



### Features

Two-stage stroke: Two compact cylinders with same I.D. but different strokes length are connected to achieve two-stage stroke.

### Specification

Model	MCJA-3*									
Acting type	Double acting / Single acting				Double acting					
Tube I.D. (mm)	12	16	20	25	32	40	50	63	80	100
Port size	M5×0.8				Rc1/8		Rc1/4		Rc3/8	
Medium	Air									
Operating pressure range (MPa)	Double acting		0.05~1		0.03~1		0.02~1			
	Single acting		0.2~1		0.15~1		0.1~1		—	
Proof pressure	1.5 MPa									
Ambient temperature	-5~+60°C (No freezing)									
Available speed range	50~500 mm/sec									
Sensor switch (*)	RCE, RCE1, RDEP									

\* RCE, RCE1, RDEP specification, please refer to page 8-12, 13, 18. RDEP only for tube I.D.  $\phi 12\sim\phi 50$ .

### Order example

MCJA — 32 — 40 — 10×25 M — □

MODEL

3: Multiple position

TUBE I.D.

STROKE1×STROKE2  
Stroke 1: First stroke  
Stroke 2: Total stroke

M: Magnet

PORT THREAD

Blank: M5×0.8 (for  $\phi 12\sim\phi 25$ )  
Blank: Rc thread  
G: G thread  
NPT: NPT thread (for  $\phi 32\sim\phi 100$ )

\*1. The total stroke must be greater than the first stroke.

\*2. Order example for special specification, refer to page 0-7.

STYLE

Code	Symbol	Description
3 1		Double acting / Male thread
3 2		Double acting / Female thread
3 5		Single acting / Normally returned male thread
3 6		Single acting / Normally returned female thread

### Double acting – Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)	
		First	Total
$\phi 12, 16$	5, 10, 15, 20, 25, 30	130	300
$\phi 20, 25, 32$ $\phi 40, 50, 63, 80$	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	130	300
$\phi 100$	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	120	125

\* Please contact us if the stroke is out of specification.

### Flat washer kits

WS — MCJA — 3 — 40

FLAT WASHER

MODEL

MULTIPLE POSITION

TUBE I.D.

\* Only for tube I.D.  $\phi 20\sim\phi 100$ .

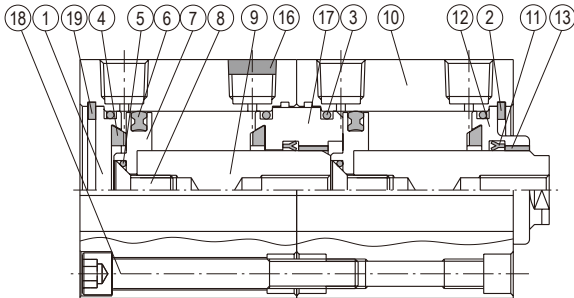
### Single acting – Table for standard stroke

Tube I.D.	Stroke (mm)
$\phi 12, 16, 20, 25, 32, 40$	5, 10, 15, 20, 25, 30
$\phi 50$	5, 10, 15, 20

\* Please contact us if the stroke is out of specification.

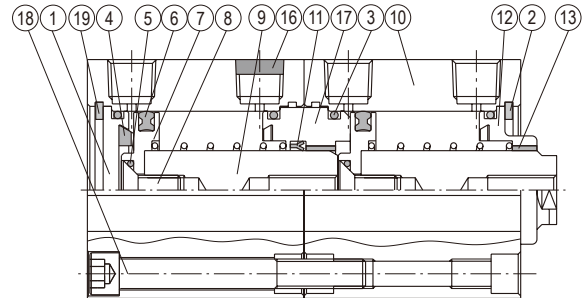
## COMPACT CYLINDER

### Double acting



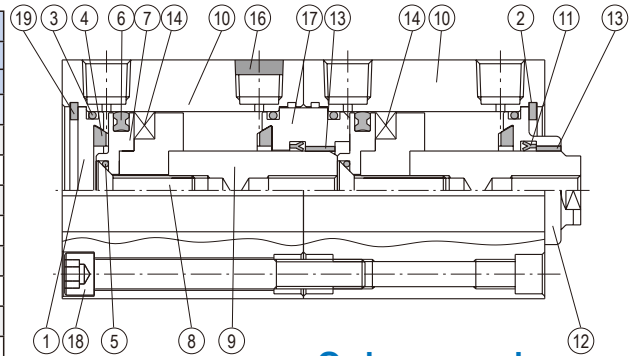
### Single acting

#### Normally returned



### Double acting

#### (with magnet)



### Seal kit

Acting type	Rod packing		Piston packing		Cover ring	Piston gasket
	Double acting	Normally returned	Double acting	Single acting	Double acting single acting	Double acting single acting
Q'y	2	1	2	2	4	2
ø12	KSYR-6	KSYR-6	OPA-12	OPA-12	S-12	d4×w1
ø16	KSYR-6	KSYR-6	OPA-16	OPA-16	S-14	d4×w1
ø20	KSYR-8	KSYR-8	OPA-20	OPA-20	S-18	d6×w1
ø25	KSYR-10	KSYR-10	OPA-25	OPA-25	S-22	d8×w1
ø32	KSYR-12	KSYR-12	OPA-32	OPA-32	d28×w2	S-9
ø40	KSYR-16	KSYR-16	OPA-40	OPA-40	S-36	S-9
ø50	KSYR-20	KSYR-20	OPA-50	OPA-50	AS-31	S-16
ø63	KSYR-20	—	OPA-63	—	AS-35	S-16
ø80	ORA-25	—	OPA-80	—	AS-41	d20×w1
ø100	SDR-30	—	OPA-100	—	S-95	S-26

### Material

No.	Tube I.D. Part name	12	16	20	25	32	40	50	63	80	100	Q'y	Component parts (inclusion)	Repair kits (inclusion)
1	Head cover	Aluminum alloy										1	●	
2	Snap ring (Front end)	*2	Spring steel		*2		Spring steel					1	●	
3	Cover ring	NBR										4	●	●
4	Cushion packing	—	NBR									4	●	●
5	Piston gasket	NBR										2	●	●
6	Piston packing	NBR										2	●	●
7	Piston	Aluminum alloy										2	●	
8	Screw	With magnet	Stainless steel				SCM				2	●		
		Without magnet	SCM	Stainless steel				SCM				2	●	
9	Piston rod *1	With magnet	*2	Carbon steel							2			
		Without magnet	*2	Carbon steel							2			
10	Body	Aluminum alloy										2		
11	Rod packing	NBR										2*3	●	●
12	Rod cover	Aluminum alloy										1	●	
13	Bush	—	Bearing alloy									2	●	
14	Magnet ring	Magnet material										2	●	
15	Spring	SWP				—				2	●			
16	Silencer	Brass										1	●	
17	Center cover	Aluminum alloy										1	●	
18	Bolt	SCM										2		
19	Snap ring (Rear end)	Stainless steel				Spring steel				1	●			

\*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

\*2. Stainless steel

\*3. Single acting / Normally returned, Q'y=1

### Order example Component parts

Tube I.D.	Component parts
ø12	CP-MCJA-3-12(M)
ø16	CP-MCJA-3-16(M)
ø20	CP-MCJA-3-20(M)
ø25	CP-MCJA-3-25(M)
ø32	CP-MCJA-3-32(M)
ø40	CP-MCJA-3-40(M)
ø50	CP-MCJA-3-50(M)
ø63	CP-MCJA-3-63(M)
ø80	CP-MCJA-3-80(M)
ø100	CP-MCJA-3-100(M)

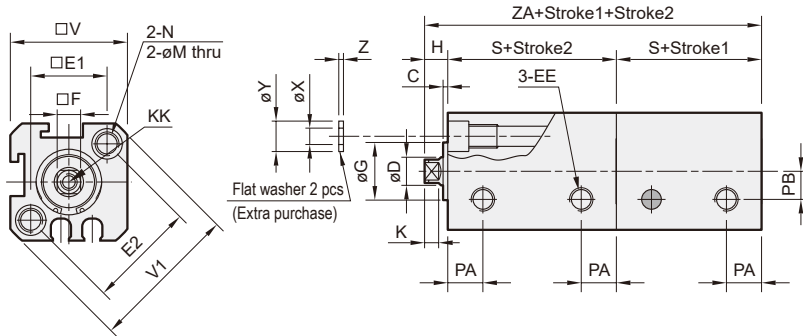
M: With magnet

### Repair kits

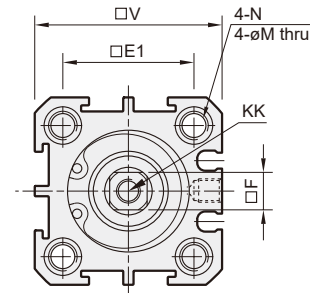
Tube I.D.	Repair kits
ø12	PS-MCJA-3-12
ø16	PS-MCJA-3-16
ø20	PS-MCJA-3-20
ø25	PS-MCJA-3-25
ø32	PS-MCJA-3-32
ø40	PS-MCJA-3-40
ø50	PS-MCJA-3-50
ø63	PS-MCJA-3-63
ø80	PS-MCJA-3-80
ø100	PS-MCJA-3-100

32

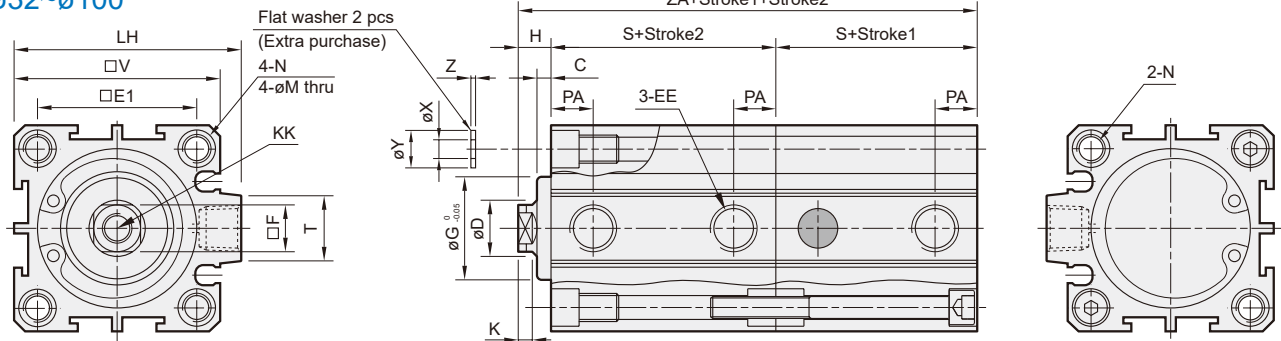
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32\sim\phi 100$



\*Stroke 1: First stroke Stroke 2: Total stroke

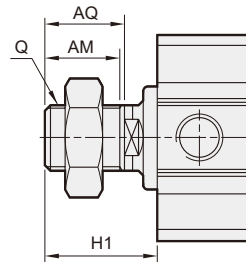
Code Tube I.D.	AM	AQ	C	D	EE	E1	E2	F	G	H	H1	K
12	10	12	1	6	M5×0.8	16.3	23	5	11	5	17	3
16	10	12	1.5	6	M5×0.8	19.8	28	5	11	5.5	17.5	3
20	13	15	1.5	8	M5×0.8	24	—	6	15	5.5	20.5	3
25	15	17	2	10	M5×0.8	28	—	8	17	6	23	3
32	15	18	3	12	Rc1/8 (*1)	34	—	10	22	7	25	3
40	25	28	3	16	Rc1/8 (*1)	40	—	14	28	7	35	3
50	25	28	4	20	Rc1/4 (*2)	48	—	17	38	9	37	3
63	25	28	4	20	Rc1/4 (*2)	60	—	17	40	9	37	3
80	30	33	5	25	Rc3/8 (*3)	74	—	22	45	11	44	4
100	35	38	5	30	Rc3/8 (*3)	90	—	27	55	12	50	4

\*1. Without magnet with stroke=5mm, EE=M5×0.8

\*2. Without magnet with stroke=5mm, EE=Rc1/8

\*3. Without magnet with stroke=5mm, EE=Rc1/4

31 Male thread

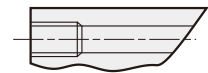


Long stroke

Without counter bore

With magnet type:  
The stroke length must be over 100mm.  
Without magnet type:  
The stroke length must be over 110mm.

$\phi 12\sim\phi 100$



Code Tube I.D.	KK	LH	M	N	PA	PB	Q	T	V	V1	X	Y	Z	Without magnet		Magnet	
														S	ZA	S	ZA
12	M3×0.5×6depth	—	4.3	$\phi 6.5\times 4.5\text{depth}$ , M5×0.8×7.5depth	6.5	6	M5×0.8	—	25	32	3.2	6.3	1	17	39	27	59
16	M3×0.5×6depth	—	4.3	$\phi 6.5\times 4.5\text{depth}$ , M5×0.8×7.5depth	7	6.5	M5×0.8	—	29	38	3.2	6.3	1	18.5	42.5	28.5	62.5
20	M4×0.7×8depth	—	4.3	$\phi 6.5\times 4.5\text{depth}$ , M5×0.8×7.5depth	7.5	—	M6×1.0	—	34	—	3.2	6.3	1	19.5	44.5	29.5	64.5
25	M5×0.8×10depth	—	5.1	$\phi 9\times 7\text{depth}$ , M6×1.0×10depth	8	—	M8×1.25	—	40	—	4.2	7.8	1	21	48	31	68
32	M6×1.0×12depth	48.5	5.1	$\phi 9\times 7\text{depth}$ , M6×1.0×10depth	9	—	M10×1.25	14	44	—	4.2	7.8	1	24.5	56	34.5	76
40	M8×1.25×12depth	56.5	6.9	$\phi 10.5\times 8\text{depth}$ , M8×1.25×12depth	10	—	M14×1.5	14	52	—	6.2	10.3	1.6	26	59	36	79
50	M10×1.5×15depth	70	6.9	$\phi 11\times 8.5\text{depth}$ , M8×1.25×16.5depth	10	—	M18×1.5	19	62	—	6.2	10.8	1.6	28	65	38	85
63	M10×1.5×15depth	83	6.9	$\phi 11\times 8.5\text{depth}$ , M8×1.25×16.5depth	12	—	M18×1.5	20	75	—	6.2	10.8	1.6	32	73	42	93
80	M14×1.5×20depth	102	10.5	$\phi 14\times 10.5\text{depth}$ , M12×1.75×12depth	13	—	M22×1.5	27	94	—	8.2	13.8	1.6	41	93	51	113
100	M18×1.5×20depth	122	12.3	$\phi 18.5\times 13\text{depth}$ , M14×2×17depth	17	—	M26×1.5	26	114	—	10.2	17.3	2	51	114	61	134