TONAB
PNEUMATIC EQUIPMENT

DG系列 圓形止動氣缸 …… A5–01

DH系列 止動氣缸 …… A5–03

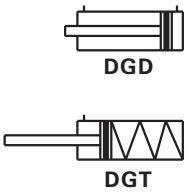
DK系列 止動氣缸 …… A5–08

圓形止動氣缸

DG系列 φ40 ~ φ50

訂購表示方法

圖形符號
Graphic symbol



DG — D — 40 × 30 — Y — R1

仕樣 Specifications	作動方式 Acting	缸徑 Bore	行程 Stroke	杆端形式 Rod end	感應器數量 Quantity
DG:圓形止動氣缸 Stopper cylinder	D:復動型 T:單動型(后彈簧) D:Double action T:Single action (with spring-return)	40:φ40mm 50:φ50mm	φ40:20、25、30mm φ50:20、25、30mm	Y:圓柱型 Y:column B:扁柱型 B:oblate G:滾輪型 G:steel roller H:杠杆式滾輪 H:lever steel roller	R1:1pcs R2:2pcs

行程 Stroke

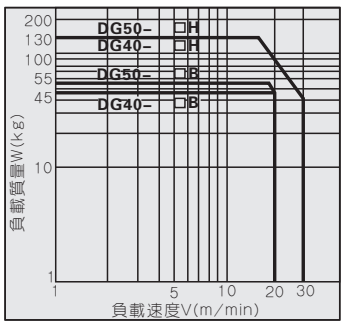
缸徑(mm) Bore	標准行程 Standard stroke	磁性開關 Auto switch
φ40	20 25 30	RC20 RC21
φ50	20 25 30	

規格 Specification

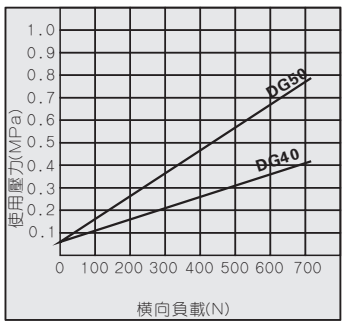
缸徑 Bore size	40	50
動作形式 Acting	復動型/單動型(后彈簧) Double Action/Single action	
工作介質 Fluid	空氣 Air	
使用壓力範圍 Pressure range	0.15~0.85MPa	
使用温度範圍 Temperature range	5~60℃	
緩衝形式 Cushion type	橡膠緩衝 Rubber Cushion	
接管口徑 Port size	Rc1/8	
潤滑 Lubrication	不需要 No required	

注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

各種定程杆操作範圍



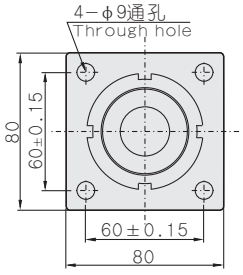
橫向負載與使用壓力
圓柱型、扁柱型、滾輪型

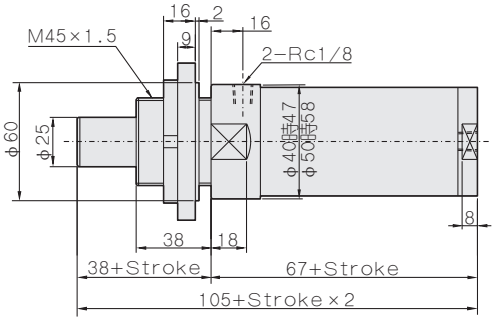


注: 特殊行程請與本公司聯系.

TYPE:DG-Y

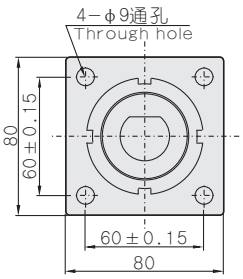
Bore:ϕ40、 ϕ50

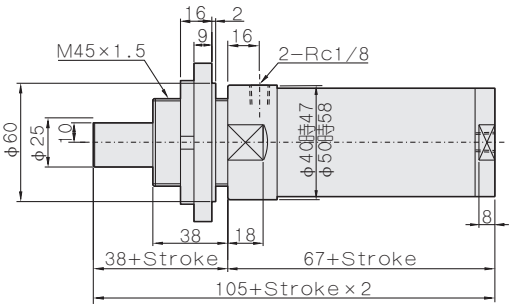




TYPE:DG-B

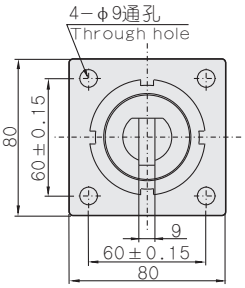
Bore:ϕ40、 ϕ50

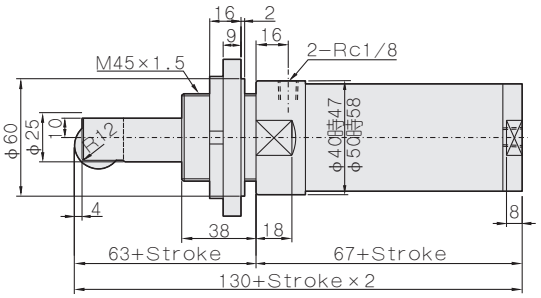




TYPE:DG-G

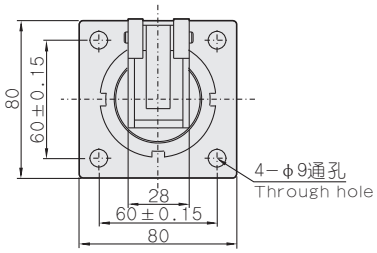
Bore:ϕ40、 ϕ50

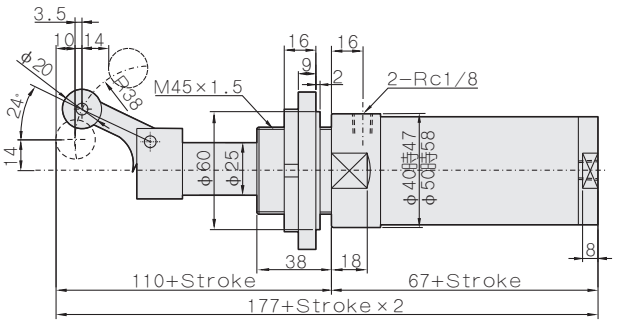




TYPE:DG-H

Bore:ϕ40、 ϕ50





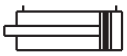
注1) Stroke=行程
注2) 上圖所示爲伸出尺寸.

止動氣缸

DH系列 φ20 ~ φ50

訂購表示方法

圖形符號
Graphic symbol



DH	D	40	×	30	—	Y	—	R1
仕樣 Specifications	作動方式 Acting	缸徑 Bore		行程 Stroke		杆端形式 Rod end		感應器數量 Quantity
DH:止動氣缸 Stopper cylinder	D:復動型 T:單動型(后彈簧) D:Double action T:Single action (with spring-return)	20:φ20mm 32:φ30mm 40:φ40mm 50:φ50mm		φ20:10、15、20mm φ32:10、15、20mm φ40:20、25、30mm φ50:20、25、30mm		Y:圓柱型 B:扁柱型 G:滾輪型 H:杠杆式滾輪 Y:column B:oblate G:steel roller H:lever steel roller		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	20	32	40	50
動作形式 Acting	復動型/單動型(后彈簧) Double Action/Single action			
工作介質 Fluid	空氣 Air			
使用壓力範圍 Pressure range	0.15~0.85MPa			
使用温度範圍 Temperature range	5~60℃			
緩衝形式 Cushion type	橡膠緩衝 rubber cushion			
接管口徑 Port size	Rc1/8			
潤滑 Lubrication	不需要 No required			

注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

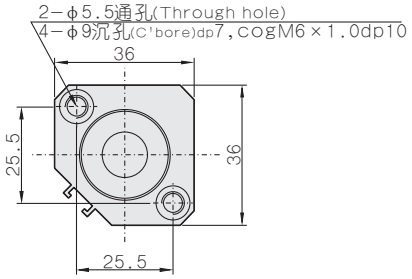
行程 Stroke

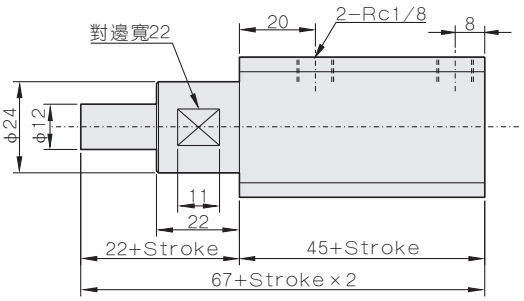
缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ20	10 15 20	RC72 RC07 RC16 適用于(φ32~ φ50)
φ32	10 15 20	
φ40	20 25 30	
φ50	20 25 30	

注: 特殊行程請與本公司聯系.

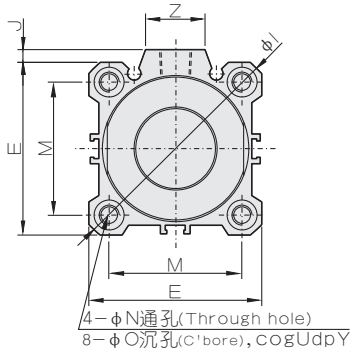
TYPE:DH-Y

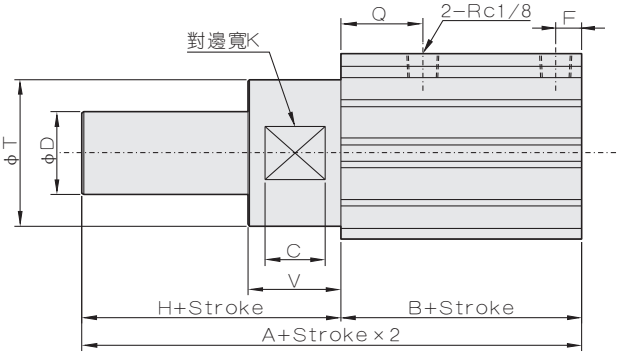
Bore: ϕ20





Bore: ϕ32 ~ ϕ50





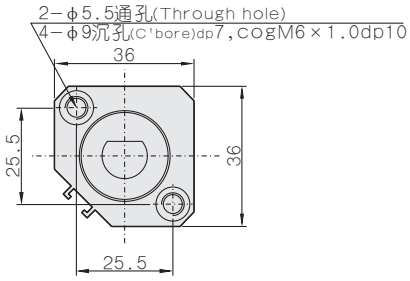
尺寸表/Dimension sheet(mm)

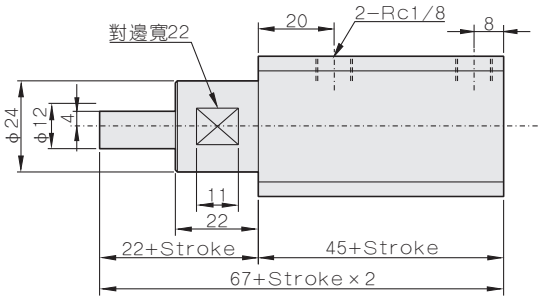
缸徑 Bore	A	B	C	D	E	F	H	I	J	K	M	N	O	Q	T	V	U	Y	Z
ϕ32	68	48	15	20	45	7.5	20	60	4.5	32	34	5.5	9dp7	20	36	20	M6×1.0	10	18
ϕ40	80.5	52.5	18	25	52	8	28	69	5	41	40	5.5	9dp7	24.5	44	28	M6×1.0	10	18
ϕ50	82	54	20	25	64	8	28	86	7	50	50	6.6	11dp8	24.5	56	28	M8×1.25	14	22

注1) Stroke=行程
注2) 上圖所示爲伸出活塞杆的尺寸.

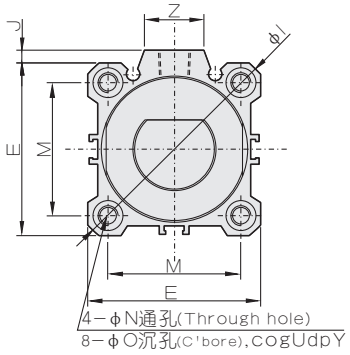
TYPE:DH-B

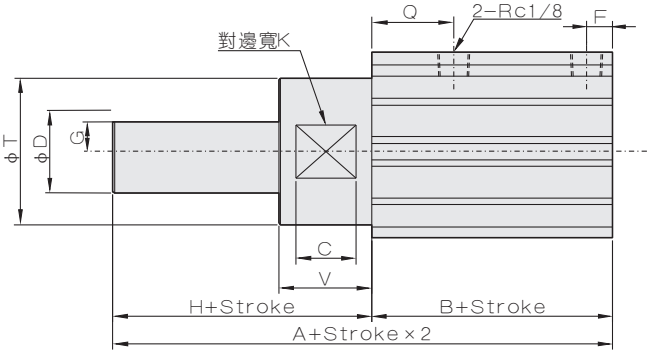
Bore: ϕ20





Bore: ϕ32 ~ ϕ50





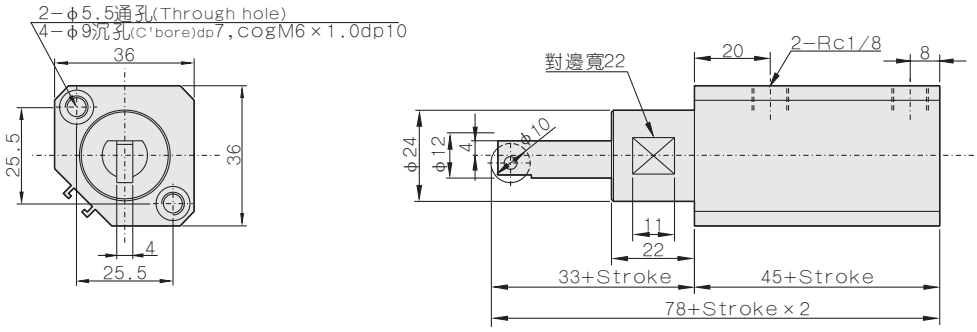
尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	H	I	J	K	M	N	O	Q	T	V	U	Y	Z
ϕ32	68	48	15	20	45	7.5	8	20	60	4.5	32	34	5.5	9dp7	20	36	20	M6×1.0	10	18
ϕ40	80.5	52.5	18	25	52	8	10	28	69	5	41	40	5.5	9dp7	24.5	44	28	M6×1.0	10	18
ϕ50	82	54	20	25	64	8	10	28	86	7	50	50	6.6	11dp8	24.5	56	28	M8×1.25	14	22

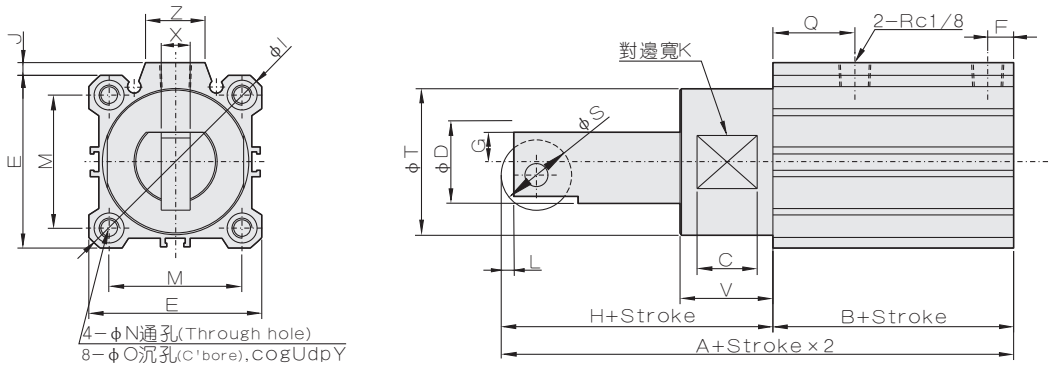
注1) Stroke=行程
注2) 上圖所示爲伸出活塞杆的尺寸.

TYPE:DH-G

Bore: ϕ20



Bore: ϕ32 ~ ϕ50



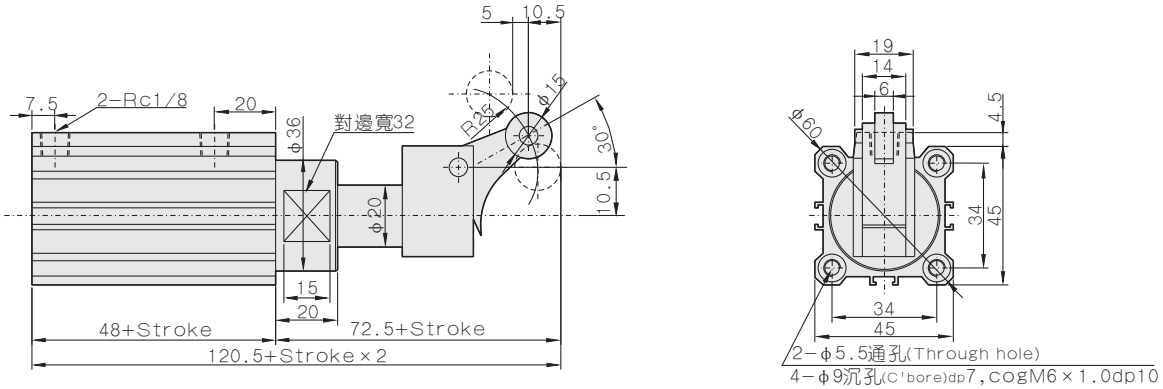
尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	H	I	J	K	M	N	O	Q	T	V	U	Y	Z	X	S	L
ϕ32	87	48	15	20	45	7.5	8	39	60	4.5	32	34	5.5	9dp7	20	36	20	M6×1.0	10	18	8	18	3
ϕ40	105.5	52.5	18	25	52	8	10	53	69	5	41	40	5.5	9dp7	24.5	44	28	M6×1.0	10	18	9	24	4
ϕ50	107	54	20	25	64	8	10	53	86	7	50	50	6.6	11dp8	24.5	56	28	M8×1.25	14	22	9	24	4

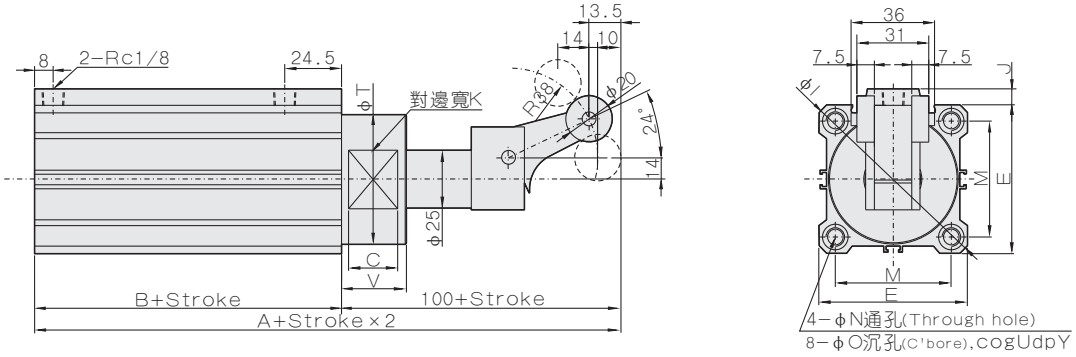
注1) Stroke=行程
注2) 上圖所示爲伸出活塞杆的尺寸.

TYPE:DH-H

Bore: ϕ32



Bore: ϕ40、 ϕ50



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	E	I	J	K	M	N	O	T	V	U	Y
ϕ40	152.5	52.5	18	52	69	5	41	40	5.5	9dp7	44	28	M6×1.0	10
ϕ50	154	54	20	64	86	7	50	50	6.6	11dp8	56	28	M8×1.25	14

注1) Stroke=行程
注2) 上圖所示爲伸出活塞杆的尺寸.

止動氣缸

DK系列 φ50、 φ63

訂購表示方法

圖形符號
Graphic symbol

DK	D	50	×	30	R1
仕樣 Specifications	作動方式 Acting	缸徑 Bore		行程 Stroke	感應器數量 Quantity
DK:止動氣缸 Stopper cylinder	D:復動型 T:單動型(后彈簧) D:Double action T:Single action (with spring-return)	50:φ50mm 63:φ63mm			R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	50	63
動作形式 Acting	復動型/單動型(后彈簧) Double Action/Single action	
工作介質 Fluid	空氣 Air	
使用壓力範圍 Pressure range	0.15~0.85MPa	
使用温度範圍 Temperature range	5~60℃	
緩衝形式 Cushion type	橡膠緩衝 rubber cushion	
接管口徑 Port size	Rc1/8	
潤滑 Lubrication	不需要 No required	

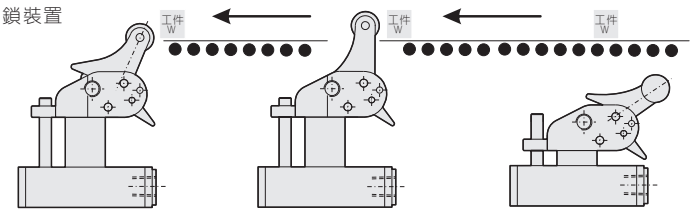
注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ50	30	RC11
φ63	30	

注: 特殊行程請與本公司聯系.

●帶自鎖裝置

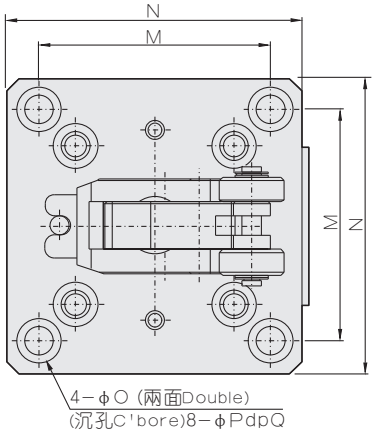


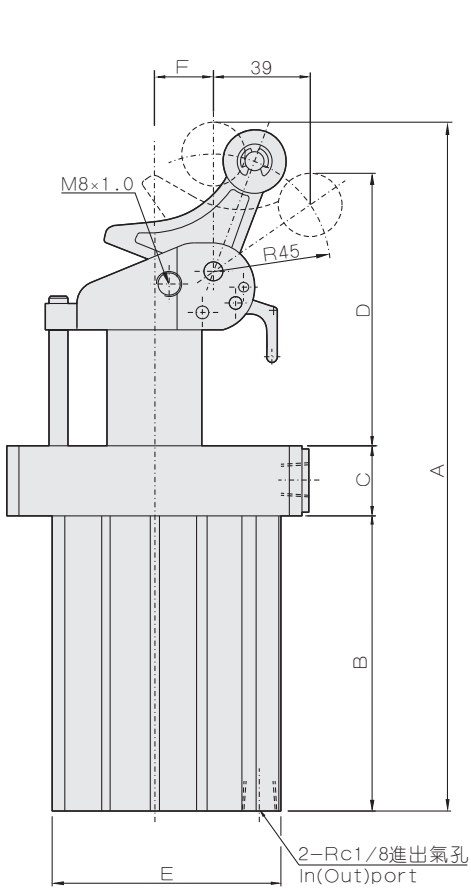
滾輪初始位置　鎖着滾輪　釋放自鎖

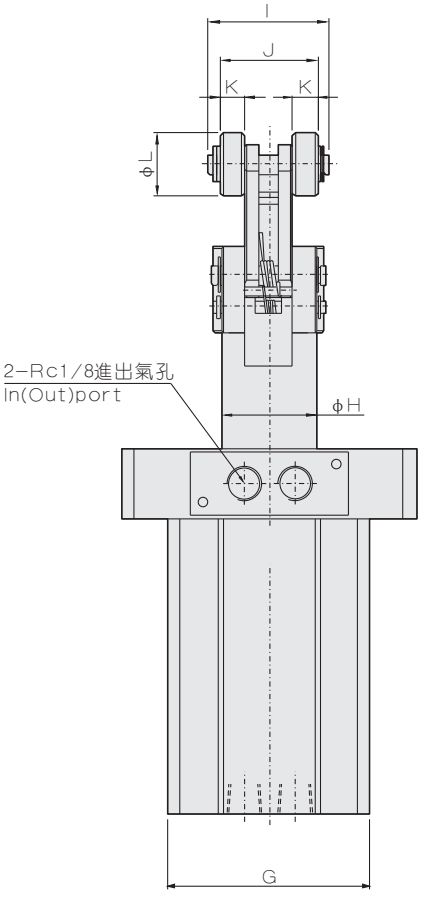
自鎖裝置可避免輕工件與滾輪及油壓緩衝器撞擊后產生之回彈

TYPE:DK

Bore:ϕ50、ϕ63



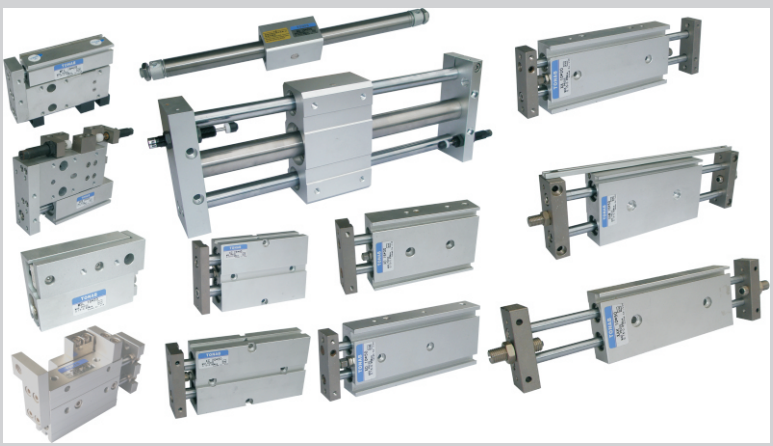




尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
ϕ50	226	93	22	86.6	72	19.5	62	30	36.4	31	8	20	73	93	9	14	6.5
ϕ63	243	107	25	86.6	85	19.5	75	35	36.4	31	8	20	90	114	11	17.5	8.5

TONAB
PNEUMATIC EQUIPMENT



MR系列 滑臺氣缸 ····· A6–01

MS系列 滑臺氣缸 ····· A6–08

MT系列 滑臺氣缸 ····· A6–11

WG系列 無杆氣缸 ····· A7–01

WF系列 無杆氣缸 ····· A7–03

XC系列 雙軸氣缸 ····· A8–01

XD系列 雙軸氣缸 ····· A8–03

XA系列 滑動雙軸氣缸 ····· A8–09

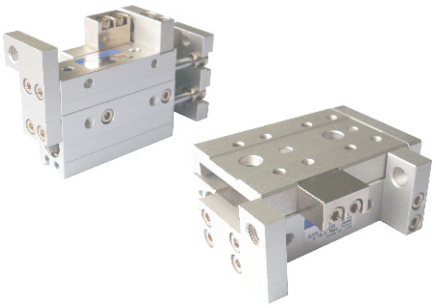
XAK系列 滑動雙軸氣缸 ··· A8–15

XAM系列 滑動雙軸氣缸 ··· A8–18

滑臺氣缸

MR系列 φ6 ~ φ25

訂購表示方法



圖形符號
Graphic symbol

MR — 12 × 30 — H — R1

MR	12	30	H	R1
仕樣 Specifications	缸徑 Bore	行程 Stroke	緩衝型式 Cushion type	感應器數量 Quantity
MR:滑臺氣缸 Slide unide cylinder	6:φ6mm 8:φ8mm 12:φ12mm 16:φ16mm 20:φ20mm 25:φ25mm	10:10mm 20:20mm 30:30mm 40:40mm 50:50mm 75:75mm 100:100mm 125:125mm 150:150mm	H:油壓緩衝器 空白:橡膠緩衝 H:hydraulic cushion Blank:rubber cushion	R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	6	8	12	16	20	25
動作形式 Acting	復動型 Double Action					
工作介質 Fluid	空氣 Air					
使用壓力範圍 Pressure range	0.15~0.7MPa					
使用温度範圍 Temperature range	5~60℃					
潤滑 Lubrication	不需要 No required					
接管口徑 Port size	M5×0.8				Rc1/8	

注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

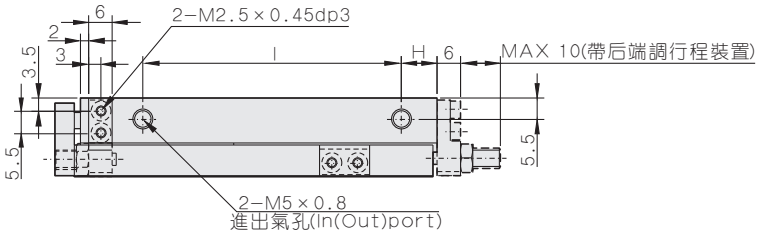
行程 Stroke

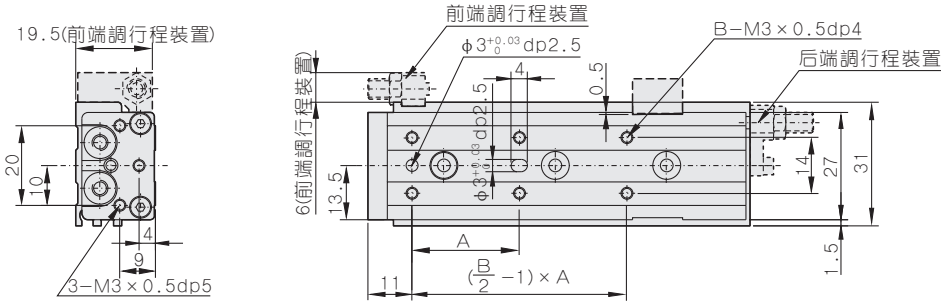
缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ6	10 20 30 40 50	RC07 RC16
φ8	10 20 30 40 50 75	
φ12	10 20 30 40 50 75 100	
φ16	10 20 30 40 50 75 100 125	
φ20	10 20 30 40 50 75 100 125 150	
φ25	10 20 30 40 50 75 100 125 150	

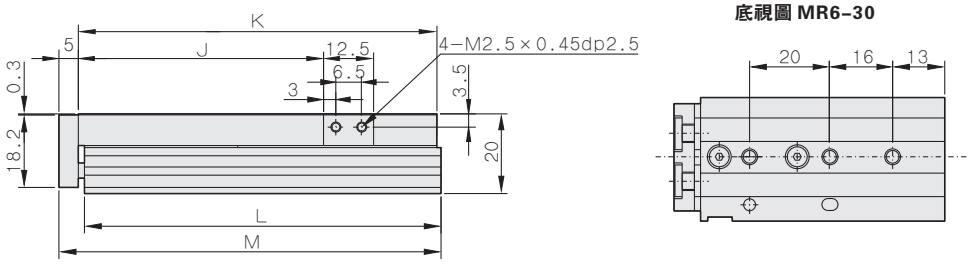
注: 特殊行程請與本公司聯系.

TYPE:MR

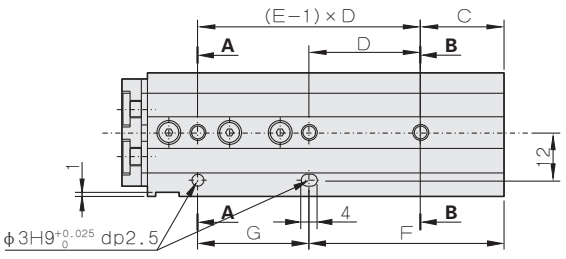
Bore: ϕ6







底視圖 MR6−30

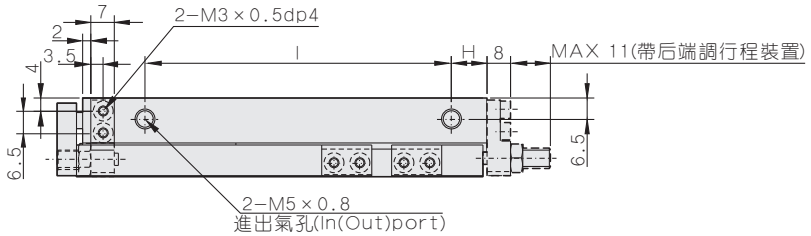


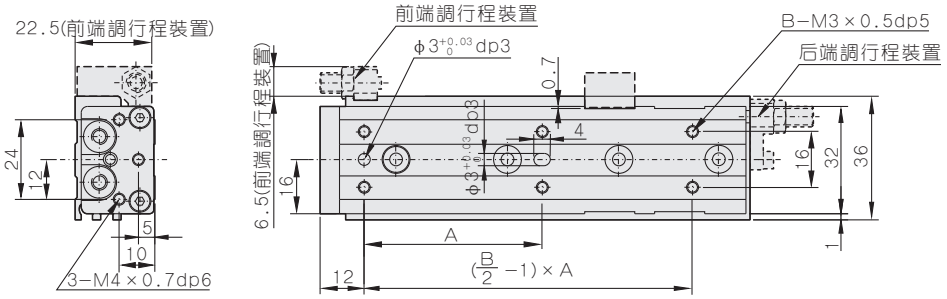
尺寸表/Dimension sheet(mm)

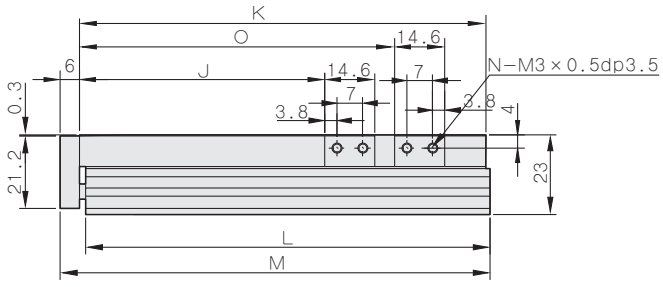
型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M
MR6−10	22	4	6	23	2	13	16	9	17	21.5	42	41.5	48
MR6−20	25	4	13	26	2	13	26	9	27	31.5	52	51.5	58
MR6−30	21	6	−	−	3	29	20	9	37	41.5	62	61.5	68
MR6−40	26	6	11	28	3	39	28	16	48	51.5	80	79.5	86
MR6−50	27	6	21	28	3	49	28	9	65	61.5	90	89.5	96

TYPE:MR

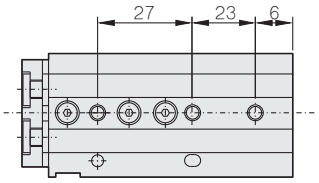
Bore: ϕ8

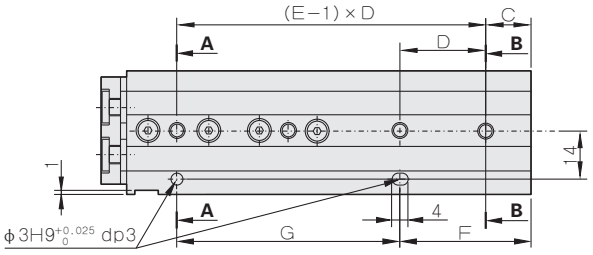






底視圖 MR8-30



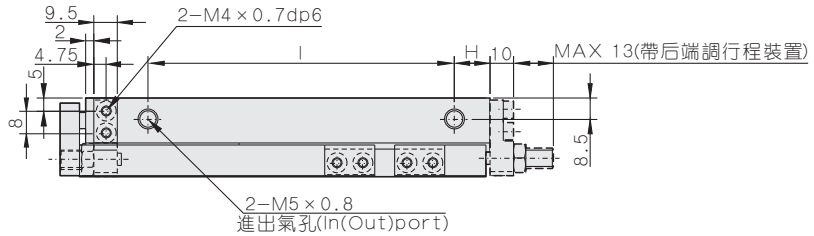


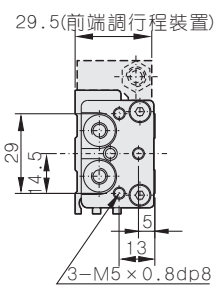
尺寸表/Dimension sheet(mm)

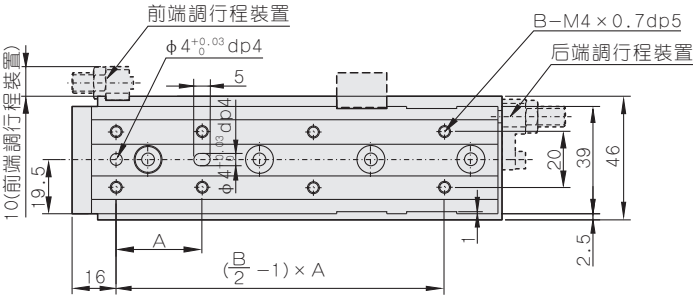
型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
MR8-10	25	4	7	25	2	13	19	11	17	23.5	46	45.5	53	4	–
MR8-20	25	4	14	28	2	14	28	10	28	33.5	56	55.5	63	4	–
MR8-30	26	6	–	–	3	29	27	12	40	43.5	70	69.5	77	4	–
MR8-40	32	6	8	31	3	39	31	14	52	53.5	84	83.5	91	4	–
MR8-50	46	6	8	29	4	37	58	13	78	63.5	109	108.5	116	8	82.5
MR8-75	50	6	31	30	4	61	60	12	105	88.5	135	134.5	142	8	112.5

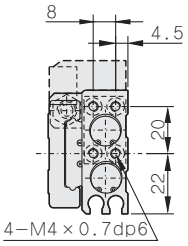
TYPE:MR

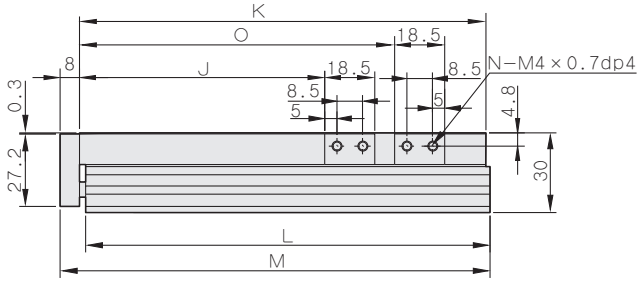
Bore: ϕ12



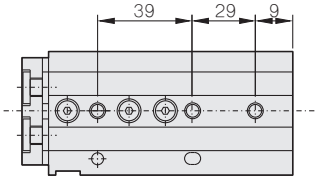


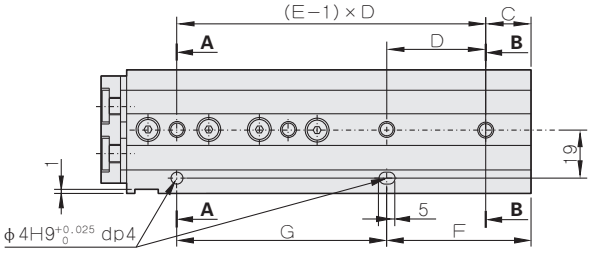


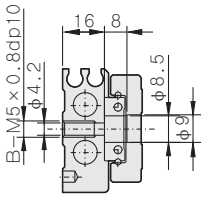




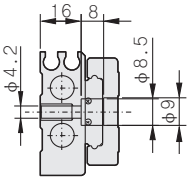
底視圖 MR12-40







截面 AA



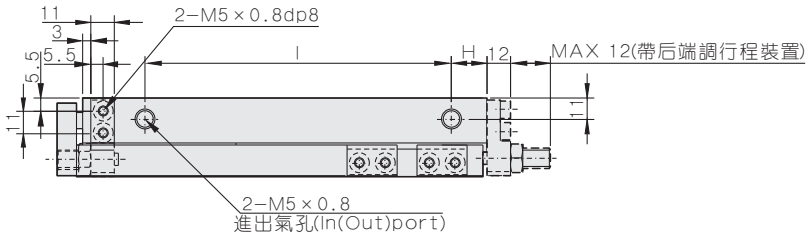
截面 BB

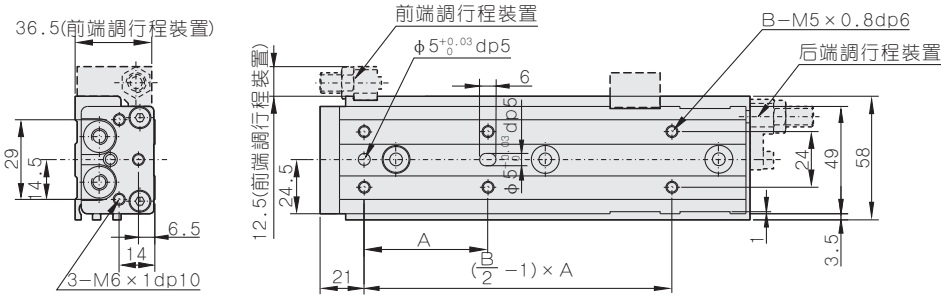
尺寸表/Dimension sheet(mm)

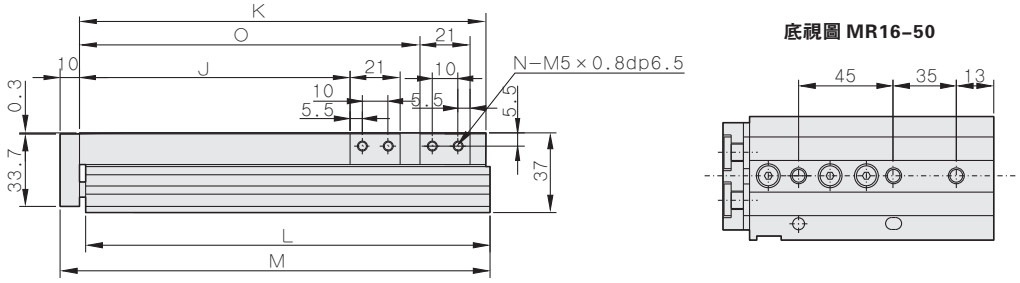
型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
MR12-10	28	4	18	32	2	18	32	12	34	26.5	67	66	76	4	–
MR12-20	28	4	18	32	2	18	32	12	34	36.5	67	66	76	4	–
MR12-30	38	6	20	40	3	20	40	14	42	46.5	77	76	86	4	–
MR12-40	34	6	–	–	3	38	39	15	58	56.5	94	93	103	4	–
MR12-50	34	6	9	39	3	48	39	13	70	66.5	104	103	113	4	–
MR12-75	36	8	23	36	4	59	72	17	110	91.5	148	147	157	8	117.5
MR12-100	36	10	12	36	5	84	72	17	135	116.5	173	172	182	8	142.5

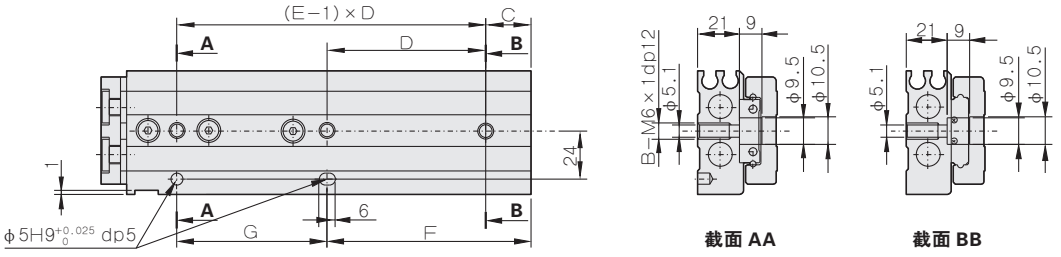
TYPE:MR

Bore: ϕ16







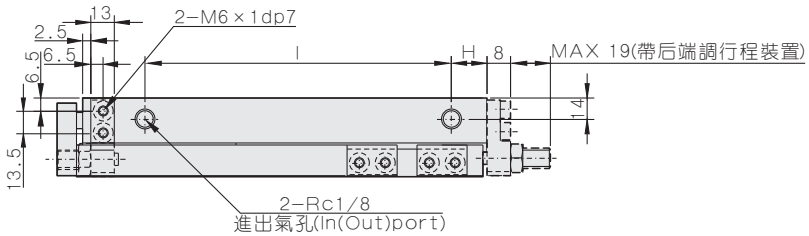


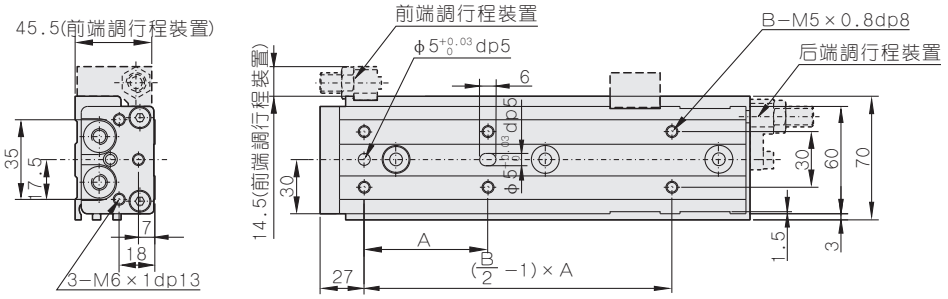
尺寸表/Dimension sheet(mm)

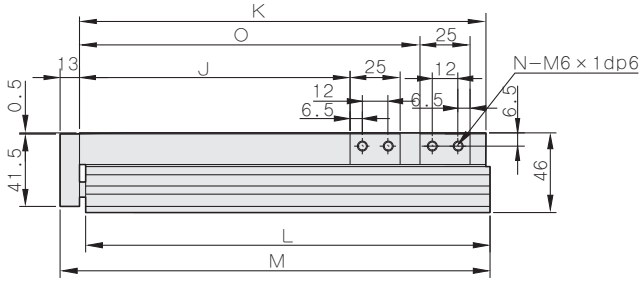
型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
MR16–10	38	4	18	39	2	18	39	12	40	28	78	77	89	4	–
MR16–20	38	4	18	39	2	18	39	12	40	38	78	77	89	4	–
MR16–30	48	4	19	48	2	19	48	12	50	48	88	87	99	4	–
MR16–40	58	4	19	58	2	19	58	12	60	58	98	97	109	4	–
MR16–50	40	6	–	–	3	48	45	20	68	68	114	113	125	8	91
MR16–75	46	6	21	52	3	73	52	15	105	93	146	145	157	8	123
MR16–100	44	8	36	44	4	80	88	18	145	118	189	188	200	8	166
MR16–125	44	10	17	44	5	105	88	23	165	143	214	213	225	8	191

TYPE:MR

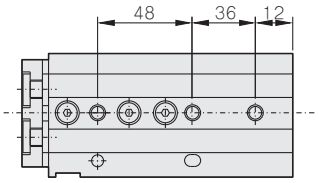
Bore: ϕ20

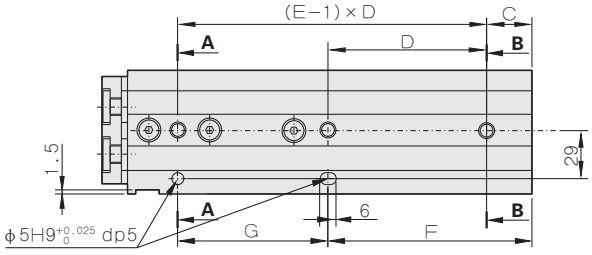


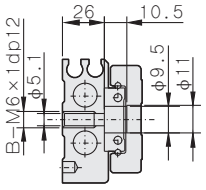




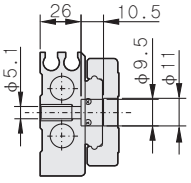
底視圖 MR20-50







截面 AA



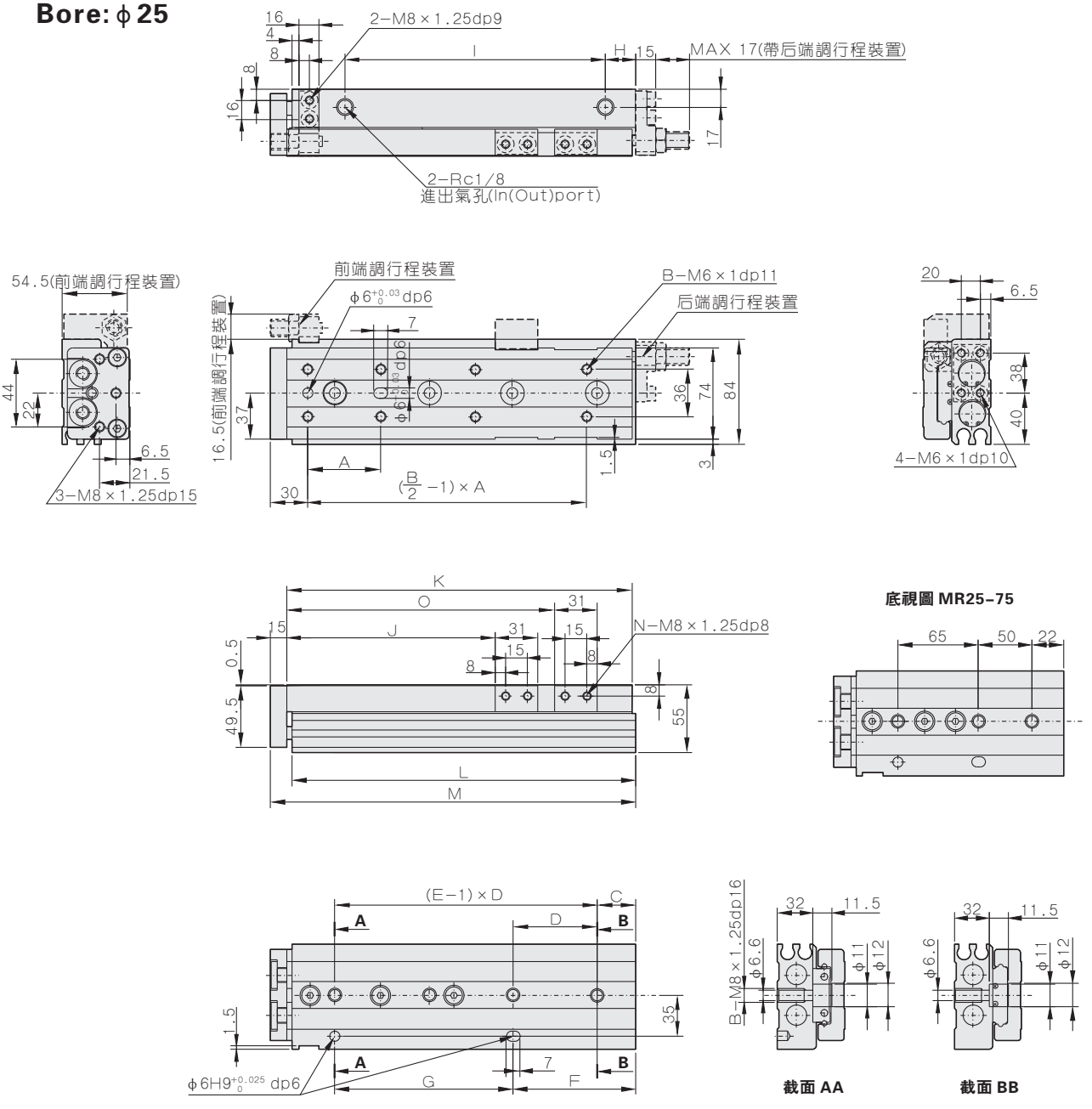
截面 BB

尺寸表/Dimension sheet(mm)

型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
MR20-10	45	4	22	46	2	18	50	16	46	31	94	92.5	108	4	–
MR20-20	40	4	22	46	2	18	50	16	46	41	94	92.5	108	4	–
MR20-30	48	4	22	46	2	18	50	16	46	51	94	92.5	108	4	–
MR20-40	58	4	22	56	2	22	56	16	56	61	104	102.5	118	4	–
MR20-50	42	6	–	–	3	48	48	18	72	71	122	120.5	136	4	–
MR20-75	55	6	17	56	3	73	56	23	100	96	155	153.5	169	8	126
MR20-100	50	8	18	56	4	74	112	25	155	121	212	210.5	226	8	183
MR20-125	55	8	37	59	4	96	118	18	190	146	240	238.5	254	8	211
MR20-150	62	8	56	62	4	118	124	21	215	171	268	266.5	282	8	239

TYPE:MR

Bore: ϕ25



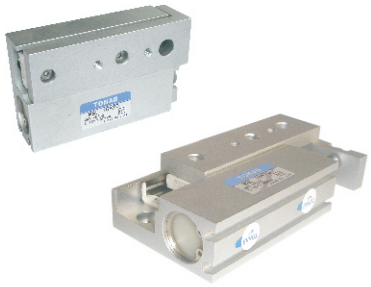
尺寸表/Dimension sheet(mm)

型號 Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
MR25−10	55	4	23	55	2	23	55	16	56	35	107	105.5	123	4	−
MR25−20	46	4	23	55	2	23	55	16	56	45	107	105.5	123	4	−
MR25−30	55	4	23	55	2	23	55	16	56	55	107	105.5	123	4	−
MR25−40	65	4	23	65	2	23	65	16	66	65	117	115.5	133	4	−
MR25−50	75	4	32	80	2	32	80	16	90	75	141	139.5	157	4	−
MR25−75	60	6	−	−	3	72	65	31	100	100	166	164.5	182	4	−
MR25−100	48	8	44	44	4	88	88	20	150	125	205	203.5	221	8	170
MR25−125	60	8	31	66	4	97	132	18	205	150	258	256.5	274	8	223
MR25−150	65	8	56	66	4	122	132	18	230	175	283	281.5	299	8	248

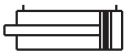
滑臺氣缸

MS系列 ϕ10、 ϕ16

訂購表示方法



圖形符號
Graphic symbol



MS	R	10	×	30	—	R1
仕樣 Specifications	滑臺方向	缸徑 Bore		行程 Stroke		感應器數量 Quantity
MS:滑臺氣缸 Slide unide cylinder	L:左(Left) R:右(Right)	10:ϕ10mm 16:ϕ16mm		10:10mm 20:20mm 30:30mm		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	16
動作形式 Acting	復動型 Double Action	
工作介質 Fluid	空氣 Air	
使用壓力範圍 Pressure range	0.15~0.85MPa	
使用溫度範圍 Temperature range	5~60℃	
潤滑 Lubrication	不需要 No required	
接管口徑 Port size	M5×0.8	

注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

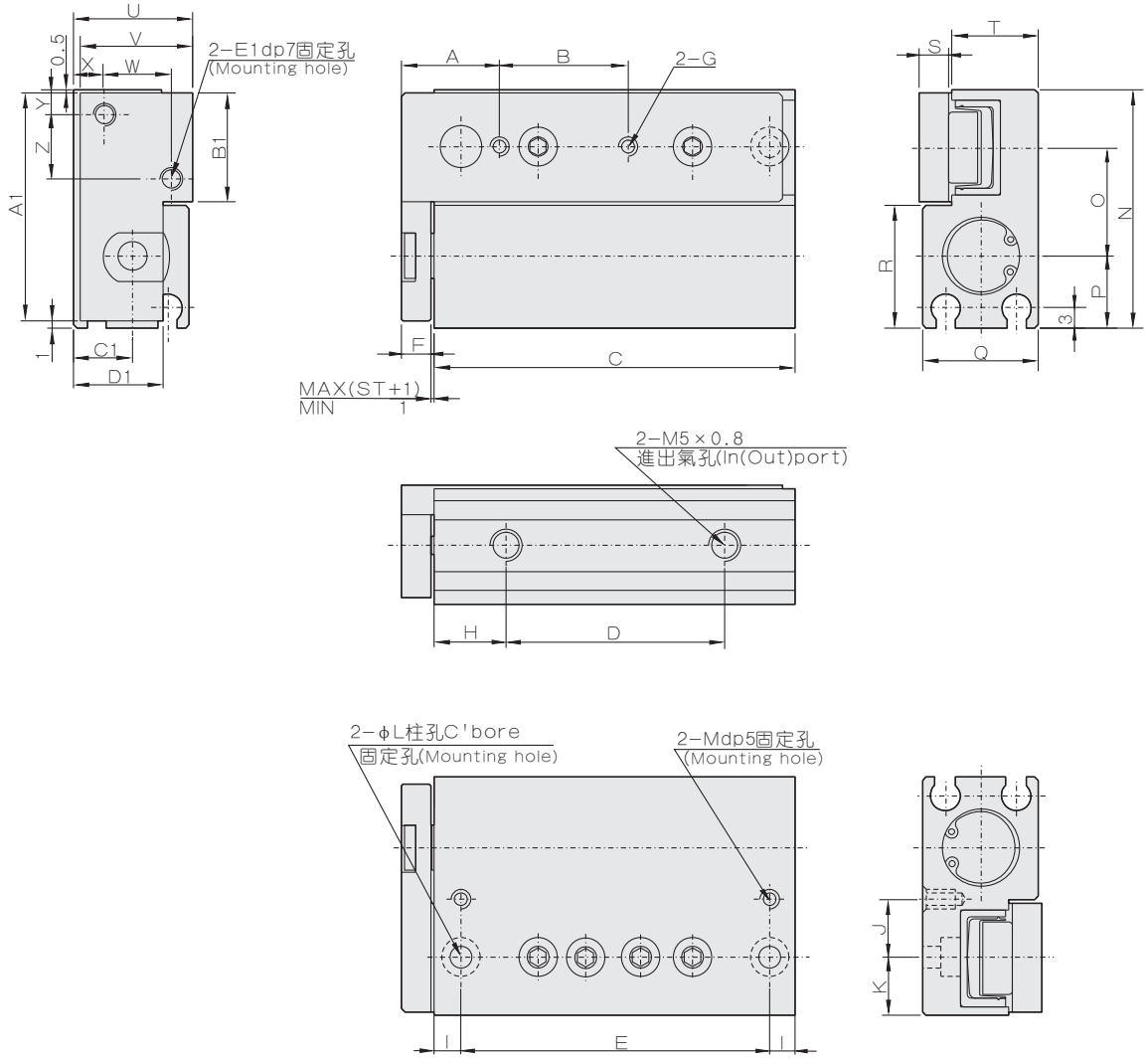
行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
ϕ10	10 20 30	RC07 RC16
ϕ16	10 20 30	

注: 特殊行程請與本公司聯系.

TYPE:MSR

Bore: ϕ10、 ϕ16



尺寸表/Dimension sheet(mm)

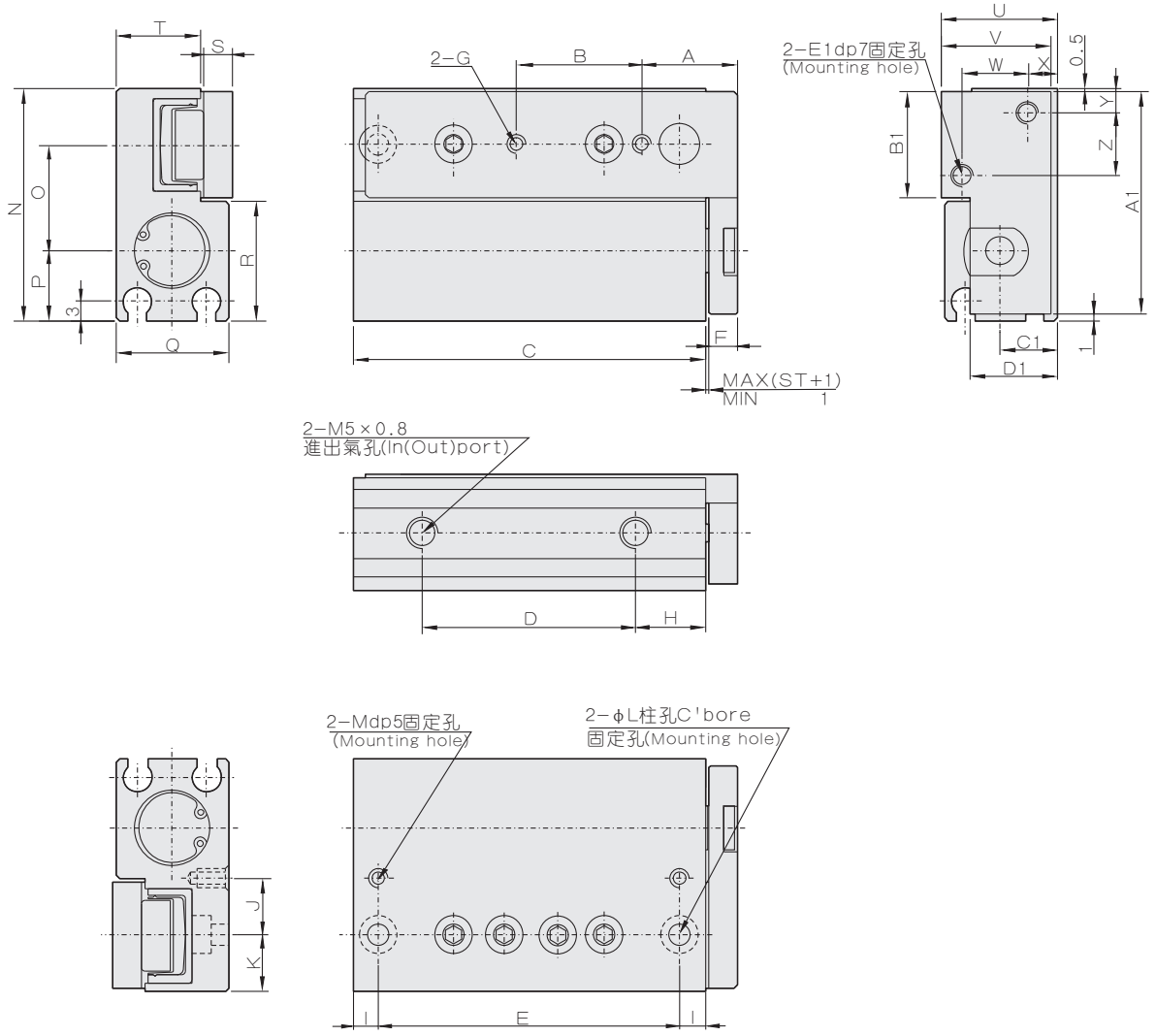
缸徑×行程 Bore×Stroke	ϕ10×10	ϕ10×20	ϕ10×30	ϕ16×10	ϕ16×20	ϕ16×30
A	15	23	28	20	23	23
B	20	20	30	20	25	47
C	56	65.5	75.5	63	73	83
D	34	43.5	53.5	33	43	53
E	48	57.5	67.5	51	61	71

缸徑 Bore	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A1	B1	C1	D1	E1
ϕ10	4.5	M3×0.5	11	4	9	9	3.4	M3×0.5	37	17	11	18	19	4.5	13.5	18.5	17.5	10.5	4.5	4	10	35.5	17	9	14	M3×0.5
ϕ16	6	M4×0.7	15	6	12	12	4.4	M4×0.7	49	23	14	22	25	6	16	23	22	12	6	5.5	12	47.5	23	11	17	M4×0.7

注1) ST=行程

TYPE:MSL

Bore: ϕ10、 ϕ16



尺寸表/Dimension sheet(mm)

缸徑/行程 Bore/Stroke	ϕ10×10	ϕ10×20	ϕ10×30	ϕ16×10	ϕ16×20	ϕ16×30
A	15	23	28	20	23	23
B	20	20	30	20	25	47
C	56	65.5	75.5	63	73	83
D	34	43.5	53.5	33	43	53
E	48	57.5	67.5	51	61	71

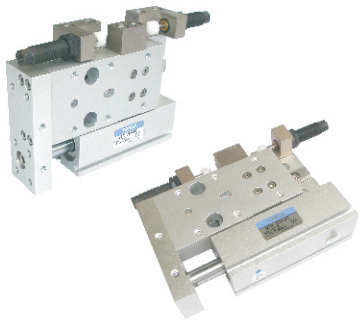
缸徑 Bore	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A1	B1	C1	D1	E1
ϕ10	4.5	M3×0.5	11	4	9	9	3.4	M3×0.5	37	17	11	18	19	4.5	13.5	18.5	17.5	10.5	4.5	4	10	35.5	17	9	14	M3×0.5
ϕ16	6	M4×0.7	15	6	12	12	4.4	M4×0.7	49	23	14	22	25	6	16	23	22	12	6	5.5	12	47.5	23	11	17	M4×0.7

注1) ST=行程

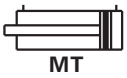
滑臺氣缸

MT系列 φ10 ~ φ32

訂購表示方法



圖形符號
Graphic symbol



MT	R	10	×	30	—	H	—	R1
仕樣 Specifications	滑臺方向	缸徑 Bore		行程 Stroke		緩衝型式 Cushion type		感應器數量 Quantity
MT:滑臺氣缸 Slide unide cylinder	L:左(Left) R:右(Right)	10:φ10mm 16:φ16mm 20:φ20mm 25:φ25mm 32:φ32mm		30:30mm 50:50mm 75:75mm 100:100mm		H:油壓緩衝器 空白:橡膠緩衝 H:hydraulic cushion Blank:rubber cushion		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	16	20	25	32
動作形式 Acting	復動型 Double Action				
工作介質 Fluid	空氣 Air				
使用壓力範圍 Pressure range	0.15~0.85MPa				
使用温度範圍 Temperature range	5~60℃				
潤滑 Lubrication	不需要 No required				
接管口徑 Port size	M5×0.8				Rc1/8

注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ10	30 50	RC07 RC16
φ16	30 50 75 100	
φ20	30 50 75 100	
φ25	30 50 75 100	
φ32	30 50 75 100	

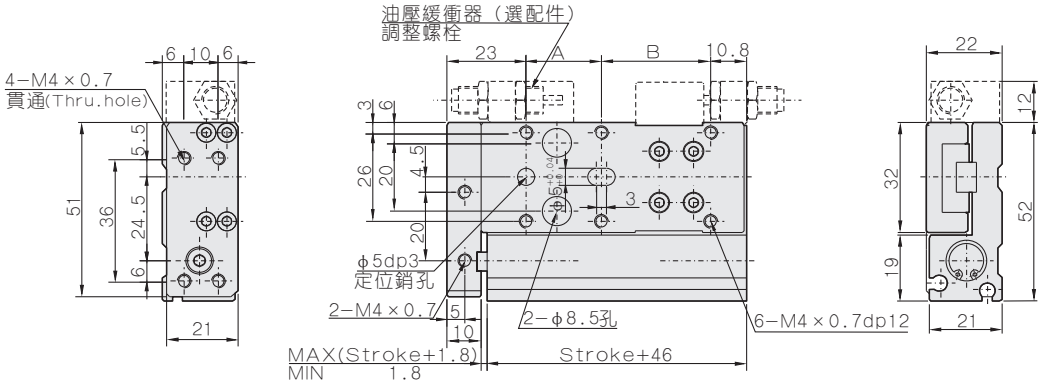
注: 特殊行程請與本公司聯系.

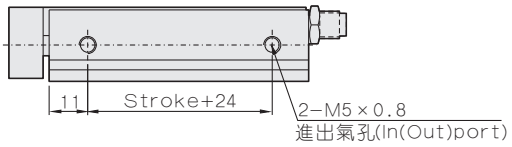
油壓緩衝器型號選配表

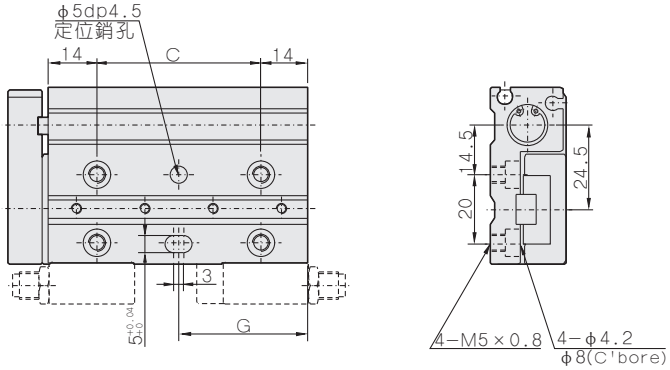
缸徑(mm) Bore	型號 Type
φ10	HC0806
φ16	HC1008
φ20	HC1008
φ25	HC1210
φ32	HC1210

TYPE:MTR

Bore: ϕ10





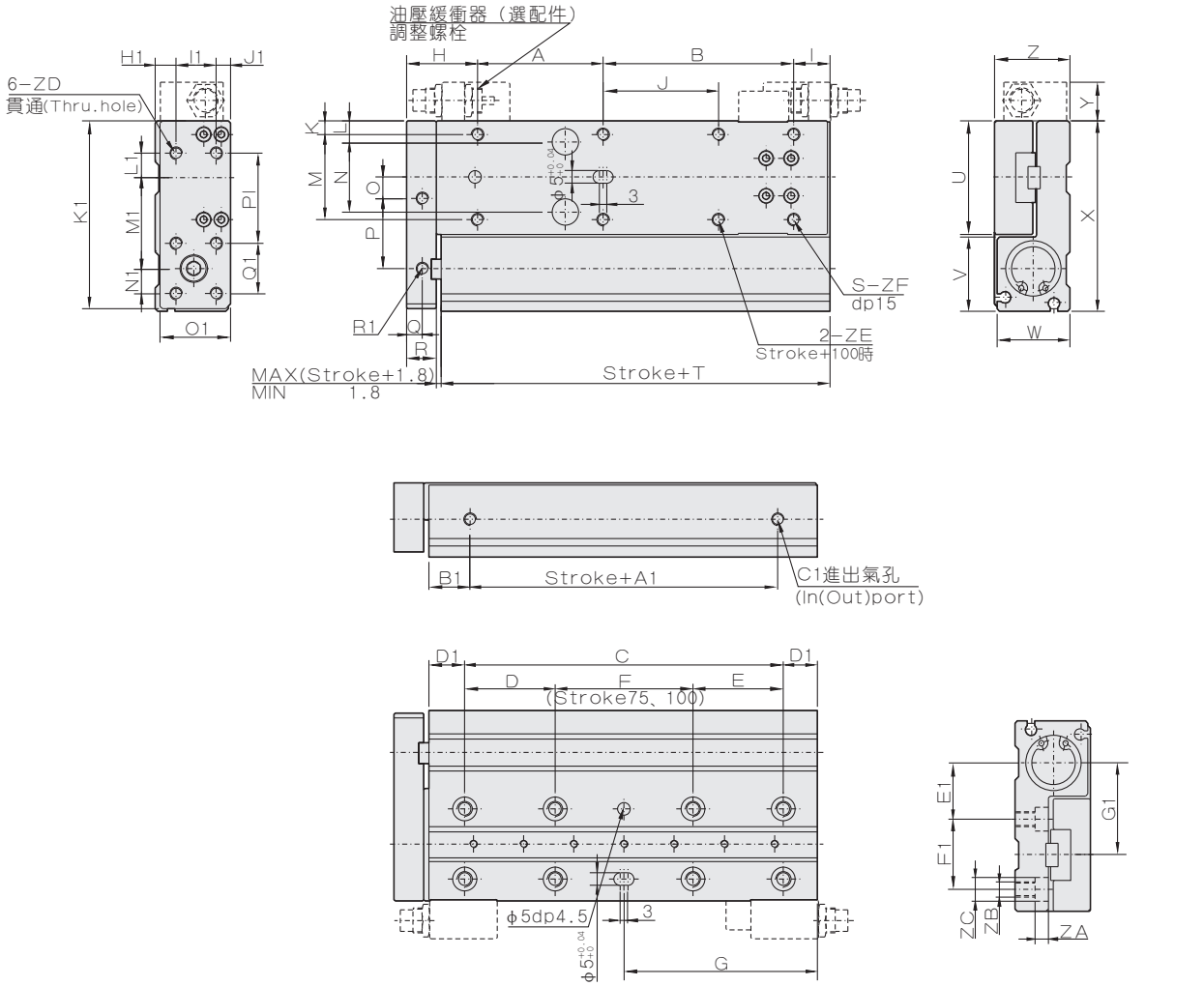


缸徑 Bore	A	B	C	G
10×30	22	32	48	38
10×50	32	42	68	48

注1) Stroke=行程

TYPE:MTR

Bore: ϕ16 ~ ϕ32



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	S	J
16×30	30	30	55	–	–	–	41.5	6	–
16×50	50	30	75	–	–	–	51.5	6	–
16×75	50	55	100	32	32	36	64	6	–
16×100	50	80	125	40	40	45	76.5	8	50
20×30	26	30	57	–	–	–	42.5	6	–
20×50	50	26	77	–	–	–	52.5	6	–
20×75	50	51	102	32	32	38	65	6	–
20×100	50	76	127	36	36	55	77.5	8	46
25×30	32	31	64	–	–	–	46	6	–
25×50	50	33	84	–	–	–	56	6	–
25×75	50	58	109	32	32	45	68.5	6	–
25×100	50	83	134	32	32	70	81	8	50
32×30	32	32	66	–	–	–	48	6	–
32×50	52	32	86	–	–	–	58	6	–
32×75	52	57	111	26	26	59	70.5	6	–
32×100	52	82	136	36	36	64	83	8	52

缸徑 Bore	H	I	K	L	M	N	O	P	Q	R	T	U	V	ZE
ϕ16	23	11.8	4	7	28	22	6	24	5	10	53	36	26	M5
ϕ20	28	14.8	5.5	8.5	34	28	8.5	28	6	12	55	45	30	M5
ϕ25	30	14.8	8.5	9.5	42	40	7	40	7	14	62	59	37	M5
ϕ32	31	18.8	6	9	46	40	9	40	8	16	66	58	43	M6

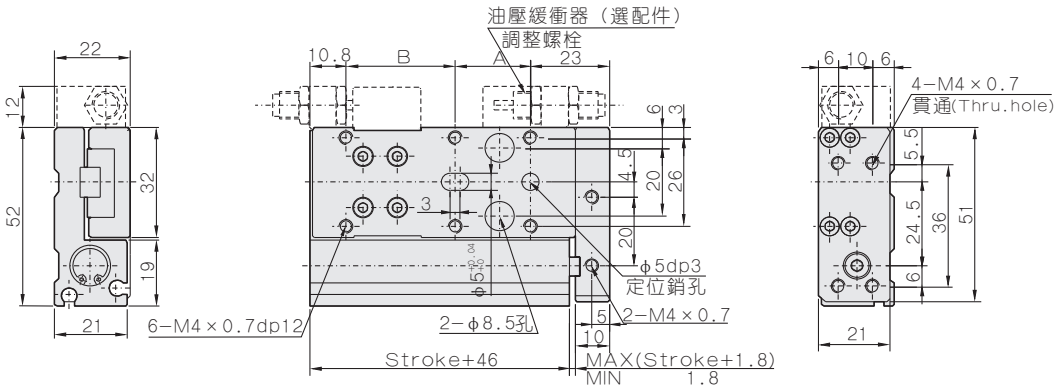
缸徑 Bore	W	X	Y	Z	A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	ZF
ϕ16	26	63	15.3	27	22	15.5	M5	14	19	22	30	8	13	6	M5
ϕ20	29	76	15.3	30	22.6	16.2	M5	14	22.5	28	36.5	8	16	6	M5
ϕ25	35	97	19.5	36	23	19.5	M5	14	27	40	47	10	18	8	M5
ϕ32	43	102	17	44	24.6	20.7	1/8	15	29	40	49	12	22	10	M6

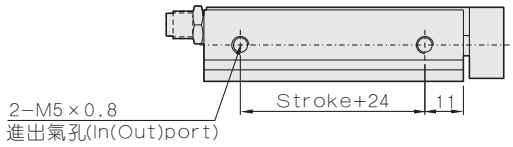
缸徑 Bore	K1	L1	M1	N1	O1	P1	Q1	R1	ZA	ZB	ZC	ZD
ϕ16	62	8	30	8	25	30	16	M4×0.7	4.2	M5×0.8	8	M5
ϕ20	75	9.5	36.5	10	28	36	20	M5×0.8	5.1	M6×1.0	9.5	M5
ϕ25	96	11	47	10	34	48	20	M6×1.0	6.5	M8×1.25	11	M6
ϕ32	101	9	49	13	42	45	26	M8×1.25	8.5	M10×1.5	14	M8

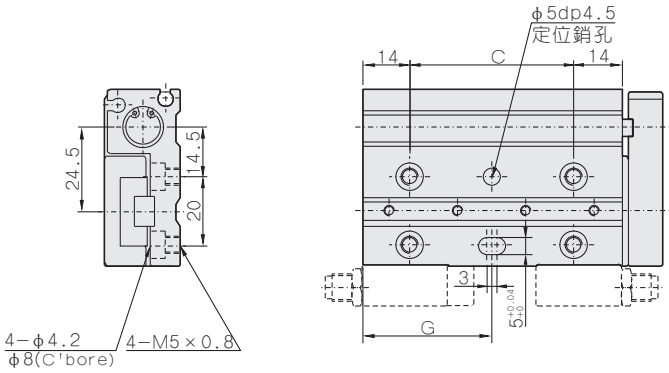
注1) Stroke=行程

TYPE:MTL

Bore: ϕ10





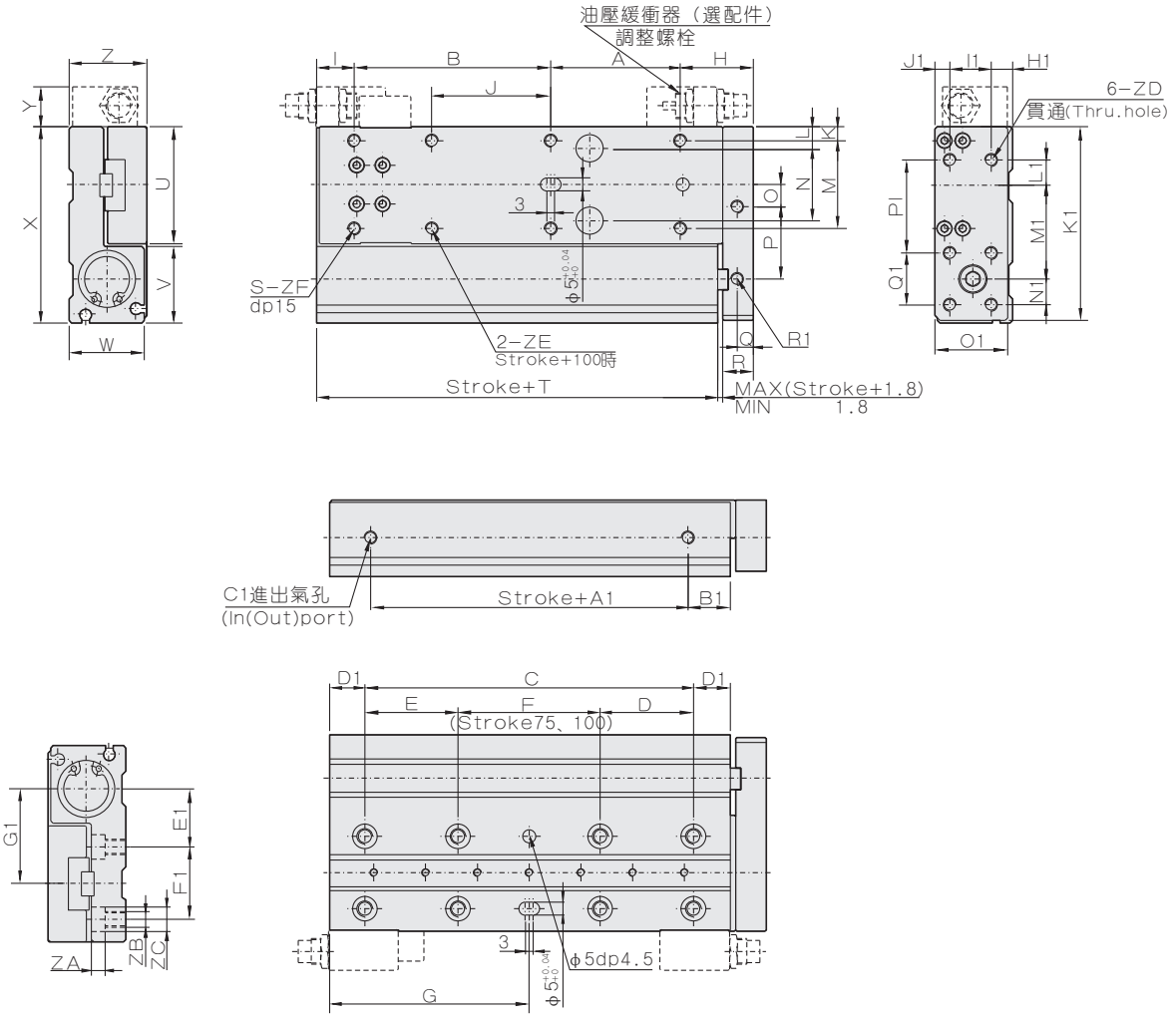


缸徑 Bore	A	B	C	G
10×30	22	32	48	38
10×50	32	42	68	48

注1) Stroke=行程

TYPE:MTL

Bore: ϕ16 ~ ϕ32



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	S	J
16×30	30	30	55	–	–	–	41.5	6	–
16×50	50	30	75	–	–	–	51.5	6	–
16×75	50	55	100	32	32	36	64	6	–
16×100	50	80	125	40	40	45	76.5	8	50
20×30	26	30	57	–	–	–	42.5	6	–
20×50	50	26	77	–	–	–	52.5	6	–
20×75	50	51	102	32	32	38	65	6	–
20×100	50	76	127	36	36	55	77.5	8	46
25×30	32	31	64	–	–	–	46	6	–
25×50	50	33	84	–	–	–	56	6	–
25×75	50	58	109	32	32	45	68.5	6	–
25×100	50	83	134	32	32	70	81	8	50
32×30	32	32	66	–	–	–	48	6	–
32×50	52	32	86	–	–	–	58	6	–
32×75	52	57	111	26	26	59	70.5	6	–
32×100	52	82	136	36	36	64	83	8	52

缸徑 Bore	H	I	K	L	M	N	O	P	Q	R	T	U	V	ZE
ϕ16	23	11.8	4	7	28	22	6	24	5	10	53	36	26	M5
ϕ20	28	14.8	5.5	8.5	34	28	8.5	28	6	12	55	45	30	M5
ϕ25	30	14.8	8.5	9.5	42	40	7	40	7	14	62	59	37	M5
ϕ32	31	18.8	6	9	46	40	9	40	8	16	66	58	43	M6

缸徑 Bore	W	X	Y	Z	A1	B1	C1	D1	E1	F1	G1	H1	I1	J1	ZF
ϕ16	26	63	15.3	27	22	15.5	M5	14	19	22	30	8	13	6	M5
ϕ20	29	76	15.3	30	22.6	16.2	M5	14	22.5	28	36.5	8	16	6	M5
ϕ25	35	97	19.5	36	23	19.5	M5	14	27	40	47	10	18	8	M5
ϕ32	43	102	17	44	24.6	20.7	1/8	15	29	40	49	12	22	10	M6

缸徑 Bore	K1	L1	M1	N1	O1	P1	Q1	R1	ZA	ZB	ZC	ZD
ϕ16	62	8	30	8	25	30	16	M4×0.7	4.2	M5×0.8	8	M5
ϕ20	75	9.5	36.5	10	28	36	20	M5×0.8	5.1	M6×1.0	9.5	M5
ϕ25	96	11	47	10	34	48	20	M6×1.0	6.5	M8×1.25	11	M6
ϕ32	101	9	49	13	42	45	26	M8×1.25	8.5	M10×1.5	14	M8

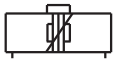
注1) Stroke=行程

無杆氣缸

WG系列 ϕ10 ~ ϕ40

訂購表示方法

圖形符號
Graphic symbol



WG	10	×	30	—	C
仕樣 Specifications	缸徑 Bore		行程 Stroke		緩衝型式 Cushion type
WG:無杆氣缸 Rodless cylinder	10:ϕ10mm 16:ϕ16mm 20:ϕ20mm 25:ϕ25mm 32:ϕ32mm 40:ϕ40mm		100~300mm 100~500mm 100~800mm 100~800mm 100~1000mm 100~1000mm		空白:橡膠緩衝 C:氣緩衝 Blank:Rubber cushion C:Air cushion

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke
ϕ10	100 150 200 250 300
ϕ16	100 200 300 350 400 450 500
ϕ20	100 200 300 350 400 450 500 600 700 800
ϕ25	100 200 300 350 400 450 500 600 700 800
ϕ32	100 200 300 350 400 450 500 600 700 800 900 1000
ϕ40	100 200 300 350 400 450 500 600 700 800 900 1000

注: 特殊行程請與本公司聯系.

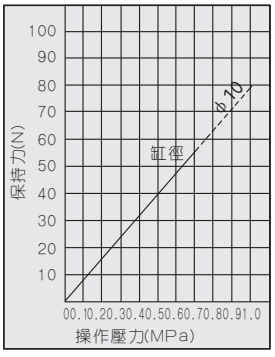
規格 Specification

缸徑 Bore size	10	16	20	25	32	40
動作形式 Acting	復動型 Double Action					
工作介質 Fluid	空氣 Air					
使用壓力範圍 Pressure range	0.15~0.7MPa					
使用温度範圍 Temperature range	5~60℃					
緩衝形式 Cushion type	橡膠緩衝 rubber cushion		橡膠、氣緩衝 Rubber、air cushion			
潤滑 Lubrication	不需要 No required					
接管口徑 Port size	M5×0.8		Rc1/8			Rc1/4

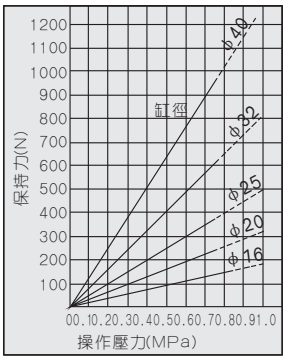
注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

氣缸理論出力及磁耦保持力

ϕ10



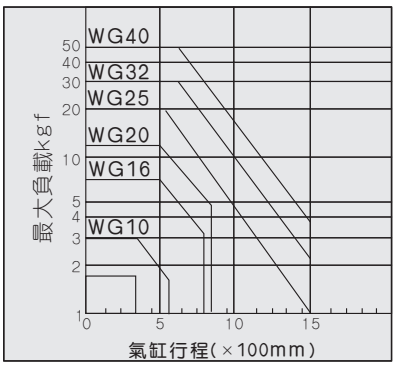
ϕ16, ϕ20, ϕ25, ϕ32, ϕ40



注: ϕ10、ϕ16無氣緩衝.

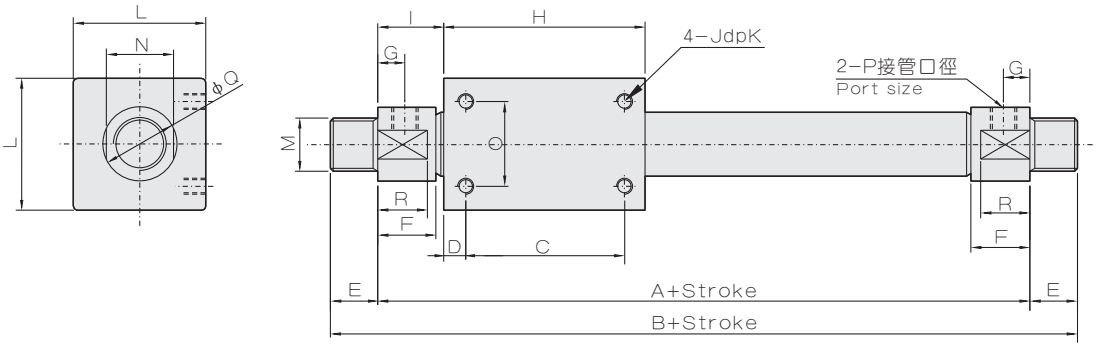
最大負載及行程(WG)

如若負載與滑塊的中心在同一點上,
則力與行程的關系曲綫如下圖.



TYPE:WG

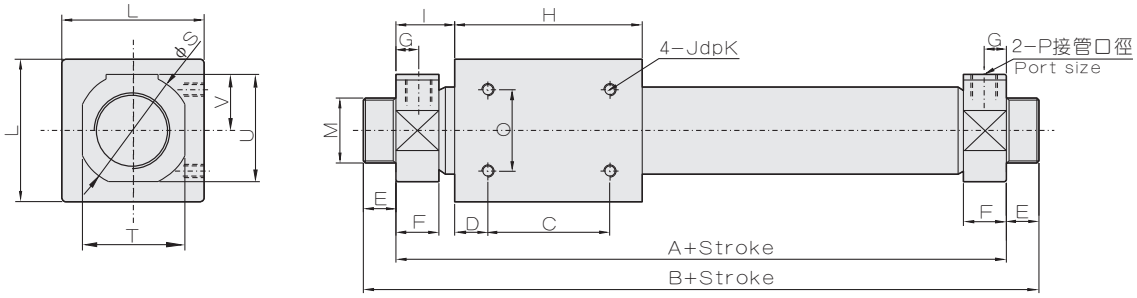
Bore: ϕ10、 ϕ16



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
ϕ10	63	81	30	4	9	11	5	38	12.5	M3×0.5	4.5	25	M10×1.0	12	16	M5×0.8	14	9
ϕ16	83	103	35	11	10	11	5.5	57	13	M4×0.7	6	35	M10×1.0	16	19	M5×0.8	18	9

Bore: ϕ20 ~ ϕ40



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	S	T	U	V
ϕ20	106	132	50	8	13	15	8	66	20	M4×0.7	6	36	M20×1.5	25	Rc1/8	30	27	28.5	15
ϕ25	111	137	50	10	13	15	8	70	20.5	M5×0.8	8	46	M26×1.5	30	Rc1/8	30	27	28.5	15
ϕ32	124	156	50	15	16	17	9	80	22	M6×1.0	8	60	M26×1.5	40	Rc1/8	38	35	36.5	19
ϕ40	150	182	60	16	16	21	11	92	29	M6×1.0	10	70	M32×2.0	40	Rc1/4	48	45	46.5	24

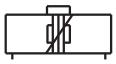
注1) Stroke=行程

無杆氣缸

WF系列 ϕ10 ~ ϕ40

訂購表示方法

圖形符號
Graphic symbol



WF	10	×	30	—	R1	—	H
仕樣 Specifications	缸徑 Bore		行程 Stroke		感應器數量 Quantity		緩衝型式 Cushion type
WF:無杆氣缸 Rodless cylinder	10:ϕ10mm 16:ϕ16mm 20:ϕ20mm 25:ϕ25mm 32:ϕ32mm 40:ϕ40mm		100~300mm 100~500mm 100~800mm 100~800mm 100~1000mm 100~1000mm		R1:1pcs R2:2pcs		H:油壓緩衝器 空白:橡膠緩衝 H:hydraulic cushion Blank:rubber cushion

規格 Specification

缸徑 Bore size	10	16	20	25	32	40
動作形式 Acting	復動型 Double Action					
工作介質 Fluid	空氣 Air					
使用壓力範圍 Pressure range	0.15~0.7MPa					
使用温度範圍 Temperature range	5~60℃					
緩衝形式 Cushion type	橡膠緩衝/油壓緩衝器 rubber cushion/hydraulic cushion					
潤滑 Lubrication	不需要 No required					
接管口徑 Port size	M5×0.8		Rc1/8			Rc1/4

注: 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

油壓緩衝器型號選配表

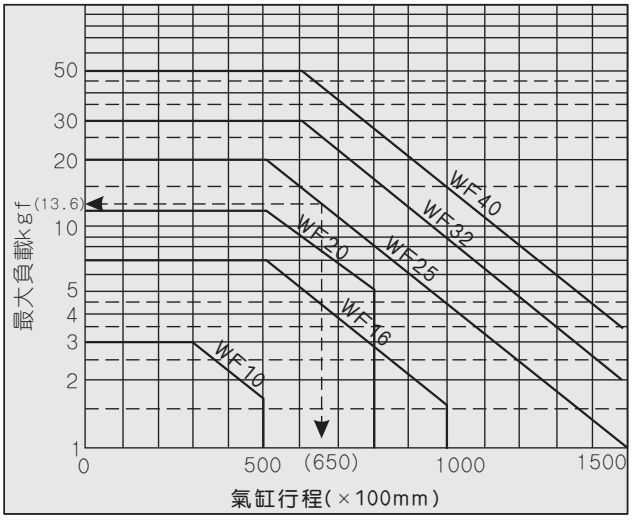
缸徑(mm) Bore	緩衝器型號 Type	磁性開關 Auto switch
ϕ10	HC0806	RC07 RC16 RC72
ϕ16	HC0806	
ϕ20	HC1008	
ϕ25	HC1412	
ϕ32	HC2020	
ϕ40	HC2020	

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke
ϕ10	100 150 200 250 300
ϕ16	100 200 300 350 400 450 500
ϕ20	100 200 300 350 400 450 500 600 700 800
ϕ25	100 200 300 350 400 450 500 600 700 800
ϕ32	100 200 300 350 400 450 500 600 700 800 900 1000
ϕ40	100 200 300 350 400 450 500 600 700 800 900 1000

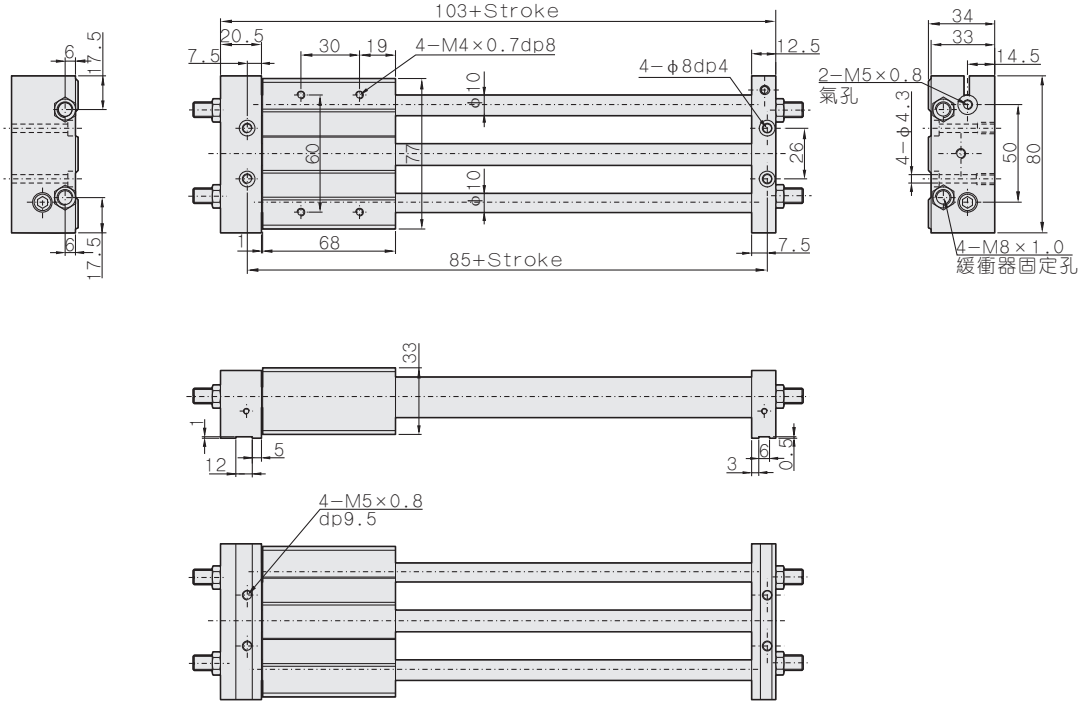
注: 特殊行程請與本公司聯系.

最大負載及行程(WF)

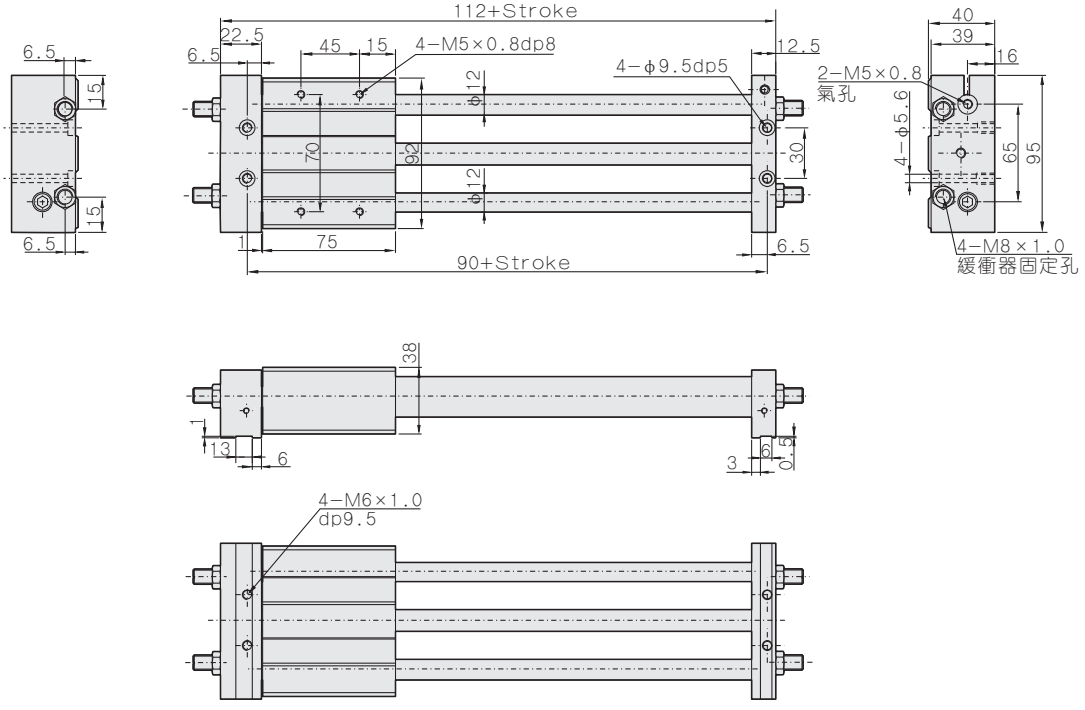


TYPE:WF

Bore: ϕ10



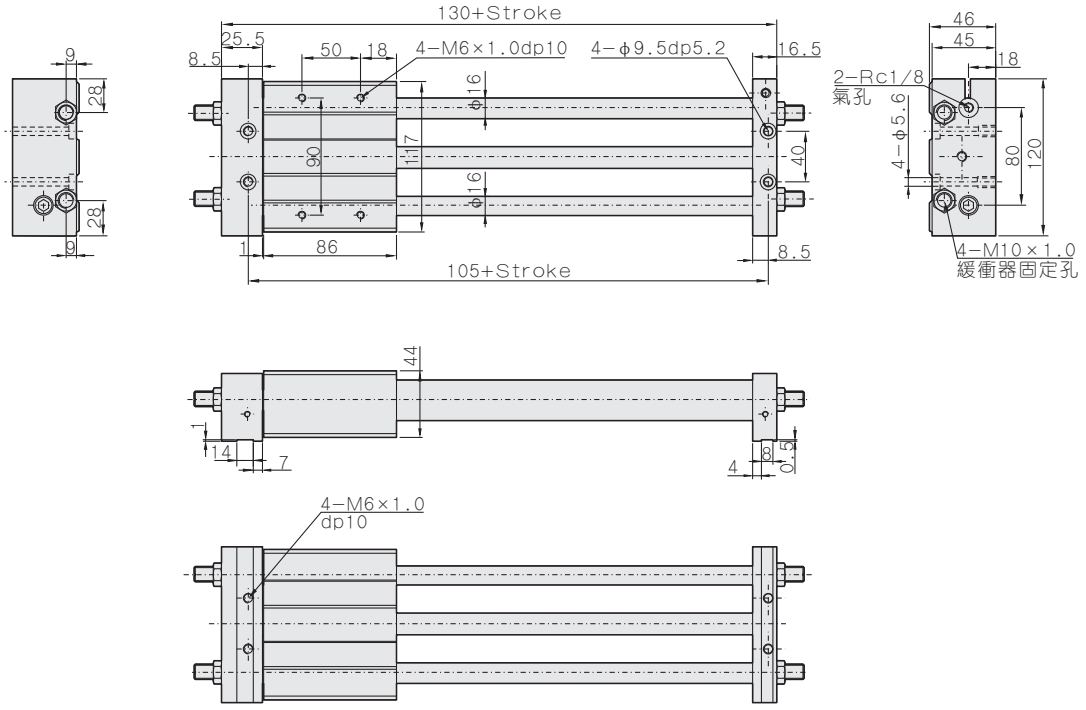
Bore: ϕ16



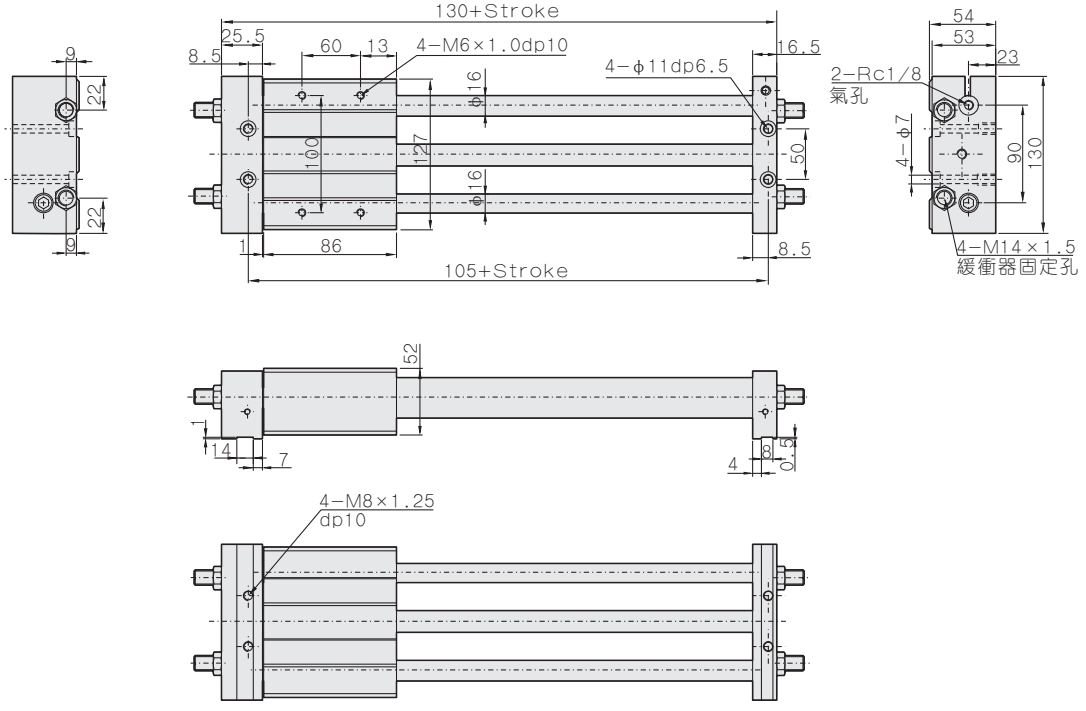
注1) Stroke=行程

TYPE:WF

Bore: ϕ20



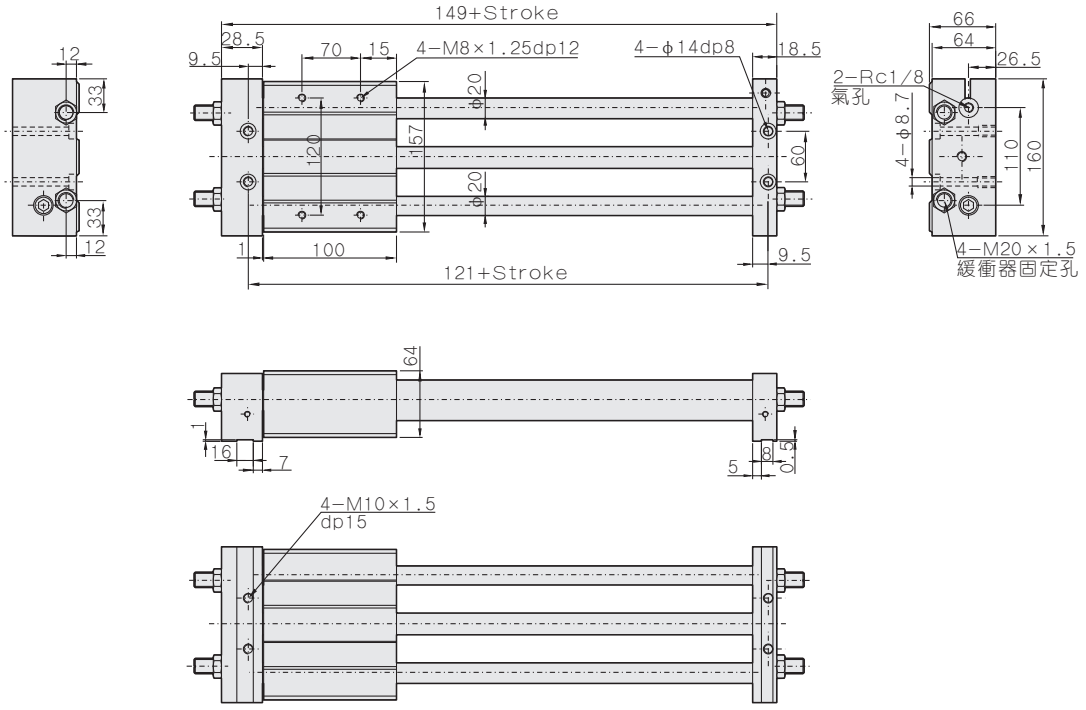
Bore: ϕ25



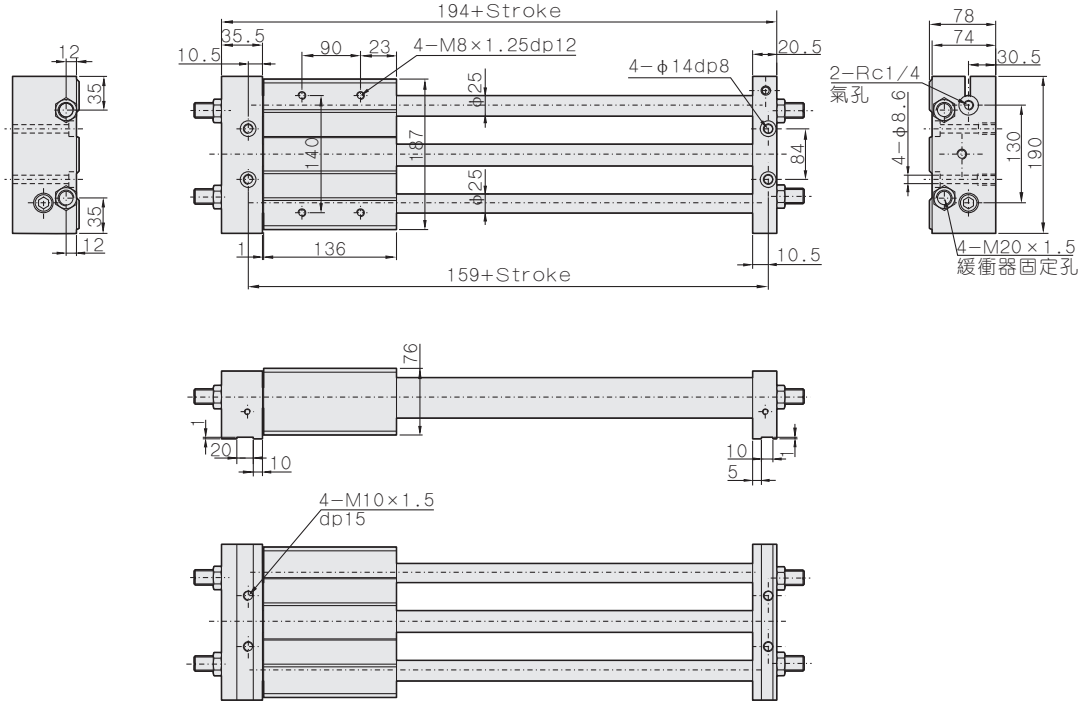
注1) Stroke=行程

TYPE:WF

Bore: ϕ32



Bore: ϕ40



注1) Stroke=行程

雙軸氣缸

XC系列 φ10 ~ φ32

訂購表示方法

圖形符號
Graphic symbol

XC	10	×	30	—	R1
仕樣 Specifications	缸徑 Bore		行程 Stroke		感應器數量 Quantity
XC:雙軸氣缸 Twin-rod cylinder	10:φ10mm 16:φ16mm 20:φ20mm 25:φ25mm 32:φ32mm		φ10:10~75mm φ16:10~150mm φ20:10~150mm φ25:10~150mm φ32:10~150mm		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	16	20	25	32
動作形式 Acting	復動型 Double Action				
工作介質 Fluid	空氣 Air				
使用壓力範圍 Pressure range	0.15~0.85MPa				
使用温度範圍 Temperature range	5~60℃				
調整行程 Adjustabie stroke	-10~0				
緩衝形式 Cushion type	橡膠緩衝 rubber cushion				
潤滑 Lubrication	不需要 No required				
接管口徑 Port size	M5×0.8				Rc1/8

注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

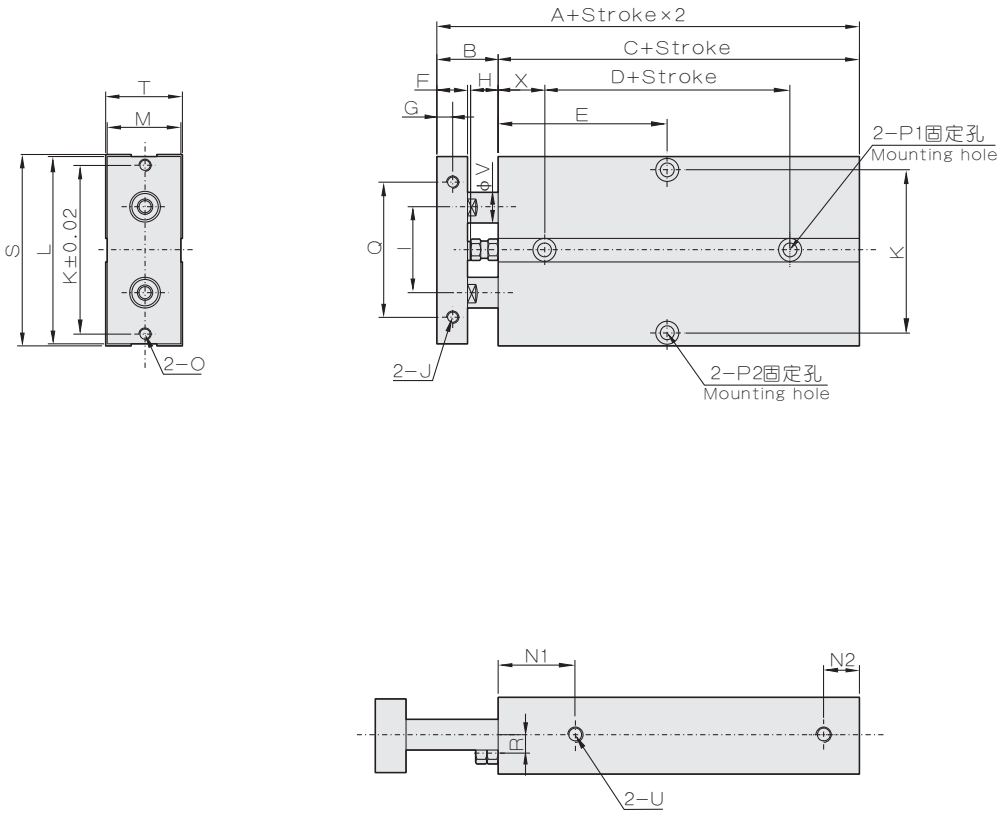
行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ10	10 20 25 30 40 50 75	RC11
φ16	10 20 25 30 40 50 75 100 125 150	
φ20	10 20 25 30 40 50 75 100 125 150	
φ25	10 20 25 30 40 50 75 100 125 150	
φ32	10 20 25 30 40 50 75 100 125 150	

注: 特殊行程請與本公司聯系.

TYPE:XC

Bore: ϕ10 ~ ϕ32



尺寸表/Dimension sheet(mm)

缸徑 Bore	A	B	C	D	行程	10	20	30	40	50	60	70	80	90	100	125	150	F	G	H	I	J	K
ϕ10	58	12	46	10	E	30	30	35	40	45	50	55	–	–	–	–	–	5	2.5	7	18	M3×0.5	34
ϕ16	68	15	53	20		30	35	40	45	50	55	60	65	70	75	87.5	100	8	4	7	24	M4×0.7dp5	47
ϕ20	78	20	58	20		35	35	40	45	50	55	60	65	70	75	87.5	100	10	5	10	28	M4×0.7dp5	55
ϕ25	81	19	62	30		40	40	45	50	55	60	65	70	75	80	92.5	105	10	5	9	34	M4×0.7dp6	66
ϕ32	108	30	78	35		45	50	55	60	65	70	75	80	85	90	102.5	115	17	8.5	13	42	M8×1.25dp10	83

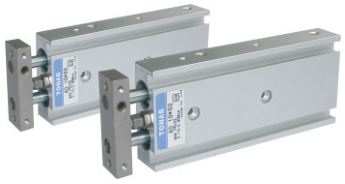
缸徑 Bore	L	M	N1	N2	O	P1	P2	Q	R	S	T	U	V	X
ϕ10	41	16	20	10	M3×0.5	通孔/Through hole:ϕ3.4 雙邊/Doubleside:ϕ6dp6.2	通孔/Through hole:ϕ3.4 雙邊/Doubleside:ϕ6dp3.3	26	2.5	42	17	M5×0.8	6	15
ϕ16	53	20	22	11	M4×0.7	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ7.5dp7.2	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ8dp4.5	34	3	54	21	M5×0.8	8	15
ϕ20	61	24	25	12	M4×0.7	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ7.5dp7.2	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ8dp4.5	44	3.5	62	25	M5×0.8	10	15
ϕ25	72	29	27	12	M4×0.7	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ7.5dp7.2	通孔/Through hole:ϕ4.5 雙邊/Doubleside:ϕ8dp4.5	56	6	73	30	M5×0.8	12	15
ϕ32	94	38	40	14	M6×1.0	通孔/Through hole:ϕ5.5 雙邊/Doubleside:ϕ9dp13.2	通孔/Through hole:ϕ5.5 雙邊/Doubleside:ϕ9dp5.4	72	10	96	40	Rc1/8	16	17

注1) Stroke=行程

雙軸氣缸

XD系列 ϕ10 ~ ϕ32

訂購表示方法



圖形符號
Graphic symbol

XD — 10 × 30 — R1

XD	10	30	R1
仕樣 Specifications	缸徑 Bore	行程 Stroke	感應器數量 Quantity
XD：雙軸氣缸 Twin-rod cylinder	10：ϕ10mm 15：ϕ15mm 20：ϕ20mm 25：ϕ25mm 32：ϕ32mm	ϕ10：10~75mm ϕ15：10~150mm ϕ20：10~150mm ϕ25：10~150mm ϕ32：10~150mm	R1：1pcs R2：2pcs

規格 Specification

缸徑 Bore size	10	15	20	25	32
動作形式 Acting	復動型 Double Action				
工作介質 Fluid	空氣 Air				
使用壓力範圍 Pressure range	0.15~0.85MPa				
使用溫度範圍 Temperature range	5~60℃				
調整行程 Adjustabie stroke	-10~0				
緩衝形式 Cushion type	橡膠緩衝 rubber cushion				
潤滑 Lubrication	不需要 No required				
接管口徑 Port size	M5×0.8			Rc1/8	

注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

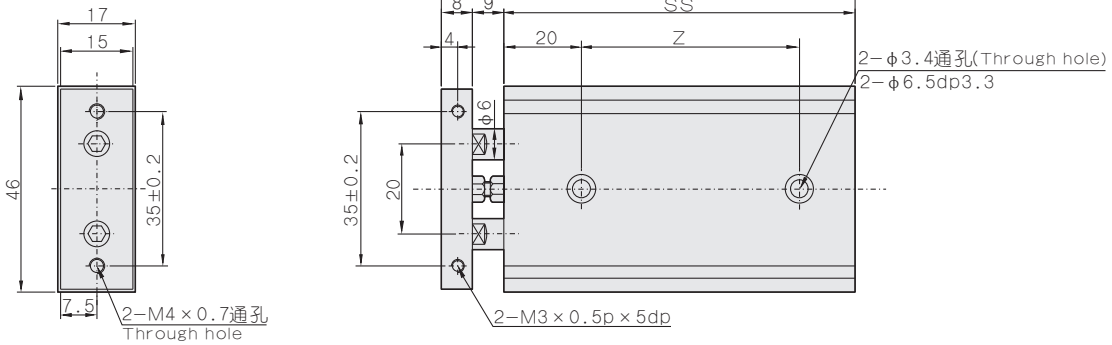
行程 Stroke

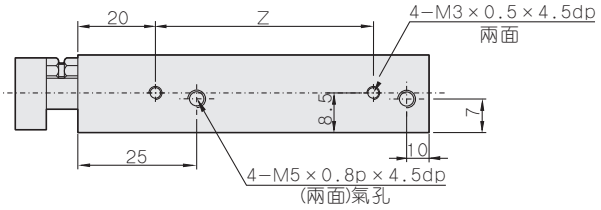
缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
ϕ10	10 20 25 30 40 50 75	RC32
ϕ15	10 20 25 30 40 50 75 100 125 150	
ϕ20	10 20 25 30 40 50 75 100 125 150	
ϕ25	10 20 25 30 40 50 75 100 125 150	
ϕ32	10 20 25 30 40 50 75 100 125 150	

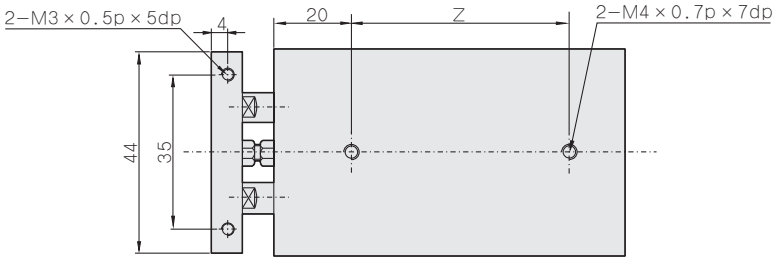
注: 特殊行程請與本公司聯系.

TYPE:XD

Bore: ϕ10





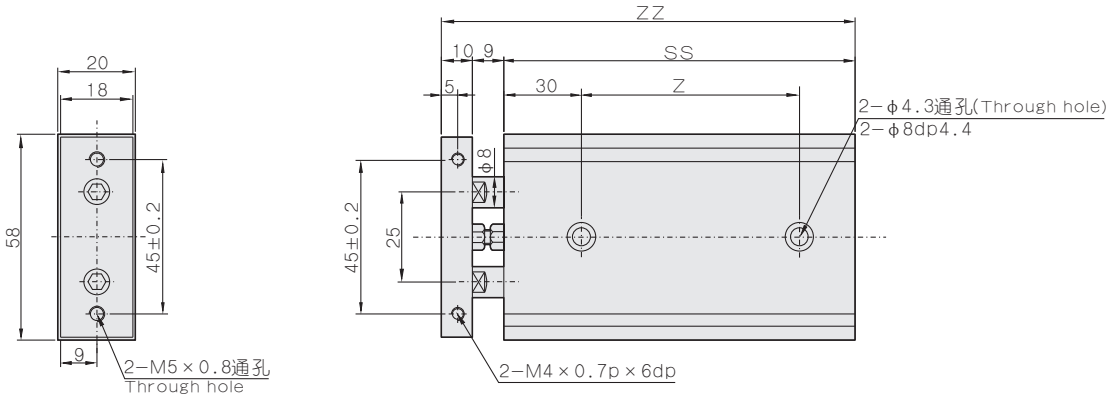


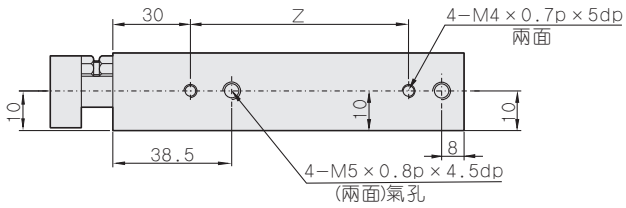
XD-10			
Z	ZZ	ST	SS
30	82	10	65
	92	20	75
40	102	30	85
	112	40	95
	122	50	105

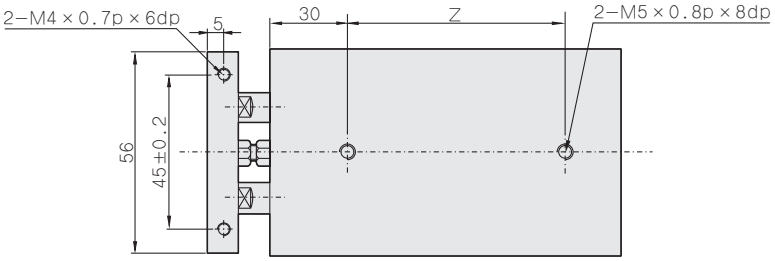
注1) ST=行程

TYPE:XD

Bore: ϕ15





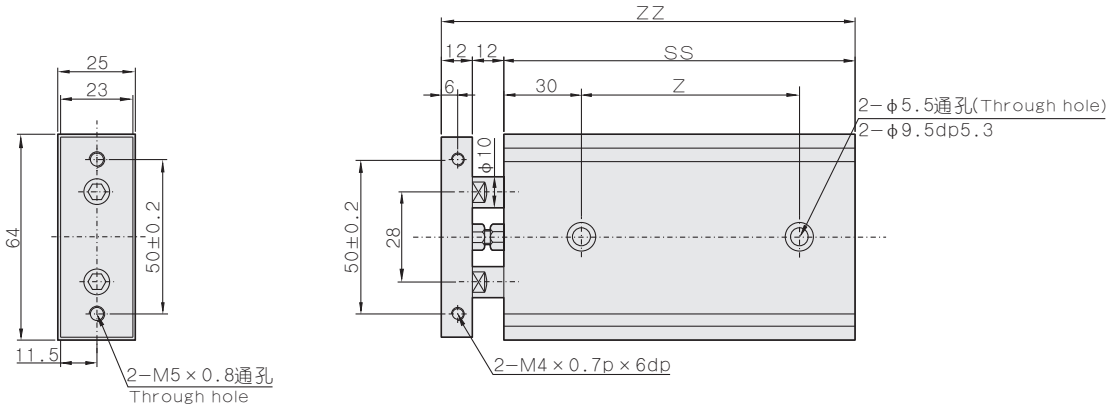


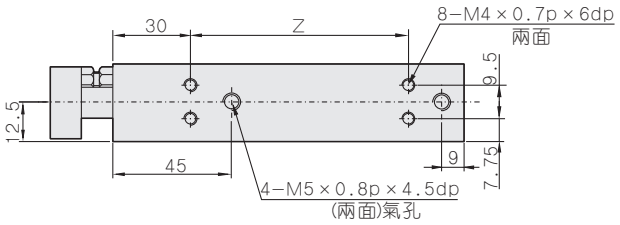
XD-15			
Z	ZZ	ST	SS
25	89	10	70
	99	20	80
35	109	30	90
	119	40	100
	129	50	110

注1) ST=行程

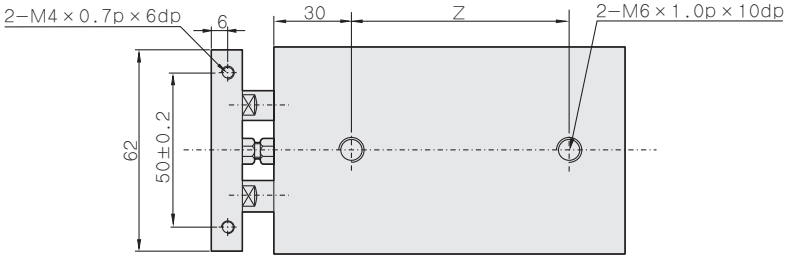
TYPE:XD

Bore: ϕ20





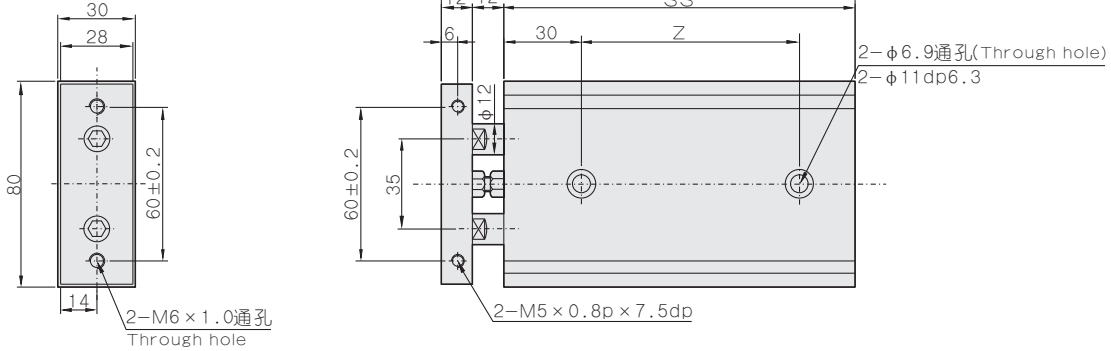
XD-20			
Z	ZZ	ST	SS
30	104	10	80
	114	20	90
40	124	30	100
	134	40	110
	144	50	120
60	169	75	145
	194	100	170



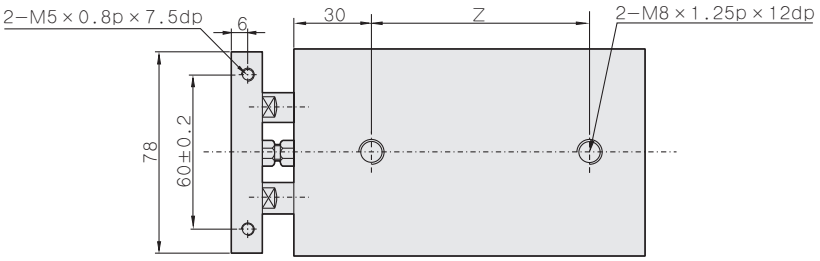
注1) ST=行程

TYPE:XD

Bore: ϕ25



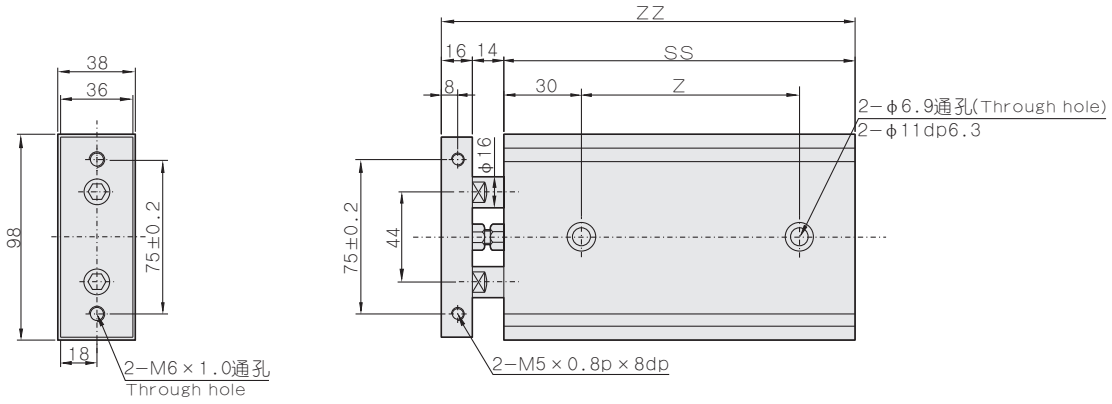
XD-25			
Z	ZZ	ST	SS
30	106	10	82
	116	20	92
40	126	30	102
	136	40	112
	146	50	122
60	171	75	147
	196	100	172

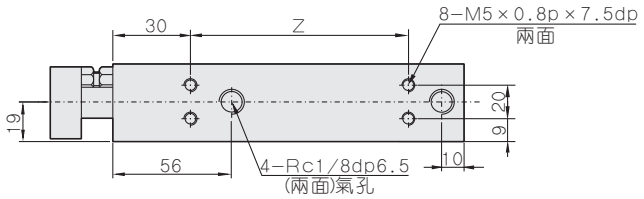


注1) ST=行程

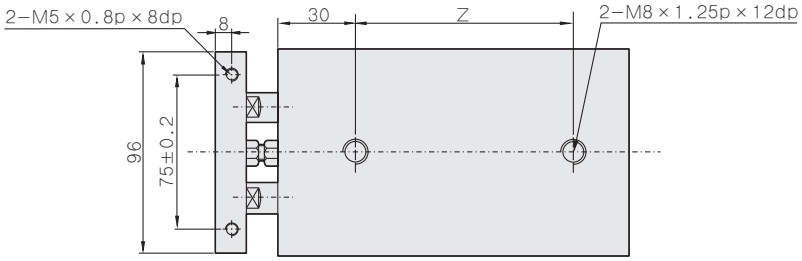
TYPE:XD

Bore: ϕ32





XD-32			
Z	ZZ	ST	SS
40	122	10	92
	132	20	102
50	142	30	112
	152	40	122
	162	50	132
70	187	75	157
	212	100	182



注1) ST=行程

滑動雙軸氣缸

XA系列 ϕ10 ~ ϕ32

訂購表示方法

圖形符號
Graphic symbol

XA	10	×	30	—	R1
仕樣 Specifications	缸徑 Bore		行程 Stroke		感應器數量 Quantity
XA:滑動雙軸氣缸 Twin-rod cylinder	10:ϕ10mm 15:ϕ15mm 20:ϕ20mm 25:ϕ25mm 32:ϕ32mm		ϕ10:25~50mm ϕ15:25~100mm ϕ20:25~100mm ϕ25:25~100mm ϕ32:25~100mm		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	15	20	25	32
動作形式 Acting	復動型 Double Action				
工作介質 Fluid	空氣 Air				
使用壓力範圍 Pressure range	0.15~0.85MPa				
使用温度範圍 Temperature range	5~60℃				
調整行程 Adjustabie stroke	-10~0				
緩衝形式 Cushion type	橡膠緩衝 rubber cushion				
潤滑 Lubrication	不需要 No required				
接管口徑 Port size	M5×0.8			Rc1/8	

注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

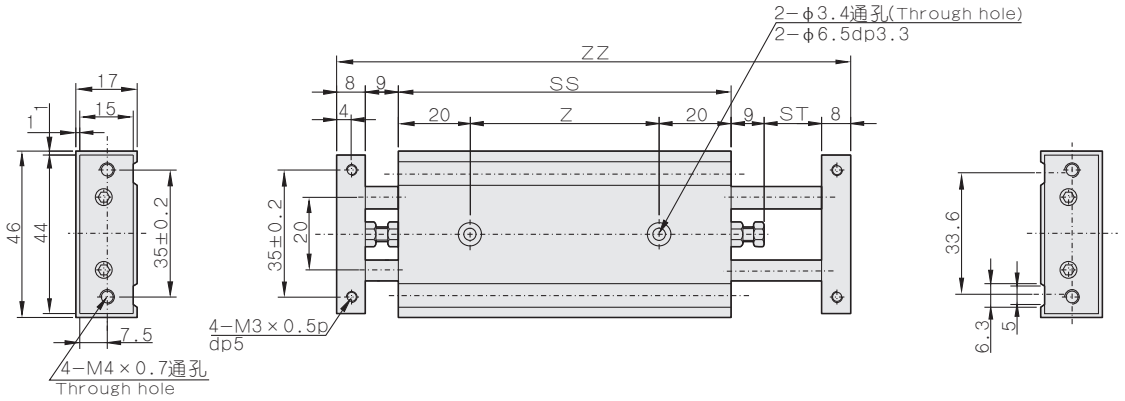
行程 Stroke

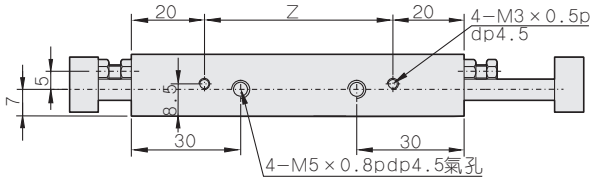
缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
ϕ10	10 20 25 30 40 50	RC32
ϕ15	10 20 25 30 40 50 75 100	
ϕ20	10 20 25 30 40 50 75 100	
ϕ25	10 20 25 30 40 50 75 100	
ϕ32	10 20 25 30 40 50 75 100	

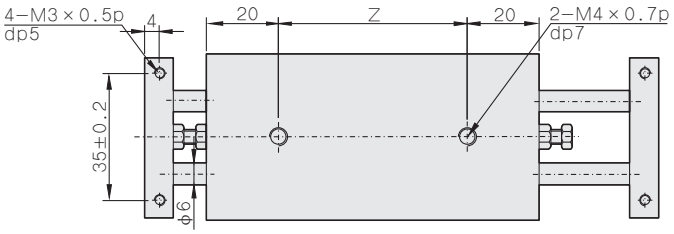
注: 特殊行程請與本公司聯系.

TYPE:XA

Bore: ϕ10





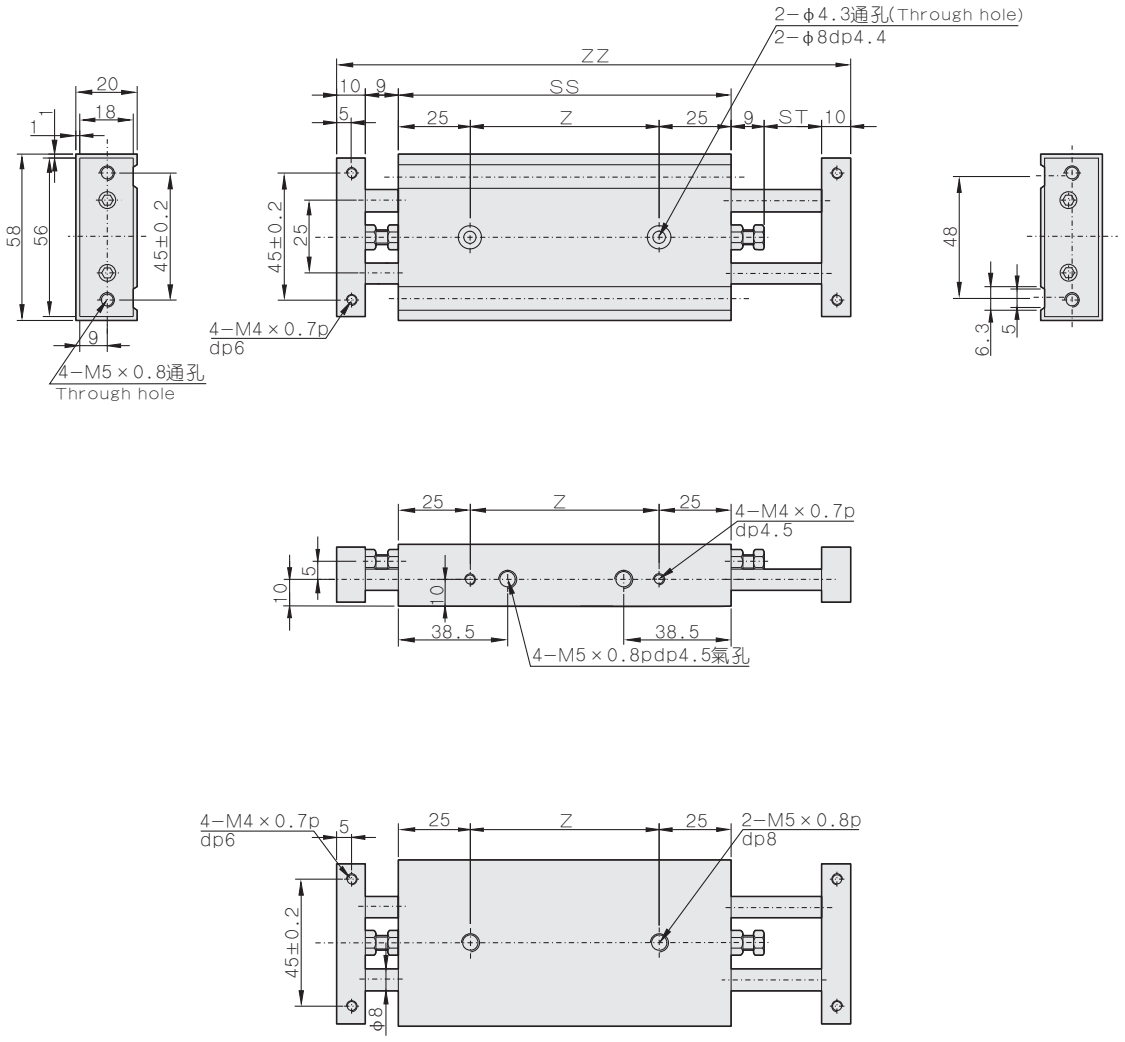


	形式 Type	ST	SS	ZZ	Z
標準行程 Standard stroke	XA10−10	10	92	136	52
	XA10−20	20	102	156	62
	XA10−30	30	112	176	72
	XA10−40	40	122	196	82
	XA10−50	50	132	216	92
長行程 Long stroke	XA10−75	75	157	266	117
	XA10−100	100	182	316	142
	XA10−125	125	207	366	167
	XA10−150	150	232	416	192

注1) ST=行程

TYPE:XA

Bore: ϕ15

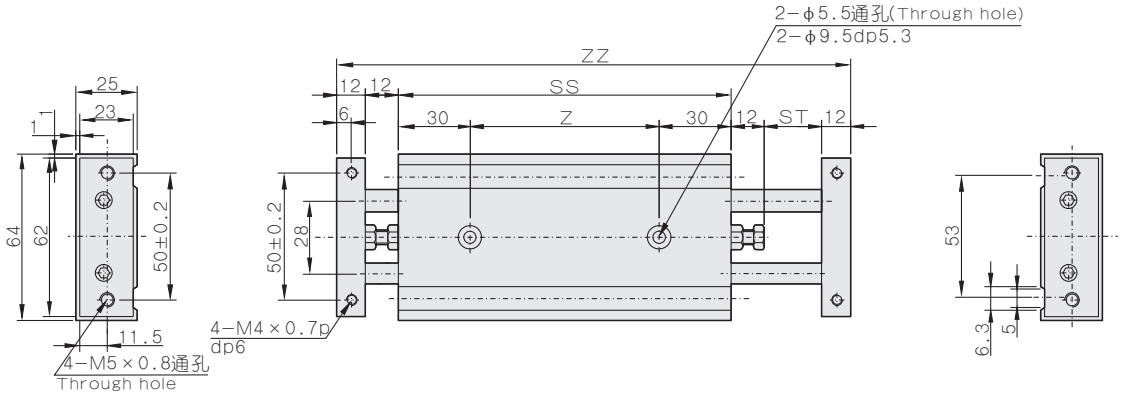


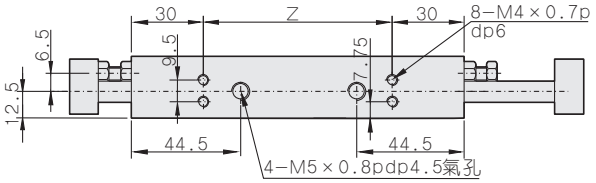
	形式 Type	ST	SS	ZZ	Z
標準行程 Standard stroke	XA15−10	10	105	153	55
	XA15−20	20	115	173	65
	XA15−30	30	125	193	75
	XA15−40	40	135	213	85
	XA15−50	50	145	233	95
長行程 Long stroke	XA15−75	75	170	283	120
	XA15−100	100	195	333	145
	XA15−125	125	220	383	170
	XA15−150	150	245	433	195

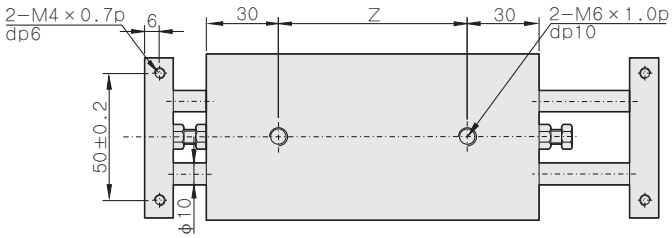
注1) ST=行程

TYPE:XA

Bore: ϕ20





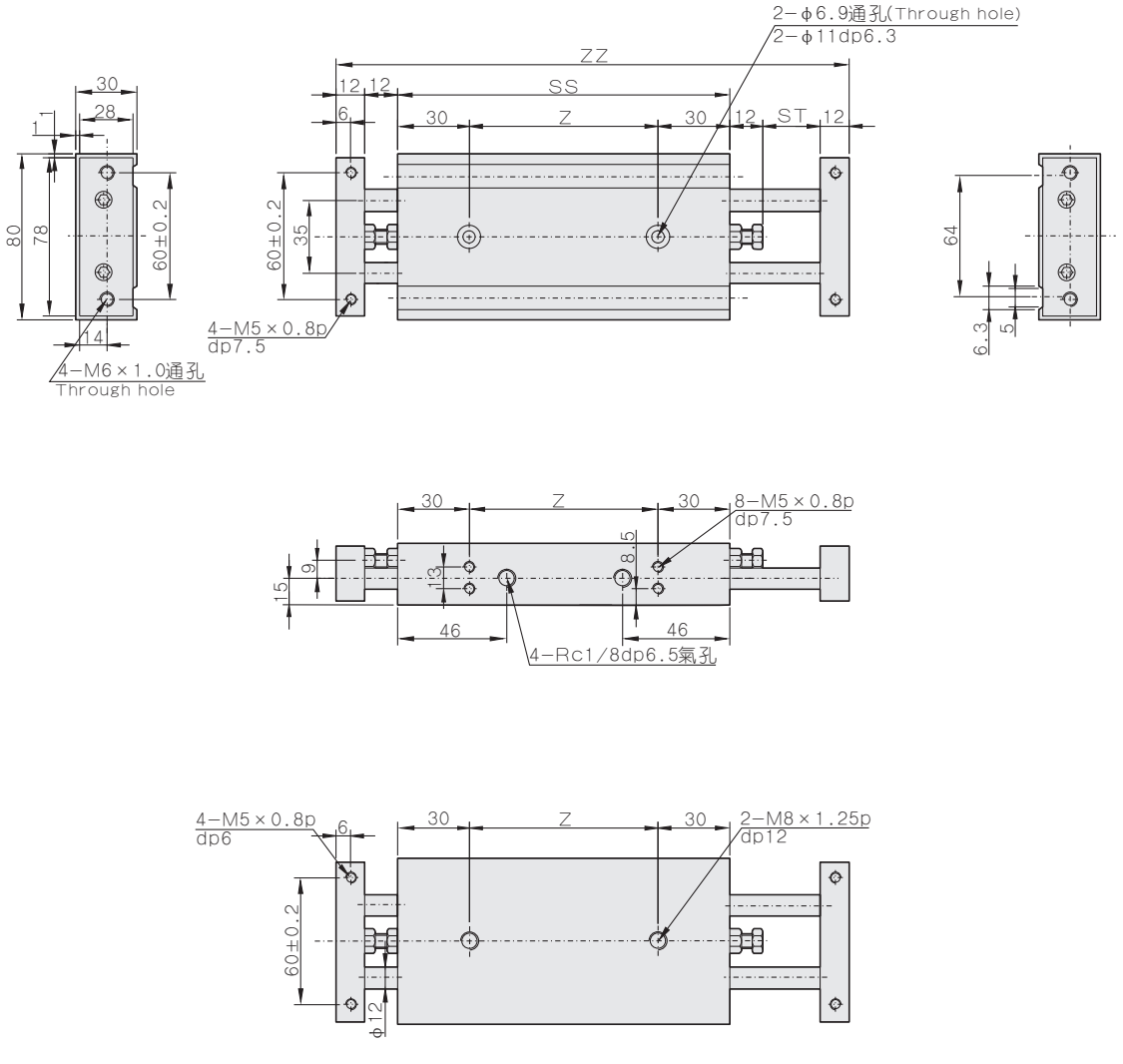


	形式 Type	ST	SS	ZZ	Z
標準行程 Standard stroke	XA20−10	10	120	178	60
	XA20−20	20	130	198	70
	XA20−30	30	140	218	80
	XA20−40	40	150	238	90
	XA20−50	50	160	258	100
	XA20−75	75	185	308	125
	XA20−100	100	210	358	150
長行程 Long stroke	XA20−125	125	235	408	175
	XA20−150	150	260	458	200
	XA20−175	175	285	508	225
	XA20−200	200	310	558	250

注1) ST=行程

TYPE:XA

Bore: ϕ25

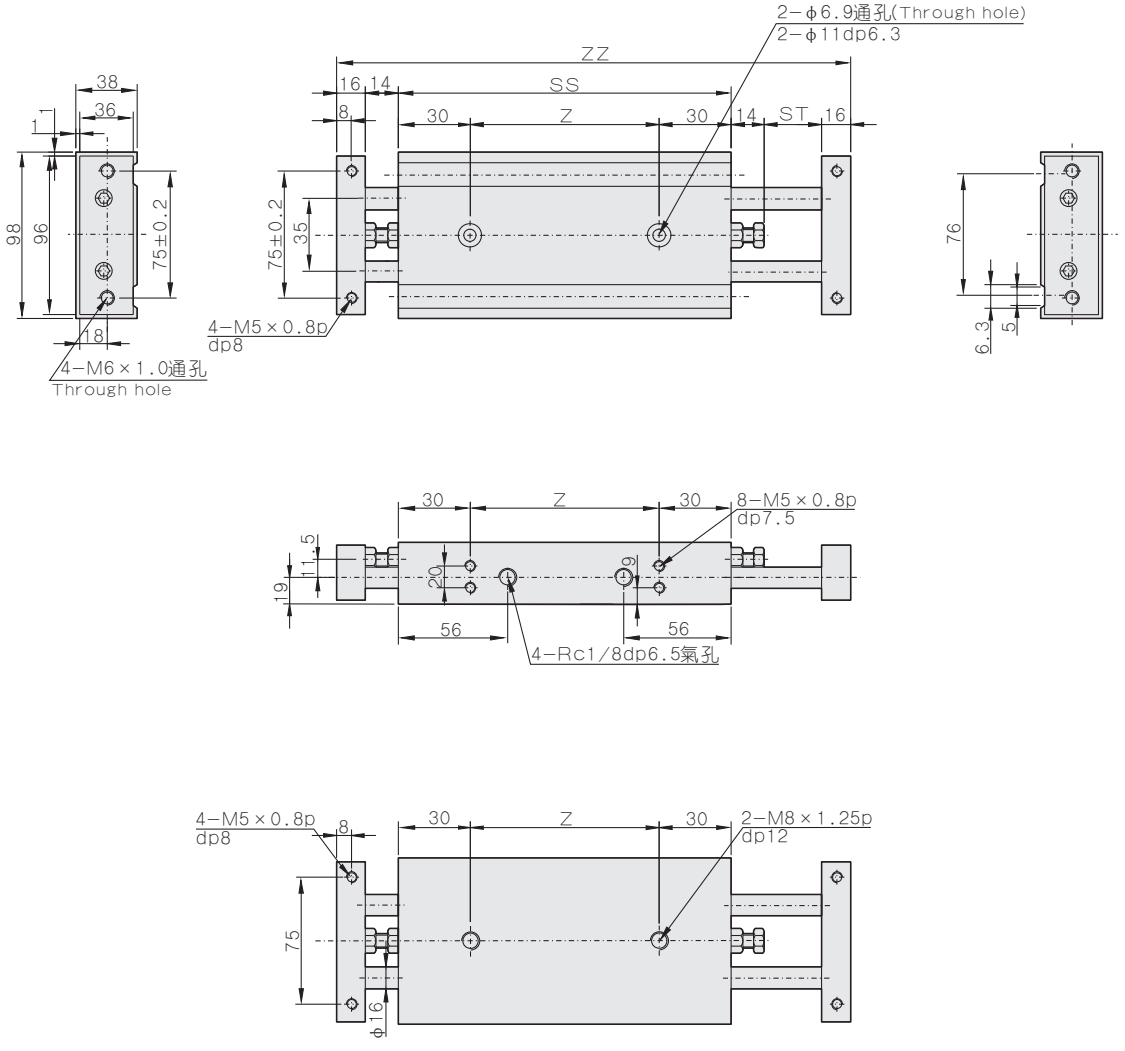


	形式 Type	ST	SS	ZZ	Z
標準行程 Standard stroke	XA25−10	10	122	180	62
	XA25−20	20	132	200	72
	XA25−30	30	142	220	82
	XA25−40	40	152	240	92
	XA25−50	50	162	260	102
	XA25−75	75	187	310	127
	XA25−100	100	212	360	152
長行程 Long stroke	XA25−125	125	237	410	177
	XA25−150	150	262	460	202
	XA25−175	175	287	510	227
	XA25−200	200	312	560	252

注1) ST=行程

TYPE:XA

Bore: φ32



	形式 Type	ST	SS	ZZ	Z
標準行程 Standard stroke	XA32−10	10	143	213	83
	XA32−20	20	153	233	93
	XA32−30	30	163	253	103
	XA32−40	40	173	273	113
	XA32−50	50	183	293	123
	XA32−75	75	208	343	148
	XA32−100	100	233	393	173
長行程 Long stroke	XA32−125	125	258	443	198
	XA32−150	150	283	493	223
	XA32−175	175	308	543	248
	XA32−200	200	333	593	273

注1) ST=行程

滑動雙軸氣缸(中間本體固定型)

XAK系列 φ10 ~ φ25

訂購表示方法

圖形符號
Graphic symbol

XAK — 10 × 30 — R1

XAK	10	30	R1
仕樣 Specifications	缸徑 Bore	行程 Stroke	感應器數量 Quantity
XAK:滑動雙軸氣缸 Twin-rod cylinder	10:φ10mm 16:φ16mm 20:φ20mm 25:φ25mm	φ10:25~100mm φ16:25~150mm φ20:25~150mm φ25:25~150mm	R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	16	20	25
動作形式 Acting	復動型 Double Action			
工作介質 Fluid	空氣 Air			
使用壓力範圍 Pressure range	0.15~0.85MPa			
使用温度範圍 Temperature range	5~60℃			
調整行程 Adjustabie stroke	-10~0			
緩衝形式 Cushion type	橡膠緩衝 rubber cushion			
潤滑 Lubrication	不需要 No required			
接管口徑 Port size	M5×0.8			Rc1/8

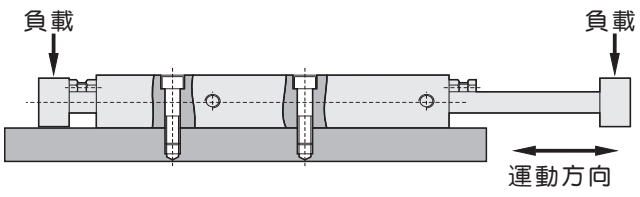
注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ10	25 50 75 100	XAK:RC06
φ16	25 50 75 100 125 150	
φ20	25 50 75 100 125 150	
φ25	25 50 75 100 125 150	

固定方式

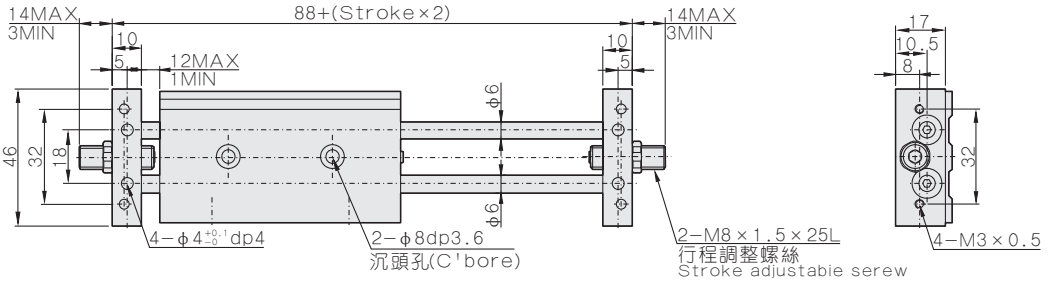
本體固定

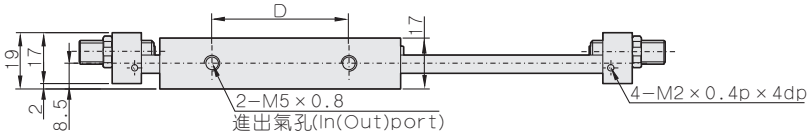


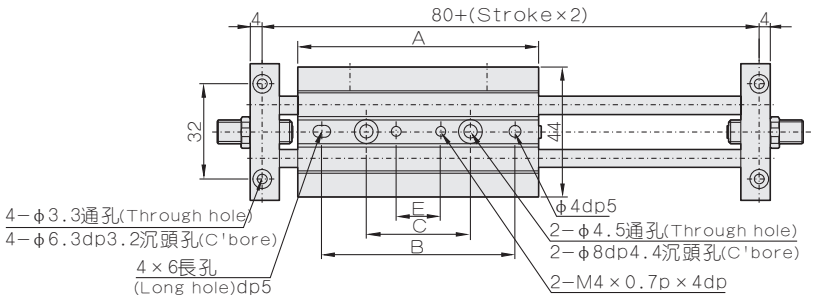
注: 特殊行程請與本公司聯系.

TYPE:XAK

Bore: ϕ10



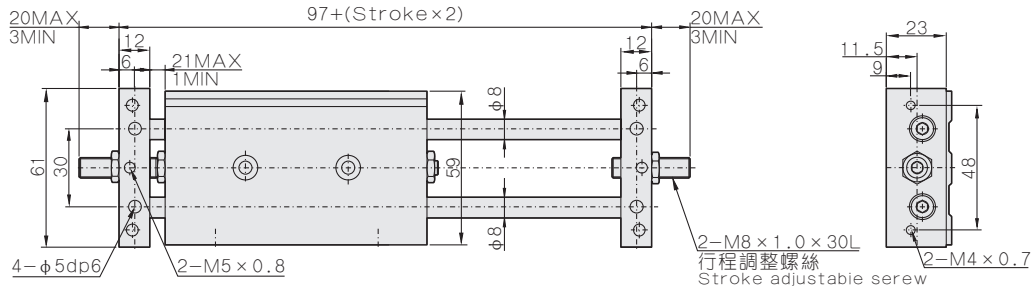


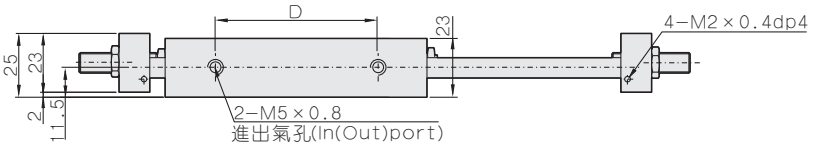


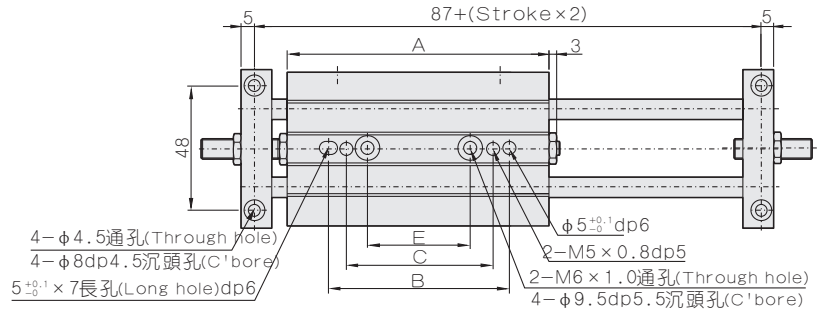
Dimension sheet(mm)

行程 Stroke	A	B	C	D	E
25	81	65	35	46	15
50	106	85	60	71	40
75	131	85	60	96	40
100	156	85	60	121	40

Bore: ϕ16







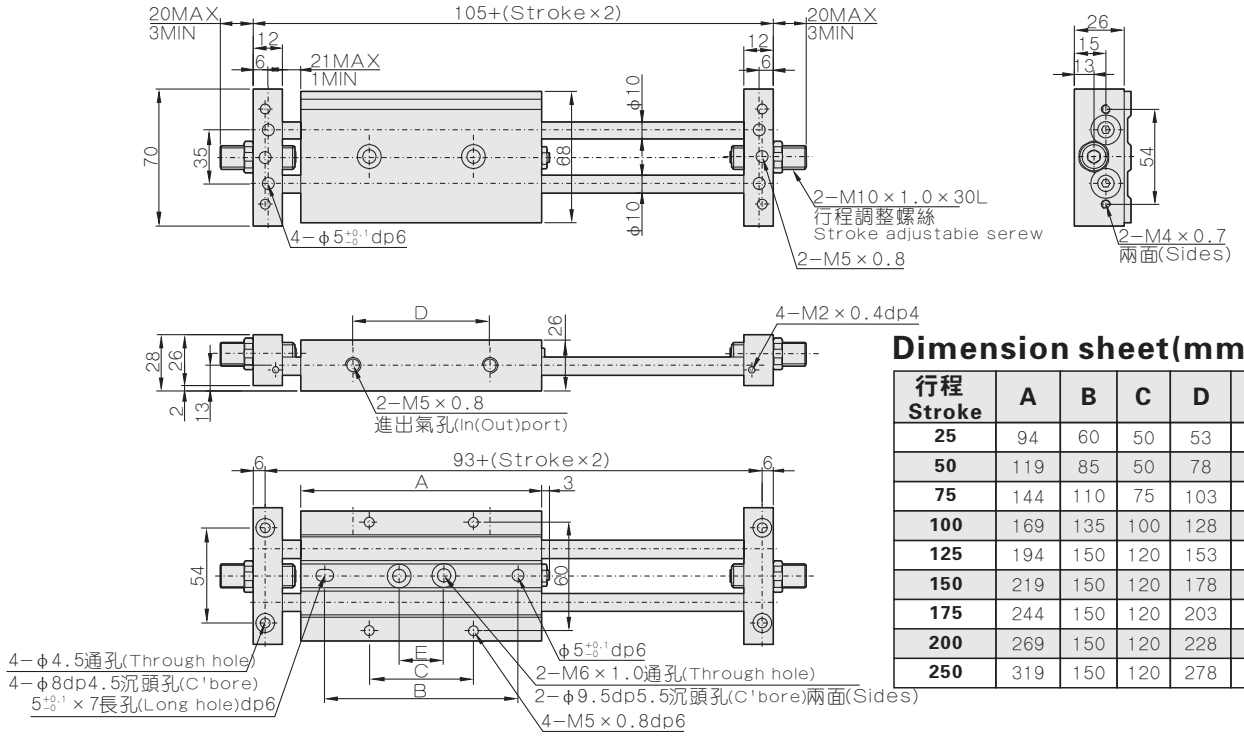
Dimension sheet(mm)

行程 Stroke	A	B	C	D	E
25	86	55	–	48	25
50	111	80	–	73	50
75	136	105	75	98	45
100	161	130	100	123	70
125	186	150	120	148	90
150	211	150	120	173	90
175	236	150	120	198	90
200	261	150	120	223	90

注1) Stroke=行程

TYPE:XAK

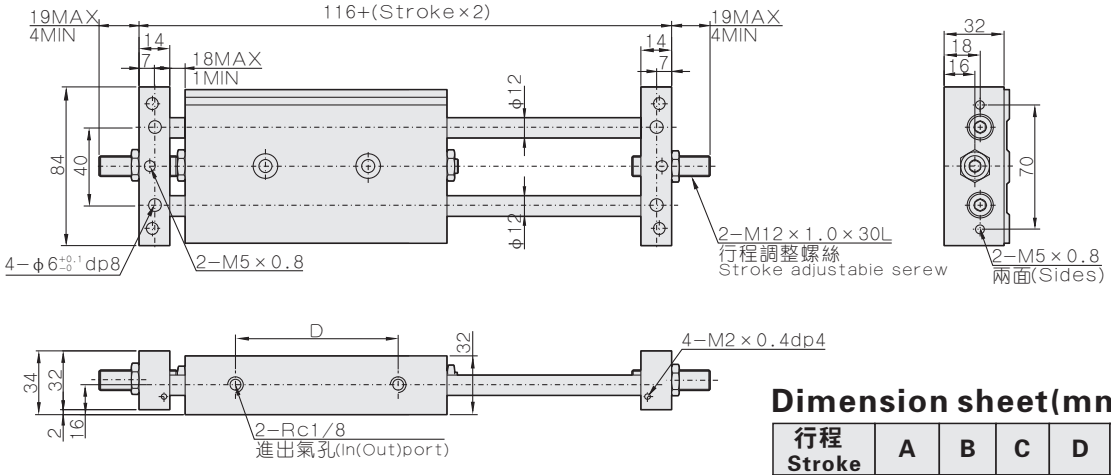
Bore: ϕ20



Dimension sheet(mm)

行程 Stroke	A	B	C	D	E
25	94	60	50	53	35
50	119	85	50	78	45
75	144	110	75	103	45
100	169	135	100	128	70
125	194	150	120	153	90
150	219	150	120	178	90
175	244	150	120	203	90
200	269	150	120	228	90
250	319	150	120	278	90

Bore: ϕ25



Dimension sheet(mm)

行程 Stroke	A	B	C	D	E
25	101	65	50	50	35
50	126	90	50	75	45
75	151	115	75	100	45
100	176	140	100	125	70
125	201	140	100	150	95
150	226	140	100	175	100
175	251	140	100	200	100
200	276	140	100	225	100
250	326	140	100	275	100

注1) Stroke=行程

滑動雙軸氣缸(兩端擋塊固定型)

XAM系列 φ10 ~ φ25

訂購表示方法

圖形符號
Graphic symbol

XAM	10	×	30	—	R1
仕樣 Specifications	缸徑 Bore		行程 Stroke		感應器數量 Quantity
XAM:滑動雙軸氣缸 Twin-rod cylinder	10:φ10mm 16:φ16mm 20:φ20mm 25:φ25mm		φ10:25~100mm φ16:25~150mm φ20:25~150mm φ25:25~150mm		R1:1pcs R2:2pcs

規格 Specification

缸徑 Bore size	10	16	20	25
動作形式 Acting	復動型 Double Action			
工作介質 Fluid	空氣 Air			
使用壓力範圍 Pressure range	0.15~0.85MPa			
使用温度範圍 Temperature range	5~60℃			
調整行程 Adjustabie stroke	-10~0			
緩衝形式 Cushion type	橡膠緩衝 rubber cushion			
潤滑 Lubrication	不需要 No required			
接管口徑 Port size	M5×0.8			Rc1/8

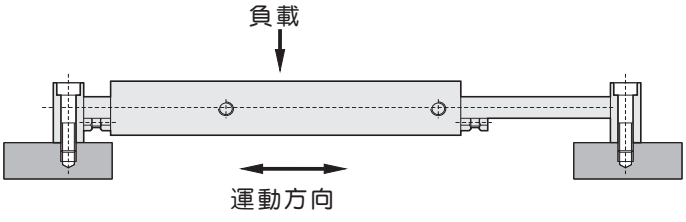
注1) 如需要潤滑,請用透平1號油 ISOVG32 Use Turbine Oil Ist-Grade ISOVG32.when Use

行程 Stroke

缸徑(mm) Bore	標準行程 Standard stroke	磁性開關 Auto switch
φ10	25 50 75 100	XAM:RC72
φ16	25 50 75 100 125 150	
φ20	25 50 75 100 125 150	
φ25	25 50 75 100 125 150	

固定方式

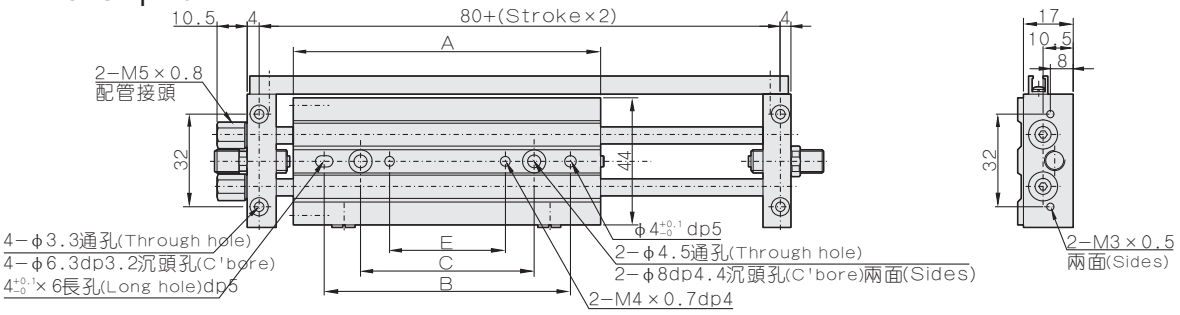
滑塊固定

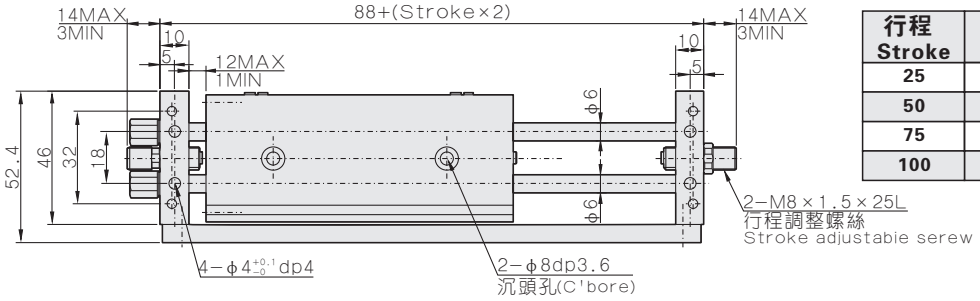


注: 特殊行程請與本公司聯系.

TYPE:XAM

Bore: ϕ10

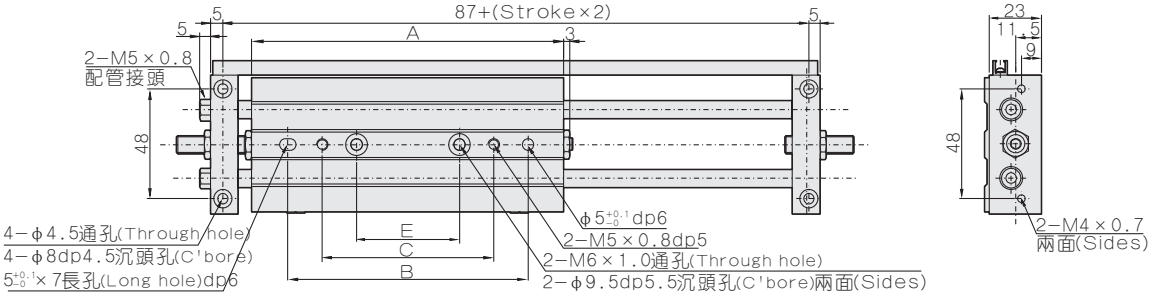


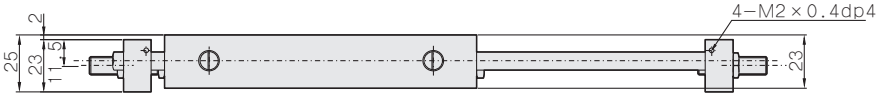


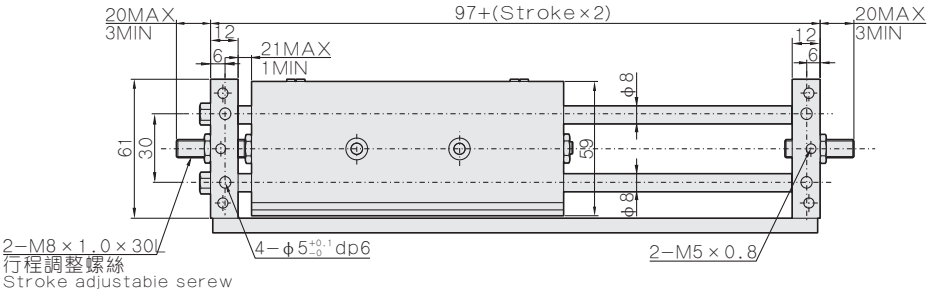
Dimension sheet(mm)

行程 Stroke	A	B	C	E
25	81	65	35	15
50	106	85	60	40
75	131	85	60	40
100	156	85	60	40

Bore: ϕ16







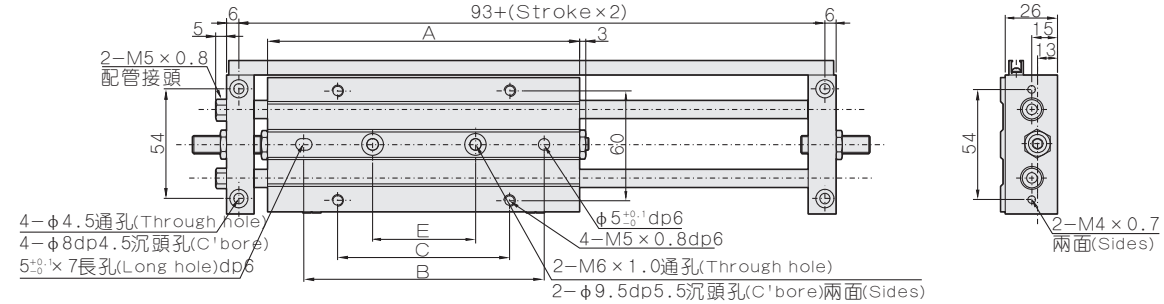
Dimension sheet(mm)

行程 Stroke	A	B	C	E
25	86	55	–	25
50	111	80	–	50
75	136	105	75	45
100	161	130	100	70
125	186	150	120	90
150	211	150	120	90
175	236	150	120	90
200	261	150	120	90

注1) Stroke=行程

TYPE:XAM

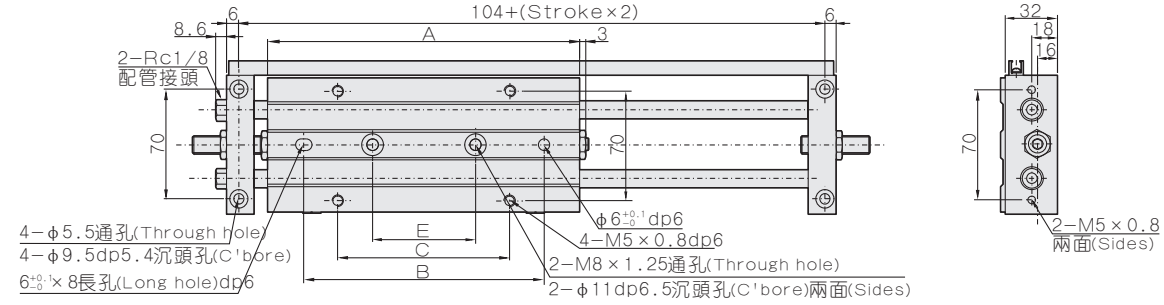
Bore: ϕ20



Dimension sheet(mm)

行程 Stroke	A	B	C	E
25	94	60	50	35
50	119	85	50	45
75	144	110	75	45
100	169	135	100	70
125	194	150	120	90
150	219	150	120	90
175	244	150	120	90
200	269	150	120	90
250	319	150	120	90

Bore: ϕ25



Dimension sheet(mm)

行程 Stroke	A	B	C	E
25	101	65	50	35
50	126	90	50	45
75	151	115	75	45
100	176	140	100	70
125	201	140	100	95
150	226	140	100	100
175	251	140	100	100
200	276	140	100	100
250	326	140	100	100

注1) Stroke=行程