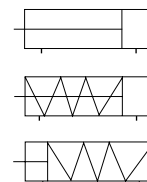


不锈钢气缸(内置磁环)
Stainless Steel Air Cylinder (Built-in Magnet)
Series MA (Ø16~Ø63)



规格 Specifications

缸径 Bore size (mm)	16	20	25	32	40	50	63
接管口径 Port size	M5x0.8	Rc(PT) 1/8				Rc(PT) 1/4	
使用流体 Fluid	过滤压缩空气 Filtered compressed air						
动作形式和缓冲 Action and cushion	MSA, MTA	单动, 橡胶缓冲 Single acting, rubber bumper				-	
	MA, MAD, MAJ	双动, 橡胶缓冲 Double acting, rubber bumper				-	
	MAC, MACD, MACJ	-	双动, 可调缓冲 Double acting, adjustable cushion				
	MAR	-	双动 Double acting				
保证耐压力 Proof pressure (MPa)	1.5						
使用压力范围 Operating pressure range (MPa)	双动 Double acting	0.15~1.0					
	单动 Single acting	0.2~1.0					
环境及流体温度 Ambient and fluid temperature	-5~60℃ (未冻结 No freezing)						
活塞速度 Piston speed	双动 Double acting	30~800 mm/s					
	单动 Single acting	50~800 mm/s					
行程公差 Stroke tolerance (mm)	0~150: $\begin{smallmatrix} +1.0 \\ 0 \end{smallmatrix}$ >150: $\begin{smallmatrix} +1.4 \\ 0 \end{smallmatrix}$						
* 润滑 Lubrication	不需要 Not required						

* 如需要润滑请使用透平 1 号油 ISOVG32。Please use Turbine oil 1st Grade ISOVG32 if necessary.

行程 / 磁性开关 Stroke/ Auto switch

缸径 Bore size (mm)	系列 Series		标准行程 Standard stroke (mm)	最大行程 Max. stroke (mm)	容许行程 Permissible stroke (mm)	系列 Series	标准行程 Standard stroke (mm)	磁性开关 / 固定钢带 Auto switch / Mounting band
16	MA	-	25, 50, 75, 80, 100, 125, 150, 160, 175, 200, 250, 300, 350, 400, 450, 500	500	600	MSA	25, 50, 75, 100	D-M9BK / PBC-S
20, 25, 32, 40		MAC			800		25, 50, 75, 100, 125, 150	
50, 63		-			MAR	-	-	
16	MAD MAJ	-	25, 50, 75, 80, 100, 125, 150, 160, 175, 200, 250, 300	300	-	MTA	25, 50, 75, 100	
20, 25		MACD MACJ	25, 50, 75, 80, 100, 125, 150, 160, 175, 200, 250, 300, 350, 400, 450, 500	500				
32, 40								
50, 63	-				-	-		

* 非标行程可定制。Nonstandard stroke can be customized.

型号表示方法 How to Order

型号 Model

MA	双动 Double acting
MSA	单动 (弹簧压回) Single acting (Spring return)
MTA	单动 (弹簧压出) Single acting (Spring extend)
MAD	双活塞杆 Double rod
MAJ	双活塞杆可调行程 Double rod with adjustable stroke
MAR	直接安装 Direct mounting
MAC	可调缓冲 Adjustable cushion
MACD	双活塞杆可调缓冲 Double rod with adjustable cushion
MACJ	双活塞杆可调行程可调缓冲 Double rod with adjustable stroke and cushion

行程 Stroke (mm)

缸径 Bore size (mm)

可调行程 Adjustable stroke (MAJ, MACJ)

10	10 mm
20	20 mm
30	30 mm
40	40 mm
50	50 mm
75	75 mm
100	100 mm

前盖型式 Front cover type (MAR)

F	前面固定 Front mounting
U	底部固定 Bottom mounting

后盖型式 End cover type (MA, MAC, MSA, MTA)

CA	原装 U 型钩 Integrated clevis
U	平尾 End plain
CM	圆尾 End round

磁环 Magnet

S	内置磁环 Built-in magnet
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安装形式 Mounting

-	基本型 Basic	
LB	脚座 Foot	MA, MAC, MSA, MTA, MAD, MACD, MAJ, MACJ
FA	前法兰 Front flange	
SDB	尾部 U 型钩支架 Bracket for integrated clevis	MA, MAC, MSA, MTA

不锈钢气缸(内置磁环)

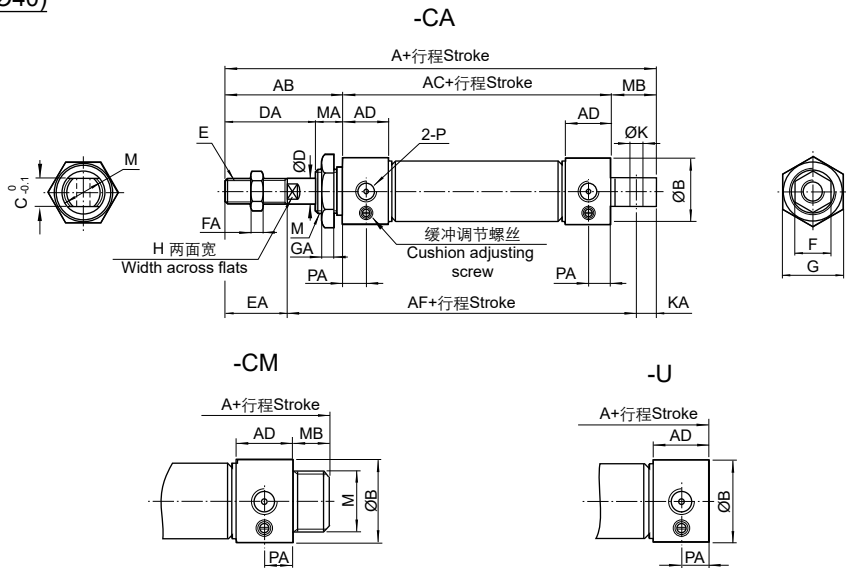
Stainless Steel Air Cylinder (Built-in Magnet)

Series MA

外形尺寸图 Dimensions (mm)

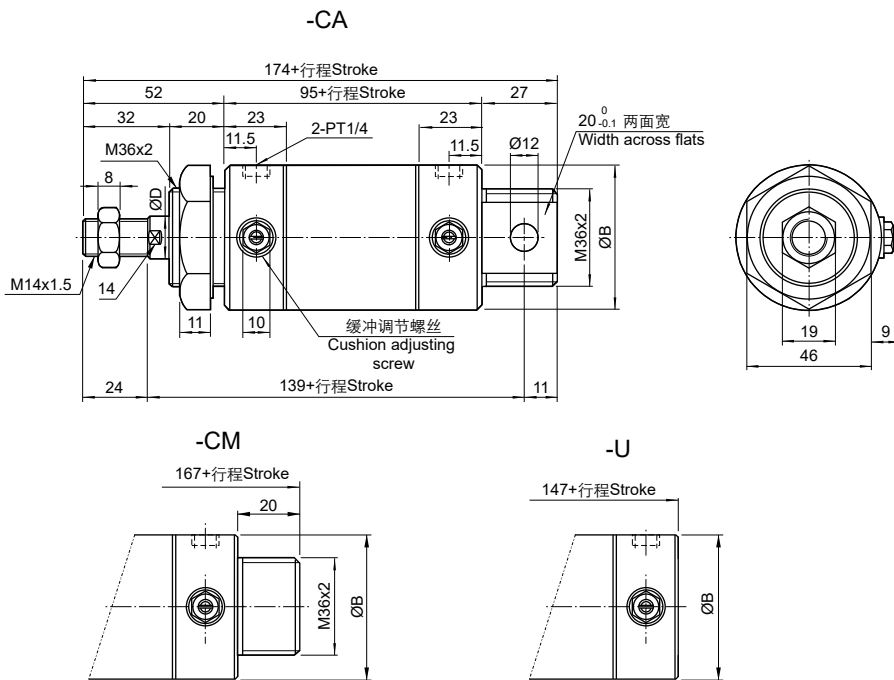
MA (Ø16~Ø40)

MAC (Ø20~Ø40)



系列 Series	缸径 Bore size	A			AB	AC	AD	AF	B	C	D	DA	E	EA	F	FA	G	GA	H	K	KA	M	MA	MB		P	PA
		CA	CM	U																				CA	CM		
MA	16	114	114	98	38	60	10	91	21	12	6	22	M6x1.0	16	10	5	22	6	5	6	9	M16x1.5	16	16	16	M5x0.8	5
	20	137	128	116	40	76	16	108	27	16	8	28	M8x1.25	20	12	6	29	7	6	8	12	M22x1.5	12	21	12	1/8	8
MAC	25	141	134	120	44	76	16	110	30	16	10	30	M10x1.25	22	17	6	29	7	8	8	12	M22x1.5	14	21	14	1/8	8
	32	147	134	120	44	76	16	113	35	16	12	30	M10x1.25	22	17	6	32	8	10	10	15	M24x2.0	14	27	14	1/8	8
	40	149	136	122	46	76	16.5	113	41.5	20	16	32	M12x1.25	24	17	7	41	9	14	12	15	M30x2.0	14	27	14	1/8	8

MAC (Ø50, Ø63)



系列 Series	缸径 Bore size	B	D
MAC	50	53	16
	63	67	16

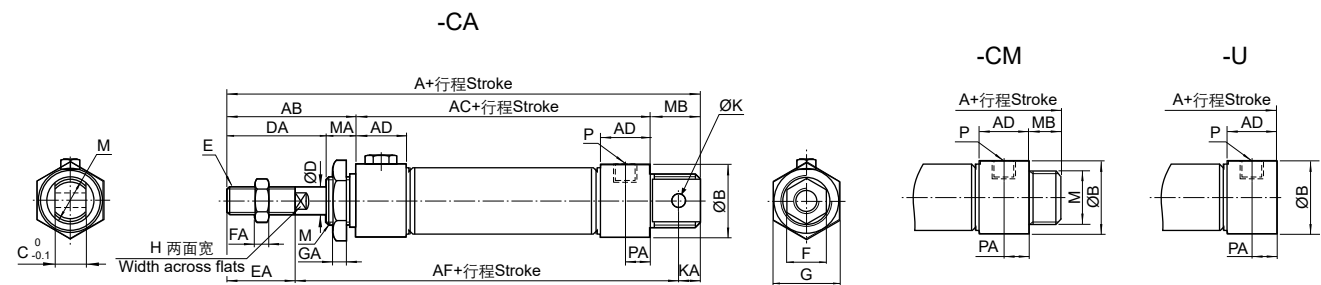
不锈钢气缸(内置磁环)

Stainless Steel Air Cylinder (Built-in Magnet)

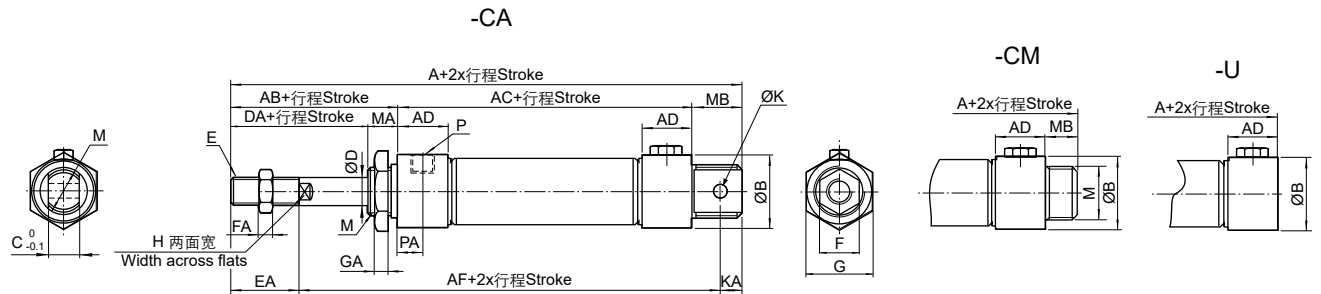
Series MA

外形尺寸图 Dimensions (mm)

MSA (Ø16~Ø40)



MTA (Ø16~Ø40)



系列 Series	缸径 Bore size	ST ≤ 50					ST=51~100					ST=101~150				
		A			AC	AF	A			AC	AF	A			AC	AF
		CA	CM	U			CA	CM	U			CA	CM	U		
MSA	16	139	139	123	85	116	164	164	148	110	141	-	-	-	-	-
	20	162	153	141	101	133	187	178	166	126	158	212	203	191	151	183
	25	166	159	145	101	135	191	184	170	126	160	216	209	195	151	185
	32	172	159	145	101	138	197	184	170	126	163	222	209	195	151	188
	40	174	161	147	101	138	199	186	172	126	163	224	211	197	151	188

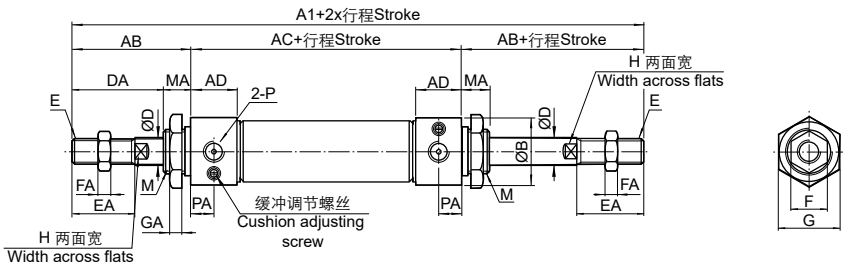
系列 Series	缸径 Bore size	ST ≤ 25					ST=26~50					ST=51~75					ST=76~100				
		A			AC	AF	A			AC	AF	A			AC	AF	A			AC	AF
		CA	CM	U			CA	CM	U			CA	CM	U			CA	CM	U		
MTA	16	129	129	113	75	106	139	139	123	85	116	154	154	138	100	131	164	164	148	110	141
	20	152	143	131	91	123	162	153	141	101	133	177	168	156	116	148	187	178	166	126	158
	25	156	149	135	91	125	166	159	145	101	135	181	174	160	116	150	191	184	170	126	160
	32	162	149	135	91	128	172	159	145	101	138	192	179	165	121	158	192	179	165	121	168
	40	164	151	137	91	128	174	161	147	101	138	194	181	167	121	158	204	191	177	131	168

系列 Series	缸径 Bore size	AB	AD	B	C	D	DA	E	EA	F	FA	G	GA	H	K	KA	M	MA	MB		P	PA
																			CA	CM		
MSA MTA	16	38	10	21	12	6	22	M6x1.0	16	10	5	22	6	5	6	7	M16x1.5	16	16	16	M5x0.8	5
	20	40	16	27	16	8	28	M8x1.25	20	12	6	29	7	6	8	9	M22x1.5	12	21	12	1/8	8
	25	44	16	30	16	10	30	M10x1.25	22	17	6	29	7	8	8	9	M22x1.5	14	21	14	1/8	8
	32	44	16	35	16	12	30	M10x1.25	22	17	6	32	8	10	10	12	M24x2.0	14	27	14	1/8	8
	40	46	16.5	41.5	20	16	32	M12x1.25	24	17	7	41	9	14	12	12	M30x2.0	14	27	14	1/8	8

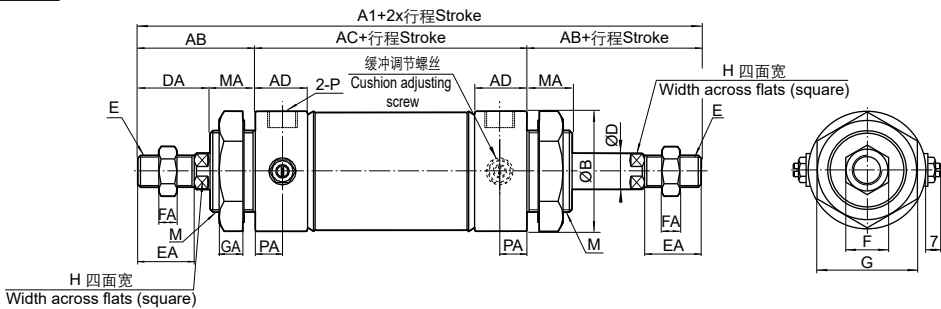
不锈钢气缸(内置磁环) Stainless Steel Air Cylinder (Built-in Magnet) Series MA

外形尺寸图 Dimensions (mm)

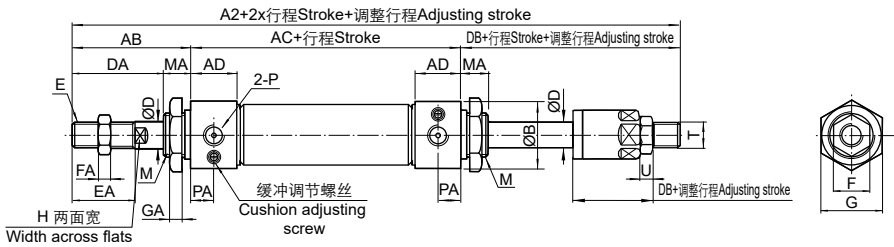
MAD (Ø16~Ø40), MACD (Ø20~Ø40)



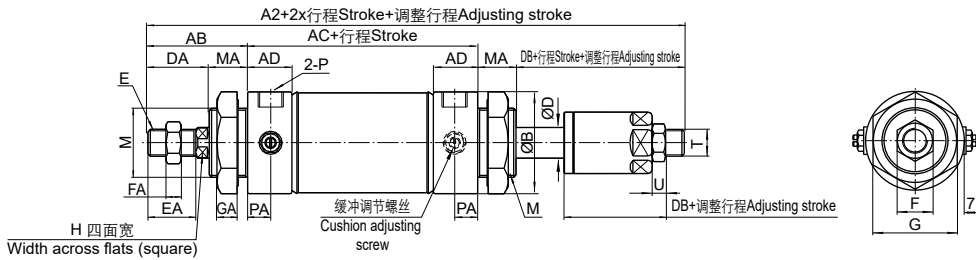
MACD (Ø50, Ø63)



MAJ (Ø16~Ø40), MACJ (Ø20~Ø40)



MACJ (Ø50, Ø63)

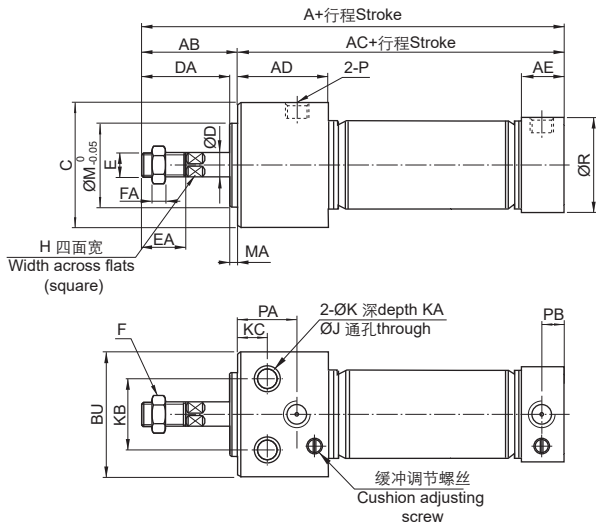


系列 Series	缸径 Bore size	A1	A2	AB	AC	AD	B	D	DA	DB	E	EA	F	FA	G	GA	H	M	MA	P	PA	T	U
MAD, MAJ	16	136	135	38	60	10	21	6	22	21	M6x1.0	16	10	5	22	6	5	M16x1.5	16	M5x0.8	5	M6x1.0	5
	20	156	153	40	76	16	27	8	28	25	M8x1.25	20	12	6	29	7	6	M22x1.5	12	1/8	8	M8x1.25	6
MAD, MAJ MACD, MACJ	25	164	161	44	76	16	30	10	30	27	M10x1.25	22	17	6	29	7	8	M22x1.5	14	1/8	8	M10x1.25	6
	32	164	161	44	76	16	35	12	30	27	M10x1.25	22	17	6	32	8	10	M24x2.0	14	1/8	8	M10x1.25	6
	40	168	164	46	76	16.5	41.5	16	32	28	M12x1.25	24	17	7	41	9	14	M30x2.0	14	1/8	8	M12x1.25	7
MACD, MACJ	50	199	195	52	95	23	53	16	32	28	M14x1.5	24	19	8	46	11	14	M36x2.0	20	1/4	11.5	M12x1.25	7
	63	199	195	52	95	23	67	16	32	28	M14x1.5	24	19	8	46	11	14	M36x2.0	20	1/4	11.5	M12x1.25	7

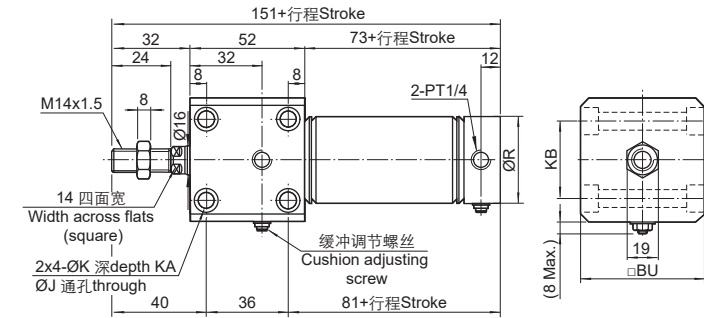
不锈钢气缸(内置磁环)
 Stainless Steel Air Cylinder (Built-in Magnet)
Series MA

外形尺寸图 Dimensions (mm)

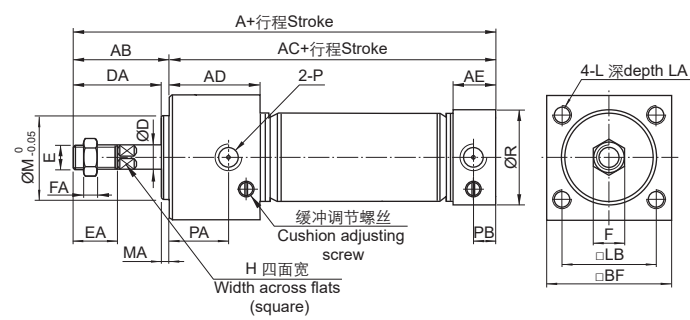
MARU (Ø20~Ø40)



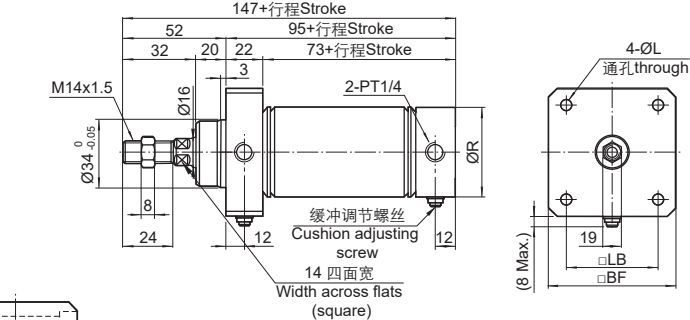
MARU (Ø50, Ø63)



MARF (Ø20~Ø40)



MARF (Ø50, Ø63)



系列 Series	缸径 Bore size	BU	J	K	KA	KB	R
MARU	50	62	6.5	11	6.5	44	53
	63	74	9	14	8.5	48	67

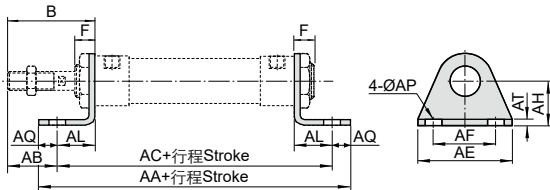
系列 Series	缸径 Bore size	BF	L	LB	R
MARF	50	62	6.5	48	53
	63	74	9	58	67

系列 Series	缸径 Bore size	A	AB	AC	AD	AE	BF	BU	C	D	DA	E	EA	F	FA	H	J	K	KA	KB	KC	L	LA	LB	M	MA	P	PAP	PB	R
MARU MARF	20	120	31	89	29	16	30.5	33.5	30.5	8	28	M8x1.25	20	13	5	6	5.5	9.5	6.5	21	12	M5x0.8	9	22	20	3	1/8	22	8	27
	25	122	33	89	29	16	36.5	39	36.5	10	30	M10x1.25	22	17	6	8	6.5	11	7.5	25	12	M6x1.0	11	26	26	3	1/8	22	8	30
	32	122	33	89	29	16	42.5	47	42.5	12	30	M10x1.25	22	17	6	10	9	14	10	30	12	M6x1.0	11	30	26	3	1/8	22	8	35
	40	132.5	35	97.5	37.5	16.5	52.5	58.5	52.5	16	32	M14x1.5	24	19	8	14	11	17.5	12.5	38	15	M8x1.25	14	36	32	3	1/8	27	8	41.5

不锈钢气缸(内置磁环)
 Stainless Steel Air Cylinder (Built-in Magnet)
 Series **MA**

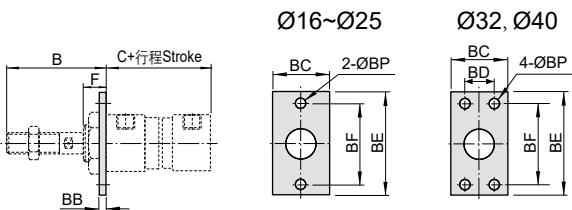
外形尺寸图 Dimensions (mm)

脚座Foot LB



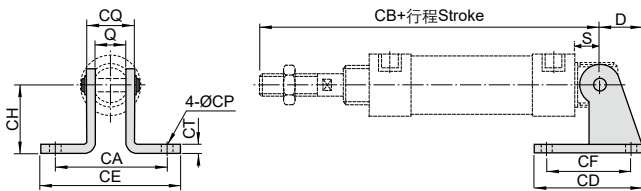
零件号 Part No.	缸径 Bore size	AA					AB	AC				AE	AF	AH	AL	AP	AQ	AT	B	F
		MA	MSA			MA		MSA												
			ST=0~50	ST=51~100	ST=101~150		ST=0~50	ST=51~100	ST=101~150											
F-MA16LB	16	98	123	148	-	25	86	111	136	-	44	32	20	13	5.5	6	3	38	16	
F-MA20LB	20	122	147	172	197	25	106	131	156	181	54	40	25	15	6.5	8	3	40	12	
F-MA20LB	25	122	147	172	197	29	106	131	156	181	54	40	25	15	6.5	8	3	44	14	
F-MA32LB	32	142	167	192	217	19	126	151	176	201	59	45	32	25	6.5	8	4	44	14	
F-MA40LB	40	142	167	192	217	21	126	151	176	201	64	50	36	25	6.5	8	4	46	14	

前法兰Front flange FA



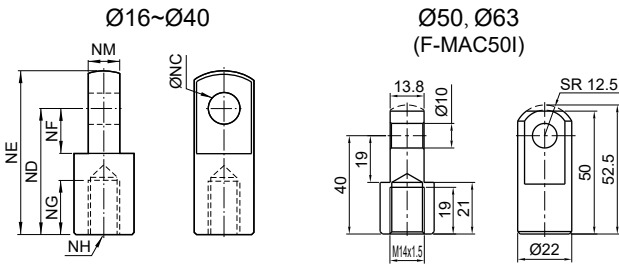
零件号 Part No.	缸径 Bore size	B	BB	BC	BD	BE	BF	BP	C				F
									MA	MSA			
										ST=0~50	ST=51~100	ST=101~150	
F-MA16FA	16	38	3	26	-	52	40	5.5	60	85	110	-	16
F-MA20FA	20	40	4	38	-	64	50	6.5	76	101	126	151	12
F-MA20FA	25	44	4	38	-	64	50	6.5	76	101	126	151	14
F-MA32FA	32	44	4	47	33	72	58	6.5	76	101	126	151	14
F-MA40FA	40	46	4	50	36	84	70	6.5	76	101	126	151	14

尾部 U 型钩支架 Bracket for integrated clevis SDB



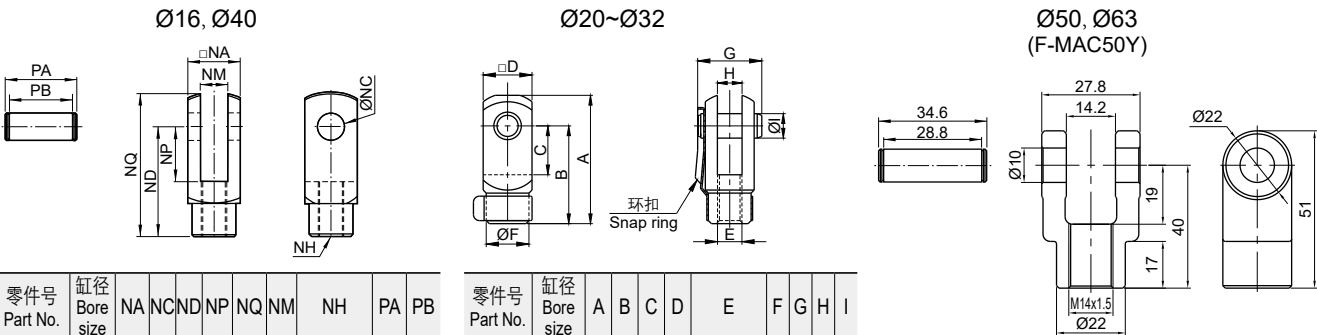
零件号 Part No.	缸径 Bore size	CA	CB				CD	CE	CF	CH	CP	CQ	CT	D	Q	S
			MA	MSA												
				ST=0~50	ST=51~100	ST=101~150										
F-MA16SDB	16	-	107	132	157	-	23	-	12	20	5.5	16	2	16	12	9
F-MA20SDB	20	51	128	153	178	203	48	67	32	32	6.5	22	3	21	16	12
F-MA20SDB	25	51	132	157	182	207	48	67	32	32	6.5	22	3	21	16	12
F-MA32SDB	32	51	135	160	185	210	52	67	36	36	6.5	24	4	27	16	15
F-MA40SDB	40	55	137	162	187	212	56	71	40	40	6.5	28	4	27	20	15

I 型单肘节接头 I type single knuckle joint



零件号 Part No.	缸径 Bore size	NC	ND	NE	NF	NG	NH	NM
F-MA16I	16	5	21	28	8.5	8	M6x1.0	6
F-MA20I	20	8	30	40	11	15	M8x1.25	8
F-MA25I	25, 32	10	40	50	15	20	M10x1.25	10
F-MA40I	40	10	45	57	16	23	M12x1.25	14

Y 型单肘节接头 Y type single knuckle joint



零件号 Part No.	缸径 Bore size	NA	NC	ND	NP	NQ	NM	NH	PA	PB
F-MA16Y	16	12	5	21	8.5	27.4	6	M6x1.0	16.8	12.4
F-MA40Y	40	25.4	10	45	20	57	14	M12x1.25	32	26.2

零件号 Part No.	缸径 Bore size	A	B	C	D	E	F	G	H	I
F-MA20Y	20	42	32	16	16	M8x1.25	14	21	8	8
F-MA25Y	25, 32	52	40	20	19	M10x1.25	18	25	10	10