge



缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125
<b>S</b>	45	52	65	76	94	112	140
<b>T</b>	32.5	38	46.5	56.5	72	89	110
<b>D</b>	6.5	6.5	8.5	8.5	10.5	10.5	12.5
<b>E</b>	14	17	17	22	24	25	30
<b>RR</b>	6.5	6.5	9	9.5	11	11.5	12
<b>CB</b>	34	41	54	65	83	101	123
<b>CC</b>	22	25	27	32	36	41	50
<b>CD</b>	10	11	13	16	16	20	25
<b>CE</b>	10	12	12	16	16	20	25
<b>CP</b>	26	28	32	40	50	60	70
<b>CT</b>	45	52	60	70	90	110	120
<b>PA1</b>	53	60	68	78	100	120	130
<b>PB1</b>	46.5	53.5	61.5	71.5	91.5	111.5	121.5

### YB 支座 Hinge



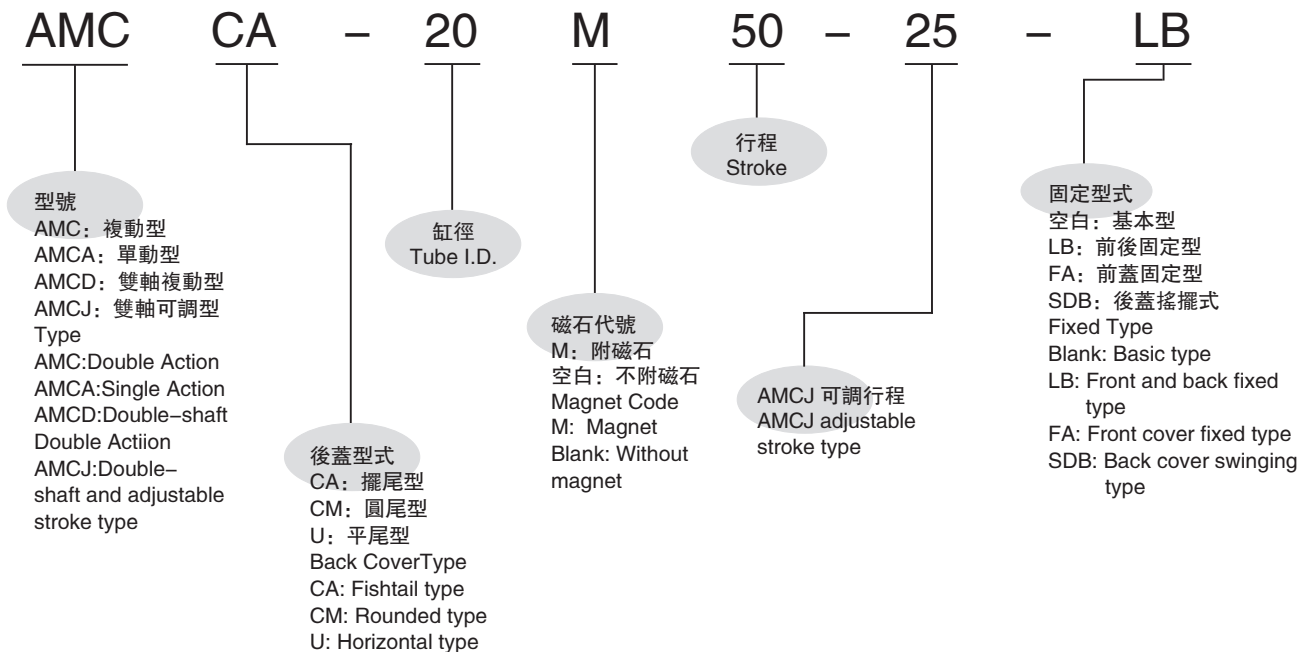
缸徑 Tube I.D. 符號 Symbol	32	40	50	63	80	100	125
<b>AH</b>	32	36	45	50	63	71	90
<b>H</b>	8	10	12	12	14	15	20
<b>CD</b>	10	12	12	16	16	20	25
<b>G1</b>	31	35	45	50	60	70	90
<b>G2</b>	18	22	30	35	40	50	60
<b>G3</b>	21	24	33	37	47	55	70
<b>CB</b>	26	28	32	40	50	60	70
<b>K1</b>	38	41	50	52	66	76	94
<b>K2</b>	51	54	65	67	86	96	124
<b>S1</b>	11	11	14	14	17	17	20
<b>S2</b>	6.6	6.6	9	9	11	11	14
<b>T</b>	1.6	1.6	1.6	1.6	2.5	2.5	3.2
<b>R</b>	10	11	13	15	15	19	22.5

## 規格 Specification

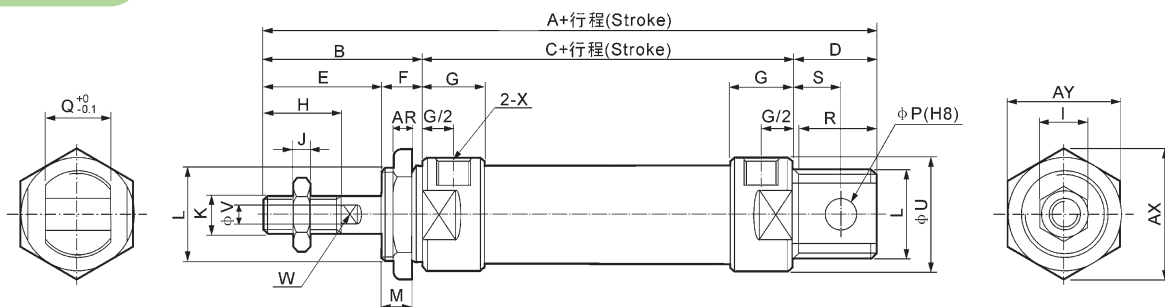


內徑 Tube I.D. (mm)	20	25	32	40
動作形式 Motion Pattern	複動型或單動型 Double Action or Single Action			
工作介質 Working Medium	空氣 Air			
固定型式 Fixed Type	基本型 /Basic type FA 型 /type LB 型 /type SDB 型 /type			
使用壓力範圍 Operating Voltage Range	1.0 ~ 9.0 Kg/cm <sup>2</sup>			
保證耐壓力 Ensured Pressure Resistance	13.5 Kg/cm <sup>2</sup>			
使用溫度範圍 Operating Temperature Range	0 ~ 70°C			
使用速度範圍 Operating Speed Range	50 ~ 800 mm/s			
緩沖型式 Buffer Type	緩沖墊片 Buffer Spacer			
接管口徑 Port Size	G1/8"			

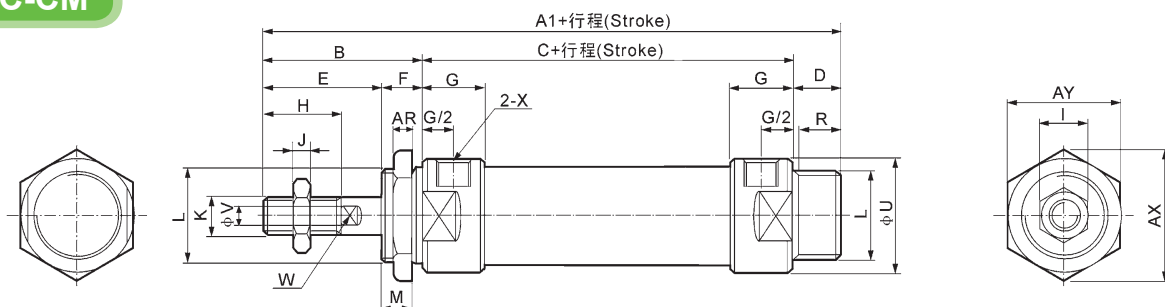
## 訂購代碼 Ordering Code



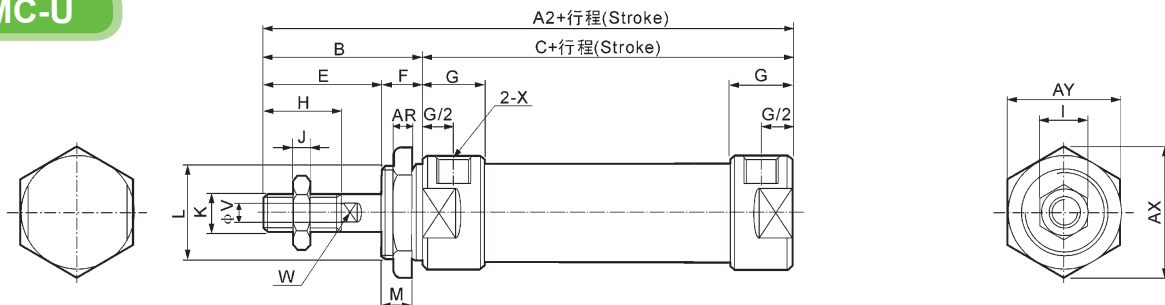
## AMC-CA



## AMC-CM

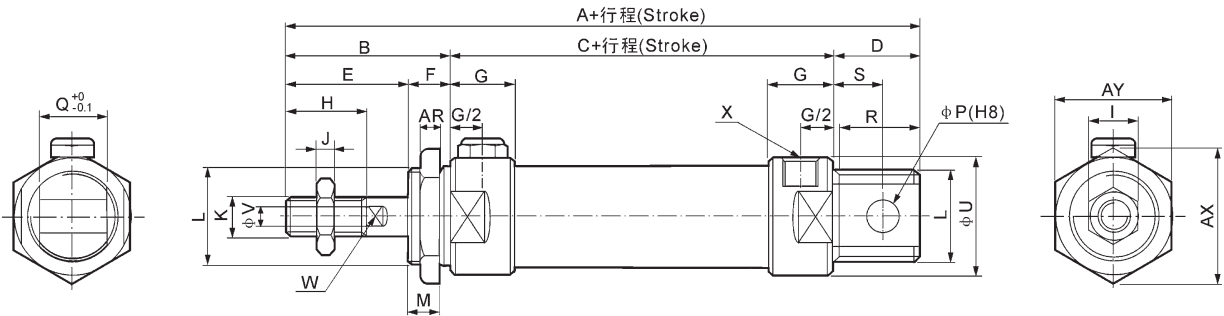


## AMC-U

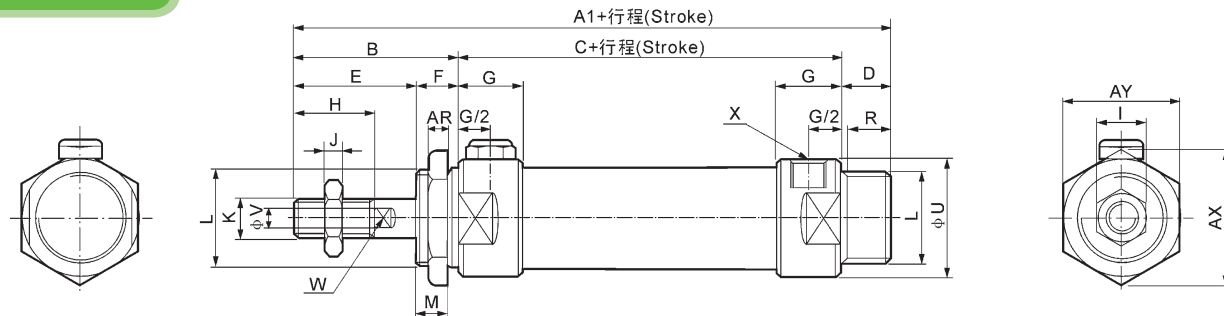


符號 Symbol 內徑 Tube I.D.	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
20	131	122	110	40	70	21	12	28	12	16	20	12	6	M8 × 1.25
25	135	128	114	44	70	21	14	30	14	16	22	17	6	M10 × 1.25
32	141	128	114	44	70	27	14	30	14	16	22	17	6	M10 × 1.25
40	165	152	138	46	92	27	14	32	14	22	24	17	7	M12 × 1.25
符號 Symbol 內徑 Tube I.D.	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
20	M22 × 1.5	10	8	16	19	10	12	29	8	6	G1/8	7	33	29
25	M22 × 1.5	12	8	16	19	12	12	34	10	8	G1/8	7	33	29
32	M24 × 2.0	12	10	16	25	12	15	39.5	12	10	G1/8	8	37	32
40	M30 × 2.0	12	12	20	25	12	15	49.5	16	14	G1/4	9	47	41

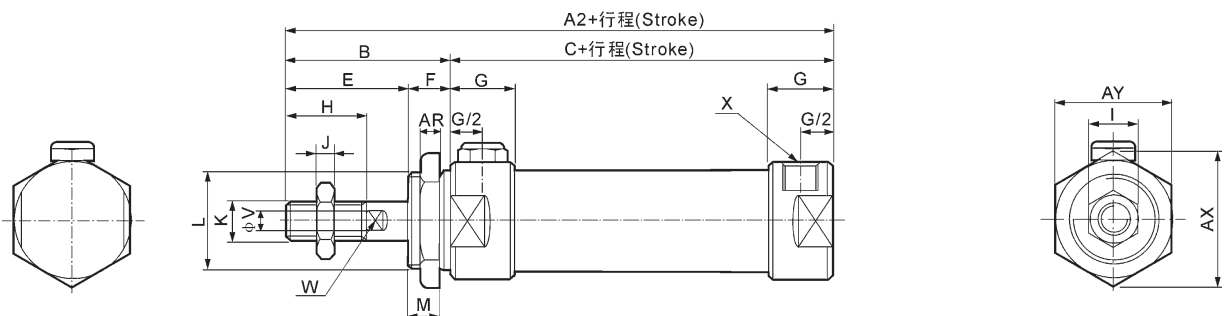
## AMCA-CA



## AMCA-CM

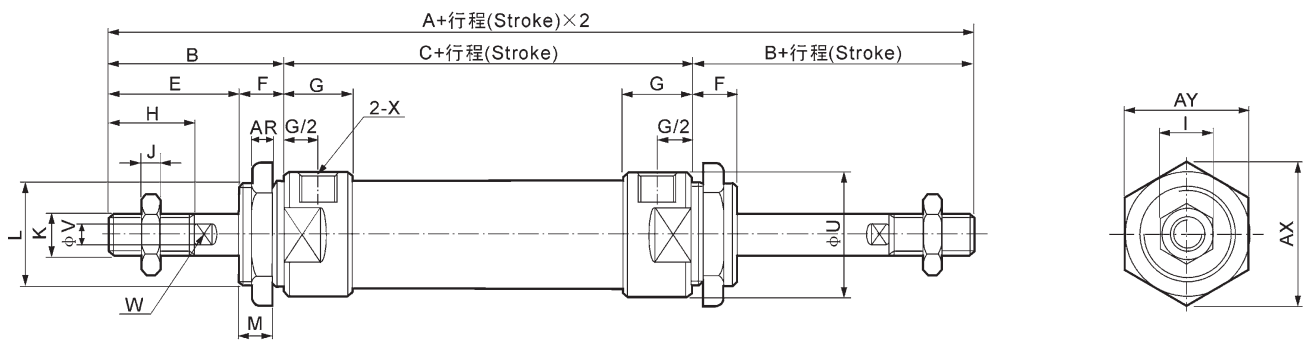


## AMCA-U

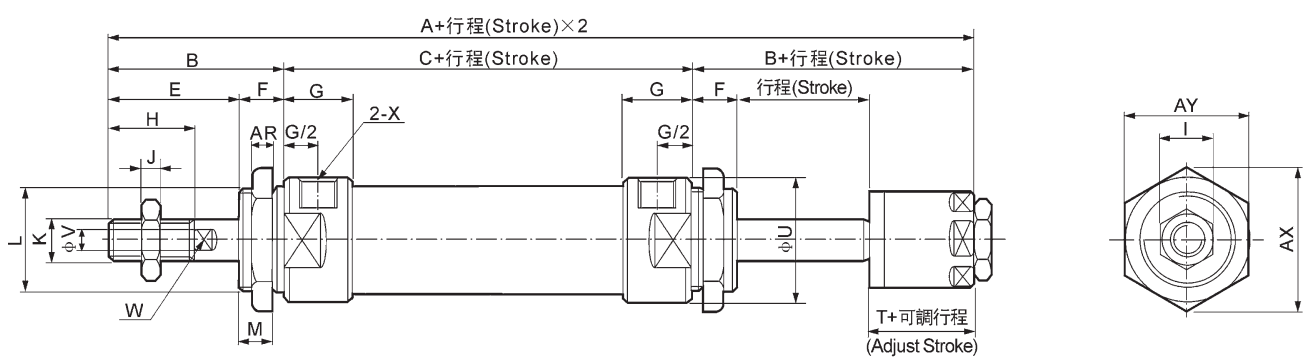


符號 Symbol 行程 Stroke 內徑 Tube I.D.	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
	0~50	51~100	0~50	51~100	0~50	51~100		0~50	51~100								
20	131	156	122	147	110	135	40	70	95	21	12	28	12	16	20	12	6
25	135	160	128	153	114	139	44	70	95	21	14	30	14	16	22	17	6
32	141	166	128	153	114	139	44	70	95	27	14	30	14	16	22	17	6
40	165	190	152	177	138	163	46	92	117	27	14	32	14	22	24	17	7
符號 Symbol 內徑 Tube I.D.	K	L		M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY	
	20	M8 × 1.25	M22 × 1.5		10	8	16	19	10	12	29	8	6	G1/8	7	33	29
25	M10 × 1.25	M22 × 1.5		12	8	16	19	12	12	34	10	8	G1/8	7	33	29	
32	M10 × 1.25	M24 × 2.0		12	10	16	25	12	15	39.5	12	10	G1/8	8	37	32	
40	M12 × 1.25	M30 × 2.0		12	12	20	25	12	15	49.5	16	14	G1/4	9	47	41	

## AMCD



## AMCJ



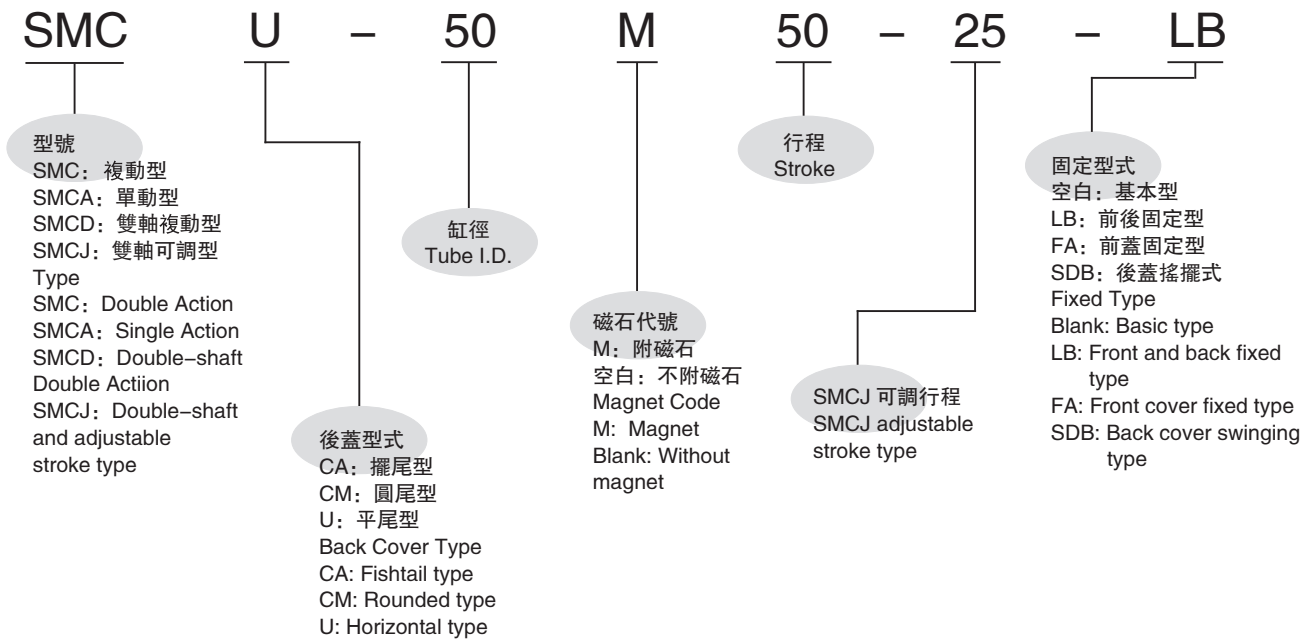
符號 Symbol	A	A1	B	C	E	F	G	H	I	I	K
內徑 Tube I.D.											
<b>20</b>	150	147	40	70	28	12	16	20	12	6	M8 × 1.25
<b>25</b>	158	155	44	70	30	14	16	22	17	6	M10 × 1.25
<b>32</b>	158	155	44	70	30	14	16	22	17	6	M10 × 1.25
<b>40</b>	184	180	46	92	32	14	22	24	17	7	M12 × 1.25
符號 Symbol	L		M	U	V	W	X	AR	AX	AY	T
內徑 Tube I.D.											
<b>20</b>	M22 × 1.5		10	29	8	6	G1/8	7	33	29	19
<b>25</b>	M22 × 1.5		12	34	10	8	G1/8	7	33	29	21
<b>32</b>	M24 × 2.0		12	39.5	12	10	G1/8	8	37	32	21
<b>40</b>	M30 × 2.0		12	49.5	16	14	G1/4	9	47	41	21

### 規格 Specification



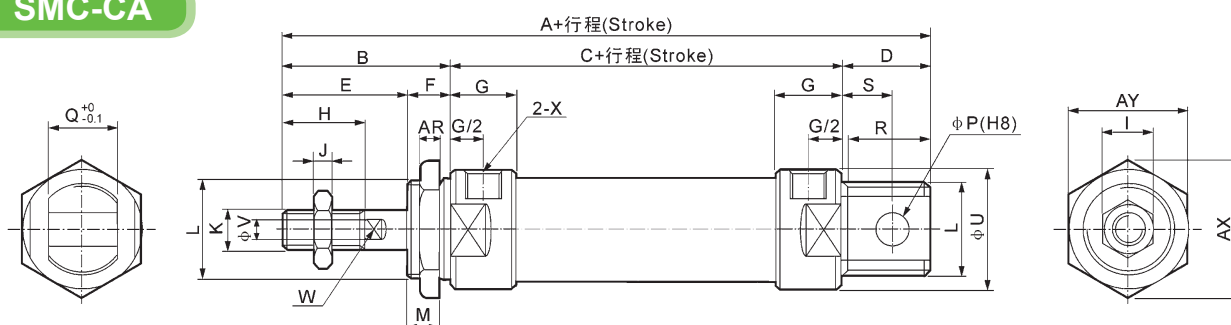
內徑 Tube I.D. (mm)	16	20	25	32	40
動作形式 Motion Pattern	複動型或單動型 Double Action or Single Action				
工作介質 Working Medium	空氣 Air				
固定型式 Mountings	基本型 /Basic type FA 型 /type LB 型 /type SDB 型 /type				
使用壓力範圍 Operating Pressure Range	1.0 ~ 9.0 Kg/cm <sup>2</sup>				
保證耐壓力 Ensured Pressure Resistance	13.5 Kg/cm <sup>2</sup>				
使用溫度範圍 Operating Temperature Range	0 ~ 70°C				
使用速度範圍 Operating Speed Range	50 ~ 800 mm/s				
緩沖型式 Buffer Type	緩沖墊片 Buffer Spacer				
接管口徑 Port Size	M5 x 0.8	G1/8"			

### 訂購代碼 Ordering Code

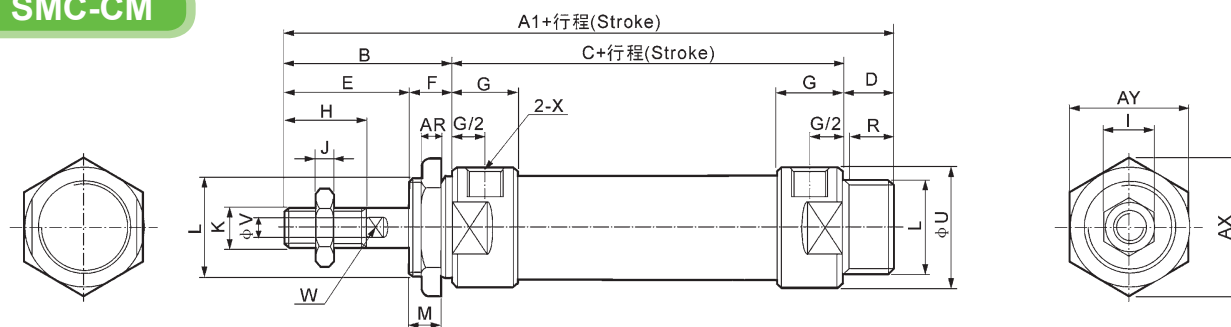




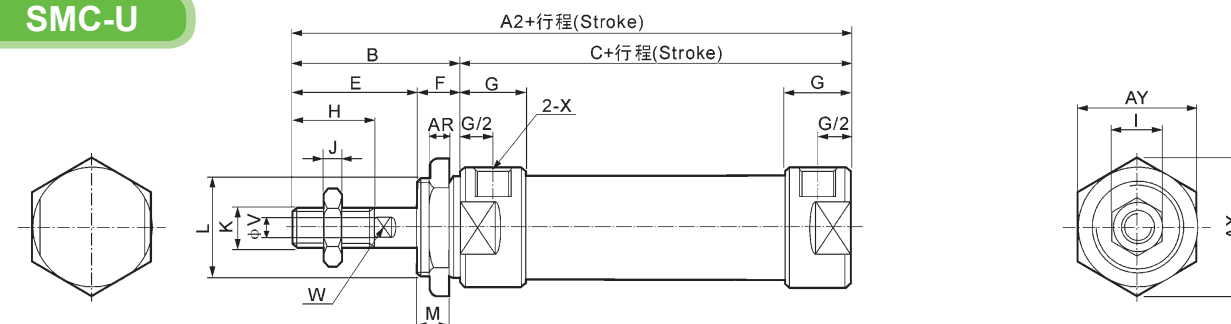
### SMC-CA



### SMC-CM

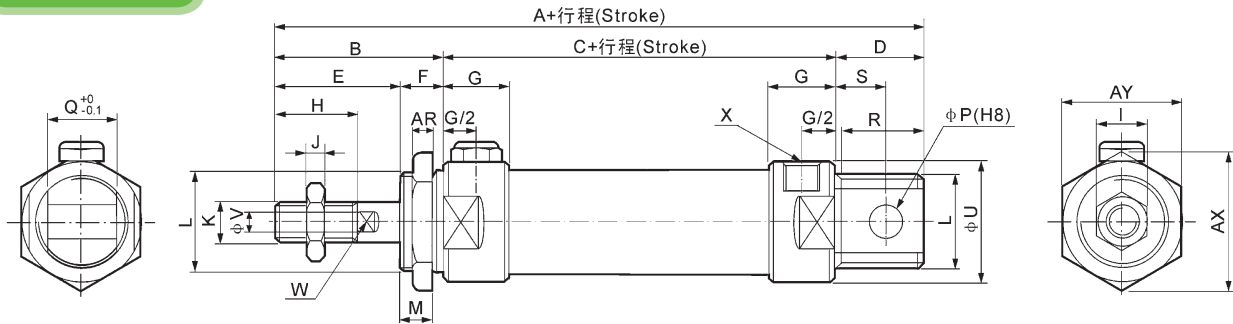


### SMC-U

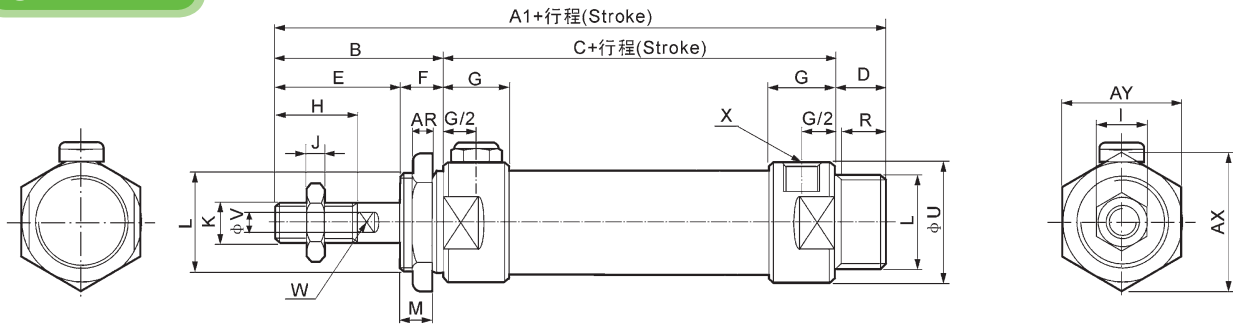


符號 Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
內徑 Tube I.D.														
16	114	114	98	38	60	16	15	22	16	10	16	10	5	M6 × 1
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8 × 1.25
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10 × 1.25
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10 × 1.25
40	149	136	122	46	76	27	14	32	14	16	24	17	7	M12 × 1.25
符號 Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
內徑 Tube I.D.														
16	M16 × 1.5	14	6	12	14	14	9	21	6	5	M5	6	24	27.5
20	M22 × 1.5	10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	M22 × 1.5	12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	M24 × 2.0	12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	M30 × 2.0	12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

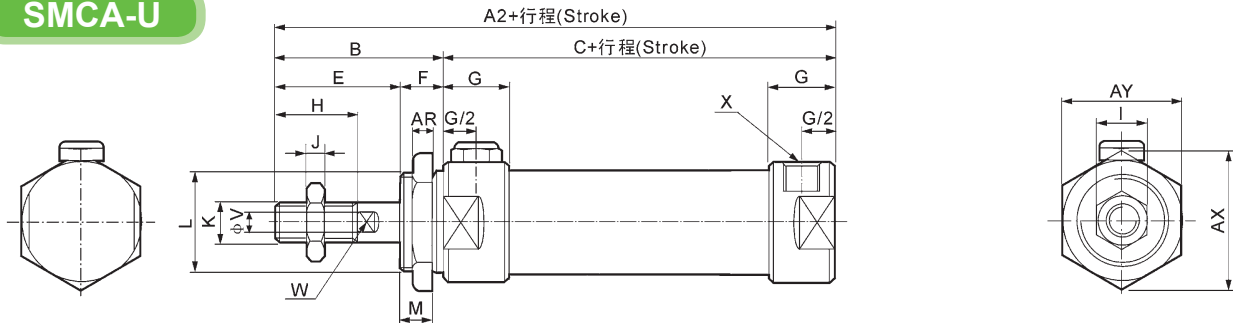
### SMCA-CA



### SMCA-CM

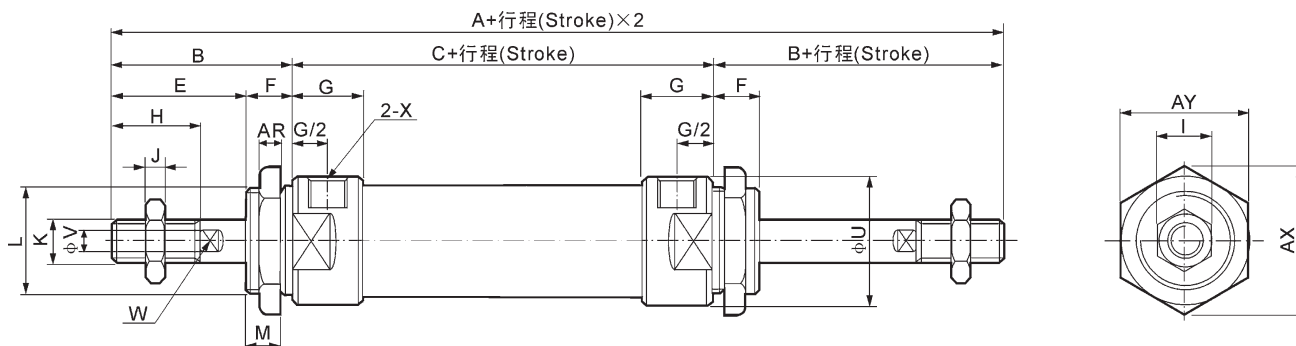


### SMCA-U

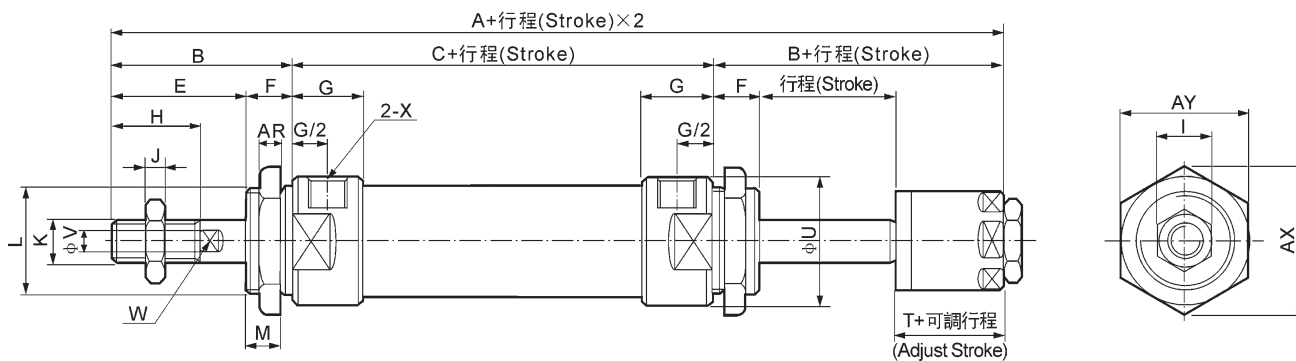


符號 Symbol 行程 Stroke 内徑 Tube I.D.	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
	0~50	51~100	0~50	51~100	0~50	51~100		0~50	51~100								
20	137	162	128	153	116	141	40	74.5	101	21	12	28	12	16	20	12	6
25	141	166	134	159	120	145	44	76	101	21	14	30	14	16	22	17	6
32	147	172	134	159	120	145	44	76	101	27	14	30	14	16	22	17	6
40	149	174	136	161	122	147	46	76	101	27	14	32	14	16	24	17	7
符號 Symbol 内徑 Tube I.D.	K		L		M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
20	M8 × 1.25		M22 × 1.5		10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	M10 × 1.25		M22 × 1.5		12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	M10 × 1.25		M24 × 2.0		12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	M12 × 1.25		M30 × 2.0		12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

## SMCD



## SMCJ



符號 Symbol 內徑 Tube I.D.	A	A1	B	C	E	F	G	H	I	I	K
20	156	153	40	70	28	12	16	20	12	6	M8 × 1.25
25	164	161	44	70	30	14	16	22	17	6	M10 × 1.25
32	164	161	44	70	30	14	16	22	17	6	M10 × 1.25
40	168	164	46	92	32	14	22	24	17	7	M12 × 1.25
符號 Symbol 內徑 Tube I.D.	L		M	U	V	W	X	AR	AX	AY	T
20	M22 × 1.5		10	29	8	6	G1/8	7	33	29	19
25	M22 × 1.5		12	34	10	8	G1/8	7	33	29	21
32	M24 × 1.5		12	39.5	12	10	G1/8	8	37	32	21
40	M30 × 2.0		12	49.5	16	14	G1/4	9	47	41	21



### 特點 Features

- 免給油：  
採用含油合金，特殊軸承襯套，使活塞桿無需給油。
- 高品質，耐久佳：  
氣壓缸採用高級不銹鋼材質，更具耐磨、腐蝕性。
- 標準化的設計：  
大多數零件均可與國際標準 ISO 規格互相替換。
- 可承製非標準規格：  
對各種桿端型尺寸及型錄規定以外之行程，請與本公司聯繫承製。
- 多樣化支架：  
多種固定式及非固定式支架，供客戶選擇。
- 全系列均附磁

- Non lubrication
- Special housing and bushing enables self lubrication of piston rod.
  - High quality long service life
  - Hard anodised stainless steel cylinder tubes offer a high resistance to corrosion and low internal friction.
  - Cylinder mountings, available with a comprehensive range of accessories for rigid or flexible mounting.
  - Operation, with the exception of FA-11, single and doubling type available-FA-13/15.
- Magnetic as standard.

### 規格 Specification

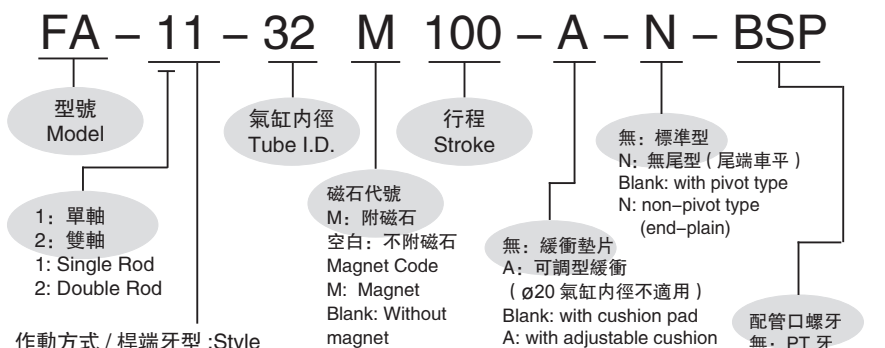
型號 Model	FA				
氣缸內徑 Tube I.D. ( mm )	16	20	25	32	40
配管口徑尺寸 Port Size	M5 x 0.8	PT 1/8			
使用流體 Medium	空氣 Air				
最大使用壓力 Max. Operating Pressure	7 kgf/cm <sup>2</sup>				
最小使用壓力 Min. Operating Pressure	複動 Double	0.6 kgf/cm <sup>2</sup>			
	單動 Single	1.5 kgf/cm <sup>2</sup>			
耐壓力 Proof Pressure	10 kgf/cm <sup>2</sup>				
周圍溫度 Ambient Temperature	-5°C ~ +60°C ( 不凍結 No freezing )				
給油 Lubricator	不需給油 Not required				
使用速度範圍 Available Speed Range	50-500mm/sec				
感應開關 ( 束帶 ) Sensor Switch (band)	RD-201	搭配 Matching the BA20-BA40 束帶 band			
	RCM	搭配 Matching the BGS20-BGS40 束帶 band			
	RCS	搭配 Matching the BM16-BM40 束帶 band			
		搭配 Matching the BJ16 束帶 band			

### 標準行程表 Table for standard stroke

	氣缸內徑 Tube I.D.	行程 Stroke ( mm )
單動型 Single Acting	Φ16	15, 25, 50, 75, 100
	Φ20, 25, 32	15, 25, 50, 75, 100, 125, 150
複動型 Double Acting	Φ16	15, 25, 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500
	Φ20, 25, 32, 40	15, 25, 50, 75, 100, 125, 150, 200, 250, 300, 350, 400, 450, 500

※ 非標準行程亦可承製，請洽業務人員。  
※ Stroke out of specification is also available.  
※ Please consult us if stroke out of specification.

### 氣缸訂購代碼 Ordering Code

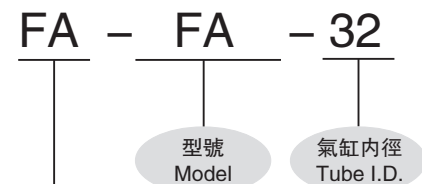


作動方式 / 桿端牙型 : Style

代號 Code	記號 Symbol	說明 Description
1 1		複動外牙 Double acting/Male thread
1 3		引入單動外牙 Single acting/ Normally extended male thread
1 5		押出單動外牙 Single acting/ Normally returned male thread
2 1		雙軸複動外牙 Double rod/Male thread
2 7		雙軸可調行程外牙 Double rod/Adjustable male thread please make "adjustable distance(mm)" at order list

※ 感應開關束帶代號 BM16, 16 為氣缸內徑。  
※ The code of sensor switch band is BM16. "16" represents the tube I.D.

### 安裝配件 Mounting accessories

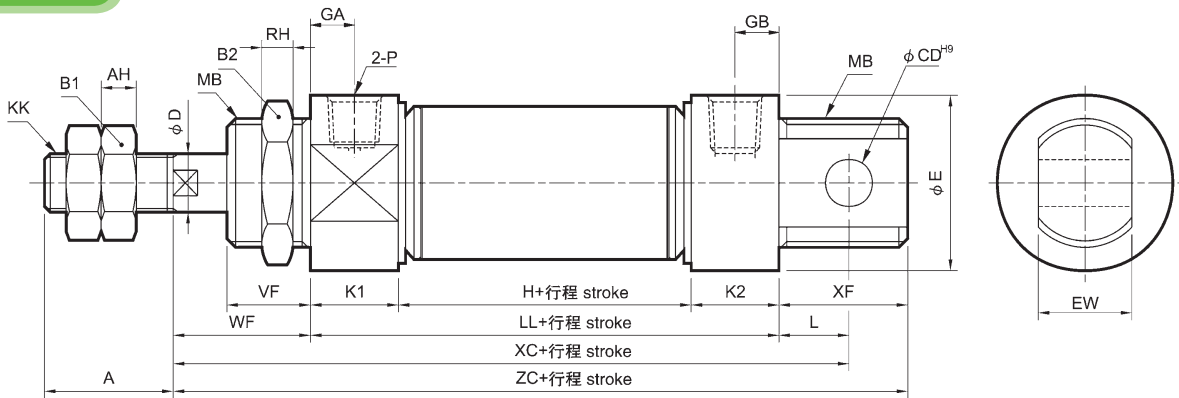


安裝型式: Mounting type

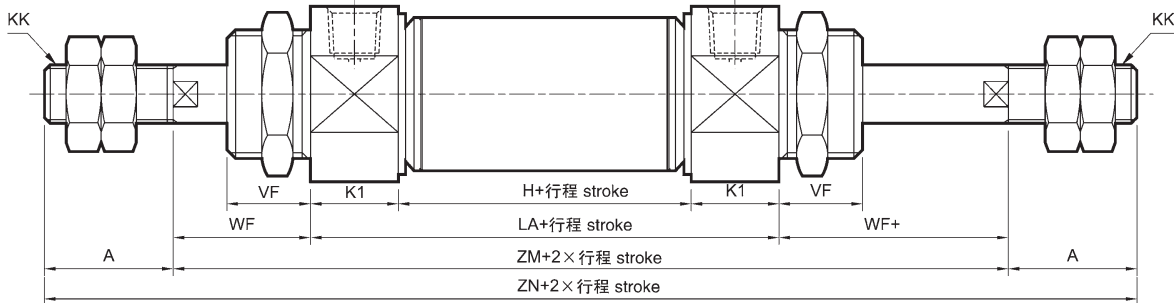
	LB
	FA
	FB
	SDB
	Y
	I

複動型 / 外觀尺寸 Dimensions / Double acting  $\phi 16 \sim \phi 40$

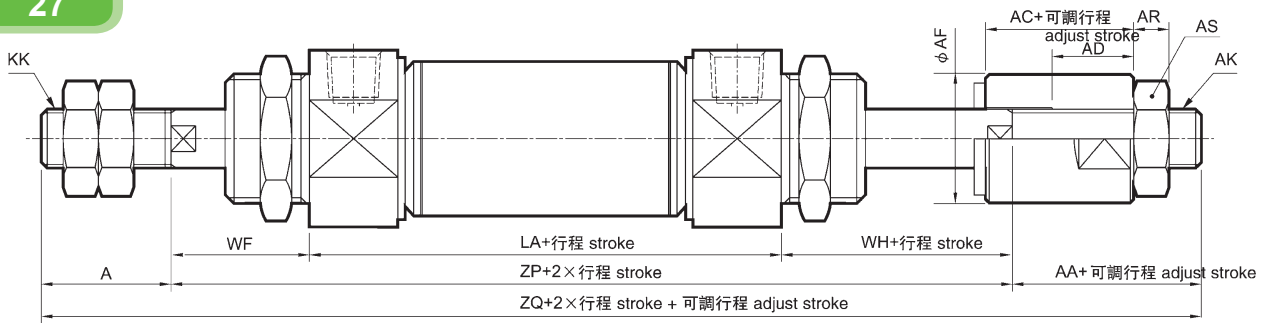
11



21



27



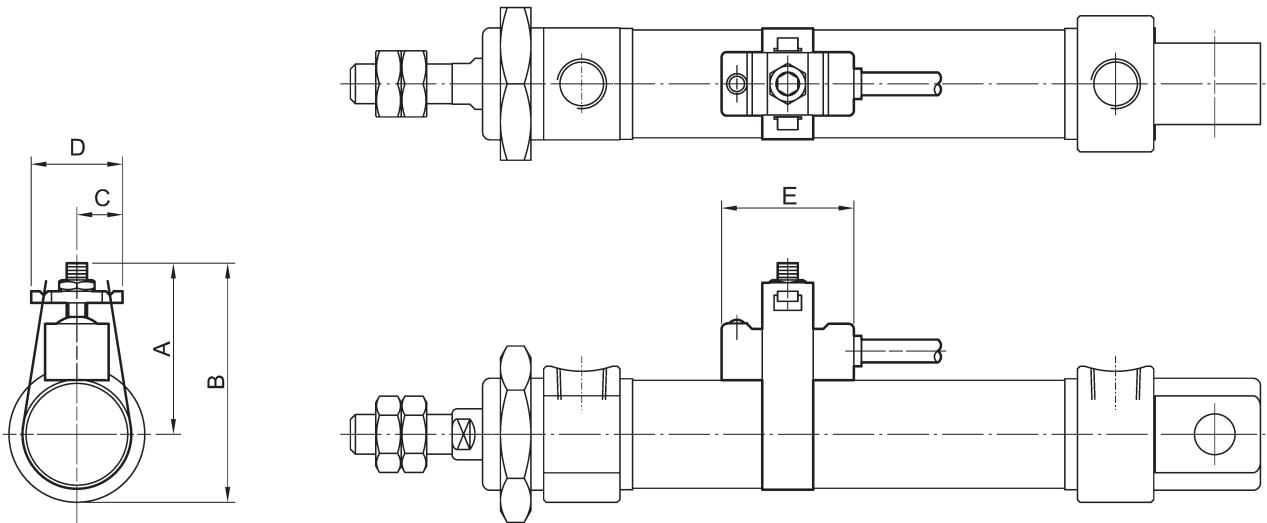
代號 Code 內徑 Tube I.D.	A	AA	AC	AD	AF	AH	AR	AS	AK	B1	B2	CD	D	E	EW	GA	GB	H	KK
16	16	16	13	7.5	12	5	4	8	M5 x 0.8	10	22	6	6	19.7	12 <sup>-0.05</sup> <sub>-0.4</sub>	5	5	34	M6 x 1.0
20	20	19	15	9.5	16	5	5	13	M8 x 1.25	13	30	8	8	26.7	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	7.5	40	M8 x 1.25
25	22	19	15	9.5	16	5	5	13	M8 x 1.25	17	30	8	10	29.7	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	7.5	40	M10 x 1.25
32	22	18	12	7	20	5	6	17	M10 x 1.25	17	32	10	12	36	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	10.5	37	M10 x 1.25
40	30	18	12	7	30	7	7	19	M12 x 1.25	19	41	12	14	45	20 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	10.5	42	M12 x 1.25

代號 Code 內徑 Tube I.D.	K1	K2	L	LA	LL	MB	P	RH	VF	WF	WH	XC	XF	ZC	ZM	ZN	ZP	ZQ
16	10	10	9	54	54	M16 x 1.5	M5 x 0.8	6	12	22	19.5	85	16	92	98	130	95.5	127.5
20	15	15	12	70	70	M22 x 1.5	PT 1/8	6	12	18	19.5	100	21	109	106	146	107.5	146.5
25	15	15	12	70	70	M22 x 1.5	PT 1/8	6	15	27	22.5	109	21	118	124	168	119.5	160.5
32	15	18	14	67	70	M24 x 2.0	PT 1/8	8	18	30	24	114	24	124	127	171	121	161
40	15	18	16	72	75	M30 x 2.0	PT 1/8	8	17	27	24	118	28	130	126	186	123	171

感應開關安裝 Installation of sensor switch  $\Phi 20 \sim \Phi 40$

感應開關 Sensor switch: RD-201

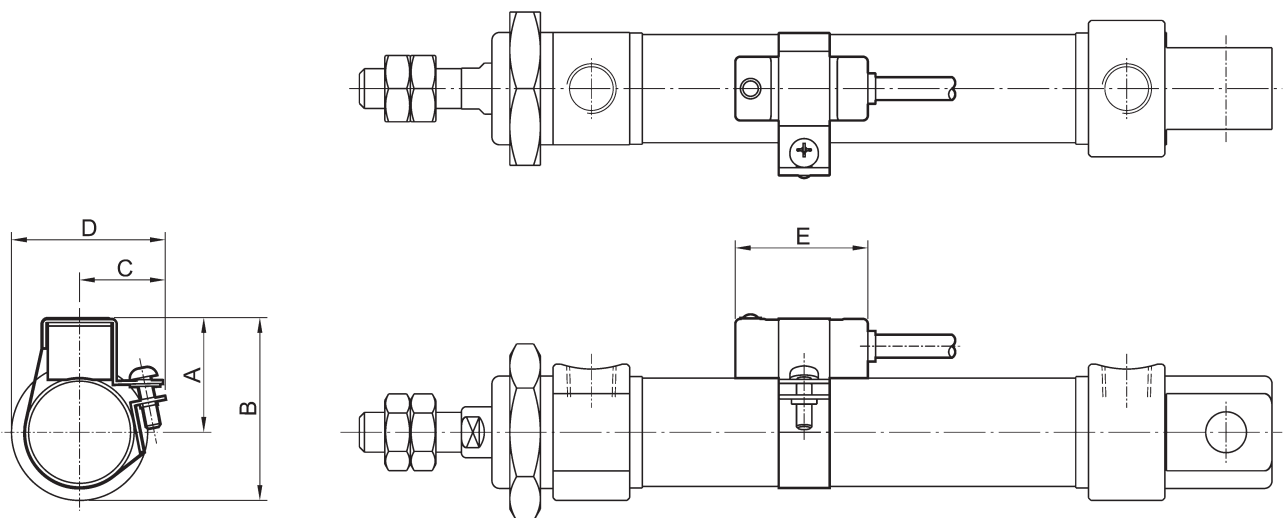
感應開關束帶 Sensor switch band: PN\*\*



代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	33	46.5	9	18	26
25	35.5	50.5	9	18	26
32	39	57	9	18	26
40	43	65.5	9	18	26

感應開關 Sensor switch: RD-201

感應開關束帶 Sensor switch band: BGS\*\*

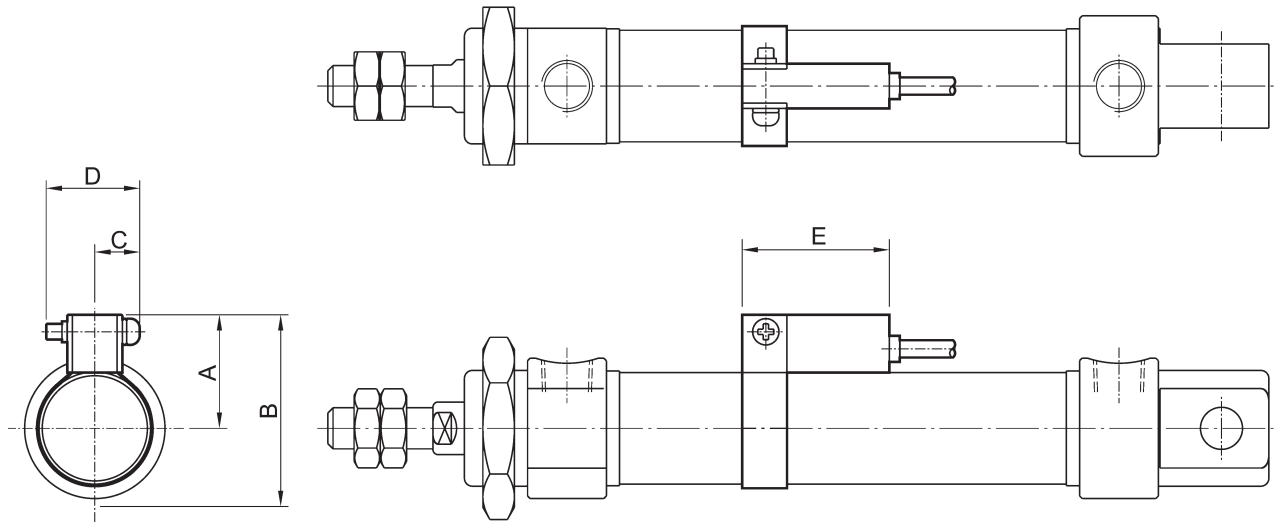


代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	25	38.5	18	30.5	26
25	25.5	40.5	18.5	31.5	26
32	29	47	22	39	26
40	33	55.5	26	47	26

感應開關安裝 Installation of sensor switch  $\Phi 16 \sim \Phi 40$

感應開關：RCM Sensor switch：RCM

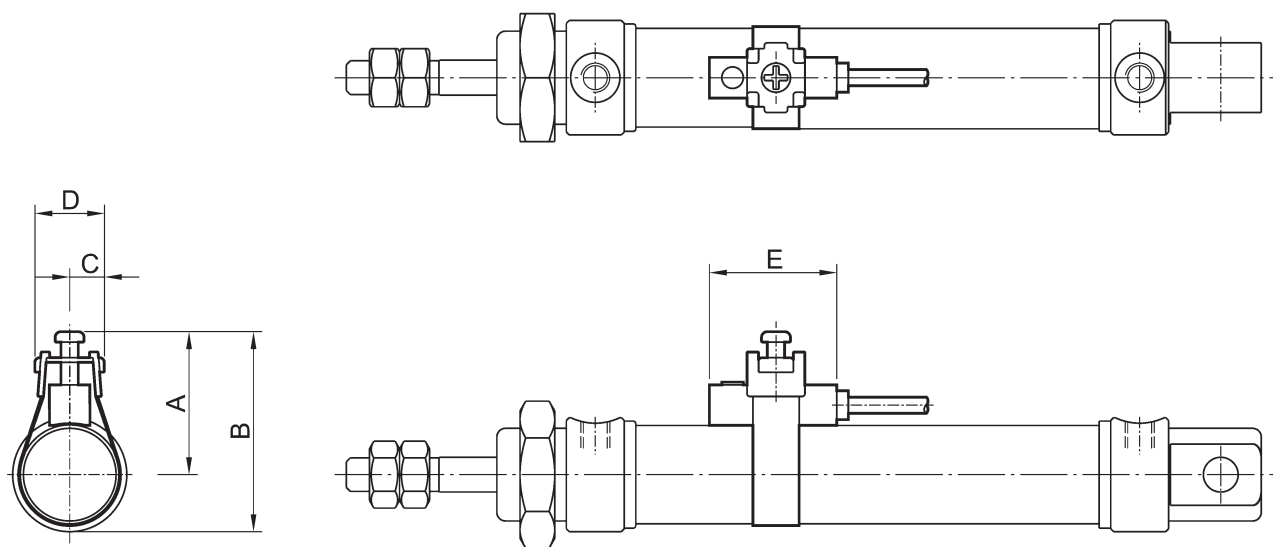
感應開關束帶：BM\*\* Sensor switch band：BM\*\*



代號 Code 內徑 Tube I.D.	A	B	C	D	E
16	20	30	10	16	28
20	22	36	10	16	28
25	25	40	10	16	28
32	28	46	10	16	28
40	32	55	10	16	28

感應開關：RCS Sensor switch：RCS

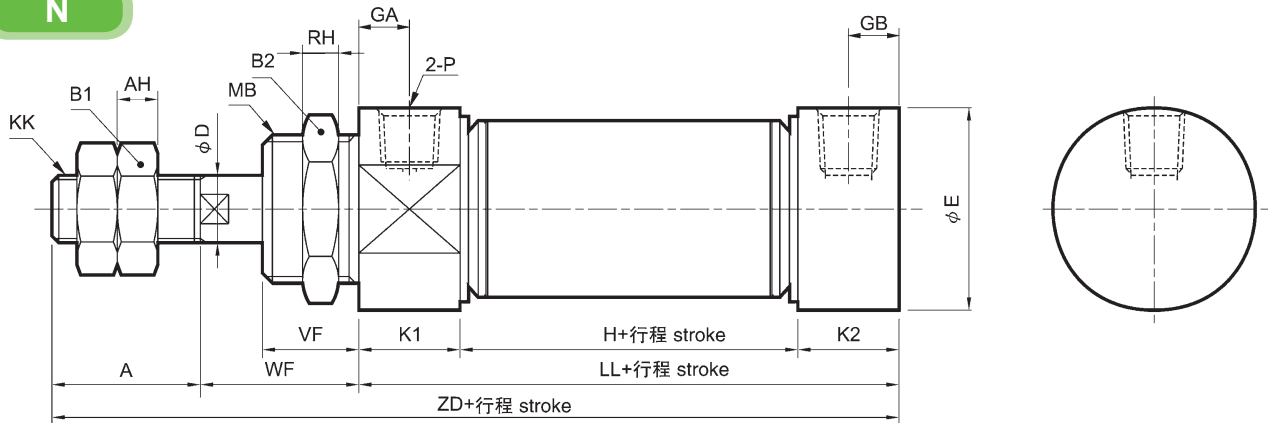
感應開關束帶：BJ 16 Sensor switch band：BJ 16



代號 Code 內徑 Tube I.D.	A	B	C	D	E
16	23.4	33.3	6	12	22

複動型 / 無尾型外觀尺寸 Dimensions / Double acting  $\Phi 16 \sim \Phi 40$

**N**

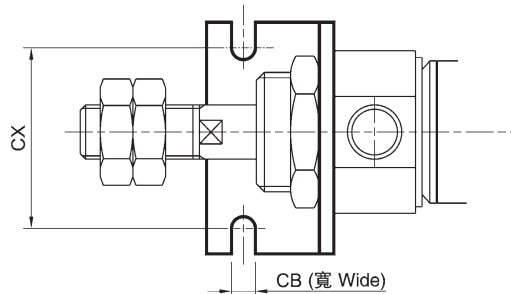


代號 Code 內徑 Tube I.D.	A	AH	B1	B2	D	E	GA	GB	H	KK	K1	K2	LL	MB	P	RH	VF	WF	ZD
16	16	5	10	22	6	19.7	5	5	34	M6 × 1.0	10	10	54	M16 × 1.5	M5 × 0.8	6	12	22	92
20	20	5	13	30	8	26.7	7.5	7.5	40	M8 × 1.25	15	15	70	M22 × 1.5	PT 1/8	6	12	18	108
25	22	6	17	30	10	29.7	7.5	7.5	40	M10 × 1.25	15	15	70	M22 × 1.5	PT 1/8	6	15	27	119
32	22	6	17	32	12	36	7.5	10.5	37	M10 × 1.25	15	18	70	M24 × 2.0	PT 1/8	8	18	30	122
40	30	7	19	41	14	45	7.5	10.5	42	M12 × 1.25	15	18	75	M30 × 2.0	PT 1/8	8	17	27	132

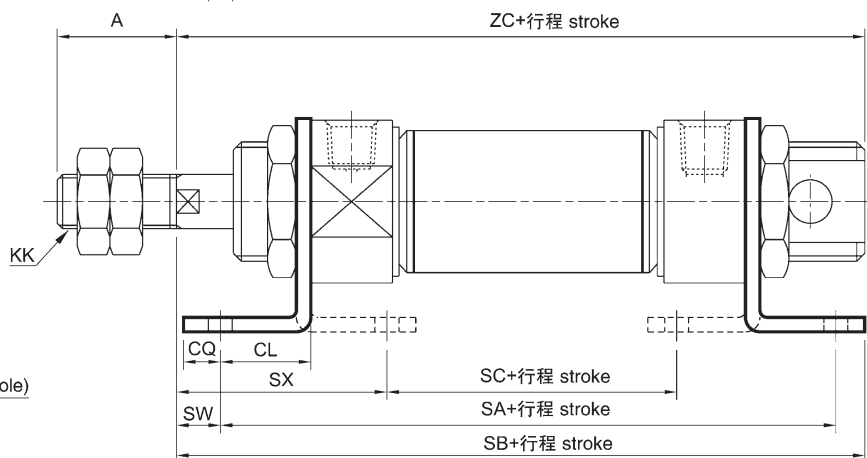
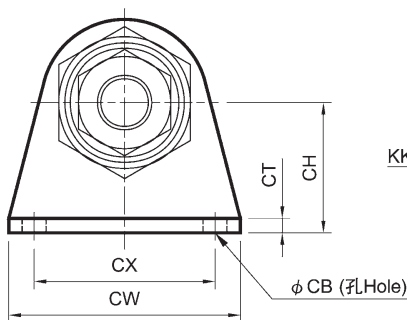
### 安裝配件 Mounting accessories

**LB**

**FA- $\Phi 16$**



**FA- $\Phi 20 \sim \Phi 40$**



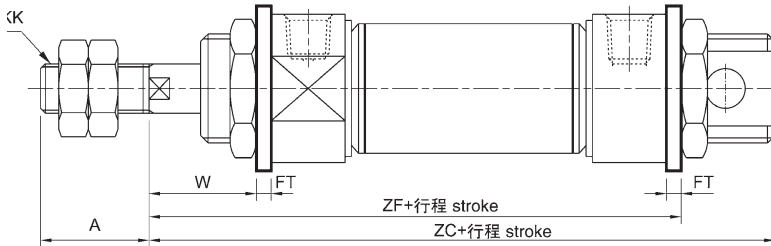
代號 Code 內徑 Tube I.D.	A	CB	CH	CL	CQ	CT	CW	CX	KK	SA	SB	SC	SW	SX	ZC
16	16	5.5	20	13	6	3.2	44	32	M6 × 1.0	80	95	34.4	9	31.8	92
20	20	6.6	25	15	8	3.2	54	40	M8 × 1.25	100	111	46.4	3	29.8	109
25	22	6.6	25	15	8	3.2	54	40	M10 × 1.25	100	120	46.4	12	38.8	118
32	22	6.6	32	25	8	4	59	45	M10 × 1.25	120	133	28	5	51	124
40	30	6.6	36	25	8	4	64	50	M12 × 1.25	125	135	33	2	48	130

Miniature Cylinders  
迷你氣壓缸  
FA



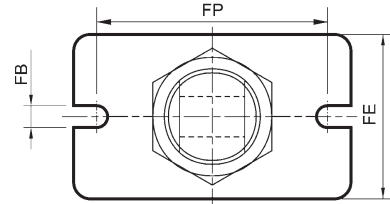
複動型 / 安裝配件 Mounting accessories / Double acting  $\Phi 16 \sim \Phi 40$

### FA(FB)

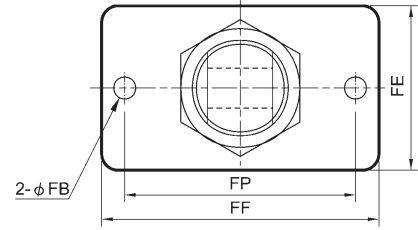


代號 Code 內徑 Tube I.D.	A	FB	FE	FF	FP	FR	FT	KK	W	ZC	ZF
16	16	5.5	26	52	40		3.2	M6 × 1.0	18.8	92	79.2
20	20	6.6	38	64	50		4.5	M8 × 1.25	13.5	109	92.5
25	22	6.6	38	64	50		4.5	M10 × 1.25	22.5	118	101.5
32	22	6.6	47	72	58	33	4.5	M10 × 1.25	25.5	124	104.5
40	30	6.6	50	84	70	36	4.5	M12 × 1.25	22.5	130	105.5

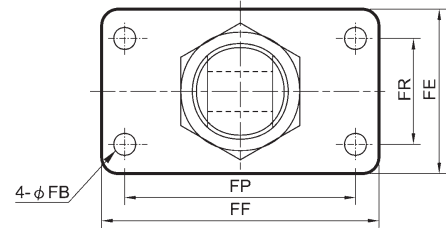
### FA- $\Phi 16$



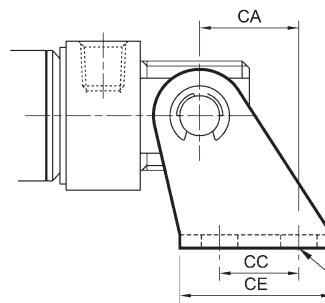
### FA- $\Phi 20, \Phi 25$



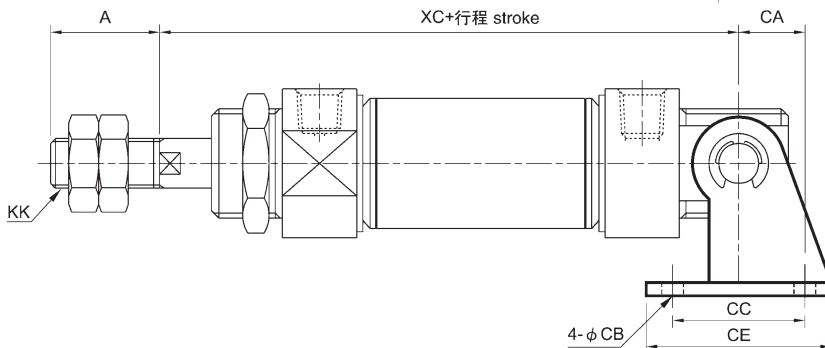
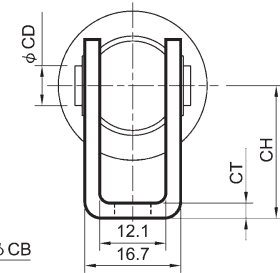
### FA- $\Phi 32, \Phi 40$



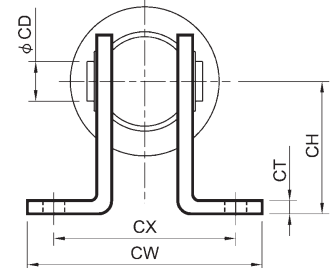
### SDB



### FA- $\Phi 16$



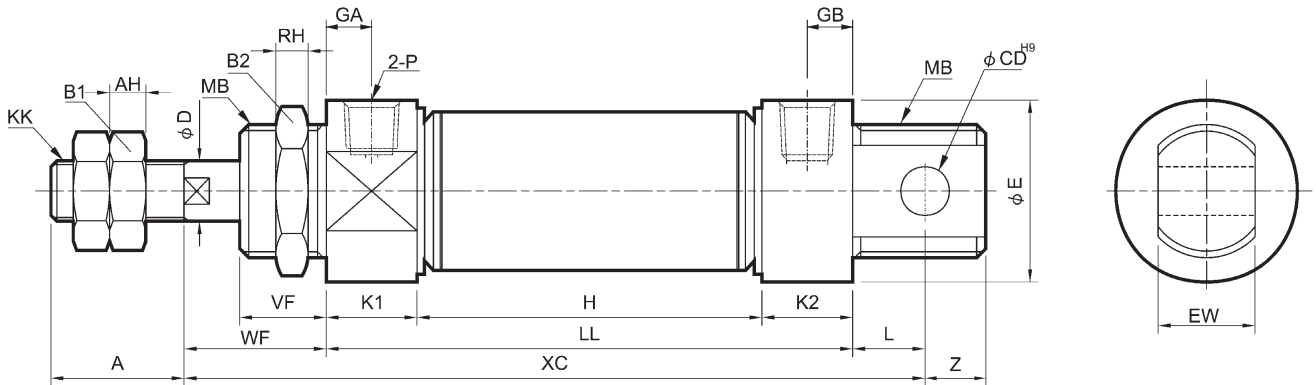
### FA- $\Phi 20 \sim \Phi 40$



代號 Code 內徑 Tube I.D.	A	CA	CB	CC	CD	CE	CH	CT	CW	CX	KK	XC
16	16	15	5.5	12	6	23	20	2.3			M6 × 1.0	85
20	20	16	6.6	32	8	48	32	3.2	67	51	M8 × 1.25	100
25	22	16	6.6	32	8	48	32	3.2	67	51	M10 × 1.25	109
32	22	18	6.6	36	10	52	36	4	67	51	M10 × 1.25	114
40	30	20	6.6	40	12	56	40	4	69	53	M12 × 1.25	121

單動型 / 外觀尺寸 Dimensions / Single acting  $\Phi 16 \sim \Phi 32$

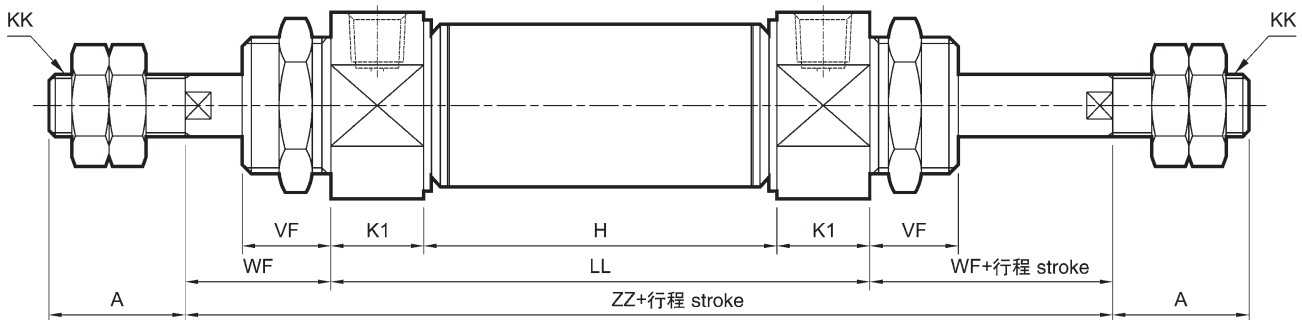
15



代號 Code 內徑 Tube I.D.	A	AH	B1	B2	CD	D	E	EW	GA	GB	KK	K1	K2	L	MB	P	RH	VF	WF	YP	Z
16	16	5	10	22	6	6	19.7	12 <sup>-0.05</sup> <sub>-0.4</sub>	5	5	M6 × 1.0	10	10	9	M16 × 1.5	M5 × 0.8	6	12	22	5	7
20	20	5	13	30	8	8	26.7	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	7.5	M8 × 1.25	15	15	12	M22 × 1.5	PT 1/8	6	12	18	7.5	9
25	22	6	17	30	8	10	29.7	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	7.5	M10 × 1.25	15	15	12	M22 × 1.5	PT 1/8	6	15	27	7.5	9
32	22	6	17	32	10	12	36	16 <sup>-0.05</sup> <sub>-0.4</sub>	7.5	10.5	M10 × 1.25	15	18	14	M24 × 2.0	PT 1/8	8	18	30	7.5	10

代號 Code 行程 Stroke	H							LL							XC						
內徑 Tube I.D.	15	25	50	75	100	125	150	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	64	74	114	154	194	/	/	84	94	134	174	214	/	/	115	125	165	205	245	/	/
20	80	90	140	190	240	290	340	110	120	170	220	270	320	370	140	150	200	250	300	350	400
25	80	90	140	190	240	290	340	110	120	170	220	270	320	370	149	159	209	259	309	359	409
32	77	87	137	187	237	287	337	110	120	170	220	270	320	370	154	164	214	264	314	364	414

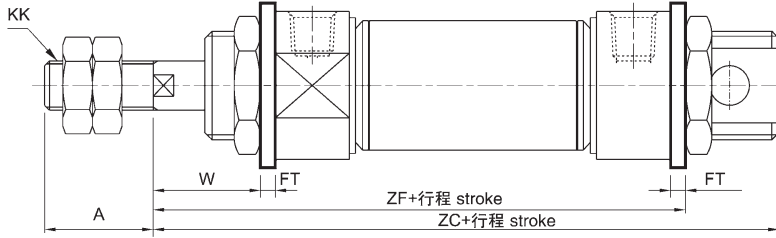
### 雙軸 Double Rod



代號 Code 行程 Stroke	H							LL							ZZ						
內徑 Tube I.D.	15	25	50	75	100	125	150	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	64	74	114	154	194	/	/	84	94	134	174	214	/	/	125	135	175	215	255	/	/
20	80	90	140	190	240	290	340	110	120	170	220	270	320	370	146	156	206	256	306	356	406
25	80	90	140	190	240	290	340	110	120	170	220	270	320	370	164	174	224	274	324	374	424
32	77	87	137	187	237	287	337	107	117	167	217	267	317	367	167	177	227	277	327	377	427

單動型 / 安裝配件 Mounting accessories / Single acting  $\Phi 16 \sim \Phi 32$

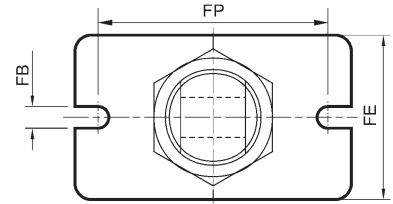
### FA(FB)



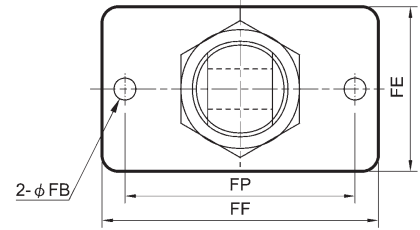
代號 Code 內徑 Tube I.D.	A	FB	FE	FF	FP	FR	FT	KK	W
16	16	5.5	26	52	40		3.2	M6 × 1.0	18.8
20	20	6.6	38	64	50		4.5	M8 × 1.25	13.5
25	22	6.6	38	64	50		4.5	M10 × 1.25	22.5
32	22	6.6	47	72	58	33	4.5	M10 × 1.25	25.5

代號 Code 行程 Stroke 內徑 Tube I.D.	ZC						ZF							
	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	121	131	171	211	251			109.2	119.2	159.2	199.2	239.2		
20	146	156	206	256	306	356	406	132.5	142.5	192.5	242.5	292.5	342.5	392.5
25	155	165	215	265	315	365	415	141.5	151.5	201.5	251.5	301.5	351.5	401.5
32	162	172	222	272	322	372	422	144.5	154.5	204.5	254.5	304.5	354.5	404.5

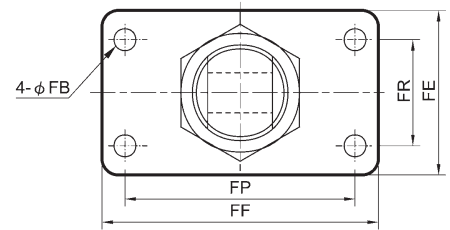
### FA- $\Phi 16$



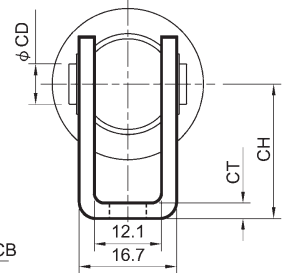
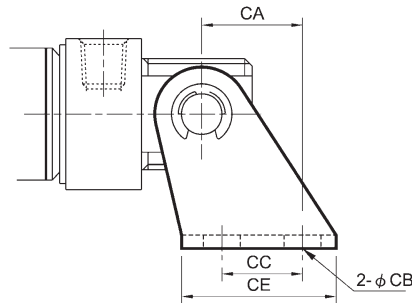
### FA- $\Phi 20, \Phi 25$



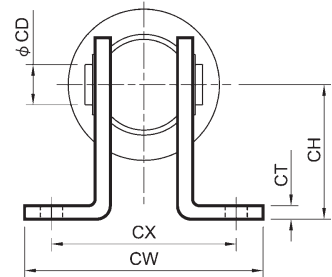
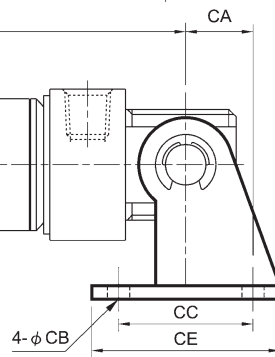
### FA- $\Phi 32$



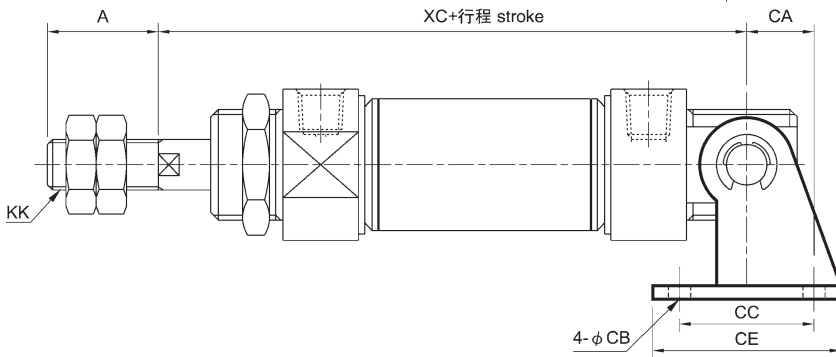
### FA- $\Phi 16$



### FA- $\Phi 20 \sim \Phi 32$



### SDB



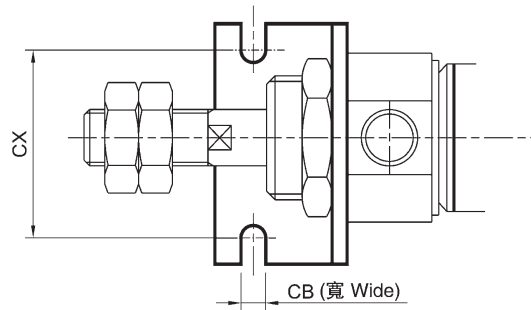
代號 Code 內徑 Tube I.D.	A	CA	CB	CC	CD	CE	CH	CT	CX	CW	KK
16	16	15	5.5	12	6	23	20	2.3			M6 × 1.0
20	20	16	6.6	32	8	48	32	3.2	51	67	M8 × 1.25
25	22	16	6.6	32	8	48	32	3.2	51	67	M10 × 1.25
32	22	18	6.6	36	10	52	36	4	51	67	M10 × 1.25

代號 Code 行程 Stroke 內徑 Tube I.D.	XC						
內徑 Tube I.D.	15	25	50	75	100	125	150
16	107	117	157	197	257		
20	139	149	199	249	299	349	399
25	141	151	172	222	272	322	372
32	142	152	173	223	273	323	373

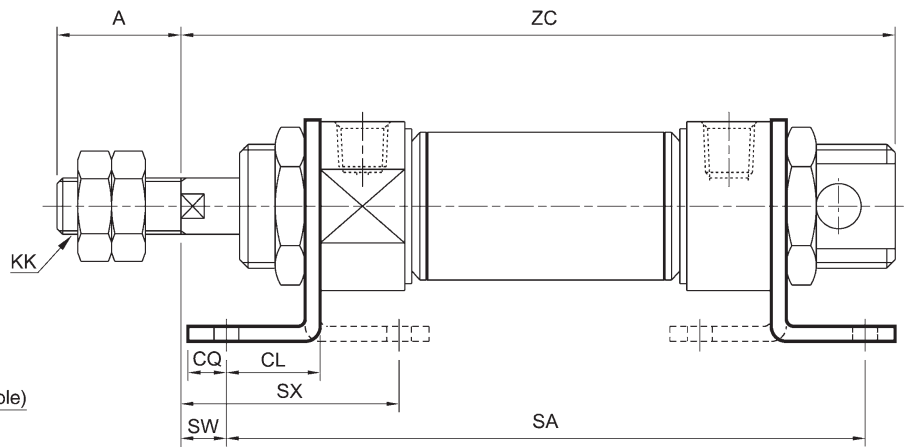
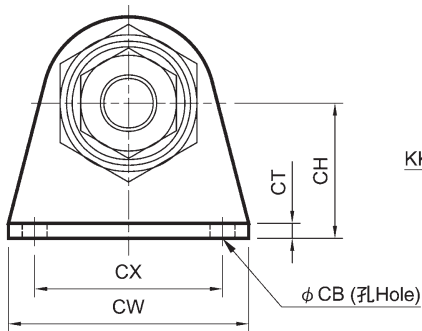
單動型 / 安裝配件 Mounting accessories / Single acting  $\Phi 16 \sim \Phi 32$

**LB**

**FA- $\Phi 16$**



**FA- $\Phi 20 \sim \Phi 40$**

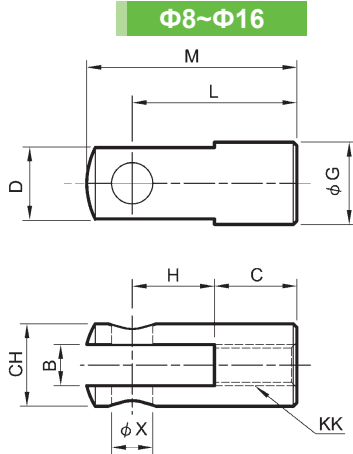


代號 Code 內徑 Tube I.D.	A	CB	CH	CL	CQ	CT	CW	CX	KK	SW	SX
<b>16</b>	16	5.5	20	13	6	3.2	44	32	M6 × 1.0	9	31.8
<b>20</b>	20	6.6	25	15	8	3.2	54	40	M8 × 1.25	3	29.8
<b>25</b>	22	6.6	25	15	8	3.2	54	40	M10 × 1.25	12	38.8
<b>32</b>	22	6.6	32	25	8	4	59	45	M10 × 1.25	5	51

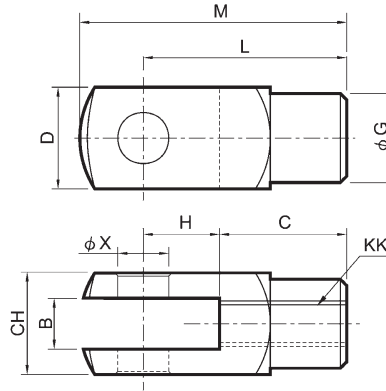
代號 Code 行程 Stroke 內徑 Tube I.D.	SA							ZC						
	15	25	50	75	100	125	150	15	25	50	75	100	125	150
<b>16</b>	110	120	160	200	240			121	131	171	211	251		
<b>20</b>	140	150	200	250	300	350	400	146	156	206	256	306	356	406
<b>25</b>	140	150	200	250	300	350	400	155	165	215	265	315	365	415
<b>32</b>	160	170	220	270	320	370	420	162	172	222	272	322	372	422

Miniature Cylinders  
迷你氣壓缸  
FA

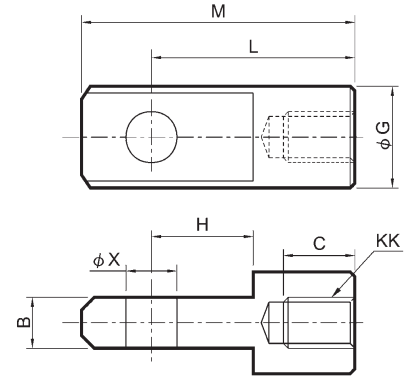
### Y 接頭 Connector



$\Phi 20 \sim \Phi 40$



### I 接頭 Connector



### Y 型、I 型 接頭尺寸表 For Y, I connector

代號 Code 內徑 Tube I.D.	B		C		CH		D		G		H		KK		L		M		X <sup>H9</sup>	
	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I		
8, 10	4		8		8		8							M4 × 0.7		16		20.75		4 <sup>+0.03 +0</sup>
12, 16	6	6	12	8	12				12	12	12	10		M6 × 1		24	21	31	28	6 <sup>+0.03 +0</sup>
20	8	8	16	14	16			16		14	16	12		M8 × 1.25		32	32	42	42	8 <sup>+0.036 +0</sup>
25, 32	10	10	20	17	19			19		18	20	20	15	M10 × 1.25		40	40	52	52	10 <sup>+0.036 +0</sup>
40	12	12	24	21	22			22		20	24	24	18	M12 × 1.25		48	48	62	62	12 <sup>+0.043 +0</sup>

### 訂購代碼 Ordering Code

PIN - FA - 16 - Y - P

插銷 Pin

氣缸內徑  
Tube I.D.

P: 含開口銷  
P: with split pin

型號 Model

FI:  $\Phi 8 \sim 12$  內徑適用 For  $\Phi 8 \sim 12$   
Tube I.D.

FA:  $\Phi 16 \sim 40$  內徑適用 For  $\Phi 16 \sim 40$   
Tube I.D.

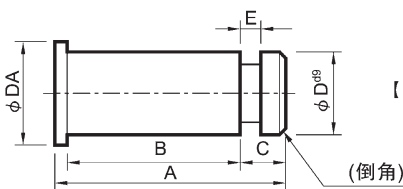
型式

Y: Y & I 接頭適用  
SDB: SDB 配件適用  
Type

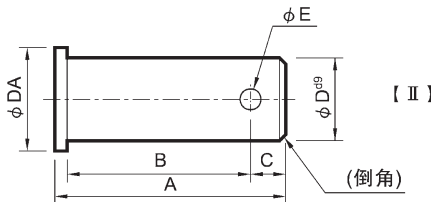
Y: For Y & I connector  
SDB: For SDB accessory

### 插銷 Pin

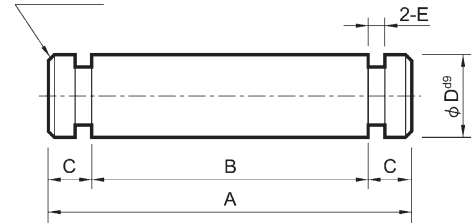
$\Phi 8 \sim \Phi 16$



$\Phi 20 \sim \Phi 40$



2-F (倒角)



### Y & I 型接頭用插銷尺寸表 For Y & I connector

代號 Code 內徑 Tube I.D.	A	B	C	D <sup>d9</sup>	DA	E	扣環開口銷 Split pin
8, 10	12	8.5	2	4 <sup>-0.03 -0.06</sup>	8	0.7	E3 (扣環)
12, 16	18.5	15	2	6 <sup>-0.03 -0.06</sup>	10	0.7	E4 (扣環)
20	24.5	20.5	2.5	8 <sup>-0.04 -0.08</sup>	12	ø2.5	2.5 × 16 長 L
25, 32	30	25	3.5	10 <sup>-0.04 -0.08</sup>	14	ø3.2	3.2 × 20 長 L
40	37	30	5	12 <sup>-0.05 -0.09</sup>	16	ø3.2	3.2 × 20 長 L

### SDB 型裝配用插銷尺寸表 For SDB

代號 Code 內徑 Tube I.D.	A	B	C	D <sup>d9</sup>	E	扣環 Split pin
8,10	18	14	2	4 <sup>-0.03 -0.06</sup>	0.7	E3.2
12	23.5	19.5	2	6 <sup>-0.03 -0.06</sup>	0.7	E5
16	21	17	2	6 <sup>-0.03 -0.06</sup>	0.7	E5
20, 25	30	25	2.5	8 <sup>-0.04 -0.08</sup>	0.9	E7
32	33	27	3	10 <sup>-0.04 -0.08</sup>	0.9	E9
40	37	31	3	12 <sup>-0.05 -0.09</sup>	0.9	E9

## 訂購代碼 Ordering Code

**F I D - 32 M 50 PPV - LB - Y - G48R 2**

ISO 6432 國際標準  
缸徑  $\Phi 12 \sim \Phi 25$   
( $\Phi 32 \sim \Phi 40$  為訂購  
規格, 非 ISO 標準)

氣壓缸內徑  
Tube I.D.

行程 (ST)  
Stroke

可調式端點緩衝功能  
Adjustable endpoint  
buffer function  
PPV: 兩端  
FPPV: 前端  
RPPV: 後端  
PPV: Both ends  
FPPV: Front end  
RPPV: Back end

感應開關  
Sensor Switch

感應開關數量  
Sensor Switch  
Quantity

軸端配件  
Shaft End Fittings

<b>Y</b>		<b>L</b>	
<b>P</b>		<b>F</b>	
<b>T</b>			

磁石代號  
M: 附磁石  
空白: 不附磁石  
Magnet Code  
M: Magnet  
Blank: Without magnet

作動方式  
Operation

<b>F</b> (雙動)	
<b>SR</b> (後單動)	

氣壓缸型態  
Cylinder Type

<b>A</b> 無尾基本型 	<b>DO</b> 雙軸空心式 
<b>C</b> 有尾基本型 	<b>M</b> 多端點行程型 
<b>D</b> 雙軸型 	<b>TA</b> 無尾串連倍力型 
<b>DE</b> 雙軸可調式 	<b>TC</b> 有尾串連倍力型 
	<b>A-C</b> 無尾緩衝加長型 
	<b>C-C</b> 有尾緩衝加長型 

固定配件  
Fixed Accessories

<b>FA</b> 	<b>TC</b> 
<b>CB</b> 	<b>LB</b> 

### 特點 Features

- 此系列氣缸由  $\Phi 12 \sim \Phi 25$  之規格均符合 ISO6432 國際標準規格， $\Phi 12$ 、 $\Phi 40$  為訂製規格。
- 具有可調式端點位置緩衝，吸收氣缸動能，避免震動，提高運作效率。
- 全系列均可裝置感應磁圈為標準配備。
- 前後蓋壓延鉚合成形，氣密性佳，同心度高。
- 缸管採用 SUS304 材質，外型美觀輕巧、散熱性佳，永不生鏽。
- 固定配件齊全，安裝方便。

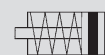


型號: FIC,FIA  
功能:



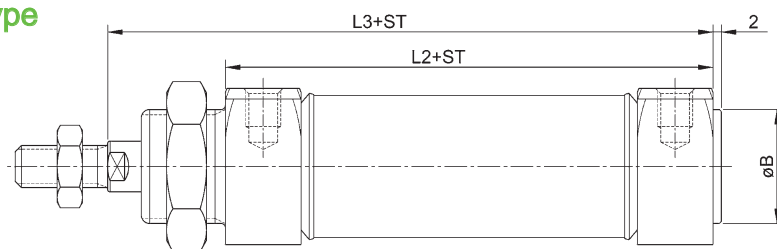
限制條件:  
緩衝裝置缸徑  $\Phi 12 \sim \Phi 40$

型號: SRIC,SRIA  
功能:

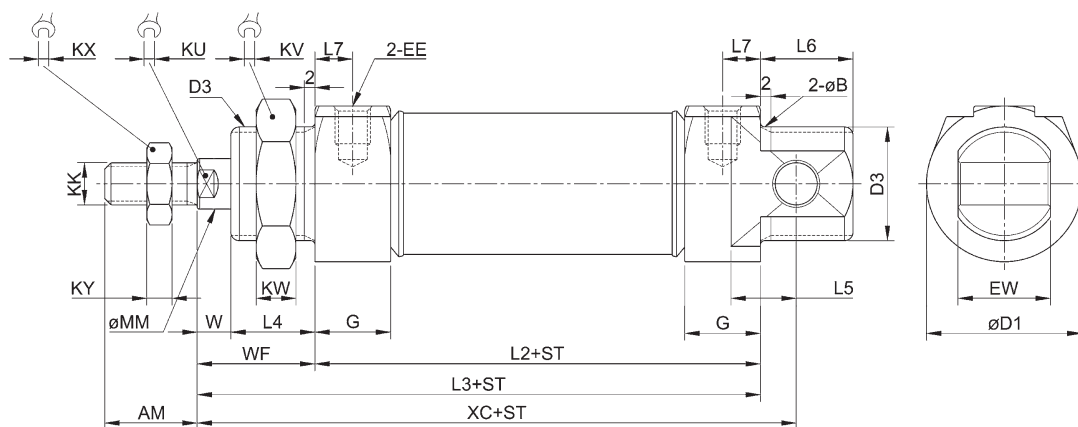


限制條件:  
行程 10 ~ 50mm

### FIA 無尾基本型 FIA Horizontal type



### FIC 有尾基本型 FIC Fishtail type



ST=行程 Stroke 單位 Unit: mm

代號 Code 缸徑 Tube I.D.	AM	D1	ΦCD	D3	WF	L2	L3	L4	L5	L6	L7	KK	KU	KV	KW	KX	KY	ΦMM	W	EW	XC	EE	G	ΦB
Φ12	16	20	6	M16×1.5	22	45	67	17	9	17	4.5	M6×1	-	24	8	10	5	6	5	12	75	M5×0.8	9	16
Φ16	16	20	6	M16×1.5	22	52	73	17	9	17	5	M6×1	-	24	8	10	5	6	5	12	82	M5×0.8	10	16
Φ20	20	27.5	8	M22×1.5	24	67.5	91.5	20	12	20	7.6	M8×1.25	7	32	8	12	6	8	4	16	95	G1/8	15.25	22
Φ25	22	27.5	8	M22×1.5	28	69.5	97.5	22	12	22	8	M10×1.25	9	32	8	17	6	10	6	16	104	G1/8	16	22
Φ32	22	37	10	M27×2.0	28	83	111	20	13.5	22	9	M10×1.25	10	35	9.5	17	6	12	8	22	119.5	G1/8	18	27
Φ40	24	45	10	M33×2.0	31	85	116	20	13.5	22	9	M12×1.25	14	41	9.5	22	8	16	11	26	124.5	G1/8	18	33

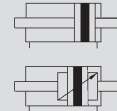
◎記號為訂製規格，非 ISO 標準



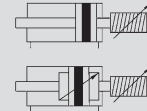
### 特點 Features

- 活塞桿與活塞體鉚合成型，活塞永不鬆脫，同心度高，摩擦阻力低，圓周無死角。
- 可裝置感應磁圈及可調式端點緩衝。
- 調整型具有前伸行程可調之功能，可做精確定位。

型號：FID  
功能：

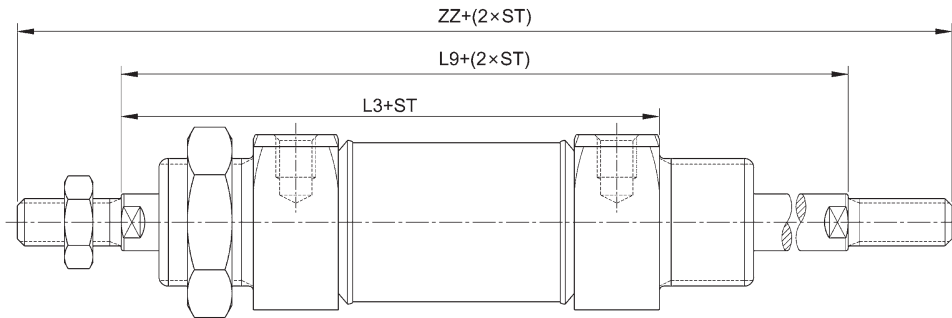


型號：FIDE  
功能：

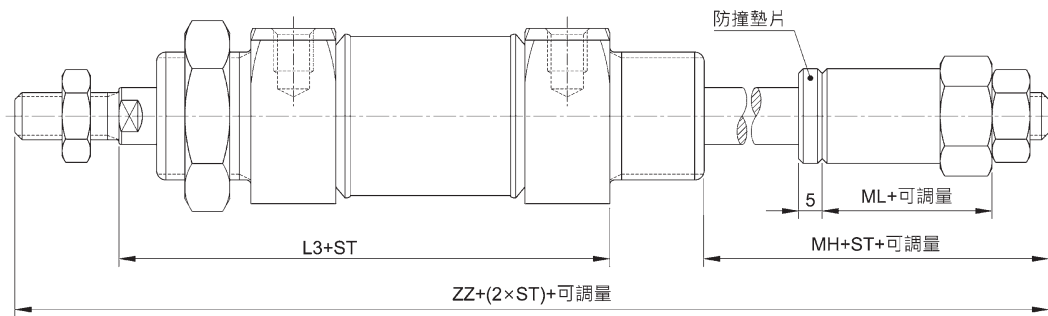


限制條件：緩衝裝置缸徑  $\Phi 12 \sim \Phi 40$

### FID (雙軸型) FID Double Shaft



### FIDE (雙軸可調型) FID Double Shaft Adjustable



代號 Code 缸徑 Tube I.D.	L3	L9	ZZ	MH	ML
Φ16	73	96	128	21	10
Φ20	91.5	115.5	155.5	24	14
Φ25	97.5	126	170	28	16
Φ32	111	138	182	32	18
Φ40	116	147	195	35	20

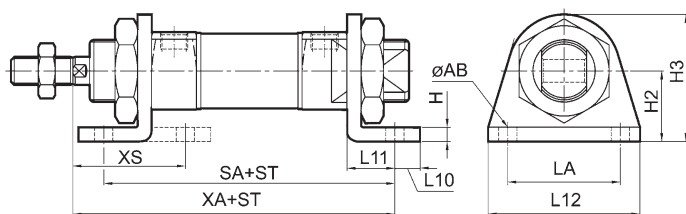
◎ 記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

※ 其他尺寸參考基本型

The dimension of others refer to standard type.



#### LB 型 LB Type

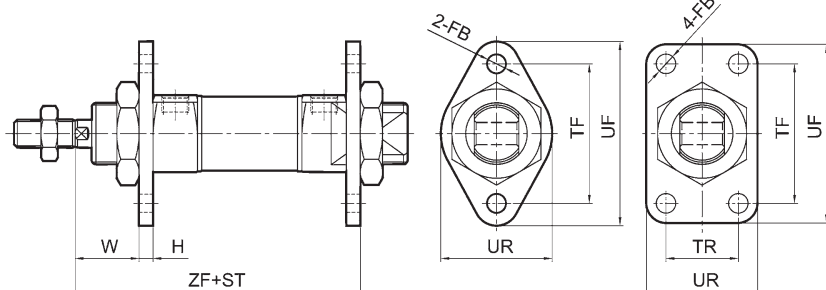


代號 Code 缸徑 Tube I.D.	L10	L11	L12	LA	H	H2	H3	ΦAB	SA	XA	XS
Φ12	6.5	14	42	32	3	20	33	5.5	73	81	33
Φ16	6.5	14	42	32	3	20	33	5.5	80	87	32
Φ20	9	17	54	40	3	25	45	6.5	101.5	108.5	38
Φ25	9	17	54	40	3	25	45	6.5	103.5	114.5	42
◎ Φ32	7	18	64	50	3	28	48	7	119	129	43
◎ Φ40	10	20	74	54	4	31.5	60	7	125	136	47

◎記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

#### FA 型 FA Type (固定前端 Fixed front-end) FB 型 FB Type (固定後端 Fixed back-end)

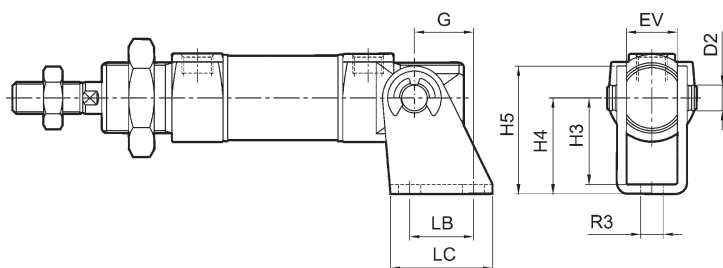
Φ12 ~ Φ25    Φ32, Φ40



代號 Code 缸徑 Tube I.D.	W	H	ZF	TF	TR	UF	UR	ΦFB
Φ12	19	3	70	40	-	52	30	5.5
Φ16	19	3	77	40	-	53	30	5.5
Φ20	21	3	94.5	50	-	66	40	6.5
Φ25	25	3	100.5	50	-	66	40	6.5
◎ Φ32	25	3	114	50	26	64	40	7
◎ Φ40	27	4	120	54	30	74	50	7

◎記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

#### CB 型 CB Type

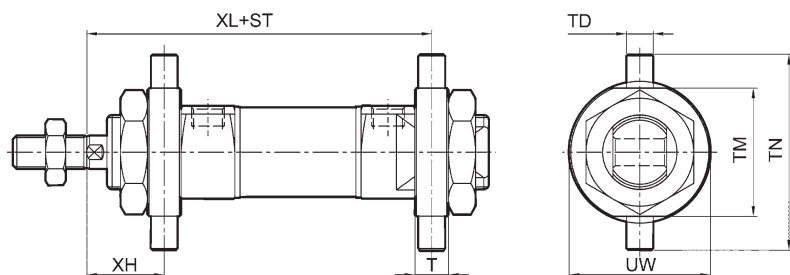


代號 Code 缸徑 Tube I.D.	LB	LC	EV	H3	H4	H5	G	ΦD2	ΦR3
Φ12	15	25	12	24	27+0.3/-0.2	34	15	6	5.5
Φ16	15	25	12	24	27+0.3/-0.2	34	15	6	5.5
Φ20	20	32	16	27	30+0.4/-0.2	40	18.5	8	7
Φ25	20	32	16	27	30+0.4/-0.2	40	18.5	8	7
◎ Φ32	25	40	22	37	40+0.5/-0.2	53	22.5	10	9
◎ Φ40	25	40	26	37	40+0.5/-0.2	53	22.5	10	9

◎記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

#### TC 型 TC Type

#### 固定前端 Fixed front-end (TA) 固定後端 Fixed back-end (TC)

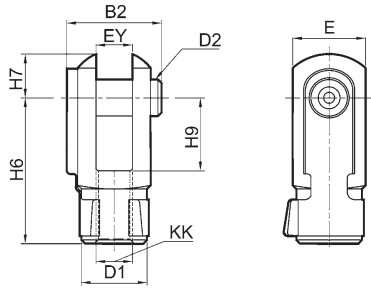


代號 Code 缸徑 Tube I.D.	TN	TM	ΦTD	ΦUW	T	XL	XH
Φ20	58	38	8	42	10	96.5	19
Φ25	58	38	8	42	10	102.5	23
◎ Φ32	60	40	10	45	12	117	22
◎ Φ40	72	48	10	50	12	122	25

◎記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

### 軸端接頭配件 Accessories for axis using

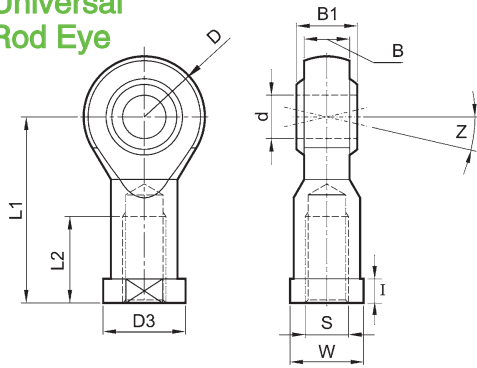
#### Y 接頭型 Y Connector



代號 Code 缸徑 Tube I.D.	H6	H7	H9	ΦD2	EY	E	KK	B2	ΦD1
Φ12, Φ16	24	7	12	6	6 B13	12	M6	16	10
Φ20	32	10	16	8	8 B13	16	M8	21.5	14
Φ25	40	12	20	10	10 B13	20	M10 × 1.25	26	18
Φ32	40	12	20	10	10 B13	20	M10 × 1.25	26	18
Φ40	48	14	24	12	12 +0.7/+0.15	24	M12 × 1.25	32	20

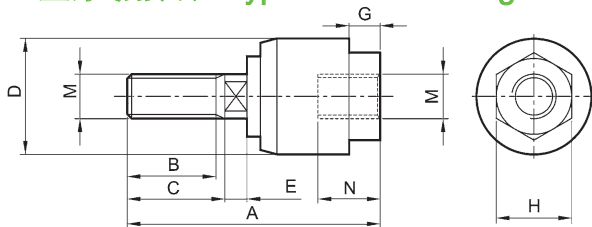
◎記號為訂制規格，非 ISO 標準  
With mark is special dimension and not the ISO standard.

#### P 型魚眼接頭 P type Universal Piston Rod Eye



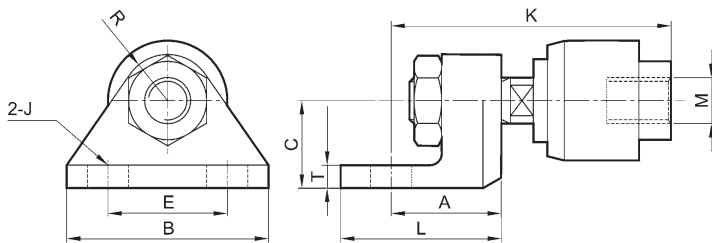
代號 Code 缸徑 Tube I.D.	Φd H7	S	ΦD	B	B1	L1	L2	W	ΦD3	I	Z°
PHS 6	6	M6 × 1.0	9	6.8	9	30	12	11	13	5	13
PHS 8	8	M8 × 1.25	11	9	12	36	16	14	16	5	13
PHS 10	10	M10 × 1.25	13	10.5	14	43	20	17	19	6.5	13
PHS 12	12	M12 × 1.25	15	12	16	50	22	19	22	6.5	13

#### T 型浮動接頭 T type Piston Floating Joint



代號 Code 缸徑 Tube I.D.	M	A	B	C	E	N	ΦD	G	H
KG-1006T	M6 × 1.0	38	15	18	3	7	18	5	11
KG-1008T	M8 × 1.25	50	18	20	4	8	24	7	13
KG-1010T	M10 × 1.25	58	20	22	5	9	26	8	17
KG-1012T	M12 × 1.25	58	20	22	5	9	28	8	17

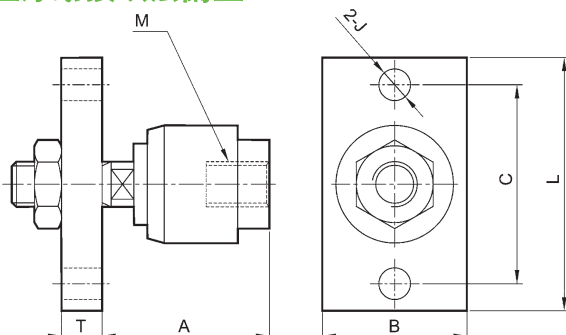
#### L 型浮動接頭托板型



代號 Code 缸徑 Tube I.D.	M	A	L	B	E	ΦJ	C	K	T	R
KG-1008L	M8 × 1.25	19	29	44	26	9	15	51	4	9
KG-1010L	M10 × 1.25	24	35	44	26	9	19	62	5	10
KG-1012L	M12 × 1.25	24	35	44	26	9	19	62	5	10

其他尺寸參考 T 型  
The dimension of others refer to T type.

#### F 型浮動接頭法蘭型



代號 Code 缸徑 Tube I.D.	M	A	T	B	ΦJ	C	L
KG-1008F	M8 × 1.25	32	6	25	7	40	52
KG-1010F	M10 × 1.25	38	9	32	7	44	56
KG-1012F	M12 × 1.25	38	9	32	7	44	56

其他尺寸參考 T 型  
The dimension of others refer to T type.

### 特點 Features

- 免給油：  
採用含油合金，特殊軸承襯套，使活塞桿無需給油。
- 高品質；耐久佳：  
氣壓缸採用高級不銹鋼材質，耐磨、耐腐蝕。
- 多樣化支架：  
多種固定式及非固定式支架，供選擇。
- Special housing and bushing enables self lubrication of piston rod.
- High quality long service life.
- Cylinder mountings, available with a comprehensive range of accessories for rigid or flexible mounting.

### 規格 Specification

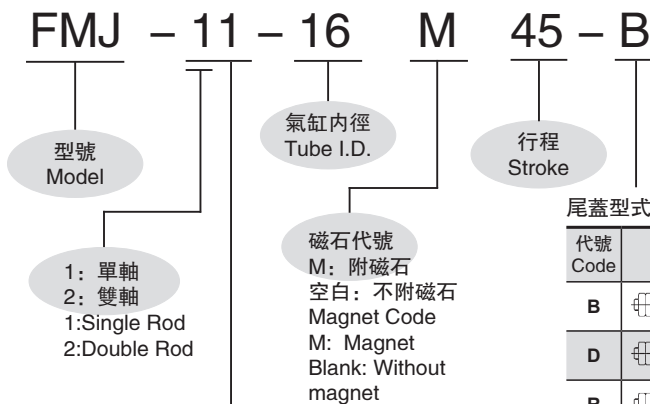
型號 Model		FMJ		
氣缸內徑 Tube I.D. (mm)		6	10	16
配管口徑尺寸 Port size		M5 x 0.8		
使用流體 Medium		空氣 Air		
最大使用壓力 Max operation pressure		7 kgf/cm <sup>2</sup>		
最小使用壓力 Min operation pressure (kgf/cm <sup>2</sup> )	單動 Single acting	引入型 Normally extended	2.5	1.5
		押出型 Normally returned	2.0	1.5
	複動 Double acting		1.2	0.6
耐壓力 Proof pressure		10 kgf/cm <sup>2</sup>		
周圍溫度 Ambient temperature		-5°C ~ +60°C (不凍結 No freezing)		
給油 Lubrication		不需給油 Not required		
感應開關 Sensor switch		RCS		RCM,RCS
感應開關束帶 Sensor switch band		-	-	BM16
		BJ6	BJ10	BJ16

### 標準行程表 Table for standard stroke

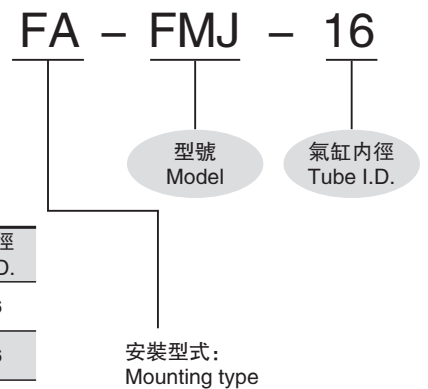
作動方式 Acting type	氣缸內徑 Tube I.D.	行程 Stroke (mm)
單動型 Single acting	Φ6	15,30,45,60
	Φ10	15,30,45,60
	Φ16	15,30,45,60,75,100,125,150
複動型 Double acting	Φ6	15,30,45,60
	Φ10	15,30,45,60,75,100,125,150
	Φ16	15,30,45,60,75,100,125,150,175,200

RCM 適用束帶 BM16。 Sensor switch band BM\*\* only for RCM.

### 氣缸訂購代碼 Ordering Code



### 安裝配件 Mounting accessories

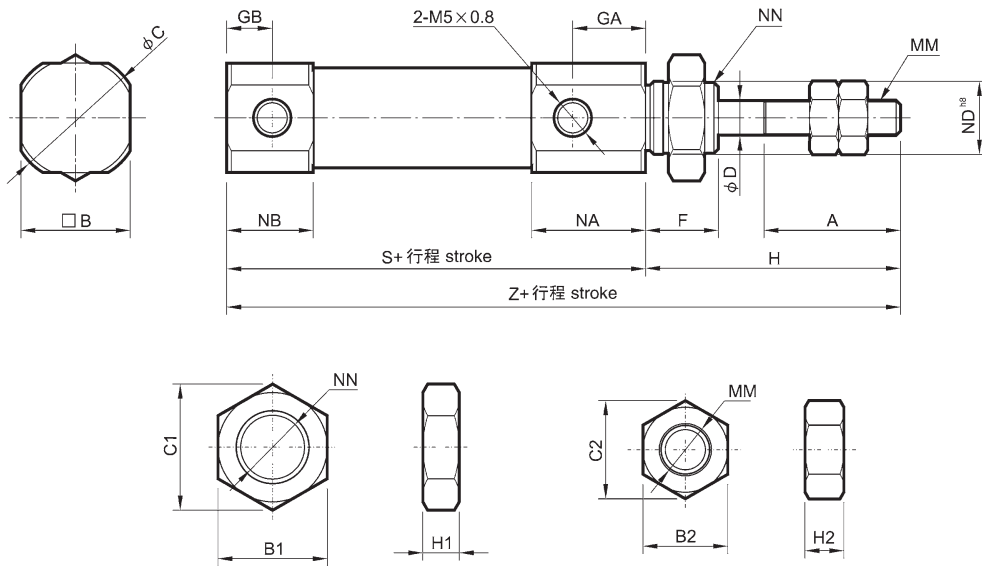


作動方式 / 桿端牙型 Style:

代號 Code	記號 Symbol	說明 Description
1	1	複動外牙 Double acting / Male thread
1	3	引入單動外牙 Single acting / Normally extended male thread
1	5	押出單動外牙 Single acting / Normally returned male thread
2	1	雙軸複動外牙 Double rod / Male thread
2	7	雙軸可調行程外牙 Double rod / Adjustable male thread

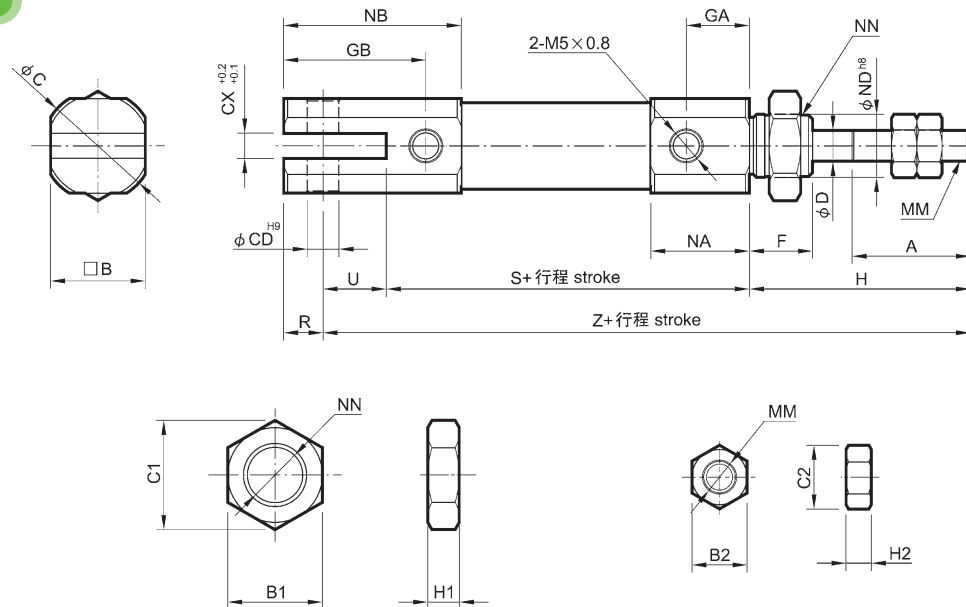
複動型 / 外觀尺寸 Dimensions / Double acting  $\Phi 10 \sim \Phi 16$

**B**



代號 Code 內徑 Tube I.D.	A	B	B1	B2	C	C1	C2	D	F	GA	GB	H	H1	H2	MM	NA	NB	ND <sup>H8</sup>	NN	S	Z
<b>10</b>	15	12	11	7	14	11.5	8.1	4	8	8	5	28	4	3.2	M4×0.7	12.5	9.5	8 <sup>0</sup> <sub>-0.022</sub>	M8×1.0	46	74
<b>16</b>	15	18	14	8	20	16.2	9.2	5	8	8	5	28	4	4	M5×0.8	12.5	9.5	10 <sup>0</sup> <sub>-0.022</sub>	M10×1.0	47	75

**D**

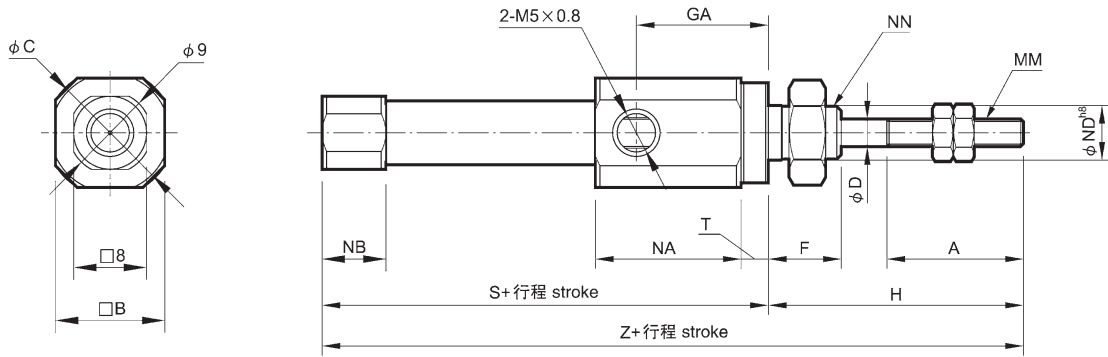


代號 Code 內徑 Tube I.D.	A	B	B1	B2	C	CD	CX	C1	C2	D	F	GA	GB	H	H1	H2	MM	NA	NB	ND <sup>H8</sup>	NN	R	S	U	Z
<b>10</b>	15	12	11	7	14	3.3	3.2	12.7	8.1	4	8	8	18	28	4	3.2	M4×0.7	12.5	22.5	8 <sup>0</sup> <sub>-0.022</sub>	M8×1.0	5	46	8	82
<b>16</b>	15	18	14	8	20	5	6.5	16.2	9.2	5	8	8	23	28	4	4	M5×0.8	12.5	27.5	10 <sup>0</sup> <sub>-0.022</sub>	M10×1.0	8	47	10	85

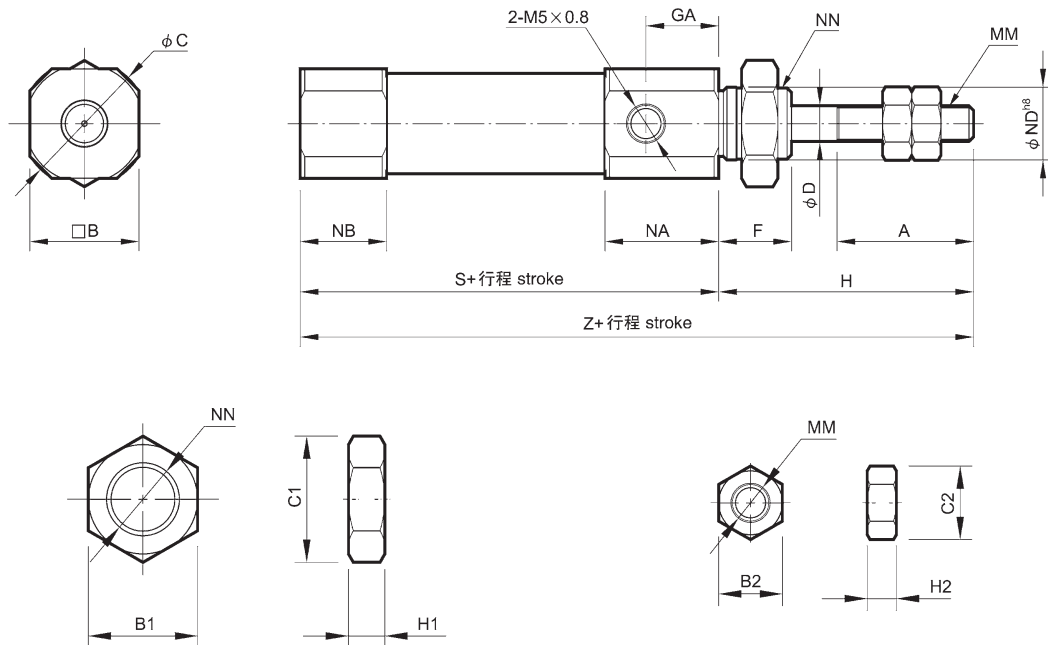
複動型 / 外觀尺寸 Dimensions / Double acting  $\Phi 6 \sim \Phi 16$

R

FMJ-6

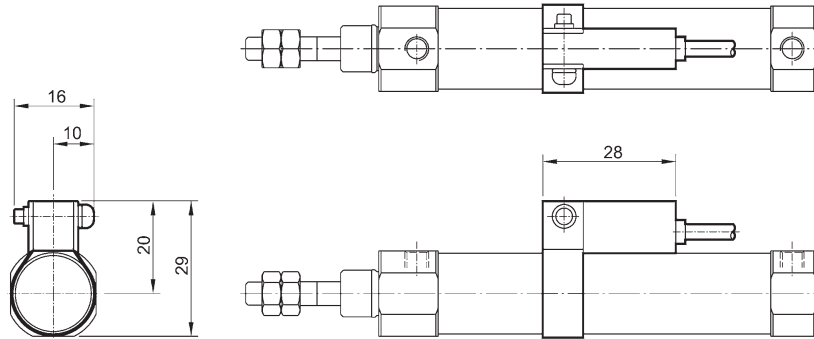


FMJ-10 / FMJ-16

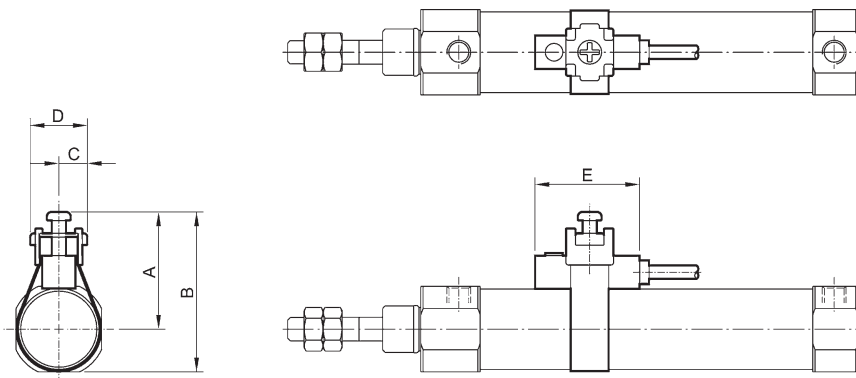


代號 Code 內徑 Tube I.D.	A	B	B1	B2	C	C1	C2	D	F	GA	H	H1	H2	MM	NA	NB	ND <sup>h8</sup>	NN	S	T	Z
<b>6</b>	15	12	8	5.5	14	9.2	6.4	3	8	14.5	28	4	2.4	M3×0.5	16	7	6 <sup>0</sup> <sub>-0.022</sub>	M6×1.0	49	3	77
<b>10</b>	15	12	11	7	14	12.7	8.1	4	8	8	28	4	3.2	M4×0.7	12.5	9.5	8 <sup>0</sup> <sub>-0.022</sub>	M8×1.0	46		74
<b>16</b>	15	18	14	8	20	16.2	9.2	5	8	8	28	4	4	M5×0.8	12.5	9.5	10 <sup>0</sup> <sub>-0.022</sub>	M10×1.0	47		75

感應開關 Sensor switch: RCM  
感應開關束帶 Sensor switch band: BM\*\*



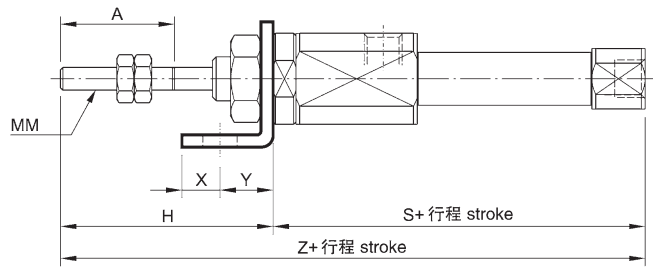
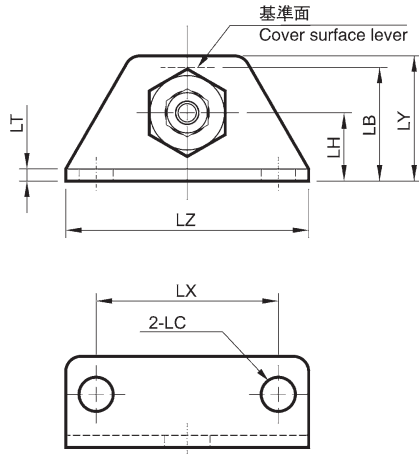
感應開關 Sensor switch: RCS  
感應開關束帶 Sensor switch band: BJ\*\*



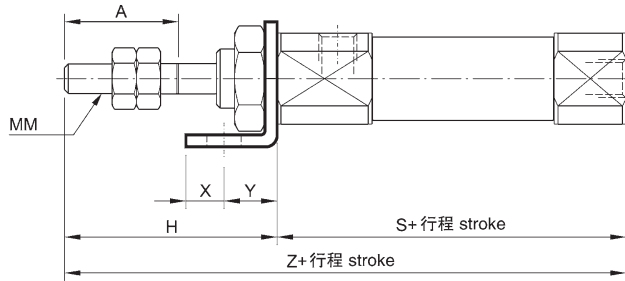
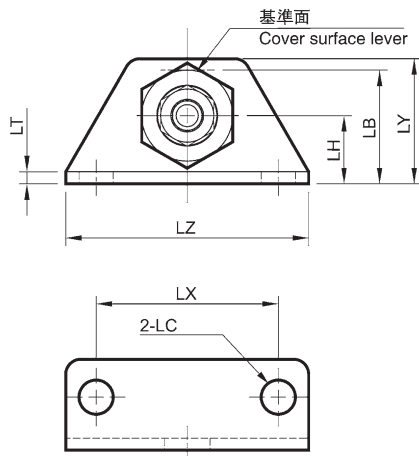
代號 Code 內徑 Tube I.D.	A	B	C	D	E
<b>6</b>	18.1	24.1	6	12	22
<b>10</b>	20.1	26.1	6	12	22
<b>16</b>	23.4	32.4	6	12	22

**LB**

$\Phi 6$



$\Phi 10, \Phi 16$

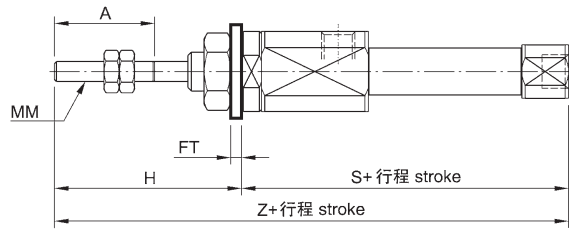
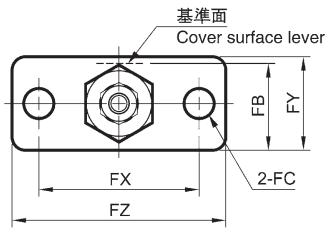


代號 Code 內徑 Tube I.D.	A	H	LB	LC	LH	LT	LX	LY	LZ	MM	S	X	Y	Z
<b>6</b>	15	28	15	4.5	9	1.6	24	16.5	32	M3 × 0.5	49	5	7	77
<b>10</b>	15	28	15	4.5	9	1.6	24	16.5	32	M4 × 0.7	46	5	7	74
<b>16</b>	15	28	23	5.5	14	2.3	33	25	42	M5 × 0.8	47	6	9	75

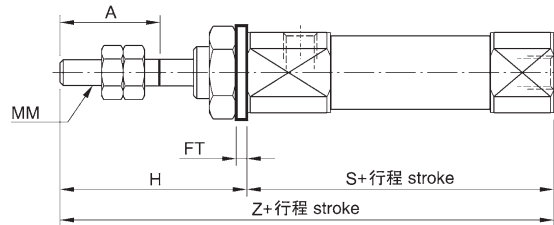
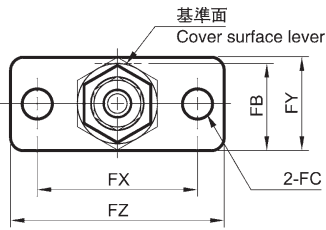
複動型 / 安裝配件 Mounting accessories / Double acting  $\Phi 6 \sim \Phi 16$

### FA

$\Phi 6$



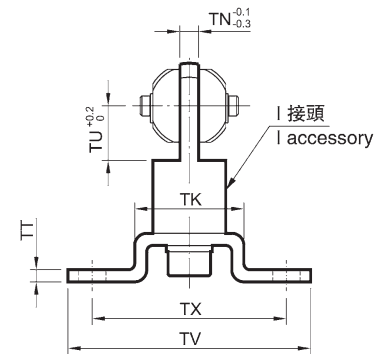
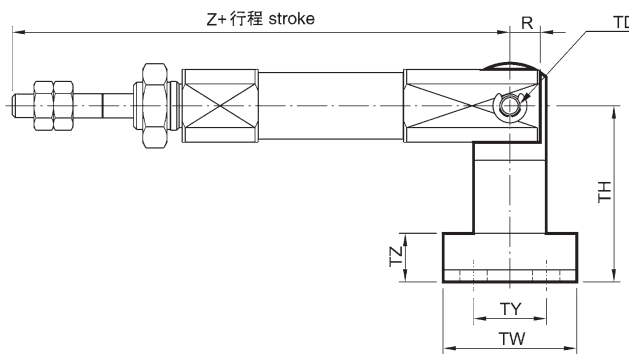
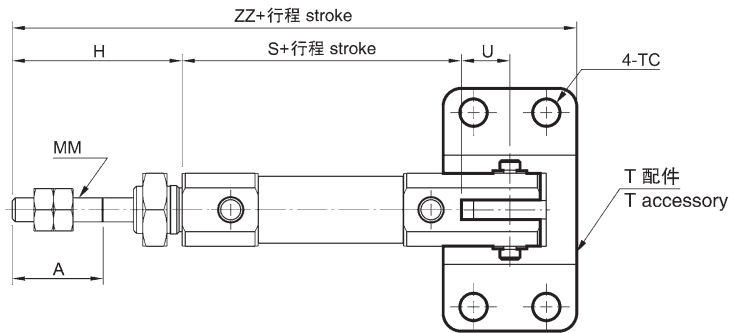
$\Phi 10 \sim \Phi 16$



代號 Code 內徑 Tube I.D.	A	FB	FC	FT	FX	FY	FZ	H	MM	S	Z
6	15	13	4.5	1.6	24	14	32	28	M3 × 0.5	49	77
10	15	13	4.5	1.6	24	14	32	28	M4 × 0.7	46	74
16	15	19	5.5	2.3	33	20	42	28	M5 × 0.8	47	75

### T

(另購 I 接頭 + 插銷)  
I+Pin (Extra purchase)



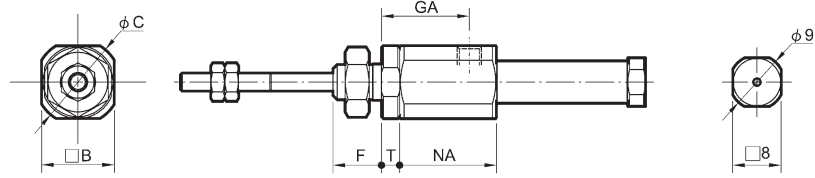
代號 Code 內徑 Tube I.D.	A	H	MM	R	S	TC	TD <sup>H10</sup>	TH	TK	TN	TT	TU	TV	TW	TX	TY	TZ	U	Z	ZZ
10	15	28	M4 × 0.7	5	46	4.5	3.3 <sup>+0.048</sup> / <sub>0</sub>	29	18	3.1	2	9	40	22	32	12	8	8	8	93
16	15	28	M5 × 0.8	8	47	4.5	5 <sup>+0.048</sup> / <sub>0</sub>	35	20	6.4	2.3	14	48	28	38	16	10	10	10	99



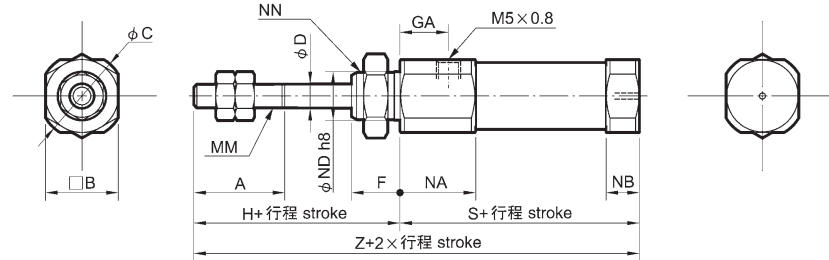
單動引入型 / 外觀尺寸 Dimensions / Normally extended  $\Phi 6 \sim \Phi 16$

13

$\Phi 6$



$\Phi 10, \Phi 16$



代號 Code 內徑 Tube I.D.	A	B	C	D	F	GA	H	MM	NA	NB	ND	NN	T
6	15	12	14	3	8	14.5	28	M3 × 0.5	16	3	6 <sup>0</sup> <sub>-0.018</sub>	M6 × 1.0	3
10	15	12	14	4	8	8	28	M4 × 0.7	12.5	5.5	8 <sup>0</sup> <sub>-0.022</sub>	M8 × 1.0	-
16	15	18	20	5	8	8	28	M5 × 0.8	12.5	5.5	10 <sup>0</sup> <sub>-0.022</sub>	M10 × 1.0	-

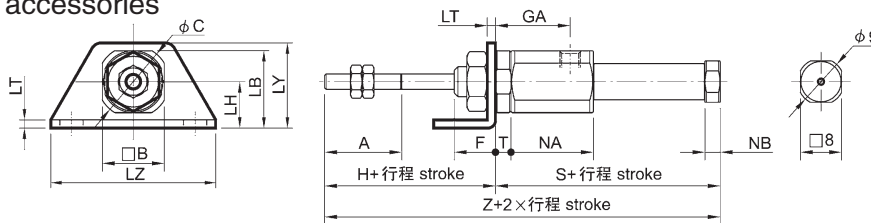
代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
6	46.5 (51.5)	55.5 (60.5)	59.5 (64.5)	73.5 (78.5)	-	-	-	-	74.5 (79.5)	83.5 (88.5)	87.5 (92.5)	101.5 (106.5)	-	-	-	-
10	48.5	56	68	80	-	-	-	-	76.5	84	96	108	-	-	-	-
16	48.5	57	69	81	87	111	129	141	76.5	85	97	109	115	139	157	169

※ (S) (Z) 括弧內屬具有磁性環之寸。 ※ (S), (Z) ( ) indicate the size of that with magnet ring.

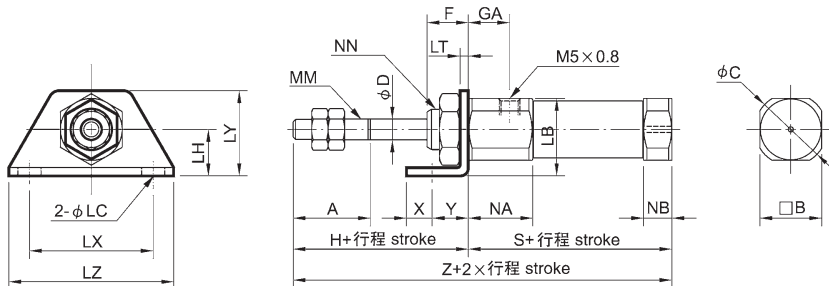
### 安裝配件 Mounting accessories

LB

$\Phi 6$



$\Phi 10, \Phi 16$



代號 Code 內徑 Tube I.D.	A	B	C	D	F	GA	H	LB	LC	LH	LT	LX	LY	LZ	MM	NA	NB	NN	T	X	Y
6	15	12	14	3	8	14.5	28	15	4.5	9	1.6	24	16.5	32	M3 × 0.5	16	3	M6 × 1.0	3	5	7
10	15	12	14	4	8	8	28	15	4.5	9	1.6	24	16.5	32	M4 × 0.7	12.5	5.5	M8 × 1.0	-	5	7
16	15	18	20	5	8	8	28	23	5.5	14	2.3	33	25	42	M5 × 0.8	12.5	5.5	M10 × 1.0	-	6	9

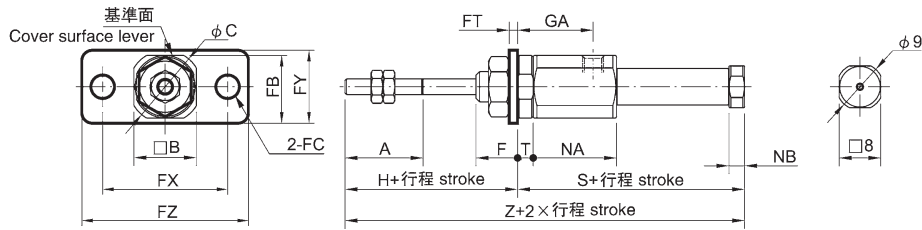
代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
6	46.5 (51.5)	55.5 (60.5)	59.5 (64.5)	73.5 (78.5)	-	-	-	-	74.5 (79.5)	83.5 (88.5)	87.5 (92.5)	101.5 (106.5)	-	-	-	-
10	48.5	56	68	80	-	-	-	-	76.5	84	96	108	-	-	-	-
16	48.5	57	69	81	87	111	129	141	76.5	85	97	109	115	139	157	169

※ (S) (Z) 括弧內屬具有磁性環之寸。 ※ (S), (Z) ( ) indicate the size of that with magnet ring.

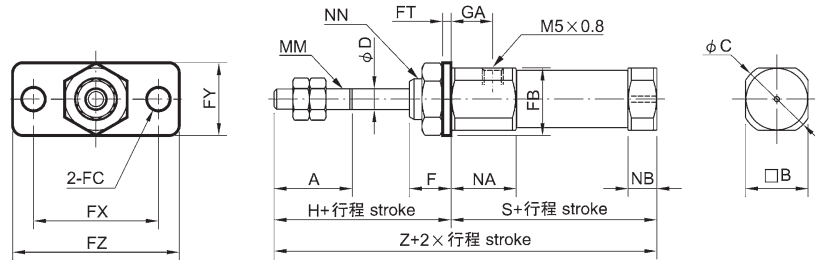
單動引入型 / 安裝配件 Mounting accessories / Normally extended  $\Phi 6 \sim \Phi 16$

**FA**

$\Phi 6$



$\Phi 10, \Phi 16$



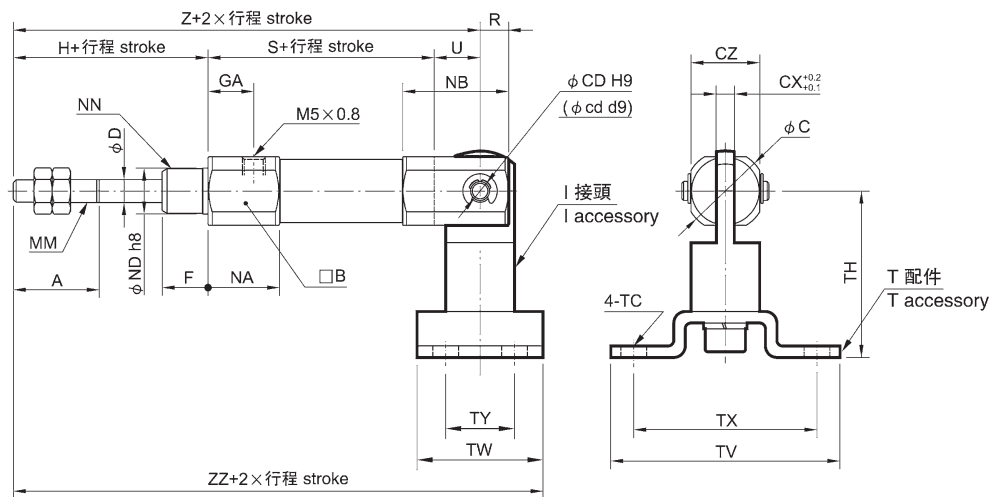
代號 Code 內徑 Tube I.D.	A	B	C	D	F	FB	FC	FT	FX	FY	FZ	GA	H	MM	NA	NB	NN	T	X	Y
<b>6</b>	15	12	14	3	8	11	4.5	1.6	24	14	32	14.5	28	M3×0.5	16	3	M6×1.0	3	5	7
<b>10</b>	15	12	14	4	8	13	4.5	1.6	24	14	32	8	28	M4×0.7	12.5	5.5	M8×1.0	-	5	7
<b>16</b>	15	18	20	5	8	19	5.5	2.3	33	20	42	8	28	M5×0.8	12.5	5.5	M10×1.0	-	6	9

代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
<b>6</b>	46.5 (51.5)	55.5 (60.5)	59.5 (64.5)	73.5 (78.5)	-	-	-	-	74.5 (79.5)	83.5 (88.5)	87.5 (92.5)	101.5 (106.5)	-	-	-	-
<b>10</b>	48.5	56	68	80	-	-	-	-	76.5	84	96	108	-	-	-	-
<b>16</b>	48.5	57	69	81	87	111	129	141	76.5	85	97	109	115	139	157	169

※ (S) (Z) 括弧內屬具有磁性環之尺寸。 ※ (S), (Z) ( ) indicate the size of that with magnet ring.

**T**

(另購 I 接頭 + 插銷)  
I+Pin (Extra purchase)



代號 Code 內徑 Tube I.D.	A	B	C	CD (cd)	CX	CZ	D	F	GA	H	MM	NA	NB	ND	NN	R	TC	TH	TV	TW	TX	TY	U
<b>10</b>	15	12	14	3.3	3.2	12	4	8	8	28	M4×0.7	12.5	18.5	8 <sup>0</sup> <sub>-0.022</sub>	M8×1.0	5	4.5	29	40	22	32	12	8
<b>16</b>	15	18	20	5	6.5	18	5	8	8	28	M5×0.8	12.5	23.5	10 <sup>0</sup> <sub>-0.022</sub>	M10×1.0	8	5.5	35	48	28	38	16	10

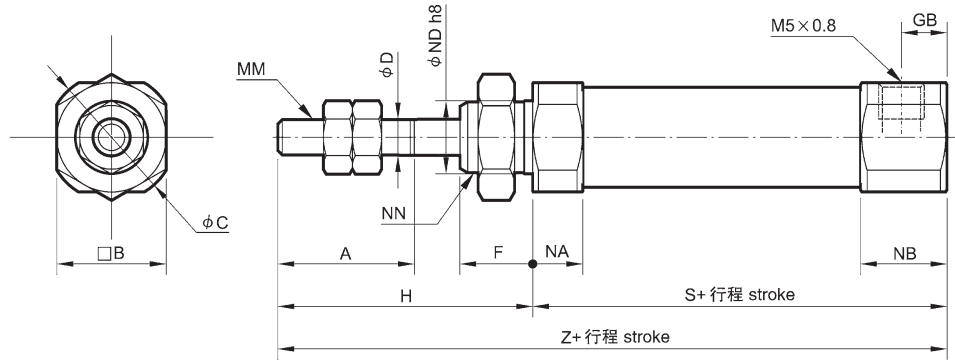
代號 Code 行程 Stroke 內徑 I.D.	S								Z								ZZ							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
<b>10</b>	48.5	56	68	80	-	-	-	-	84.5	92	104	116	-	-	-	-	95.5	103	115	127	-	-	-	-
<b>16</b>	48.5	57	69	81	87	111	129	141	86.5	95	107	119	125	149	167	179	100.5	109	121	133	139	163	181	193

筆型氣壓缸  
Pen Cylinders

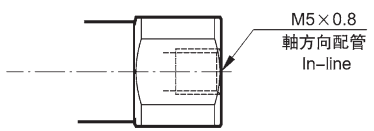
FMJ

單動伸出型 / 外觀尺寸 Dimensions / Normally returned  $\Phi 6 \sim \Phi 16$

15



代號 Code 內徑 Tube I.D.	A	B	C	D	F	GB	H	MM	NA	NB	ND	NN
6	15	8	9	3	8	-	28	M3x0.5	3	7	6 <sup>0</sup> <sub>-0.018</sub>	M6x1.0
10	15	12	14	4	8	5	28	M4x0.7	5.5	9.5	8 <sup>0</sup> <sub>-0.022</sub>	M8x1.0
16	15	18	20	5	8	5	28	M5x0.8	5.5	9.5	10 <sup>0</sup> <sub>-0.022</sub>	M10x1.0

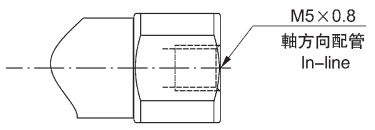
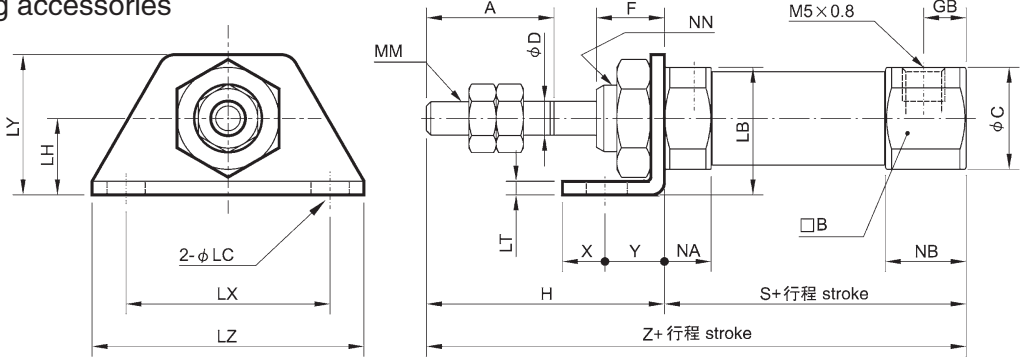


代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
6	34.5 (39.5)	43.5 (48.5)	47.5 (52.5)	61.5 (66.5)	-	-	-	-	62.5 (67.5)	71.5 (76.5)	75.5 (80.5)	89.5 (94.5)	-	-	-	-
10	45.5	53	65	77	-	-	-	-	73.5	81	93	105	-	-	-	-
16	45.5	54	66	78	84	108	126	138	73.5	82	94	106	112	136	154	166

※ (S) (Z) 括弧內屬具有磁性環之寸。 ※ (S), (Z) ( ) indicate the size of that with magnet ring.

### 安裝配件 Mounting accessories

LB



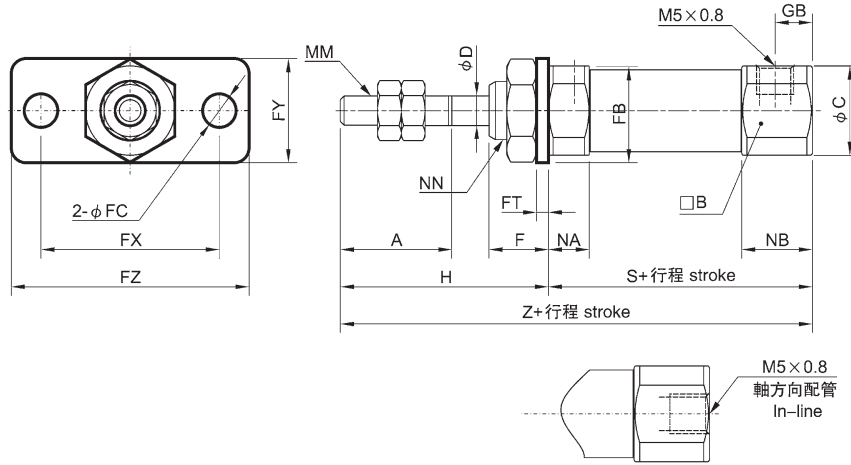
代號 Code 內徑 Tube I.D.	A	B	C	D	F	GB	H	LB	LC	LH	LT	LX	LY	LZ	MM	NA	NB	NN	X	Y
6	15	8	9	3	8	-	28	13	4.5	9	1.6	24	16.5	32	M3x0.5	3	7	M6x1.0	5	7
10	15	12	14	4	8	5	28	15	4.5	9	1.6	24	16.5	32	M4x0.7	5.5	9.5	M8x1.0	5	7
16	15	18	20	5	8	5	28	23	5.5	14	2.3	33	25	42	M5x0.8	5.5	9.5	M10x1.0	6	9

代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150	5~15	16~30	31~45	46~60	61~75	76~100	101~125	126~150
6	34.5 (39.5)	43.5 (48.5)	47.5 (52.5)	61.5 (66.5)	-	-	-	-	62.5 (67.5)	71.5 (76.5)	75.5 (80.5)	89.5 (94.5)	-	-	-	-
10	45.5	53	65	77	-	-	-	-	73.5	81	93	105	-	-	-	-
16	45.5	54	66	78	84	108	126	138	73.5	82	94	106	112	136	154	166

※ (S) (Z) 括弧內屬具有磁性環之寸。 ※ (S), (Z) ( ) indicate the size of that with magnet ring.

單動伸出型 / 安裝配件 Mounting accessories / Normally returned  $\Phi 6 \sim \Phi 16$

### FA

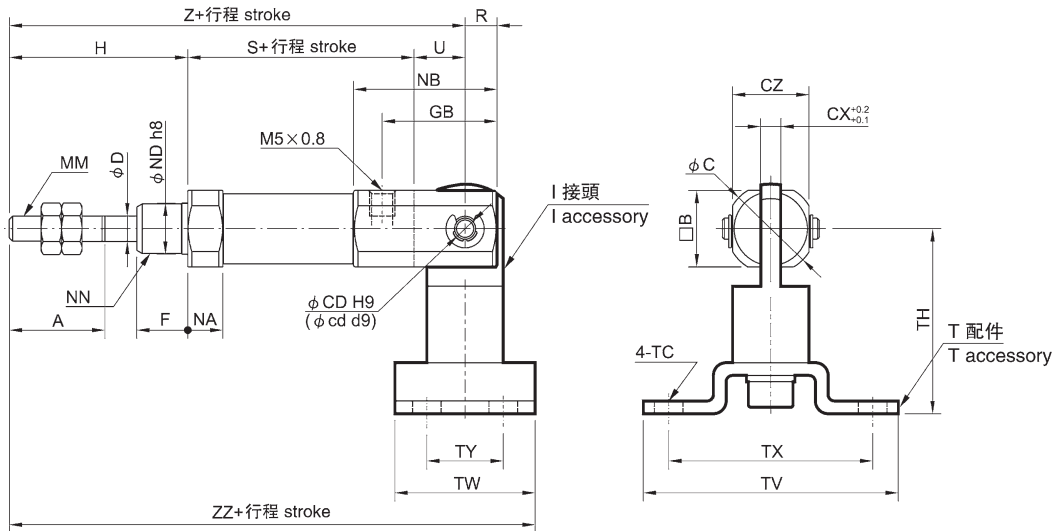


代號 Code 內徑 Tube I.D.	A	B	C	D	F	GB	H	FB	FC	FT	FX	FY	FZ	MM	NA	NB	NN	X	Y
6	15	8	9	3	8	-	28	11	4.5	1.6	24	14	32	M3x0.5	3	7	M6x1.0	5	7
10	15	12	14	4	8	5	28	13	4.5	1.6	24	14	32	M4x0.7	5.5	9.5	M8x1.0	5	7
16	15	18	20	5	8	5	28	19	5.5	2.3	33	20	42	M5x0.8	5.5	9.5	M10x1.0	6	9

代號 Code 行程 Stroke 內徑 I.D.	※S								※Z							
	5-15	16-30	31-45	46-60	61-75	76-100	101-125	126-150	5-15	16-30	31-45	46-60	61-75	76-100	101-125	126-150
6	34.5 (39.5)	43.5 (48.5)	47.5 (52.5)	61.5 (66.5)	-	-	-	-	62.5 (67.5)	71.5 (76.5)	75.5 (80.5)	89.5 (94.5)	-	-	-	-
10	45.5	53	65	77	-	-	-	-	73.5	81	93	105	-	-	-	-
16	45.5	54	66	78	84	108	126	138	73.5	82	94	106	112	136	154	166

### T

(另購 I 接頭 + 插銷)  
I+Pin (Extra purchase)



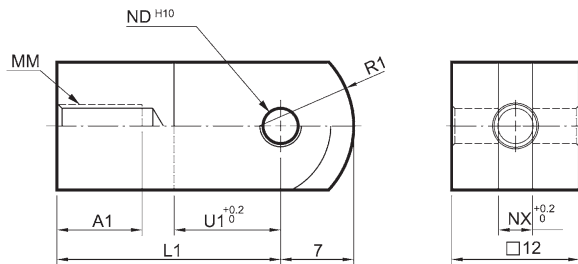
代號 Code 內徑 Tube I.D.	A	B	C	CD (cd)	CX	CZ	D	F	GB	H	MM	NA	NB	ND	NN	R	TC	TH	TV	TW	TX	TY	U
10	15	12	14	3.3	3.2	12	4	8	18	28	M4x0.7	5.5	22.5	8 <sup>0</sup> <sub>-0.022</sub>	M8x1.0	5	4.5	29	40	22	32	12	8
16	15	18	20	5	6.5	18	5	8	23	28	M5x0.8	5.5	27.5	10 <sup>0</sup> <sub>-0.022</sub>	M10x1.0	8	5.5	35	48	28	38	16	10

代號 Code 行程 Stroke 內徑 I.D.	S								Z								ZZ							
	5-15	16-30	31-45	46-60	61-75	76-100	101-125	126-150	5-15	16-30	31-45	46-60	61-75	76-100	101-125	126-150	5-15	16-30	31-45	46-60	61-75	76-100	101-125	126-150
10	45.5	53	65	77	-	-	-	-	81.5	89	101	113	-	-	-	-	92.5	100	112	124	-	-	-	-
16	45.5	54	66	78	84	108	126	138	83.5	92	104	116	122	146	164	176	97.5	106	118	130	136	160	178	190

筆型氣壓缸  
Pen Cylinders

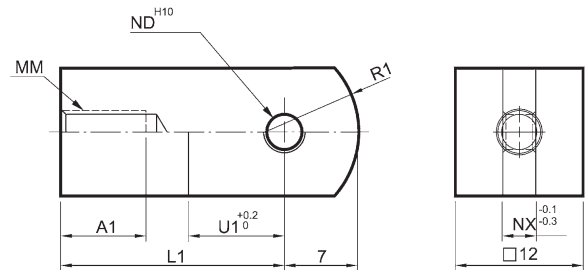
FMJ

## Y 接頭 / Y Connector



代號 Code 內徑 Tube I.D.	A1	L1	MM	HD <sup>H10</sup>	NX	R1	U1
10	8	21	M4 × 0.7	3.3 <sup>+0.048</sup> <sub>0</sub>	3.2	8	10
16	11	21	M5 × 0.8	5 <sup>+0.048</sup> <sub>0</sub>	6.5	12	10

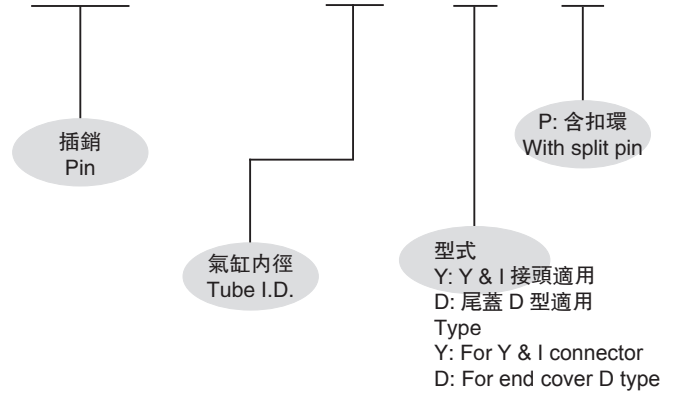
## I 接頭 / I Connector



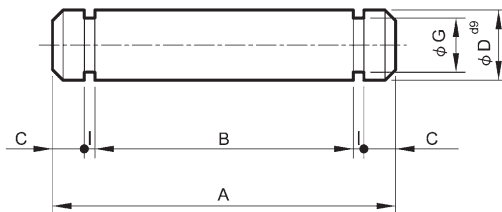
代號 Code 內徑 Tube I.D.	A1	L1	MM	HD <sup>H10</sup>	NX	R1	U1
10	8	21	M4 × 0.7	3.3 <sup>+0.048</sup> <sub>0</sub>	3.1	8	9
16	8	25	M5 × 0.8	5 <sup>+0.048</sup> <sub>0</sub>	6.4	12	14

## 訂購代碼 Ordering Code

PIN – FMJ – 10 – Y – P

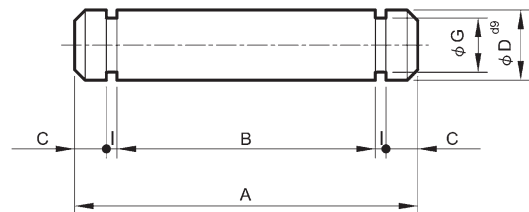


## 插銷 / Pin



### 適用於 I 型 & Y 型接頭 For I & Y connector

代號 Code 內徑 Tube I.D.	A	B	C	D <sup>d9</sup>	G	I	扣環 Split pin
10	16.2	12.2	1.5	3.3 <sup>-0.03</sup> <sub>-0.06</sub>	2.5	0.5	E-2.5
16	16.2	12.2	1.5	5 <sup>-0.03</sup> <sub>-0.06</sub>	4	0.7	E-4



### 適用於尾蓋 D 型 For end cover D type

代號 Code 內徑 Tube I.D.	A	B	C	D <sup>d9</sup>	G	I	扣環 Split pin
10	15.2	12.2	1	3.3 <sup>-0.03</sup> <sub>-0.06</sub>	2.5	0.5	E-2.5
16	22.7	18.3	1.5	5 <sup>-0.03</sup> <sub>-0.06</sub>	4	0.7	E-4

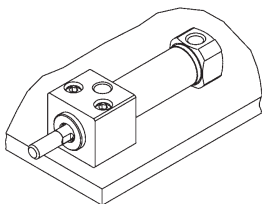
### 特點 Features

- 短小、節省空間  
不必另外使用支架即可直接安裝，整體長度大幅度縮短，安裝距離可較小，因此所需的安裝空間可明顯減少。
- 安裝精度、強度增大
- 兩種固定型式  
依使用目的，有兩種固定型式可供選擇：  
底面固定型、前面固定型。
- 全系列均附磁
- Compact type  
The cylinder can be directly mounted without brackets (You have brackets) the overall length is shorter and so it will fit into a more confined space. This gives the benefit of saving space when installing the cylinder.
- Improved strength and accuracy of installation.
- Two installation methods.
- Cylinder can be front mounted, or mounted from underneath.
- Magnetic as standard.

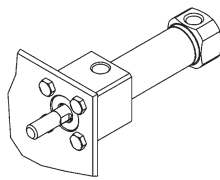
### 規格 Specification

型號 Model	FCMBRA, FCMBRB			
氣缸內徑 Tube I.D. (mm)	20	25	32	40
配管口徑尺寸 Port size	PT 1/8			PT 1/4
使用流體 Medium	空氣 Air			
最大使用壓力 Max. operation pressure	9.9kgf/cm <sup>2</sup>			
最小使用壓力 Min operation pressure	0.5kgf/cm <sup>2</sup>			
耐壓力 Proof pressure	15kgf/cm <sup>2</sup>			
周圍溫度 Ambient temperature	-5°C ~ +60°C (不凍結 No freezing)			
給油 Lubrication	不需給油 Not required			
使用速度範圍 Available speed range	50 ~ 500 mm/sec			
緩衝裝置 Cushion	緩衝墊片 With rubber cushion pad			
感應開關 Sensor switch	RD-201			
感應開關束帶 Sensor switch band	BA20	BA25	BA32	BA40
	BGS20	BGS25	BGS32	BGS40

### 固定型式 Mounting



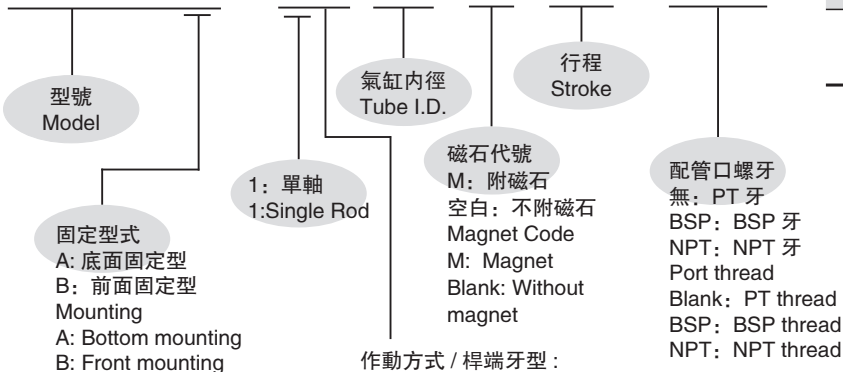
A: 底面固定型  
Bottom mounting



B: 前面固定型  
Front mounting

### 訂購代碼 Ordering Code

FCMBRA - 11 - 25 M 100 - BSP



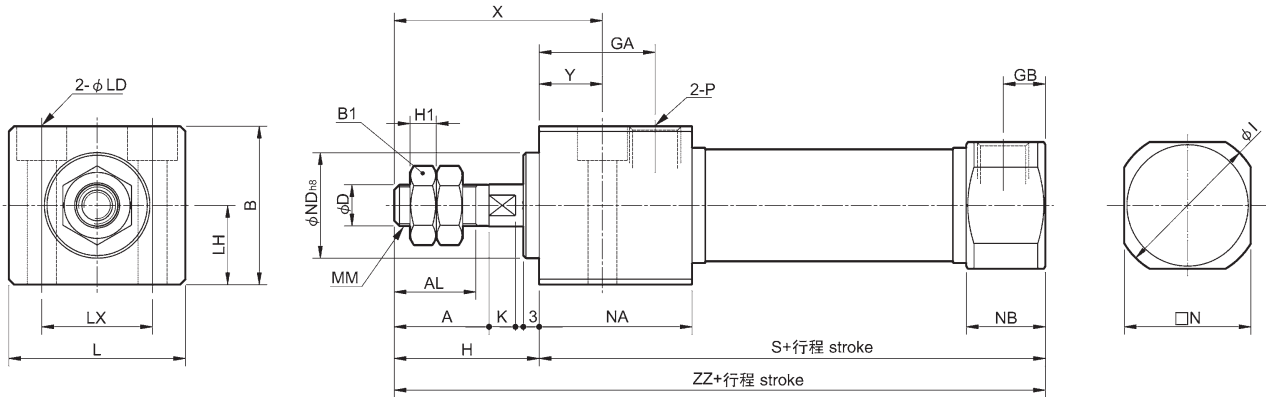
代號 Code	記號 Symbol	說明 Description
1	1	複動外牙 Double acting / Male thread

### 標準行程表 Table for standard stroke

氣缸內徑 Tube I.D.	行程 Stroke (mm)
Φ20, 25, 32, 40	25, 50, 75, 100, 120, 150, 200, 250, 300

複動型 / 外觀尺寸 Dimensions / Double acting  $\Phi 20 \sim \Phi 40$

### FCMBRA

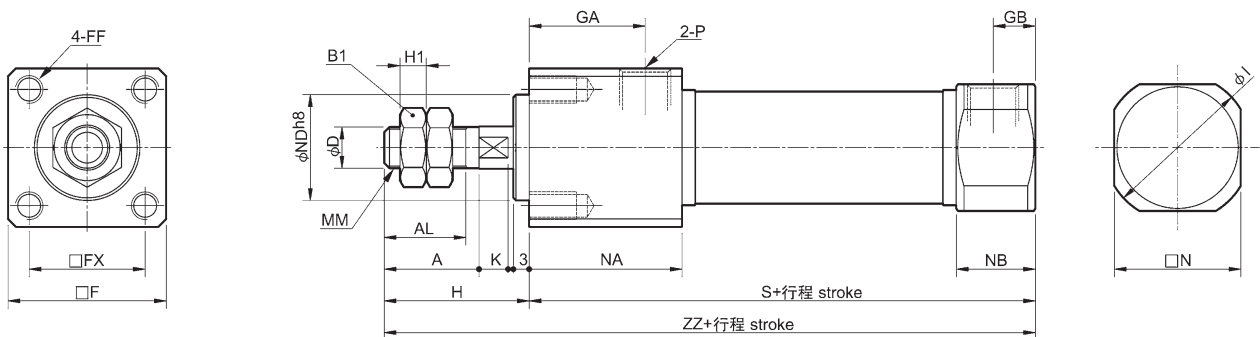


(mm)

代號 Code 內徑 Tube I.D.	A	AL	B	B1	D	GA	GB	H	H1	I	K	L	LD	LH	LX	MM	N	NA	NB	ND
20	18	15.5	30	13	8	22	8	27	5	28	5	33.5	$\Phi 5.5$ 貫通 thru, $\Phi 9.5 \times 6.5$ 深 depth	15	21	M8 $\times$ 1.25	24	29	15	20 <sup>0</sup> <sub>-0.033</sub>
25	22	19.5	36	17	10	22	8	31	6	33.5	5	39	$\Phi 6.6$ 貫通 thru, $\Phi 11 \times 7.5$ 深 depth	18	25	M10 $\times$ 1.25	30	29	15	26 <sup>0</sup> <sub>-0.033</sub>
32	22	19.5	42	17	12	22	8	31	6	37.5	5.5	47	$\Phi 9$ 貫通 thru, $\Phi 14 \times 10$ 深 depth	21	30	M10 $\times$ 1.25	34.5	29	15	26 <sup>0</sup> <sub>-0.033</sub>
40	24	21	52	22	14	27	11	34	8	46.5	7	58.5	$\Phi 11$ 貫通 thru, $\Phi 17.5 \times 12.5$ 深 depth	26	38	M14 $\times$ 1.5	42.5	37.5	21.5	32 <sup>0</sup> <sub>-0.039</sub>

代號 Code 內徑 Tube I.D.	P	S	X	Y	ZZ
20	PT 1/8	76	39	12	103
25	PT 1/8	76	43	12	107
32	PT 1/8	78	43	12	109
40	PT 1/4	104	49	15	138

### FCMBRB

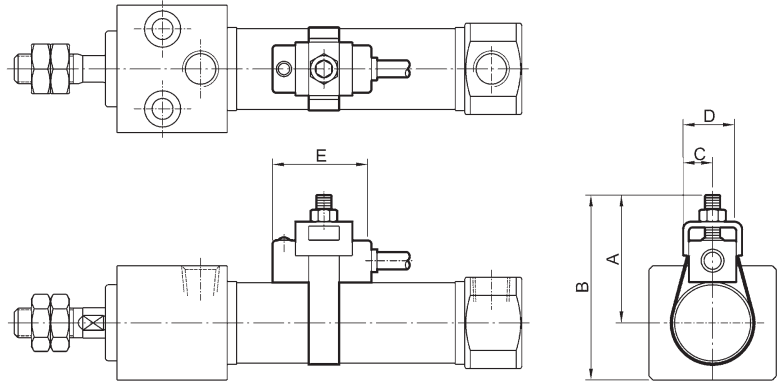


代號 Code 內徑 Tube I.D.	A	AL	B1	D	F	FF	FX	GA	GB	H	H1	I	K	MM	N	NA	NB	ND	P	S	ZZ
20	18	15.5	13	8	30	M5 $\times$ 0.8 $\times$ 9深 depth	22	22	8	27	5	28	5	M8 $\times$ 1.25	24	29	15	20 <sup>0</sup> <sub>-0.033</sub>	PT 1/8	76	103
25	22	19.5	17	10	36	M6 $\times$ 1.0 $\times$ 11深 depth	26	22	8	31	6	33.5	5	M10 $\times$ 1.25	30	29	15	26 <sup>0</sup> <sub>-0.033</sub>	PT 1/8	76	107
32	22	19.5	17	12	42	M6 $\times$ 1.0 $\times$ 11深 depth	30	22	8	31	6	37.5	5.5	M10 $\times$ 1.25	34.5	29	15	26 <sup>0</sup> <sub>-0.033</sub>	PT 1/8	78	109
40	24	21	22	14	52	M8 $\times$ 1.25 $\times$ 14深 depth	36	27	11	34	8	46.5	7	M14 $\times$ 1.5	42.5	37.5	21.5	32 <sup>0</sup> <sub>-0.039</sub>	PT 1/4	104	138

**感應開關 Sensor switch: RD-201**

**感應開關束帶 Sensor switch band: BA\*\***

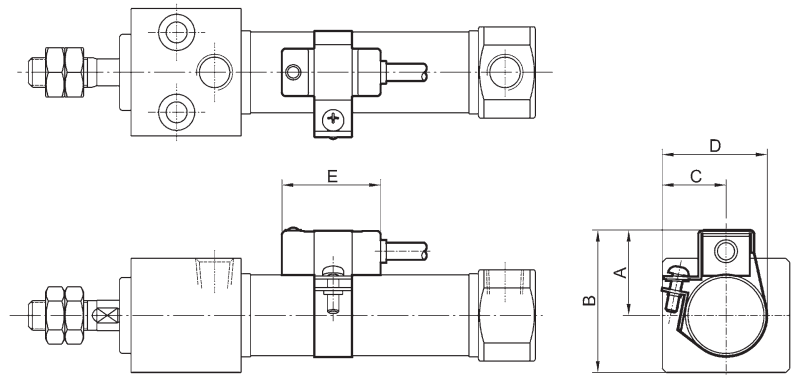
代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	34	49	8	16	26
25	37	55	8	16	26
32	40	62	8	16	26
40	44	71	8	16	26



**感應開關 Sensor switch: RD-201**

**感應開關束帶 Sensor switch band: BGS\*\***

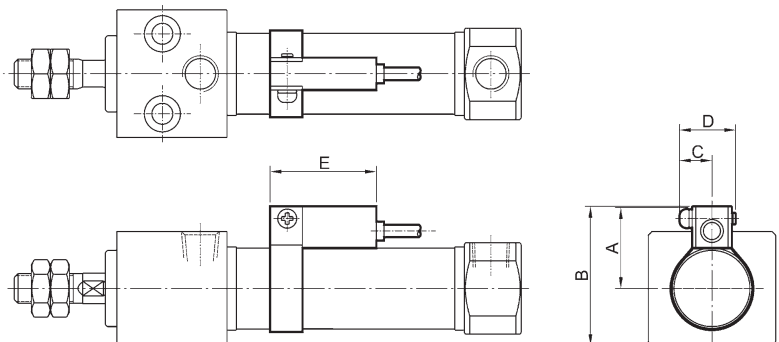
代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	25	40	18	30	26
25	25.5	43.5	18.5	33.5	26
32	29	50.5	22	39.5	26
40	33	60	26	47.5	26



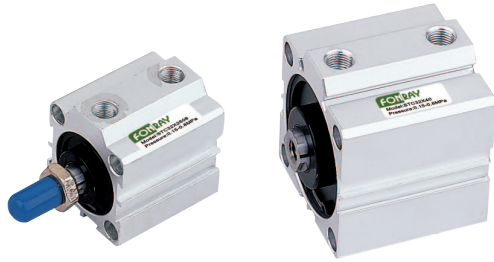
**感應開關 Sensor switch: RCM**

**感應開關束帶 Sensor switch band: BM\*\***

代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	22	37	10	16	28
25	25	43	10	16	28
32	28	50	10	16	28
40	32	59	10	16	28







### 訂購代碼 Ordering Code

STCDFA - 12 - 40 M 25 - BSP

型號  
Model

- 1: 單軸  
2: 雙軸
- 1: Single Rod  
2: Double Rod

氣缸內徑  
Tube I.D.

- 磁石代號  
M: 附磁石  
空白: 不附磁石
- Magnet Code  
M: Magnet  
Blank: Without magnet

行程  
Stroke

- 配管口螺牙  
無: PT 牙  
BSP: BSP 牙  
NPT: NPT 牙
- Port thread  
Blank: PT thread  
BSP: BSP thread  
NPT: NPT thread

作動方式 / 桿端牙型:  
Style

代號 Code	記號 Symbol	說明 Description
1 1		複動外牙 Double acting / Male thread
1 2		複動內牙 Double acting / Female thread
1 3		引入單動外牙 Single acting / Normally extended male thread
1 4		引入單動內牙 Single acting / Normally extended female thread
1 5		押出單動外牙 Single acting / Normally returned male thread
1 6		押出單動內牙 Single acting / Normally returned female thread
2 1		雙軸複動外牙 Double rod / Male thread
2 2		雙軸複動內牙 Double rod / Female thread
2 7		雙軸可調行程外牙 Double rod / Adjustable male thread
2 8		雙軸可調行程內牙 Double rod / Adjustable female thread

### 特點 Features

- 本公司追求效率成本及容易安裝使用，而設計出的產品。
- 此系列產品之安裝，全部使用沉頭孔牙設計的安裝方式，不需任何固定腳架，達到節省配置空間的要求。
- 本體使用精心挑選的鋁合金素材，經過硬質陽極處理；更具耐磨耐蝕性，配合精密的組裝技術；並且藉由嚴格地全數檢查，達到可絕對信賴的品質要求。
- 於缸體擠製時，於外圍預留裝配槽；使感應開關在安裝固定及位置調整時，均極其簡單。
- Ultra Compact, light weight and space saving cylinder.
- Wide range of bore sizes and strokes (12-100mm).
- Single and double acting available.

### 規格 Specification

型號 Model	STCDFA				
作動方式 Acting type	複動型 / 押出型 / 引入型 Double acting / Normally returned / Normally extended			複動型 Double acting	
氣缸內徑 Tube I.D. ( mm )	12	16	20	25	32 40 50 63 80 100
配管口徑尺寸 Port size	M5 x 0.8		PT 1/8	PT 1/4	PT 3/8
使用流體 Medium	空氣 Air				
使用壓力範圍 Operating pressure range kgf/cm <sup>2</sup>	複動 Double acting	0.5~9.9	0.3~9.9	0.2~9.9	
	單動 Single acting	2.0~9.9	1.5~9.9	1.0~9.9	—
耐壓力 Proof pressure	15kgf/cm <sup>2</sup>				
周圍溫度 Ambient temperature	-5°C ~ +60°C ( 不凍結 No freezing )				
感應開關 Sensor switch	RD-301, RCE, RCE1				

### 複動型 – 標準行程表

#### Double acting – Table for standard stroke

	氣缸內徑 Tube I.D.	行程 Stroke ( mm )	最大行程 ( 不附磁 ) Max. Stroke Without magne)
單軸 Single Rod	Φ12,16	5,10,15,20,25,30	300
	Φ20,25,32 Φ40,50,63	5,10,15,20,25,30,35,40,45,50	300
	Φ80,100	5,10,15,20,25,30,35,40,45,50	125
雙軸 Double Rod	Φ12,16	5,10,15,20,25,30	300
	Φ20,25,32 Φ40,50,63	5,10,15,20,25,30,35,40,45,50	300
	Φ80,100	5,10,15,20,25,30,35,40,45,50	125

- ※ 非標準行程亦可承製，請洽業務人員。
- ※ Stroke out of specification is also available.
- ※ Please consult us if stroke out of specification.

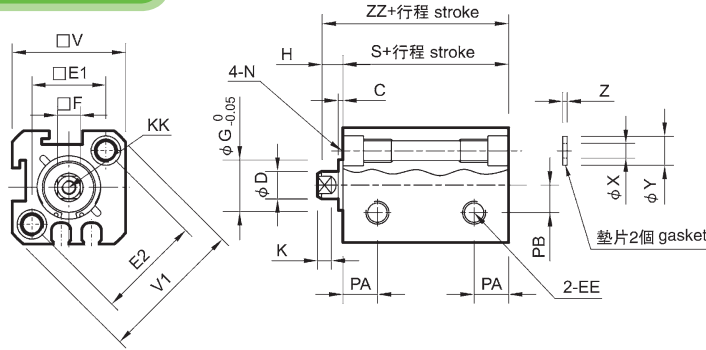
### 單動型 – 標準行程表

#### Single acting – Table for standard stroke

氣缸內徑 Tube I.D.	行程 Stroke ( mm )
Φ12, 16, 20, 25, 32, 40	5,10
Φ50	10,20

內牙型 / 外觀尺寸 Male thread / Dimensions  $\Phi 12 \sim \Phi 100$

### $\Phi 12, \Phi 16$

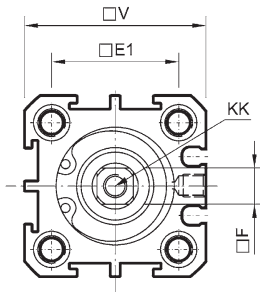


$\Phi 12 \sim \Phi 100$  長行程 Long stroke  
(無承窩孔 Without counter bore)

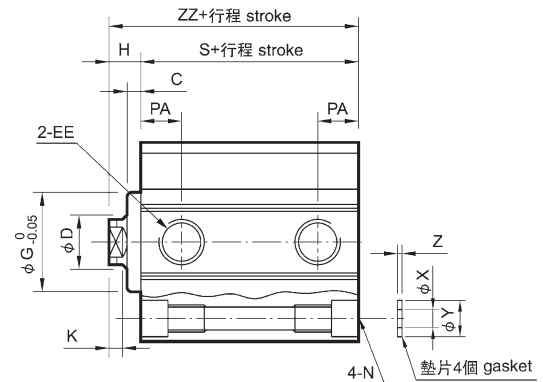
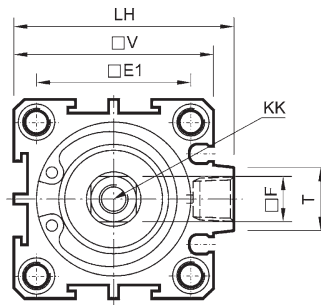


※ 附磁型：行程超過 100mm。  
※ With magnet type: the store length must be over 100mm.

### $\Phi 20, \Phi 25$



### $\Phi 32 \sim \Phi 100$



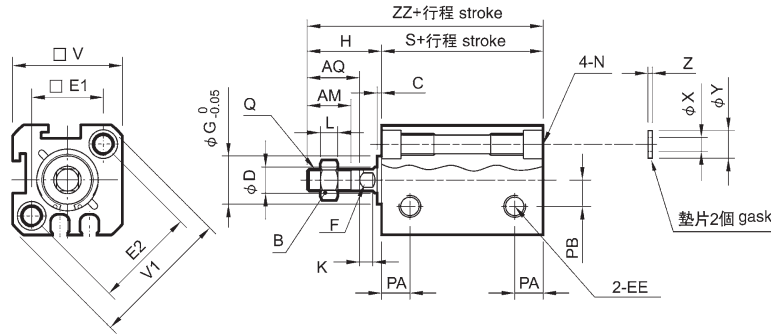
代號 Code 內徑 Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	N (固定孔 Fixed Hole)
12	1	6	M5 × 0.8	16.3	23	5	11	5	3	M3 × 0.5 × 6dp	—	6.5 × 4.5dp, 貫通 thru $\Phi 4.3$ , M5 × 0.8 × 7.5dp
16	1.5	6	M5 × 0.8	19.8	28	5	11	5.5	3	M3 × 0.5 × 6dp	—	6.5 × 4.5dp, 貫通 thru $\Phi 4.3$ , M5 × 0.8 × 7.5dp
20	1.5	8	M5 × 0.8	24	—	6	15	5.5	3	M4 × 0.7 × 8dp	—	6.5 × 4.5dp, 貫通 thru $\Phi 4.3$ , M5 × 0.8 × 7.5dp
25	2	10	M5 × 0.8	28	—	8	17	6	3	M5 × 0.8 × 10dp	—	9 × 7dp, 貫通 thru $\Phi 5.1$ , M6 × 1 × 10dp
32	3	12	PT 1/8(註 Note1)	34	—	10	22	7	3	M6 × 1 × 12dp	48.5	9 × 7dp, 貫通 thru $\Phi 5.1$ , M6 × 1 × 10dp
40	3	16	PT 1/8(註 Note1)	40	—	14	28	7	3	M8 × 1.25 × 12dp	56.5	10.5 × 8dp, 貫通 thru $\Phi 6.9$ , M8 × 1.25 × 12.5dp
50	4	20	PT 1/4(註 Note2)	48	—	17	38	9	3	M10 × 1.5 × 15dp	70	11 × 8.5dp, 貫通 thru $\Phi 6.9$ , M8 × 1.25 × 16.5dp
63	4	20	PT 1/4(註 Note2)	60	—	17	40	9	3	M10 × 1.5 × 15dp	83	11 × 8.5dp, 貫通 thru $\Phi 6.9$ , M8 × 1.25 × 16.5dp
80	5	25	PT 3/8(註 Note3)	74	—	22	45	11	4	M14 × 1.5 × 20dp	102	14 × 10.5dp, 貫通 thru $\Phi 10.5$ , M12 × 1.75 × 12dp
100	5	30	PT 3/8(註 Note3)	90	—	27	55	12	4	M18 × 1.5 × 20dp	122	17.5 × 13dp, 貫通 thru $\Phi 12.3$ , M14 × 2 × 17dp

註 1: 不附磁行程為 5mm 時, EE=M5 × 0.8  
Note 1: Without magnet with stroke=5mm, EF=M5 × 0.8  
註 2: 不附磁行程為 5mm 時, EE=PT 1/8  
Note 2: Without magnet with stroke=5mm, EF=PT 1/8  
註 3: 不附磁行程為 5mm 時, EE=PT 1/4  
Note 3: Without magnet with stroke=5mm, EF=PT 1/4

代號 Code 內徑 Tube I.D.	PA	PB	T	V	V1	X	Y	Z	不附磁型 Without magnet		附磁型 magnet	
									S	ZZ	S	ZZ
12	6.5	6	—	25	32	3.2	6.3	1	17	22	27	32
16	7	6.5	—	29	38	3.2	6.3	1	18.5	24	28.5	34
20	7.5	—	—	34	—	3.2	6.3	1	19.5	25	29.5	35
25	8	—	—	40	—	4.2	7.8	1	21	27	31	37
32	9	—	14	44	—	4.2	7.8	1	24.5	31.5	34.5	41.5
40	10	—	14	52	—	6.2	10.3	1.6	26	33	36	43
50	10	—	19	62	—	6.2	10.8	1.6	28	37	38	47
63	12	—	20	75	—	6.2	10.8	1.6	32	41	42	51
80	13	—	27	94	—	8.2	13.8	1.6	41	52	51	62
100	17	—	26	114	—	10.2	17.3	2	51	63	61	73

外牙型 / 外觀尺寸 Female thread / Dimensions  $\Phi 12 \sim \Phi 100$

$\Phi 12, \Phi 16$

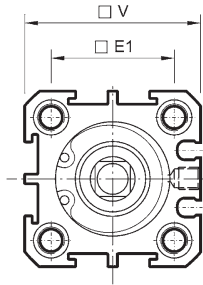


$\Phi 12 \sim \Phi 100$  長行程 Long stroke  
(無承窩孔 Without counter bore)

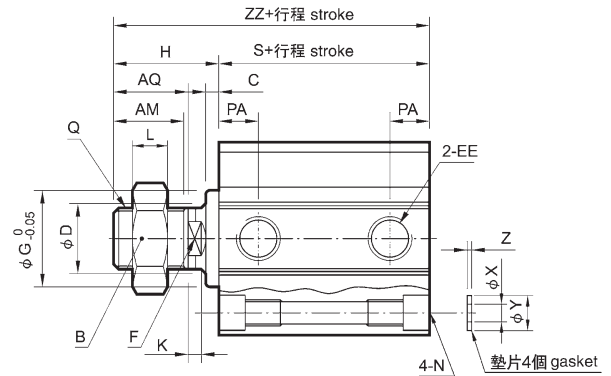
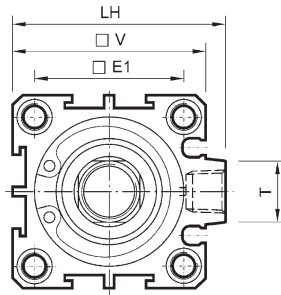


※ 附磁型: 行程超過 100mm。  
※ With magnet type: the store length must be over 100mm.

$\Phi 20, \Phi 25$



$\Phi 32 \sim \Phi 100$



代號 Code 內徑 Tube I.D.	AM	AQ	B	C	D	EE	E1	E2	F	G	H	K	L	LH	N (固定孔)			
12	10	12	8	1	6	M5 × 0.8	16.3	23	5	11	17	3	4	—	6.5 × 4.5dp, 貫通 thruΦ4.3, M5 × 0.8 × 7.5dp			
16	10	12	8	1.5	6	M5 × 0.8	19.8	28	5	11	17.5	3	4	—	6.5 × 4.5dp, 貫通 thruΦ4.3, M5 × 0.8 × 7.5dp			
20	13	15	10	1.5	8	M5 × 0.8	24	—	6	15	20.5	3	5	—	6.5 × 4.5dp, 貫通 thruΦ4.3, M5 × 0.8 × 7.5dp			
25	15	17	13	2	10	M5 × 0.8	28	—	8	17	23	3	5	—	9 × 7dp, 貫通 thruΦ5.1, M6 × 1 × 10dp			
32	15	18	17	3	12	PT 1/8 (註 Note1)	34	—	10	22	25	3	6	48.5	9 × 7dp, 貫通 thruΦ5.1, M6 × 1 × 10dp			
40	25	28	22	3	16	PT 1/8 (註 Note1)	40	—	14	28	35	3	8	56.5	10.5 × 8dp, 貫通 thruΦ6.9, M8 × 1.25 × 12.5dp			
50	25	28	26	4	20	PT 1/4 (註 Note2)	48	—	17	38	37	3	11	70	11 × 8.5dp, 貫通 thruΦ6.9, M8 × 1.25 × 16.5dp			
63	25	28	26	4	20	PT 1/4 (註 Note2)	60	—	17	40	37	3	11	83	11 × 8.5dp, 貫通 thruΦ6.9, M8 × 1.25 × 16.5dp			
80	30	33	32	5	25	PT 3/8 (註 Note3)	74	—	22	45	44	4	13	102	14 × 10.5dp, 貫通 thruΦ10.5, M12 × 1.75 × 12dp			
100	35	38	35	5	30	PT 3/8 (註 Note3)	90	—	27	55	50	4	14	122	17.5 × 13dp, 貫通 thruΦ12.3, M14 × 2 × 17dp			

註 1: 不附磁行程為 5mm 時, EE=M5 × 0.8

Note 1: Without magnet with stroke=5mm, EF=M5 × 0.8

註 2: 不附磁行程為 5mm 時, EE=PT 1/8

Note 2: Without magnet with stroke=5mm, EF=PT 1/8

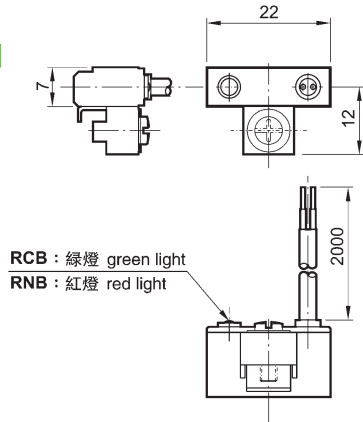
註 3: 不附磁行程為 5mm 時, EE=PT 1/4

Note 3: Without magnet with stroke=5mm, EF=PT 1/4

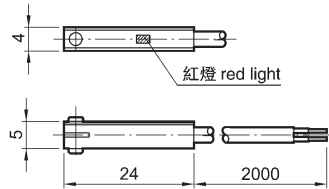
代號 Code 內徑 Tube I.D.	PA	PB	Q	T	V	V1	X	Y	Z	不附磁型 Without magnet		附磁型 Magnet	
										S	ZZ	S	ZZ
12	6.5	6	M5 × 0.8	—	25	32	3.2	6.3	1	17	34	27	44
16	7	6.5	M5 × 0.8	—	29	38	3.2	6.3	1	18.5	36	28.5	46
20	7.5	—	M6 × 1	—	34	—	3.2	6.3	1	19.5	40	29.5	50
25	8	—	M8 × 1.25	—	40	—	4.2	7.8	1	21	44	31	54
32	9	—	M10 × 1.25	14	44	—	4.2	7.8	1	24.5	49.5	34.5	59.5
40	10	—	M14 × 1.5	14	52	—	6.2	10.3	1.6	26	61	36	71
50	10	—	M18 × 1.5	19	62	—	6.2	10.8	1.6	28	65	38	75
63	12	—	M18 × 1.5	20	75	—	6.2	10.8	1.6	32	69	42	79
80	13	—	M22 × 1.5	27	94	—	8.2	13.8	1.6	41	85	51	95
100	17	—	M26 × 1.5	26	114	—	10.2	17.3	2	51	101	61	111

### 外觀尺寸 Dimensions

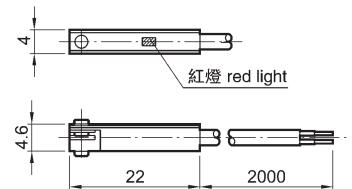
RD-301  
RNB



RCE

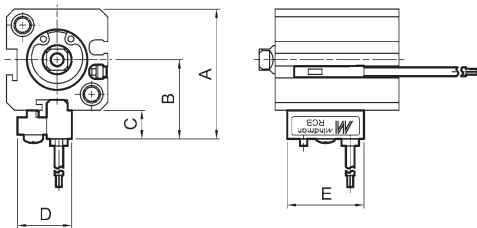


RCE1  
RNE

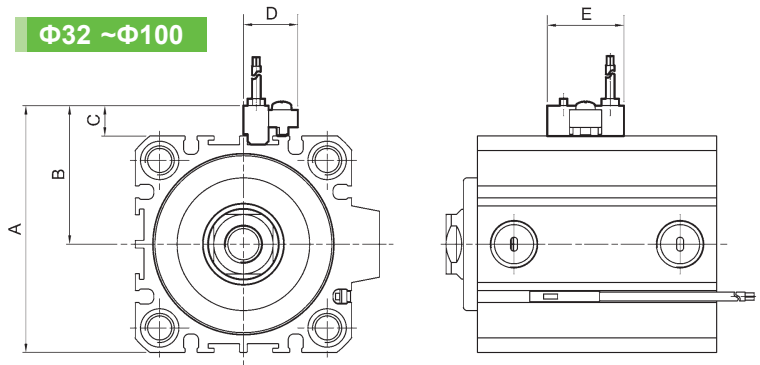


### 感應開關安裝 Installation of sensor switch

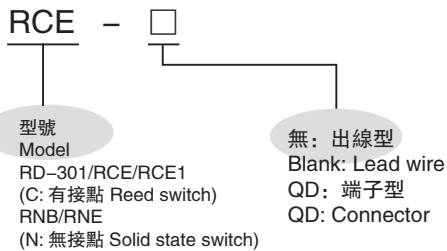
$\Phi 12, \Phi 16$



$\Phi 32 \sim \Phi 100$



### 訂購代碼 Ordering Code



代號 Code 內徑 Tube I.D.	A	B	C	D	E
12	33.5	21.5	8.5	16	22
16	37.5	23	8.5	16	22
20	42.5	25.5	8.5	16	22
25	49	29	9	16	22
32	53	31	9	16	22

代號 Code 內徑 Tube I.D.	A	B	C	D	E
40	61	35	9	16	22
50	71	40	9	16	22
63	84	46.5	9	16	22
80	103	56	9	16	22
100	123	66	9	16	22

### 感應開關固定面 Sensor switch fixed surface

記號說明  
Description

▽ 可裝設 RD-301 溝槽  
groove (switch)

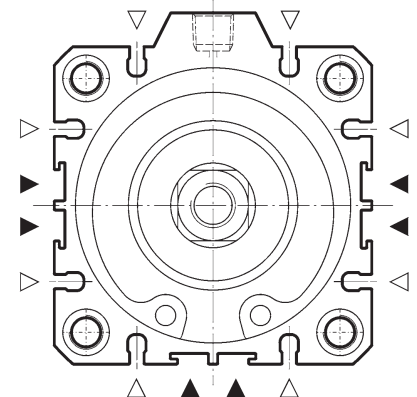
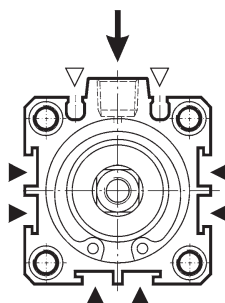
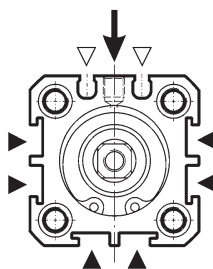
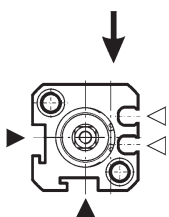
$\Phi 20, \Phi 25$

↓ 進出氣口方向 (Port)  
Input and output direction  
▽ 可裝設 RCE, RCE1 溝槽  
groove (switch)

$\Phi 32, \Phi 40$

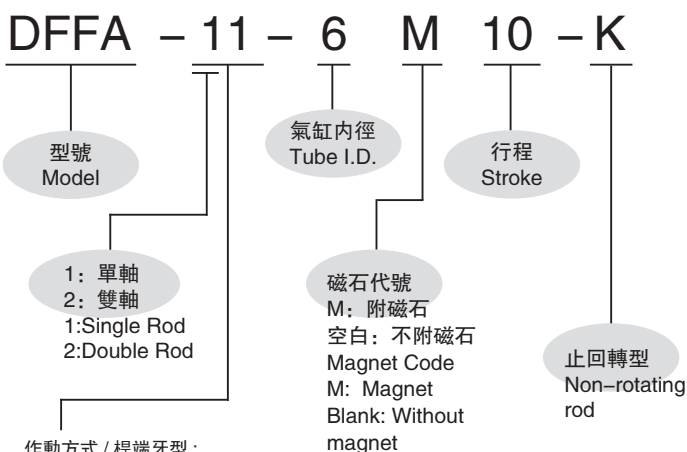
$\Phi 50 \sim \Phi 100$

$\Phi 12, \Phi 16$





### 訂購代碼 Ordering Code



代號 Code	記號 Symbol	說明 Description
1	1	複動外牙 Double action/Male thread
2	1	雙軸複動外牙 Double rod/Male thread

### 特點 Features

- 節省安裝空間
- 埋入型感應開關設計
- Compact and space saving.

### 規格 Specification

型號 Model	DFFA		
作動方式 Acting type	複動型 Double acting		
氣缸內徑 Tube I.D. (mm)	16	10, 16	20, 25, 32
配管口徑尺寸 Port size	Φ6 ~ Φ25	M5 × 0.8	
	Φ32	PT 1/8	
使用流體 Medium	空氣 Air		
最大使用壓力 Max. operating pressure	7kgf/cm <sup>2</sup>		
最小使用壓力 Min. operating pressure	1.2kgf/cm <sup>2</sup>	0.6kgf/cm <sup>2</sup>	0.5kgf/cm <sup>2</sup>
耐壓力 Proof pressure	10kgf/cm <sup>2</sup>		
周圍溫度 Ambient temperature	-5°C ~ +60°C (不凍結 No freezing)		
給油 Lubrication	不需給油 Not required		
使用速度範圍 Available speed range	50 ~ 500 mm/sec		
緩衝裝置 Cushion	緩衝壓片 With rubber cushion pad		
感應開關 Sensor switch ※	RCE,RCE1		

### 標準行程表 Table for Standard Stroke

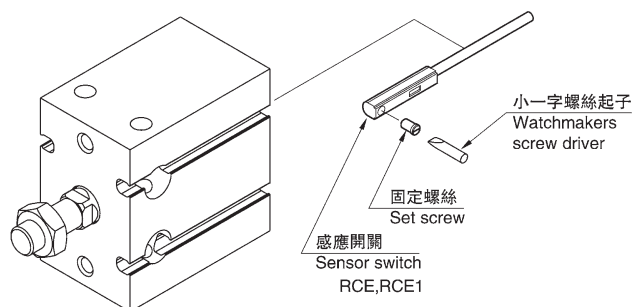
氣缸內徑 Tube I.D.	行程 Stroke (mm)
Φ 6,10,16	5, 10, 15, 20, 25, 30
Φ 20,25,32	5, 10, 15, 20, 25, 30, 40, 50

### 安裝扭力 Tightening Torque

直接固定氣壓缸時請依下表之範圍內安裝。  
When mounting series DFFA, refer to the below table.

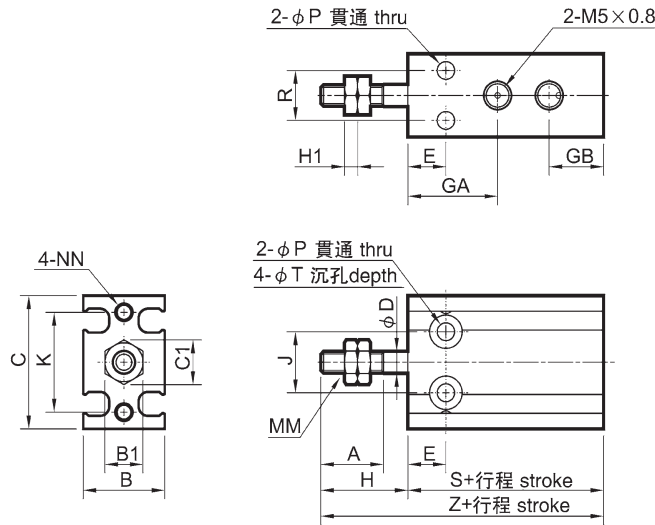
型號 Model	螺栓徑 Hexagon socket head cap screw dia.(mm)	適用之固定扭力 Proper tightening torque N.m[kgf.cm]
DFFA-6,10	M3	1.1[11.2] ± 10%
DFFA-16	M4	2.5[25.5] ± 10%
DFFA-20,25	M5	5.0[51] ± 10%
DFFA-32	M6	8.0[81.6] ± 10%

### 感應開關安裝 Installation of Sensor Switch

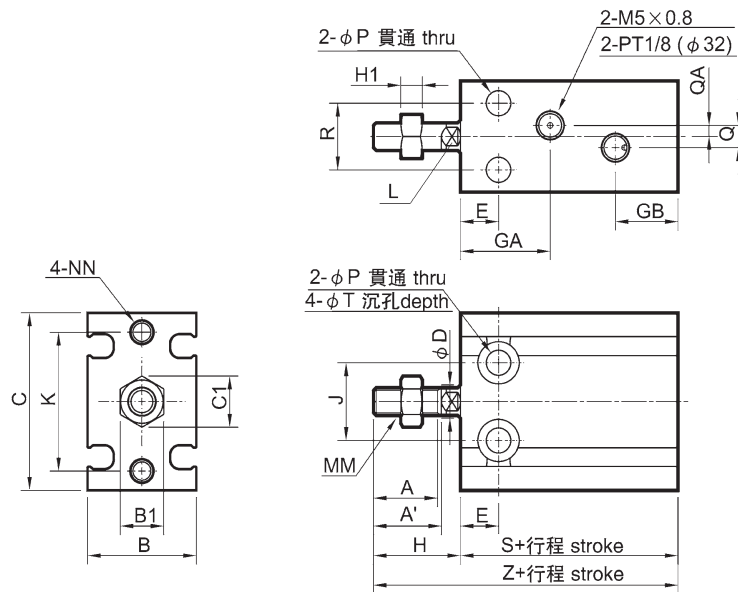


單軸 / 外觀尺寸 Dimensions / Single rod  $\Phi 6 \sim \Phi 32$

**$\Phi 6, \Phi 10$**



**$\Phi 16 \sim \Phi 32$**



代號 Code 內徑 Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R
<b>6</b>	7	-	13	5.5	22	6.4	3	7	15	10	13	1.8	10	17	-	M3×0.5	M3×0.5×5 深 depth	3.2	-	-	7
<b>10</b>	10	-	15	7	24	8.1	4	7	16.5	10	16	2.4	11	18	-	M4×0.7	M3×0.5×5 深 depth	3.2	-	-	9
<b>16</b>	11	12.5	20	8	32	9.2	6	7	※16.5	11.5	16	4	14	25	5	M5×0.8	M4×0.7×6 深 depth	4.5	4	2	12
<b>20</b>	12	14	26	10	40	11.5	8	9	19	12.5	19	5	16	30	6	M6×1.0	M5×0.8×8 深 depth	5.5	9	4.5	16
<b>25</b>	15.5	18	32	13	50	15.0	10	10	21.5	13	23	5	20	38	8	M8×1.25	M5×0.8×8 深 depth	5.5	9	4.5	20
<b>32</b>	19.5	22	40	17	62	19.6	12	11	23	12.5	27	6	24	48	10	M10×1.25	M6×1.0×9 深 depth	6.6	13.5	4.5	24

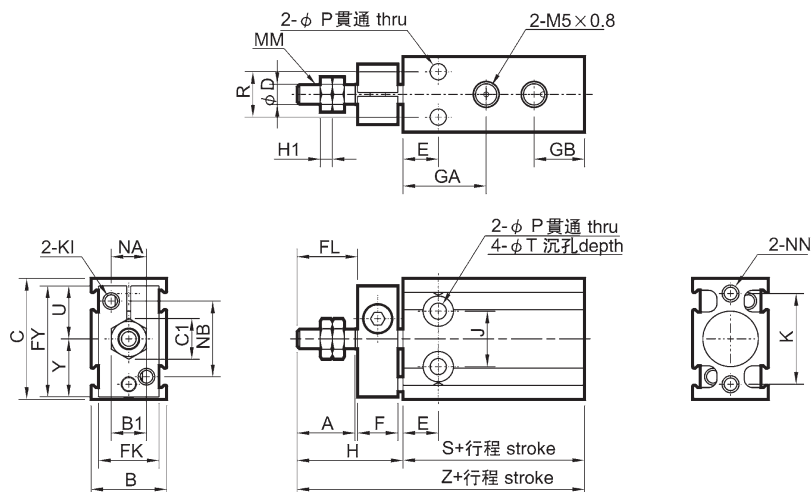
※: 不附磁行程為 5mm 時, GA=14.5mm

※: Without magnet with stroke=5mm, GA=14.5mm.

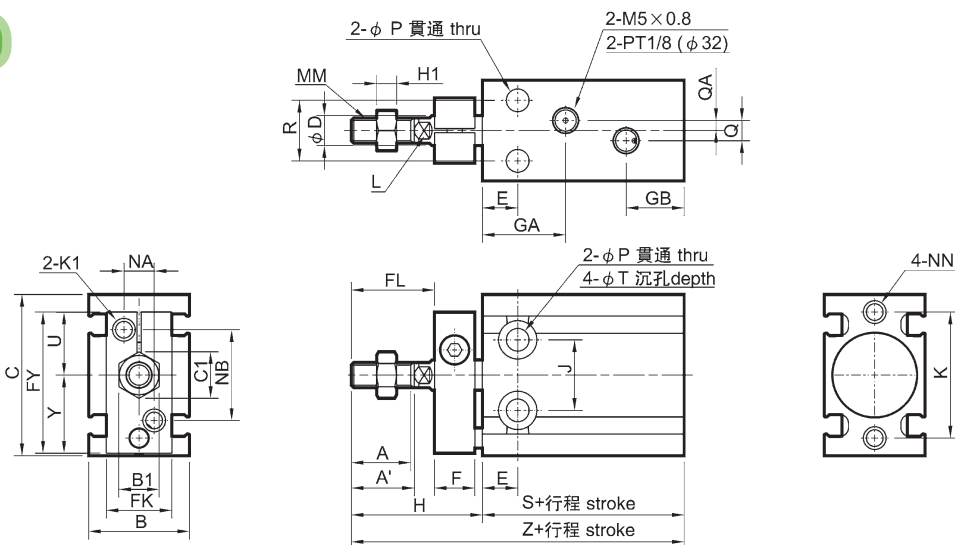
代號 Code 內徑 Tube I.D.	T	不附磁 Without magnet		附磁 Magnet	
		S	Z	S	Z
<b>6</b>	6×4.8 深 depth	33	46	33	46
<b>10</b>	6×5 深 depth	36	52	36	52
<b>16</b>	7.6×6.5 深 depth	30	46	40	56
<b>20</b>	9.3×8 深 depth	36	55	46	65
<b>25</b>	9.3×9 深 depth	40	63	50	73
<b>32</b>	11×11.5 深 depth	42	69	52	79

止回轉型單軸 / 外觀尺寸 Dimensions / Non-rotating rod / single rod  $\Phi 6 \sim \Phi 32$

**$\Phi 6, \Phi 10$**



**$\Phi 16 \sim \Phi 32$**



代號 Code 內徑 Tube I.D.	A	A'	B	B1	C	C1	D	E	F	FL	FK	FY	GA	GB	H	H1	J	K	KI	L	MM	NA	NB
<b>6</b>	7	-	13	5.5	22	6.4	3	7	8	9	11	20.5	15	10	18	1.8	10	17	M3×0.5	-	M3×0.5	6	14
<b>10</b>	10	-	15	7	24	8.1	4	7	8	12	12	22	16.5	10	21	2.4	11	18	M3×0.5	-	M4×0.7	7	15
<b>16</b>	11	12.5	20	8	32	9.2	6	7	8	17	13	28	※16.5	11.5	26	4	14	25	M4×0.7	5	M5×0.8	6	18
<b>20</b>	12	14	26	10	40	11.5	8	9	8	20	16	33	19	12.5	29	5	16	30	M4×0.7	6	M6×1.0	8	20
<b>25</b>	15.5	18	32	13	50	15.0	10	10	10	22	20	43.5	21.5	13	33	5	20	38	M5×0.8	8	M8×1.25	10	28
<b>32</b>	19.5	22	40	17	62	19.6	12	11	12	29	24	51.5	23	12.5	42	6	24	48	M5×0.8	10	M10×1.25	12	32

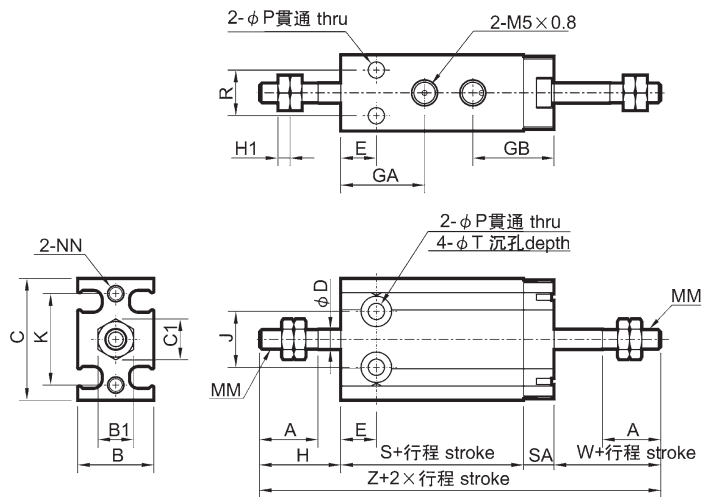
※: 不附磁行程為 5mm 時, GA=14.5mm

※: Without magnet with stroke=5mm, GA=14.5mm

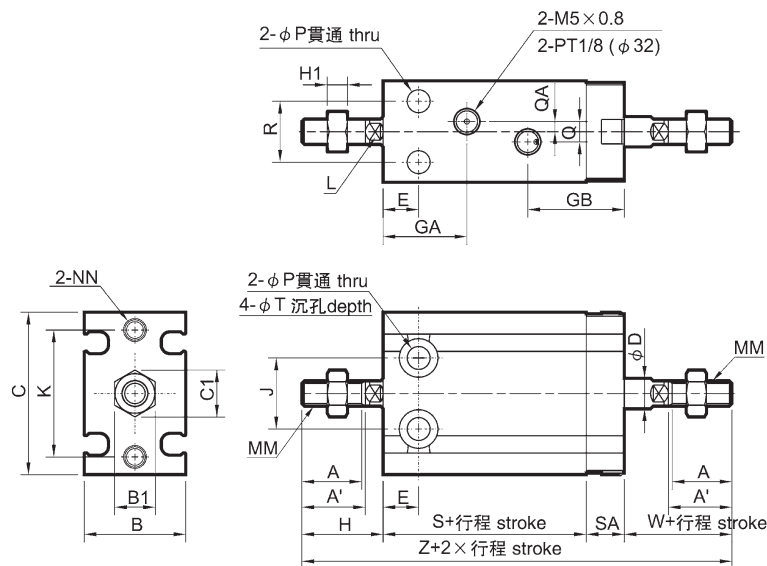
代號 Code 內徑 Tube I.D.	NN	P	Q	QA	R	T	U	Y	不附磁 Without magnet		附磁 Magnet	
									S	Z	S	Z
<b>6</b>	M3×0.5×5 深 depth	3.2	-	-	7	6×4.8 深 depth	10	10.5	33	51	33	51
<b>10</b>	M3×0.5×5 深 depth	3.2	-	-	9	6×5 深 depth	10.5	11.5	36	57	36	57
<b>16</b>	M4×0.7×6 深 depth	4.5	4	2	12	7.6×6.5 深 depth	12.5	15.5	30	56	40	66
<b>20</b>	M5×0.8×8 深 depth	5.5	9	4.5	16	9.3×8 深 depth	13.5	19.5	36	65	46	75
<b>25</b>	M5×0.8×8 深 depth	5.5	9	4.5	20	9.3×9 深 depth	19	24.5	40	73	50	83
<b>32</b>	M6×1.0×9 深 depth	6.6	13.5	4.5	24	11×11.5 深 depth	21	30.5	42	84	52	94

### 雙軸 / 外觀尺寸 Dimensions / Double rod $\Phi 6 \sim \Phi 32$

#### Φ6, Φ10



#### Φ16 ~ Φ32



代號 Code 内徑 Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R	SA
6	7	-	13	5.5	22	6.4	3	7	15	16	13	1.8	10	17	-	M3 × 0.5	M3 × 0.5 × 5 深 depth	3.2	-	-	7	6
10	10	-	15	7	24	8.1	4	7	16.5	16	16	2.4	11	18	-	M4 × 0.7	M3 × 0.5 × 5 深 depth	3.2	-	-	9	6
16	11	12.5	20	8	32	9.2	6	7	※16.5	19	16	4	14	25	5	M5 × 0.8	M4 × 0.7 × 6 深 depth	4.5	4	2	12	7.5
20	12	14	26	10	40	11.5	8	9	19	21.5	19	5	16	30	6	M6 × 1.0	M5 × 0.8 × 8 深 depth	5.5	9	4.5	16	9
25	15.5	18	32	13	50	15.0	10	10	21.5	22	23	5	20	38	8	M8 × 1.25	M5 × 0.8 × 8 深 depth	5.5	9	4.5	20	9
32	19.5	22	40	17	62	19.6	12	11	23	22.5	27	6	24	48	10	M10 × 1.25	M6 × 1.0 × 9 深 depth	6.6	13.5	4.5	24	10

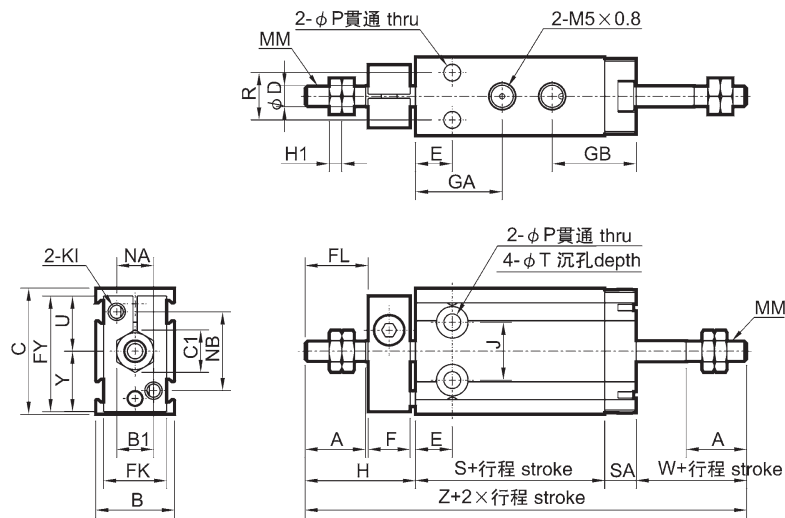
※: 不附磁行程為 5mm 時, GA=14.5mm ※: Without magnet with stroke=5mm, GA=14.5mm

代號 Code 内徑 Tube I.D.	T	W	不附磁 Without magnet		附磁 Magnet	
			S	Z	S	Z
6	6 × 4.8 深 depth	13	38	70	38	70
10	6 × 5 深 depth	16	36	74	36	74
16	7.6 × 6.5 深 depth	16	30	69.5	40	79.5
20	9.3 × 8 深 depth	19	36	83	46	93
25	9.3 × 9 深 depth	23	40	95	50	105
32	11 × 11.5 深 depth	27	42	106	52	116

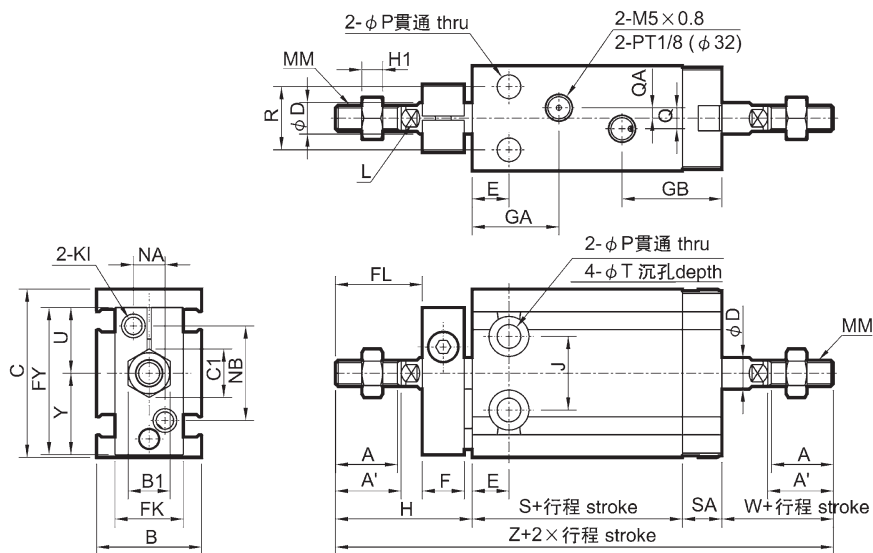


止迴轉型雙軸 / 外觀尺寸 Dimensions / Non-rotating rod / double rod  $\Phi 6 \sim \Phi 32$

**$\Phi 6, \Phi 10$**



**$\Phi 16 \sim \Phi 32$**



代號 Code 內徑 Tube I.D.	A	A'	B	B1	C	C1	D	E	F	FL	FK	FY	GA	GB	H	H1	J	KI	L	MM	NA	NB	P	Q
<b>6</b>	7	-	13	5.5	22	6.4	3	7	8	9	11	20.5	15	16	18	1.8	10	M3×0.5	-	M3×0.5	6	14	3.2	-
<b>10</b>	10	-	15	7	24	8.1	4	7	8	12	12	22	16.5	16	21	2.4	11	M3×0.5	-	M4×0.7	7	15	3.2	-
<b>16</b>	11	12.5	20	8	32	9.2	6	7	8	17	13	28	※16.5	19	26	4	14	M4×0.7	5	M5×0.8	6	18	4.5	4
<b>20</b>	12	14	26	10	40	11.5	8	9	8	20	16	33	19	21.5	29	5	16	M4×0.7	6	M6×1.0	8	20	5.5	9
<b>25</b>	15.5	18	32	13	50	15.0	10	10	10	22	20	43.5	21.5	22	33	5	20	M5×0.8	8	M8×1.25	10	28	5.5	9
<b>32</b>	19.5	22	40	17	62	19.6	12	11	12	29	24	51.5	23	22.5	42	6	24	M5×0.8	10	M10×1.25	12	32	6.6	13.5

※: 不附磁行程為 5mm 時, GA=14.5mm ※: Without magnet with stroke=5mm, GA=14.5mm

代號 Code 內徑 Tube I.D.	QA	R	SA	T	U	W	Y	不附磁 Without magnet		附磁 Magnet	
								S	Z	S	Z
<b>6</b>	-	7	6	6×4.8 深 depth	10	13	10.5	38	75	38	75
<b>10</b>	-	9	6	6×5 深 depth	10.5	16	11.5	36	79	36	79
<b>16</b>	2	12	7.5	7.6×6.5 深 depth	12.5	16	15.5	30	79.5	40	89.5
<b>20</b>	4.5	16	9	9.3×8 深 depth	13.5	19	19.5	36	93	46	103
<b>25</b>	4.5	20	9	9.3×9 深 depth	19	23	24.5	40	105	50	115
<b>32</b>	4.5	24	10	11×11.5 深 depth	21	27	30.5	42	121	52	131

### 性能特點 Features

雙活塞杆雙倍出力提供了高度的抗彎曲和扭轉剛性，保證了氣缸的使用壽命和卓越的導向性能。

Double rod with double force for higher anti-bending and anti-twisted strength ensured durable life and perfect directional characteristic.



### 規格 Specification

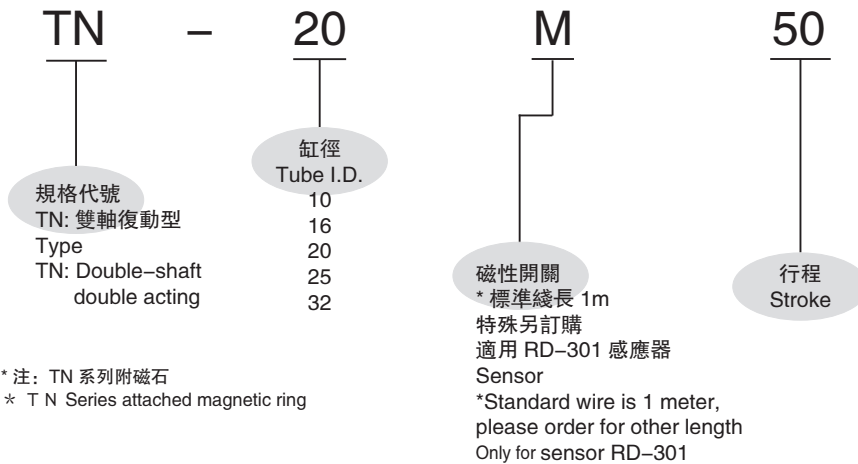
缸徑 Tube I.D. (mm)	10	16	20	25	32
工作介質 Working Medium	空氣 Air				
動作形式 Operation	雙動 Double Acting				
使用壓力範圍 Operation Pressure Range	0.1 ~ 0.9Mpa				
保證耐壓力 Ensure Pressure Resistance	1.35Mpa				
使用溫度範圍 Operation Temperature Range	0 ~ 70°C				
使用速度範圍 Operation Speed Range	100 ~ 500 mm/s				
調整行程 Adjustable Stroke	-10 ~ 0 mm				
緩衝型式 Cushion	無 Not Available	吸震墊片 Cushion Gasket			
不迴轉精度 Presion of Non-rotating	0.4°	0.3°			
接管口徑 Port Size	M5x0.8				PT1/8"

### 圖形符號 Symbol



註: 最高使用壓力是受液壓緩衝器的最大允許負載重限制。  
The Max. operating pressure is subject to the Max. load of hydraulic buffer.

### 訂購代碼 Ordering Code



\* 注: TN 系列附磁石  
\* T N Series attached magnetic ring

### 行程 Stroke

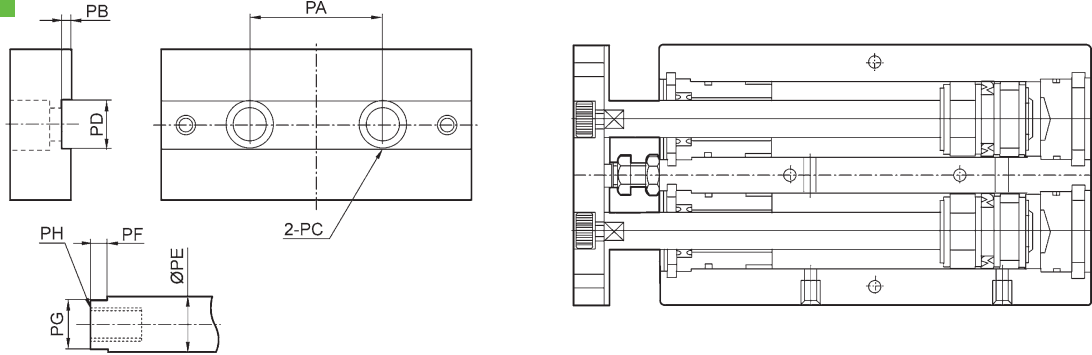
內徑 Tube I.D. (mm)	標準行程 Standard Stroke													最大行程 Max. Stroke	容許行程 Allowable Stroke
10	10	20	30	40	50	60	70						70	100	
16	10	20	30	40	50	60	70	80	90	100	125	150	150	200	
20	10	20	30	40	50	60	70	80	90	100	125	150	150	200	
25	10	20	30	40	50	60	70	80	90	100	125	150	150	200	
32	10	20	30	40	50	60	70	80	90	100	125	150	150	200	

雙軸氣缸  
Double Rod  
TN

## 外形尺寸 Overall Dimension

TN

Φ16~Φ25

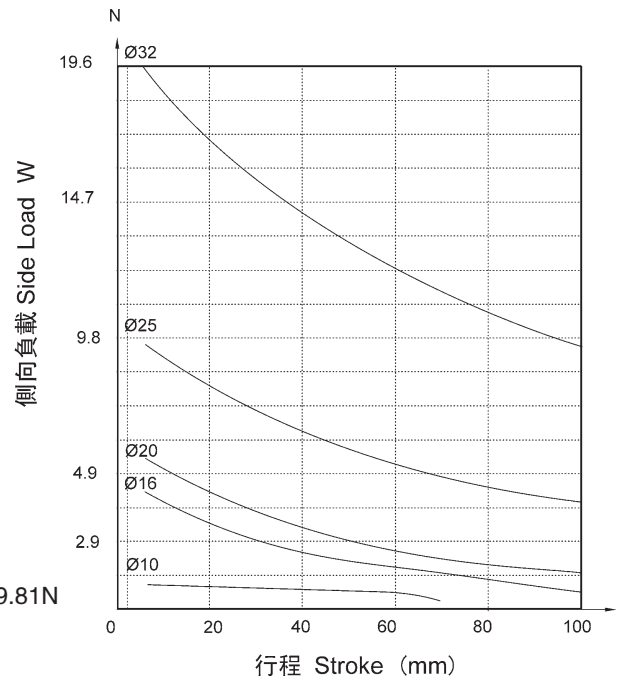
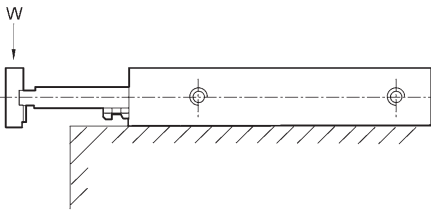


## 尺寸表 Dimension

符號 Symbol 缸徑 Tube I.D.	PA	PB	P1	PD	PE	PF	PG	P2
10	18	0.5	Φ6.2 深Depth 3.5mm, 通孔Through Hole: Φ4.5	5.2	6	3	5.2	M3 × 0.5 深Depth 5mm
16	24	1	Φ7.8 深Depth 4.6mm, 通孔Through Hole: Φ4.5	6.2	8	3	6.2	M4 × 0.7 深Depth 46mm
20	28	1	Φ11 深Depth 6.8mm, 通孔Through Hole: Φ4.5	8.2	10	3	8.2	M6 × 1 深Depth 48mm
25	34	1	Φ11 深Depth 6.8mm, 通孔Through Hole: Φ4.5	10.2	12	3	10.2	M6 × 1 深Depth 48mm
32	42	2	Φ17 深Depth 12mm, 通孔Through Hole: Φ4.5	14	16	3	14	M10 × 1.5 深Depth 14mm

## 外形尺寸 Overall Dimension

容許側向負載 Allowable size load



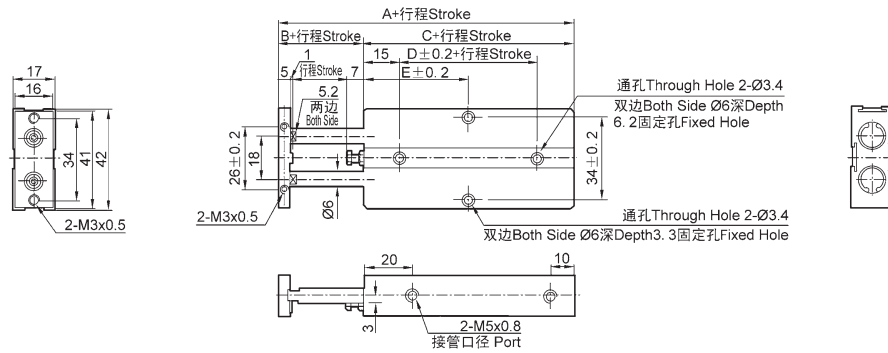
## 尺寸表 Dimension

O令一覽表 O-ring List

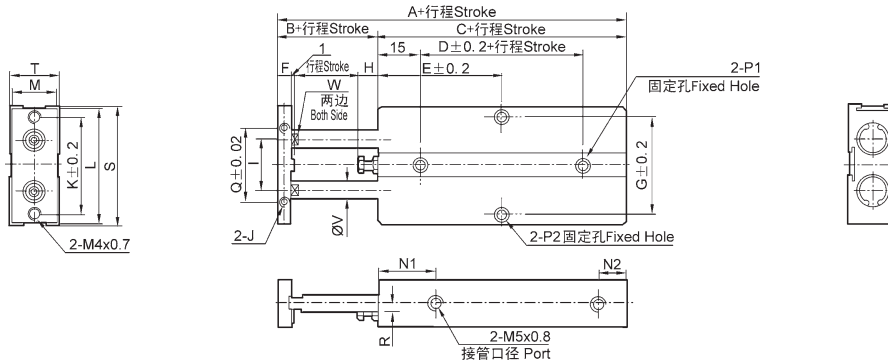
數量 Quantity 缸徑 Tube I.D.	前蓋密封圈 Front cover seal	活塞O令 Piston O-ring	前後蓋O令 Rear cover O-ring	活塞杆O令 Piston rod O-ring
	1	2	2	1
10	PDU-6	APA-10	10 × 1.5	P12
16	PDU-8	APA-16	16 × 1.5	P16
20	PDU-10	APA-20	20 × 1.5	P20
25	PDU-12	APA-25	25 × 1.5	P20
32	PDU-16	APA-32	32 × 1.5	P25

TN

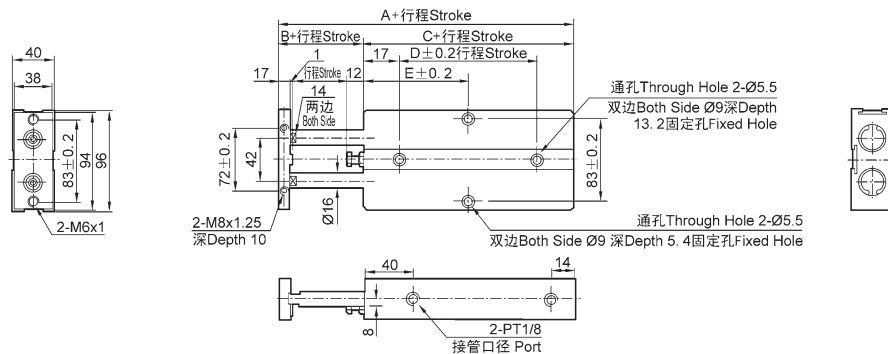
$\Phi 10$



$\Phi 16 \sim \Phi 25$



$\Phi 32$



符號 Symbol 缸徑 Tube I.D.	A	B	C	D	E													F	G	H	I
					10	20	30	40	50	60	70	80	90	100	125	150					
16	68	15	53	20	30	35	40	45	50	55	60	65	70	75	87.5	100	8	47	6	24	
20	78	20	58	20	35	35	40	45	50	55	60	65	70	75	87.5	100	10	55	9	28	
25	81	19	62	30	40	40	45	50	55	60	65	70	75	80	92.5	105	10	66	8	34	

符號 Symbol 缸徑 Tube I.D.	J	K	L	M	N1	N2	P1		P2		Q	R	S	T	V	W
							雙邊Both Side $\Phi 7.5$ 深Depth 7.2mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$						
16	M4 × 0.7 深Depth 5	47	53	20	22	10	雙邊Both Side $\Phi 7.5$ 深Depth 7.2mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	34	3	54	21	8	6.2
20	M4 × 0.7 深Depth 5	55	61	24	25	12	雙邊Both Side $\Phi 7.5$ 深Depth 7.2mm, 通孔through: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	44	3.5	62	25	10	8.1
25	M4 × 0.8 深Depth 6	66	72	27	30	12	雙邊Both Side $\Phi 7.5$ 深Depth 7.2mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	雙邊Both Side $\Phi 8$ 深Depth 4.4mm, 通孔Through Hole: $\Phi 4.5$	56	7	73	30	12	10.2

符號 Symbol 缸徑 Tube I.D.	A	B	C	D	E												
					10	20	30	40	50	60	70	80	90	100	125	150	
10	63	12	51	10	30	30	35	40	45	50	60	70	80	90	100	125	150
32	108	30	78	35	45	50	55	60	65	70	75	80	85	90	102.5	115	

雙軸氣缸  
Double Rod

TN

### 規格 Specification



項目 Item	缸徑 Tube I.D. (mm)				
	10X2	16X2	20X2	25X2	32X2
作動形式 Type of Operation	複動 Double Acting Type				
使用流體 Fluid	空氣 Air				
使用壓力範圍 Operation pressure	1-7 kgf/cm <sup>2</sup> (0.1-0.7 MPa)				
保證耐壓力 Proof Pressure	10.5 kgf/cm <sup>2</sup> (1.05 MPa)				
使用溫度範圍 Temperature	0-60° C				
使用速度範圍 Piston Speed	100-500 mm/s				
給油 Lubrication	不要 Lubrication Free Type				
配管接頭口徑 Port Size	M5X0.8P			Rc(PT) 1/8"	

### 訂購代碼 Ordering Code

DPCO - 20 M 100 - 2 KT-07R - 2 A

氣缸內徑 Tube I.D.  
 移動行程 Stroke  
 磁石代號  
 M: 附磁石  
 空白: 不附磁石  
 Magnet Code  
 M: Magnet  
 Blank: Without magnet  
 緩衝器數量  
 Number of buffers  
 感應器種類與數量  
 Sensor type and quantity

種類樣式 kinds of style

種類樣式 kinds of style	標準形 Stander Type	滑台 Slide Unit Type
代號 Code	DPCO	DPCS

感應器種類 Sensor Type	圓形 Circular	方形 Rectangular
代號 Code	KT-07R	KT-11R
適用電壓 Applied voltage	5~120 DC/AC	5~220 DC/AC

#### 備註:

1. 感應器與緩衝器為選購品，客戶依需求另行購買。
2. 標準形與滑台均附感應磁石，可加裝感應器控制。
3. 滑台若需加裝緩衝器，請參照附件表選購。
4. 滑台用感應器固定條為選購品。

## 理論出力 Theoretical Cylinder Force

(單位 Unit: kg)

缸徑 mm Tube I.D.	軸徑 mm Piston Rod	作動方向 Acting	受壓面積 cm <sup>2</sup> Piston Area	使用壓力 kgf/cm <sup>2</sup> Operating Pressure					
				2	3	4	5	6	7
10 X 2	6	推出 Push	1.57	3.14	4.71	6.28	7.85	9.42	10.99
		拉回 Pull	1.01	2.02	3.03	4.04	5.05	6.06	7.07
16 X 2	8	推出 Push	4.02	8.04	12.06	16.08	20.10	24.12	28.14
		拉回 Pull	3.02	6.04	9.06	12.08	15.10	18.12	21.14
20 X 2	10	推出 Push	6.28	12.56	18.84	25.12	31.40	37.68	43.96
		拉回 Pull	4.71	9.42	14.13	18.84	23.55	28.26	32.97
25 X 2	12	推出 Push	9.82	19.64	29.46	39.28	49.10	58.92	68.74
		拉回 Pull	7.56	15.12	22.68	30.24	37.80	45.36	52.92
32 X 2	16	推出 Push	16.08	32.16	48.24	64.32	80.40	96.48	112.56
		拉回 Pull	12.06	24.12	36.18	48.24	60.30	72.36	84.42

## 標準形 ( DPCO ) 行程表 Cylinder Stroke Table

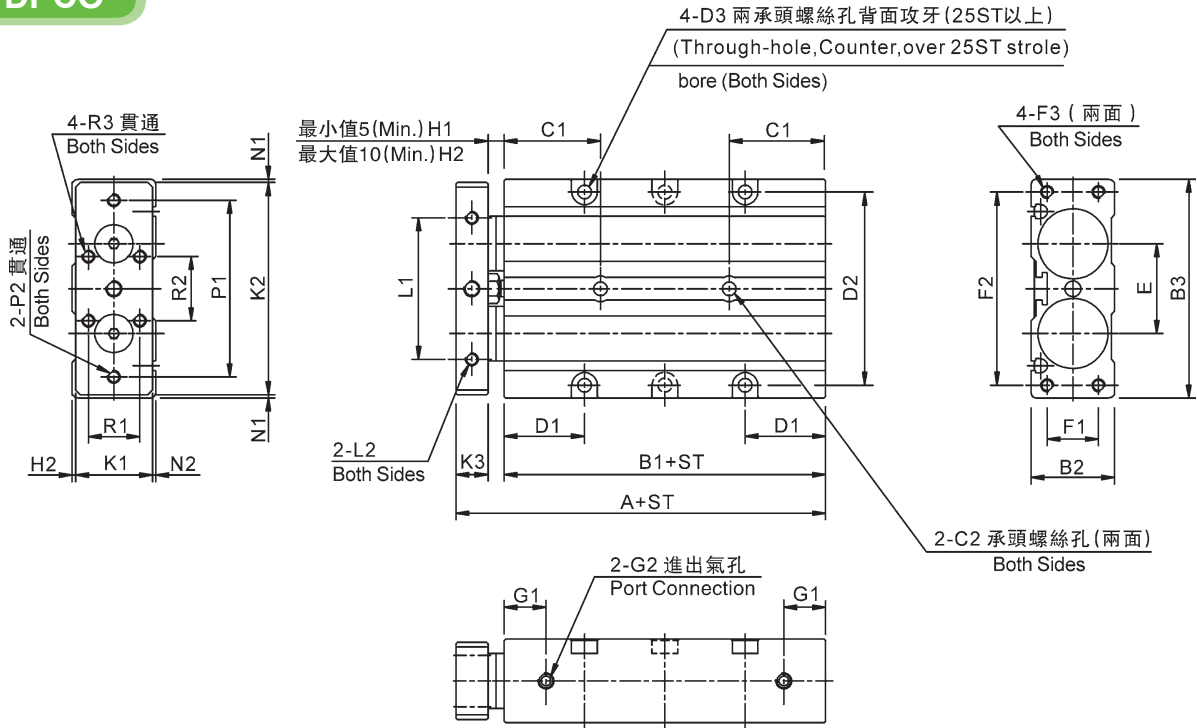
氣缸內徑 Tube I.D.	標準行程 mm Standard Stroke												
10	10,	20,	25,	30,	40,	50,	75,	100					
16	10,	20,	25,	30,	40,	50,	75,	100,	125,	150,	175,	200	
20	10,	20,	25,	30,	40,	50,	75,	100,	125,	150,	175,	200,	250
25	10,	20,	25,	30,	40,	50,	75,	100,	125,	150,	175,	200,	250
32	10,	20,	25,	30,	40,	50,	75,	100,	125,	150,	175,	200,	250

## 滑台 ( DPCS ) 行程表 Cylinder Stroke Table

氣缸內徑 Tube I.D.	標準行程 mm Standard Stroke									
10	25,	50,	75,	100,						
16	25,	50,	75,	100,	125,	150,	175,	200,		
20	25,	50,	75,	100,	125,	150,	175,	200,	250	
25	25,	50,	75,	100,	125,	150,	175,	200,	250	
32	25,	50,	75,	100,	125,	150,	175,	200,	250	

DPCO 標準形外觀尺寸 DPCO Standard Type Dimensions  $\Phi 10 \sim \Phi 32$

### DPCO



(單位 Unit: mm)

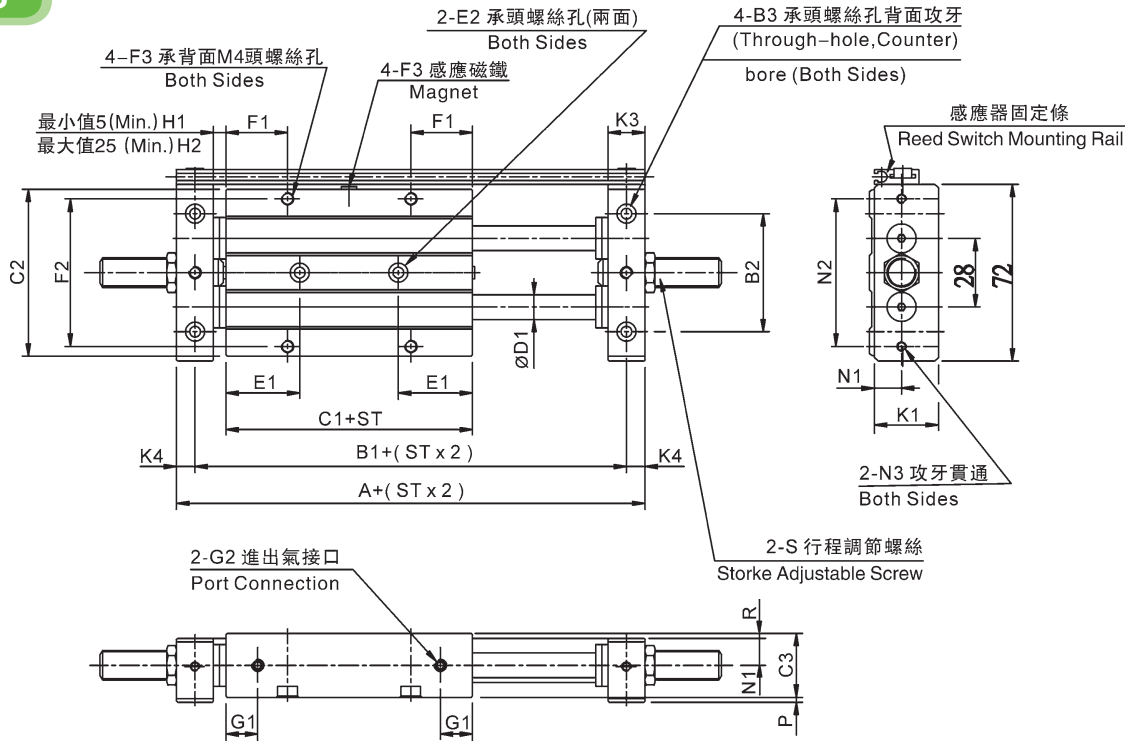
符號 Symbol 缸徑 Tube I.D.	A	B1	B2	B3	C1 (依行程)										C2
					10	20	25	30	40	50	75	100	125	150	
$\Phi 10$	51	40	19	46	15	15	15	15	15	15	15	15	-	-	鑽孔 Drilling hole $\Phi 3.5$ , 柱孔 $\Phi 6$ , 深 Depth 3.5
$\Phi 16$	57	45	24	58	17.5	22.5	25	27.5	27.5	27.5	30	32.5	35	47.5	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5
$\Phi 20$	65	50	26	68	20	25	27.5	30	30	30	32.5	35	37.5	50	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5
$\Phi 25$	72	55	34	82	22.5	27.5	30	32.5	32.5	32.5	35	37.5	40	52.5	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5
$\Phi 32$	80	60	40	100	25	30	32.5	35	35	35	37.5	40	42.5	55	鑽孔 Drilling hole $\Phi 5.5$ , 柱孔 $\Phi 9.5$ , 深 Depth 5.5

符號 Symbol 缸徑 Tube I.D.	D1	D2	D3	E	F1	F2	F3	G1	G2	H1
$\Phi 10$	20	40	鑽孔 Drilling hole $\Phi 3.5$ , 柱孔 $\Phi 6$ , 深 Depth 3.5	22	12	38	M4X0.7P 深 Depth 10	11.5	M5 氣源接口 Air connection	4
$\Phi 16$	22.5	51	鑽孔 Drilling hole $\Phi 3.5$ , 柱孔 $\Phi 6$ , 深 Depth 3.5	25	14	50	M4X0.7P 深 Depth 12	12.5	M5 氣源接口 Air connection	4
$\Phi 20$	25	60	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	28	16	60	M4X0.7P 深 Depth 12	13	M5 氣源接口 Air connection	5
$\Phi 25$	27.5	72	鑽孔 Drilling hole $\Phi 5.5$ , 柱孔 $\Phi 9.5$ , 深 Depth 5.5	36	20	72	M5X0.8P 深 Depth 12	14.5	M5 氣源接口 Air connection	5
$\Phi 32$	30	88	鑽孔 Drilling hole $\Phi 6.5$ , 柱孔 $\Phi 11$ , 深 Depth 6.5	44	24	84	M6X1.0P 深 Depth 15	17	PT1/8" 氣源接口 Air connection	5

符號 Symbol 缸徑 Tube I.D.	H2	K1	K2	K3	L1	L2	N1	N2	P1	P2	R1	R2	R3
$\Phi 10$	7	17	44	7	30	M3X0.5P 深 Depth 8	1	1	36	M3X0.5P	10	12	M3X0.5P
$\Phi 16$	7	22	56	8	34	M4X0.7P 深 Depth 8	1	1	47	M4X0.7P	14	15	M3X0.5P
$\Phi 20$	10	24	66	10	44	M4X0.7P 深 Depth 10	1	1	55	M4X0.7P	16	20	M4X0.7P
$\Phi 25$	10	31	79	12	56	M5X0.8P 深 Depth 12	1.5	1.5	66	M5X0.8P	20	28	M5X0.8P
$\Phi 32$	10	36	96	15	64	M6X1.0P 深 Depth 12	2	2	80	M6X1.0P	24	36	M5X0.8P

### DPCS 滑台外觀尺寸 DPCS Slide Unit Type Dimensions $\Phi 10 \sim \Phi 32$

#### DPCS



(單位 Unit: mm)

符號 Symbol 缸徑 Tube I.D.	A	B1	B2	B3	C1	C2	C3	D1	D2	E1(依行程)					
										25	50	75	100	125	150
$\Phi 10$	68	58	32	鑽孔 Drilling hole $\Phi 3.5$ , 柱孔 $\Phi 6$ , 深 Depth 3.5	40	46	19	6	22	15	15	15	15	-	-
$\Phi 16$	77	65	40	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	45	58	24	8	25	25	27.5	30	32.5	35	47.5
$\Phi 20$	90	75	48	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	50	68	26	10	28	27.5	30	32.5	35	37.5	50
$\Phi 25$	95	80	56	鑽孔 Drilling hole $\Phi 5.5$ , 柱孔 $\Phi 9.5$ , 深 Depth 5.5	55	82	34	12	36	30	32.5	35	37.5	40	52.5
$\Phi 32$	110	90	72	鑽孔 Drilling hole $\Phi 5.5$ , 柱孔 $\Phi 9.5$ , 深 Depth 5.5	60	100	40	16	44	32.5	35	37.5	40	42.5	55

符號 Symbol 缸徑 Tube I.D.	E2	F1	F2	F3	G1	G2	H1	H2
$\Phi 10$	鑽孔 Drilling hole $\Phi 3.5$ , 柱孔 $\Phi 6$ , 深 Depth 3.5	20	40	M4X0.7P 深 Depth 10	11.5	M5 氣源接口 Air connection	4	25
$\Phi 16$	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	22.5	51	M4X0.7P 深 Depth 10	12.5	M5 氣源接口 Air connection	4	25
$\Phi 20$	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	25	60	M5X0.8P 深 Depth 10	13	M5 氣源接口 Air connection	5	25
$\Phi 25$	鑽孔 Drilling hole $\Phi 4.5$ , 柱孔 $\Phi 8$ , 深 Depth 4.5	27.5	72	M6X1.0P 深 Depth 12	14.5	M5 氣源接口 Air connection	5	25
$\Phi 32$	鑽孔 Drilling hole $\Phi 5.5$ , 柱孔 $\Phi 9.5$ , 深 Depth 5.5	30	88	M8X1.25P 深 Depth 12	17	PT1/8" 氣源接口 Air connection	5	25

符號 Symbol 缸徑 Tube I.D.	K1	K2	K3	K4	N1	N2	N3	P	R	S
$\Phi 10$	19	49	10	5	8	40	M3X0.5P	1.5	1.5	M8X1.0PX50L
$\Phi 16$	24	62	12	6	10	52	M4X0.7P	2	2	M10X1.0PX50L
$\Phi 20$	26	72	15	7.5	11	60	M4X0.7P	2	2	M12X1.0PX50L
$\Phi 25$	34	86	15	7.5	15	72	M5X0.8P	2	2	M14X1.5PX50L
$\Phi 32$	40	104	20	10	18	90	M6X1.0P	2	2	M20X1.5PX50L





### 特點 Features

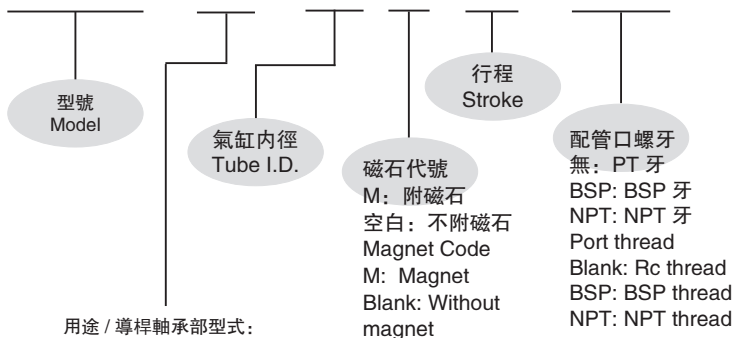
- 為了追求最實用的效果，本公司設計此省空間，且方便安裝的產品。
- 可由兩個側面安裝配管。
- 有三種安裝本體方式。
- 配置四個溝槽，安裝埋入型作動感應檢出器（感應開關）。
- 全系列均附磁。
- Proven track record in manufacturing precision guided cylinders.
- Multi-Ports as standard enabling two direction mounting option.
- Flush fitting sensors.
- Inbuilt high density rubber pad absorbs energy at the end of stroke.
- Magnetic as standard.

### 規格 Specification

型號 Model	FCGB		
模組外形 Model			
作動方式 Acting type	複動型 Double acting		
氣缸內徑 Tube I.D. (mm)	12, 16	20, 25, 32, 40	50, 63
配管口徑尺寸 Port size	M5 x 0.8	PT 1/8	PT 1/4
使用流體 Medium	空氣 Air		
使用壓力範圍 Operating pressure range	1 ~ 9.9 kgf/cm <sup>2</sup>		
耐壓力 Proof pressure	15 kgf/cm <sup>2</sup>		
周圍溫度 Ambient temperature	-5°C ~ +60°C (不凍結 No freezing)		
給油 Lubrication	不需給油 Not required		
緩衝裝置 Cushion	NBR 緩衝墊片 With rubber cushion pad		
感應開關 Sensor switch	RCE, RCE1		

### 訂購代碼 Ordering Code

FCGB - 03 - 12 M 50 - BSP



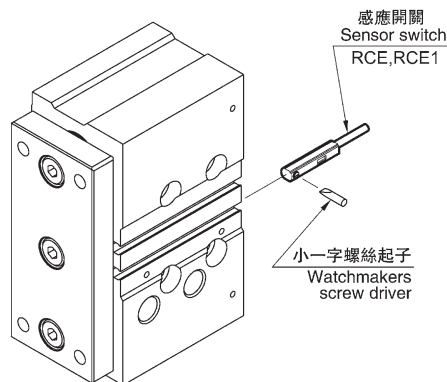
用途 / 導桿軸承部型式:  
Purpose / Type of bearing

代號 Code	用途 / 軸承種類 Purpose / Type of bearing
03	阻擋型 / 滑動軸承 Stop / Slide bearing
23*	推出型 / 線性滾珠軸承 Push / Linear bush bearing

※ 此型僅要於連接塊上，組合一承載板，即可當做舉起型用。

※ Could attach a table for the use as a lifter.

### 感應開關安裝方式 Installation of sensor switch



### 標準行程表 Table for standard stroke

型號 Series variety	軸承種類 Bearing type	內徑 Tube I.D.	行程 Stroke (mm)														
			10	20	25	30	40	50	75	100	125	150	175	200			
FCGB-03	滑動軸承 Slide bearing	Φ12															
		Φ16															
		Φ20															
		Φ25															
		Φ32*															
		Φ40															
		Φ50															
FCGB-23	線性滾珠軸承 Linear bush bearing	Φ12															
		Φ16															
		Φ20															
		Φ25															
		Φ32															
		Φ40															
		Φ50															

\*1. FCGB-03 型，缸徑 Φ32 者其最短的標準行程為 25mm。

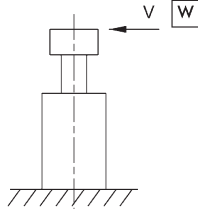
2. 屬中間行程者，用大於其之規格之本體於活塞上加一墊塊。

\*1. FCGB-03- Tube I.D. Φ32: 25mm for the shortest standard stroke.

2. Please consult us if stroke out of specification.

### 橫荷重圖表 Capacity graph

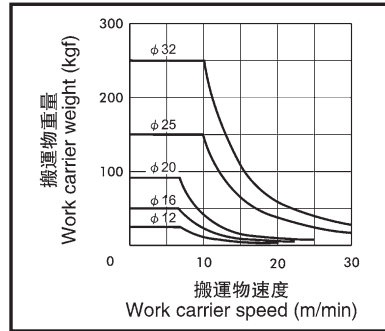
作阻擋使用時的容許性能  
Capacity for the use as a stopper



請注意：線性滾珠軸承式之導桿缸，不適於當阻擋用途。  
Linear bush bearing type is not available as a stopper.

### 容許阻擋能力表 Stop capacity

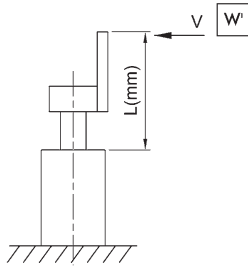
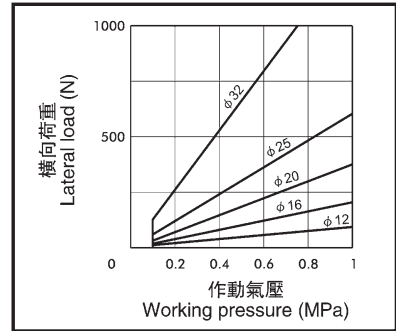
FCGB-03... 行程 30mm 者  
FCGB-03...30st



### 性能圖表 Capacity Φ12 ~ Φ32

### 常用橫荷重表 Normal lateral load

FCGB-03... 行程 30mm 者  
FCGB-03...30st



對於在連接塊上，固定一擋板使時，請依據下式關係，將 W' 換算成 W 當量值

### 換算用系數表 Coefficients for conversion

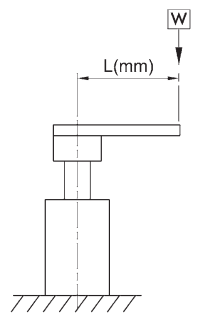
$$W = W' \times \frac{L}{l}$$

FCGB 系列 / Series	Φ12	Φ16	Φ20	Φ25	Φ32
$l$	40	42	42	42	44

W: 換算出的 W 當量值，仍須符合上述搬運物重量—速度關係圖  
W: the maximum weight of the work carrier in the above graph for the stopper's capacity.

### 舉起型使用之偏心荷重 Capacity for the use as a lifter

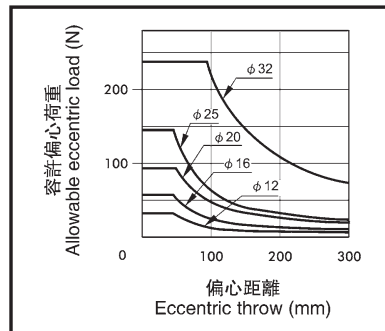
作業起使用時的容許偏心荷重 (考慮作動氣壓 0.5MPa 情況時)  
Allowable eccentricity load for the use as a lifter (at supply pressure 0.5Mpa)



圖示 W 表氣缸作動時，距離導桿中心 Lmm 處，容許因動態所產生的荷重值  
Show the dynamic allowable value at L(mm) eccentricity from the center of the guide rod.

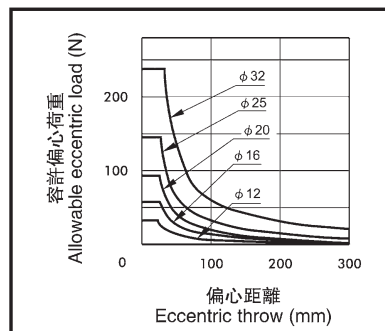
### 滑動軸承型 Slide bearing

FCGB-03... 行程 10~50mm 者  
FCGB-03...10~50st



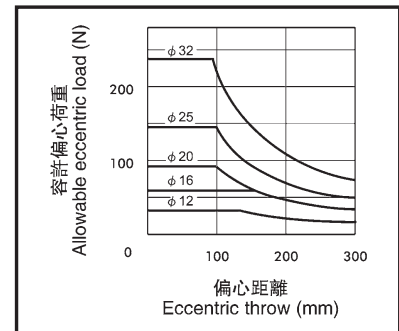
### 線性滾珠軸承型 Linear bush bearing

FCGB-03... 行程 10~50mm 者  
FCGB-03...10~50st



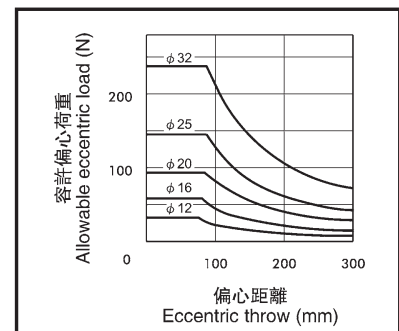
### 滑動軸承型 Slide bearing

FCGB-03... 行程 75~200mm 者  
FCGB-03...75~200st



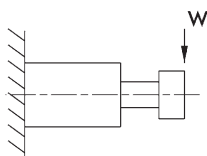
### 線性滾珠軸承型 Linear bush bearing

FCGB-03... 行程 75~200mm 者  
FCGB-03...75~200st



### 橫荷重表 Capacity table

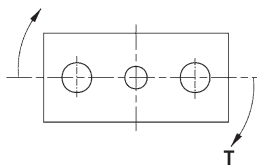
#### 容許橫向荷重: Allowable lateral load



考慮驅動氣缸過程時，於導桿端部，所能承受，因動態所產生的最大荷重（指垂直於導桿軸心線的荷重）。

Shows the dynamic allowable value, when actuating the cylinder with lateral load W at the guide rods' top (vertical load against the guide rods).

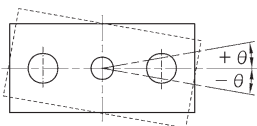
#### 容許旋轉扭矩: Allowable rotating torque



考慮驅動氣缸過程時，於導桿端部所能承受，因動態所產生的最大扭矩

Shows the dynamic allowable value, when actuating the cylinder with a rotating torque T at the guide rods' top.

#### 不迴轉精度: (抵抗偏擺的能力) Anti-roll accuracy



- 此精度值  $\theta$  是以活塞桿為中心的偏擺角度作表示
- 此精度值  $\theta$  忽略之導桿本身的撓度情況
- The values are the deflection angle against the piston rod.
- Exclusive factor of the guide rods' deflection.

(N)

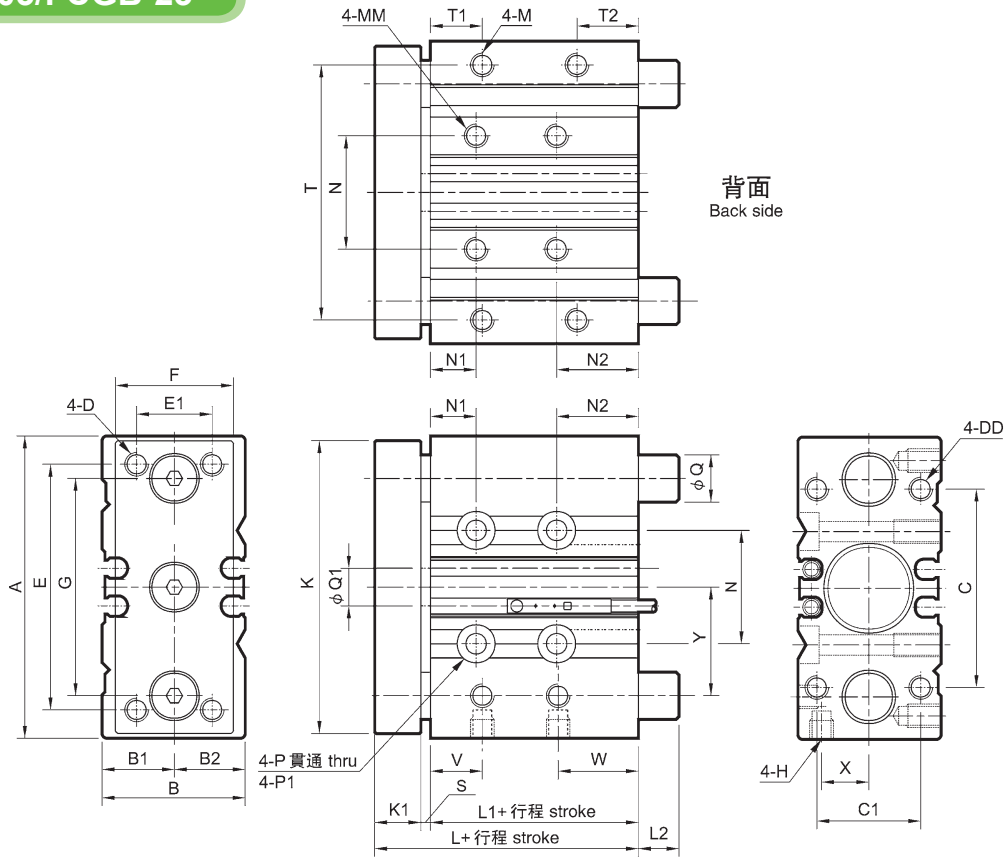
氣缸內徑 Tube I.D.	軸承種類 Bearing type	行程 Stroke (mm)											
		10	20	25	30	40	50	75	100	125	150	175	200
$\Phi 12$	滑動軸承 Slide bearing	31	24	/	19	16	13	37	31	/	/	/	/
	線性滾珠軸承 Linear bush bearing	23	17	/	14	34	30	23	19	/	/	/	/
$\Phi 16$	滑動軸承 Slide bearing	50	39	/	32	27	24	54	45	/	/	/	/
	線性滾珠軸承 Linear bush bearing	36	29	/	24	59	52	40	33	/	/	/	/
$\Phi 20$	滑動軸承 Slide bearing	/	51	/	44	39	35	54	46	74	66	59	54
	線性滾珠軸承 Linear bush bearing	/	43	/	36	98	87	69	57	46	40	36	32
$\Phi 25$	滑動軸承 Slide bearing	/	68	/	59	52	46	72	61	98	88	79	72
	線性滾珠軸承 Linear bush bearing	/	67	/	56	148	132	105	87	70	62	55	50
$\Phi 32$	滑動軸承 Slide bearing	/	/	165	/	/	129	106	90	138	123	111	101
	線性滾珠軸承 Linear bush bearing	/	/	104	/	/	74	165	138	114	100	90	81

(N.m)

氣缸內徑 Tube I.D.	軸承種類 Bearing type	行程 Stroke (mm)											
		10	20	25	30	40	50	75	100	125	150	175	200
$\Phi 12$	滑動軸承 Slide bearing	0.64	0.48	/	0.39	0.32	0.28	0.75	0.63	/	/	/	/
	線性滾珠軸承 Linear bush bearing	0.47	0.35	/	0.29	0.71	0.62	0.4	0.38	/	/	/	/
$\Phi 16$	滑動軸承 Slide bearing	1.14	0.9	/	0.74	0.63	0.55	1.23	1.04	/	/	/	/
	線性滾珠軸承 Linear bush bearing	0.84	0.66	/	0.54	1.35	1.19	0.93	1.76	/	/	/	/
$\Phi 20$	滑動軸承 Slide bearing	/	1.14	/	1.21	1.07	0.95	1.49	1.25	2.03	1.81	1.63	1.48
	線性滾珠軸承 Linear bush bearing	/	1.19	/	0.99	2.69	2.4	1.89	1.56	1.26	1.1	0.98	0.88
$\Phi 25$	滑動軸承 Slide bearing	/	2.19	/	1.88	1.65	1.47	2.31	1.94	3.15	2.8	2.52	2.3
	線性滾珠軸承 Linear bush bearing	/	2.14	/	1.79	4.74	4.22	3.36	2.78	2.25	1.98	1.76	1.59
$\Phi 32$	滑動軸承 Slide bearing	/	/	6.61	/	/	5.16	4.23	3.59	5.52	4.93	4.45	4.06
	線性滾珠軸承 Linear bush bearing	/	/	4.17	/	/	2.95	6.6	5.52	4.56	4.02	3.59	3.24

氣缸內徑 Tube I.D.	軸承種類 Bearing type	不迴轉精度 Anti-roll accuracy
		$\theta$
$\Phi 12$	滑動軸承 Slide bearing	$\pm 0.09^\circ$
	線性滾珠軸承 Linear bush bearing	$\pm 0.06^\circ$
$\Phi 16$	滑動軸承 Slide bearing	$\pm 0.08^\circ$
	線性滾珠軸承 Linear bush bearing	$\pm 0.06^\circ$
$\Phi 20$	滑動軸承 Slide bearing	$\pm 0.08^\circ$
	線性滾珠軸承 Linear bush bearing	$\pm 0.03^\circ$
$\Phi 25$	滑動軸承 Slide bearing	$\pm 0.07^\circ$
	線性滾珠軸承 Linear bush bearing	$\pm 0.05^\circ$
$\Phi 32$	滑動軸承 Slide bearing	$\pm 0.07^\circ$
	線性滾珠軸承 Linear bush bearing	$\pm 0.03^\circ$

### FCGB-03/FCGB-23



### FCGB-03/FCGB-23

代號 Code 內徑 Tube I.D.	A	B	B1	B2	C	C1	D	DD	E	E1	F	G	H	K	K1	L	L1	L2	M
12	58	26	13	13	40	18	M4 x 0.7	M4 x 0.7 x 9 深 dp	48	14	22	41.5	M5 x 0.8	56	8	39	29		M4 x 0.7 x 7 深 dp
16	64	30	15	15	42	22	M5 x 0.8	M5 x 0.8 x 11 深 dp	52	16	25	46	M5 x 0.8	62	10	43	31		M5 x 0.8 x 8 深 dp
20	85	36	17	19	52	26	M5 x 0.8	M5 x 0.8 x 13 深 dp	60	18	30	55	PT 1/8	72	10	47	35	※	M5 x 0.8 x 7 深 dp
25	96	42	21	21	62	32	M6 x 1.0	M6 x 1.0 x 15 深 dp	70	26	38	65	PT 1/8	86	10	47.5	35.5		M6 x 1.0 x 9 深 dp
32	116	51	26	25	80	38	M8 x 1.25	M8 x 1.25 x 18 深 dp	96	30	48	80	PT 1/8	112	12	47.5	33.5		M8 x 1.25 x 11 深 dp

代號 Code 內徑 Tube I.D.	MM	N	N1	N2	P	P1	Q		Q1	S	T	T1	T2	V	W	X	Y
							FCGB-03	FCGB-23									
12	M5 x 0.8 x 10 深 dp	23	5	20	Φ4.3	Φ8 x 4.5 深 dp	8	6	6	2	50	12	12	11	15	8.5	19.5
16	M5 x 0.8 x 10 深 dp	24	5	22	Φ4.3	Φ8 x 4.5 深 dp	10	8	8	2	54	11	13	11	17	10	23
20	M6 x 1.0 x 12 深 dp	28	19	16	Φ5.3	Φ9.5 x 5.5 深 dp	12	10	10	2	64	11	14	12	23	11.5	24.5
25	M6 x 1.0 x 12 深 dp	34	22	12.5	Φ5.3	Φ9.5 x 5.5 深 dp	16	13	12	2	76	12	13.5	11	23.5	13.5	24
32	M8 x 1.25 x 16 深 dp	42	22	14.5	Φ6.6	Φ11 x 6.5 深 dp	20	16	16	2	100	12	16.5	11.5	25	16	31

### L2 尺寸表 / Dimensions list

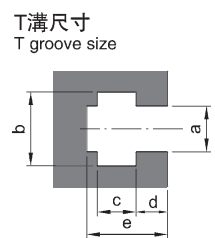
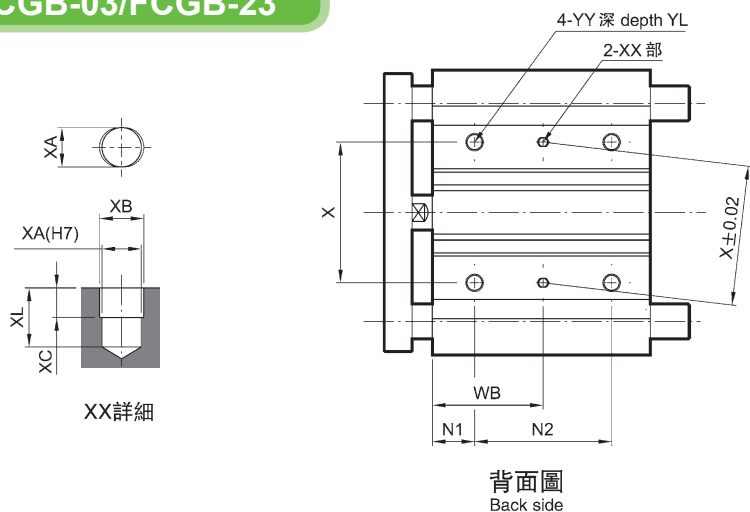
#### FCGB-03

內徑 Tube I.D.	行程 Stroke (mm)											
	10	20	25	30	40	50	75	100	125	150	175	200
12	0	0	/	0	0	0	18	18	/	/	/	/
16	0	0	/	0	0	0	21	21	/	/	/	/
20	/	0	/	0	0	0	14	14	31	31	31	31
25	/	0	/	0	0	0	14	14	31	31	31	31
32	/	/	/	20	20	20	20	20	42	42	42	42

#### FCGB-23

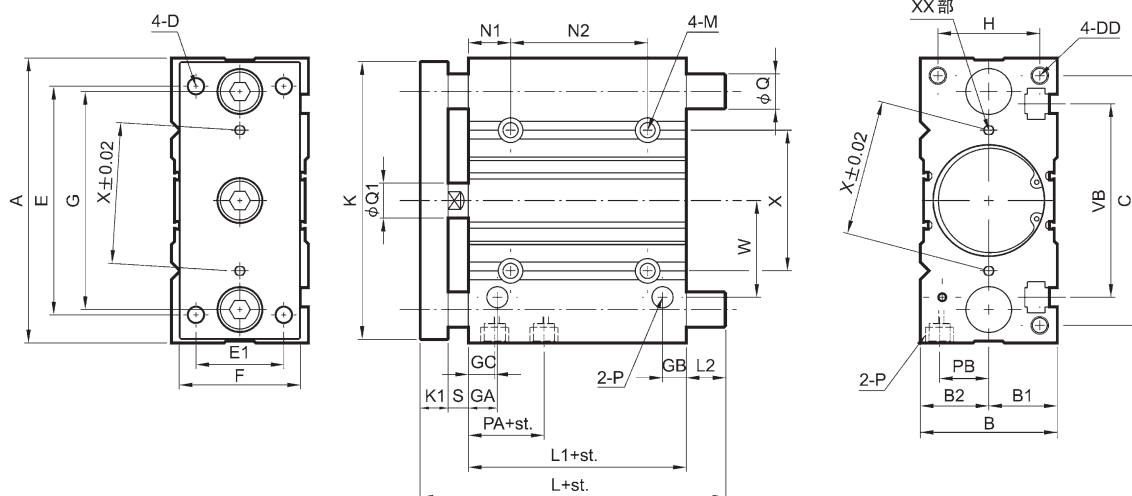
內徑 Tube I.D.	行程 Stroke (mm)											
	10	20	25	30	40	50	75	100	125	150	175	200
12	0	0	/	0	14	14	14	14	/	/	/	/
16	0	0	/	0	21	21	21	21	/	/	/	/
20	/	0	/	0	27	27	27	27	50	50	50	50
25	/	0	/	0	35	35	35	35	50	50	50	50
32	/	/	/	8	8	8	8	42	42	55	55	55

### FCGB-03/FCGB-23



### T 溝尺寸 T groove size

內徑 Tube I.D.	a	b	c	d	e
40	6.5	10.5	5.5	4	11
50	8.5	13.5	7.5	4.5	13.5
63	11	17.8	10	7	18.5



### FCGB-03/FCGB-23

代號 Code 內徑 Tube I.D.	A	B	B1	B2	C	D	DD	E	E1	F	G	GA	GB	GC	H	K	K1	L1	M
40	120	54	27	27	106	M8 × 1.25	M8 × 1.25 × 20 深 dp	104	30	44	86	14	10	14	40	118	12	44	Φ6.6 貫通 thru, Φ11 × 7.5 深 dp, 沉孔 hole
50	148	64	32	32	130	M10 × 1.5	M10 × 1.5 × 22 深 dp	130	40	60	110	14	11	12	46	146	16	44	Φ8.6 貫通 thru, Φ14 × 9 深 dp, 沉孔 hole
63	162	78	39	39	142	M10 × 1.5	M10 × 1.5 × 22 深 dp	130	50	70	124	16.5	13.5	16.5	58	158	16	49	Φ8.6 貫通 thru, Φ14 × 9 深 dp, 沉孔 hole

代號 Code 內徑 Tube I.D.	N1	P	PA	PB	Q1	S	VB	W	X	XA <sup>H7</sup>	XB	XC	XL	YY	YL	N2			WB		
																25st	50,75,100st	100st 以上 above	25st	50,75,100st	100st 以上 above
40	22	PT 1/8	13	18	16	10	72	38	50	4	4.5	3	6	M8 × 1.25	16	24	48	124	34	46	84
50	24	PT 1/4	9	21.5	20	12	92	47	66	5	6	4	8	M10 × 1.5	20	24	48	124	36	48	86
63	24	PT 1/4	14	28	20	12	110	55	80	5	6	4	8	M10 × 1.5	20	28	52	128	38	50	88

### FCGB-03

代號 Code 內徑 Tube I.D.	L		L2		Q
	25,50st	50st 以上 above	25,50st	50st 以上 above	
40	97	102	31	36	Φ20
50	106.5	118	34.5	46	Φ25
63	106.5	118	29.5	41	Φ25

### FCGB-23

代號 Code 內徑 Tube I.D.	L			L2			Q
	25,50st	75,100st	100st 以上 above	25,50st	75,100st	100st 以上 above	
40	81	98	118	15	32	52	Φ16
50	93	114	134	21	42	62	Φ20
63	93	114	134	16	37	57	Φ20

### 特點 Features

- 導桿缸係氣缸與周邊設備結合而成，可有絕佳之抗旋轉，扭力及側向負載的能力。
- 可節省許多機構設計之思考，繪圖及安裝的時間，且結構簡單。
- 導桿缸一律附有磁性感應。
- 導桿缸 FGTB (U)(X) 一律附有端點可調式緩衝。
- 導桿缸較導桿治具缸可有較長之行程及較大之缸徑可用。
- $\Phi 32 \sim \Phi 63$  氣缸使用埋入式感應開關，缸管四面均設計埋入式感應開關固定溝槽，可依實際使用需求變更感應開關安裝位置。
- 全系列均附磁。
- The guide units can be assembled to cylinders that then conform to ISO6432.
- Anti rotation guaranteed by use of external guide rods.
- Four self lube bushes or linear bearings enable high loadings and consistent movement.
- Simple to install by universal mounting holes.
- For  $\Phi 32 \sim \Phi 63$  FGTB/U/X is standard with adjustable cushion.
- Flush fitting reed switch.
- Magnetic as standard.



### 規格 Specification

型號 Model	FGTB,FGTU					
	FGTK		FGTX			
氣缸內徑 Tube I.D.(mm)	20	25	32	40	50	63
配管口徑尺寸 Port size	G 1/8		G 1/8	G 1/4	G 3/8	
行程範圍 The range of stroke (mm)	依所需訂制 Stroke by request					
使用流體 Medium	空氣 Air					
使用壓力範圍 Operating pressure range	2 ~ 7 kgf/cm <sup>2</sup>					
周圍溫度 Ambient temperature	-5 ~ +60°C (不凍結 No freezing)					
給油 Lubrication	氣缸 Cylinder		不需給油 No required			
	導桿 Guide ※		潤滑脂 Lubricating grease			
感應開關 Sensor switch	RD-201		RCI			
感應開關固定座 Sensor switch holder	BA20	BA25	-			
	BGS20	BGS25	-			

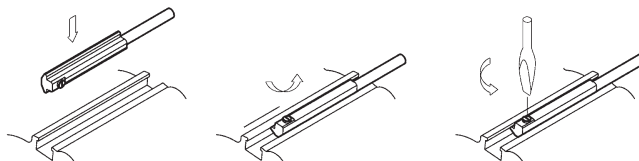
※ 須定期於注油孔處填充潤滑脂，以增加潤滑度及使用壽命。  
※ Periodically refill of the lubricating grease is required to enhance the lubricative grade and its lifetime.

### 感應開關 Sensor switch

型號 Model	RD-201	RNA
開關型式 Switch type	有接點 Reed switch	無接點 NPN Current sinking
使用電壓範圍 Voltage range	5 ~ 220V DC/AC	5 ~ 30V DC
使用電流範圍 Current range	100mA max.	200mA max.
耐衝擊值 Shock resistance	30G	50G

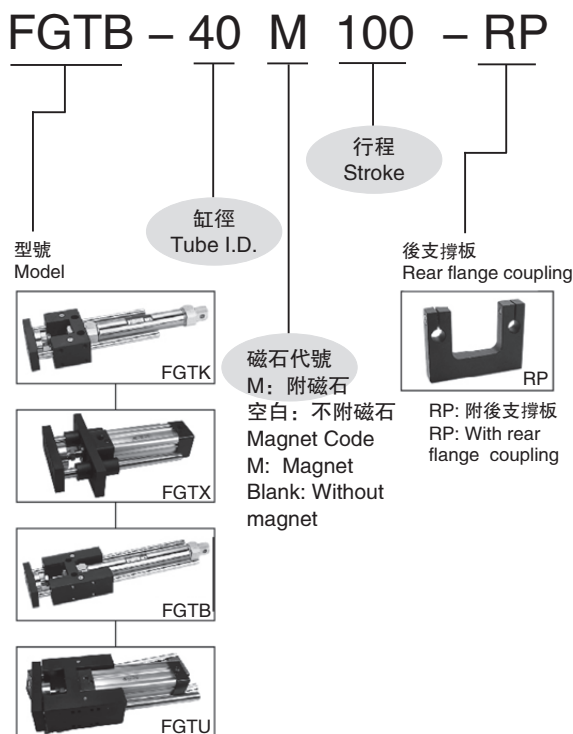
型號 Model	RCI	RNI	RPI
開關型式 Switch type	有接點 Reed switch	無接點 NPN Current sinking	無接點 PNP Current sourcing
使用電壓範圍 Voltage range	5 ~ 220V DC/AC	10 ~ 30V DC	
使用電流範圍 Current range	100mA max.		
耐衝擊值 Shock resistance	30G	50G	

### RCI 安裝方式 Mounting



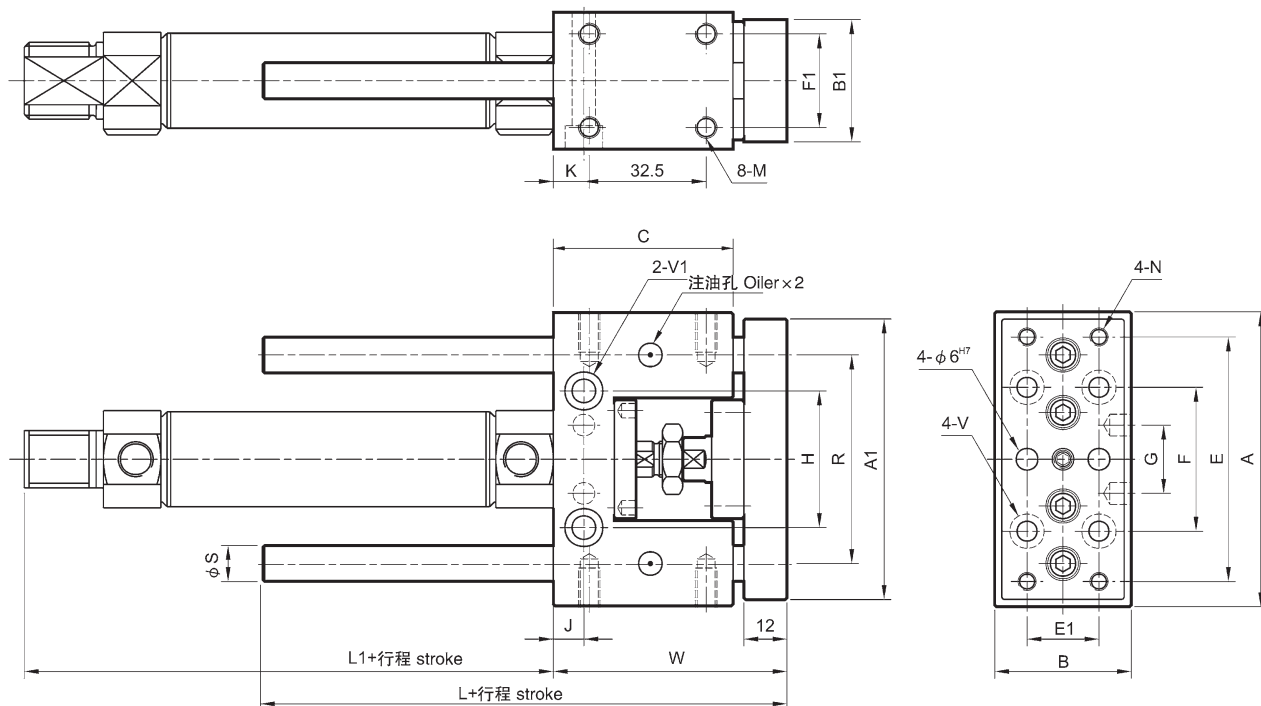
FGTK	滑動軸承經濟型 Light duty type	
FGTX	滑動軸承法蘭型 Light duty flange type	
FGTB	滑動軸承重負荷型 Heavy duty (bush) type	
FGTU	線性滾珠軸承精密型 Heavy duty (linear bearing) type	

### 訂購代碼 Ordering Code



**FGTK** (含油軸襯 Oilless bush guide)

氣缸內徑 Tube I.D.  $\Phi 20, \Phi 25$

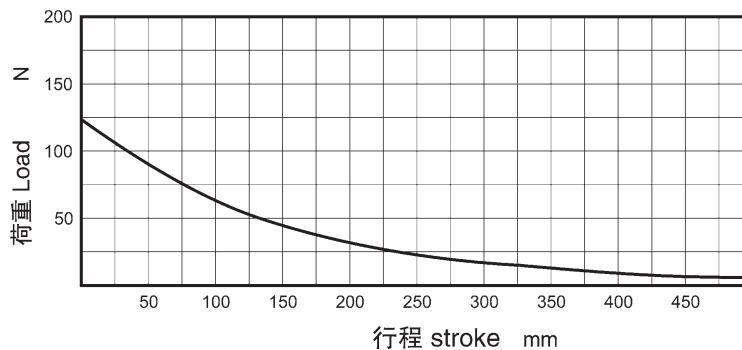
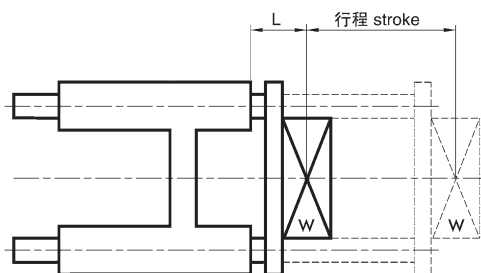


代號 Code 內徑 Tube I.D.	A	A1	B	B1	C	E	E1	F	F1	G	H	J	K	L	L1	M	N	R	S	V	V1	W
20	82	78	38	34	50	68	20	40	26	19	38	8.5	5	85	88	M6(深 D)11	M5	58	10	$\Phi 5.5, \Phi 9.5$ (深 D)5.4	$\Phi 6.5, \Phi 10.5$ (深 D)6.5	65
25	82	78	38	34	50	68	20	40	26	19	38	8.5	5	85	89	M6(深 D)11	M5	58	10	$\Phi 5.5, \Phi 9.5$ (深 D)5.4	$\Phi 6.5, \Phi 10.5$ (深 D)6.5	65

導桿氣缸荷重圖表 Maximum allowable torque moment

最大容許負荷 Max. allowable load

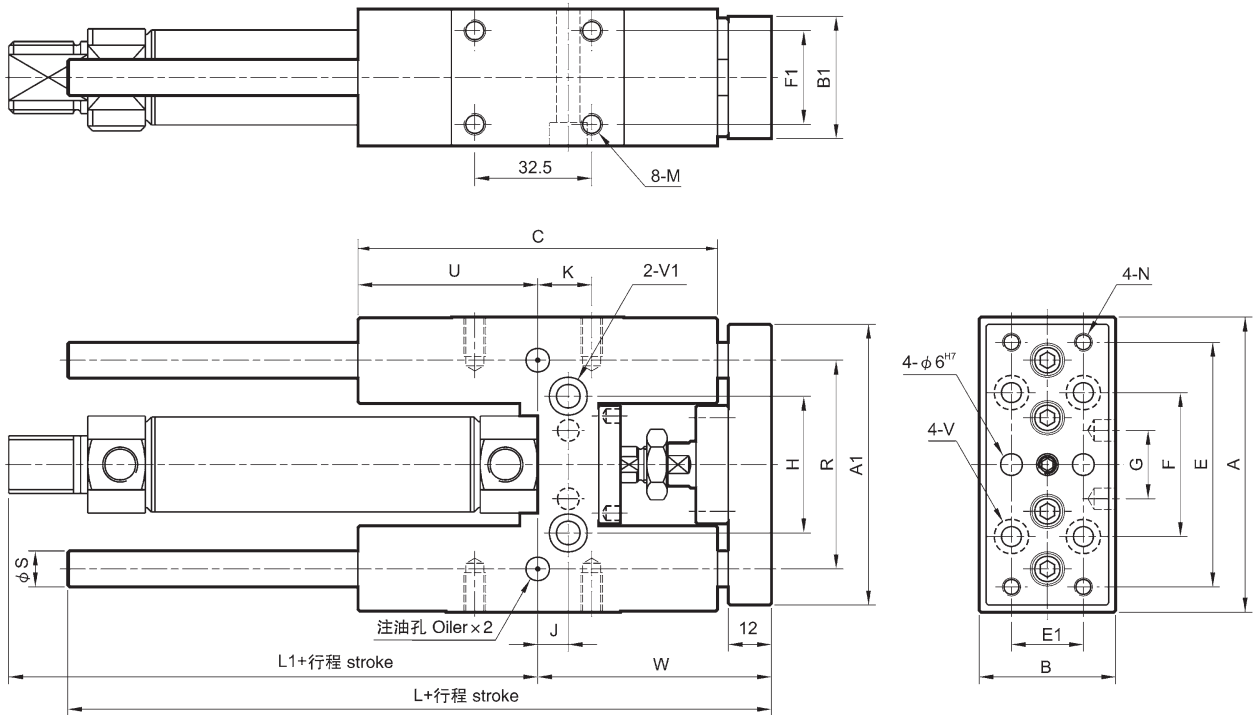
FGTK 氣缸內徑 FGTK  $\Phi 20, \Phi 25$



**FGTB** (滑動軸承 – 高級銅合金)  
(Brass bush guide)

**FGTU** (線性滾珠軸承)  
(Linear bearing guide)

氣缸內徑 Tube I.D.  $\Phi 20, \Phi 25$

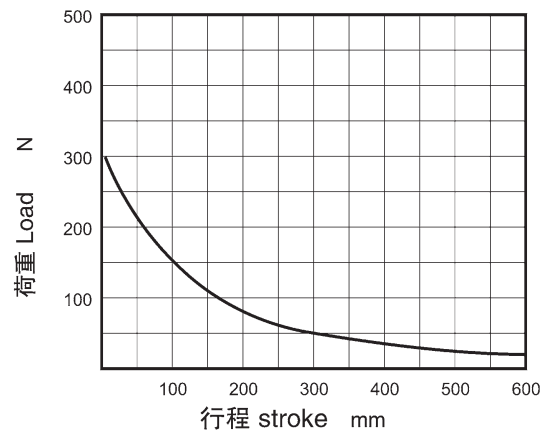
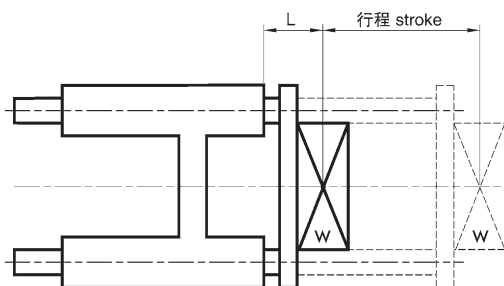


代號 Code 內徑 Tube I.D.	A	A1	B	B1	C	E	E1	F	F1	G	H	J	K	L	L1	M	N	R	S	U	V	V1	W
20	82	78	38	34	100	68	20	40	26	19	38	8.5	15	135	88	M6(深D)11	M5	58	10	50	$\Phi 5.5, \Phi 9.5$ (深D)5.4	$\Phi 6.5, \Phi 10.5$ (深D)6.5	65
25	82	78	38	34	100	68	20	40	26	19	38	8.5	15	135	89	M6(深D)11	M5	58	10	50	$\Phi 5.5, \Phi 9.5$ (深D)5.4	$\Phi 6.5, \Phi 10.5$ (深D)6.5	65

氣壓缸  
Cylinder

FGT\*

導桿氣缸荷重圖表 Maximum allowable torque moment  
最大容許負荷 Max. allowable load  
FGTB.FGTU 氣缸內徑 FGTB.FGTU  $\Phi 20, \Phi 25$

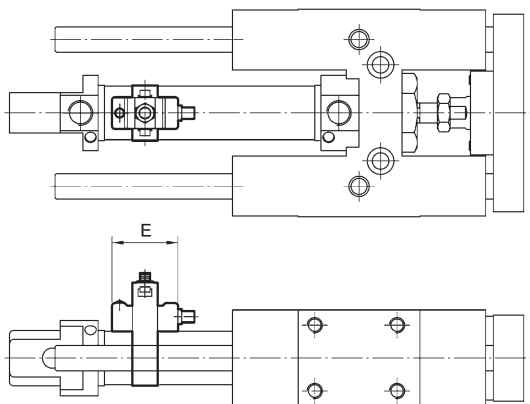
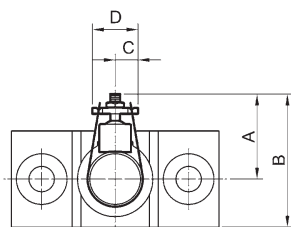




感應開關：RD-201 Sensor switch；RD-201

感應開關束帶：PN Sensor switch band；PN

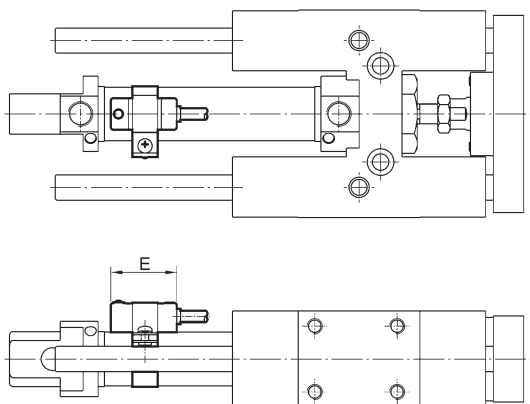
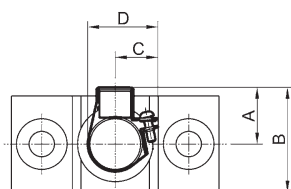
代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	33	52	9	18	26
25	35.5	54.5	9	18	26



感應開關：RD-201 Sensor switch；RD-201

感應開關束帶：BGS\*\* Sensor switch band；BGS\*\*

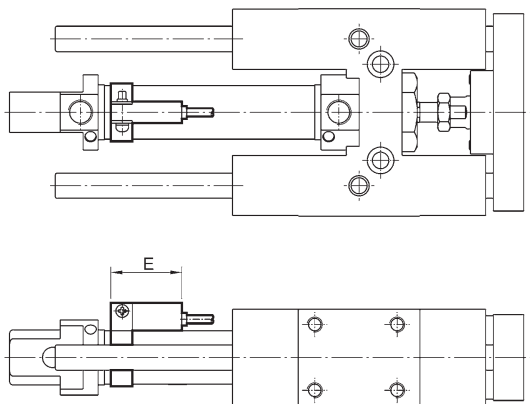
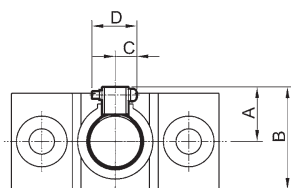
代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	25	44	18	33	26
25	25.5	44.5	18.5	33.5	26



感應開關：RCM Sensor switch；RCM

感應開關束帶：BM\*\* Sensor switch band；BM\*\*

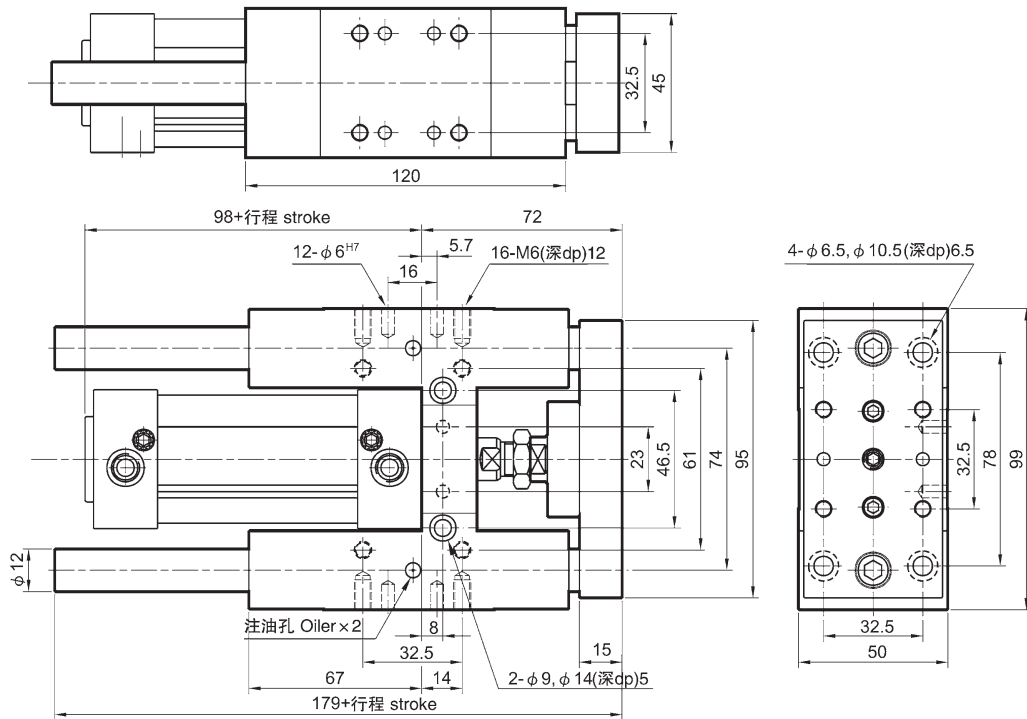
代號 Code 內徑 Tube I.D.	A	B	C	D	E
20	22	41	10	16	28
25	25	44	10	16	28



**FGTB** (滑動軸承 – 高級銅合金)  
(Brass bush guide)

**FGTU** (線性滾珠軸承)  
(Linear bearing guide)

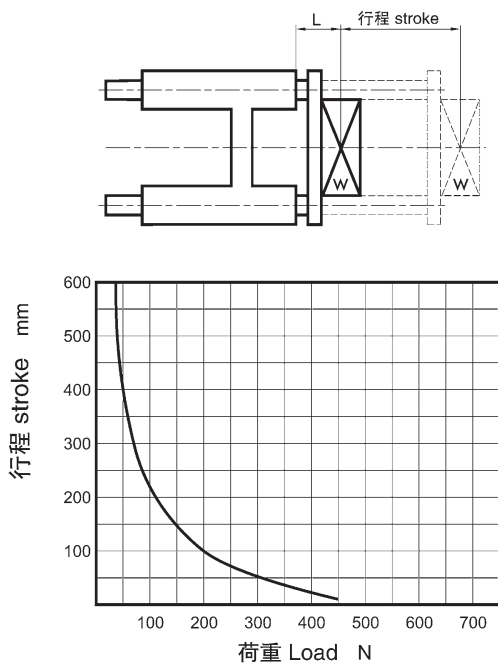
氣缸內徑 Tube I.D.  $\Phi 32$



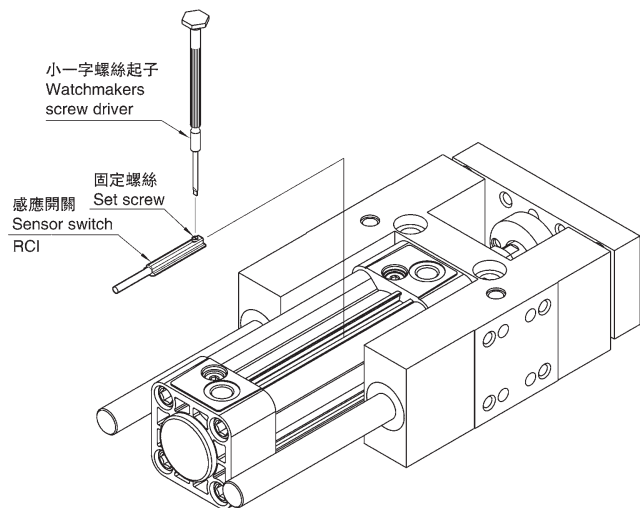
導桿氣缸荷重圖表 Maximum allowable torque moment

最大容許負荷 Max. allowable load

FGTB.FGTU 氣缸內徑 FGTB.FGTU  $\Phi 32$



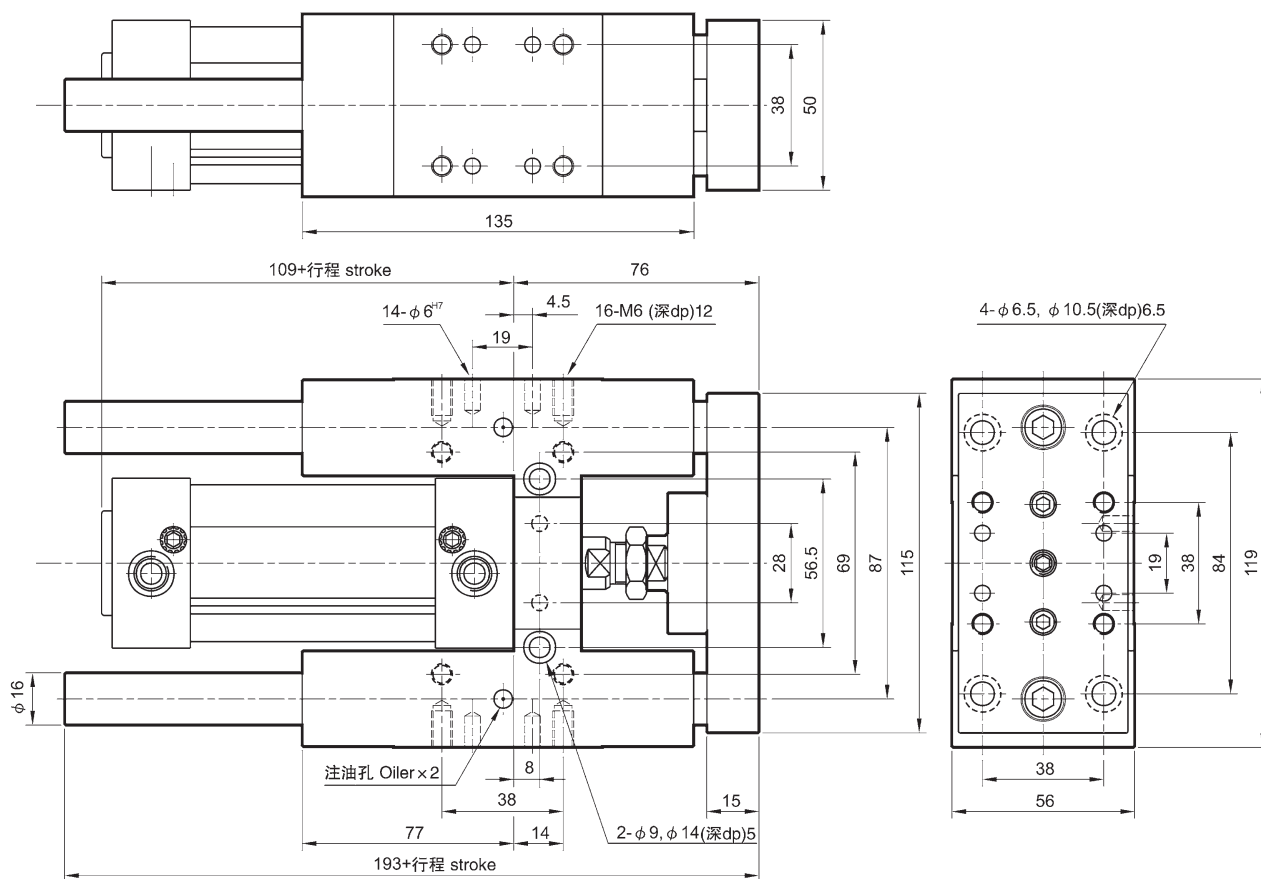
感應開關安裝  $\Phi 32 \sim \Phi 63$   
Installation of sensor switch



**FGTB** ( 滑動軸承 – 高級銅合金 )  
( Brass bush guide )

**FGTU** ( 線性滾珠軸承 )  
( Linear bearing guide )

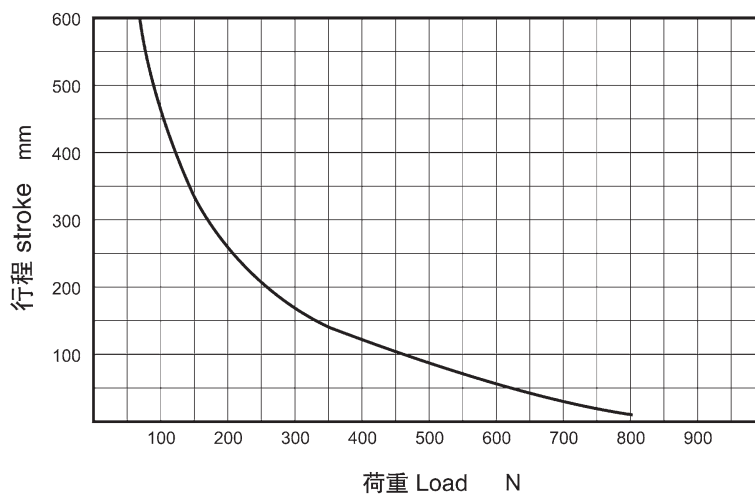
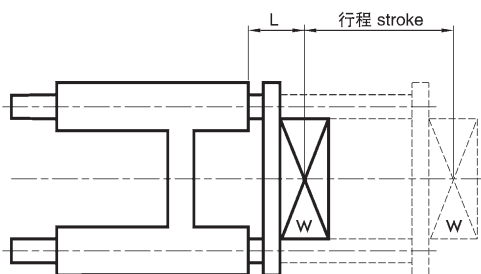
氣缸內徑 Tube I.D.  $\Phi 40$



導桿氣缸荷重圖表 Maximum allowable torque moment

最大容許負荷 Max.allowable load

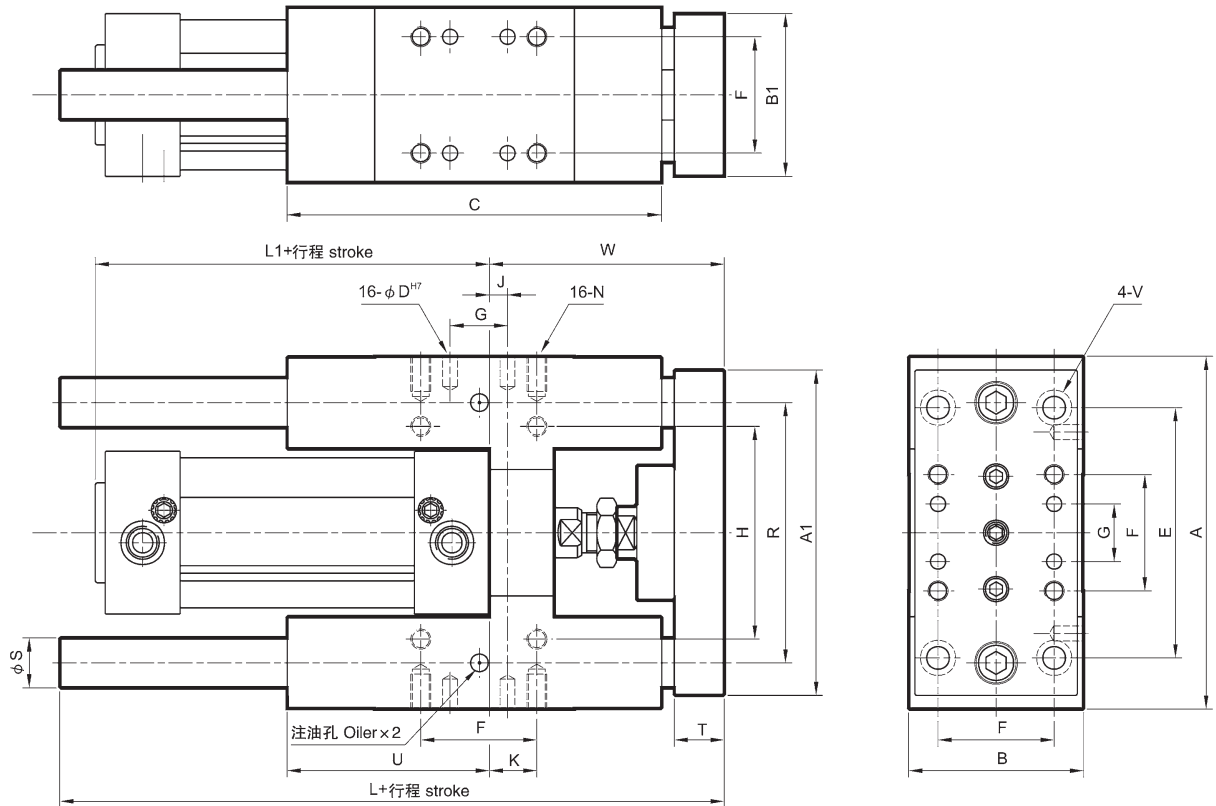
FGTB.FGTU 氣缸內徑 FGTB.FGTU  $\Phi 40$



**FGTB** (滑動軸承 – 高級銅合金)  
(Brass bush guide)

**FGTU** (線性滾珠軸承)  
(Linear bearing guide)

氣缸內徑 Tube I.D.  $\Phi 50, \Phi 63$

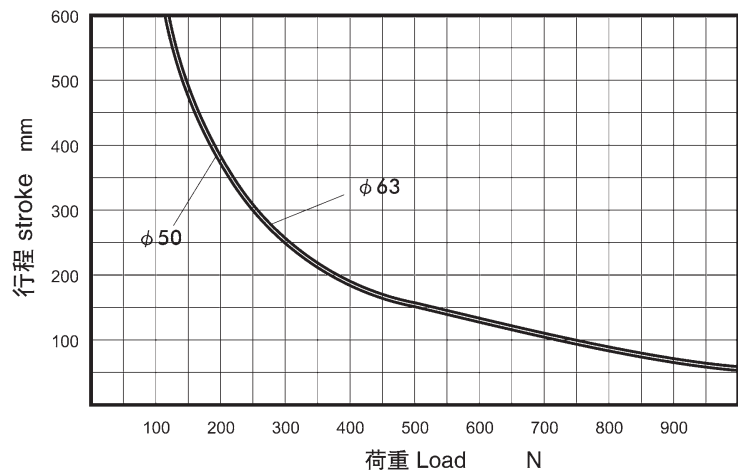
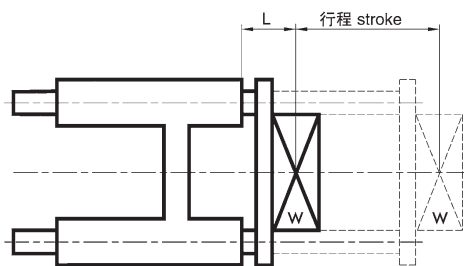


代號 Code 內徑 Tube I.D.	A	A1	B	B1	C	D	E	F	G	H	J	K	L	L1	N	R	S	T	U	V	W
50	141	135	70	65	150	6	100	46.5	23	85	7.5	19	215	110	M8(深D)14	104	20	20	81	$\Phi 9, \Phi 14$ (深D)8.5	94
63	156	150	80	75	165	6	105	56.5	28	100	5	19	230	125	M8(深D)14	119	20	20	96	$\Phi 9, \Phi 14$ (深D)8.5	94

導桿氣缸荷重圖表 Maximum allowable torque moment

最大容許負荷 Max. allowable load

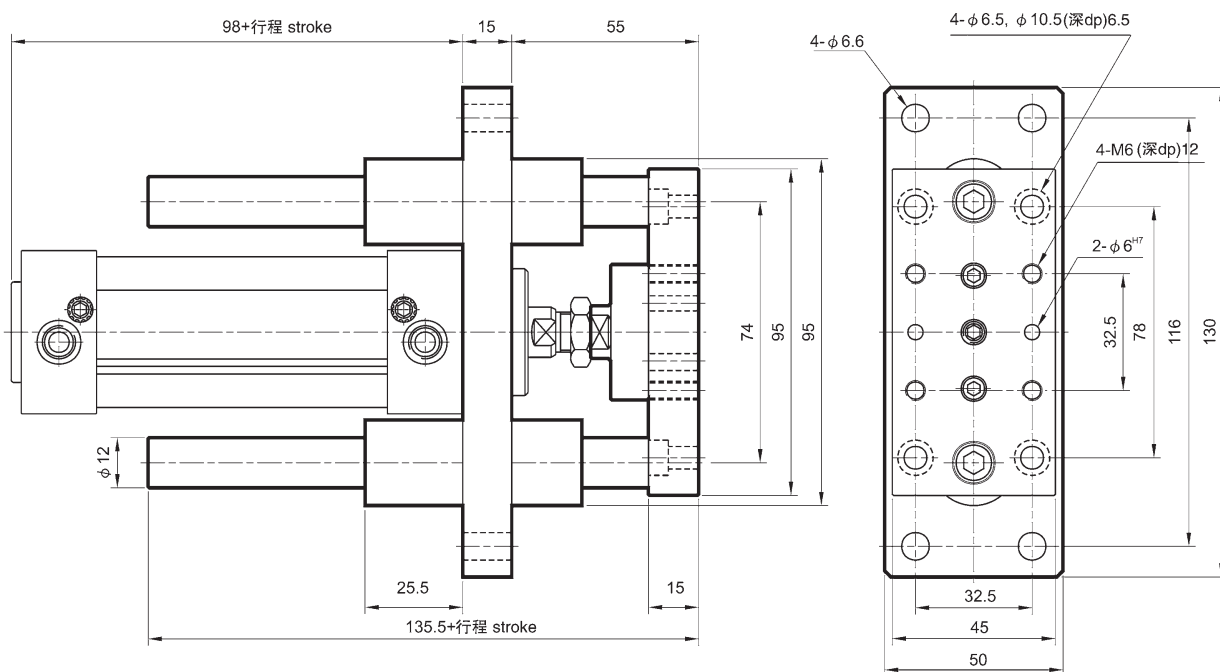
FGTB.FGTU 氣缸內徑 FGTB.FGTU  $\Phi 50, \Phi 63$



氣壓缸  
Cylinder  
FGT\*

**FGTX** (法蘭固定型 Flange type)

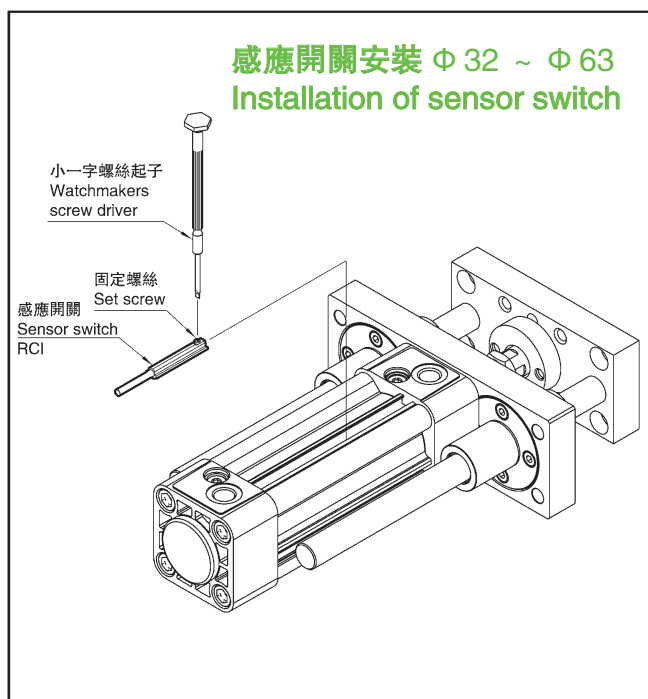
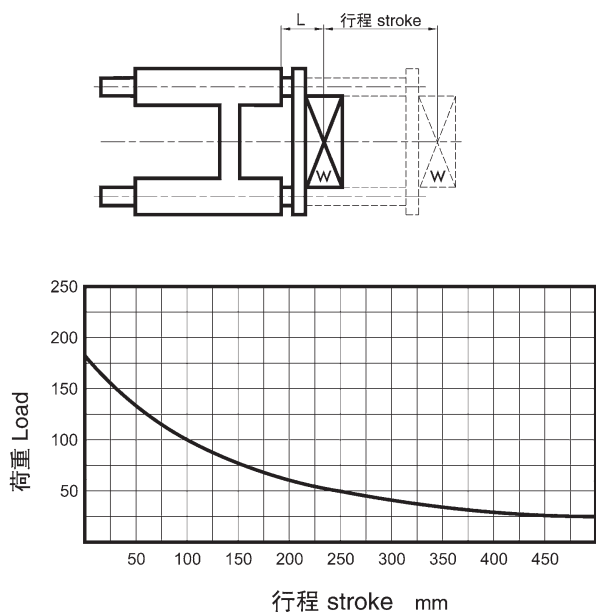
氣缸內徑 Tube I.D. Φ32



導桿氣缸荷重圖表 Maximum allowable torque moment

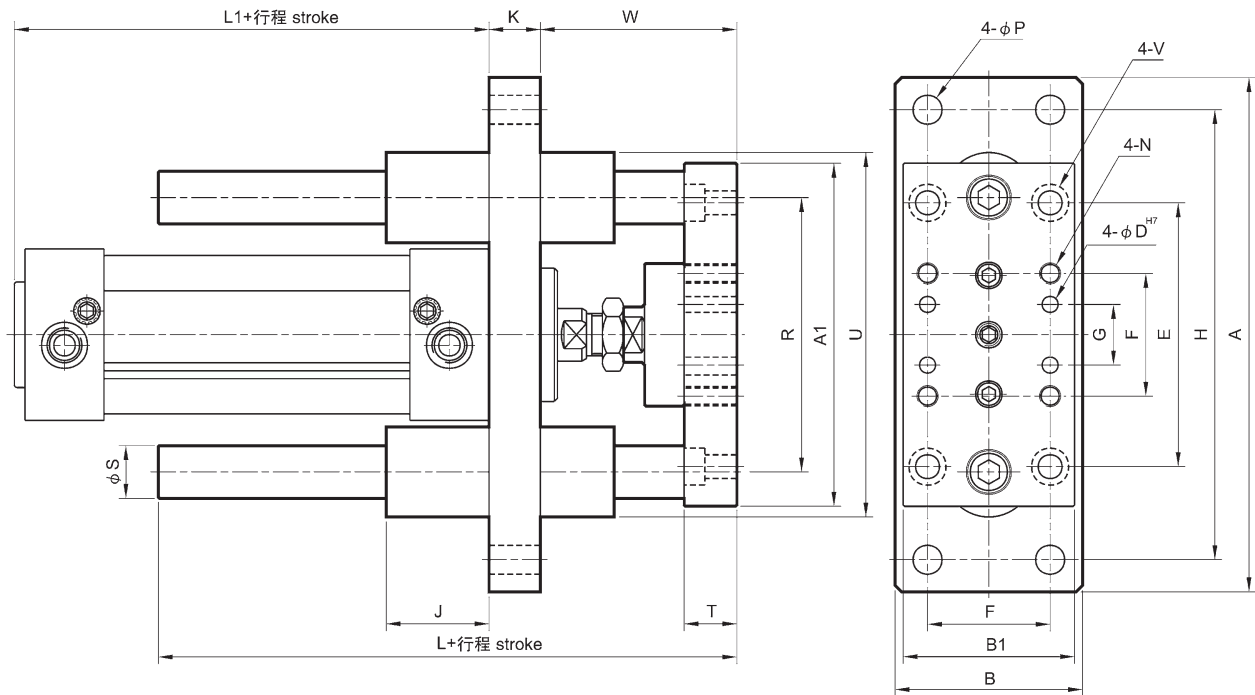
最大容許負荷 Max. allowable load

FGTX 氣缸內徑 FGTX Φ32



**FGTX** (法蘭固定型 Flange type)

氣缸內徑 Tube I.D.  $\Phi 40 \sim \Phi 60$



代號 Code 內徑 Tube I.D.	A	A1	B	B1	D	E	F	G	H	J	K	L	L1	N	P	R	S	T	U	V	W
<b>40</b>	160	115	55	54	6	84	38	19	140	32	15	148	109	M6(深 D)12	$\Phi 9$	87	16	15	115	$\Phi 6.5, \Phi 10.5$ (深 D)6.5	61
<b>50</b>	180	135	70	65	6	100	46.5	23	160	36	20	170	110	M8(深 D)14	$\Phi 9$	104	20	20	136	$\Phi 9, \Phi 14$ (深 D)8.5	74
<b>63</b>	195	150	80	75	6	105	56.5	28	175	36	20	170	125	M8(深 D)16	$\Phi 9$	119	20	20	151	$\Phi 9, \Phi 14$ (深 D)8.5	74

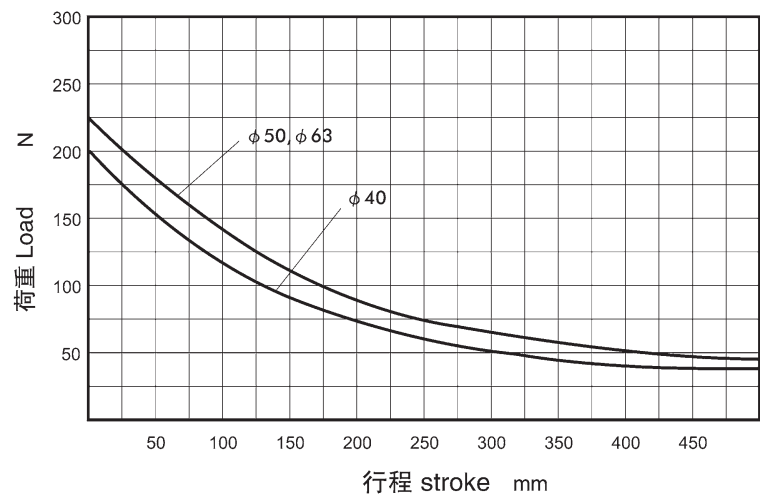
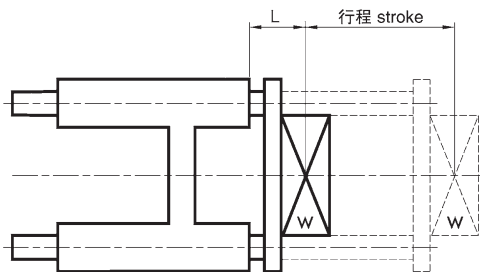
氣壓缸  
Cylinder

FGT\*

導桿氣缸荷重圖表 Maximum allowable torque moment

最大容許負荷 Max.allowable load

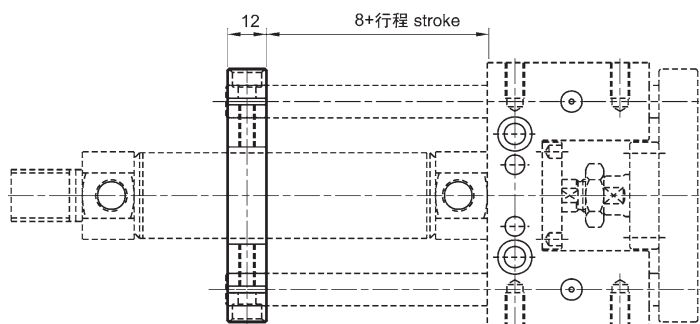
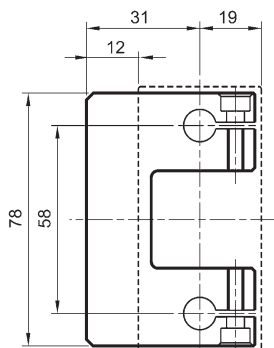
FGTX 氣缸內徑 FGTX  $\Phi 40 \sim \Phi 60$



後支撐板 Rear flange coupling  $\Phi 20, \Phi 25$

**FGTK**

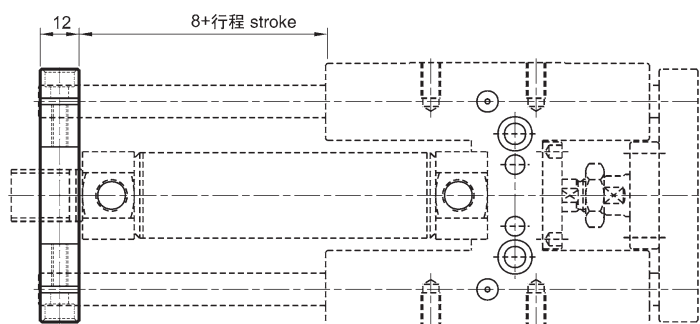
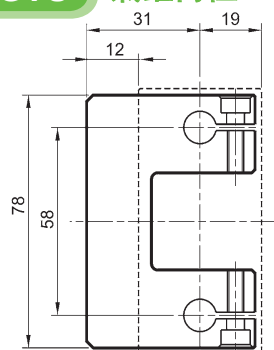
氣缸內徑 Tube I.D.  $\Phi 20, \Phi 25$



**FGTB**

**FGTU**

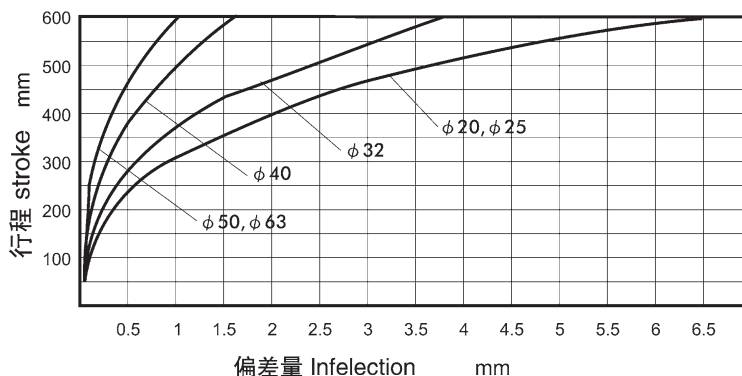
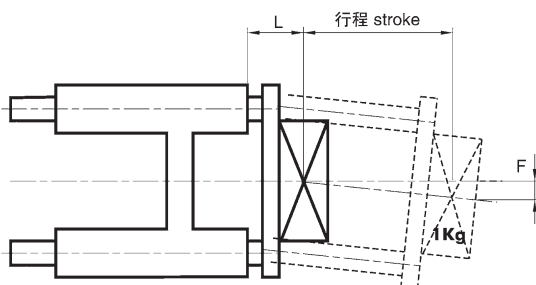
氣缸內徑 Tube I.D.  $\Phi 20, \Phi 25$



### 導桿氣缸荷重圖表 Maximum allowable torque moment 容許負荷偏擺 Max. allowable load FGTB.FGTU

基材：高級鋁合金（附有兩支夾持用螺絲）  
Building material: aluminium alloy  
2 Clamps screws are included in the supply

此圖表之撓度變化是依據桿端加上 1kg 載重物後，隨行程可產生關係曲線。  
Inflection of guide stems is due to their weight summed to the load of 1kg. related to the stroke.

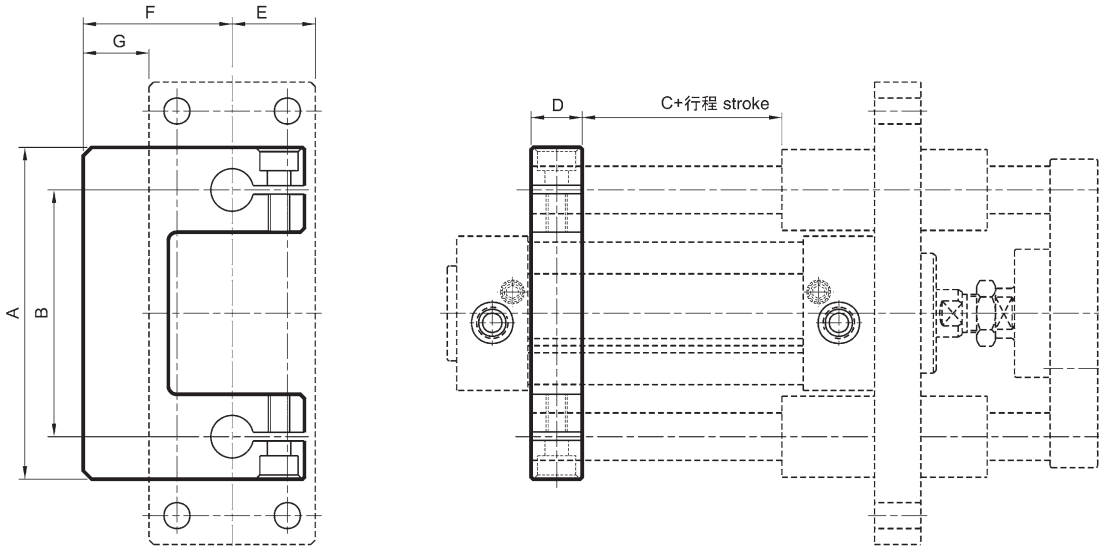


### 重量表 Weight of the guide cylinder

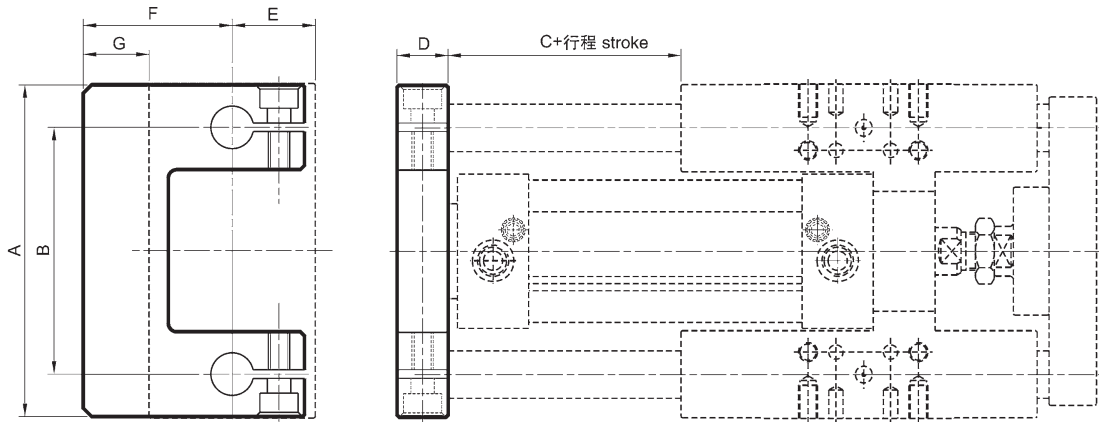
氣缸內徑 Tube I.D.	基準重量 Basic weight	行程 Stroke 25 mm 增加重量	基準重量 Basic weight	行程 Stroke 25 mm 增加重量	基準重量 Basic weight	行程 Stroke 25 mm 增加重量
	FGTK( 滑動軸承 - 復合材料 Oilless bush guide )	FGTB( 滑動軸承 - 銅合金 Brass bush guide )	FGTU( 線性滾珠軸承 Linear bushing guide )			
<b>20</b>	0.690	0.050	1.090	0.050	0.967	0.050
<b>25</b>	0.716	0.058	1.137	0.058	1.015	0.058

後支撐板 Rear flange coupling  $\Phi 32 \sim \Phi 63$

### FGTX 氣缸內徑 Tube I.D. $\Phi 32 \sim \Phi 63$



### FGTB FGTU 氣缸內徑 Tube I.D. $\Phi 32 \sim \Phi 63$



代號 Code 內徑 Tube I.D.	A	B	C	D	E	F	G
32	95	74	25	15	25	47	22
40	115	87	20	20	28	52.5	24.5
50	135	104	20	20	35	67.5	32.5
63	150	119	20	20	40	78	38

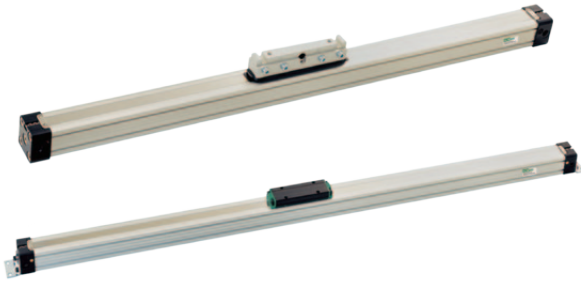
基材：高級鋁合金（附有兩支夾持用螺絲）  
Building material: aluminium alloy  
2 Clamps screws are included in the supply

### 重量表 Weight of the guide cylinder

氣缸內徑 Tube I.D.	基準重量 Basic weight	行程 Stroke 25 mm 增加重量	基準重量 Basic weight	行程 Stroke 25 mm 增加重量	基準重量 Basic weight	行程 Stroke 25 mm 增加重量
	FGTB( 滑動軸承 - 銅合金 Brass bush guide )		FGTU( 線性滾珠軸承 Linear bushing guide )		FGTX( 滑動軸承 - 銅合金 Brass bush guide )	
32	2.060	0.100	1.918	0.100	1.274	0.100
40	3.423	0.159	3.113	0.159	2.082	0.159
50	5.584	0.240	5.162	0.240	3.440	0.240
63	6.816	0.250	6.390	0.250	4.221	0.250



### 規格 Specification



型號 Model	FPRCL			FPRCLF			
作動方式 Acting type	複動型 Double acting			複動型 Double acting			
氣缸內徑 Tube I.D. (mm)	16	25	32, 40	16	25	32, 40, 50	63
配管口徑尺寸 Port size	M5	G1/8	G1/4	M5	G1/8	G1/4	G3/8
配管口數 No. of port	3						
使用流體 Medium	空氣 Air						
使用壓力範圍 Operating pressure range	1 ~ 7.8 kgf/cm <sup>2</sup>						
周圍溫度 Ambient temperature	-15°C ~ +80°C (不凍結 No freezing)						
給油 Lubrication	給油或不需給油均可 With or Without lubrication						
緩衝裝置 Cushion	端點可調緩衝 With adjustable cushion at both ends						
行程範圍 Stroke range (※1)	Φ16 : 100 ~ 3300 mm						
	Φ25 ~ 63 : 100 ~ 5600 mm						
感應開關 Sensor switch	RCAL						
感應開關固定座 Sensor switch holder	HPL						

### 特點 Features

- 節省空間 50%
- 有 3 個不同配管位置可供選擇
- 全系列均附磁
- Equal forces on both ends of the piston.
- High cantilever and direct loads can be taken on piston.
- Multi ported endcaps as standard.
- Self guiding.
- High temperature seals available as a standard option.
- Many mounting options available.
- 50% Space saving when compared to conventional cylinders.
- Reed switches available.
- Magnetic as standard.
- Simple construction enables rapid servicing of cylinder.
- Slow speed grease available as option to enable very slow and smooth piston movement.

※1: 行程單位增減最小 1mm。

※2: 由於缸管非完全密閉, 因此氣缸允許一定之洩漏量。  
所有氣缸於出貨前, 皆已通過氣密測試標準。

※1: Minimum stroke unit 1mm.

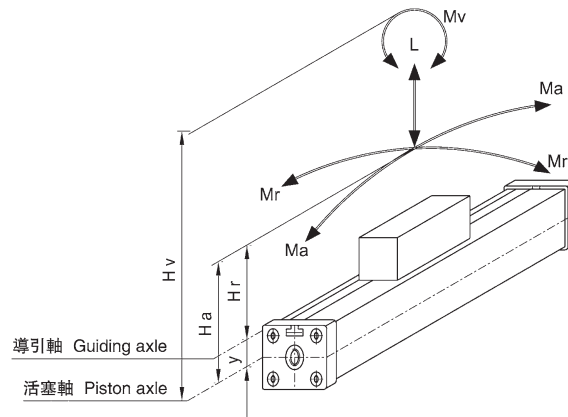
※2: The tube isn't airtight, so the cylinder is allowed little leakage.  
Before the cylinder is sale, it has passed the standard of leakage test.

### 訂購代碼 Ordering Code

FPRCL - 90V - 25 M 0850 - S - 24/2

型號 Model	型式 Type	活塞密封環 Piston seals	磁石代號 Magnet Code	行程 Stroke	潤滑油 Grease lubrication	安裝配件 Accessory
FPRCL	90 標準型 Standard type	NBR (適用活塞速度 for piston speeds V ≤ 1 m/s)	M: 附磁石 Magnet 空白: 不附磁石 Without magnet	100 ~ 5600mm (4碼 Four codes)	- 標準油 Standard grease	
FPRCLF	98 長活塞型 Long piston type (適用 Only for FPRCL)	VITON (適用活塞速度 for piston speeds V > 1 m/s)			S 低速油 Slow motion grease	
					※ 潤滑油選用標準: ● 標準油 NBR 密封環: 0.2m/s ≤ V ≤ 1 m/s VITON 密封環: 1 m/s < V ● 低速油 NBR 密封環: V < 0.2 m/s VITON 密封環: V < 0.2 m/s ※ Speed range for the different greases: ● Standard grease: NBR piston seals: 0.2 m/s ≤ V ≤ 1m/s VITON piston seals: 1 m/s < V ● Slow motion grease: NBR piston seals: V < 0.2 m/s VITON piston seals: V < 0.2 m/s	

氣缸內徑 Tube I.D. 16, 25, 32, 40, 50, 63 適用 For FPRCLF



### FPRCL

氣缸 Cylinder		有效作用力 Effect force at 6 bar (N)	緩衝長度 Cushion (mm)	最大容許負載 Max. allowed load (N)	最大容許彎曲力矩 Max. allowed bending moment (Nm)		最大容許扭矩 Max. allowed torque (Nm)
$\Phi$	y				Ma 軸向 axial	Mr 徑向 radial	
16	9	110	15	120	4	0.3	0.5
16L	9	110	15	120	5	0.4	0.6
25	14	250	21	300	15	1.0	3.0
25L	14	250	21	300	20	1.5	6.0
32	18	420	26	450	30	2.0	4.5
32L	18	420	26	450	60	3.5	10.0
40	23	640	32	750	60	4.0	8.0
40L	23	640	32	750	130	7.0	20.0

- 16L ~ 40L: 長活塞型, 即 98 型式, 適用於彎曲力矩大、扭矩大、垂直移動的場合。
- 上表之數值皆為最大值, 其使用條件為最大壓力 6bar, 作用速度  $V \leq 0.2\text{m/s}$  之狀況。
- 在動態操作狀況下即使是短力矩, 其值若超過上表請避免。
- 注意: 由於一些未定義的使用情形, 上述最大值在使用上請降低 10~20% 以確保安全。

- 16L ~ 40L: cylinder with long piston for heavy bending, torque moments and vertical movement.
- The figures above are max. values based on light shock free duty and speed of  $V \leq 0.2\text{m/s}$ . Max. pressure 6 bar.
- An exceeding of the values in dynamic operations, even for short moments, has to be avoided.
- Attention: Resulting forces could lead to extreme exceedings of the values. In case of undefinable situations the above max. values have to be reduced by 10 ~ 20%.

### FPRCLF

氣缸 Cylinder		有效作用力 Effect force at 6 bar (N)	緩衝長度 Cushion (mm)	最大容許負載 Max. allowed load (N)	最大容許彎曲力矩 Max. allowed bending moment (Nm)		最大容許扭矩 Max. allowed torque (Nm)
$\Phi$	y				Ma 軸向 axial	Mr 徑向 radial	
16	9	110	15	120	4	0.45	0.5
25	14	250	21	300	15	1.5	3.0
32	18	420	26	450	30	3.0	4.5
40	23	640	32	750	60	6.0	8.0
50	28	1000	32	1200	115	10.0	15.0
63	36	1550	40	1650	200	12.0	24.0

- 上表之數值皆為最大值, 其使用條件為最大壓力 6bar, 作用速度  $V \leq 0.2\text{m/s}$  之狀況。
- 在動態操作狀況下即使是短力矩, 其值若超過上表請避免。
- 注意: 由於一些未定義的使用情形, 上述最大值在使用上請降低 10~20% 以確保安全。

- The figures above are max. values based on light shock free duty and speed of  $V \leq 0.2\text{m/s}$ . Max. pressure 6 bar.
- An exceeding of the values in dynamic operations, even for short moments, has to be avoided.
- Attention: Resulting forces could lead to extreme exceedings of the values. In case of undefinable situations the above max. values have to be reduced by 10 ~ 20%.

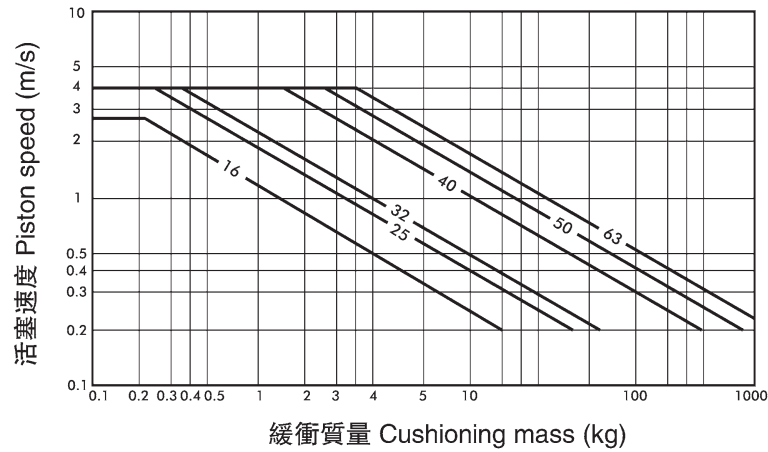
### 重量表 Cylinder weight

單位 Unit: g

型號 Model	基本重量 Basic weight FPRCL	每 100 mm 行程 (Stroke 100 mm) FPRCL
內徑 Tube I.D.		
$\Phi 16$	240	92
$\Phi 25$	760	294
$\Phi 32$	1,670	379
$\Phi 40$	2,760	594

型號 Model	基本重量 Basic weight FPRCL	每 100 mm 行程 (Stroke 100 mm) FPRCL
內徑 Tube I.D.		
$\Phi 16$	230	92
$\Phi 25$	710	294
$\Phi 32$	1,150	379
$\Phi 40$	2,700	594
$\Phi 50$	4,000	648

## 緩衝能力 Cushioning diagram



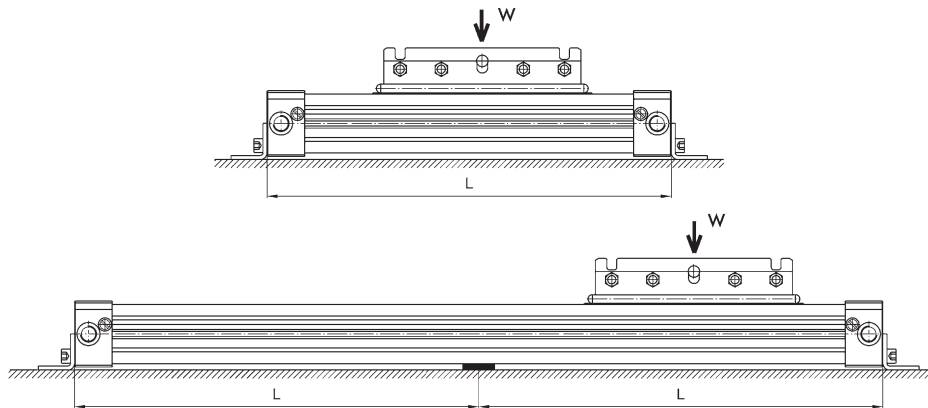
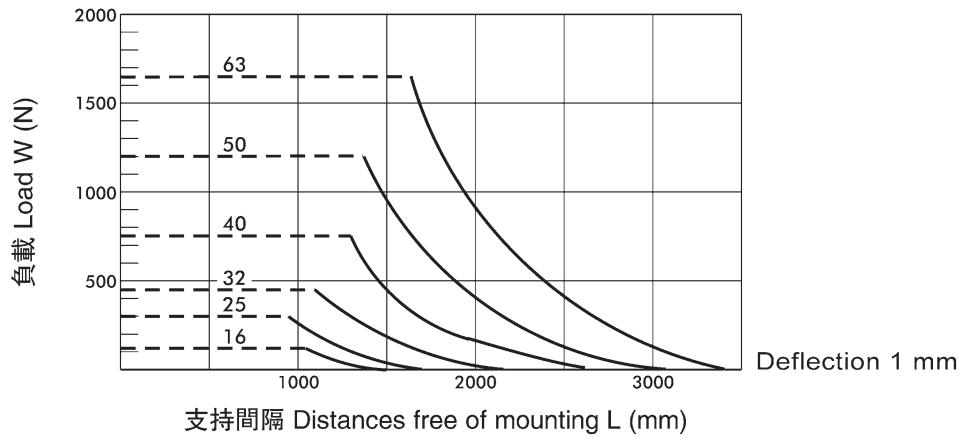
### 請注意下列各點:

- 假如緩衝能力超過上表需另外加裝緩衝器。
- 當活塞速度  $V < 0.1\text{m/s}$  需使用低速潤滑油，請於訂購時選用低速油。
- 活塞速度未超過  $1\text{m/s}$  則有最佳的使用壽命。

### Pay attention to the following points

- If the limits above are exceeded additional shock absorbers are necessary.
- For piston speeds  $< 0.2\text{ m/s}$  slow speed lubrication is necessary.
- Maximum seal life will be achieved when piston speeds do not exceed  $1\text{ m/s}$ .

## 氣缸固定位置 Positioning of cylinder mountings

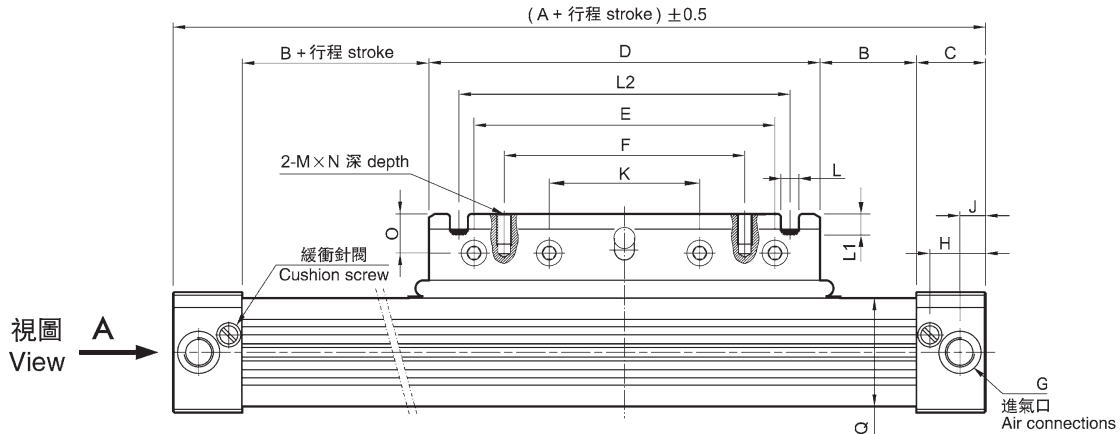


### 說明

- 支持間隔中之偏差量若在  $0.5 \sim 1\text{ mm}$  範圍內，允許超出其極限值。
- 支持間隔中之偏差量若在  $1 \sim 1.5\text{ mm}$  (最大值) 範圍內，需降低其極限值。

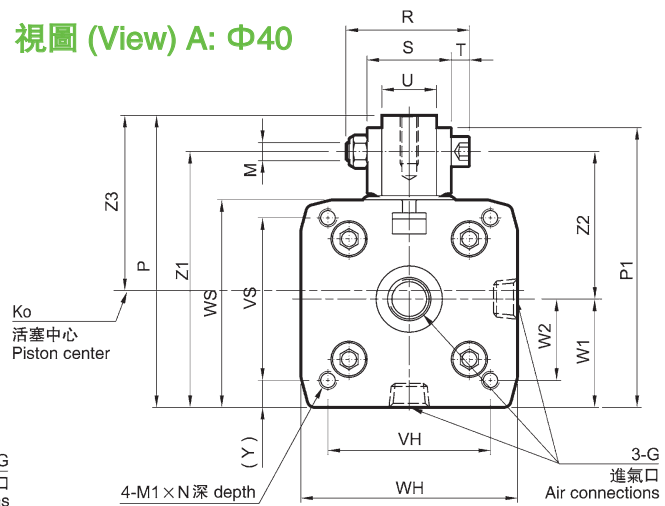
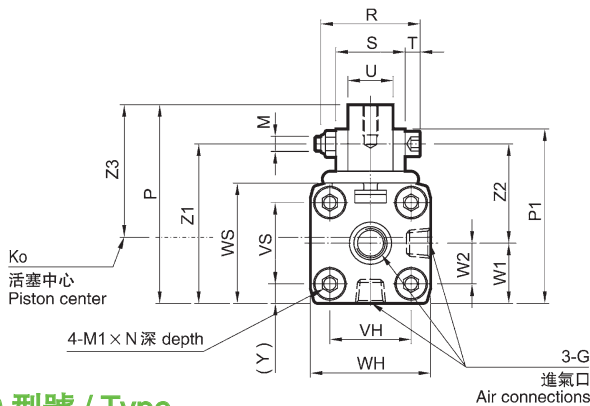
### Diagram information

- Calculated deflections without support of  $0.5\text{--}1\text{ mm}$  allow exceeding of the approved limits.
- Calculated deflections without support of  $> 1\text{--} \text{max.}1.5\text{ mm}$  require reduction of approved limits.



視圖 (View) A:  $\Phi 16 \sim 32$

視圖 (View) A:  $\Phi 40$



### 90 型號 / Type

代號 Code 內徑 Tube I.D.	A	B	C	D	E	F	G	H	J	K	L	L1	L2	M	M1	N	O	P	P1
16	130	12	15	76	64	48	M5	12	5.5	32	-	-	-	M4	M3	7	6	43.5	42.3
25	200	17	23	120	100	80	G1/8	18.5	8.5	50	6	7	100	M5	M5	11	13	66	58
32	250	23	27	150	110	90	G1/4	22	10.5	55	6	7	130	M6	M6	14	12	86	82
40	300	45	30	150	110	90	G1/4	24	15	55	6	7	130	M6	M6	15	12	97	93

代號 Code 內徑 Tube I.D.	Q	R	S	T	U	VH	VS	WH	WS	W1	W2	Y	Z1	Z2	Z3
16	25 x 24.5	27	18	4	10	18	18	27	27	13.5	9	4.5	37.5	24	28.8
25	36 x 36	35	23	5	15	27	27	40	40	20	13.5	6.5	53	33	38.8
32	48 x 52	41	27	6	18	36	40	52	56	30	22	8	74	44	53.5
40	58 x 58	41	28	6	18	54	54	72	69	36	27	9	85	49	58.2

### 98 型號 / Type

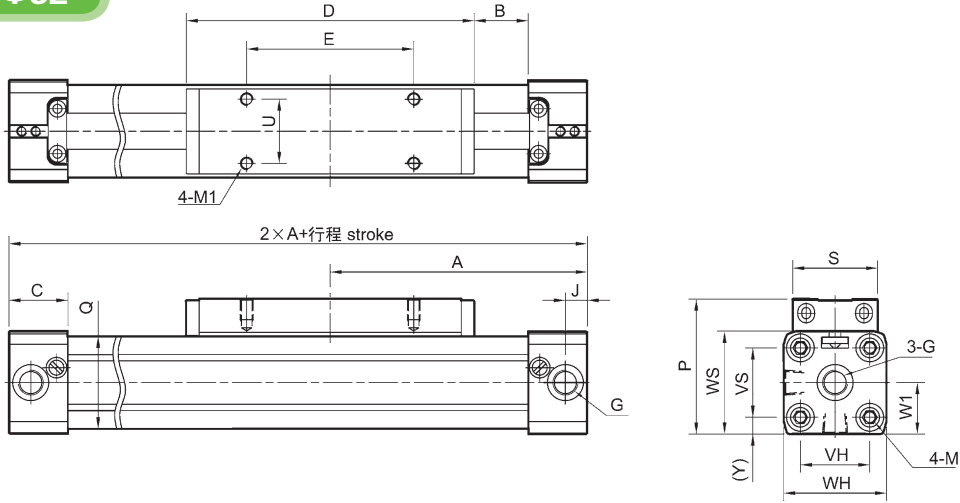
代號 Code 內徑 Tube I.D.	A	B	C	D	E	F	G	H	J	K	L	L1	L2	M	M1	N	O	P	P1
16L	180	37	15	76	64	48	M5	12	5.5	32	-	-	-	M4	M3	7	6	43.5	42.3
25L	300	67	23	120	100	80	G1/8	18.5	8.5	50	6	7	100	M5	M5	11	13	66	58
32L	400	23	27	300	240	180	G1/4	22	10.5	120	-	-	-	M6	M6	14	12	86	82
40L	500	70	30	300	240	180	G1/4	24	15	120	-	-	-	M6	M6	15	12	97	93

代號 Code 內徑 Tube I.D.	Q	R	S	T	U	VH	VS	WH	WS	W1	W2	Y	Z1	Z2	Z3
16L	25 x 24.5	27	18	4	10	18	18	27	27	13.5	9	4.5	37.5	24	28.8
25L	36 x 36	35	23	5	15	27	27	40	40	20	13.5	6.5	53	33	38.8
32L	48 x 52	41	27	6	18	36	40	52	56	30	22	8	74	44	53.5
40L	58 x 58	41	28	6	18	54	54	72	69	36	27	9	85	49	58.2

● 16L ~ 40L: 長活塞型，即 98 型式，適用於彎曲力矩及扭矩大的場合。

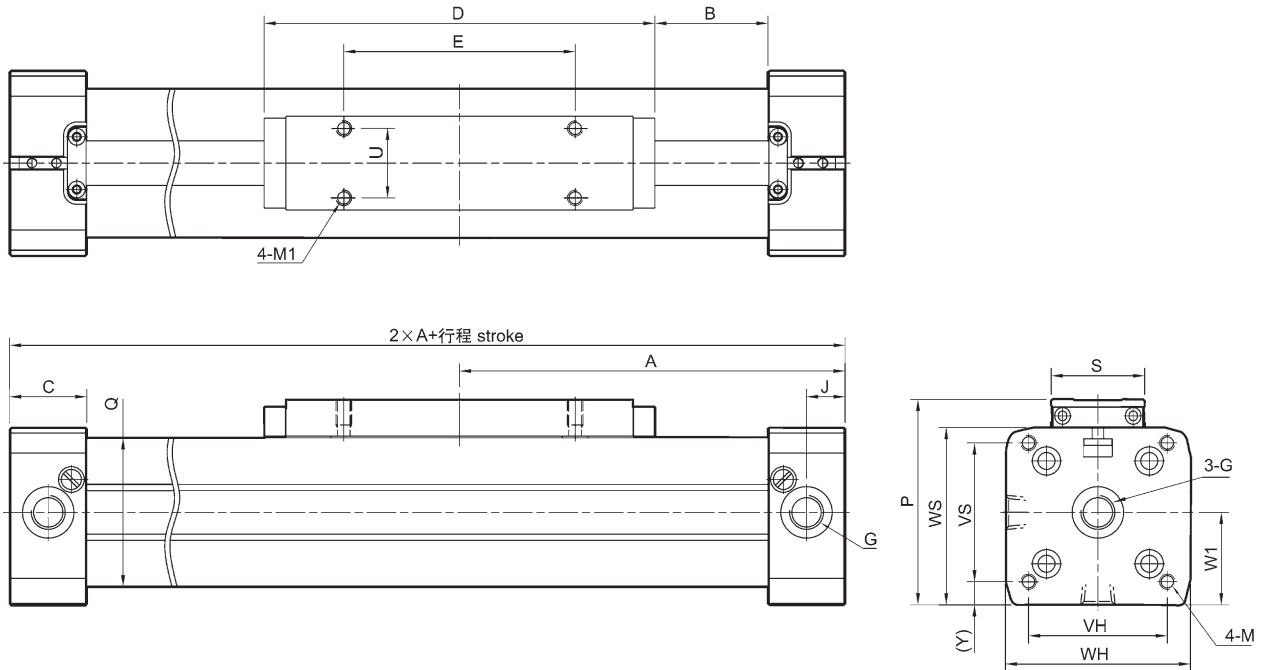
● 16L ~ 40L: Cylinder with long piston for heavy bending and torque moments.

### $\Phi 16 \sim \Phi 32$



代號 Code 內徑 Tube I.D.	A	B	C	D	E	G	J	M	M1	P	Q	S	U	VH	VS	WH	WS	W1	Y
16	65	15.5	15	69	36	M5	5.5	M3 × 7 深 dp	M4 × 7 深 dp	36.5	25 × 24.5	22	16.5	18	18	27	27	13.5	4.5
25	100	21.5	23	112	65	G 1/8	8.5	M5 × 12 深 dp	M5 × 8 深 dp	52.5	36 × 36	33	25	27	27	40	40	20	6.5
32	125	22.0	27	152	90	G 1/4	10.5	M6 × 15 深 dp	M6 × 8 深 dp	66.5	48 × 52	36	27	36	40	52	56	30	8

### $\Phi 40 \sim \Phi 63$

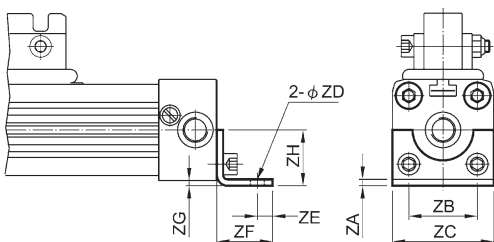


代號 Code 內徑 Tube I.D.	A	B	C	D	E	G	J	M	M1	P	Q	S	U	VH	VS	WH	WS	W1	Y
40	150	44	30	152	90	G 1/4	15	M6 × 15 深 dp	M6 × 10 深 dp	80	58 × 58	36.4	27	54	54	72	69	36	9
50	175	42	33	200	110	G 1/4	11.7	M6 × 15 深 dp	M6 × 10 深 dp	89	77 × 76	56	27	70	70	80	80	43.6	5
63	215	47.5	50	235	155	G 3/8	25	M8 × 17 深 dp	M8 × 14 深 dp	123	102 × 102	50	36	78	78	106	106	62.5	14.5

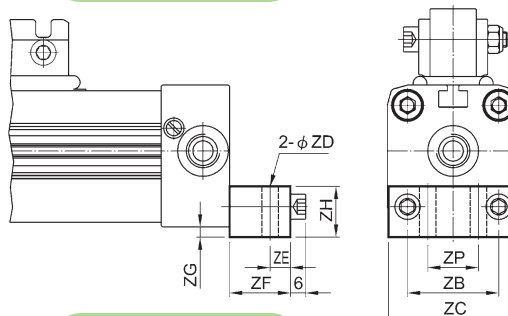
### 端蓋安裝支架 (適用 FPRCL/FPRCLF) End cover bracket (foot) (for FPRCL/FPRCLF)

安裝配件 Accessories for mounting  $\Phi 16 \sim \Phi 63$

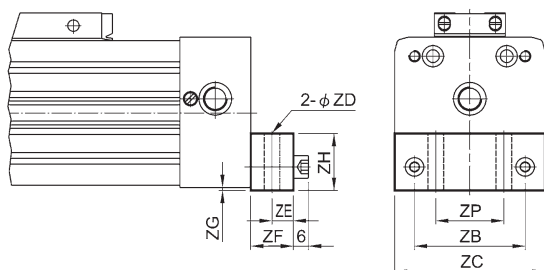
$\Phi 16 \Phi 25$



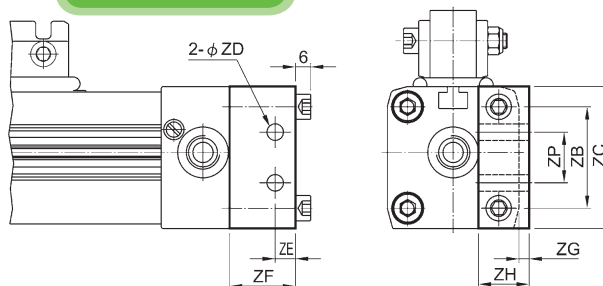
$\Phi 32 \Phi 40$



$\Phi 50 \Phi 63$



$\Phi 32^*$

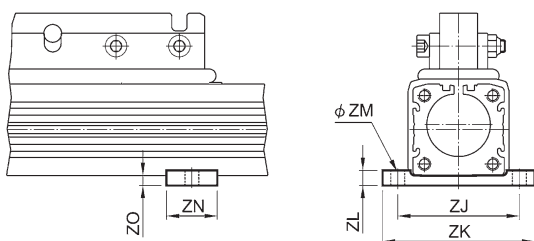


代號 Code 內徑 Tube I.D.	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZP	訂購代碼 Order number
16	1.6	18	26	3.6	4	14	1.5	12.5	--	PL 24/1
25	2.5	27	40	5.5	6	22	2	18	--	PL 24/2
32	--	36	51	6.5	8	24	4	20	20	PL 24/3
32*	--	40	56	6.5	8	26	4	20	20	PL 24/3.1

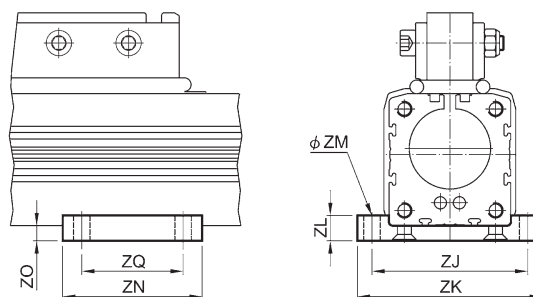
代號 Code 內徑 Tube I.D.	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZP	訂購代碼 Order number
40	--	54	71	9	11.5	24	2	20	30	PL 24/4
50	--	70	80	9	12.5	25	2	25	45	PL 24/5
63	--	78	106	11	15	30	2	40	48	PL 24/6

### 中間支撐座 Articulated carrier (適用 For FPRCL/FPRCLF)

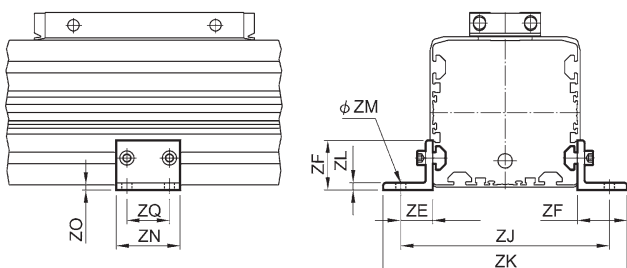
$\Phi 16 \Phi 25$



$\Phi 32 \Phi 40$



$\Phi 50 \Phi 63$



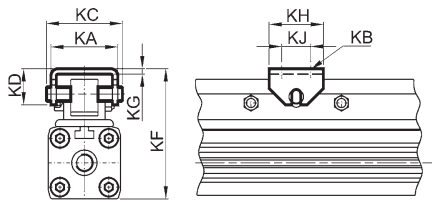
代號 Code 內徑 Tube I.D.	ZE	ZF	ZJ	ZK	ZL	ZM	ZN	ZO	ZQ	訂購代碼 Order number
16	--	--	38	50	6	5.5	20	3	--	PL 25/1
25	--	--	48	60	6	5.5	20	4	--	PL 25/2
32	--	--	61	73	10	6.5	55	6	40	PL 25/3
40	--	--	70	85	10	6.5	60	7.2	45	PL 25/4
50	22	35	120	146	4.8	6.6	45	3.5	30	PL 25/5
63	22.5	35	147	172	4.8	6.6	45	4	30	PL 25/6

無桿缸  
Rodless Cylinder

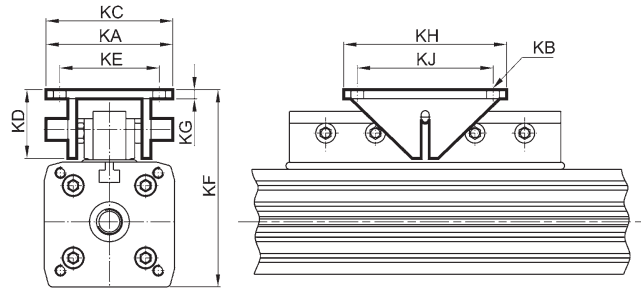
FPRCL\*

### 浮動式托架 Mid section support

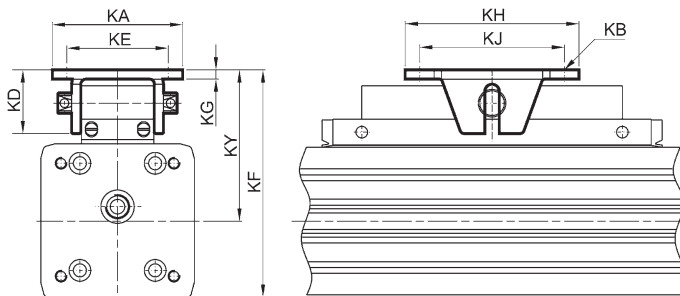
#### FPRCL Φ16, Φ25



#### FPRCL Φ32, Φ40



#### FPRCL Φ50, Φ63

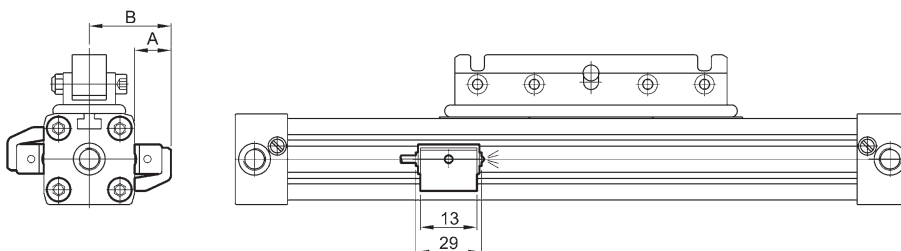


### 感應開關 Sensor switch 規格 Specification

型號 Model	RCAL
開關型式 Switch type	有接點 Reed switch
接點型式 Contracts	常開 Normal open
使用電壓範圍 Voltage range	DC/AC 5 ~ 240V
使用電流範圍 Current range	100 mA max
功率 Switch range	10W max
耐衝擊值 Shock resistance	30 G
壓降 Voltage drop	2.5V max
應答時間 Response time	1ms 以下 Max.1ms
使用溫度範圍 Temperature	-10°C ~ 70°C
配線方式 Lead wire	Φ4,2C,PVC
電纜長度 Lead wire length	2 m
指示燈亮時機 Indicator lamp	迴路通路時 (ON) 時, 指示燈亮 LED lights up when ON
絕緣等級 Enclosure classification	IP 67 (NEMA 6)
指示燈亮顏色 Indicator	綠燈 Green LED

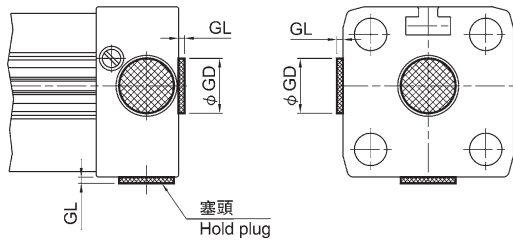
代號 Code 內徑 Tube I.D.	KA	KB	KC	KD	KE	KF**	KG	KH	KJ	KY**	訂購代碼 Order number
FPRCL-16	25	4.5	28	13	-	47-50	2	20	10	33	PL 225/1
FPRCL-25	37	5.5	42	20	-	72-75	3	30	16	50	PL 225/2
FPRCL-32	70	6.5	70	38	55	91-100	5	90	75	102.3	PL 225/3
FPRCL-40	70	6.5	70	38	55	111-120	5	90	75	102	PL 225/3
FPRCLF-50	90	9	-	43.7	70	136-151	6.4	120	100	93-108	PL 225/5
FPRCLF-63	90	9	-	43.7	70	152	6.4	120	100	99	PL 225/6

\*\*KF/KY 尺寸並非固定。 \*\*KF/KY size is not fixed.



代號 Code 內徑 Tube I.D.	A	B	感應開關 固定座 Switch holder
16	16	29.5	HPL
25	15.5	35.5	
32	15.5	41.5	
40	10.5	46.5	
50	16.5	56	
63	15.5	68.5	

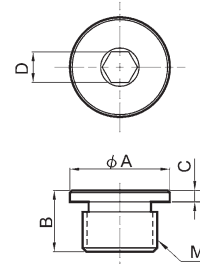
## 塞頭 Hold plug



代號 Code 內徑 Tube I.D.	GL	GD
16	0.7	7.5
25	1.0	13
32	0.7	18
40	0.7	18
50	0.8	18

註：端蓋進氣口鎖附塞頭尺寸  
Note: The dimension of end cap which lock hold plug.

## 塞頭 Hold plug



代號 Code 內徑 Tube I.D.	A	B	C	D	E
16	7.5	5.3	1.3	2	M5 × 0.8
25	13	8	1.5	4	G 1/8
32 ~ 50	18	10	1.5	4	G 1/4



### 規格 Specification



項目 Item		缸徑 Tube I.D. (mm)				
		*10	16	20	*25	*32
作動形式 Type of Operation		複動 Double Acting Type				
使用流體 Fluid		空氣 Air				
使用壓力範圍 Operation pressure		1.5~7 kgf/cm <sup>2</sup> (1.5~0.7 MPa)				
保證耐壓力 Proof Pressure		10.5 kgf/cm <sup>2</sup> (1.05 MPa)				
使用溫度範圍 Temperature		0~60° C				
最高作動頻度 Max. Operation Frequency		180 cycle/min				
給油 Lubrication	氣缸 Cylinder Section	不要 Lubrication Free Type				
	彎臂部位 Closed Section	要 Apply Grease To Sliding Section				
配管接頭口徑 Port Size		M5X0.8P				

### 訂購代碼 Ordering Code

ACHP - 20 - 2 KT-07R

種類式樣  
kinds of style

種類式樣 kinds of style	平行夾爪 Parallel grip	Y 形夾爪 Y grip
代號 Code	ACHP	ACHY

氣缸內徑  
Tube I.D.

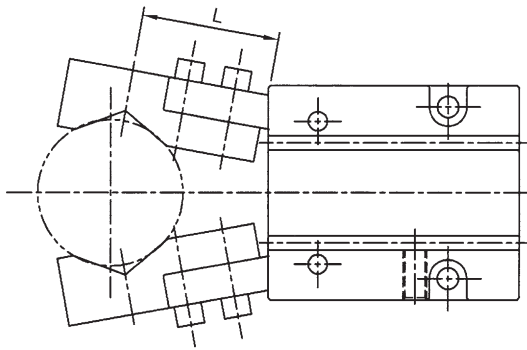
感應器數量  
Number of sensors

感應器種類 Sensor Type	代號 Code	適用電壓 Applied voltage
圓形 Circular	KT-07R	5~120 DC/AC

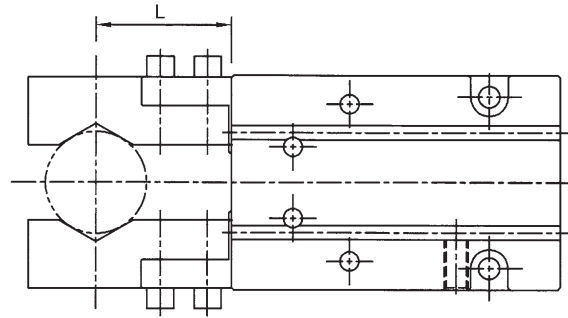
#### 備註 Note:

1. Y 形夾爪與平行夾爪均附感應磁石，可加裝感應器控制。
  2. 感應器採用圓形 (KT-07R)，需另行購買。
1. Y type gripper and H type gripper are with magnet and can use with sensor to control them.
  2. The grippers are use of circle shape (KT-07R) and can be purchased.

## 理論出力 Theoretical Cylinder Force



Y形夾爪 (ACHY) 爪臂接點長度  
Y grip (ACHY) Length of gripping point



平行夾爪 (ACHP) 爪臂接點長度  
Parallel grip (ACHP) Length of gripping point

項目 Item		缸徑 mm Tube I.D.	*ACHY10	ACHY16	ACHY20	*ACHY25	*ACHY32
理論把持力矩 ( M ) Kgf/cm Lubrication	閉側 Closed Side		0.17XP	0.9XP	1.7XP	3.4XP	6.1XP
	開側 Opened Side		0.27XP	1.2XP	2.3XP	4.4XP	8.1XP
最大爪臂接點長度 ( L ) Length of Maximum			30mm	40mm	60mm	70mm	85mm
夾爪開閉角度 Lever Open/Close Angles			- 10° - + 30°				
實際把持力 ( F ) Kgf Length of Maximum			$F = M / L \times 8.5$				

\* 者陸續將開發。

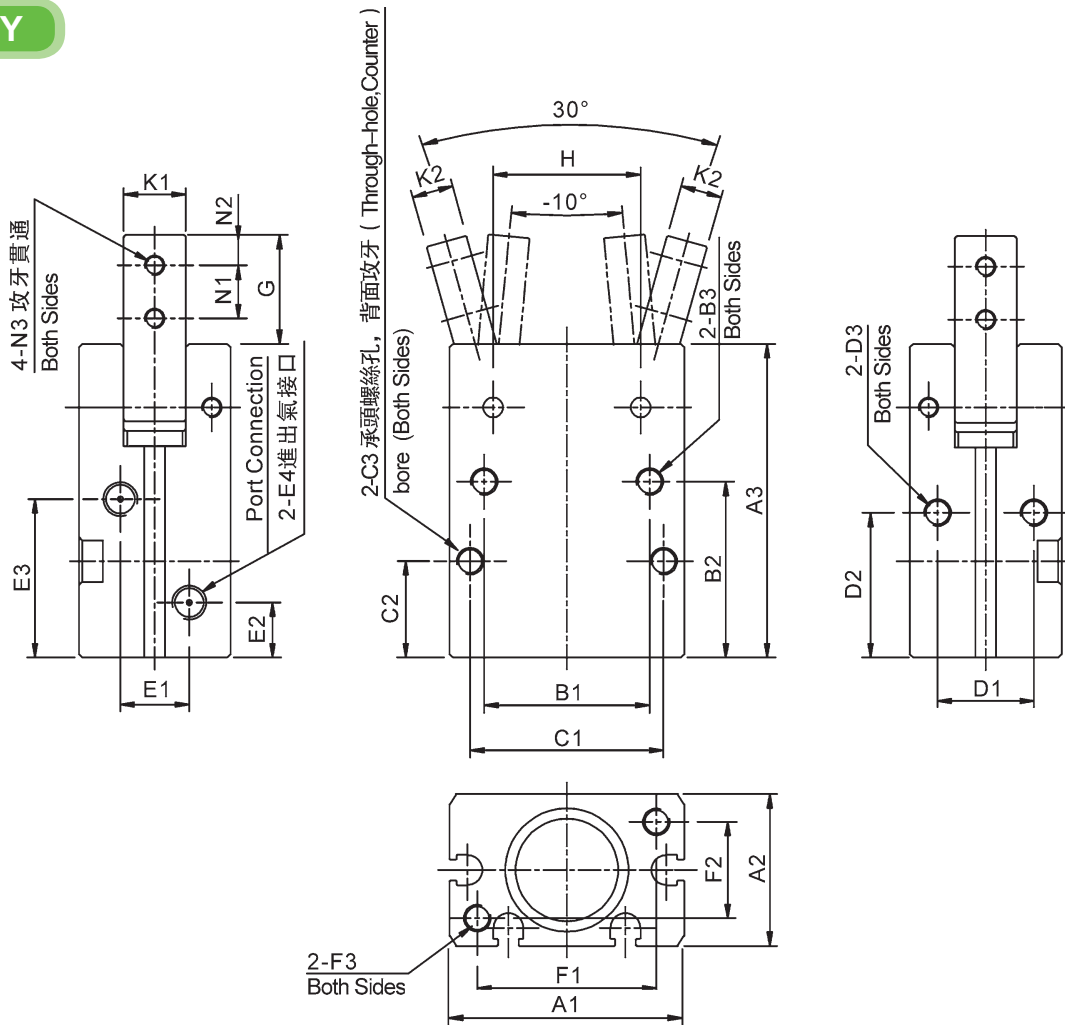
註： F：有效把持力。 M：理論把持力矩。 L：爪臂接點長度。 F: Clamping force. M: Theorem moment. L: Arm length

項目 Item		缸徑 mm Tube I.D.	*ACHP10	ACHP16	ACHP20	*ACHP25	*ACHP32
理論把持力矩 ( M ) Kgf/cm Lubrication	閉側 Closed Side		0.17XP	0.9XP	1.7XP	3.4XP	6.1XP
	開側 Opened Side		0.27XP	1.2XP	2.3XP	4.4XP	8.1XP
最大爪臂接點長度 ( L ) Length Of Maximum			30mm	40mm	60mm	70mm	85mm
夾爪開閉行程 mm Lever Open/Close Angles			4	8	12	14	16

\* 者陸續將開發。

ACHY Y 型外觀尺寸 ACHY Y Type Dimensions  $\Phi 10 \sim \Phi 32$

**ACHY**



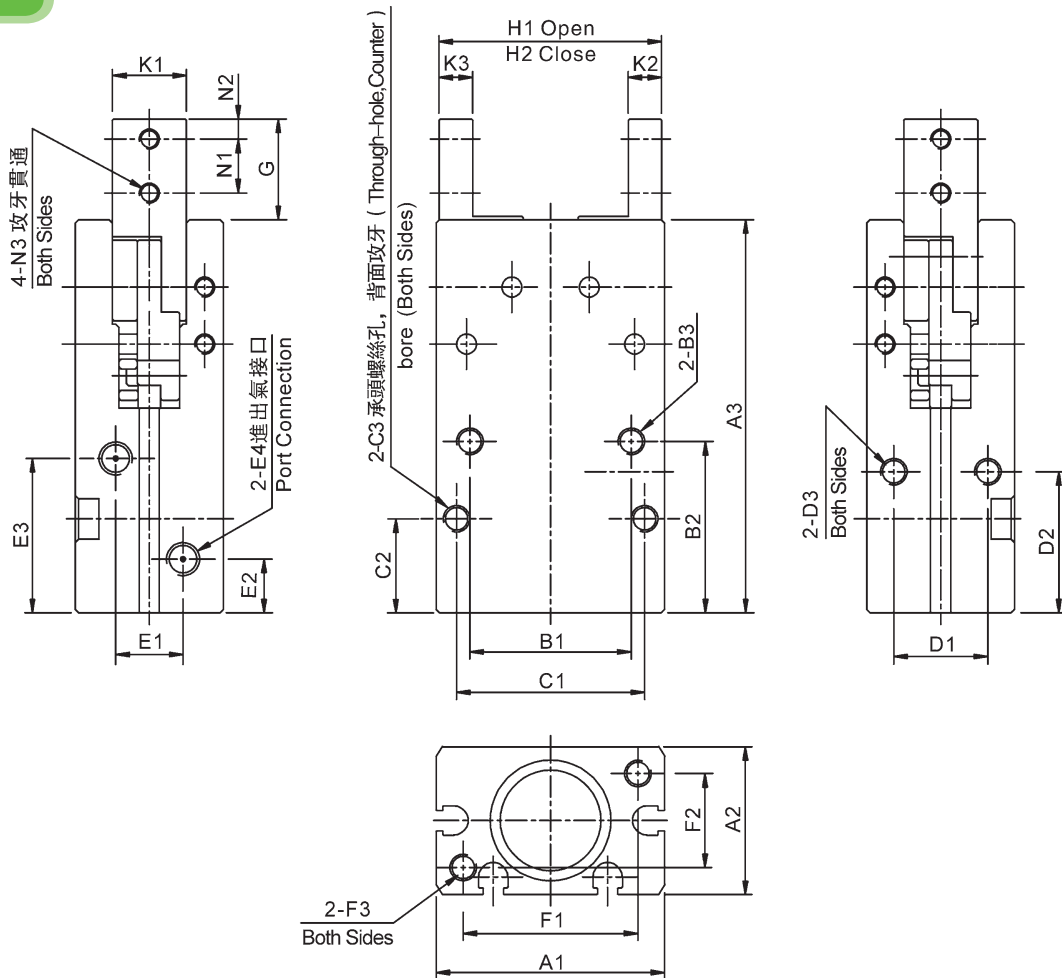
(單位 Unit: mm)

符號 Symbol 缸徑 Tube I.D.	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	E1
* $\Phi 10$	23	16	36.5	18	20	M3X0.5P 深 Depth 6	18	11	M3 深 6 (背面 Back)	10	15.5	M3X0.5P 深 Depth 5	9
$\Phi 16$	34	22	45.5	24	25.5	M4X0.7P 深 Depth 8	28	14	M4X0.7P 深 Depth 8	14	21	M4X0.7P 深 Depth 8	6
$\Phi 20$	45	26	53	30	28	M5X0.8P 深 Depth 10	36	15	M5X0.8P 深 Depth 10	16	22	M5X0.8P 深 Depth 10	8
* $\Phi 25$	52	32	61	36	31.5	M6X1.0P 深 Depth 12	40	16	M6X1.0P 深 Depth 12	20	24.5	M6X1.0P 深 Depth 12	18
* $\Phi 32$	60	40	68	44	37.5	M6X1.0P 深 Depth 15	50	18	M6X1.0P 深 Depth 10	26	30	M6X1.0P 深 Depth 10	24

符號 Symbol 缸徑 Tube I.D.	E2	E3	E4	F1	F2	F3	G	H	K1	K2	N1	N2	N3
* $\Phi 10$	7	20	M3 氣源接口 Air connection	17	10	M3X0.5P 深 Depth 5	15.7	14	7	4	3	6	M3X0.5P
$\Phi 16$	8	23	M5 氣源接口 Air connection	26	14	M4X0.7P 深 Depth 7	17.5	21.4	9	6	3	8	M3X0.5P
$\Phi 20$	9	28	M5 氣源接口 Air connection	35	16	M5X0.8P 深 Depth 10	22	30	12	7	4	10	M4X0.7P
* $\Phi 25$	9.5	30.5	M5 氣源接口 Air connection	40	20	M6X1.0P 深 Depth 10	26	36	14	9	5	12	M5X0.8P
* $\Phi 32$	10	34	M5 氣源接口 Air connection	46	26	M6X1.0P 深 Depth 10	30	42	18	10	6	14	M6X1.0P

ACHP 平行外觀尺寸 ACHP Parallel Type Dimensions  $\Phi 10 \sim \Phi 32$

**ACHP**



(單位 Unit: mm)

符號 Symbol 缸徑 Tube I.D.	A1	A2	A3	B1	B2	B3	C1	C2	C3	D1	D2	D3	E1
* $\Phi 10$	23	16	45	18	20	M3X0.5P 深 Depth 6	18	11	M3 深 6 (背面 Back)	10	15.5	M3X0.5P 深 Depth 5	9
$\Phi 16$	34	22	58.5	24	25.5	M4X0.7P 深 Depth 8	28	14	M4X0.7P 深 Depth 8	14	21	M4X0.7P 深 Depth 8	6
$\Phi 20$	45	26	69.5	30	28	M5X0.8P 深 Depth 10	36	15	M5X0.8P 深 Depth 10	16	22	M5X0.8P 深 Depth 10	8
* $\Phi 25$	52	32	79.5	36	31.5	M6X1.0P 深 Depth 12	40	16	M6X1.0P 深 Depth 12	20	24.5	M6X1.0P 深 Depth 12	18
* $\Phi 32$	60	40	88	44	37.5	M6X1.0P 深 Depth 15	50	18	M6X1.0P 深 Depth 10	26	30	M6X1.0P 深 Depth 10	24

符號 Symbol 缸徑 Tube I.D.	E2	E3	E4	F1	F2	F3	G	H1	H2	K1	K2	N1	N2	N3
* $\Phi 10$	7	20	M3 氣源接口 Air connection	17	10	M3X0.5P 深 Depth 5	13	22	18	7	4	3	6	M3X0.5P
$\Phi 16$	8	23	M5 氣源接口 Air connection	26	14	M4X0.7P 深 Depth 7	15	33	25	11	5	3	8	M3X0.5P
$\Phi 20$	9	28	M5 氣源接口 Air connection	35	16	M5X0.8P 深 Depth 10	19	44	32	12	6	4	10	M4X0.7P
* $\Phi 25$	9.5	30.5	M5 氣源接口 Air connection	40	20	M6X1.0P 深 Depth 10	24	51	37	14	8	5	12	M5X0.8P
* $\Phi 32$	10	34	M5 氣源接口 Air connection	46	26	M6X1.0P 深 Depth 10	31	60	44	18	9	7	15	M6X1.0P

Air Chuck Hand  
氣壓夾爪

ACH

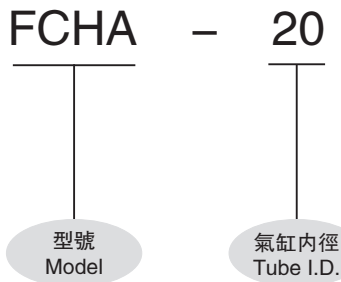
## 特點 Features

- 可因應各種場合需要不同夾持力量 提供多種口徑選擇 (Φ12 ~ 32)。
- 高準確度，空間開關工作。
- 全系列均附磁。
- Available with comprehensive range of bore sizes 12 ~ 32 mm.
- Highly accurate air driven for holding work-piece.
- Magnetic as standard.

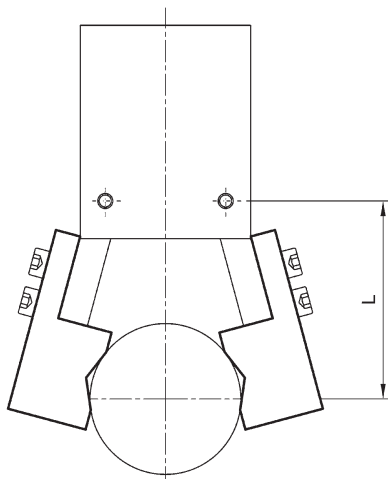
## 規格 Specification

型號 Model		FCHA				
作動方式 Acting Type		復動型 Double acting				
氣缸內徑 Tube I.D. (mm)		12	16	20	25	32
配管口徑尺寸 Port Size		M3 × 0.5	M5 × 0.8			
使用流體 Medium		空氣 Air				
使用壓力範圍 Operating Pressure Range		1.5 ~ 7kgf/cm <sup>2</sup> (0.15 ~ 0.7Mpa)				
周圍溫度 Ambient Temperature		-5°C ~ +60°C (不凍結 No freezing)				
最高作動頻率 Max. Frequency		180次 / 分鐘 180 Cycles/min				
給油 Lubrication	氣缸 Cylinder	不需給油 Not required				
	爪片 Lever	要 (塗抹潤滑油) Grease (Actuation at)				
最大爪臂長度 Max Arm Length (L)※		30	40	60	70	85
夾爪開關角度 Clamp/Release angle		-10 ~ 30°				
理論把持力矩 Theorem Moment (M)※	閉側 Closed	0.4 × P	0.9 × P	1.7 × P	3.4 × P	6.1 × P
	開側 Open	0.5 × P	1.2 × P	2.3 × P	4.4 × P	8.1 × P
有效把持力 (F) ※ Clamping Force		F = M/L × 0.85				
感應開關 Sensor Switch		RCE,RCE1				
重量 Weight (g)		53	103	193	327	525

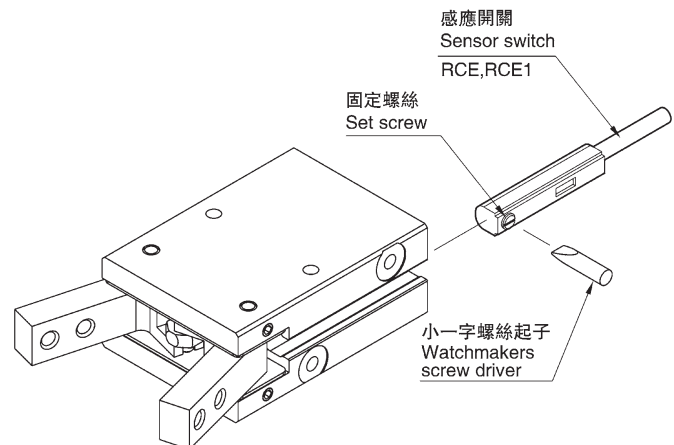
## 訂購代碼 Ordering Code

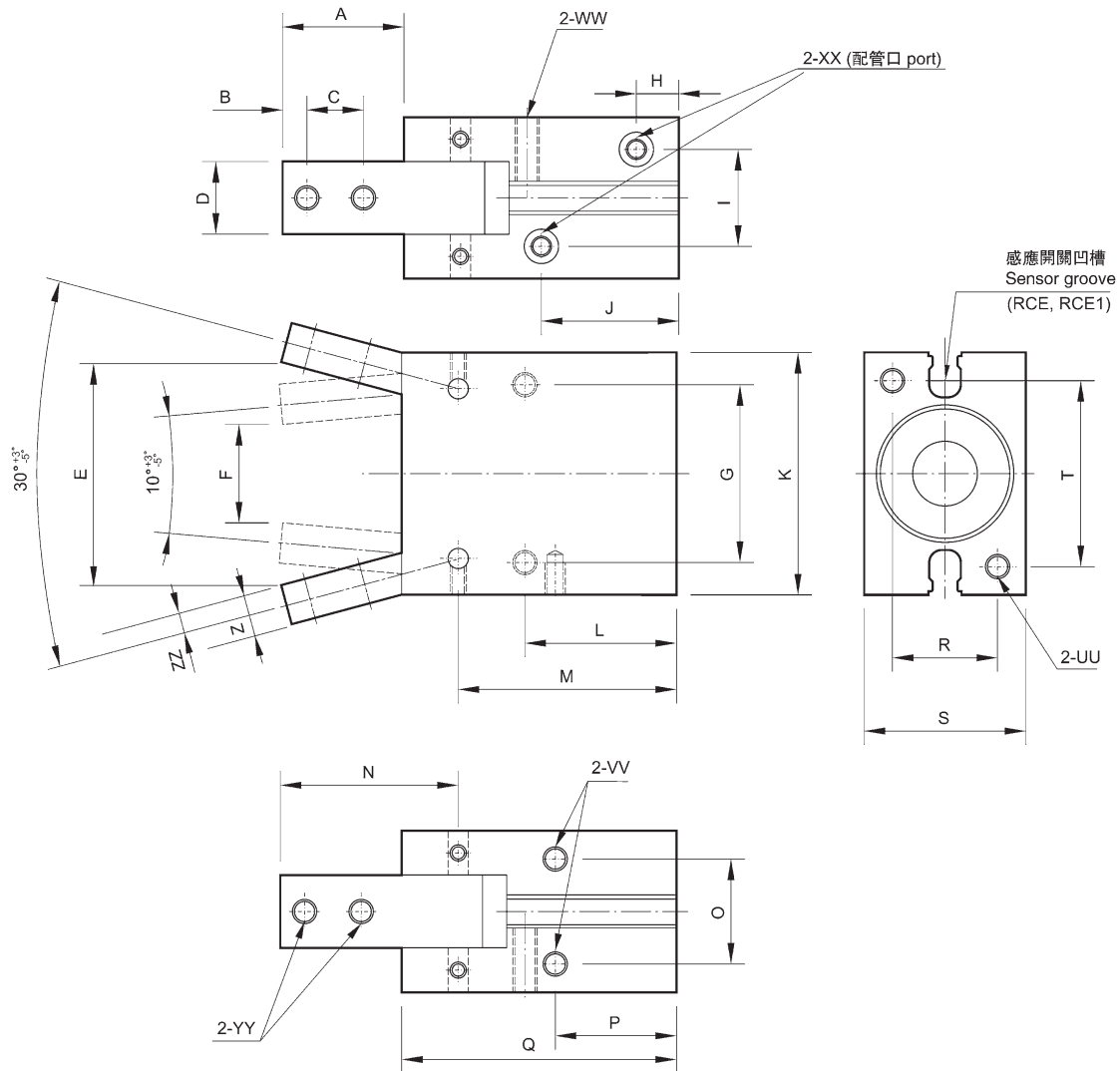


## 爪臂之接點長度 Length of gripping point



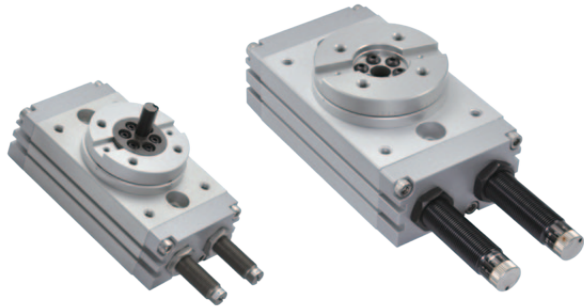
## 感應開關安裝 Installation of sensor switch





代號 Code 內徑 Tube I.D.	A	B	C	D	E	F	G	H	I	J	K	L	M
12	15.4	3	6	7	26.3	9	20	7.5	10.2	23.5	28	20	32.9
16	17.5	3	8	9	31.1	14	24	7.5	12	22	34	22.5	35
20	22	4	10	12	40.1	18	30	8.0	13	25	45	25	39.5
25	26	5	12	14	47.9	21	36	8.5	18	28	52	28.5	45.5
32	30	6	14	18	55.1	24	44	10.5	24	34	60	37.5	54

代號 Code 內徑 Tube I.D.	N	O	P	Q	R	S	T	UU	VV	WW	XX	YY	Z	ZZ
12	21.5	10.2	16	39	10	16	22	M3	M3	M3	M3	M3	5	2.5
16	25	14	18	42.5	14	22	26	M4	M4	M4	M5	M3	6	3
20	32.5	16	19	50	16	26	35	M5	M5	M5	M5	M4	7	3.5
25	38.5	20	21.5	58	20	32	40	M6	M6	M6	M5	M5	9	4
32	44	26	30	68	26	40	46	M6	M6	M6	M5	M6	10	5



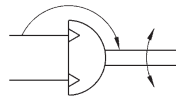
### 特點 Features

- 同時藉雙缸作動及齒條一齒輪的旋轉驅動機構。
- 可大幅度地調整旋轉角度 (0° ~ 190°) 及三種本體安裝方式。
- 利用軌型槽安裝感應開關, 可容易地調整感應位置。
- 全系列均附磁。
- Twin rack and pinion fitted as standard.
- Can be adjusted between 0 and 190 degrees.
- Simple mounting of sensors.
- Magnetic as standard.

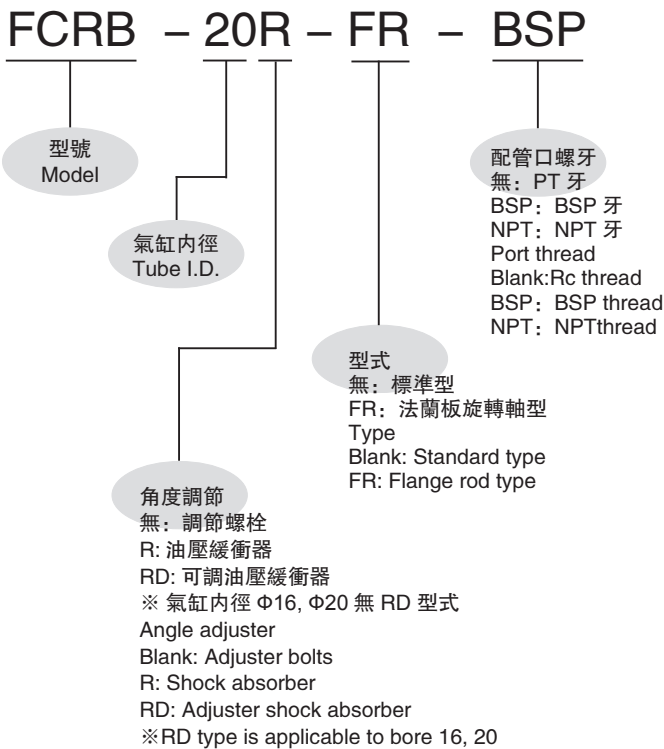
### 規格 Specification

型號 Model	FCRB				
作動方式 Acting Type	複動型 Double acting				
氣缸內徑 Tube I.D. ( mm )	16	20	25	32	
配管口徑尺寸 Port Size	PT 1/8				
使用流體 Medium	空氣 Air				
使用壓力範圍 operating Pressure Range	1 ~ 9.9 kgf/cm <sup>2</sup>				
耐壓力 Proof Pressure	15 kgf/cm <sup>2</sup>				
周圍溫度 Ambient Temperature	-5°C ~ +60°C (不凍結 No freezing)				
給油 Lubrication	不需給油 Not required				
緩衝裝置 Cushion	NBR 緩衝壓片 spacer				
容許運動能量 Allowable Kinetic Energy	緩衝墊塊 Cushion Pad	0.007J	0.040J	0.081J	0.32J
	緩衝器 Cushion	0.039J	0.116J	0.294J	1.6J
搖動時間調整範圍 Stable rotation time regulation range	0.2 ~ 1.0 s/90°				
感應開關 Sensor Switch (※)	RCD				
重量 Weight ( kg )	0.7	1.16	1.57	3.07	

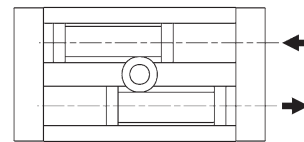
### 符號 Symbol



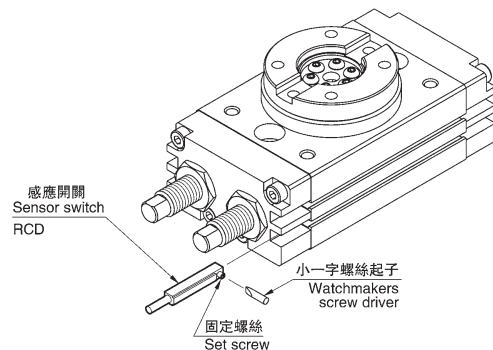
### 訂購代碼 Ordering Code



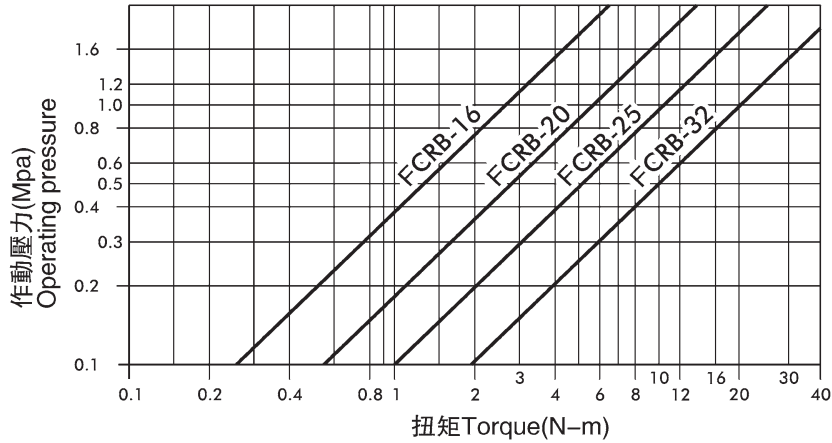
### 作動型式 Action profile



### 感應開關安裝 Installation of sensor switch



## 作動壓力 – 工作扭矩關係圖 Torque diagram



## 理論扭矩出力表 Theoretic force

單位 Unit: N · m (kgf · m)

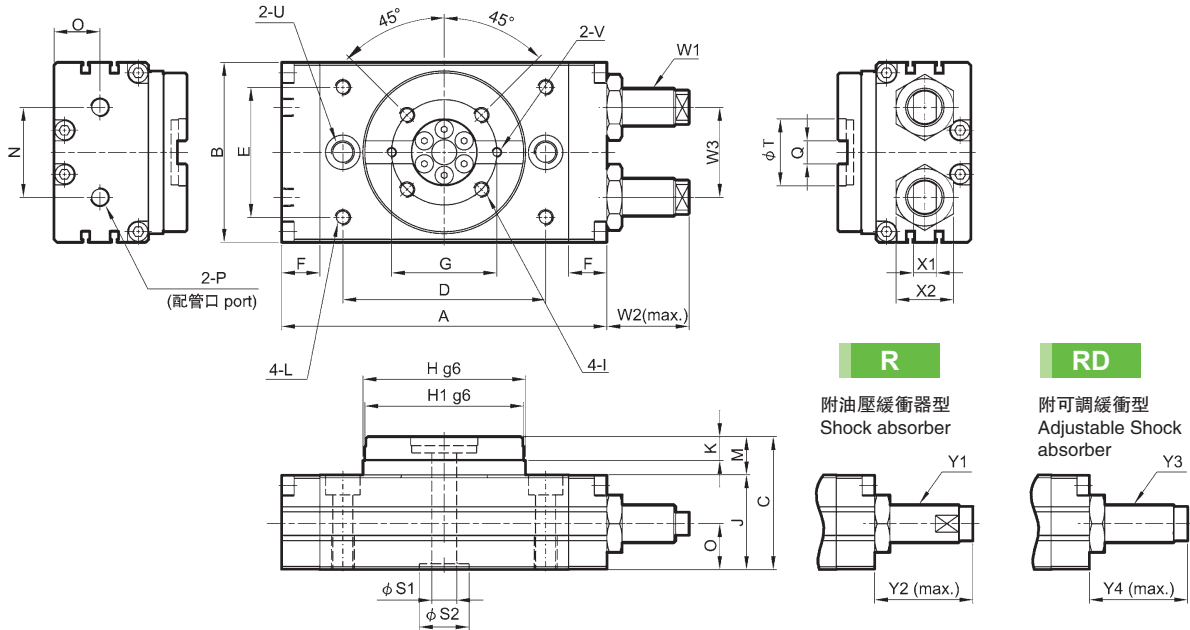
型式 Type		FCRB			
缸徑 Tube I.D.		16	20	25	32
操作壓力 Operating pressure (Mpa)	0.1	0.24 (0.02)	0.50 (0.05)	0.98 (0.1)	1.94 (0.2)
	0.2	0.48 (0.05)	1.01 (0.1)	1.96 (0.2)	3.86 (0.39)
	0.3	0.72 (0.07)	1.51 (0.15)	2.95 (0.3)	5.80 (0.59)
	0.4	0.96 (0.1)	2.01 (0.2)	3.93 (0.4)	7.72 (0.79)
	0.5	1.21 (0.12)	2.51 (0.25)	4.91 (0.5)	9.86 (1.0)
	0.6	1.45 (0.15)	3.02 (0.3)	5.89 (0.6)	11.58 (1.18)
	0.7	1.69 (0.17)	3.52 (0.35)	6.87 (0.7)	13.52 (1.38)

## 容許荷重 Allowable Load

Set the load and moment to be applied to the table within the allowable values show in the table below.  
(Values outside of limitations will cause excessive play, deteriorate accuracy, and shorten service life.)

缸徑 Tube I.D.	容許徑向荷重 (N) Allowable radial load	容許荷重 (N) Allowable thrust load		容許力矩 (N.m) Allowable moment
		(a)	(b)	
		16	78	
20	147	137	137	4.0
25	196	197	363	5.3
32	314	296	451	9.7





代號 Code 內徑 Tube I.D.	A	B	C	D	E	F	G	H	H1	I	J	K	L	M	N	O	P
16	108	58	47	62	38	15	38	50	48	M5 x 7 深 dp, P.C.D38	33	8	M5 x 8 深 dp	14	26	15.5	PT1/8
20	128	68	55	78	47	15	46	62.5	60	M6 x 7 深 dp, P.C.D46	38	10	M6 x 8 深 dp	17	27	18.5	PT1/8
25	135.5	77	58.5	84	55	15.5	48	67	65	M6 x 9 深 dp, P.C.D48	41.5	10	M5 x 8 深 dp	17	37	20	PT1/8
32	170	94	69.5	106	68	20	55	85	83	M8 x 10 深 dp, P.C.D55	49.5	12.5	M8 x 8.5 深 dp	20	47	24	PT1/8

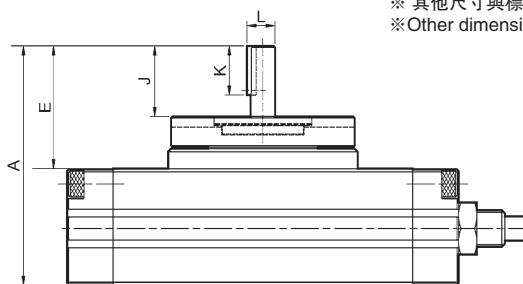
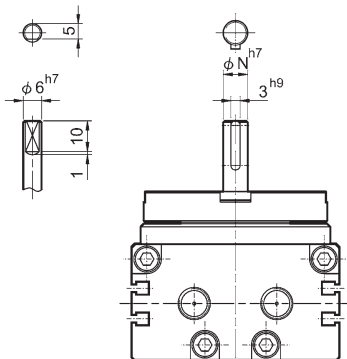
代號 Code 內徑 Tube I.D.	Q	S1	S2	T	U
16	8 <sup>+0.03</sup> <sub>-0</sub> (寬 wide) x 3.3 深 dp	6	17(H7) x 2.5 深 dp	24(H7) x 3 深 dp	2- $\Phi 6.8$ 貫通 thru, $\Phi 11 \times 6.5$ 深 dp, M8 x 12dp (底側 sink)
20	10 <sup>+0.03</sup> <sub>-0</sub> (寬 wide) x 3.5 深 dp	10	22(H7) x 2.5 深 dp	32(H7) x 3 深 dp	2- $\Phi 8.6$ 貫通 thru, $\Phi 14 \times 8.5$ 深 dp, M10 x 15dp (底側 sink)
25	12 <sup>+0.03</sup> <sub>-0</sub> (寬 wide) x 4 深 dp	13	22(H7) x 3 深 dp	32(H7) x 3.7 深 dp	2- $\Phi 8.6$ 貫通 thru, $\Phi 14 \times 8.5$ 深 dp, M10 x 15dp (底側 sink)
32	12 <sup>+0.03</sup> <sub>-0</sub> (寬 wide) x 5 深 dp	13	26(H7) x 3 深 dp	35(H7) x 4.7 深 dp	2- $\Phi 10.5$ 貫通 thru, $\Phi 18 \times 10.5$ 深 dp, M12 x 18dp (底側 sink)

代號 Code 內徑 Tube I.D.	V	W1	W2	W3	X1	X2	Y1	Y2	Y3	Y4
16	M3 x 4 深 dp	M10 x 1.0	27	26	7	17	MAC1007-SN	31	-	-
20	M4 x 6 深 dp	M12 x 1.0	23	32	8	19	MAC1210-SN	36	-	-
25	M4 x 5 深 dp	M14 x 1.5	36	37	8	22	MAC1412-SN-01Q (對邊 Opposite sides12)	50	MAD1410-N	72
32	M5 x 5 深 dp	M20 x 1.5	43	47	12	30	MAC2015-SN-01Q (對邊 Opposite sides18)	51	MAD2016-CN	96

### 法蘭板旋轉軸型 Flange rod type

**$\Phi 16$**

**$\Phi 20 \sim \Phi 32$**



代號 Code 內徑 Tube I.D.	A	E	J	K	L	N
16	64.5	31.5	17.5	-	-	-
20	78	40	23	16	9.2	8
25	81.5	40	23	20	11.2	10
32	109.5	60	40	20	13.2	12

※ 其他尺寸與標準型相同  
※ Other dimensions are the same as standard type.

### 特點 Features

- 本系列迴轉氣缸，造型美觀，性能優異，具高扭力。
- 一律附有磁性感應及角度調整裝置。
- Hard anodised aluminium body is standard.
- Clean lines with high functionality.
- Carbon steel rack and pinion with low backlash.
- Simple adjustment of rotary movement.
- Magnetic as standard.



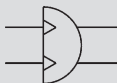
### 規格 Specification

型號 Model	FRTF, FRTH, FRTH-D			
氣缸內徑 Tube I.D. (mm)	40	63	80	
旋轉角度 Standard Rotation (mm)	90 ± 5° , 180 ± 5°			
轉軸原點 Initial Position of Slot (mm)	詳見尺寸圖 See dimensional feature			
使用流體 Medium	已濾清加油霧之壓縮空氣 Filtered air with or without lubrication			
使用壓力範圍 Operating Pressure Range	1.3 ~ 7 kgf/cm <sup>2</sup>			
周圍溫度 Ambient Temperature	-5° ~ +60°C (不凍結 No freezing)			
允許軸向負荷 Max. Allowable Axial Thrust (kg)	10	12	20	
最大容許動能 Max. allowable kinetic energy	90°	0.266J	0.675J	1.34J
	180°	0.58J	1.54J	3.03J
最大容許徑向推力 Max. allowable radial trust ( F )	52.5kg	74kg	91.5kg	
感應開關 Sensor Switch	LN01A	LN02A	LN03A	

FRTH 外軸型迴轉缸  
Male pivot gear (standard type)

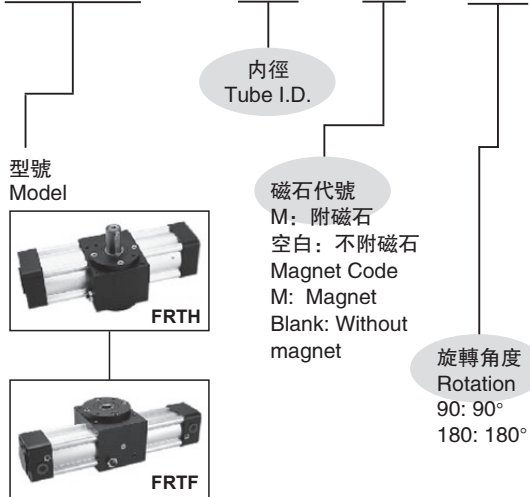
FRTH-D 雙心外軸型迴轉缸  
Male pivot gear (double end rod type)

FRTF 內孔型迴轉缸  
Female pivot gear

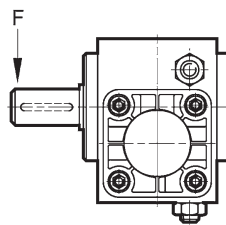


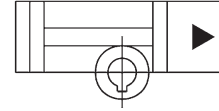
### 訂購代碼 Ordering Code

FRTH - 40 M 90 - D



### 最大容許徑向推力 Max. allowable radial trust





## 空氣消耗量 (一來迴行程) Compressed air consumption for a complete cycle

單位 Unit: L/cycle

型號 Model	角度 Rotation	作動壓力 Operating Pressure (Mpa)									
		0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
FRTH40	90°	0.1571	0.2352	0.3133	0.3915	0.4696	0.5477	0.6259	0.7040	0.7821	0.8603
FRTF40	180°	0.3141	0.4704	0.6267	0.7829	0.9392	1.0955	1.2517	1.4080	1.5643	1.7205
FRTH63	90°	0.4383	0.6564	0.8744	1.0925	1.3105	1.5286	1.7466	1.9647	2.1828	2.4008
FRTF63	180°	0.8766	1.3127	1.7488	2.1850	2.6211	3.0572	3.4933	3.9294	4.3655	4.8016
FRTH80	90°	0.8480	1.2698	1.6917	2.1135	2.5354	2.9572	3.3791	3.8009	4.2228	4.6447
FRTF80	180°	1.6959	2.5396	3.3834	4.2271	5.0708	5.9145	6.7582	7.6019	8.4456	9.2893

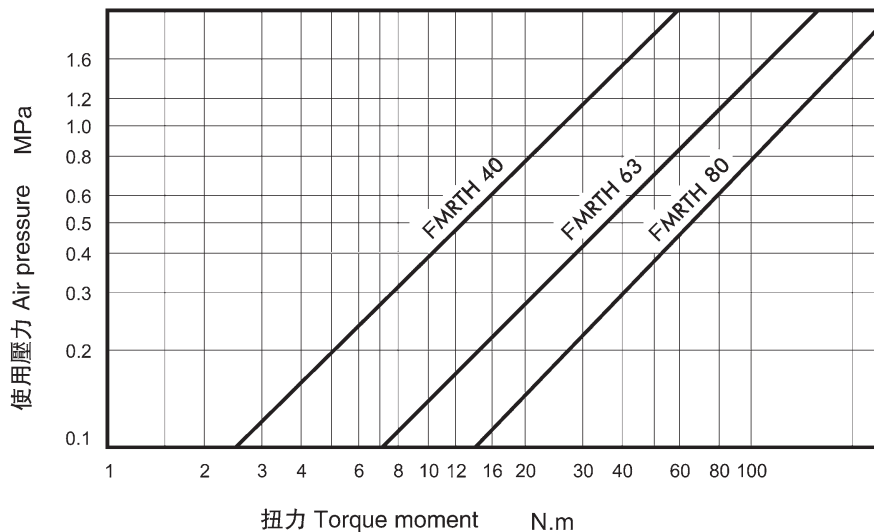
型號 Model	FRTH, FRTF		
氣缸內徑 Tube I.D. (mm)	40	63	80
角度係數 Constant K	0.3491	0.3927	0.4712

## 空氣消耗量計算方式: The method of calculation (Compressed air consumption)

$$Q = 2 \times K \times A \times n \times Dg \times \frac{P+0.101}{0.101} \times 10^{-6}$$

Q:	空氣消耗量 Compressed air consumption	(L/cycle)
A:	氣缸之截面積 Piston area	(mm <sup>2</sup> )
Dg:	旋轉角度 Rotation	
P:	操作壓力 Air pressure	(MPa)
K:	角度係數 Constant	
n:	搖動頻率 Cycle of operation	(次 cycle/min)

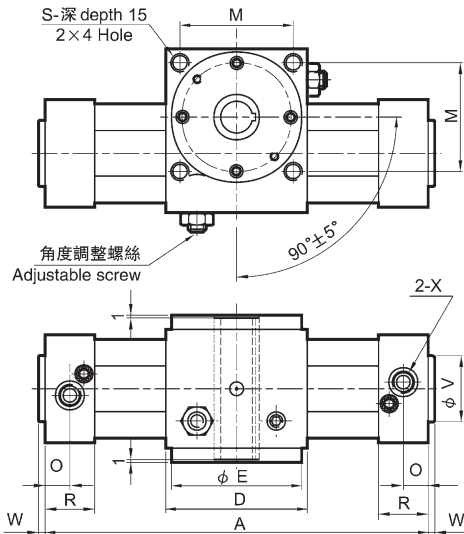
## 扭力出力表 Output torque table



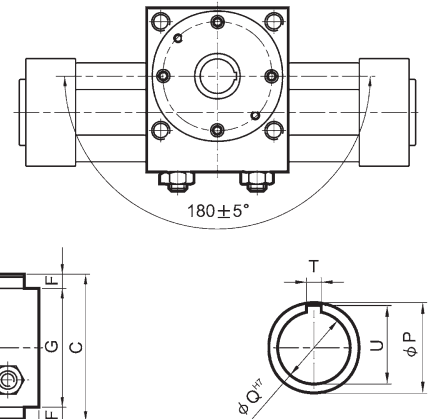
外觀尺寸 Dimensions  $\Phi 40 \sim \Phi 80$

### FRTF

迴轉角度90°  
Angle of rotation 90°



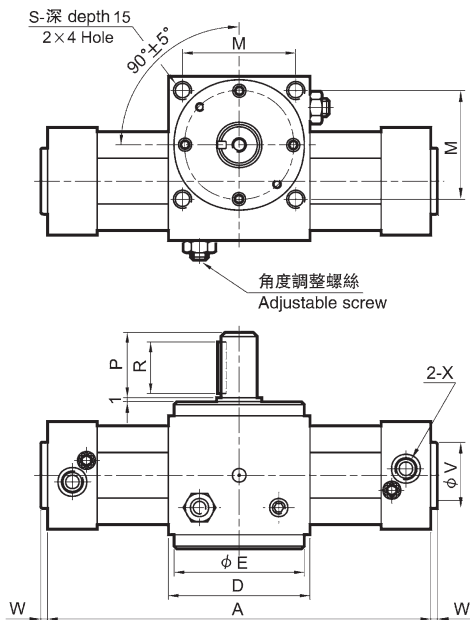
迴轉角度180°  
Angle of rotation 180°



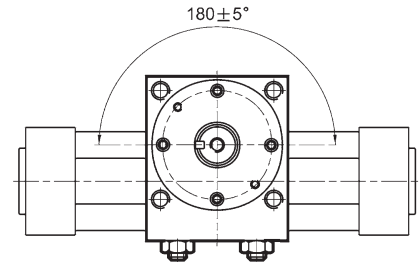
代號 Code 型號 Model	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
FRTF40	263	326	81	75	72	8	65	53	37.5	93	27.5	60	38	15	25	14	30	M6	5	16.5	35	4	G 1/4	M6
FRTF63	306	377	95	90	82	10	75	75	42.5	110	30	70	56.5	16	30	19	32	M8	6	22	45	5	G 3/8	M8
FRTF80	343	428	119	105	96	12	95	95	51.5	135	36	82	72	19	45	24	38	M10	6	27.5	45	5	G 3/8	M10

### FRTH

迴轉角度90°  
Angle of rotation 90°



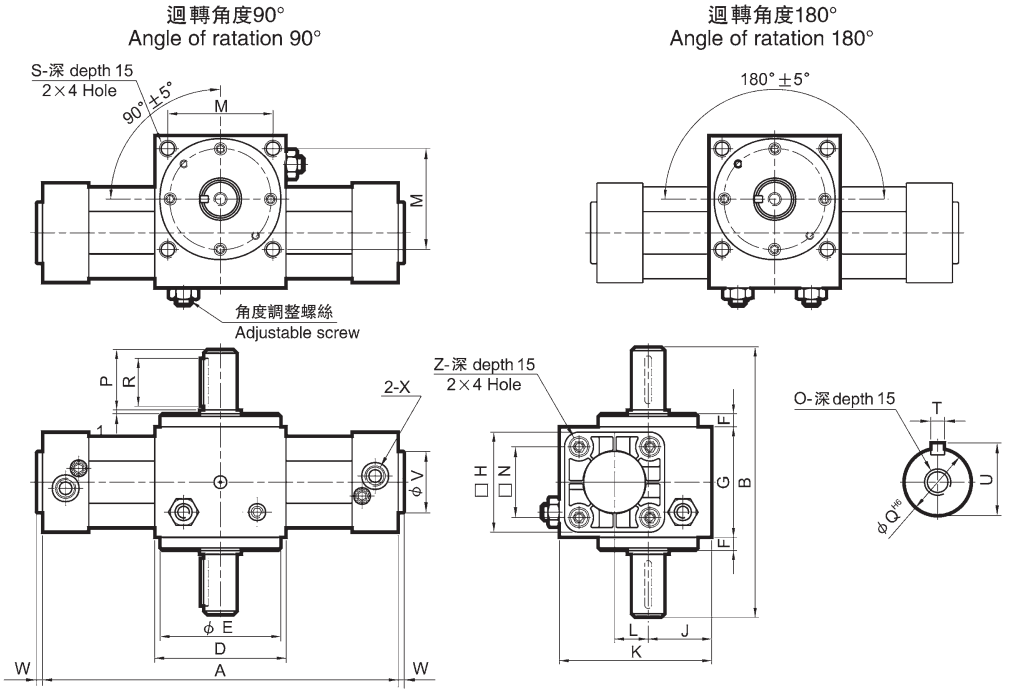
迴轉角度180°  
Angle of rotation 180°



軸心加大訂製品 Bigger axis	P	Q	T
FRTH63		28	
FRTH80	58	35	10

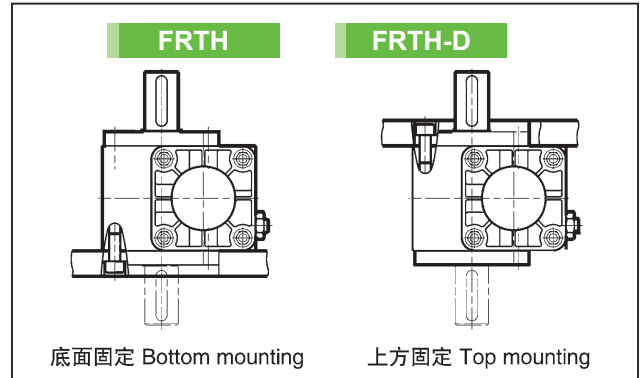
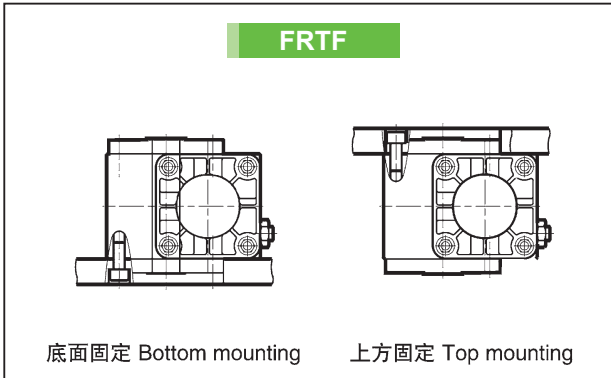
代號 Code 型號 Model	A		C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
FRTH40	263	326	112	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16	25	M6	5	18	35	4	G 1/4	M6
FRTH63	306	377	138	90	82	10	75	75	42.5	110	30	70	56.5	M8	42	24	36	M8	8	27	45	5	G 3/8	M8
FRTH80	343	428	170	105	96	12	95	95	51.5	135	36	82	72	M8	50	28	45	M10	8	31	45	5	G 3/8	M10

#### FRTH-D

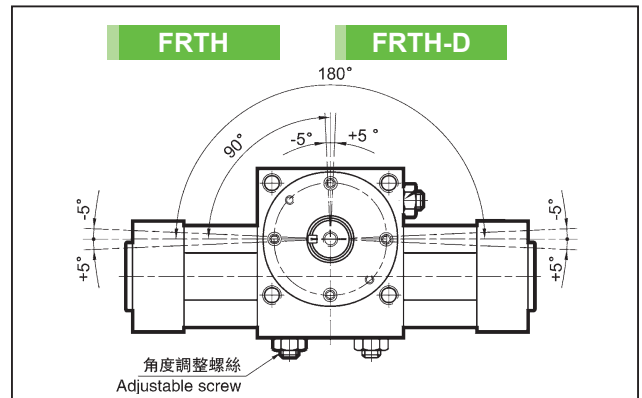
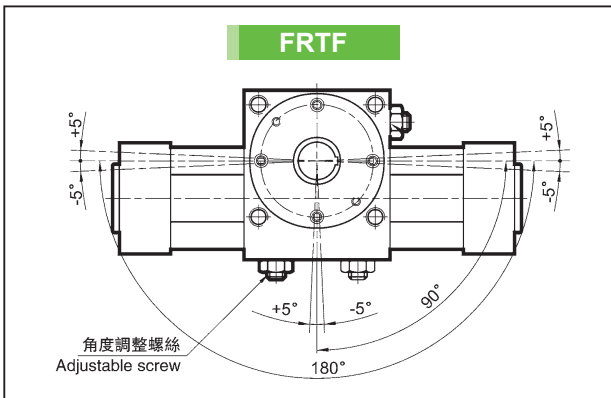


代號 Code 型號 Model	A		B	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Z
	90°	180°																						
FRTH40-D	263	326	143	75	72	8	65	53	37.5	93	27.5	60	38	M5	30	16	25	M6	5	18	35	4	G 1/4	M6
FRTH63-D	306	377	181	90	82	10	75	75	42.5	110	30	70	56.5	M8	42	24	36	M8	8	27	45	5	G 3/8	M8
FRTH80-D	343	428	221	105	96	12	95	95	51.5	135	36	82	72	M8	50	28	45	M10	8	31	45	5	G 3/8	M10

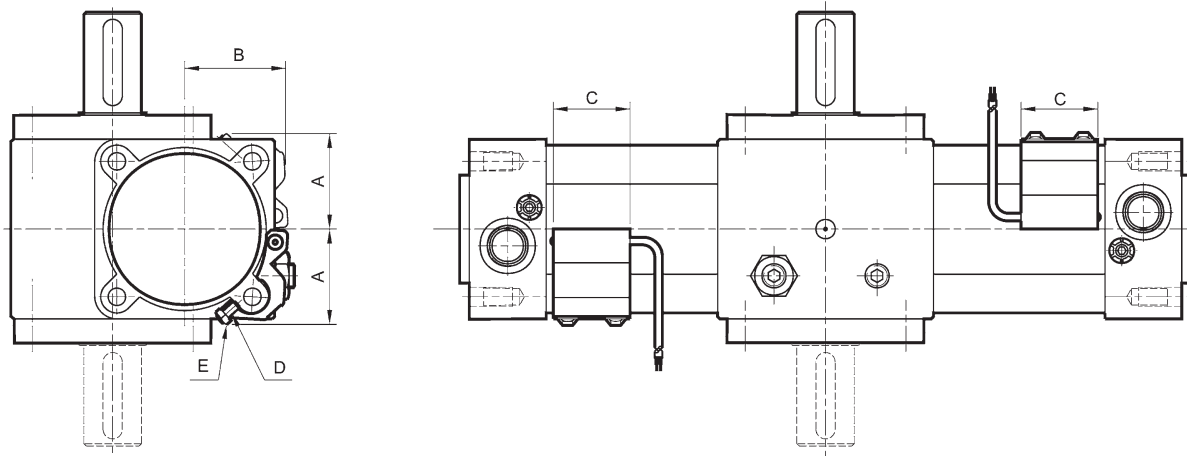
#### 固定方式: Mounting type



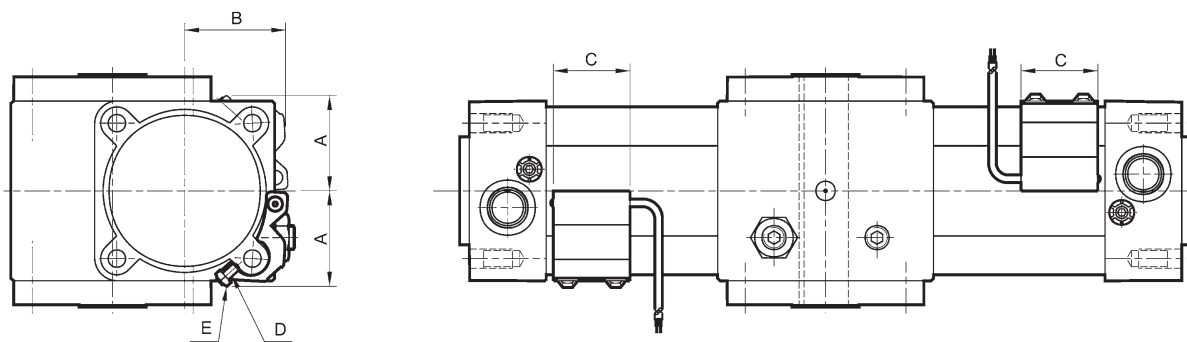
#### 迴轉角度及調整範圍: Rotating direction and adjustable angle



**FRTH-D**



**FRTF**



迴轉氣缸  
Rotary Actuator  
FRT\*

氣徑內徑 Tube I.D.	感應開關模式 Sensor switch	A	B	C	D	E
40	LN01A	29	32	32	M4 × 8L	M4
63	LN02A	40	43	32	M4 × 10L	M4
80	LN03A	49.5	52	32	M4 × 12L	M4

**重量表 Cylinder Weight**

單位 Unit: kg

型號 & 迴轉角度 Model & Standard Rotation	FRTH		FRTH-D		FRTF		感應器型式 Sensor switch
	90°	180°	90°	180°	90°	180°	
氣缸內徑 Tube I.D.							
40	3.00	3.10	3.05	3.15	2.84	2.94	
63	5.40	5.80	5.55	5.95	5.07	5.47	
80	9.75	10.30	9.99	10.54	9.19	9.47	0.086



### 特點 Features

- 空壓轉角下壓缸主要使用在空間狹小，且無任何輔助壓板下，能輕易的夾持及放鬆工作。
- 本空壓轉角下壓缸為下拉式氣缸，並有五種規格及兩種可 360° 任意安裝之壓板供選擇。
- These swing clamps are used when it is required to keep the fixture workpiece loading and un-loading.
- This pneumatic clamping element is a pull type cylinder, there are five standard sizes, and for each size two versions of standard clamping arms, mounting of these clamping arms at angle within 360.

### 注意事項 Note

- 在使用空壓轉角下壓缸時，若需要增長壓板之長度時，請勿大於原長之 1.5 倍。
- 建議使用空壓轉角下壓缸時，請加裝流量控制閥，避免因速度過快而損壞缸體及內部零件。
- Please don't exceed 1.5 times of the original length, if it is necessary to increase the length of the clamping arm.
- Suggested to install a flow control valve protect cylinder barrel and internal components against fretting wear.

### 規格 Specification

型號 Model	FTAS (單邊壓板型) (Single side clamping arm)	FTAD (雙邊壓板型) (Double side clamping arm)
動作方式 Acting Type	複動型 Double acting	
氣缸內徑 (mm) Tube I.D. (mm)	25,32,40,50,63	32,40,50,63
使用流體 Power Fluid	過濾空氣 Filtered air with or without lubrication	
使用壓力範圍 The Range of Pressure	1 ~ 10.3 kgf/cm <sup>2</sup>	
耐壓力 Max. Pressure	14.7 kgf/cm <sup>2</sup>	
缸體材質 Material of Cylinder Barrel	鋁合金管 (硬質陽極處理) Anodised aluminium alloy	
標準旋轉角度 Standard Angle of Rotation	90° ± 2° ( 0°、45°、60° 為可供選擇之角度 ) ( Angle of 0° , 45° and 60° are optional )	
旋轉方向 Rotating Direction	順時針 ( CM ) 或逆時針 ( CCW ) Clockwise or counter clockwise	
感應開關 Sensor Switch	LN40R	

#### FTAS/FTAD

複動單邊 / 雙邊壓板型  
Single side clamping arm、Double sides clamping arm

#### FTAS .F/FTAD .F

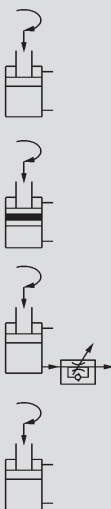
複動單邊 / 雙邊壓板型 (附磁型)  
Single side clamping arm、Double side clamping arm  
(Piston with magnet)

#### FTAS .FC/FTAD .FC

複動單邊 / 雙邊壓板型 (深孔附調速閥)  
Single side clamping arm、Double side clamping arm  
(Manifold with flow control)

#### FTAS .FA/FTAD .FA

複動單邊 / 雙邊壓板型 (法蘭型)  
Single side clamping arm、Double side clamping arm  
(Flange type)



### 訂購代碼 Ordering Code

FTAS L - 25M - CW - 90 - FC - B

垂直下壓行程  
無：標準型  
L：加長型  
Clamping Stroke  
Blank: Standard  
L: Lengthened

M：附磁石  
※ 僅適用標準型。  
M: Magnet  
※ Only for standard type.

旋轉方向  
CCW: 逆時針旋轉  
CW: 順時針旋轉  
Rotating direction  
CCW: Counter clockwise  
CW: clockwise

旋轉角度  
90: 標準旋轉角度 90°  
Rotating angle  
90°: Standard rotation

壓板型式  
無：標準型  
B: 加長型  
Clamping arm type  
Blank: Standard  
B: Extension

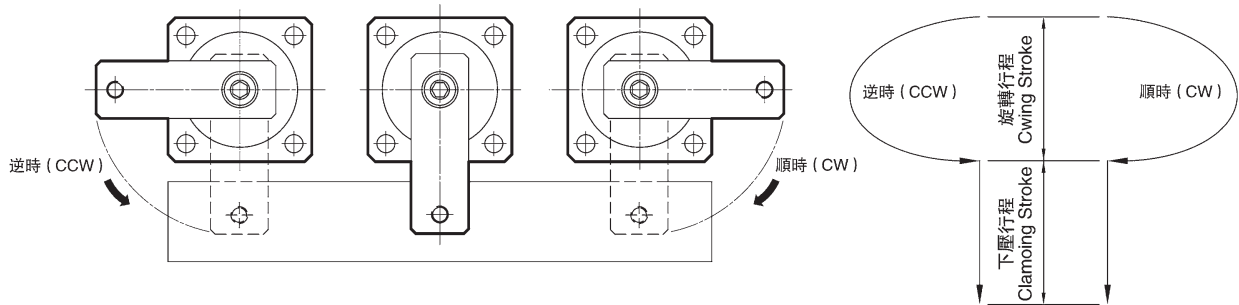
固定型式  
Mounting type

FA  
FC

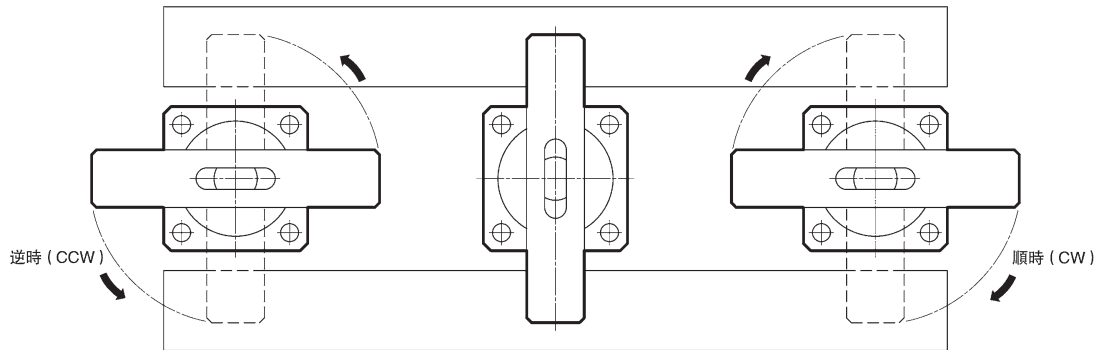
※ 僅適用於不附磁型。  
※ 1: Only for without magnet type.  
※ 2: FC type required with the manifolds.

操作注意事項 Precautions be sure to read before handling  $\Phi 25 \sim \Phi 63$

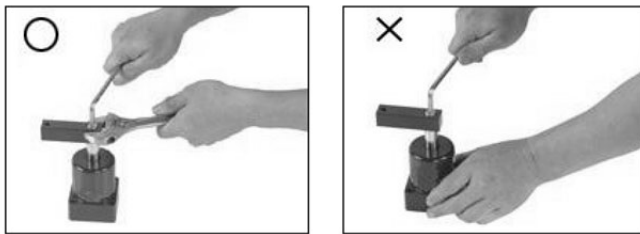
### 單邊壓板旋轉示意圖 Single side swing clamp



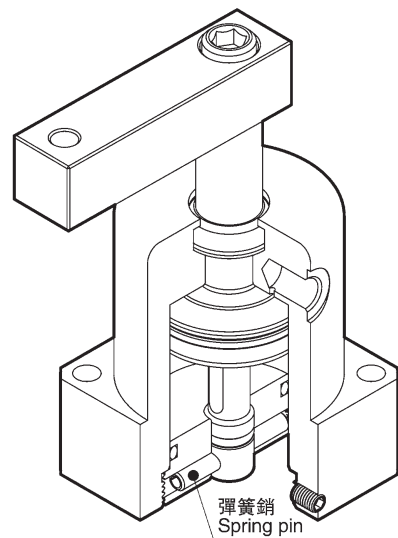
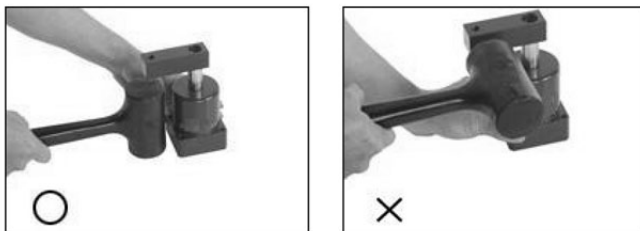
### 雙邊壓板旋轉示意圖 Double side swing clamp



### 壓板鎖緊操作方式 Clamping arm mounting methods



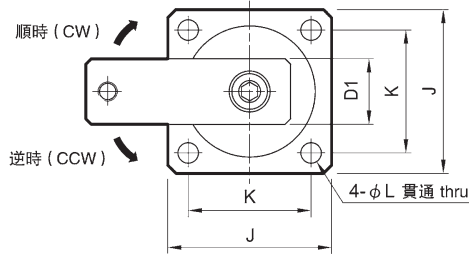
### 壓板拆卸操作方式 Clamping arm removing methods



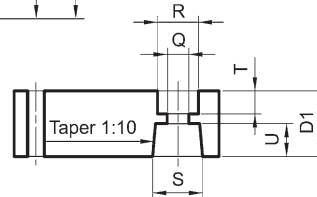
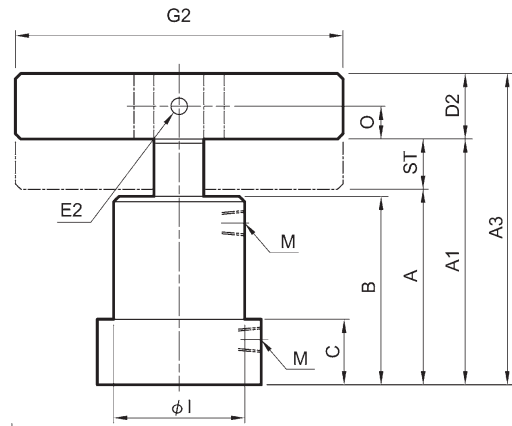
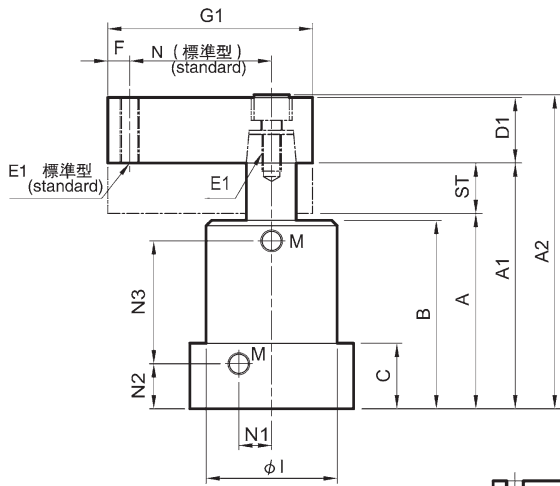
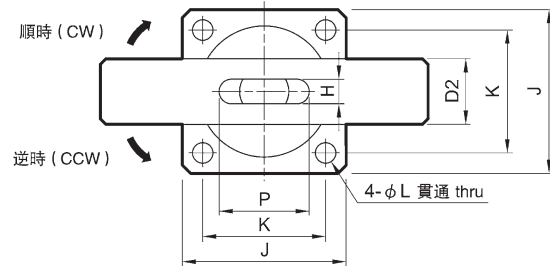
註：在錯誤方式鎖緊及拆卸壓板，彈簧銷易造成斷裂；使轉角缸作動時，會發生旋轉角度位置偏移或動作不順暢。  
Note: If the clamping arm is wrong mounting and removing, the spring pin is broken easily.  
Then the rotation angle is deviation or the action is not smooth when the cylinder works.



### FTAS/FTASL



### FTAD/FTADL



單邊壓板安裝尺寸  
Single side clamping arm

型號 Model	氣缸內徑 Tube I.D. (mm)	活塞桿徑 Piston rod (mm)	轉角行程 Swing stroke (mm)	垂直下壓行程 Clamping stroke (mm)		受壓面積 壓側/拉側 Pressure area push/pull(mm <sup>2</sup> )	理論加持力 Clamping force N(0.6Mpa)	板壓型式 Clamping arm type			
				標準 Standard	加長※ Extension			G1		G2	
FTAS-25	$\Phi 25$	$\Phi 14$	9	13	-	491/337	200	50	70	-	-
FTAS-32 FTAD-32	$\Phi 32$	$\Phi 16$	11	15	30	804/603	360	70	100	140	200
FTAS-40 FTAD-40	$\Phi 40$	$\Phi 16$	11	15	30	1257/1056	630	75	100	140	200
FTAS-50 FTAD-50	$\Phi 50$	$\Phi 20$	13	17	34	1963/1649	980	85	130	160	230
FTAS-63 FTAD-63	$\Phi 63$	$\Phi 20$	13	17	34	3117/2803	1680	95	130	160	230

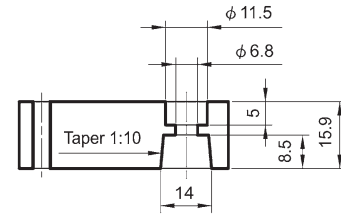
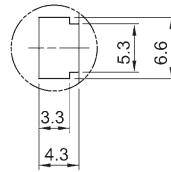
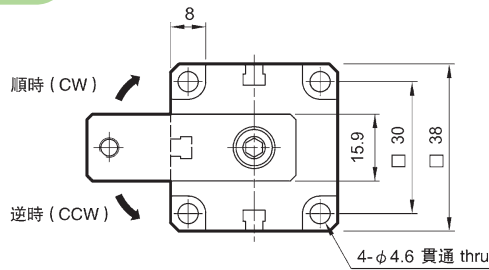
代號 Code 型號 Model	標準型 Standard type						垂直下壓行程加長型※ Clamping stroke lengthened type						C	D1	D2	E1	E2	F
	A	A1	A2	A3	B	ST	A	A1	A2	A3	B	ST						
FTAS-25	67	89	(105.9)	-	65	22	-	-	-	-	-	-	23	□ 15.9	-	M6 × 1.0	-	6
FTAS-32 FTAD-32	82	108	(128)	127	78	26	97	138	(158)	157	93	41	28	□ 19	□ 19	M8 × 1.25	Φ8	8
FTAS-40 FTAD-40	82	108	(128)	127	78	26	97	138	(158)	157	93	41	28	□ 19	□ 19	M8 × 1.25	Φ8	8
FTAS-50 FTAD-50	94	124	(150.4)	146.2	90	30	111	158	(184.4)	180.2	107	47	31	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10
FTAS-63 FTAD-63	94	124	(150.4)	146.2	90	30	111	158	(184.4)	180.2	107	47	31	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10

代號 Code 型號 Model	H	I	J	K	L	M	N	N1	N2	N3		O	P	Q	R	S	T	U
										標準 Standard	加長※ Extension							
FTAS-25	-	Φ35	38	30	Φ4.6	M5 × 8.0	35	8	16.5	39.5	-	-	-	Φ6.8	Φ11	Φ14	5	8.5
FTAS-32 FTAD-32	9	Φ46	50	40	Φ5.6	PT 1/8	50	11.5	19	45	60	9.5	25	Φ9	Φ14	Φ16	7	9.5
FTAS-40 FTAD-40	9	Φ55	60	48	Φ6.8	PT 1/8	55	14	19	45	60	9.5	25	Φ9	Φ14	Φ16	7	9.5
FTAS-50 FTAD-50	10	Φ65	70	57	Φ6.8	PT 1/8	60	17	21	54	71	11.1	29	Φ11	Φ17	Φ20	9	12.5
FTAS-63 FTAD-63	10	Φ78	83	67	Φ9	PT 1/8	70	20	21	54	71	11.1	29	Φ11	Φ17	Φ20	9	12.5

※ 垂直下壓行程加長型尺寸。 ※ Clamping stroke lengthened type.

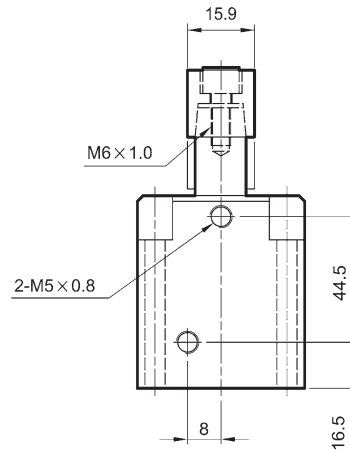
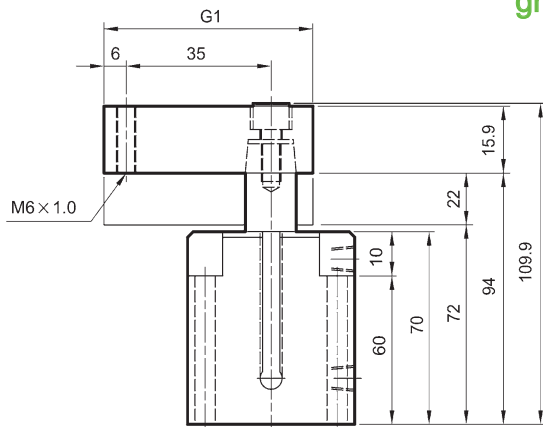
附磁型 / 外觀尺寸 Dimensions / With magnet type  $\Phi 25$

### FTAS



感應開關溝槽  
Auto switch mounting  
groove position

單邊壓板安裝尺寸  
Single side clamping arm



型號 Model	氣缸內徑 Tube I.D. (mm)	活塞桿徑 Piston rod (mm)	轉角行程 Swing stroke (mm)	垂直下壓行程 Clamping stroke (mm)	受壓面積 壓側 / 拉側 Pressure area push pull(mm <sup>2</sup> )	理論加持力 Clamping force N(0.6Mpa)	板壓型式 G1 Clamping arm type	
							標準型 Standard	加長型 Extension
<b>FTAS-25M</b>	$\Phi 25$	$\Phi 14$	9	13	491/337	200	50	70

下壓缸  
Cylinders

FTA\*

### 重量表 Cylinder weight

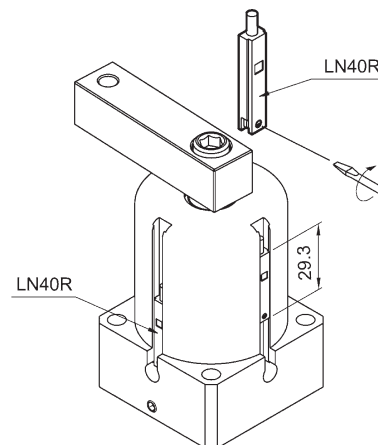
#### ■標準型 Standard type

型號 Model	重量 Weight (kg)
<b>FTAS-25</b>	0.3
<b>FTAS-32</b>	0.7
<b>FTAD-32</b>	0.9
<b>FTAS-40</b>	0.9
<b>FTAD-40</b>	1.1
<b>FTAS-50</b>	1.6
<b>FTAD-50</b>	1.8
<b>FTAS-63</b>	2.1
<b>FTAD-63</b>	2.3

#### ■附磁型 With magnet type

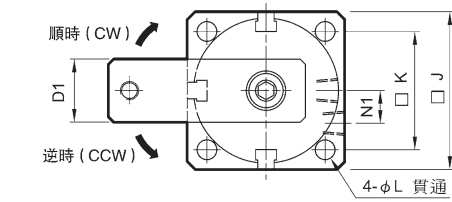
型號 Model	重量 Weight (kg)
<b>FTAS-25M</b>	0.4
<b>FTAS-32M</b>	0.73
<b>FTAD-32M</b>	0.93
<b>FTAS-40M</b>	0.95
<b>FTAD-40M</b>	1.15
<b>FTAS-50M</b>	1.65
<b>FTAD-50M</b>	1.85
<b>FTAS-63M</b>	2.22
<b>FTAD-63M</b>	2.42

### 感應開關 Installation of sensor switch LN40R

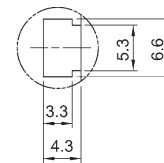
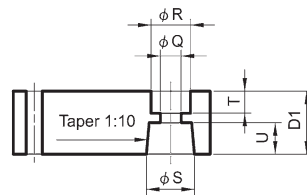
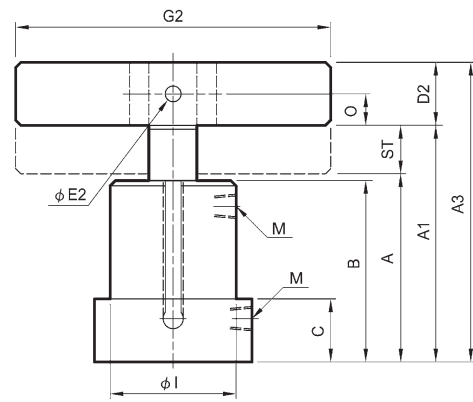
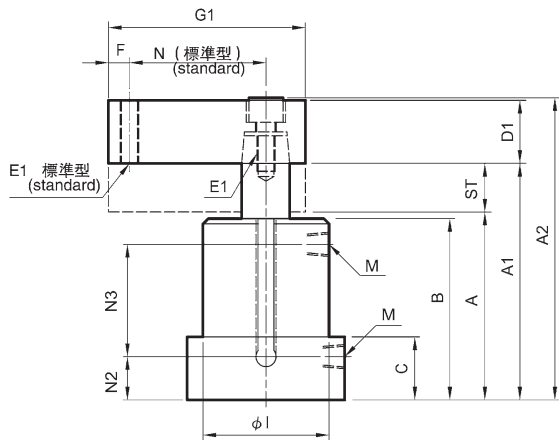
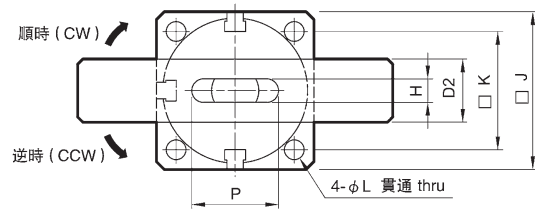


附磁型 / 外觀尺寸 Dimensions / With magnet type  $\Phi 32M \sim \Phi 63M$

### FTAS



### FTAD



單邊壓板安裝尺寸  
Single side clamping arm

感應開關溝槽  
Auto switch mounting groove position

型號 Model	氣缸內徑 Tube I.D. (mm)	活塞桿徑 Piston rod (mm)	轉角行程 Swing stroke (mm)	垂直下壓行程 Clamping stroke (mm)	受壓面積 壓側 / 拉側 Pressure area push / pull (mm <sup>2</sup> )	理論加持力 Clamping force N(0.6Mpa)	板壓型式 Clamping arm type				
							G1		G2		
							標準型 Standard	加長型 Extension	標準型 Standard	加長型 Extension	
FTAS-32M	FTAD-32M	Φ32	Φ16	11	15	804/603	360	70	100	140	200
FTAS-40M	FTAD-40M	Φ40	Φ16	11	15	1257/1056	630	75	100	140	200
FTAS-50M	FTAD-50M	Φ50	Φ20	13	17	1963/1649	980	85	130	160	230
FTAS-63M	FTAD-63M	Φ63	Φ20	13	17	3117/2803	1680	95	130	160	230

代號 Code		A	A1	A2	A3	B	C	D1	D2	E1	E2	F	H	I	J	K
FTAS-32M	FTAD-32M	87	113	(133)	132	83	28	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ46	50	40
FTAS-40M	FTAD-40M	87	113	(133)	132	83	28	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ55	60	48
FTAS-50M	FTAD-50M	99	129	(155.4)	151.2	95	31	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ65	70	57
FTAS-63M	FTAD-63M	99	129	(155.4)	151.2	95	31	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ78	83	67

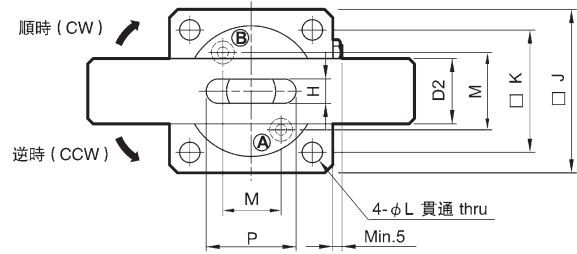
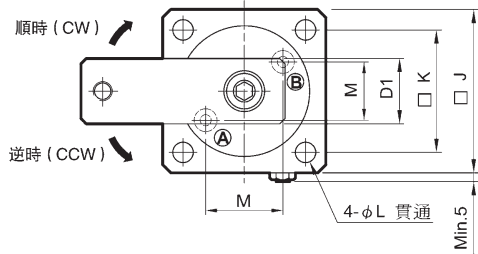
代號 Code		L	M	N	N1	N2	N3	O	P	Q	R	S	ST	T	U
FTAS-32M	FTAD-32M	Φ5.6	PT 1/8	50	11.5	19	50	9.5	25	Φ9	Φ14	Φ16	26	7	9.5
FTAS-40M	FTAD-40M	Φ6.8	PT 1/8	55	14	19	50	9.5	25	Φ9	Φ14	Φ16	26	7	9.5
FTAS-50M	FTAD-50M	Φ6.8	PT 1/8	60	17	21	59	11.1	29	Φ11	Φ17	Φ17	30	9	12.5
FTAS-63M	FTAD-63M	Φ9	PT 1/8	70	20	21	59	11.1	29	Φ11	Φ17	Φ17	30	9	12.5

深孔附調速型 / 外觀尺寸 Dimensions / Manifold with flow control  $\Phi 32 \sim \Phi 63$

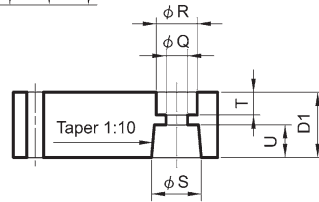
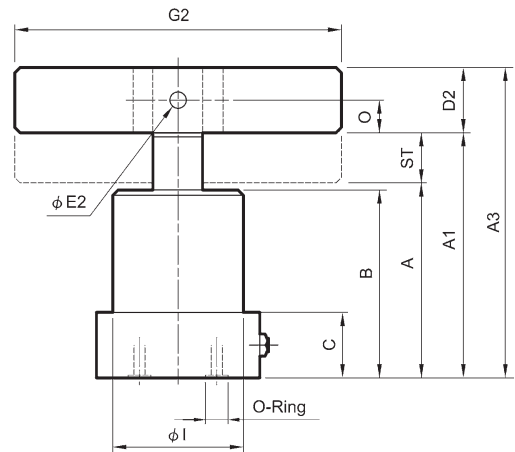
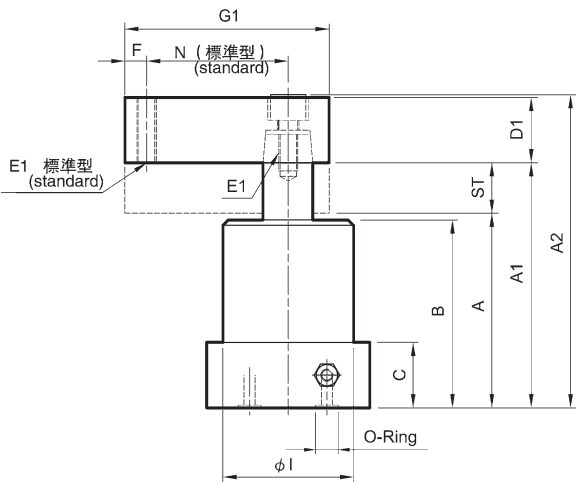
FC

FTAS

FTAD



- Ⓐ 夾持油孔Clamp port
- Ⓑ 放鬆油孔Release port



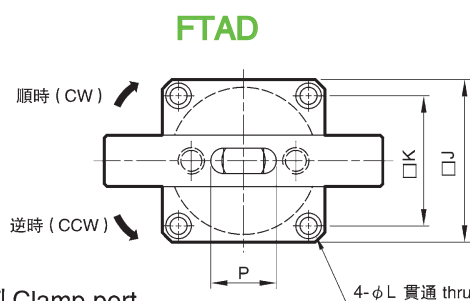
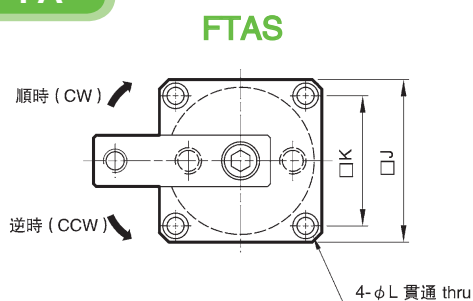
### 單邊壓板安裝尺寸 Single side clamping arm

型號 Model	氣缸內徑 Tube I.D. (mm)	活塞桿徑 Piston rod (mm)	轉角 行程 Swing stroke (mm)	垂直下壓行程 Clamping stroke (mm)	受壓面積 壓側 / 拉側 Pressure area push / pull (mm <sup>2</sup> )	理論加持力 Clamping force N (0.6Mpa)	板壓型式 Clamping arm type			
							G1		G2	
							標準型 Standard	加長型 Extension	標準型 Standard	加長型 Extension
FTAS-32FC FTAD-32 FC	Φ32	Φ16	11	15	804/603	360	70	100	140	200
FTAS-40FC FTAD-40 FC	Φ40	Φ16	11	15	1257/1056	630	75	100	140	200
FTAS-50FC FTAD-50 FC	Φ50	Φ20	13	17	1963/1649	980	85	130	160	230
FTAS-63FC FTAD-63 FC	Φ63	Φ20	13	17	3117/2803	1680	95	130	160	230

代號 Code		A	A1	A2	A3	B	C	D1	D2	E1	E2	F	H	I	J	K
型號 Model																
FTAS-32 FC FTAD-32 FC		82	108	(129.5)	127	78	22	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ46	50	40
FTAS-40 FC FTAD-40 FC		82	108	(129.5)	127	78	22	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ55	60	48
FTAS-50 FC FTAD-50 FC		94	124	(152.4)	146.2	90	25	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ65	70	57
FTAS-63 FC FTAD-63 FC		94	124	(152.4)	146.2	90	25	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ78	83	67

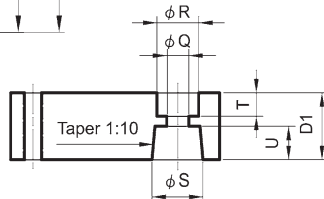
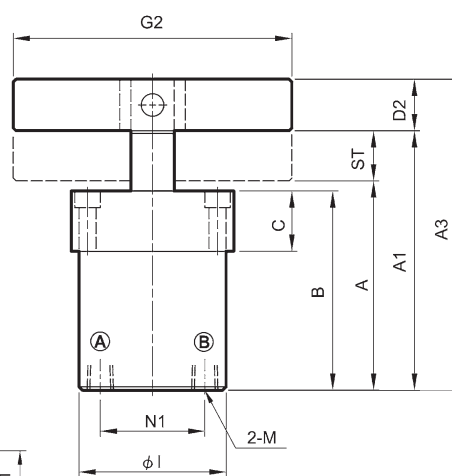
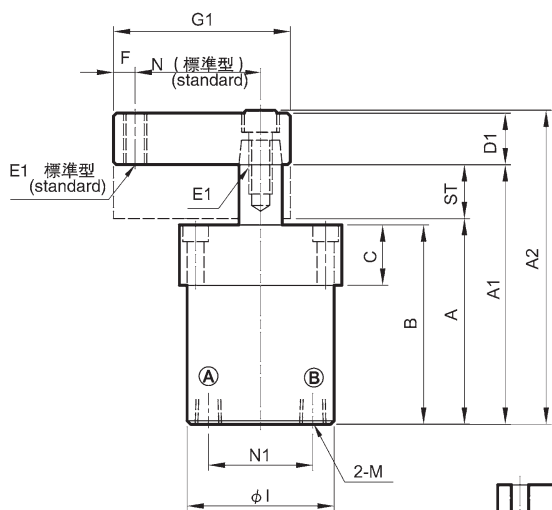
代號 Code		L	M	N	O	P	Q	R	S	ST	T	U	O-ring
型號 Model													
FTAS-32 FC FTAD-32 FC		Φ5.6	19	50	9.5	25	Φ9	Φ14	Φ16	26	7	9.5	P7
FTAS-40 FC FTAD-40 FC		Φ6.8	23	55	9.5	25	Φ9	Φ14	Φ16	26	7	9.5	P7
FTAS-50 FC FTAD-50 FC		Φ6.8	28	60	11.1	29	Φ11	Φ17	Φ20	30	9	12.5	P9
FTAS-63 FC FTAD-63 FC		Φ9	32	70	11.1	29	Φ11	Φ17	Φ20	30	9	12.5	P9

FA



Ⓐ 夾持油孔 Clamp port

Ⓑ 放鬆油孔 Release port



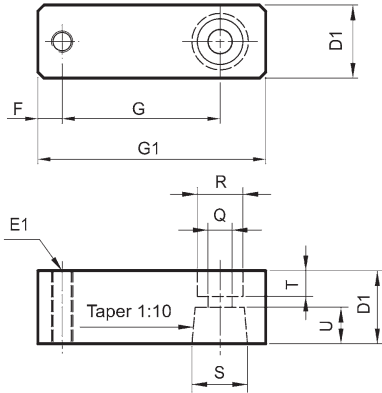
### 單邊壓板安裝尺寸 Single side clamping arm

型號 Model	氣缸內徑 Tube I.D. (mm)	活塞桿徑 Piston rod (mm)	轉角 行程 Swing stroke (mm)	垂直下壓行程 Clamping stroke (mm)	受壓面積 壓側 / 拉側 Pressure area push / pull (mm <sup>2</sup> )	理論加持力 Clamping force N (0.6Mpa)	板壓型式 Clamping arm type				
							G1		G2		
							標準型 Standard	加長型 Extension	標準型 Standard	加長型 Extension	
FTAS-32 FA	FTAD-32 FA	Φ32	Φ16	11	15	804/603	360	70	100	140	200
FTAS-40 FA	FTAD-40 FA	Φ40	Φ16	11	15	1257/1056	630	75	100	140	200
FTAS-50 FA	FTAD-50 FA	Φ50	Φ20	13	17	1963/1649	980	85	130	160	230
FTAS-63 FA	FTAD-63 FA	Φ63	Φ20	13	17	3117/2803	1680	95	130	160	230

代號 Code		A	A1	A2	A3	B	C	D1	D2	E1	E2	F	H	I	J	K
型號 Model																
FTAS-32 FA	FTAD-32 FA	82	108	(129.5)	127	78	22	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ46	50	40
FTAS-40 FA	FTAD-40 FA	82	108	(129.5)	127	78	22	□ 19	□ 19	M8 × 1.25	Φ8	8	9	Φ55	60	48
FTAS-50 FA	FTAD-50 FA	94	124	(152.4)	146.2	90	25	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ65	70	57
FTAS-63 FA	FTAD-63 FA	94	124	(152.4)	146.2	90	25	□ 25.4	□ 22.2	M10 × 1.5	Φ8	10	10	Φ78	83	67

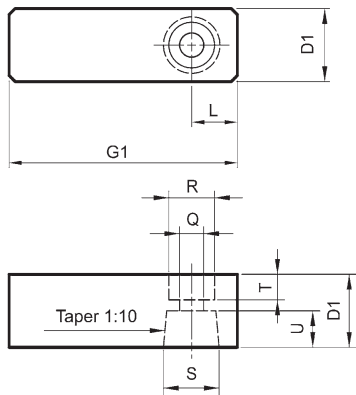
代號 Code		L	M	N	N1	O	P	Q	R	S	ST	T	U
型號 Model													
FTAS-32 FA	FTAD-32 FA	Φ5.6, Φ9 × 5.5dp	PT 1/8	50	32	9.5	25	Φ9	Φ14	Φ16	26	7	9.5
FTAS-40 FA	FTAD-40 FA	Φ6.8, Φ10.5 × 6.5dp	PT 1/8	55	40	9.5	25	Φ9	Φ14	Φ16	26	7	9.5
FTAS-50 FA	FTAD-50 FA	Φ6.8, Φ10.5 × 6.5dp	PT 1/8	60	50	11.1	29	Φ11	Φ17	Φ20	30	9	12.5
FTAS-63 FA	FTAD-63 FA	Φ9, Φ14 × 9dp	PT 1/8	70	63	11.1	29	Φ11	Φ17	Φ20	30	9	12.5

**單邊壓板 (標準型)**  
Single side clamping arm  
(Standard type with thread)



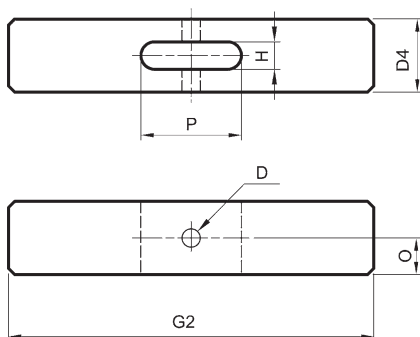
代號 Code 型號 Model	D1	F	G	G1	E1	Q	R	S	T	U
FTAS-25	□ 15.9	6	35	50	M6 × 1.0	Φ6.8	Φ11	Φ14	5	8.5
FTAS-32	□ 19	8	50	70	M8 × 1.25	Φ9	Φ14	Φ16	7	9.5
FTAS-40	□ 19	8	55	75	M8 × 1.25	Φ9	Φ14	Φ16	7	9.5
FTAS-50	□ 25.4	10	60	85	M10 × 1.5	Φ11	Φ17	Φ20	9	12.5
FTAS-63	□ 25.4	10	70	95	M10 × 1.5	Φ11	Φ17	Φ20	9	12.5

**單邊壓板 B 型 (加長型無牙)**  
Single side clamping arm B type  
(Extension type without thread)



代號 Code 型號 Model	D1	F	G1	L	Q	R	S	T	U
FTAS-25 B	□ 15.9	6	70	15	Φ6.8	Φ11	Φ14	5	8.5
FTAS-32 B	□ 19	8	100	20	Φ9	Φ14	Φ16	7	9.5
FTAS-40 B	□ 19	8	100	20	Φ9	Φ14	Φ16	7	9.5
FTAS-50 B	□ 25.4	10	130	25	Φ11	Φ17	Φ20	9	12.5
FTAS-63 B	□ 25.4	10	130	25	Φ11	Φ17	Φ20	9	12.5

**雙邊壓板 (標準型/加長型)**  
Double side clamping arm  
(Standard & Extension type)



**雙邊壓板 (標準型)**  
Double side clamping arm (Standard type)

代號 Code 型號 Model	內徑 Tube I.D.	D	D4	G2	H	O	P
FTAD-32	Φ32	Φ8	□ 19	140	9	9.5	25
FTAD-40	Φ40	Φ8	□ 19	140	9	9.5	25
FTAD-50	Φ50	Φ8	□ 22.2	160	10	11.1	29
FTAD-63	Φ63	Φ8	□ 22.2	160	10	11.1	29

**雙邊壓板 B 型 (加長型無牙)**  
Double side clamping arm B type (Extension type)

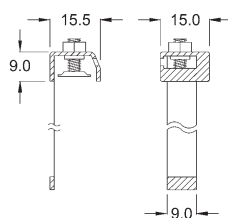
代號 Code 型號 Model	內徑 Tube I.D.	D	D4	G2	H	O	P
FTAD-32 B	Φ32	Φ8	□ 19	200	9	9.5	25
FTAD-40 B	Φ40	Φ8	□ 19	200	9	9.5	25
FTAD-50 B	Φ50	Φ8	□ 22.2	230	10	11.1	29
FTAD-63 B	Φ63	Φ8	□ 22.2	230	10	11.1	29

### 磁感應開關 Magnetism Sensor Switch

型號 Model	圖片 Photo	感應型式 Form	使用電壓 Working Voltage	最大值 Max. Value	尺寸 Dimension	適用氣缸及溝槽 Apply for cylinder & groove
KT-03R		磁簧管 / 常開型	5~240V DC/AC	10W, 100mA		(PBT鋼帶) (PC夾具) (BK鋼帶) 鳩尾槽 60~630圓形氣缸
KT-03N		NPN / 常開型	5~28V DC	6W, 200mA		
KT-03P		PNP / 常開型				
KT-06R		磁簧管 / 常開型	5~120V DC/AC	10W, 100mA		
KT-06N		NPN / 常開型	5~28V DC	6W, 200mA		
KT-06P		PNP / 常開型				
KT-07R		磁簧管 / 常開型	5~120V DC/AC	10W, 100mA		(BIMBA;SMC) 
KT-07N		NPN / 常開型	5~28V DC	6W, 200mA		
KT-07P		PNP / 常開型				
RD-301-R		磁簧管 / 常開型	5~240V DC/AC	10W, 100mA		(AIR TAC) 
RD-301-N		NPN / 常開型	5~28V DC	6W, 200mA		
RD-301-P		PNP / 常開型				
RD-201-R		磁簧管 / 常開型	5~240V DC/AC	10W, 100mA		
RD-201-N		NPN / 常開型	5~28V DC	6W, 200mA		
RD-201-P		PNP / 常開型				

### 固定鋼帶 Fixed Metal Band

PN



步驟1

請先將螺絲、螺帽鬆開至頂端。

步驟2

如上圖將鋼帶與氣缸組合，鋼帶並由固定蓋頭之缺口穿出。

步驟3

將磁性傳感器穿入於固定蓋頭與氣缸間隙，並鎖緊螺絲，華司片加壓於磁性傳感器上，以防止滑動。

步驟4

螺絲鎖緊後，再將螺帽鎖緊即完成鋼帶之固定。

PN - S 20

S: 圓型缸本體材質為不銹鋼  
A: 圓型缸本體材質為鋁合金

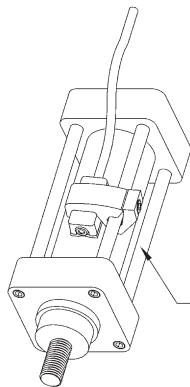
例如: PN-S25: 是適用於Φ25的不銹鋼圓型缸。

專用在圓型缸,用於固定 RD-201-R系列的磁性傳感器。

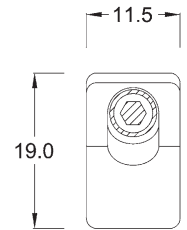
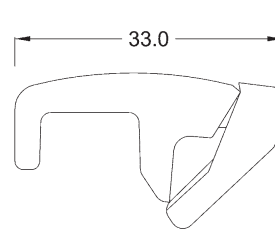
12: Φ12圓型缸  
16: Φ16圓型缸  
150: Φ150圓型缸

### 固定夾具 Fixed Clamp

#### PAC

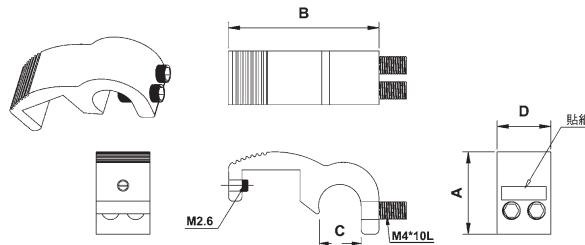
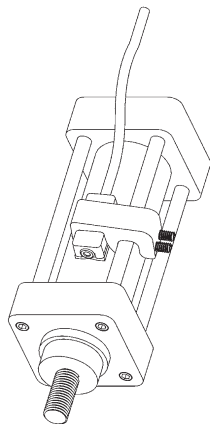


搭配使用說明：Φ32~Φ100 拉桿缸  
(拉桿直徑：Φ4~Φ10)



專用在拉桿缸(tie-rod),用於固定 RD-201-R & RD-301-R系列的磁性傳感器。

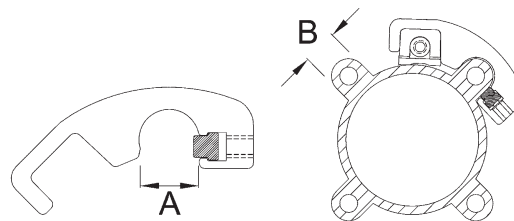
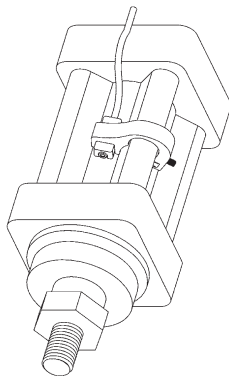
#### PM



型號 Model	尺寸 Size	A	B	C	D
PM-6		19.1	31.3	7.3	12
PM-8		18.4	33.5	9.5	12
PM-10		16.7	35.7	11.2	12
PM-12		20	35.5	11.5	12
PM-14		24	38.0	13.5	12
PM-16		24	40.0	15.5	12

專用在拉桿缸(tie-rod),用於固定RD-201-R系列的磁性傳感器。

#### PI



單位Unit: mm

型號 Model	尺寸 Size	A	B	適用米型缸缸徑
PI-1		11.15	10.4	Φ32 ~ Φ40
PI-2		14.10	13.5	Φ50 ~ Φ63
PI-3		15.45	15	Φ80
PI-4		16.3	16	Φ100
PI-5		19.8	18.7	Φ125
PI-6		26.5	25.7	Φ150

專用在米型缸(ISO profile),用於固定RD-201-R & RD-301-R系列的磁性傳感器。