



Features

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

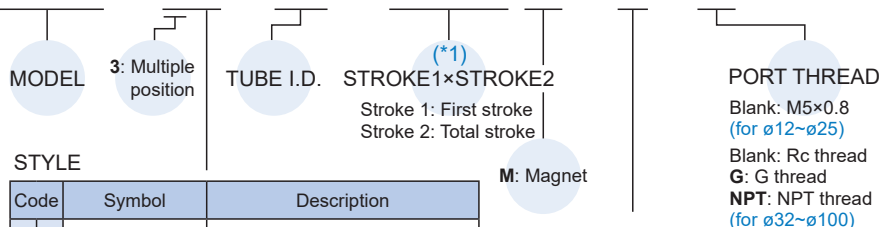
Specification

Model	MCJQ-3*									
Acting type	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)	0.07~1		0.05~1							
Proof pressure	1.5 MPa									
Ambient temperature	-5°C~+60°C (No freezing)									
Available speed range	50~500 mm/sec									
Sensor switch (*)	RCE, RCE1	●	●	●	●	●	●	●	●	●
	RDEP	●	●	—	●	—	●	●	●	●

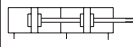
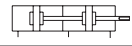
* RCE, RCE1, RDEP specification, please refer to page 8-12, 13, 18.

Order example


MCJQ — 32 — 20 — 10×25 M — F — G



STYLE

Code	Symbol	Description
3 1		Double acting / Male thread
3 2		Double acting / Female thread

TYPE

Code	Description
Blank	Standard
F	Rear flange 
L	Piston rod extended to 10 mm (for standard stroke for STROKE2). For adding FAC accessories

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

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

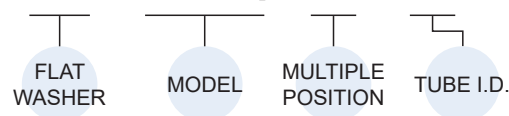
Double acting – Table for standard stroke

Tube I.D.	Stroke 1		Stroke2	
	Standard stroke	Standard stroke	Long stroke (mm)	
ø12,16	5,10,15,20,25,30	5,10,15,20,25,30	35,40,45,50,75,100	
ø20	5,10,15,20,25,30, 35,40,45,50	5,10,15,20,25,30, 35,40,45,50	75,100,125,150,175,200	
			75,100,125,150,175,200,250,300	
ø32~80	5,10,15,20,25,30, 35,40,45,50,75,100	5,10,15,20,25,30, 35,40,45,50,75,100	125,150,175,200,250,300	
			—	

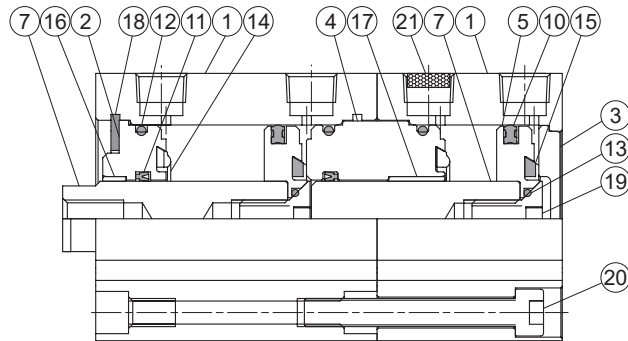
• Please contact us if the stroke is out of specification.

Flat washer kits

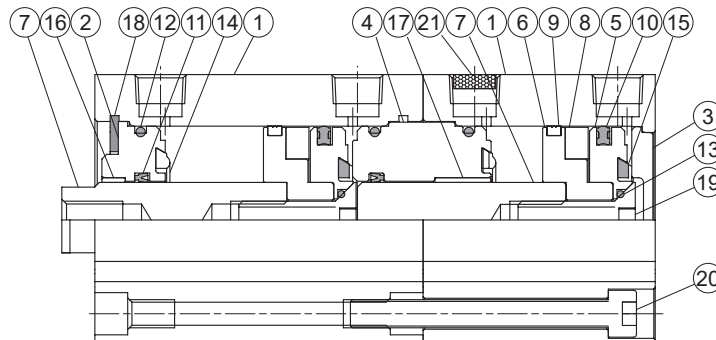
WS — MCJQ — 3 — 20



Double acting



Double acting (with magnet)



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	Body #1, #2	Aluminum alloy										1		
2	Rod cover	Aluminum alloy										1	●	
3	End cover	Aluminum alloy										1	●	
4	Center cover	Aluminum alloy										1	●	
5	Piston	Aluminum alloy										2	●	
6		Aluminum alloy										2	●	
7	Piston rod #1, #2	Stainless steel				Carbor steel						1		
		SUS				Carbor steel						1		
8	Magnet ring	Magnet										2	●	
9	Wear ring	—				Resin						2	●	
10	Piston packing	—				NBR						2	●	●
11	Rod packing	—				NBR						2	●	●
12	Cover ring	—				NBR						3	●	●
13	Piston gasket	—				NBR						2	●	●
14	Cushion packing	—				NBR						2	●	●
15	Cushion packing	—				NBR						2	●	●
16	Bush #1	—				Bearing alloy						1	●	
17	Bush #2	—				Bearing alloy						1	●	
18	Snap ring	Stainless steel				Spring steel						1	●	
19	Piston bolt	Stainless steel				SCM						2	●	
20	Bolt	SUS				SCM						2		
21	Silencer	Brass										1	●	

Order example Component parts

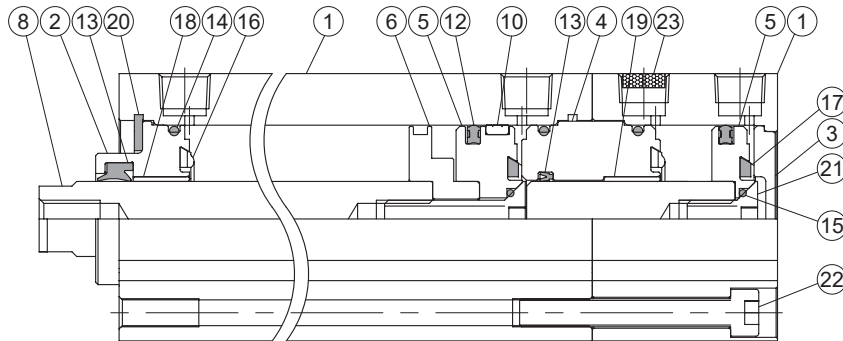
Tube I.D.	Component parts
ø12	CP-MCJQ-3-12(M)
ø16	CP-MCJQ-3-16(M)
ø20	CP-MCJQ-3-20(M)
ø25	CP-MCJQ-3-25(M)
ø32	CP-MCJQ-3-32(M)
ø40	CP-MCJQ-3-40(M)
ø50	CP-MCJQ-3-50(M)
ø63	CP-MCJQ-3-63(M)
ø80	CP-MCJQ-3-80(M)
ø100	CP-MCJQ-3-100(M)

M: With magnet

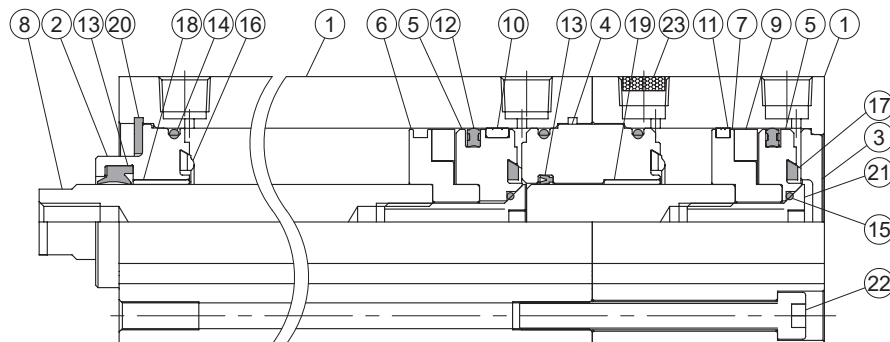
Repair kits

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

Double acting



Double acting (with magnet)



Material

No.	Tube I.D. Part name	12	16	20	25	32	40	50	63	80	Q'y	Component parts (inclusion)	Repair kits (inclusion)
1	Body #1, #2	Aluminum alloy									1		
2	Rod cover	Aluminum alloy									1	●	
3	End cover	Aluminum alloy									1	●	
4	Center cover	Aluminum alloy									1	●	
5	Piston #1, #2	Aluminum alloy									1	●	
6	Piston #1 With magnet	Aluminum alloy									1	●	
7	Piston #2 With magnet	Aluminum alloy									1	●	
8	Piston rod #1, #2	With magnet	Stainless steel		Carbor steel					1	●		
		Without magnet	SUS	Carbor steel					1				
9	Magnet ring	Magnet									2	●	
10	Wear ring #1	Resin									1	●	
11	Wear ring #2	Resin									1	●	
12	Piston packing	NBR									2	●	●
13	Rod packing #1, #2	NBR									1	●	●
14	Cover ring	NBR									3	●	●
15	Piston gasket	NBR									2	●	●
16	Cushion packing	NBR									2	●	●
17	Cushion packing	NBR									2	●	●
18	Bush #1	—			Bearing alloy						1	●	
19	Bush #2	—			Bearing alloy						1	●	
20	Snap ring	Stainless steel				Spring steel					1	●	
21	Piston bolt	Stainless steel				SCM					2	●	
22	Bolt	SUS		SCM						2			
23	Silencer	Brass									1	●	

Order example

Component parts

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

M: With magnet

Repair kits

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

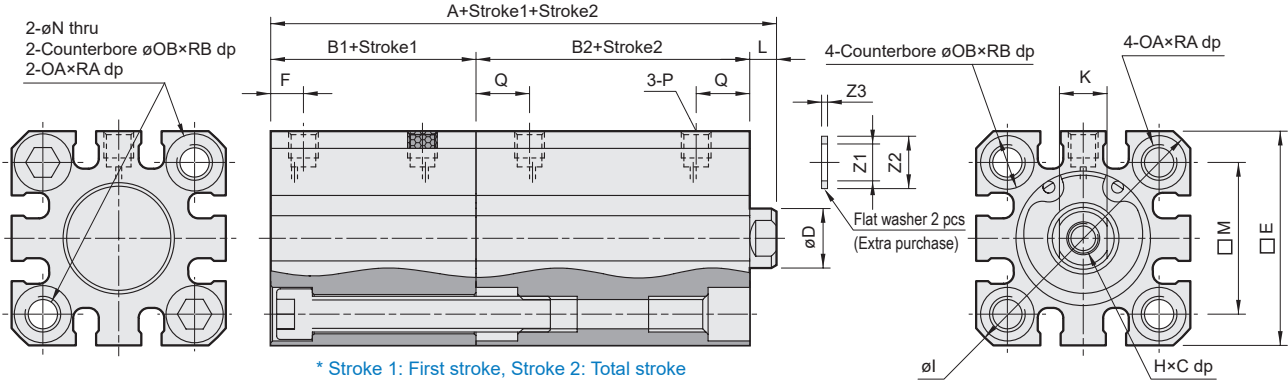
MCJQ Dimensions – Double acting $\phi 12 \sim \phi 25$

COMPACT CYLINDER



$\phi 20, \phi 25$

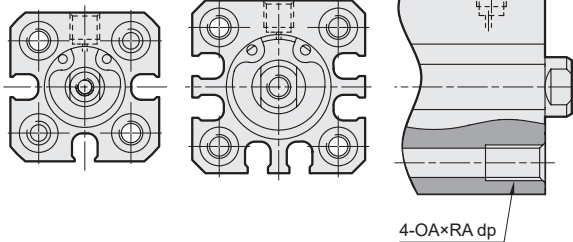
Total stroke 5~100



for total stroke over 101

$\phi 12$

$\phi 16$



MCJQ-31 male thread size

Code Tube I.D.	C1	H1	L1*1,2	L2*1	X
12	9	M5×0.8	14 (24)	24	10.5
16	10	M6×1.0	15.5 (25.5)	25.5	12
20	12	M8×1.25	18.5 (28.5)	28.5	14
25	15	M10×1.25	22.5 (32.5)	32.5	17.5

*1. L1: Total stroke (Standard stroke)
L2: Total stroke (Long stroke)
*2. () Dimensions for piston rod extended "L" type.

Code Tube I.D.	First stroke				Total stroke									
	Standard stroke		Standard stroke						Long stroke					
	Stroke range	Without Magnet B1	Magnet B1	Stroke range	Without magnet A B2		Magnet A B2		L*	Stroke range	Without Magnet A	Magnet A	B2	L
12	5~30	17	22	5~30	42.5	22	52.5	27	3.5 (13.5)	31~100	62.5	67.5	32	13.5
16	5~30	17	22	5~30	42.5	22	52.5	27	3.5 (13.5)	31~100	62.5	67.5	32	13.5
20	5~50	19.5	29.5	5~50	50	26	70	36	4.5 (14.5)	51~200	75	85	41	14.5
25	5~50	22.5	32.5	5~50	56.5	29	76.5	39	5 (15)	51~300	81.5	91.5	44	15

Code Tube I.D.	C	D	E	F	H	I	K	M	N	OA	OB	P	Q	RA	RB	Z1	Z2	Z3
12	6	6	25	5	M3×0.5	32	5	15.5	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	4.2	6.3	0.5
16	8	8	29	5	M4×0.7	38	6	20	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	4.2	6.3	0.5
20	7	10	36	5.5	M5×0.8	47	8	25.5	5.4	M6×1.0	9	M5×0.8	9	10	7	6.2	8.8	1
25	12	12	40	5.5	M6×1.0	52	10	28	5.4	M6×1.0	9	M5×0.8	11	10	7	6.2	8.8	1

* () Dimensions for piston rod extended "L" type.

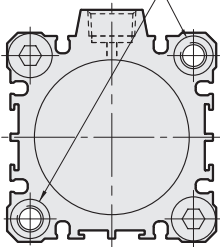
MCJQ Dimensions – Double acting $\phi 32 \sim \phi 100$

COMPACT CYLINDER

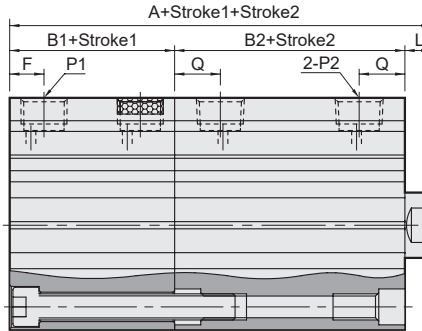


$\phi 50 \sim \phi 100$

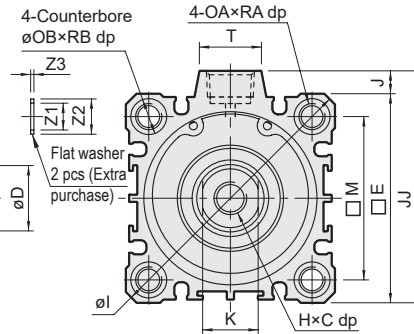
2- ϕN thru
2-Counterbore $\phi OB \times RB$ dp
2-OA \times RA dp



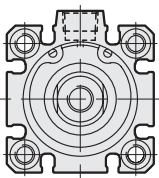
Total stroke 5~100



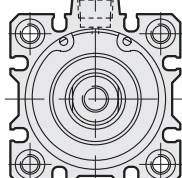
* Stroke 1: First stroke, Stroke 2: Total stroke



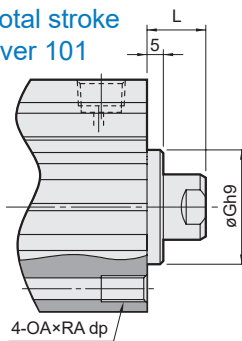
$\phi 32$



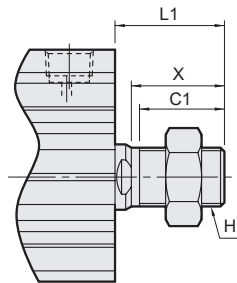
$\phi 40$



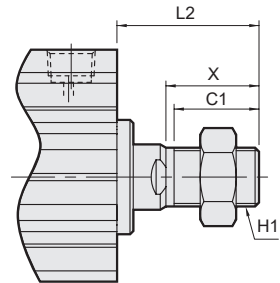
for total stroke over 101



$\phi 32 \sim \phi 100$ (Total stroke 5~100)



$\phi 32 \sim \phi 80$ (Total stroke over 101)



MCJQ-31 male thread size

Code	First stroke		Total stroke												
	Standard stroke		Standard stroke							Long stroke					
	Stroke range	Without Magnet	Stroke range	Without magnet	Magnet	L ^{*5}	Q	Stroke range	Without Magnet	Magnet	B2	L	Q		
32	5-50	23	5-50	60.5	30.5	7	12.5	101~300	85.5	95.5	45.5	17	12.5		
		33		80.5	40.5									(17)	
	51-100	33	51-100	80.5	40.5	8	14		101.5	111.5	55	17	14		
40	5-50	29.5	5-50	76.5	40	7	14	101~300	101.5	111.5	55	17	14		
														39.5	96.5
	51-100	39.5	51-100	96.5	50	8	14		104	114	55.5	18	14		
50	5-50	30.5	5-50	79	40.5	8	14	101~300	104	114	55.5	18	14		
														40.5	99
	51-100	40.5	51-100	99	50.5	8	14		111	121	57	18	16.5		
63	5-50	36	5-50	86	42	8	15.5	101~300	111	121	57	18	16.5		
														46	106
	51-100	46	51-100	106	52	8	15.5		121	139.5	66	20	19		
80	5-50	43.5	5-50	104.5	51	10	18	101~300	129.5	139.5	66	20	19		
														53.5	124.5
	51-100	53.5	51-100	124.5	61	10	18		139.5	139.5	66	20	19		
100	5-50	53	5-50	125.5	60.5	12	22	101~300	145.5	145.5	70.5	22	22		
														63	145.5
	51-100	63	51-100	145.5	70.5	12	22		145.5	145.5	70.5	12	22		

Code Tube I.D.	C1	H1	L1 ^{*1,2}	L2 ^{*1}	X
32	20.5	M14 \times 1.5	28.5 (38.5)	38.5	23.5
40	20.5	M14 \times 1.5	28.5 (38.5)	38.5	23.5
50	26	M18 \times 1.5	33.5 (43.5)	43.5	28.5
63	26	M18 \times 1.5	33.5 (43.5)	43.5	28.5
80	32.5	M22 \times 1.5	43.5 (53.5)	53.5	35.5
100	32.5	M26 \times 1.5	43.5 (53.5)	—	35.5

*1. L1: Total stroke (Standard stroke)
L2: Total stroke (Long stroke)
*2. () Dimensions for piston rod extended "L" type.

Code Tube I.D.	C	D	E	F	G ^{h9}	H	I	J	JJ	K	M	N	OA	OB	P1	P2	RA	RB	T	Z1	Z2	Z3
32	13	16	45	7.5 ^{*1}	22 ^{+0 -0.052}	M8 \times 1.25	60	4.5	49.5	14	34	5.5	M6 \times 1.0	9	Rc1/8 ^{*1}	Rc1/8 ^{*1}	10	7	14	6.2	8.8	1
40	13	16	52	8	28 ^{+0 -0.052}	M8 \times 1.25	70	5	57	14	40	5.5	M6 \times 1.0	9	Rc1/8	Rc1/8	10	7	14	6.2	8.8	1
50	15	20	64	10.5 ^{*2}	35 ^{+0 -0.062}	M10 \times 1.5	86	7	71	17	50	6.6	M8 \times 1.25	11	Rc1/4 ^{*2}	Rc1/4	14	8	19	8.2	10.8	1
63	15	20	77	10.5	35 ^{+0 -0.062}	M10 \times 1.5	103	7	84	17	60	9	M10 \times 1.5	14	Rc1/4 ^{*3}	Rc1/4 ^{*3}	18	10.5	19	10.2	13.8	1
80	21	25	98	12.5	43 ^{+0 -0.062}	M16 \times 2.0	132	6	104	22	77	11	M12 \times 1.75	17.5	Rc3/8 ^{*4}	Rc3/8 ^{*4}	22	13.5	26	12.2	17.3	2
100	27	30	117	13	—	M20 \times 2.5	156	6.5	123.5	27	94	11	M12 \times 1.75	17.5	Rc3/8 ^{*4}	Rc3/8 ^{*4}	22	13.5	26	12.2	17.3	2

*1. First stroke without magnet=5mm, P1=M5 \times 0.8, F=5.5, Total stroke without magnet=5mm, P1=P2=M5 \times 0.8, F=5.5

*2. First stroke or total stroke without magnet=5mm, P1=Rc1/8, F=8

*3. First stroke without magnet=5mm, P1=Rc1/8, Total stroke without magnet=5mm, P1=P2=Rc1/8

*4. First stroke without magnet=5mm, P1=Rc1/4, Total stroke without magnet=5mm, P1=P2=Rc1/4

*5. () Dimensions for piston rod extended "L" type.