

# Mini Cylinder

Double Acting, Single Rod; Single Acting, Spring Return / Extend

# Series MAL, MSAL, MTAL

### ◆ How to Order

**MAL** - **CM** **20** - **50** - **S** - **LB**

#### Mounting style

Nil	LB	FA	SDB

#### Magnet

Nil	Without magnet	S	Built-in magnet
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#### Cylinder stroke

\* Refer to "Standard stroke" .

#### Bore size (mm)

20	25	32	40
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#### Back cover type

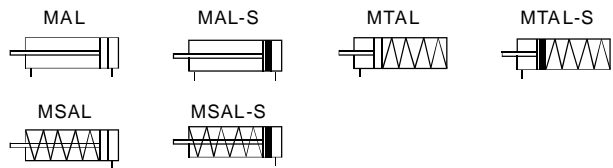
CA	Pivot type	CM	Round-end type	U	Flat-end type
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#### Model

MAL	Double acting
MSAL	Single acting, spring return
MTAL	Single acting, spring extend



#### Symbol



### ◆ Specifications

Bore size (mm)		20	25	32	40
Action	MAL	Double acting, single rod			
	MSAL / MTAL	Single acting, spring return / extend			
Fluid		Filtered compressed air			
Proof pressure		1.5 MPa			
Operating pressure range	MAL	0.1~0.9 MPa			
	MSAL / MTAL	0.2~0.9 Mpa			
Ambient and fluid temperature		-5~70 °C(No freezing)			
Port size		Rc1/8			Rc1/4
Piston rod thread		M8×1.25	M10×1.25		M12×1.25
Cushion		Rubber bupmer			

Note): Please contact with ANSSION for the mounting accessories.

### ◆ Standard Stroke

Series	Bore size (mm)	Standard stroke(mm)														Maximum stroke	Available stroke		
MAL	20	25	50	75	80	100	125	150	160	175	200	250	300			500	800		
	25	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	800	1200
	32	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	800	1200
	40	25	50	75	80	100	125	150	160	175	200	250	300	350	400	450	500	1200	1500
MSAL	20	25	50	75	100													100	-
	25	25	50	75	100													100	-
MTAL	32	25	50	75	100													100	-
	40	25	50	75	100													100	-

# Mini Cylinder

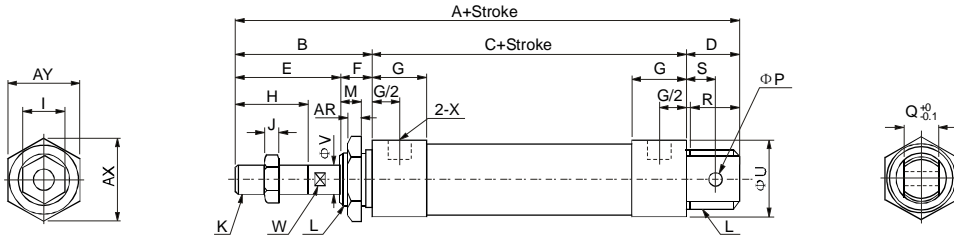
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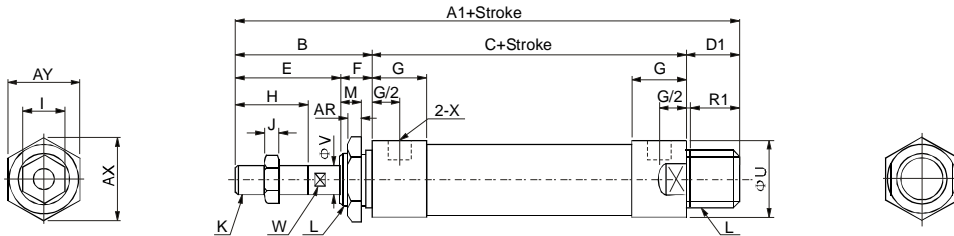


### ◆ Dimensions

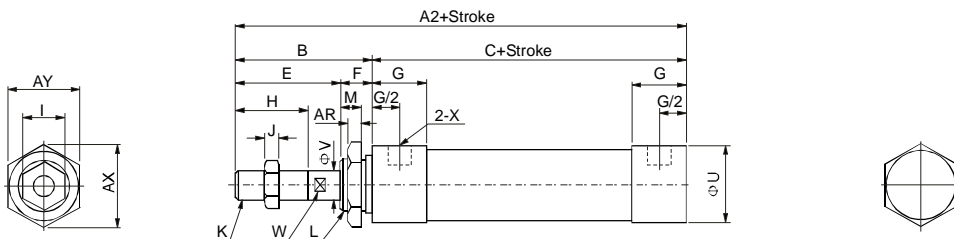
**MAL-CA□-□**  
(Pivot style)



**MAL-CM□-□**  
(Round-end style)



**MAL-U□-□**  
(Flat-end style)



Bore size(mm)	A	A1	A2	B	C	D	D1	E	F	G	H	I	J	K
20	131	122	110	40	70	21	12	28	12	16	20	12	6	M8×1.25
25	135	128	114	44	70	21	14	30	14	16	22	17	6	M10×1.25
32	141	128	114	44	70	27	14	30	14	16	22	17	6	M10×1.25
40	165	152	138	46	92	27	14	32	14	22	24	17	7	M12×1.25

Bore size(mm)	L	M	P	Q	R	R1	S	U	V	W	X	AR	AX	AY
20	M22×1.5	10	8	16	19	10	12	29	8	6	Rc1/8	7	33	29
25	M22×1.5	12	8	16	19	12	12	34	10	8	Rc1/8	7	33	29
32	M24×2.0	12	10	16	25	12	15	39.5	12	10	Rc1/8	8	37	32
40	M30×2.0	12	12	20	25	12	15	49.5	16	14	Rc1/4	9	47	41

I

CJP

CJ1

DNC

DNCB

DNG

C95

SI

CS1

MB

SU

SC

DSNU

C85

CJ2

CM2

MA

**MAL**

ADVU

CQ2

CQS

SDA

CU

DPZ

CXS

TN

ADVUL

CQM

MGP

MGG

CRA1

CY1B

CS

Auto switch

D

Auto switch

AC,AD

HR

RB

RBQ

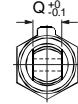
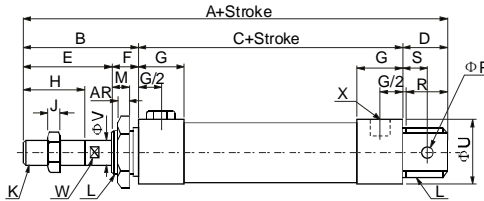
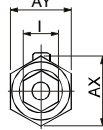
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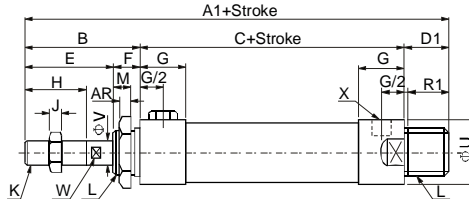
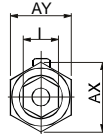
**MSAL-CA** □-□

(Spring return, Pivot style)



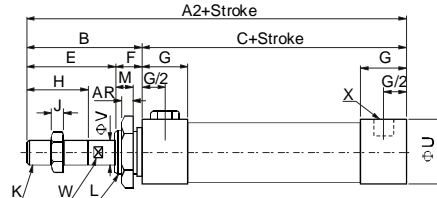
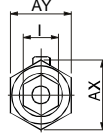
**MSAL-CM** □-□

(Spring return, Round-end style)



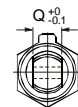
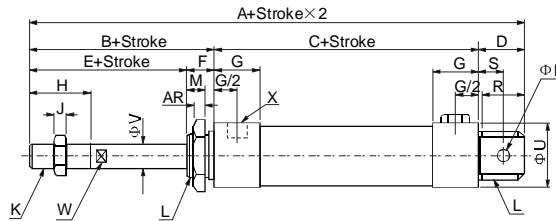
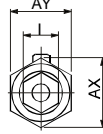
**MSAL-CU** □-□

(Spring return, Flat-end style)



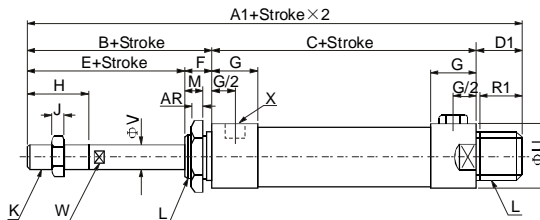
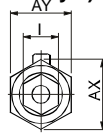
**MTAL-CA** □-□

(Spring extend, Pivot style)



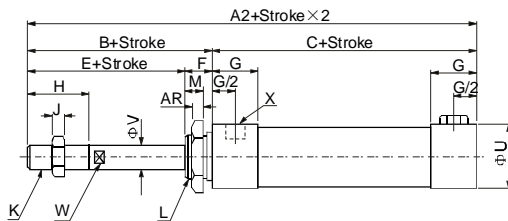
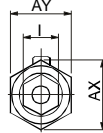
**MTAL-CM** □-□

(Spring extend, Round-end style)



**MTAL-CU** □-□

(Spring extend, Flat-end style)



Bore size(mm)	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	131	156	122	147	110	135	40	70	95	21	12	28	12	16	20	12	6
25	135	160	128	153	114	139	44	70	95	21	14	30	14	16	22	17	6
32	141	166	128	153	114	139	44	70	95	27	14	30	14	16	22	17	6
40	165	190	152	177	138	163	46	92	117	27	14	32	14	22	24	17	7

Bore size(mm)	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	10	12	29	8	6	Rc1/8	7	33	29
25	M10×1.25	M22×1.5	12	8	16	19	12	12	34	10	8	Rc1/8	7	33	29
32	M10×1.25	M24×2.0	12	10	16	25	12	15	39.5	12	10	Rc1/8	8	37	32
40	M12×1.25	M30×2.0	12	12	20	25	12	15	49.5	16	14	Rc1/4	9	47	41