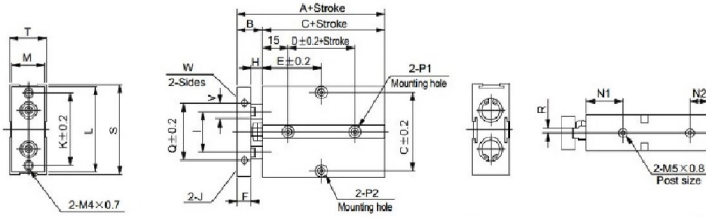


ÇİFT MILLİ SİLİNDİRLER (MANYETİK)

TN Φ 16, 20, 25



Stroke	10	20	30	40	50	60	70
E	30	30	35	40	45	50	55

Bore size(mm)	A	B	C	D	Stroke \leq	10	20	30	40	50	60	70	80	90	100	125	150	F	G	H	I
16	68	15	53	20	E	30	35	40	45	50	55	60	65	70	75	87.5	100	8	47	7	24
20	78	20	58	20	E	35	35	40	45	50	55	60	65	70	75	87.5	100	10	55	10	28
25	81	19	62	30	E	40	40	45	50	55	60	65	70	75	80	92.5	105	10	66	9	34

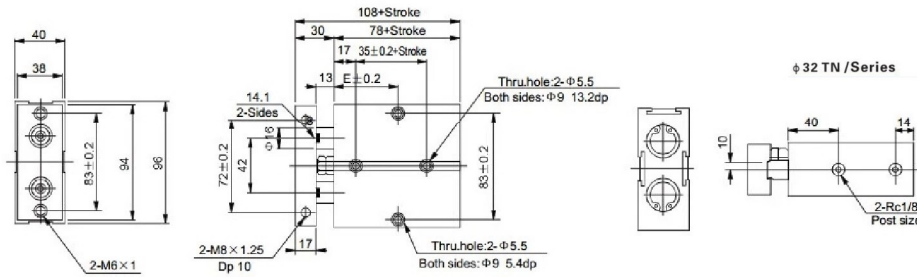
Bore size(mm)	J	K	L	M	N1	N2	P1	P2	Q	R	S	T	V	W
16	M4 \times 0.7dp5	47	53	20	22	11	Both sides: Φ 7.5dp7.2mm Thru.hole: Φ 4.5	Both sides: Φ 8dp4.5mm Thru.hole: Φ 4.5	34	3	54	21	8	6.1
20	M4 \times 0.7dp5	55	61	24	25	12	Both sides: Φ 7.5dp7.2mm Thru.hole: Φ 4.5	Both sides: Φ 8dp4.5mm Thru.hole: Φ 4.5	44	3.5	62	25	10	8.1
25	M4 \times 0.7dp6	66	72	29	27	12	Both sides: Φ 7.5dp7.2mm Thru.hole: Φ 4.5	Both sides: Φ 8dp4.5mm Thru.hole: Φ 4.5	56	6	73	30	12	10.1



TN

- TN 16 x 25
- TN 16 x 50
- TN 16 x 100
- TN 16 x 150
- TN 20 x 25
- TN 20 x 50
- TN 20 x 100
- TN 20 x 150

TN Φ 32



Stroke \leq	10	20	30	40	50	60	70	80	90	100	125	150
E	45	50	55	60	65	70	75	80	85	90	102.5	115



TN

- TN 25 x 25
- TN 25 x 50
- TN 25 x 100
- TN 25 x 150
- TN 32 x 25
- TN 32 x 50
- TN 32 x 100
- TN 32 x 150

MA Series Stainless Steel Mini Cylinder



Ordering code

MA	-	CA	50 X 50	-	25	-	S	-	LB
Type MA: Double acting MSA: Single acting MAD: Double-shaft double acting MAJ: Double-shaft and adjustable stroke		Back cover type CA: Fishtail type CM: Rounded type U: Horizontal type	Bore	Stroke	MAJ adjustable stroke type		Magnet Code S: With magnet Blank: Without magnet		Mounting Blank: Basic type LB: Front and back fixed type FA: Front flange type SDB: Back cover swinging type

Specifications

Bore (mm)	16	20	25	32	40
Operation	Double acting or single acting				
Fluid	Air				
Mounting	Basic FA LB SDB				
Operating pressure	1.0~9.0 Kgf/cm ²				
Proof pressure	13.5 Kgf/cm ²				
Operating temperature	0~70°C				
Operating piston speed	50~800 mm/s				
Cushioning	Rubber bumper				
Port size	M5×0.8		G1/8"		

Stainless Steel, Aluminum Alloy Mini Cylinder

Stroke

Bore (mm)	Standard stroke												Max. stroke	Allowable stroke				
16	25	50	75	80	100	125	150	160	175	200					300	500		
20	25	50	75	80	100	125	150	160	175	200	250	300			500	650		
25	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	500	650
32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	500	650
40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	500	650

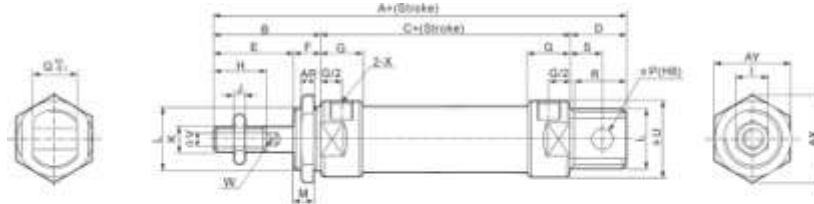
Theoretical force

Boresize		16			20			25			32			40		
Rod diameter		6			8			10			12			16		
Operation	SingleS acting	Double acting		SingleS acting	Double acting		SingleS action	Double acting		SingleS acting	Double acting		SingleS acting	Double acting		
		Extrusion side	Pullside		Extrusion side	Pullside		Extrusion side	Pullside		Extrusion Side	Pullside		Extrusion side	Pullside	
Piston area(cm ²)		2.01	2.01	1.81	3.14	3.14	2.64	4.90	4.90	4.12	8.04	8.04	6.90	12.56	12.56	10.55
Operating pressure (Kgf/cm ²)	1	-	2.01	1.81	-	3.14	2.64	-	4.90	4.12	-	8.04	6.90	-	12.56	10.55
	2	-	4.02	3.62	1.57	6.28	5.28	2.45	9.80	8.24	4.02	16.08	13.80	6.28	25.12	21.10
	3	2.01	6.03	5.43	4.71	9.42	7.92	7.35	14.70	12.36	12.06	24.12	20.70	18.84	37.68	31.65
	4	4.02	8.04	7.24	7.85	12.56	10.56	12.25	19.60	16.48	20.10	32.16	27.60	31.40	50.24	42.20
	5	6.03	10.05	9.05	10.99	15.70	13.20	17.15	24.50	20.60	28.14	40.20	34.50	43.96	62.80	52.75
	6	8.04	12.06	10.86	14.13	18.84	25.84	22.05	29.40	24.72	36.18	48.24	41.40	56.52	75.36	63.30
	7	10.04	14.07	12.67	17.27	21.98	18.48	26.95	34.30	28.84	44.22	56.28	48.30	69.08	87.92	73.85
	8	-	-	-	20.41	25.12	21.12	31.85	39.20	32.96	52.26	64.32	55.20	81.64	100.48	84.40
	9	-	-	-	23.55	28.26	23.76	36.75	44.10	37.08	60.30	72.36	62.10	94.20	117.60	94.95

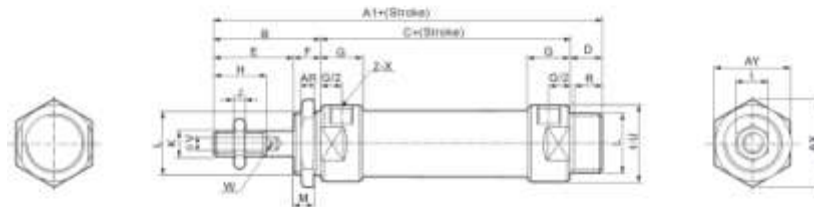
MA Series Stainless Steel Mini Cylinder

● Dimensions

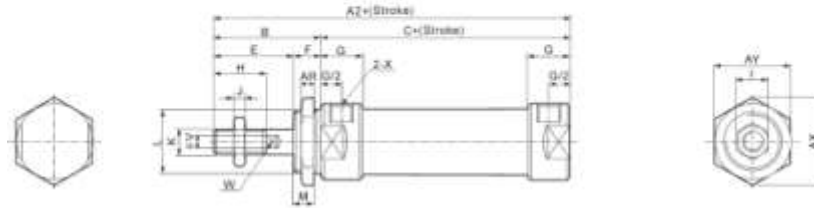
MA-CA



MA-CM



MA-U

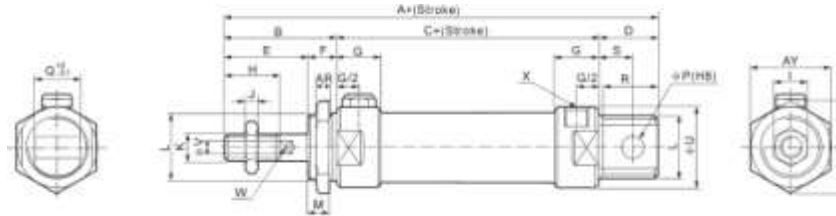


Bore size / Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K	
16	114	98	88	8	8	8	15	8	8	8	8	8		M6×1	
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8×1.25	
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10×1.25	
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10×1.25	
40	149	136	122	46	76	27	14	32	14	16.7	24	17	7	M12×1.25	
Bore size / Symbol	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY	
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	

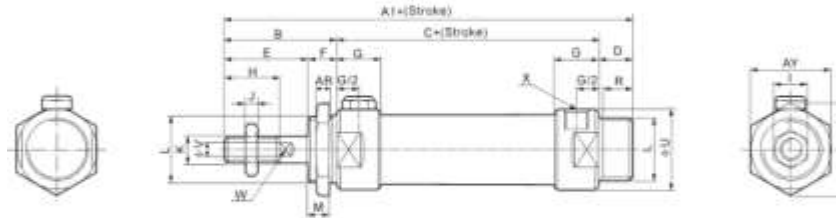
MA Series Stainless Steel Mini Cylinder

● Dimensions

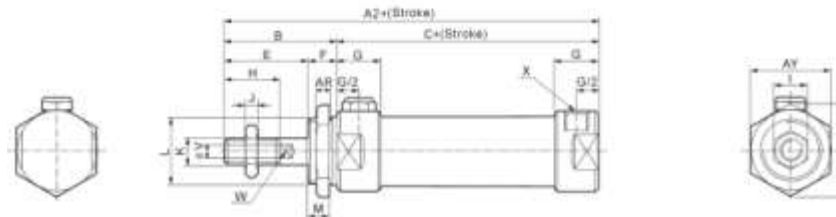
MSA-CA



MSA-CM



MSA-U

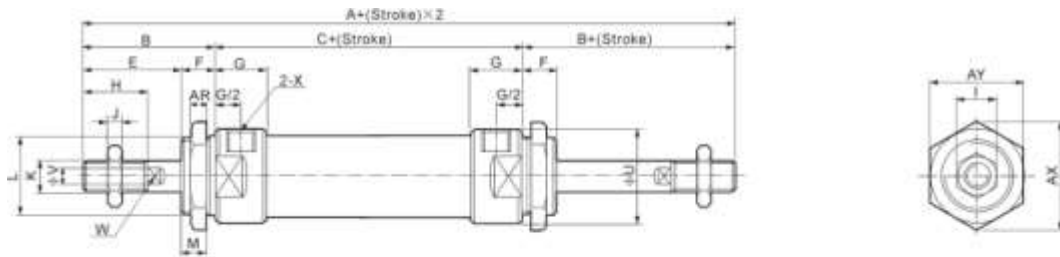


Symbol	A		A1		A2		B	C		D	D1	E	F	G	H	I	J
	0~50	51~100	0~50	51~100	0~50	51~100		0~50	51~100								
20	137	162	128	153	116	141	40	76	101	21	12	28	12	16	20	12	6
25	141	166	134	159	120	145	44	76	101	21	14	30	14	16	22	17	6
32	147	172	134	159	120	145	44	76	101	27	14	30	14	16	22	17	6
40	149	174	136	161	122	147	46	76	101	27	14	32	14	22	24	17	7
Bore/ Symbol	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

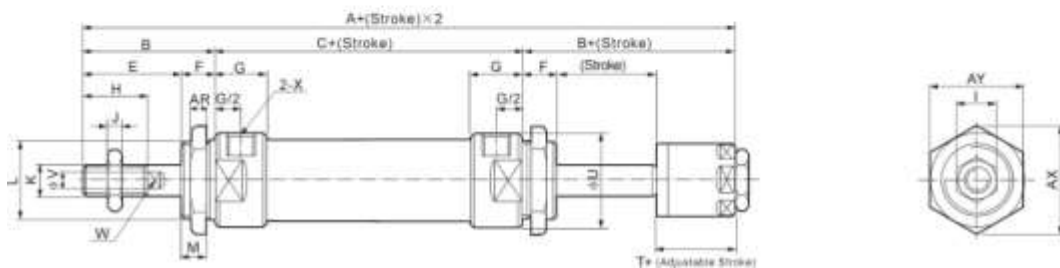
MA Series Stainless Steel Mini Cylinder

● Dimensions

MAD



MAJ



Bore/Symbol	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
Bore/Symbol	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