MALC Series
Aluminum Alloy Mini Cylinder


MALC16X100


MALC25X100


MALC32X100

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. Change processing technology of cylinder cushion structure to ensure buffering function in stabilization.
5. Improved the range of buffering fine-tune, enable customers to more easily adjust the buffer throttling speed.

Ordering Code

MALC - U - 32 x 50 - 10 - S - E - LB - MT

Series
- MALC: Double Acting
- MALCD: Double-shaft
- MALCJ: Double-shaft with adjustable stroke

Back Form
- Blank: Standard with eye mounting
- CM: Standard with round back cover
- U: Standard with flat back cover

Bore
16, 20, 25, 32, 40

Stroke

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

Magnet
- S: With magnet
- Blank: Without magnet

Piston Rod Material
- Blank: Carbon steel
- E: Stainless steel

Mountings
- Blank: Basic mountings
- LB: Front and back mounting
- FA: Front mounting flange
- FB: Back mounting flange
- SDB: Back hinge

Sensor
- JEL-03R

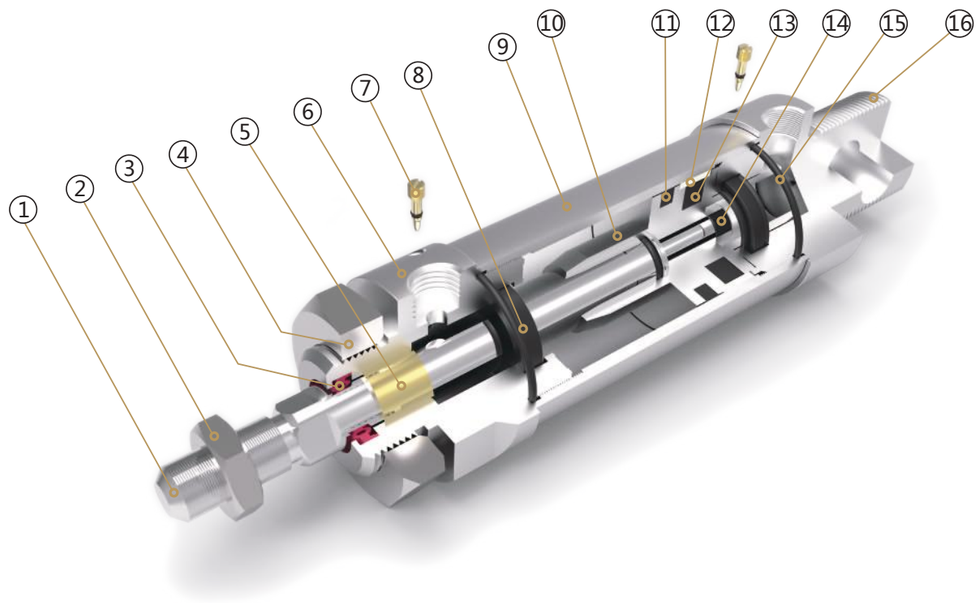
* Standard wire length is 1 meter, please specify for other length

Specification

Bore (mm)	16	20	25	32	40
Operation	Double 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℃				
Operating Speed Range	50 ~ 800mm/s				
Cushion	Adjustable Air Cushion				
Port Size	M5×0.8	G1/8"			G1/4"

JELPC®

Internal Structure



Parts

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

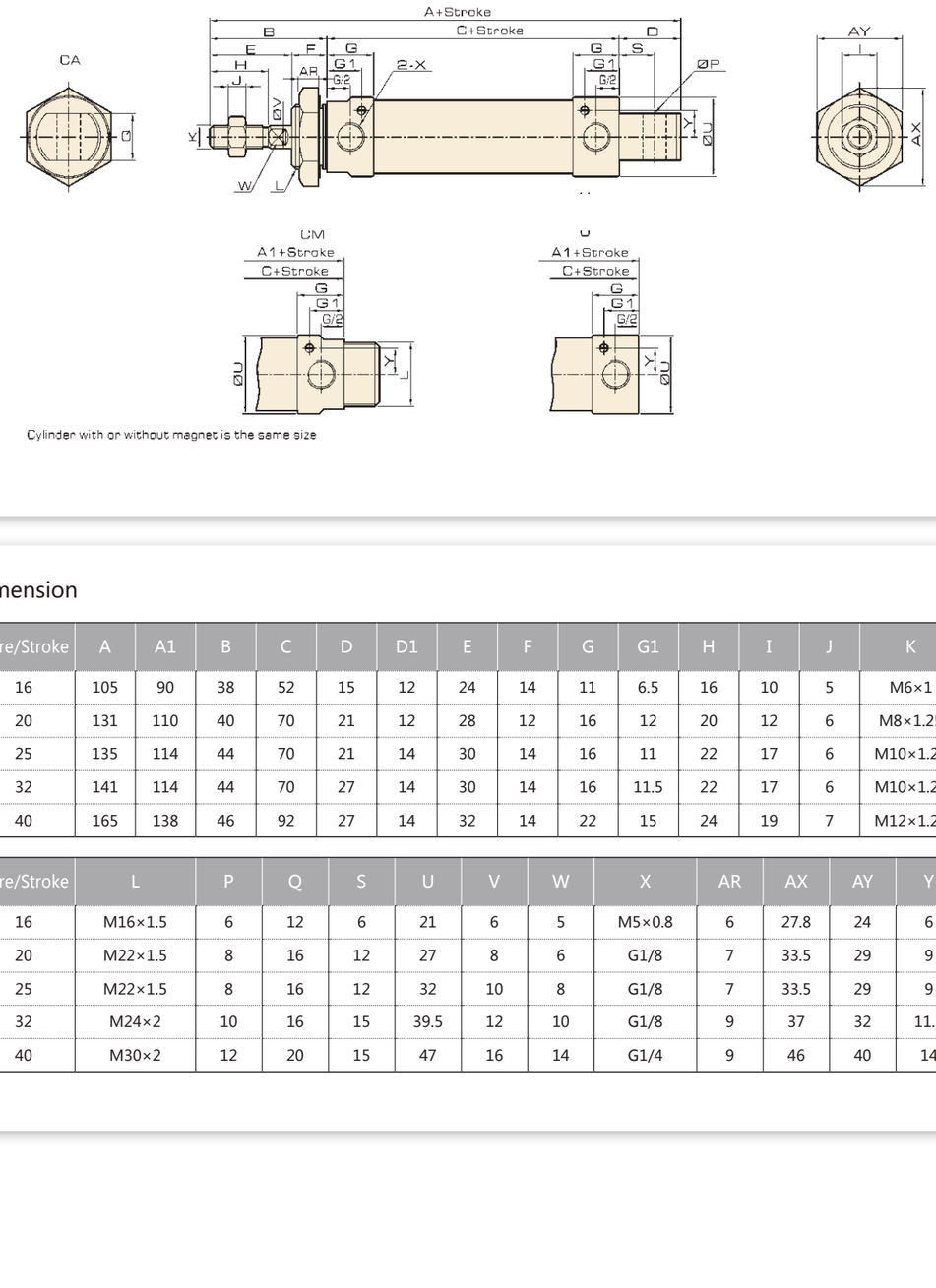
ISO9001:2015 CE

MALC Series
Aluminum Alloy Mini Cylinder

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/MACL A.
SDA
CQ2
TCQ2
ADN
TADN
PPRM
MHL2
Pneumatic Fingers
MXH/MXQ
CJP
CJ2
CDU
TN
CXS
MGP
MSQ

Overall Dimension

MALC



Cylinder with or without magnet is the same size

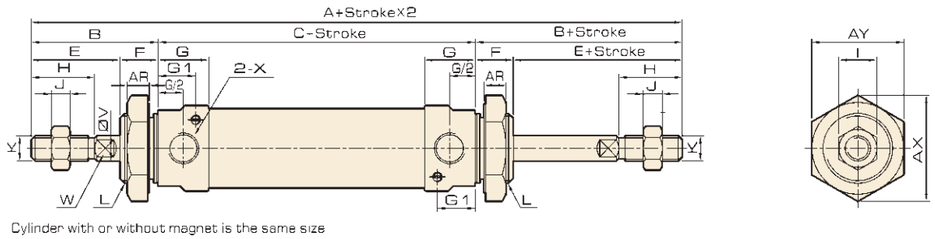
Dimension

Bore/Stroke	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/Stroke	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

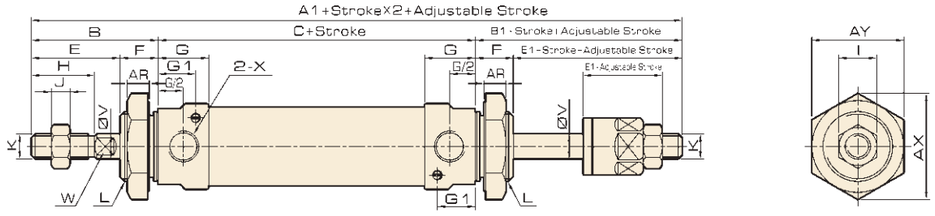
Overall Dimension

MALCD



Cylinder with or without magnet is the same size

MALCJ



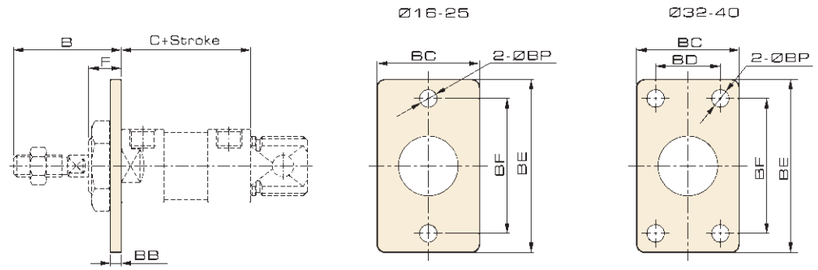
Cylinder with or without magnet is the same size

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

Overall Dimension

FA

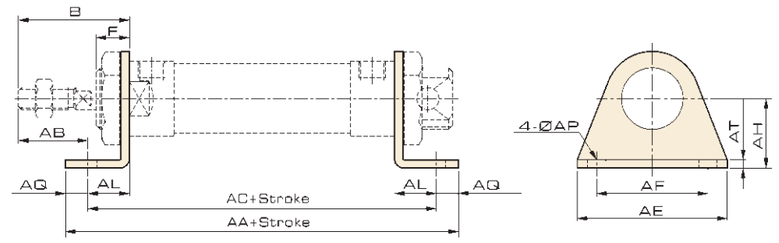


Dimension

Bore/ Stroke	B	C (MAL Series)	C (MSAL/MTAL Series) 0-50	C (MSAL/MTAL Series) 50-100	C (MSAL/MTAL Series) 100-150	BB	BC	BD	BE	BF	BP	F
16	38	52	77	102	-	3	26	-	52	40	5.5	14
20	40	70	95	120	145	4	38	-	64	50	6.5	12
25	44	70	95	120	145	4	38	-	64	50	6.5	14
32	44	70	95	120	145	4	47	33	72	58	6.5	14
40	46	92	117	142	167	4	50	36	84	70	6.5	14

Overall Dimension

LB

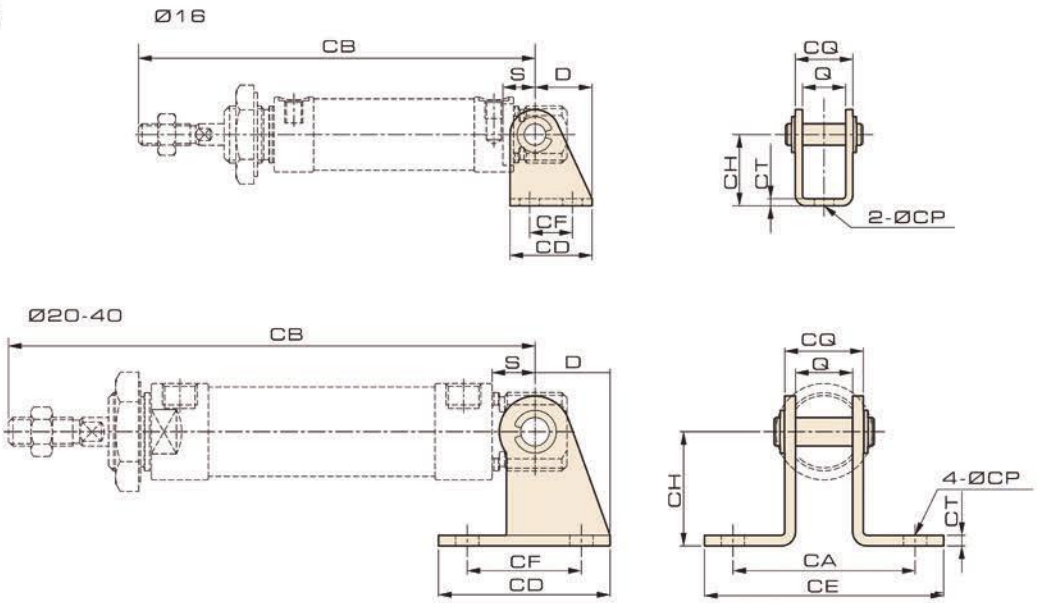


Dimension

Bore/ Stroke	B	AA (MAL Series)	AA (MSAL/MTAL Series) 0-50	AA (MSAL/MTAL Series) 50-100	AA (MSAL/MTAL Series) 100-150	AB	AC (MAL Series)	AC (MSAL/MTAL Series) 0-50	AC (MSAL/MTAL Series) 50-100	AC (MSAL/MTAL Series) 100-150	AE	AF	AH	AL	AP	AQ	AT	F
16	38	90	115	140	-	25	78	103	128	-	44	32	20	13	5.5	6	3	14
20	40	116	141	166	191	25	100	125	150	175	54	40	25	15	6.5	8	3	12
25	44	116	141	166	191	29	100	125	150	175	54	40	25	15	6.5	8	3	14
32	44	136	161	186	211	19	120	145	170	195	59	45	32	25	6.5	8	4	14
40	46	158	183	208	233	21	142	167	192	217	64	50	36	25	6.5	8	4	14

Overall Dimension

SDB

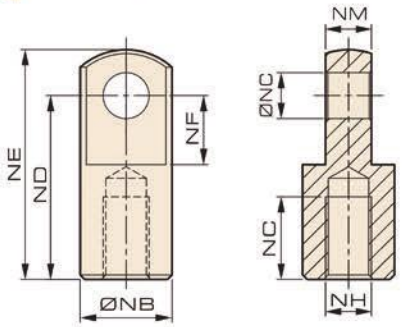


Dimension

Symbol / Bore/ Stroke	D	S	Q	CA	CB (MAL Series)	CB (MSAL/MTAL Series) 0-50	CB (MSAL/MTAL Series) 50-100	CB (MSAL/MTAL Series) 100-150	CD	CE	CF	CH	CT	CP	CQ
16	16	9	12	-	96	121	146	-	23	-	12	20	2	5.5	16
20	21	12	16	51	122	147	172	197	48	67	32	32	3	6.5	22
25	21	12	16	51	126	151	176	201	48	67	32	32	3	6.5	22
32	27	15	16	51	129	154	179	204	52	67	36	36	4	6.5	24
40	27	15	20	55	153	178	203	228	56	71	40	40	4	6.5	28

Overall Dimension

I Knuckle



Dimension

	NB	NC	ND	NE	NF	NG	NH	NM	Bore	16	20	25	32	40
II-M04070	10	4	16	21	7	6	M4×0.7	4	Adapted fitting form					
II-M06100	12	5	21	28	8.5	8	M6×1	6		√				
II-M08125	16	8	30	40	11	15	M8×1.25	8			√			
II-M10125	20	10	40	50	15	18	M10×1.25	10				√	√	
II-M12125	24	12	48	62	24	18	M12×1.25	12						√