

MCJA Multiple position series

COMPACT CYLINDER



Special spec



Rod end shape



Technical data



Caution for safety
(Read before installing)



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 perssure 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℃ (No freezing)									
Available speed range		50~500 mm/sec									
Sensor switch (*)		RCE  , RCE1  , RDEP 									

* RDEP only for tube I.D. ø12~ø50.

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 ø12~ø25)
Blank: Rc thread
G: G thread
NPT: NPT thread
(for ø32~ø100)

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

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
ø12,16	5,10,15,20,25,30	130	300
ø20,25,32 ø40,50,63,80	5,10,15,20,25,30,35,40,45,50	130	300
ø100	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.

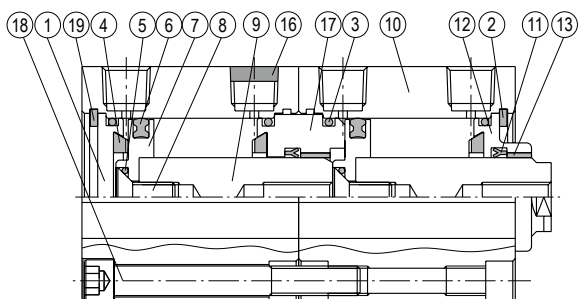
* Only for tube I.D. ø20~ø100.

Single acting – Table for standard stroke

Tube I.D.	Stroke (mm)
ø12,16,20,25,32,40	5,10,15,20,25,30
ø50	5,10,15,20

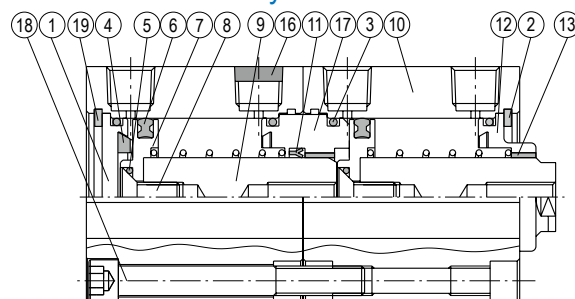
* Please contact us if the stroke is out of specification.

Double acting



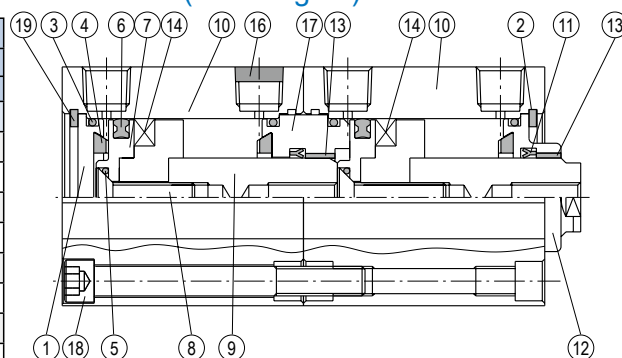
Single acting

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	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)

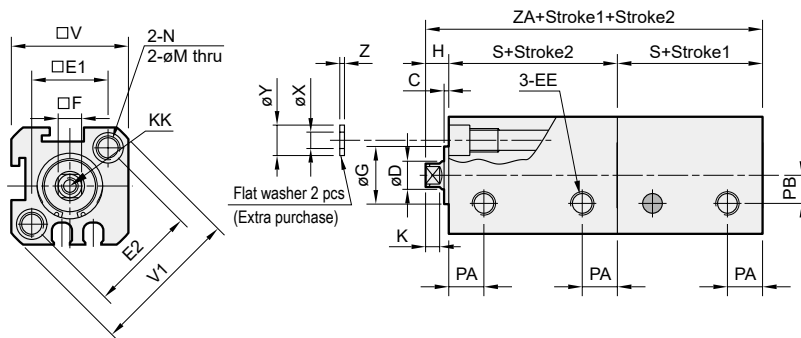
M: With magnet

Repair kits

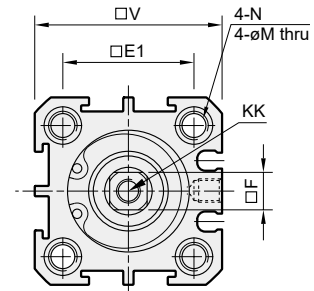
Tube I.D.	Repair kits
ø12	PS-MCJA-3-12
ø16	PS-MCJA-3-16
ø20	PS-MCJA-3-20
ø25	PS-MCJA-3-25
ø32	PS-MCJA-3-32
ø40	PS-MCJA-3-40
ø50	PS-MCJA-3-50
ø63	PS-MCJA-3-63
ø80	PS-MCJA-3-80
ø100	PS-MCJA-3-100

32

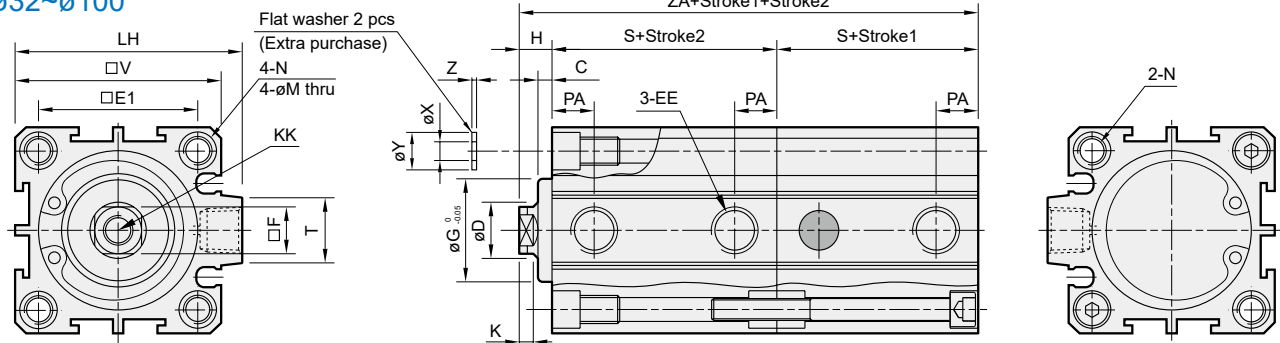
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32 \sim \phi 100$



*Stroke 1: First stroke Stroke 2: Total stroke

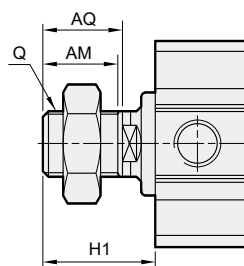
Code Tube I.D.	AM	AQ	C	D	EE	E1	E2	F	G	H	H1	K
12	10	12	1	6	M5×0.8	16.3	23	5	11	5	17	3
16	10	12	1.5	6	M5×0.8	19.8	28	5	11	5.5	17.5	3
20	13	15	1.5	8	M5×0.8	24	—	6	15	5.5	20.5	3
25	15	17	2	10	M5×0.8	28	—	8	17	6	23	3
32	15	18	3	12	Rc1/8 (*1)	34	—	10	22	7	25	3
40	25	28	3	16	Rc1/8 (*1)	40	—	14	28	7	35	3
50	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

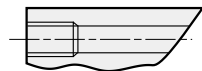


Long stroke

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	$\phi 6.5 \times 4.5$ 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	$\phi 6.5 \times 4.5$ 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	$\phi 6.5 \times 4.5$ 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	$\phi 9 \times 7$ 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	$\phi 9 \times 7$ 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	$\phi 10.5 \times 8$ 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	$\phi 11 \times 8.5$ 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	$\phi 11 \times 8.5$ 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	$\phi 14 \times 10.5$ 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	$\phi 18.5 \times 13$ depth, M14×2×17depth	17	—	M26×1.5	26	114	—	10.2	17.3	2	51	114	61	134