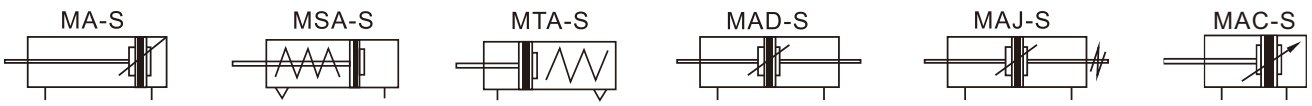
MA Series Mini Cylinder





Ordering Code MA Series Mini Cylinder

M A - C M 2 0 X 5 0 - 2 0 - L B

Series Code
MA: Double acting
MSA: Spring extend
MTA: Spring return
MAD: Double rod
MAJ: Adjustable stroke
MAR: Double acting with cushion
MAC: Double acting with cushion
MACD: Double rod with cushion
MACJ: Adjustable stroke with cushion

Rear Cover Type
CA:Swivelling tail
CM:Round tail
U: Flat tail

Bore

Stroke

Adjustable Stroke
10:10mm
20:20mm
30:30mm
40:40mm
50:50mm
75:75mm
100:100mm

Mounting type
Blank: Standard Cylinder
LB: Leg mounting
FA: Front rear plate mounting
SDB: Trunnion bracket mounting

Specifications

Bore(mm)		16	20	25	32	40	50	63
Acting type	MSA MTA	Single acting					–	
	MA MAD MAJ	Double acting					–	
	MAR	–	Double acting					
	MAC MACD MACJ	–	Double acting with cushion					
Working medium		Air(to be filtered by 40μm filter element)						
Working pressure	Double acting	0.1~1.0MPa						
	Single acting	0.2~1.0MPa						
Guaranteed pressure		1.5MPa						
Working temperature		-20 to 70℃						
Speed range		Double acting: 30~500mm/s Single acting: 50~500mm/s						
Stroke tolerance		Stroke≤150 $^{+1.0}_{0}$ Stroke>150 $^{+1.4}_{0}$						
Cushion type		MAC MACD MACJ series: Adjustable cushion Other series: Bumper						
Port size		M5×0.8	1/8"				1/4"	

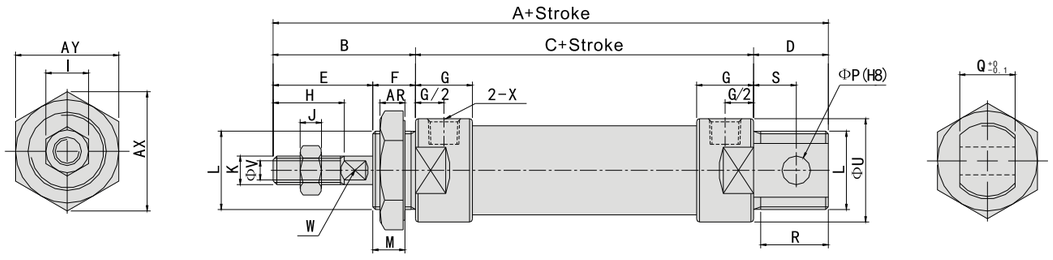
PT thread,NPT thread and G thread are available.

MA Series Mini Cylinder

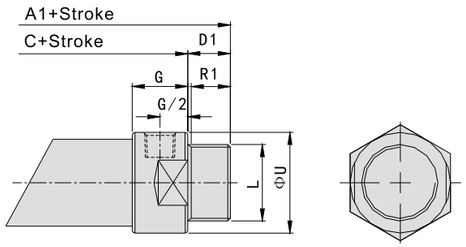
Main Dimensions

Φ16~Φ40

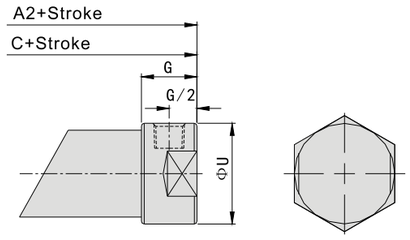
MA (MAC) - CA Swivelling tail



MA (MAC) - CM Round tail



MA (MAC) - U Flat tail

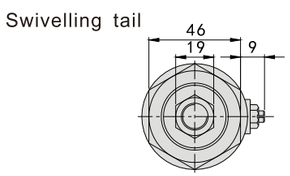


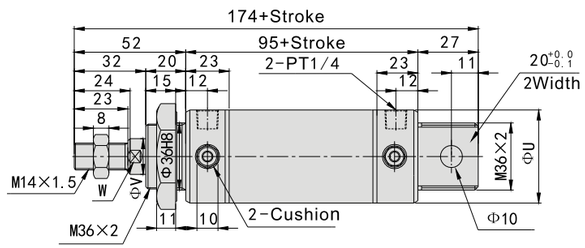
Bore \ Sign	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
16	114	114	98	38	60	16	15	22	16	10	16	10	5	M6X1
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8X1.25
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10X1.25
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10X1.25
40	149	136	122	46	76	27	14	32	14	16.7	24	17	7	M12X1.25

Bore \ Sign	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	M16X1.5	14	6	12	14	14	9	21	6	5	M5	6	25	22
20	M22X1.5	10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	M24X1.5	12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	M24X2.0	12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	M30X2.0	12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

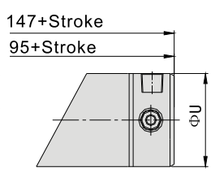
MA (MAC) Φ50 Φ63

Swivelling tail

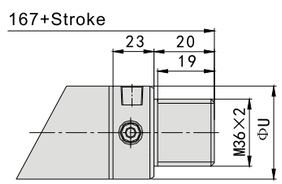




Flat tail



Round tail

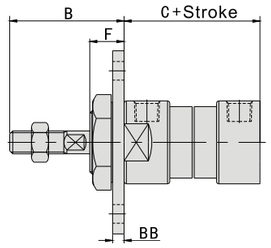


Bore \ Sign	U	V
50	53	16
63	67	16

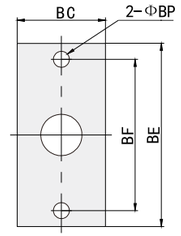
MAL/MA Series Mini Cylinder Brackets

Main Dimensions

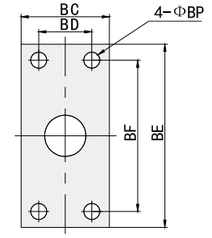
FA



Φ20~Φ25

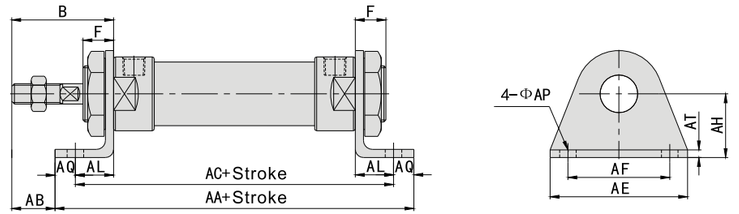


Φ32~Φ40



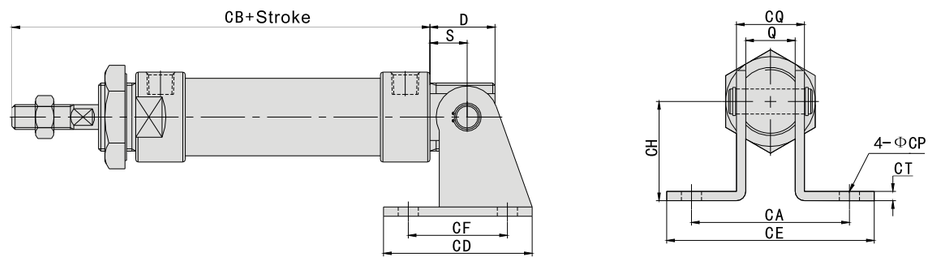
Bore/Stroke \ Sign	B	C (MA Series)	C (MSA Series) 0~50	C (MSA Series) 51~100	C (MAL Series)	C (MSAL Series) 0~50	C (MSAL Series) 51~100	BB	BC	BD	BE	BF	BP	F
16	38	60	60	85	-	-	-	3	26	-	52	40	5.5	16
20	40	76	76	101	70	70	95	4	38	-	64	50	6.5	12
25	44	76	76	101	70	70	95	4	38	-	64	50	6.5	14
32	44	76	76	101	70	70	95	4	47	33	72	58	6.5	14
40	46	76	76	101	92	92	117	4	50	36	84	70	6.5	14

LB



Bore/Stroke \ Sign	B	F	AA (MA Series)	AA (MSA Series) 0~50	AA (MSA Series) 51~100	AB	AC (MA serices)	AC (MSA Series) 0~50	AC (MSA Series) 51~100	AA (MAL Series)	AA (MSAL Series) 0~50	AA (MSAL Series) 51~100	AC (MAL系列)	AC (MSAL Series) 0~50	AC (MSAL Series) 51~100	AE	AF	AL	AQ	AP	AT	AH
16	38	16	98	98	123	25	86	86	111	-	-	-	-	-	-	44	32	13	6	5.5	3	20
20	40	12	122	122	147	25	106	106	131	116	116	141	100	100	125	54	40	15	8	6.5	3	25
25	44	14	122	122	147	29	106	106	131	116	116	141	100	100	125	54	40	15	8	6.5	3	25
32	44	14	142	142	167	19	126	126	151	136	136	161	120	120	145	59	45	25	8	6.5	4	32
40	46	14	142	142	167	21	126	126	151	158	158	183	142	142	167	64	50	25	8	6.5	4.5	36

SDB

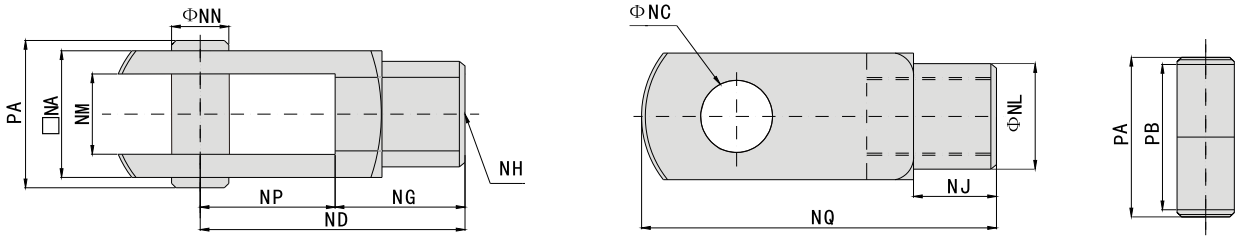


Bore/Stroke \ Sign	D	S	Q	CA	CB (MA Series)	CB (MSA Series) 0~50	CB (MSA Series) 51~100	CB (MAL Series)	CB(MSAL Series) 0~50	CB(MSAL Series) 51~100	CD	CE	CF	CH	CT	CP	CQ
16	16	9	12	-	107	107	132	-	-	-	23	-	12	20	2.3	5.5	16.5
20	21	12	16	51	128	128	153	122	122	147	48	67	32	32	3	6.5	22
25	21	12	16	51	132	132	157	126	126	151	48	67	32	32	3	6.5	22
32	27	15	16	51	135	135	160	129	129	154	52	67	36	36	4	6.5	24
40	27	15	20	55	137	137	162	153	153	178	56	71	40	40	4	6.5	28

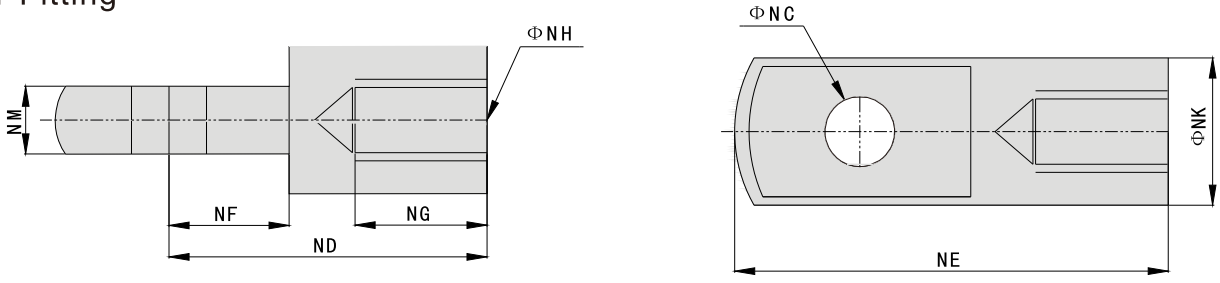
MAL/MA Series Mini Cylinder Brackets

Main Dimensions

Y Fitting

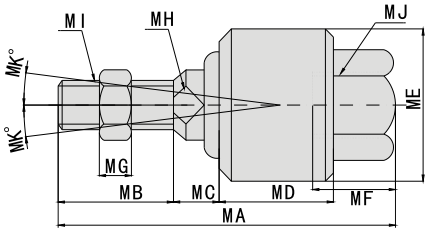


I Fitting



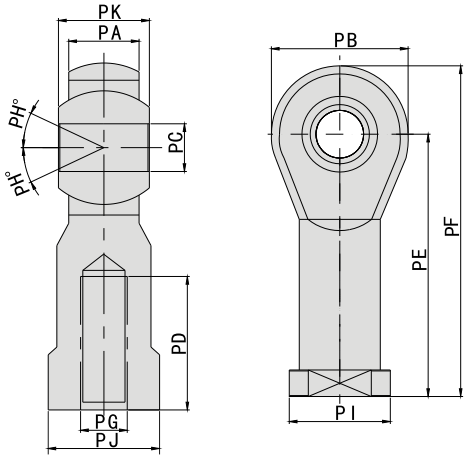
Bore \ Sign	NA	NC	ND	NE	NF	NG	NH	NJ	NK	NL	NM	NN	NP	NQ	PA	PB
16	12	3.5	12	28	8.5	12.5	M6X1	7	12	12	6	5	8.5	28	17	12.5
20	16	8	30	40	11	15	M8X1.25	10	16	14	8	8	15	40	21	16.5
25	19	10	40	52	15	20	M10X1.25	12	20	18	10	10	20	52	25	19.5
32	19	10	40	52	15	20	M10X1.25	12	20	18	10	10	20	52	25	19.5
40	25.4	10	48	67	15	25	M12X1.25	20	24	23	14	10	20	57	31	26

Floating Fitting



Bore \ Sign	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK
20	51	20	6	17	24	11.5	6	8	M8X1.25	M8X1.25	13
25	58	22	7	21	26	11.5	7	10	M10X1.25	M10X1.25	12
32	58	22	7	21	26	11.5	7	10	M10X1.25	M10X1.25	12
40	58	22	8	21	28	11.5	8	12	M12X1.25	M12X1.25	12
50	70	22.5	8.5	28	34.5	13	8	15	M14X1.5	M14X1.5	13
63	70	22.5	8.5	28	34.5	13	8	15	M14X1.5	M14X1.5	13

Bearing Fitting



Bore \ Sign	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK
20	9	24	8	16	36	48	M8X1.25	13	16	14	12
25	11	26	10	20	43	56	M10X1.25	13	19	17	14
32	11	26	10	20	43	56	M10X1.25	13	19	17	14
40	12	32	12	24	50	66	M12X1.25	13	22	19	16
50	15	40	16	28	64	84	M16X1.5	15	27	22	21
63	15	40	16	28	64	84	M16X1.5	15	27	22	21