

MAL Series

Aluminum Alloy Mini Cylinder



ISO9001:2015 CE

MAL Series

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Cylinder
Calculation
SI
SI A.
SIB
SQ
DNT
SC / SU
SCT
SC A.
SL
DN
DSN
DN/DSN A.
MA
MAC
MA/MAC A.
MAL
MALC
MAL/MAC A.
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic Fingers
MXH/MXQ
CJP
CJ2
CDU
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CXS
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Features

1. Improving for adapting wide range applications, using precise polishing of piston rod, more sense of products quality and longer life of front seal.
2. Optima design and improve the production efficiency.
3. Combined with enterprise color planning and new structure design.
4. Using embedded gasket, increase the pressured area of pistons after collision.



Ordering Code

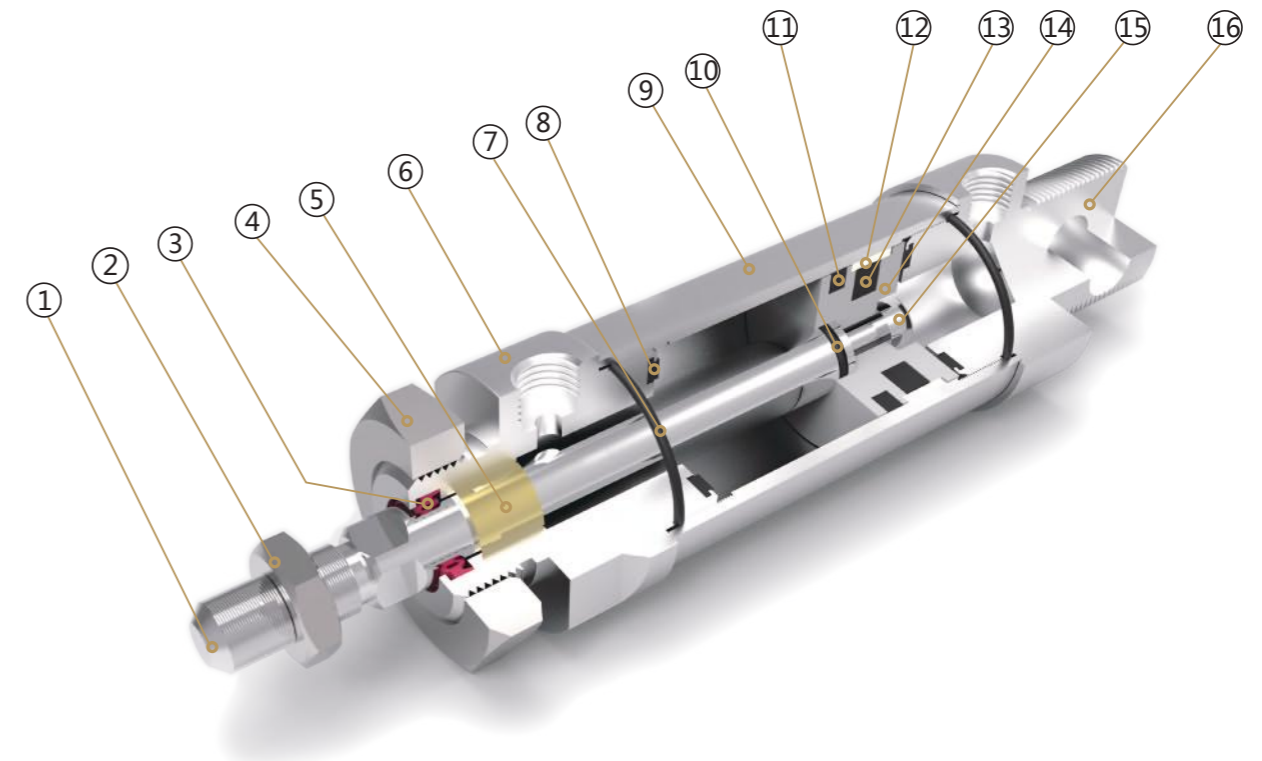
MAL	U	32	x	50	10	S	E	LB	MT
Series	Back Form	Bore	Stroke	Adjustable Stroke	Magnet	Piston Rod Material	Mountings	Sensor	
MAL: Double Acting	Blank: Standard with eye mounting	16 20 25 32 40		10: 10mm 20: 20mm 30: 30mm 50: 50mm 75: 75mm 100: 100mm	S: With magnet Blank: Without magnet	Blank: Carbon steel E: Stainless steel	Blank: Basic mountings LB: Front and back mounting FA: Front mounting flange FB: Back mounting flange SDB: Back hinge	JEL-03R	

* Standard wire length is 1 meter, please specify for other length

Specification

Bore (mm)	16	20	25	32	40
Operation	Double Acting or Single Acting				
Working Medium	Air				
Mountings	Basic LB FA FB SDB				
Operating Pressure Range	0.1 ~ 1.0MPa				
Proof Pressure	1.5 MPa				
Operating Temperature Range	-20 ~ 80°C				
Operating Speed Range	50 ~ 800mm/s				
Cushion	Gasket Cushion				
Port Size	M5×0.8	G1/8"			G1/4"

Internal Structure



Parts

Number	Name	Number	Name
1	Piston rod	9	Barrel
2	Hexagon nut	10	O ring
3	Shaft seal	11	Piston seal
4	Hexagon nut	12	Anti-friction seal
5	DU bearing	13	Magnet
6	Front cover	14	Piston
7	O ring	15	Socket head cap screw
8	Anti-collision gasket	16	Back cover

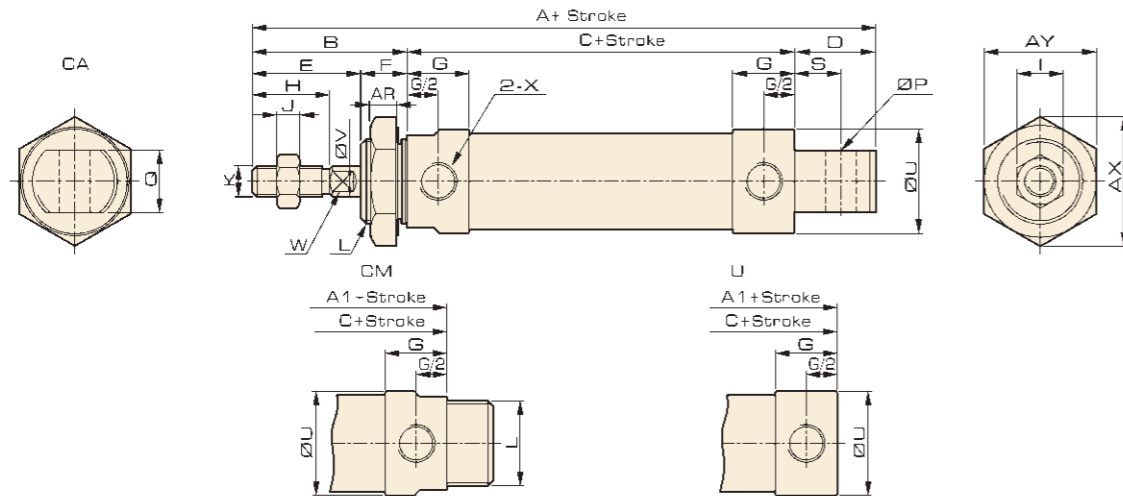
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Overall Dimension

MAL



Cylinder with or without magnet is the same size

Dimension

Bore/Symbol	A	A1	B	C	D	D1	E	F	G	G1	H	I	J	K
16	105	90	38	52	15	12	24	14	11	6.5	16	10	5	M6×1
20	131	110	40	70	21	12	28	12	16	12	20	12	6	M8×1.25
25	135	114	44	70	21	14	30	14	16	11	22	17	6	M10×1.25
32	141	114	44	70	27	14	30	14	16	11.5	22	17	6	M10×1.25
40	165	138	46	92	27	14	32	14	22	15	24	19	7	M12×1.25

Bore/Symbol	L	P	Q	S	U	V	W	X	AR	AX	AY	Y
16	M16×1.5	6	12	6	21	6	5	M5×0.8	6	27.8	24	6
20	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29	9
25	M22×1.5	8	16	12	32	10	8	G1/8	7	33.5	29	9
32	M24×2	10	16	15	39.5	12	10	G1/8	9	37	32	11.5
40	M30×2	12	20	15	47	16	14	G1/4	9	46	40	14

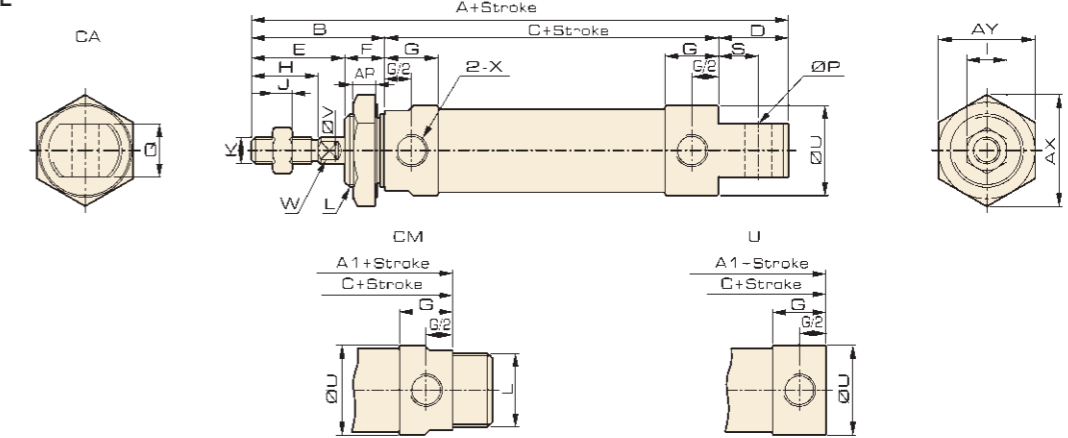
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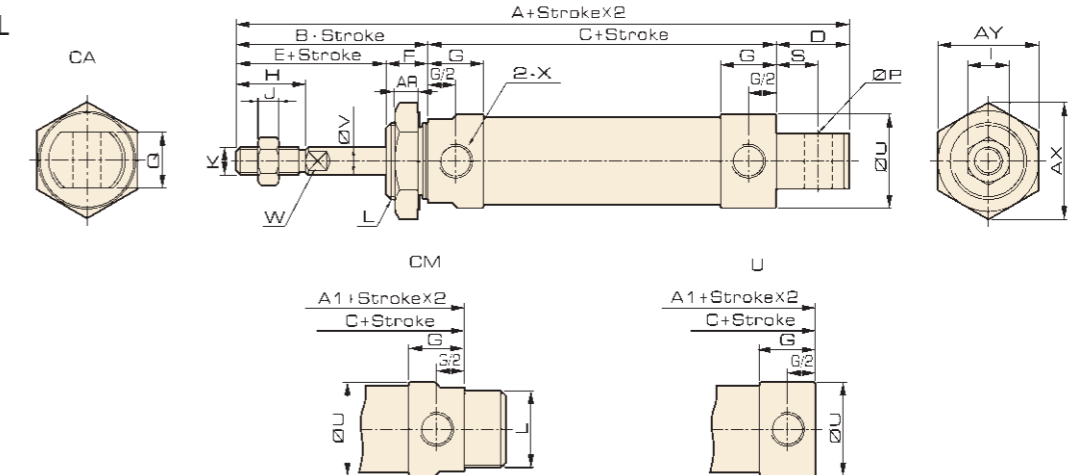
Overall Dimension

MSAL



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MTAL



Cylinder with or without magnet is the same size

Dimension

Symbol	A			A1			B	C			D	D1	E	F	G
	0-50	50-100	100-150	0-50	50-100	100-150		0-50	50-100	100-150					
16	130	155	-	115	140	-	38	77	102	-	15	12	24	14	11
20	156	181	206	135	160	185	40	95	120	145	21	12	28	12	16
25	160	185	210	139	164	189	44	95	120	145	21	14	30	14	16
32	166	191	216	139	164	189	44	95	120	145	27	14	30	14	16
40	190	215	240	163	188	213	46	117	142	167	27	14	32	14	22

Bore/Stroke	H	I	J	K	L	P	Q	S	U	V	W	X	AR	AX	AY
16	16	10	5	M6×1	M16×1.5	6	12	6	21	6	5	M5×0.8	6	27.8	24
20	20	12	6	M8×1.25	M22×1.5	8	16	12	27	8	6	G1/8	7	33.5	29
25	22	17	6	M10×1.25	M22×1.5	8	16	12	32	10	8	G1/8	7	33.5	29
32	22	17	6	M10×1.25	M24×2	10	16	15	39.5	12	10	G1/8	9	37	32
40	24	19	7	M12×1.25	M30×2	12	20	15	47	16	14	G1/4	9	46	40

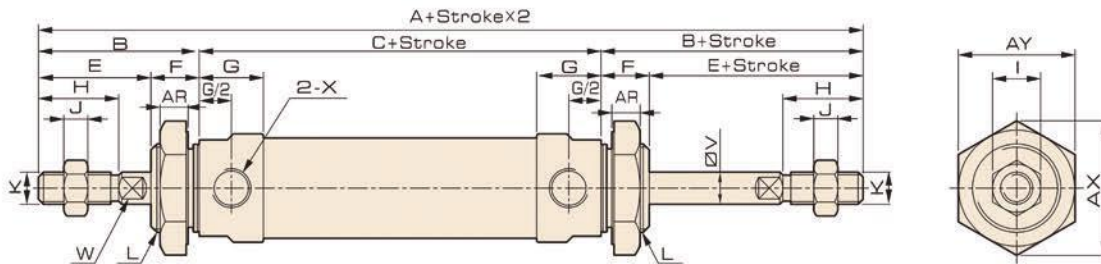
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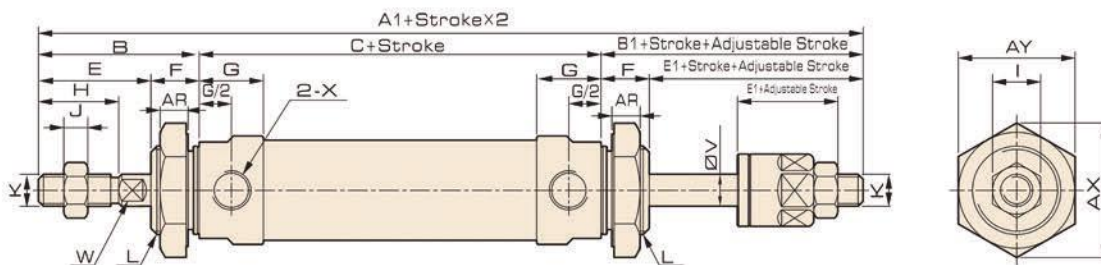
Overall Dimension

MALD



Cylinder with or without magnet is the same size

MALJ



Cylinder with or without magnet is the same size

Dimension

Bore/ Stroke	A	A1	B	B1	C	E	E1	F	G	G1	H	I	J	K	L	U	V	W	X	AR	AX	AY	Y
16	128	125	38	35	52	24	21	14	11	6.5	16	10	5	M6×1	M16×1.5	21	6	5	M5×0.8	6	27.8	24	6
20	150	147	40	37	70	28	25	12	16	12	20	12	6	M8×1.25	M22×1.5	27	8	6	G1/8	7	33.5	29	9
25	158	155	44	41	70	30	27	14	16	11	22	17	6	M10×1.25	M22×1.5	32	10	8	G1/8	7	33.5	29	9
32	158	155	44	41	70	30	27	14	16	11.5	22	17	6	M10×1.25	M24×2	39.5	12	10	G1/8	9	37	32	11.5
40	184	180	46	42	92	32	28	14	22	15	24	19	7	M12×1.25	M30×2	47	16	14	G1/4	9	46	40	14