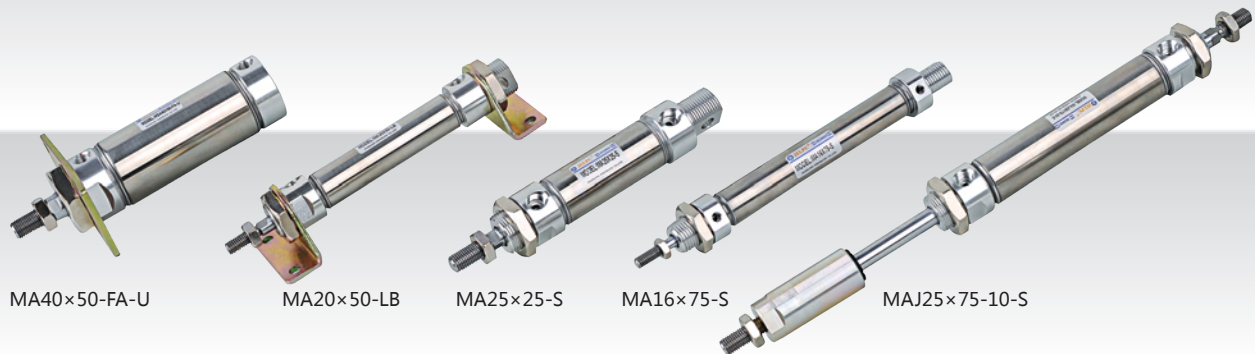


# MA Stainless Steel Mini Cylinder



The way to automation



MA40×50-FA-U














MA20×50-LB

MA25×25-S

MA16×75-S

MAJ25×75-10-S

## Ordering Code

MA	D	50	50	25	S	LB	MT
Series	Series Code	Bore	Stroke	Adjustable Stroke	Magnet	Mountings	Sensor
MA: Double acting 	Blank: Standard with eye mounting Blank: Fishtail type 	16 20 25 32 40			S: With magnet Blank: Without magnet	Blank: Basic mounting LB: Front and back mounting  FA: Front mounting flange FB: Rear mounting flange  SDB: Rear hinge 	JEL-03 type  Sensor bend 
MSA: Single acting, spring-out 	CM: Round rear cover 						
MTA: Single acting, spring-in 	U: Flat rear cover 						
MAD: Double-shaft, double acting 							
MAJ: Double-shaft with adjustable stroke 							

## Specification

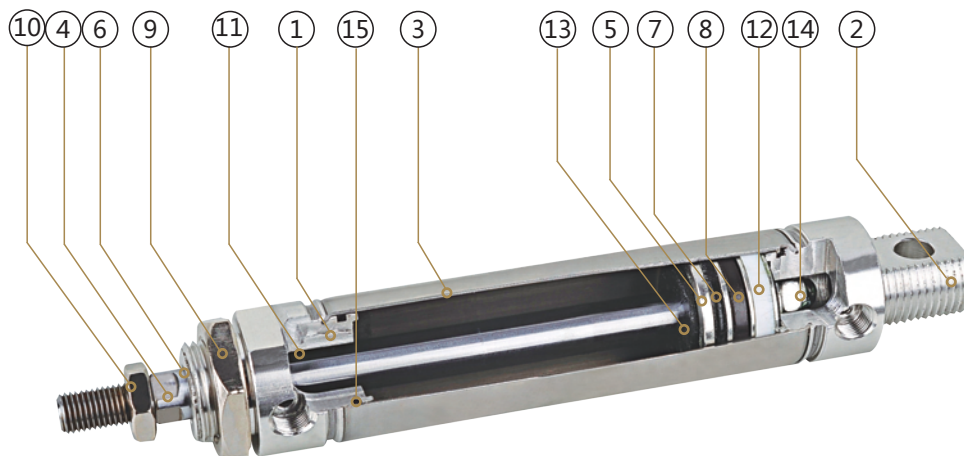
Bore (mm)	16	20	25	32	40
Operation	Double Acting or Single Acting				
Working Medium	Air				
Mountings	Basic LB FA SDB				
Operating Pressure Range	1 ~ 9.0 Kgf/cm <sup>2</sup>				
Proof Pressure	13.5 Kgf/cm <sup>2</sup>				
Operating Temperature Range	0 ~ 70 °C				
Operating Speed Range	50 ~ 800 mm/s				
Cushion	Gasket Cushioning				
Port Size	M5 × 0.8		G 1/8"		

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA
- MAL
- MA / MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

## Stroke

Bore	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

## Internal Structure



## Parts

Number	Name	Material	Quantity
1	Front Cover	Hard Anodised Aluminium	1
2	Back Cover	Hard Anodised Aluminium	1
3	Barrel	Stainless Steel	1
4	Piston Rod	Chromed Carbon Steel	1
5	Piston	Aluminium	1
6	Piston Rod Seal	NBR	1
7	Piston Seal	NBR	1
8	Magnet	Plastic	1
9	Front and Rear Cover	Carbon Steel	1
10	Piston Rod Screw	Carbon Steel	1
11	Bearing	Non-lub Bearing	1
12	Anti-friction Ring	PTFE	1
13	Cushioning Gasket	NBR	2
14	Fixing Screw	Carbon Steel	1
15	Cover Seal	NBR	2

Cylinder  
Sizing  
SI  
SI A.  
SC / SU  
SCT  
SC A.  
DSN  
DSN A.  
MA  
MAL  
MA/MAL A.  
SDA  
CQ2  
CJ2  
CDU  
TN  
CXS  
MGP  
MSQ

# MA Stainless Steel Mini Cylinder

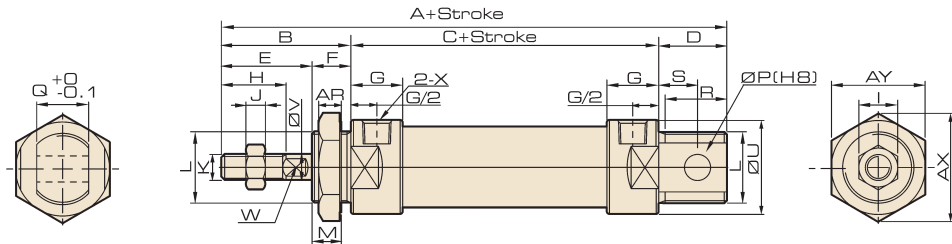


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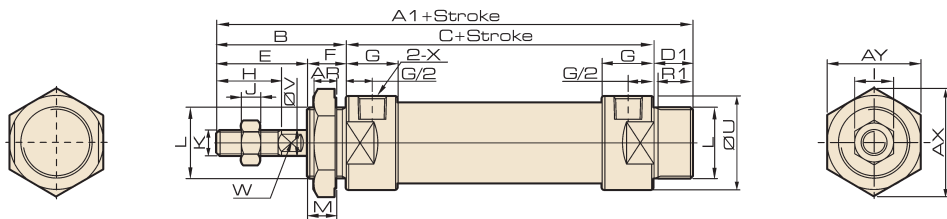
## Overall Dimension

- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA**
- MAL
- MA/MAL A.
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- CJ2
- CDU
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- MGP
- MSQ

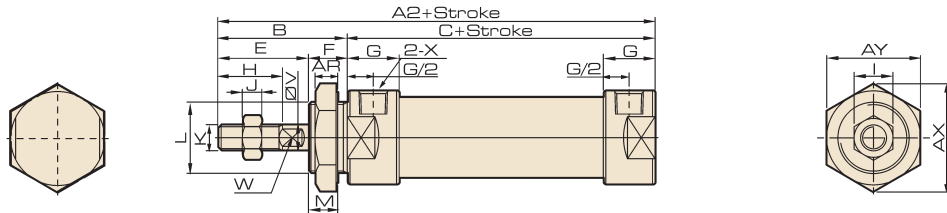
### MA-CA



### MA-CM



### MA-U



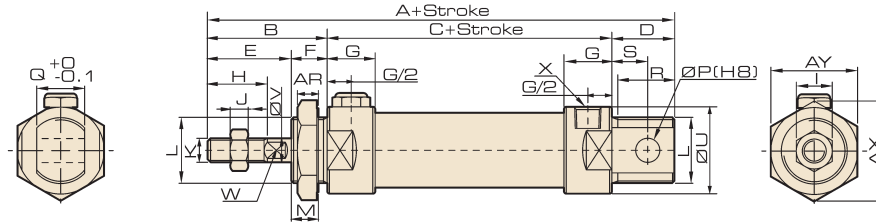
## Dimension

Bore/ Symbol	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K	L
16	114	114	98	38	60	16	15	22	16	10	16	10	5	M6 × 1	M16 × 1.5
20	137	128	116	40	76	21	12	28	12	16	20	12	6	M8 × 1.25	M22 × 1.5
25	141	134	120	44	76	21	14	30	14	16	22	17	6	M10 × 1.25	M22 × 1.5
32	147	134	120	44	76	27	14	30	14	16	22	17	6	M10 × 1.25	M24 × 2.0
40	149	136	122	46	76	27	14	32	14	16	24	17	7	M12 × 1.25	M30 × 2.0

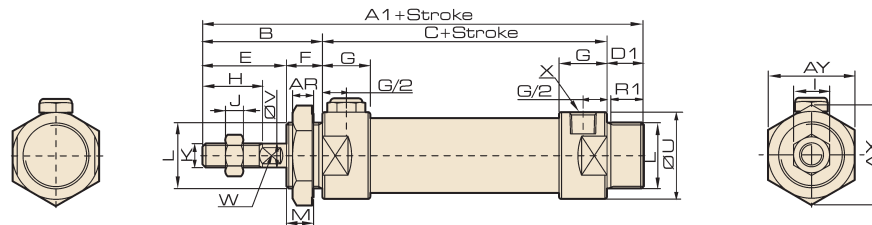
Bore/ Symbol	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
16	14	6	12	14	14	9	21	6	5	M5	6	24	27.5
20	10	8	16	19	12	12	27	8	6	G1/8	7	33	29
25	12	8	16	19	14	12	30	10	8	G1/8	7	33	29
32	12	10	16	25	14	15	35	12	10	G1/8	8	37	32
40	12	12	20	25	14	15	41.6	16	14	G1/8	9	47	41

## Overall Dimension

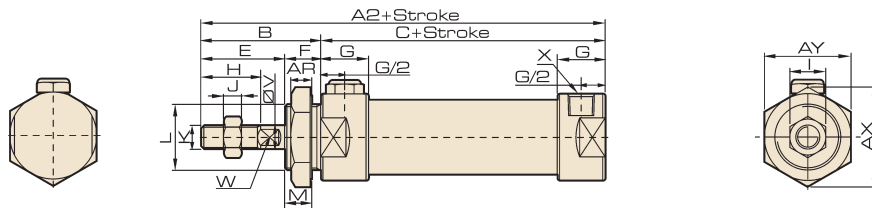
### MSA-CA



### MSA-CM



### MSA-U



## Dimension

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	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

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

- Cylinder
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- SI A.
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# MA Stainless Steel Mini Cylinder

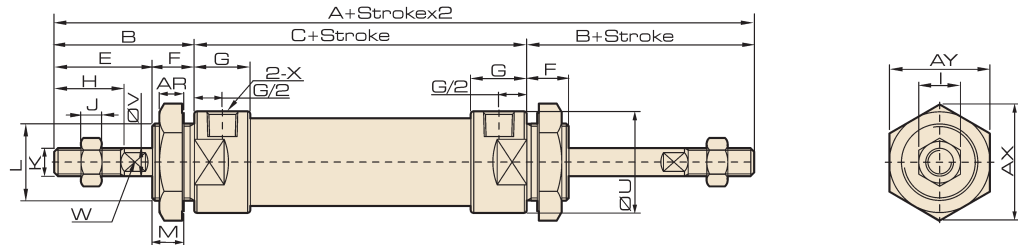


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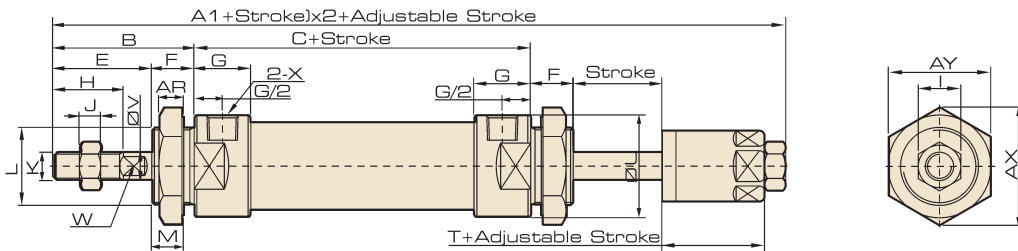
- Cylinder
- Sizing
- SI
- SI A.
- SC / SU
- SCT
- SC A.
- DSN
- DSN A.
- MA**
- MAL
- MA/MAL A.
- SDA
- CQ2
- CJ2
- CDU
- TN
- CXS
- MGP
- MSQ

## Overall Dimension

### MAD



### MAJ



## Dimension

Bore / Symbol	A	A1	B	C	E	F	G	H	I	J	K	L
20	156	153	40	76	28	12	16	20	12	6	M8 × 1.25	M22 × 1.5
25	164	161	44	76	30	14	16	22	17	6	M10 × 1.25	M22 × 1.5
32	164	161	44	76	30	14	16	22	17	6	M10 × 1.25	M24 × 2.0
40	168	164	46	76	32	14	16	24	17	7	M12 × 1.25	M30 × 2.0

Bore / Symbol	M	U	V	W	X	AR	AX	AY	T
20	10	27	8	6	G1/8	7	33	29	19
25	12	30	10	8	G1/8	7	33	29	21
32	12	35	12	10	G1/8	8	37	32	21
40	12	41.6	16	14	G1/8	9	47	41	21