



Special spec



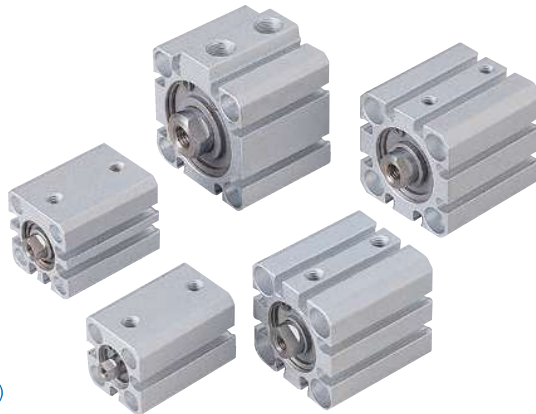
Rod end shape



Technical data



Caution for safety  
(Read before installing)



### Features

- All products use counterbore and thread installation design without any fixed frame to meet the space saving requirements.
- Anodised aluminum tubes provide better corrosion and abrasion resistance.
- The assembly grooves are designed around the body to make the sensor easier to install and fix.
- Compact assembly groove design makes the sensors enable to flush mount and can save space.
- Sensors can be mounted on any one of three faces for 12 and 16 bore and on four faces for 20~100 bore.


### Single acting – Table for standard stroke

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


### Double acting – Table for standard stroke

Tube I.D.	Standard stroke	Long stroke (mm)
ø12,16	5,10,15,20,25,30	35,40,45,50,75,100
ø20	5,10,15,20,25,30,35,40,45,50	75,100,125,150,175,200
ø25	5,10,15,20,25,30,35,40,45,50,75,100	75,100,125,150,175,200,250,300
ø32~80	5,10,15,20,25,30,35,40,45,50,75,100	125,150,175,200,250,300
Tube I.D.	Standard stroke (mm)	
ø100	5,10,15,20,25,30,35,40,45,50,75,100	

### Specification

Model	MCJQ3									
Acting type	Double acting / Single acting					Double				
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		0.07~1		0.05~1					
	Single acting		0.2~1	0.15~1	0.1~1	—				
Proof pressure	1.5 MPa									
Ambient temperature	-5°C~+60°C (No freezing)									
Available speed range	50~500 mm/sec									
Sensor switch	RDC(V), RQC(V) 									

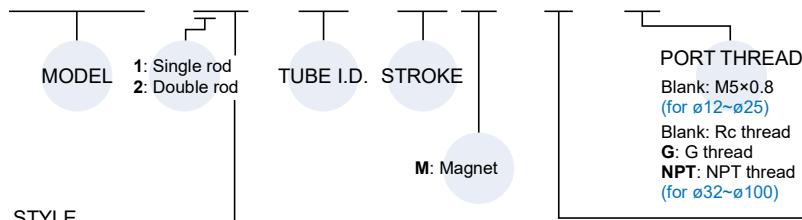
\* The standard and long stroke models have slight differences in appearance and manufacturing process.

Please refer to the instructions . These differences do not affect product functionality.

\* The long-stroke version looks slightly different but performs the same. See the 3D display on our website for details.














### Order example

MCJQ3 – 12 – 20 – 25 M – F – G









STYLE

TYPE


Code	Symbol	Description	Code	Symbol	Description	Code	Description
1 1		Double acting / Male thread	2 1		Double rod / Male thread	Blank	Standard
1 2		Double acting / Female thread	2 2		Double rod / Female thread	F	Rear flange  (for standard stroke)
1 3		Single acting / Normally extended male thread	2 3		Single acting / Double rod / Male thread	L*	Piston rod extended to 10 mm (for standard stroke) For adding LB accessories or single rod cylinder with FAC accessories
1 4		Single acting / Normally extended female thread	2 4		Single acting / Double rod / Female thread	LA	For double rod cylinders with FAC accessories
1 5		Single acting / Normally returned male thread	2 7		Double rod / Adjustable male thread Please mark "adjustable stroke" at order list	* L type not applicable to MCJQ3-27/28 adjustable stroke type, if required, please contact us.	
1 6		Single acting / Normally returned female thread	2 8		Double rod / Adjustable female thread Please mark "adjustable stroke" at order list		

### Accessories


Code	Accessories					Rod nut
	LB* (Purchase 2 pcs)	CB	FAC*	FBC	RF	NUT
Mounting Tube I.D.						
ø12	LB-J1-12	CB-J1-12	FAC-J1-12		RF-J1-12	NUT-M5x0.8x4Hx8B
ø16	LB-J1-16	CB-J1-16	FAC-J1-16		RF-J1-16	NUT-M6x1.0x5Hx10B
ø20	LB-J1-20	CB-J1-20	FAC-J1-20		RF-J1-20	NUT-M8x1.25x5Hx13B
ø25	LB-J1-25	CB-J1-25	FAC-J1-25		RF-J1-25	NUT-M10x1.25x6Hx17B
ø32	LB-J1-32	CB-J1-32	FAC-J1-32		RF-J1-32	NUT-M14x1.5x8Hx22B
ø40	LB-J1-40	CB-J1-40	FAC-J1-40		RF-J1-40	
ø50	LB-J1-50	CB-J1-50	FAC-J1-50		RF-J1-50	NUT-M18x1.5x11Hx26B
ø63	LB-J1-63	CB-J1-63	FAC-J1-63		RF-J1-63	
ø80	LB-J1-80	CB-J1-80	FAC-J1-80		RF-J1-80	NUT-M22x1.5x13Hx32B
ø100	LB-J1-100	CB-J1-100	FAC-J1-100		RF-J1-100	NUT-M26x1.5x14Hx35B

\* Standard stroke LB and FAC must be used with the L type (as the piston rod needs to be extended by 10 mm).

### Pin

Applicable	CB accessories
Code	<b>PIN-CB-P</b> (With snap ring)
Fig Tube I.D.	
ø12	PIN-J1-12-1-P
ø16	PIN-J1-16-1-P
ø20	PIN-J1-20-1-P
ø25	PIN-J1-25-1-P
ø32	PIN-J1-32-1-P
ø40	
ø50	PIN-J1-50-1-P
ø63	
ø80	PIN-J1-80-1-P
ø100	PIN-J1-100-1-P

### Flat washer kits

Code	WS
Fig Tube I.D.	
ø12	WS-MCJQ-12
ø16	WS-MCJQ-16
ø20	WS-MCJQ-20
ø25	WS-MCJQ-25
ø32	WS-MCJQ-32
ø40	WS-MCJQ-40
ø50	WS-MCJQ-50
ø63	WS-MCJQ-63
ø80	WS-MCJQ-80
ø100	WS-MCJQ-100

\* Use the same washer kits with MCJQ series.

### Order example of self-assembled

The tube I.D. ø40 of LB accessories with stroke 25mm.

No.	Order number	Qty
1	LB-J1-40	2
2	MCJQ3-12-40-25-L	1

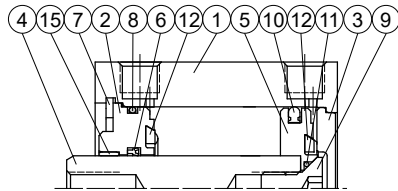
\* To order accessories/cylinder, please place orders separately according to the order codes in the above table. Please refer to the previous page for the cylinder ordering method.

# MCJQ3 Inside structure & Parts list – Single rod

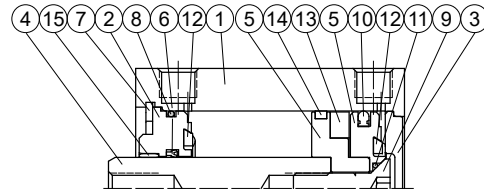
## COMPACT CYLINDER



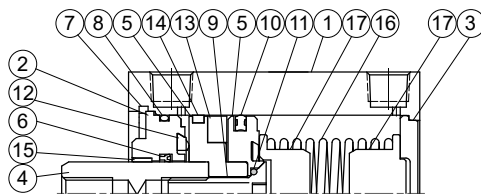
### Double acting



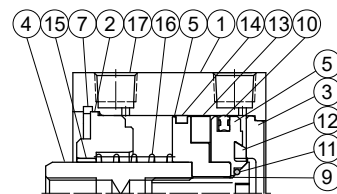
### Double acting (with magnet)



### Single acting Normally extended



### Single acting Normally returned



## Material

No.	Tube I.D. Part name	12	16	20	25	32	40	50	63	80	100	Q'y	Repair kits (inclusion)
1	Body	Aluminum alloy										1	
2	Rod cover	Aluminum alloy										1	
3	End cover	Aluminum alloy										1	
4	Piston rod	Carbor steel										1	
5	Piston	Aluminum alloy										1	
6	Rod packing	NBR										1	●
7	Snap ring	Stainless steel					Spring steel					1	
8	Cover ring	NBR										1	●
9	Piston bolt	Stainless steel					SCM					1	
10	Piston packing	NBR										1	●
11	Piston gasket	NBR										1	●
12	Cushion packing	NBR										2	●
13	Magnet	Magnet										1	
14	Wear ring	—					Resin					1	
15	Bush	—					Bearing alloy					1	
16	Spring	SWP										1	
17	Spring holder	Aluminum alloy					—					2	

## Order example Repair kits

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

\* Use the same repair kits with MCJQ series.

## Seal kit

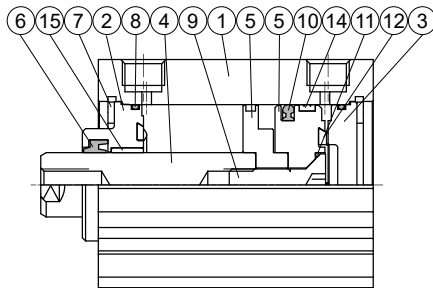
Acting type	Rod packing		Piston packing		Cover ring		Piston gasket
	Double acting / Normally extended	Normally returned	Double acting	Single acting	Double acting / Normally extended	Normally returned	
Q'y	1	0	1	1	1	0	1
ø12	KSYR-6	—	OPA-12	OPA-12	S-11	—	d4×w1
ø16	KSYR-8	—	OPA-16	OPA-16	S-14	—	d5×w1
ø20	KSYR-10A	—	OPA-20	OPA-20	S-18	—	d6×w1
ø25	KSYR-12	—	OPA-25	OPA-25	S-22,4	—	d8×w1
ø32	KSYR-16	—	OPA-32	OPA-32	S-28	—	S-9
ø40	KSYR-16	—	OPA-40	OPA-40	S-36	—	S-10
ø50	KSYR-20	—	OPA-50	OPA-50	S-46	—	S-16
ø63	KSYR-20	—	OPA-63	—	S-60	—	S-16
ø80	ORA-25	—	OPA-80	—	G-75	—	d20×w1
ø100	ORA-30	—	OPA-100	—	G-95	—	S-26

# MCJQ3 Inside structure & Parts list – Single rod / Long stroke

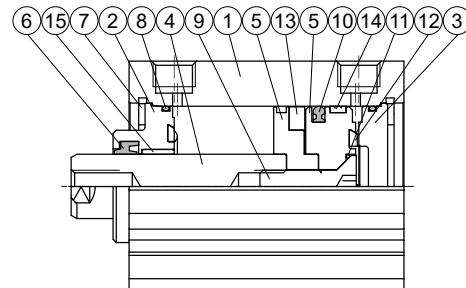
## COMPACT CYLINDER



Long stroke



Long stroke  
(with magnet)



### Long stroke – 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	Aluminum alloy									1		
2	Rod cover	Aluminum alloy									1	●	
3	End cover	Aluminum alloy									1	●	
4	Piston rod	Carbor steel									1		
5	Piston	Aluminum alloy									1	●	
6	Rod packing	NBR									1	●	●
7	Snap ring	Stainless steel				Spring steel					2	●	
8	Cover ring	NBR									2	●	●
9	Piston bolt	Stainless steel				SCM					1	●	
10	Piston packing	NBR									1	●	●
11	Piston gasket	NBR									1	●	●
12	Cushion packing	NBR									2	●	●
13	Magnet	Magnet									1	●	
14	Wear ring	Resin									1	●	
15	Bush	-				Bearing alloy					1	●	

### Long stroke – Seal kit

	Rod packing	Piston packing	Cover ring	Piston gasket
Acting type	Double acting			
Q'y	1	1	2	1
ø12	KSYR-6	OPA-12	S-11	d4×w1
ø16	KSYR-8	OPA-16	S-14	d5×w1
ø20	KSYR-10A	OPA-20	S-18	d6×w1
ø25	KSYR-12	OPA-25	S-22	d8×w1
ø32	KSYR-16	OPA-32	d28×w2	S-9
ø40	ORA-16	OPA-40	S-36	S-10
ø50	ORA-20	OPA-50	S-46	S-16
ø63	ORA-20	OPA-63	S-60	S-16
ø80	ORA-25	OPA-80	AS-41 G-75	d20×w1

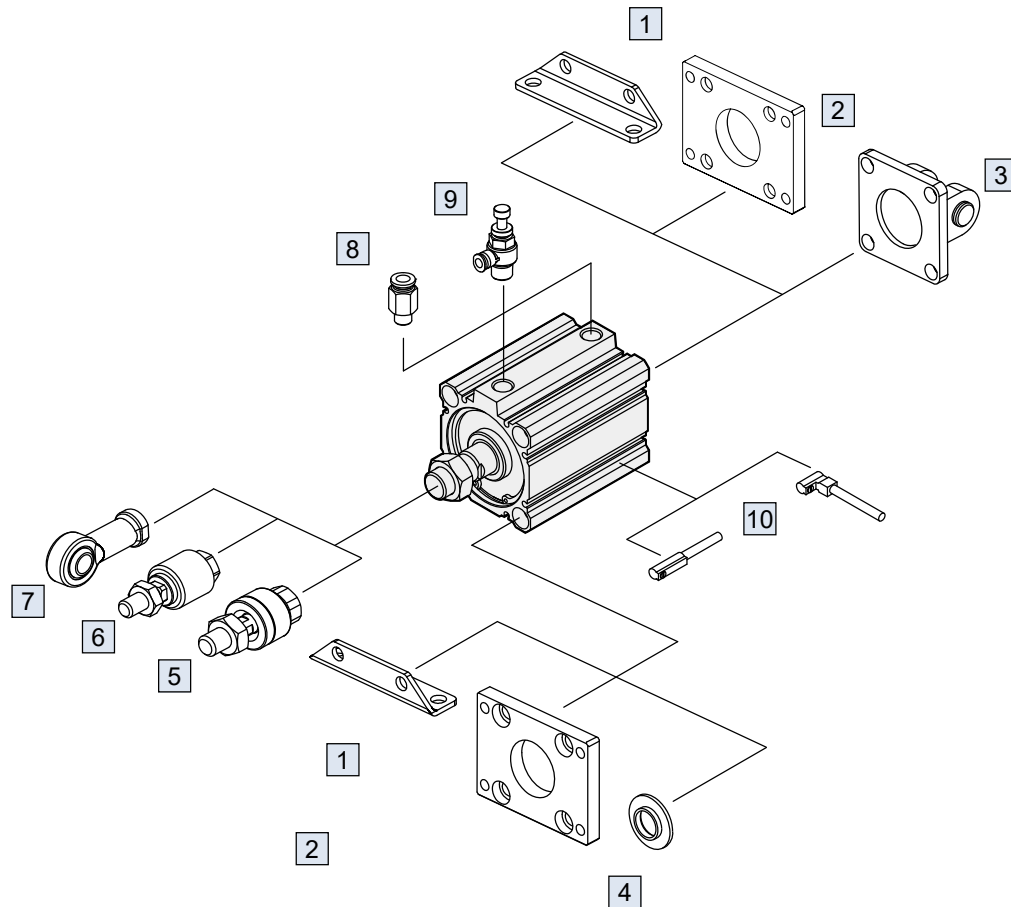
### Order example

#### Component parts / Repair kits

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

M: With magnet

\* Use the same component parts and repair kits with MCJQ series.



No.	Accessories	Material	Page link
1	Mounting accessories LB	Carbon steel	<a href="#">1</a> , <a href="#">2</a>
2	Mounting accessories FAC/FBC	Carbon steel	<a href="#">1</a> , <a href="#">2</a> , <a href="#">3</a> , <a href="#">4</a>
3	Mounting accessories CB+PIN	Cast iron / *	<a href="#">1</a> , <a href="#">2</a> , <a href="#">3</a>
4	Mounting accessories RF	Aluminum	<a href="#">1</a>
5	Floating joint MFC	Carbon steel	<a href="#">1</a>
6	Floating joint MFCS	Carbon steel	<a href="#">1</a>
7	Female rod ends PHS	Carbon steel	<a href="#">1</a>
8	Fitting PC (PISCO)	-	<a href="#">1</a>
9	Speed controller JSC (PISCO)	-	<a href="#">1</a>
10	Sensor switch R*C(V)	-	<a href="#">1</a>

\* Material of PIN and  $\varnothing 12$ ,  $\varnothing 16$  CB accessories are carbon steel.

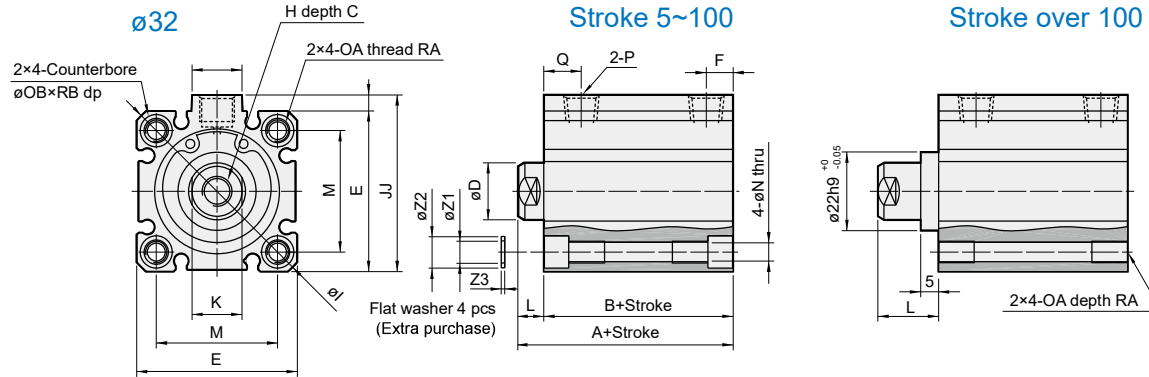
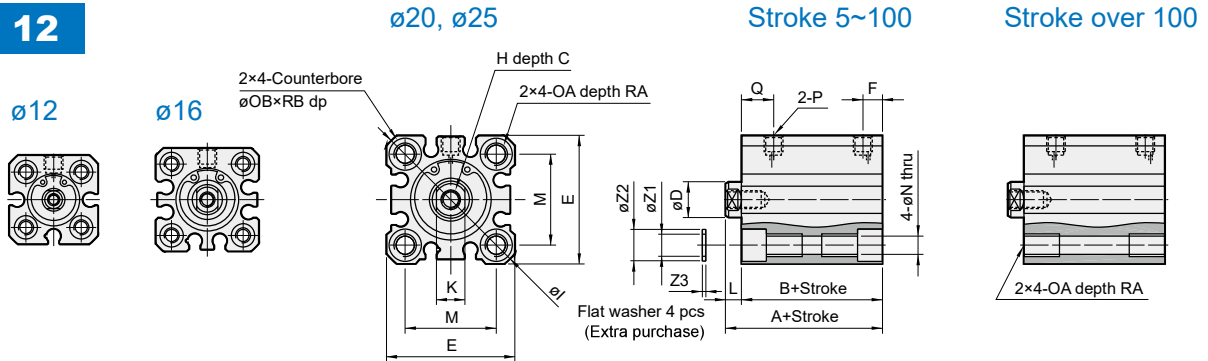
# MCJQ3 Dimensions – Double acting $\phi 12\sim\phi 32$

## COMPACT CYLINDER

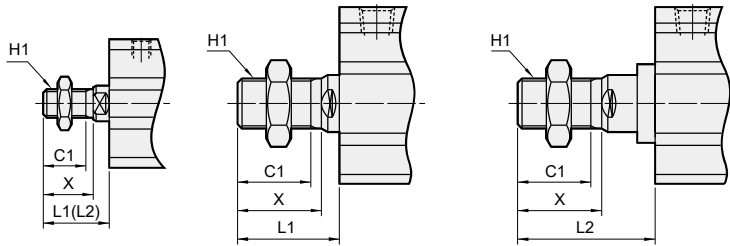


Mindman

12



$\phi 12\sim 25$      $\phi 32$  for stroke 5~100     $\phi 32$  for stroke over 100



11 Male thread

Code Tube I.D.	C1	H1	L1 <sup>*1,2</sup>	L2 <sup>*1</sup>	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
32	20.5	M14×1.5	28.5 (38.5)	38.5	23.5

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

$\phi 12\sim 25$

Code Tube I.D.	Standard stroke						Long stroke						C	D	E	H	I	K	M	N	OA	OB	P	Q	RA	RB	Z1	Z2	Z3
	Stroke range	Without magnet		Magnet		F	L <sup>*2</sup>	Stroke range	A	B	F	L																	
		A	B	A	B																								
12	5~30	20.5	17	25.5	22	5	3.5 (13.5)	31~100	45.5	32	7.5	13.5	6	6	25	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	5~30	20.5	17	25.5	22	5	3.5 (13.5)	31~100	45.5	32	7.5	13.5	8	8	29	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	5~50	24	19.5	34	29.5	5.5	4.5 (14.5)	51~200	55.5	41	9	14.5	7	10	36	M5×0.8	47	8	25.5	5.5	M6×1.0	9	M5×0.8	9	10	7	6.2	8.8	1
25	5~50	27.5	22.5	37.5	32.5	5.5	5 (15)	51~300	59	44	11	15	12	12	40	M6×1.0	52	10	28	5.5	M6×1.0	9	M5×0.8	11	10	7	6.2	8.8	1

$\phi 32$

Code Tube I.D.	Standard stroke						Long stroke						P	C	D	E	H	I	J	JJ	K	M	N	OA	OB	RA	RB	Z1	Z2	Z3		
	Stroke range	Without magnet		Magnet		F	L <sup>*2</sup>	Q	Stroke range	A	B	F																			L	Q
		A	B	A	B																											
32	5~50	30	23	40	33	7.5 <sup>*1</sup>	7 (17)	10.5 <sup>*1</sup>	101~300	62.5	45.5	12.5	17	12.5	Rc1/8	13	16	45	M8×1.25	60	4.5	49.5	14	34	5.5	M6×1.0	9	10	7	6.2	8.8	1

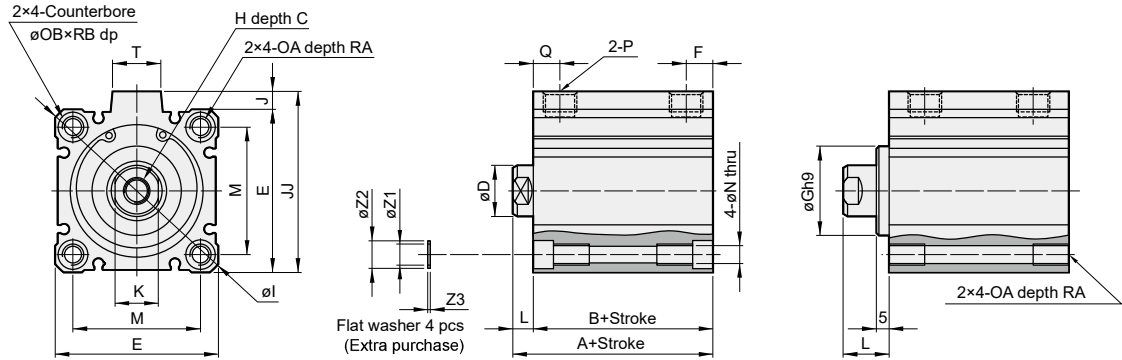
\*1. Without magnet with stroke=5mm, P=M5×0.8, Q=11.5, F=5.5    \*2. ( ) Dimensions for piston rod extended "L" type.

12

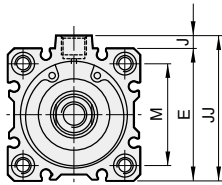
$\phi 50 \sim \phi 100$

Stroke 5~100

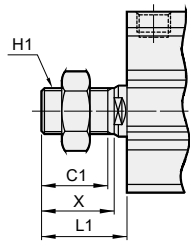
Stroke over 100



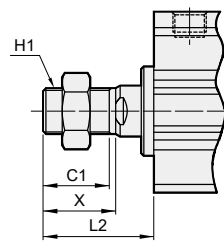
$\phi 40$



$\phi 40 \sim \phi 100$   
(Stroke 5~100)



$\phi 40 \sim \phi 80$   
(Stroke over 100)



11

Male thread

Code Tube I.D.	C1	H1	L1 <sup>*1,2</sup>	L2 <sup>*1</sup>	X
40	20.5	M14×1.5	28.5 (38.5)	38.5	23.5
50	26	M18×1.5	33.5 (43.5)	43.5	28.5
63	26	M18×1.5	33.5 (43.5)	43.5	28.5
80	32.5	M22×1.5	43.5 (53.5)	53.5	35.5
100	32.5	M26×1.5	43.5 (53.5)	—	35.5

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

Code Tube I.D.	Standard stroke						Long stroke							
	Stroke range	Without magnet		Magnet		F	L <sup>*4</sup>	Q	Stroke range	A	B	F	L	Q
40	5~50	36.5	29.5	46.5	39.5	8	7 (17)	11	125~300	72	55	14	17	14
	51~100	46.5	39.5	46.5	39.5	8	7 (17)	11	125~300	72	55	14	17	14
50	5~50	38.5	30.5	48.5	40.5	10.5 <sup>*1</sup>	8 (18)	10.5 <sup>*1</sup>	125~300	73.5	55.5	14	18	14
	51~100	48.5	40.5	48.5	40.5	10.5 <sup>*1</sup>	8 (18)	10.5 <sup>*1</sup>	125~300	73.5	55.5	14	18	14
63	5~50	44	36	54	46	10.5	8 (18)	15	125~300	75	57	16.5	18	16.5
	51~100	54	46	54	46	10.5	8 (18)	15	125~300	75	57	16.5	18	16.5
80	5~50	53.5	43.5	63.5	53.5	12.5	10 (20)	16	125~300	86	66	19	20	19
	51~100	63.5	53.5	63.5	53.5	12.5	10 (20)	16	125~300	86	66	19	20	19
100	5~50	65	53	75	63	13	12 (22)	23	—	—	—	—	—	—
	51~100	75	63	75	63	13	12 (22)	23	—	—	—	—	—	—

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

\*1. Without magnet with stroke=5mm, P=Rc1/8, Q=12, F=8

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

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

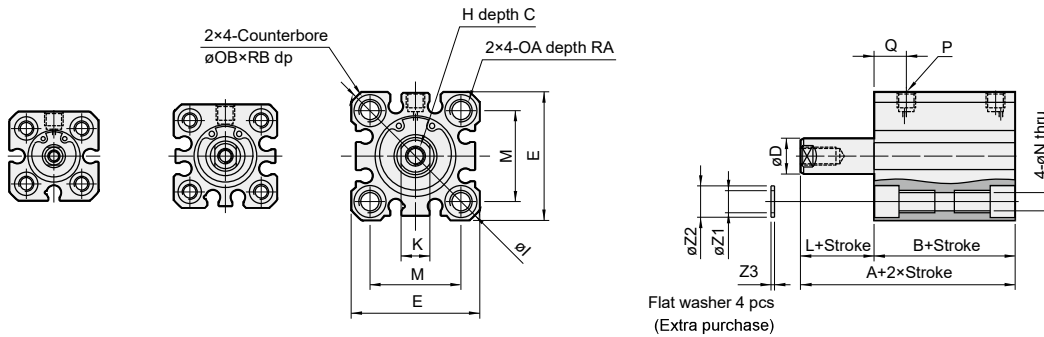
\*4. ( ) Dimensions for piston rod extended "L" type.

### 14

$\phi 12$

$\phi 16$

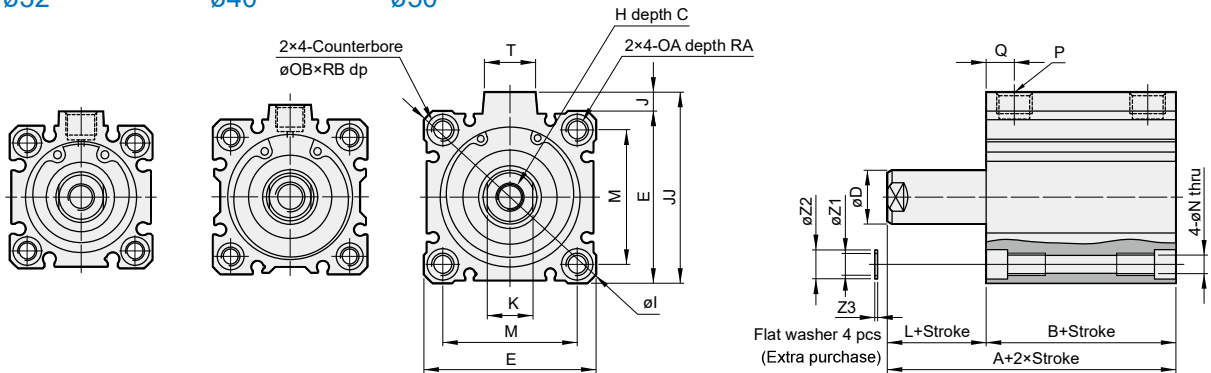
$\phi 20, \phi 25$



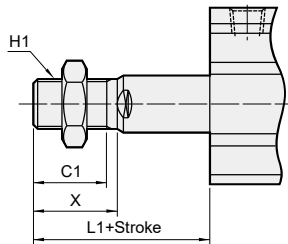
$\phi 32$

$\phi 40$

$\phi 50$



### 13 Male thread



Code Tube I.D.	C1	H1	L1*	X
12	9	M5×0.8	14 (24)	10.5
16	10	M6×1.0	15.5 (25.5)	12
20	12	M8×1.25	18.5 (28.5)	14
25	15	M10×1.25	22.5 (32.5)	17.5
32	20.5	M14×1.5	28.5 (38.5)	23.5
40	20.5	M14×1.5	28.5 (38.5)	23.5
50	26	M18×1.5	33.5 (43.5)	28.5

\* L1: Standard stroke

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

Note: The value B of  $\phi 12\sim\phi 40$  type is greater than double acting type.

Code	Standard stroke				C	D	E	H	I	J	JJ	K	L* <sup>2</sup>	M	N	OA	OB	P	Q	RA	RB	T	Z1	Z2	Z3	
	Stroke range	Without magnet		Magnet																						
		A	B	A																						B
12	5,10	30.5	27	35.5	32	6	6	25	M3×0.5	32	-	-	5	3.5 (13.5)	15.5	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	-	4.2	6.3	0.5
16	5,10	35.5	32	40.5	37	8	8	29	M4×0.7	38	-	-	6	3.5 (13.5)	20	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	-	4.2	6.3	0.5
20	5,10	34	29.5	44	39.5	7	10	36	M5×0.8	47	-	-	8	4.5 (14.5)	25.5	5.5	M6×1.0	9	M5×0.8	9	10	7	-	6.2	8.8	1
25	5,10	47.5	42.5	57.5	52.5	12	12	40	M6×1.0	52	-	-	10	5 (15)	28	5.5	M6×1.0	9	M5×0.8	11	10	7	-	6.2	8.8	1
32	5,10	55	48	65	58	13	16	45	M8×1.25	60	4.5	49.5	14	7 (17)	34	5.5	M6×1.0	9	Rc1/8	10.5	10	7	14	6.2	8.8	1
40	5,10	61.5	54.5	71.5	64.5	13	16	52	M8×1.25	70	5	57	14	7 (17)	40	5.5	M6×1.0	9	Rc1/8	11	10	7	14	6.2	8.8	1
50	5~20	38.5	30.5	48.5	40.5	15	20	64	M10×1.5	86	7	71	17	8 (18)	50	6.5	M8×1.25	11	Rc1/4 <sup>*1</sup>	10.5 <sup>*1</sup>	14	8	19	8.2	10.8	1

\*1. Without magnet with stroke=5mm, P=Rc1/8, Q=12

\*2. ( ) Dimensions for piston rod extended "L" type.

# MCJQ3 Dimensions – Normally returned $\phi 12 \sim \phi 50$

## COMPACT CYLINDER

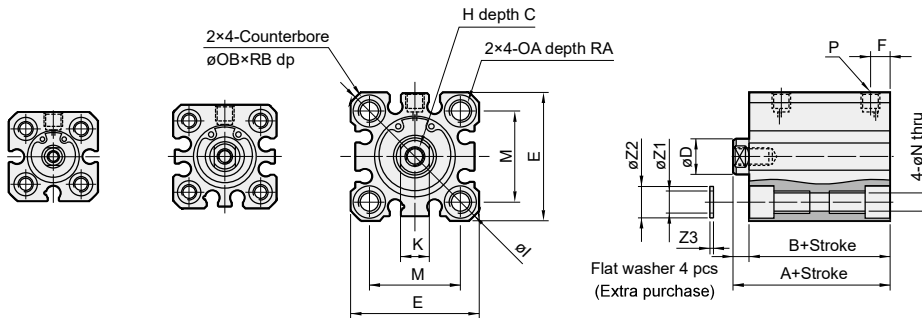


16

$\phi 12$

$\phi 16$

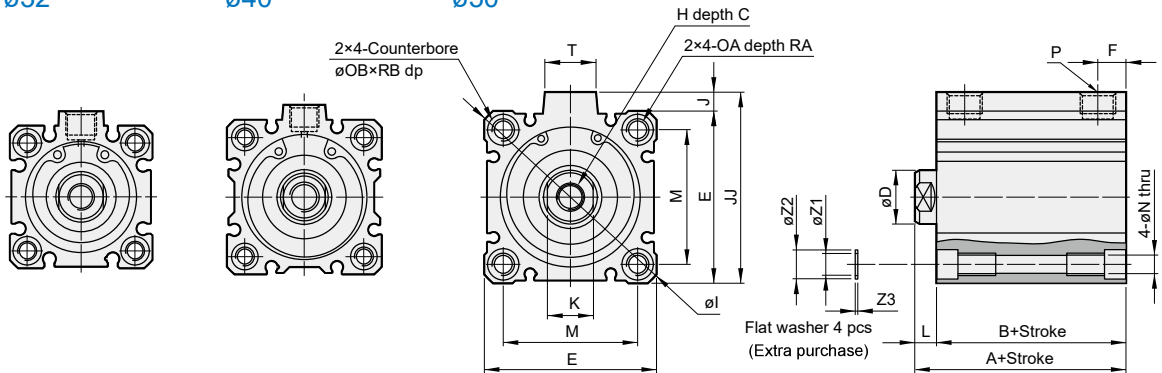
$\phi 20, \phi 25$



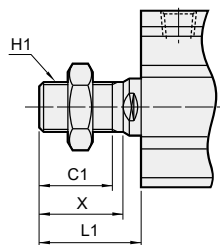
$\phi 32$

$\phi 40$

$\phi 50$



### 15 Male thread



Code Tube I.D.	C1	H1	L1*	X
12	9	M5×0.8	14 (24)	10.5
16	10	M6×1.0	15.5 (25.5)	12
20	12	M8×1.25	18.5 (28.5)	14
25	15	M10×1.25	22.5 (32.5)	17.5
32	20.5	M14×1.5	28.5 (38.5)	23.5
40	20.5	M14×1.5	28.5 (38.5)	23.5
50	26	M18×1.5	33.5 (43.5)	28.5

\* L1: Standard stroke

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

Code Tube I.D.	Standard stroke				C	D	E	F	H	I	J	JJ	K	L <sup>*3</sup>	M	N	OA	OB	P	RA	RB	T	Z1	Z2	Z3	
	Stroke range	Without magnet		Magnet																						
		A	B	A																						B
12	5,10	20.5	17	25.5	22	6	6	25	5	M3×0.5	32	-	-	5	3.5 (13.5)	15.5	3.5	M4×0.7	6.5	M5×0.8	7	4	-	4.2	6.3	0.5
16	5,10	20.5	17	25.5	22	8	8	29	5	M4×0.7	38	-	-	6	3.5 (13.5)	20	3.5	M4×0.7	6.5	M5×0.8	7	4	-	4.2	6.3	0.5
20	5,10	24	19.5	34	29.5	7	10	36	5.5	M5×0.8	47	-	-	8	4.5 (14.5)	25.5	5.5	M6×1.0	9	M5×0.8	10	7	-	6.2	8.8	1
25	5,10	27.5	22.5	37.5	32.5	12	12	40	5.5	M6×1.0	52	-	-	10	5 (15)	28	5.5	M6×1.0	9	M5×0.8	10	7	-	6.2	8.8	1
32	5,10	30	23	40	33	13	16	45	7.5 <sup>*1</sup>	M8×1.25	60	4.5	49.5	14	7 (17)	34	5.5	M6×1.0	9	Rc1/8 <sup>*1</sup>	10	7	14	6.2	8.8	1
40	5,10	36.5	29.5	46.5	39.5	13	16	52	8	M8×1.25	70	5	57	14	7 (17)	40	5.5	M6×1.0	9	Rc1/8	10	7	14	6.2	8.8	1
50	5~20	38.5	30.5	48.5	40.5	15	20	64	10.5 <sup>*2</sup>	M10×1.5	86	7	71	17	8 (18)	50	6.5	M8×1.25	11	Rc1/4 <sup>*2</sup>	14	8	19	8.2	10.8	1

\*1. Without magnet with stroke=5mm, P=M5×0.8, F=5.5

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

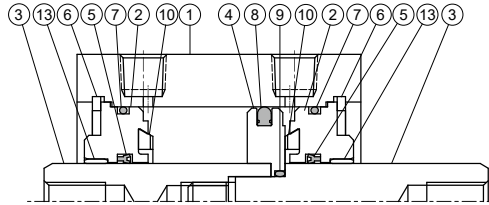
\*3. ( ) Dimensions for piston rod extended "L" type.

# MCJQ3 Inside structure & Parts list – Double rod

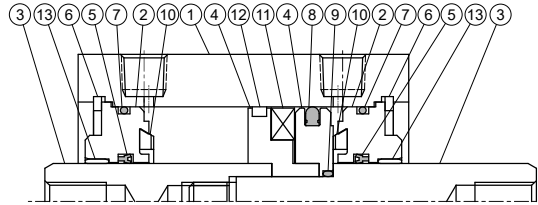
## COMPACT CYLINDER



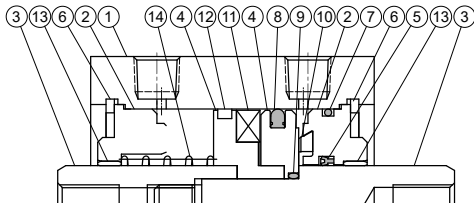
**Double acting**



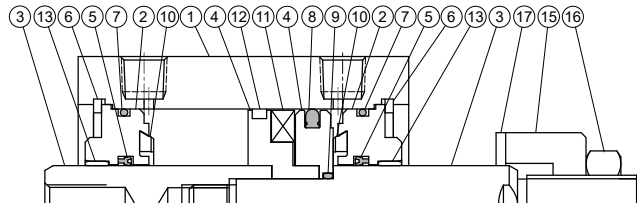
**Double acting (with magnet)**



**Single acting**



**Adjustable stroke**



### 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	Aluminum alloy										1		
2	Rod cover	Aluminum alloy										2	●	
3	Piston rod	With magnet	Stainless steel				Carbor steel				2			
		Without magnet	*1	Carbor steel								2		
4	Piston	Aluminum alloy										1	●	
5	Rod packing	NBR										2	●	●
6	Snap ring	Stainless steel				Spring steel				2	●			
7	Cover ring	NBR										2 *2	●	●
8	Piston packing	NBR										1	●	●
9	Piston gasket	NBR										1	●	●
10	Cushion packing	NBR										2	●	●
11	Magnet	Magnet										1	●	
12	Wear ring	—				Resin				1	●			
13	Bush	—				Bearing alloy				2	●			
14	Spring	SWP				—				1	●			
15	Adjustble nut	Carbor steel										1	●	
16	Hexagon nut	Carbor steel										1	●	
17	Cushion packing	PU										1	●	

\*1. Stainless steel

\*2. Single acting (Q'y=1 pc)

### Seal kit

Acting type	Rod packing		Piston packing		Cover ring		Piston gasket
	Double acting	Single acting	Double acting	Single acting	Double acting	Single acting	
Q'y	2	1	1	1	2	1	1
ø12	KSYR-6	KSYR-6	OPA-12	OPA-12	S-11	S-11	d4×w1
ø16	KSYR-8	KSYR-8	OPA-16	OPA-16	S-14	S-14	d6×w1
ø20	KSYR-10A	KSYR-10A	OPA-20	OPA-20	S-18	S-18	d6×w1
ø25	KSYR-12	KSYR-12	OPA-25	OPA-25	S-22	S-22	S-9
ø32	KSYR-16	KSYR-16	OPA-32	OPA-32	d28×w2	d28×w2	d11×w1
ø40	KSYR-16	KSYR-16	OPA-40	OPA-40	S-36	S-36	S-10
ø50	KSYR-20	KSYR-20	OPA-50	OPA-50	S-46	S-46	S-16
ø63	KSYR-20	—	OPA-63	—	S-60	—	S-14
ø80	ORA-25	—	OPA-80	—	G-75	—	d20×w1
ø100	ORA-30	—	OPA-100	—	G-95	—	S-24

### Order example

#### Component parts / Repair kits

Tube I.D.	Component parts	Repair kits
ø12	CP-MCJQ-2-12(M)	PS-MCJQ-2-12
ø16	CP-MCJQ-2-16(M)	PS-MCJQ-2-16
ø20	CP-MCJQ-2-20(M)	PS-MCJQ-2-20
ø25	CP-MCJQ-2-25(M)	PS-MCJQ-2-25
ø32	CP-MCJQ-2-32(M)	PS-MCJQ-2-32
ø40	CP-MCJQ-2-40(M)	PS-MCJQ-2-40
ø50	CP-MCJQ-2-50(M)	PS-MCJQ-2-50
ø63	CP-MCJQ-2-63(M)	PS-MCJQ-2-63
ø80	CP-MCJQ-2-80(M)	PS-MCJQ-2-80
ø100	CP-MCJQ-2-100(M)	PS-MCJQ-2-100

M: With magnet

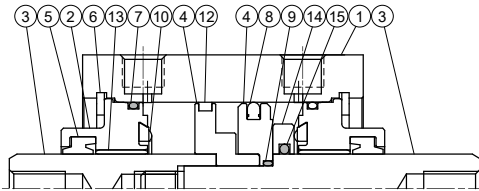
\* Use the same component parts and repair kits with MCJQ series.

# MCJQ3 Inside structure & Parts list – Double rod / Long stroke

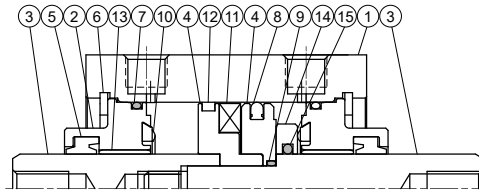
## COMPACT CYLINDER



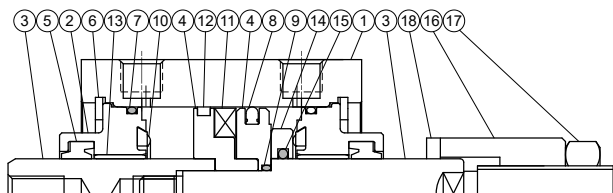
### Double acting



### Double acting (with magnet)



### Adjustable stroke



## Long stroke – 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	Aluminum alloy									1			
2	Rod cover	Aluminum alloy									2	●		
3	Piston rod	With magnet	Stainless steel			Carbor steel				2				
		Without magnet	*1 Carbor steel									2		
4	Piston	Aluminum alloy									2	●		
5	Rod packing	NBR									2	●	●	
6	Snap ring	Stainless steel			Spring steel						2	●		
7	Cover ring	NBR									2	●	●	
8	Piston packing	NBR									1	●	●	
9	Piston gasket	NBR									1	●	●	
10	Cushion packing	—	NBR									2	●	●
11	Magnet	Magnet									1	●		
12	Wear ring	—			Resin						1	●		
13	Bush	—			Bearing alloy						2	●		
14	Sub-piston	—	PU		Aluminum alloy					1	●			
15	Sub-piston gasket	—		NBR						1	●	●		
16	Adjust nut	Carbor steel									1	●		
17	Hexagon nut	Carbor steel									1	●		
18	Cushion gasket	PU									1	●		

\*1. Stainless steel

## Long stroke – Seal kit

	Rod packing	Piston packing	Cover ring	Piston gasket	Sub-piston gasket
Acting type	Double acting				
Q'y	2	1	2	1	1
ø12	KSYR-6	OPA-12	S-11	d4×w1	—
ø16	KSYR-8	OPA-16	S-14	d5×w1	—
ø20	KSYR-10A	OPA-20	S-18	d6×w1	—
ø25	KSYR-12	OPA-25	S-22	S-9	—
ø32	KSYR-16	OPA-32	d28×w2	d11×w1	P-16
ø40	ORA-16	OPA-40	S-36	S-10	P-16
ø50	ORA-20	OPA-50	S-46	S-16	P-20
ø63	ORA-20	OPA-63	S-60	S-14	P-20
ø80	ORA-25	OPA-80	G-75	S-18	S-25

## Order example

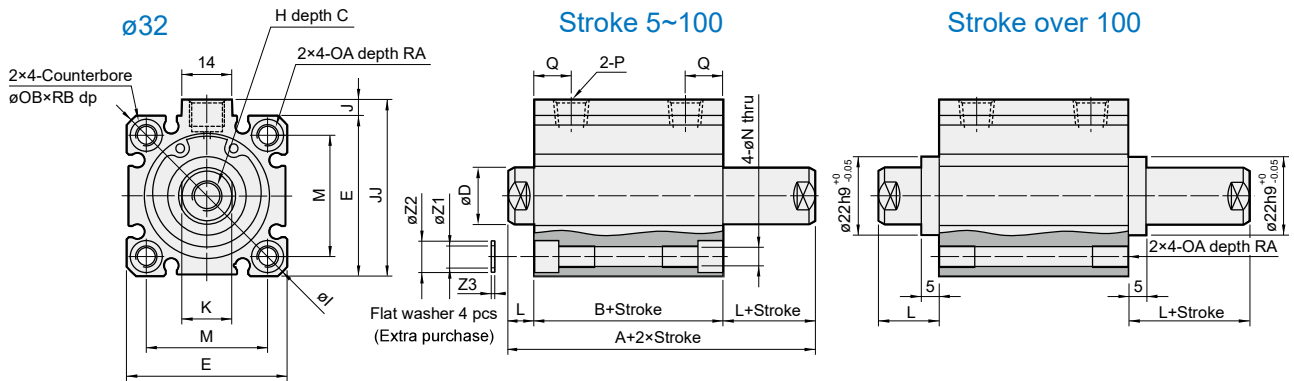
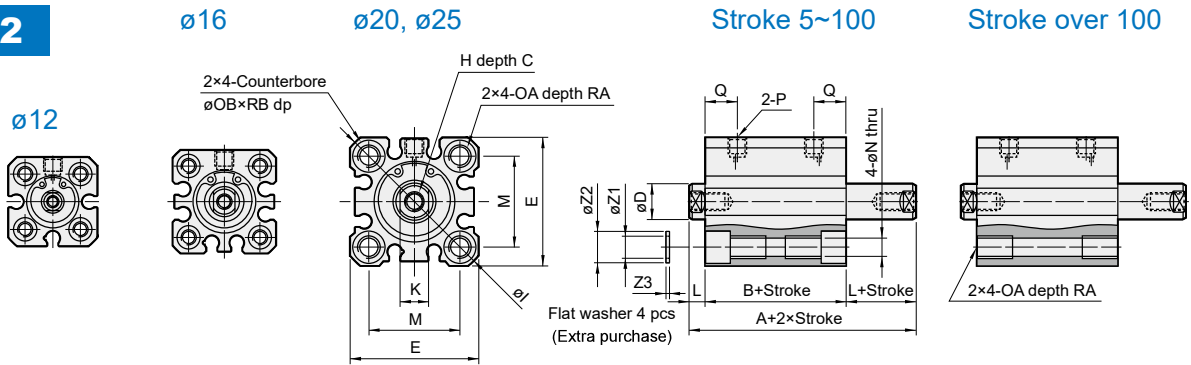
### Component parts / Repair kits

Tube I.D.	Component parts	Repair kits
ø12	CPL-MCJQ-2-12(M)	PSL-MCJQ-2-12
ø16	CPL-MCJQ-2-16(M)	PSL-MCJQ-2-16
ø20	CPL-MCJQ-2-20(M)	PSL-MCJQ-2-20
ø25	CPL-MCJQ-2-25(M)	PSL-MCJQ-2-25
ø32	CPL-MCJQ-2-32(M)	PSL-MCJQ-2-32
ø40	CPL-MCJQ-2-40(M)	PSL-MCJQ-2-40
ø50	CPL-MCJQ-2-50(M)	PSL-MCJQ-2-50
ø63	CPL-MCJQ-2-63(M)	PSL-MCJQ-2-63
ø80	CPL-MCJQ-2-80(M)	PSL-MCJQ-2-80

M: With magnet

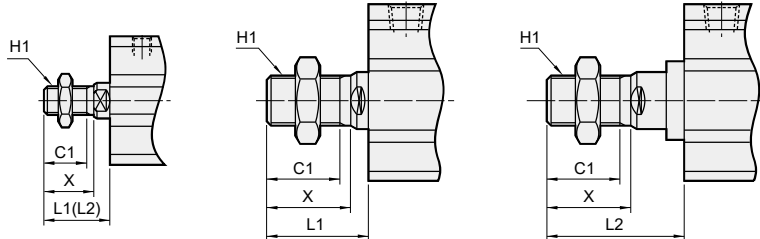
\* Use the same component parts and repair kits with MCJQ series.

22



$\phi 12\sim 25$

$\phi 32$  for stroke 5~100     $\phi 32$  for stroke over 100



21 Male thread

Code	Tube I.D.	C1	H1	L1 <sup>*1,2</sup>	L2 <sup>*1</sup>	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	
32	20.5	M14×1.5	28.5 (38.5)	38.5	23.5	

\*1. L1: Standard stroke, L2: Long stroke

\*2. ( ) Dimensions for L type that both sides piston rod are extended.

For LA type that single side piston rod is extended.

Code	Standard stroke					Long stroke					C	D	E	H	I	J	JJ	K	M	N	OA	OB	P	Q	RA	RB	Z1	Z2	Z3
	Stroke range	Without magnet		Magnet		L <sup>*2</sup>	Stroke range	A	B	L																			
		A	B	A	B																								
12	5~30	29	22	34	27	3.5 (13.5)	31~100	59	32	13.5	6	6	25	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	5~30	29	22	34	27	3.5 (13.5)	31~100	59	32	13.5	8	8	29	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	5~50	35	26	45	36	4.5 (14.5)	51~200	70	41	14.5	7	10	36	M5×0.8	47	-	-	8	25.5	5.5	M6×1.0	9	M5×0.8	9	10	7	6.2	8.8	1
25	5~50	39	29	49	39	5 (15)	51~300	74	44	15	12	12	40	M6×1.0	52	-	-	10	28	5.5	M6×1.0	9	M5×0.8	11	10	7	6.2	8.8	1
32	5~50	44.5	30.5	54.5	40.5	7 (17)	101~300	79.5	45.5	17	13	16	45	M8×1.25	60	4.5	49.5	14	34	5.5	M6×1.0	9	Rc1/8 <sup>*1</sup>	12.5	10	7	6.2	8.8	1
	51~100	54.5	40.5	54.5	40.5	7 (17)																							

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

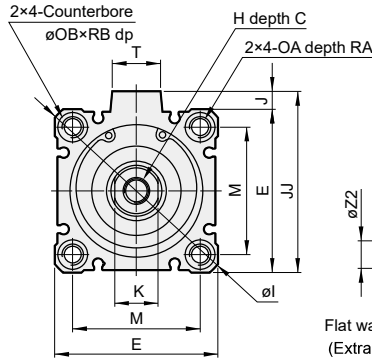
\*2. ( ) dimensions for L type that both sides piston rod are extended.  
For LA type that single side piston rod is extended.

# MCJQ3 Dimensions – Double acting / Double rod $\phi 40\sim\phi 100$

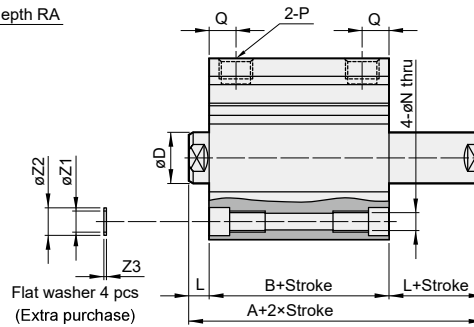
## COMPACT CYLINDER



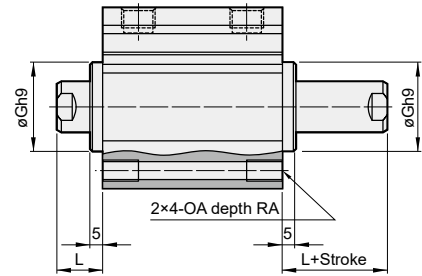
### 22 $\phi 50\sim\phi 100$



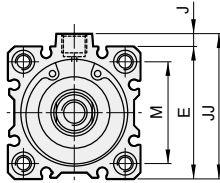
### Stroke 5~100



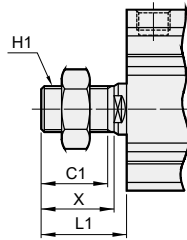
### Stroke over 100



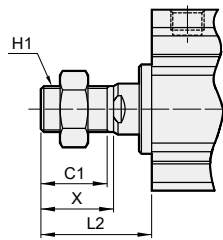
### $\phi 40$



### $\phi 40\sim\phi 100$ (Stroke 5~100)



### $\phi 40\sim\phi 80$ (Stroke over 100)



### 21 Male thread

Code Tube I.D.	C1	H1	L1 <sup>*1,2</sup>	L2 <sup>*1</sup>	X
40	20.5	M14×1.5	28.5 (38.5)	38.5	23.5
50	26	M18×1.5	33.5 (43.5)	43.5	28.5
63	26	M18×1.5	33.5 (43.5)	43.5	28.5
80	32.5	M22×1.5	43.5 (53.5)	53.5	35.5
100	32.5	M26×1.5	43.5 (53.5)	—	35.5

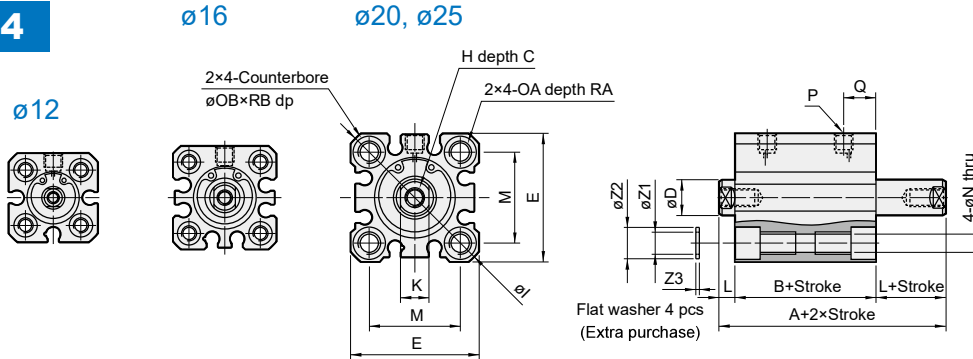
\*1. L1: Standard stroke, L2: Long stroke  
 \*2. ( ) dimensions for L type that both sides piston rod are extended.  
 For LA type that single side piston rod is extended.

Code Tube I.D.	Standard stroke							Long stroke				
	Stroke range	Without magnet		Magnet		L <sup>*3</sup>	Q	Stroke range	A	B	L	Q
		A	B	A	B							
40	5~50	54	40	64	50	7 (17)	14	101~300	89	55	17	14
	51~100	64	50									
50	5~50	56.5	40.5	66.5	50.5	8 (18)	14	101~300	91.5	55.5	18	14
	51~100	66.5	50.5									
63	5~50	58	42	68	52	8 (18)	15.5	101~300	93	57	18	16.5
	51~100	68	52									
80	5~50	71	51	81	61	10 (20)	18	101~300	106	66	20	19
	51~100	81	61									
100	5~50	84.5	60.5	94.5	70.5	12 (22)	22					
	51~100	94.5	70.5									

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

\*1. Without magnet with stroke=5mm, P=Rc1/8  
 \*2. Without magnet with stroke=5mm, P=Rc1/4  
 \*3. ( ) dimensions for L type that both sides piston rod are extended.  
 For LA type that single side piston rod is extended.

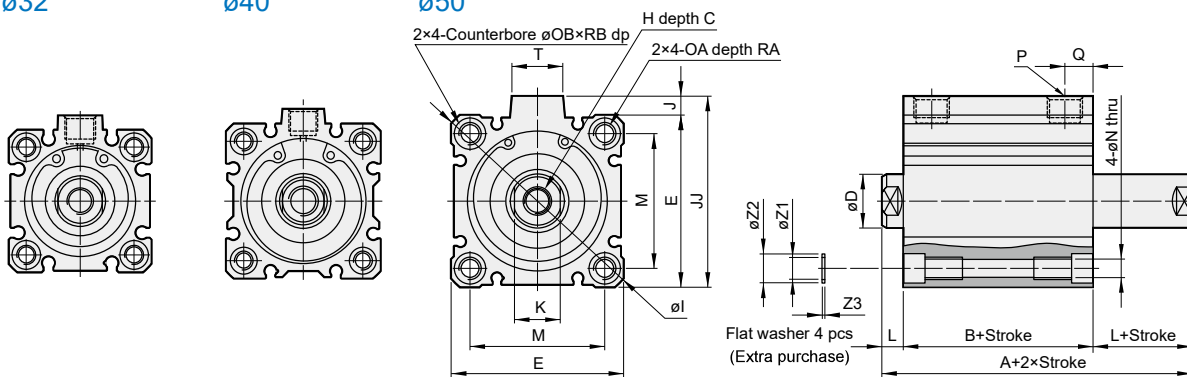
24



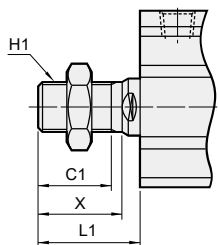
$\phi 32$

$\phi 40$

$\phi 50$



### 23 Male thread



Code	C1	H1	L1*	X
12	9	M5×0.8	14 (24)	10.5
16	10	M6×1.0	15.5 (25.5)	12
20	12	M8×1.25	18.5 (28.5)	14
25	15	M10×1.25	22.5 (32.5)	17.5
32	20.5	M14×1.5	28.5 (38.5)	23.5
40	20.5	M14×1.5	28.5 (38.5)	23.5
50	26	M18×1.5	33.5 (43.5)	28.5

\* L1: Standard stroke  
 \* ( ) Dimensions for L type that both sides piston rod are extended.  
 For LA type that piston rod retracted side is extended.

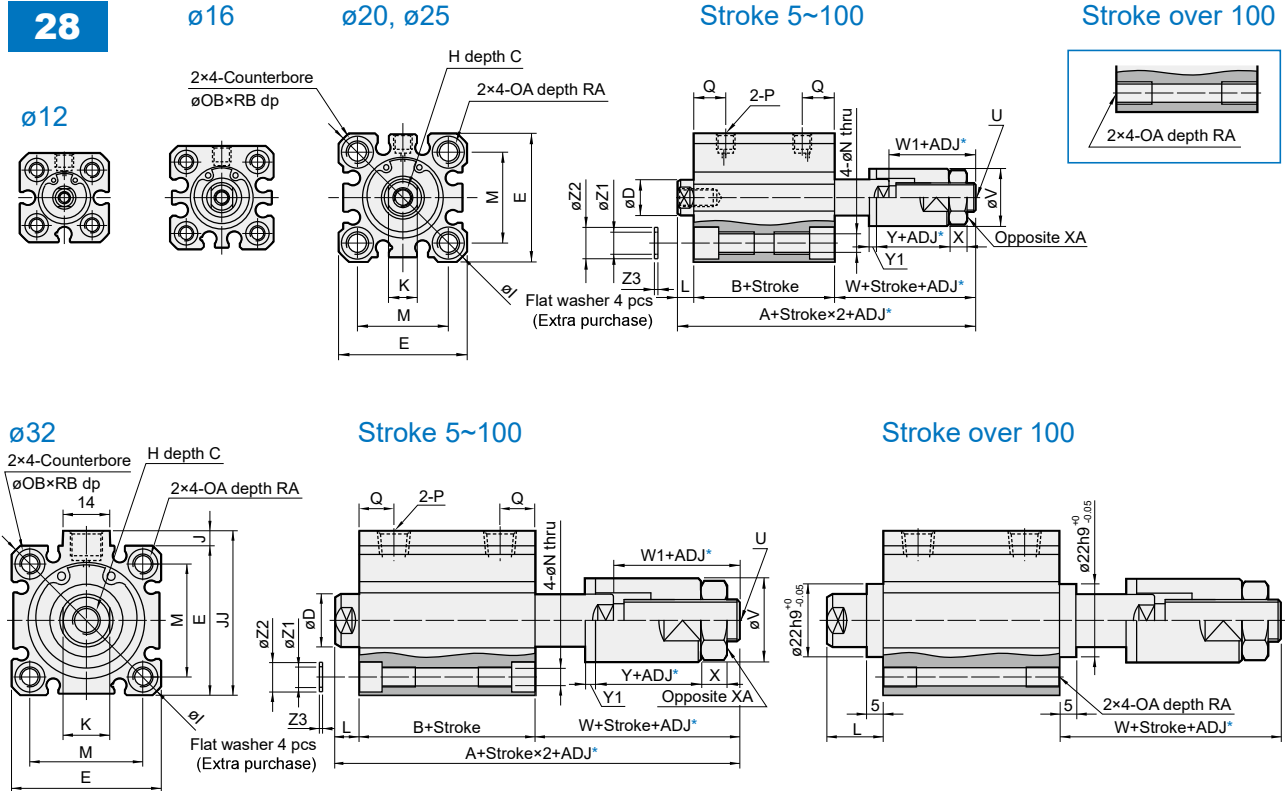
Code	Standard stroke				C	D	E	H	I	J	JJ	K	L <sup>*2</sup>	M	N	OA	OB	P	Q	RA	RB	T	Z1	Z2	Z3	
	Stroke range	Without magnet		Magnet																						
		A	B	A																						B
12	5,10	29	22	34	27	6	6	25	M3×0.5	32	—	—	5	3.5 (13.5)	15.5	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	—	4.2	6.3	0.5
16	5,10	29	22	34	27	8	8	29	M4×0.7	38	—	—	6	3.5 (13.5)	20	3.5	M4×0.7	6.5	M5×0.8	7.5	7	4	—	4.2	6.3	0.5
20	5,10	35	26	45	36	7	10	36	M5×0.8	47	—	—	8	4.5 (14.5)	25.5	5.5	M6×1.0	9	M5×0.8	9	10	7	—	6.2	8.8	1
25	5,10	39	29	49	39	12	12	40	M6×1.0	52	—	—	10	5 (15)	28	5.5	M6×1.0	9	M5×0.8	11	10	7	—	6.2	8.8	1
32	5,10	44.5	30.5	54.5	40.5	13	16	45	M8×1.25	60	4.5	49.5	14	7 (17)	34	5.5	M6×1.0	9	Rc1/8 <sup>*1</sup>	12.5	10	7	14	6.2	8.8	1
40	5,10	54	40	64	50	13	16	52	M8×1.25	70	5	57	14	7 (17)	40	5.5	M6×1.0	9	Rc1/8	14	10	7	14	6.2	8.8	1
50	5~20	56.5	40.5	66.5	50.5	15	20	64	M10×1.5	86	7	71	17	8 (18)	50	6.5	M8×1.25	11	Rc1/4	14	14	8	19	8.2	10.8	1

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

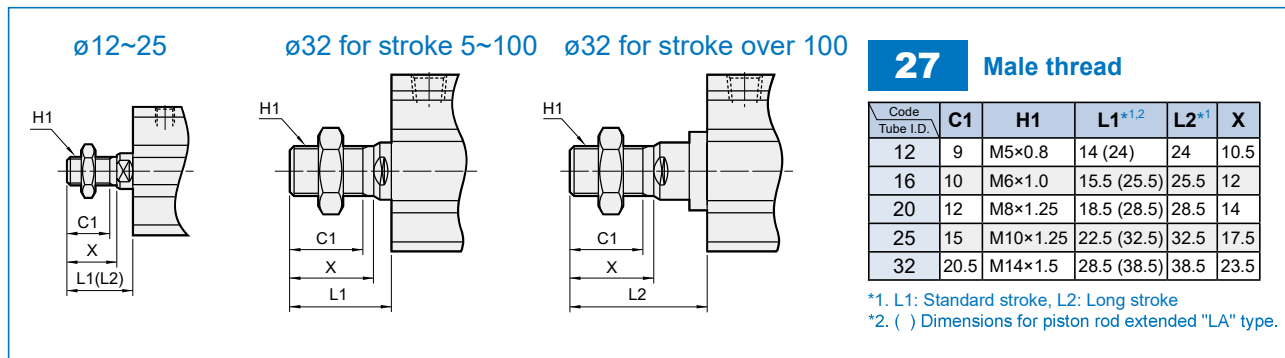
\*2. ( ) Dimensions for L type that both sides piston rod are extended. For LA type that piston rod retracted side is extended.

# MCJQ3 Dimensions – Double rod / Adjustable stroke $\phi 12\sim\phi 32$

## COMPACT CYLINDER



\* ADJ: Adjustable stroke



Code Tube I.D.	Standard stroke					Long stroke					Code Tube I.D.	C	D	E	H	I	J	JJ	K	M	N	OA	OB	P	Q		
	Stroke range	Without magnet		Magnet		L*2	W	Stroke range	A	B																L	W
		A	B	A	B																						
12	5~30	45.5	22	50.5	27	3.5 (13.5)	20	31~100	65.5	32	13.5	20	12	6	6	25	M3×0.5	32	-	-	5	15.5	3.5	M4×0.7	6.5	M5×0.8	7.5
16	5~30	49	22	54	27	3.5 (13.5)	23.5	31~100	69	32	13.5	23.5	16	8	8	29	M4×0.7	38	-	-	6	20	3.5	M4×0.7	6.5	M5×0.8	7.5
20	5~50	54.3	26	64.3	36	4.5 (14.5)	23.8	51~200	79.3	41	14.5	23.8	20	7	10	36	M5×0.8	47	-	-	8	25.5	5.5	M6×1.0	9	M5×0.8	9
25	5~50	56.5	29	66.5	39	5 (15)	22.5	51~300	81.5	44	15	22.5	25	12	12	40	M6×1.0	52	-	-	10	28	5.5	M6×1.0	9	M5×0.8	11
32	5~100	70.9	40.5	70.9	40.5	7 (17)	23.4	101~300	91.5	45.5	17	29	32	13	16	45	M8×1.25	60	4.5	49.5	14	34	5.5	M6×1.0	9	Rc1/8*1	12.5
Code Tube I.D.	RA	RB	U	V	W1	X	XA	Y	Y1	Z1	Z2	Z3															
12	7	4	M5×0.8	12	16	4	8	13	2	4.2	6.3	0.5															
16	7	4	M8×1.25	16	19	5	13	15	2	4.2	6.3	0.5															
20	10	7	M8×1.25	16	19	5	13	15	2	6.2	8.8	1															
25	10	7	M10×1.25	20	18	6	17	12	2	6.2	8.8	1															
32	10	7	M12×1.25	30	19	7	19	12	2	6.2	8.8	1															

\*1. Without magnet with stroke=5mm, P=M5×0.8  
\*2. ( ) Dimensions for piston rod extended "LA" type.

# MCJQ3 Dimensions – Double rod / Adjustable stroke $\phi 40\sim\phi 100$

## COMPACT CYLINDER

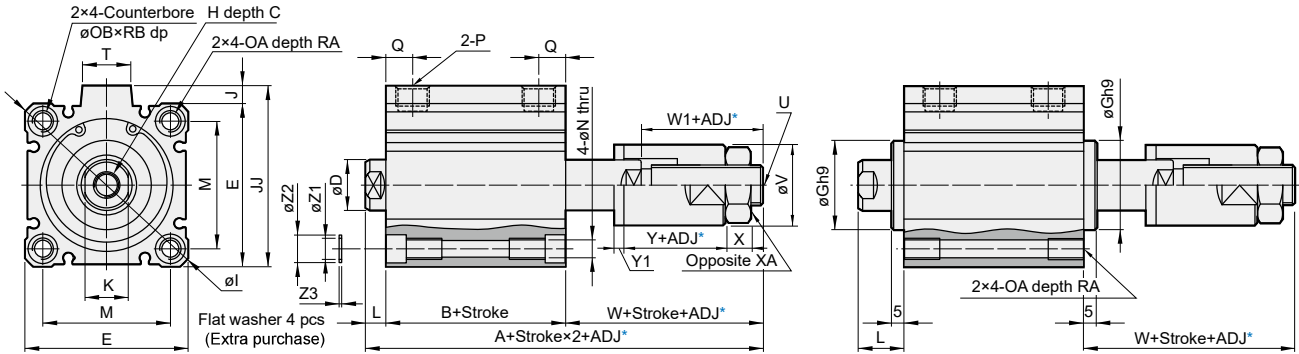


**28**

$\phi 50\sim\phi 100$

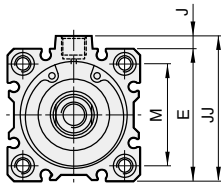
Stroke 5~100

Stroke over 100

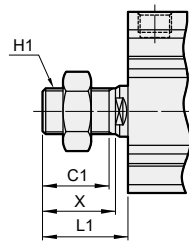


\* ADJ: Adjustable stroke

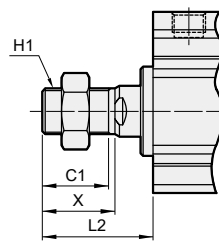
$\phi 40$



$\phi 40\sim\phi 100$   
(Stroke 5~100)



$\phi 40\sim\phi 80$   
(Stroke over 100)



### 27 Male thread

Code Tube I.D.	C1	H1	L1 <sup>*1,2</sup>	L2 <sup>*1</sup>	X
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: Standard stroke, L2: Long stroke

\*2. ( ) Dimensions for piston rod extended "LA" type.

Code Tube I.D.	Standard stroke									Long stroke				
	Stroke range	Without magnet		Magnet		L <sup>*3</sup>	Q	W	Stroke range	A	B	L	Q	W
		A	B	A	B									
40	5~50	71	40	81	50	7 (17)	14	24	101~300	102.5	55	17	14	30.5
	51~100	81	50											
50	5~50	75	40.5	85	50.5	8 (18)	14	26.5	101~300	105.5	55.5	18	14	32
	51~100	85	50.5											
63	5~50	80	42	90	52	8 (18)	15.5	30	101~300	110	57	18	16.5	35
	51~100	90	52											
80	5~50	100	51	110	61	10 (20)	18	39	101~300	130	66	20	19	44
	51~100	110	61											
100	5~50	111	60.5	121	70.5	12 (22)	22	38.5						
	51~100	121	70.5											

Code Tube I.D.	C	D	E	G <sup>h9</sup>	H	I	J	JJ	K	M	N	OA	OB	P	RA	RB	T	U	V	W1	X	XA	Y	Y1	Z1	Z2	Z3
40	13	16	52	28 <sup>+0 -0.052</sup>	M8 $\times 1.25$	70	5	57	14	40	5.5	M6 $\times 1.0$	9	Rc1/8	10	7	14	M12 $\times 1.25$	30	21	7	19	12	2	6.2	8.8	1
50	15	20	64	35 <sup>+0 -0.062</sup>	M10 $\times 1.5$	86	7	71	17	50	6.6	M8 $\times 1.25$	11	Rc1/4	14	8	19	M16 $\times 1.5$	40	25.5	8	24	15	2	8.2	10.8	1
63	15	20	77	35 <sup>+0 -0.062</sup>	M10 $\times 1.5$	103	7	84	17	60	9	M10 $\times 1.5$	14	Rc1/4 <sup>*1</sup>	18	10.5	19	M16 $\times 1.5$	40	25.5	8	24	15	2	10.2	13.8	1
80	21	25	98	43 <sup>+0 -0.062</sup>	M16 $\times 2.0$	132	6	104	22	77	11	M12 $\times 1.75$	17.5	Rc3/8 <sup>*2</sup>	22	13.5	26	M22 $\times 1.5$	50	33	13	32	20	3	12.2	17.3	2
100	27	30	117	—	M20 $\times 2.5$	156	6.5	123.5	27	94	11	M12 $\times 1.75$	17.5	Rc3/8 <sup>*2</sup>	22	13.5	26	M22 $\times 1.5$	50	33	13	32	20	3	12.2	17.3	2

\*1. Without magnet with stroke=5mm, P=Rc1/8

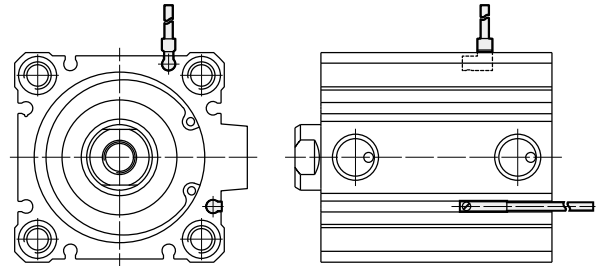
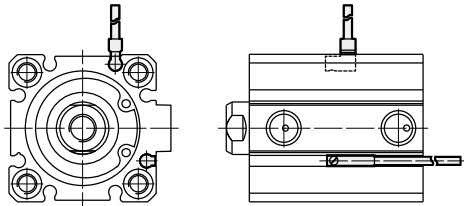
\*2. Without magnet with stroke=5mm, P=Rc1/4

\*3. ( ) Dimensions for piston rod extended "LA" type.

### Installation of sensor switch

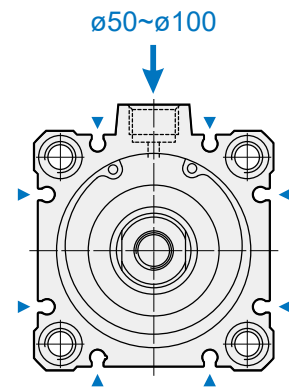
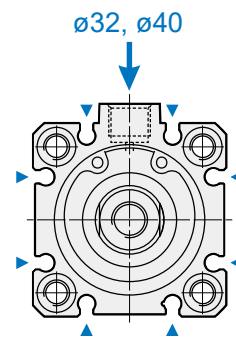
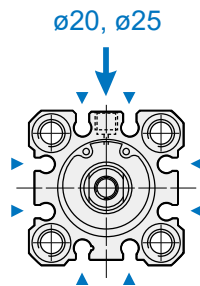
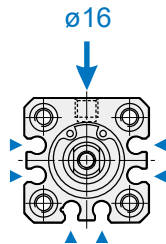
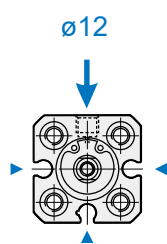
$\phi 12\sim\phi 40$

$\phi 50\sim\phi 100$



### Description

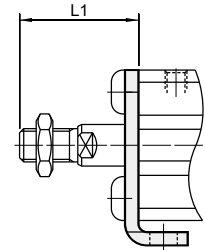
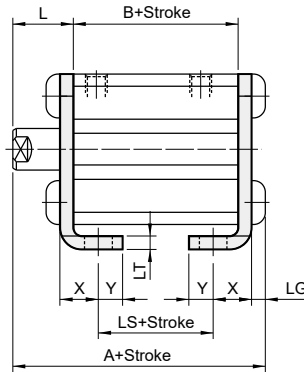
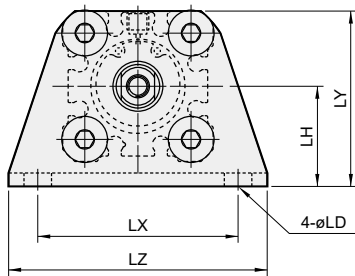
▼ R\*C(V) switch    ↓ Port



### LB

#### Female thread

#### Male thread

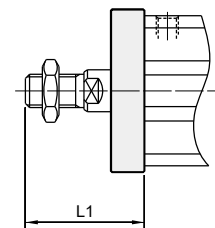
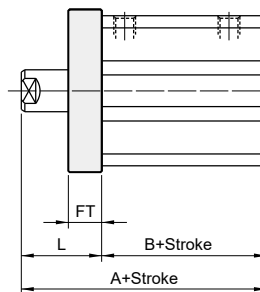
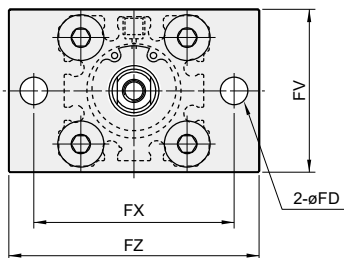


Code	Standard stroke							Long stroke														
	Stroke range	Without magnet			Magnet			Stroke range	A	B	LS	L	L1	LD	LG	LH	LT	LX	LY	LZ	X	Y
		A	B	LS	A	B	LS															
12	5~30	35.3	17	5	40.3	22	10	35~100	50.3	32	20	13.5	24	4.5	2.8	17	2	34	29.5	44	8	4.5
16	5~30	35.3	17	5	40.3	22	10	35~100	50.3	32	20	13.5	25.5	4.5	2.8	19	2	38	33.5	48	8	5
20	5~50	41.2	19.5	7.5	51.2	29.5	17.5	75~200	62.7	41	29	14.5	28.5	6.6	4	24	3.2	48	42	62	9.2	5.8
25	5~50	44.7	22.5	7.5	54.7	32.5	17.5	75~300	66.2	44	29	15	32.5	6.6	4	26	3.2	52	46	66	10.7	5.8

### FAC

#### Female thread

#### Male thread



Code	Standard stroke					Long stroke									
	Stroke range	Without magnet		Magnet		Stroke range	A	B	FD	FT	FV	FX	FZ	L	L1
		A	B	A	B										
12	5~30	30.5	17	35.5	22	35~100	45.5	32	4.5	5.5	25	45	55	13.5	24
16	5~30	30.5	17	35.5	22	35~100	45.5	32	4.5	5.5	30	45	55	13.5	25.5
20	5~50	34	19.5	44	29.5	75~200	55.5	41	6.6	8	39	48	60	14.5	28.5
25	5~50	37.5	22.5	47.5	32.5	75~300	59	44	6.6	8	42	52	64	15	32.5

# MCJQ3 Mounting accessories – Double acting / Single rod $\varnothing 12\sim\varnothing 25$

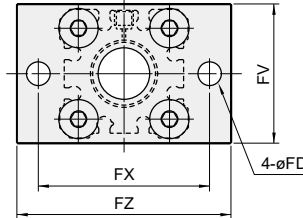
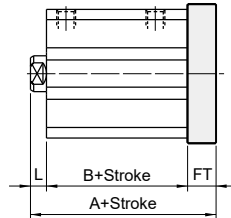
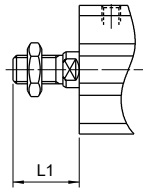
## COMPACT CYLINDER



### FBC

Male thread

Female thread

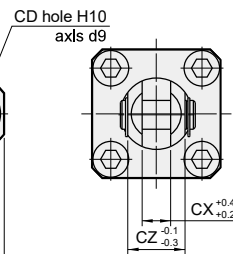
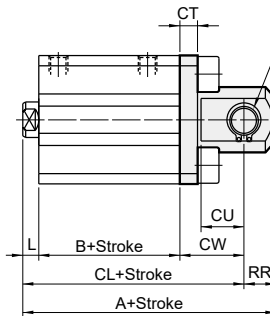
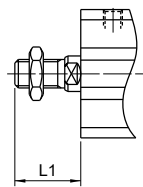


Code	Standard stroke										Long stroke					FD	FT	FV	FX	FZ	
	Stroke range	Without magnet					Magnet					Stroke range	A	B	L						L1
		A	B	L	L1	A	B	L	L1												
12	5~30	26	17	3.5	14	31	22	3.5	14	35~100	51	32	13.5	24	4.5	5.5	25	45	55		
16	5~30	26	17	3.5	15.5	31	22	3.5	15.5	35~100	51	32	13.5	25.5	4.5	5.5	30	45	55		
20	5~50	32	19.5	4.5	18.5	42	29.5	4.5	18.5	75~200	63.5	41	14.5	28.5	6.6	8	39	48	60		
25	5~50	35.5	22.5	5	22.5	45.5	32.5	5	22.5	75~300	67	44	15	32.5	6.6	8	42	52	64		

### CB

Male thread

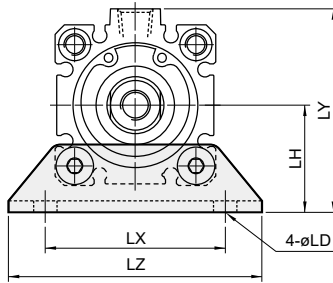
Female thread



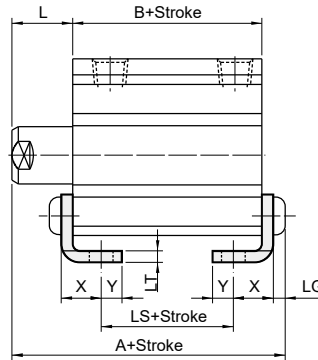
Code	Standard stroke										Long stroke						CD	CT	CU	CW	CX	CZ	RR	
	Stroke range	Without magnet					Magnet					Stroke range	A	B	CL	L								L1
		A	B	CL	L	L1	A	B	CL	L	L1													
12	5~30	40.5	17	34.5	3.5	14	45.5	22	39.5	3.5	14	35~100	65.5	32	59.5	13.5	24	5	4	7	14	5	10	6
16	5~30	41.5	17	35.5	3.5	15.5	46.5	22	40.5	3.5	15.5	35~100	66.5	32	60.5	13.5	25.5	5	4	10	15	6.5	12	6
20	5~50	51	19.5	42	4.5	18.5	61	29.5	52	4.5	18.5	75~200	82.5	41	73.5	14.5	28.5	8	5	12	18	8	16	9
25	5~50	57.5	22.5	47.5	5	22.5	67.5	32.5	57.5	5	22.5	75~300	89	44	79	15	32.5	10	5	14	20	10	20	10

**LB**

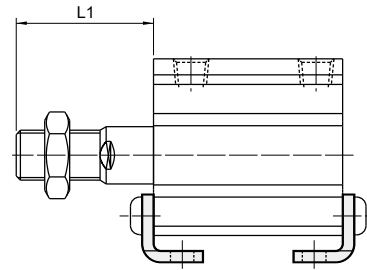
**Standard stroke**



**Female thread**

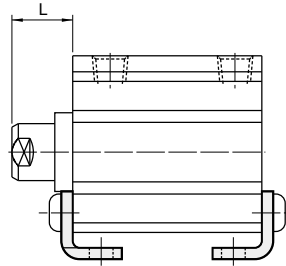


**Male thread**

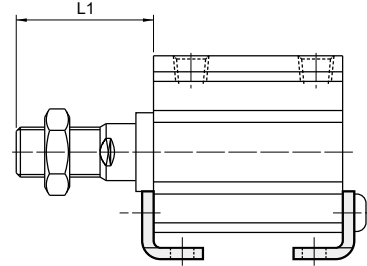


**Long stroke**

**Female thread**



**Male thread**



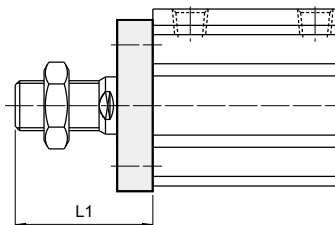
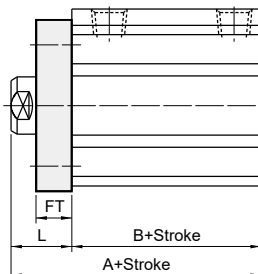
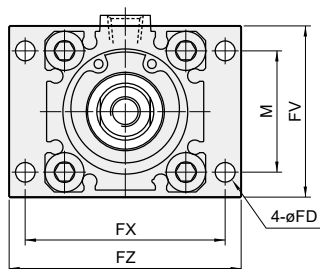
Code	Standard stroke						Long stroke				L	L1	LD	LG	LH	LT	LX	LY	LZ	X	Y	
	Stroke range	Without magnet			Magnet			Stroke range	A	B												LS
		A	B	LS	A	B	LS															
32	5~50	47.2	23	7	57.2	33	17	125~300	69.7	45.5	29.5	17	38.5	6.6	4	30	3.2	57	57	71	11.2	5.8
	75,100	57.2	33	17																		
40	5~50	53.7	29.5	13.5	63.7	39.5	23.5	125~300	79.2	55	39	17	38.5	6.6	4	33	3.2	64	64	78	11.2	7
	75,100	63.7	39.5	23.5																		
50	5~50	56.7	30.5	7.5	66.7	40.5	17.5	125~300	81.7	55.5	32.5	18	43.5	9	5	39	3.2	79	78	95	14.7	8
	75,100	66.7	40.5	17.5																		
63	5~50	62.2	36	10	72.2	46	20	125~300	83.2	57	31	18	43.5	11	5	46	3.2	95	91.5	113	16.2	9
	75,100	72.2	46	20																		
80	5~50	75	43.5	13.5	85	53.5	23.5	125~300	97.5	66	36	20	53.5	13	7	59	4.5	118	114	140	19.5	11
	75,100	85	53.5	23.5																		
100	5~50	88	53	19	98	63	29	125~300	—	—	—	22	53.5	13	7	71	6	137	136	162	23	12.5
	75,100	98	63	29																		



### FAC

#### Female thread

#### Male thread



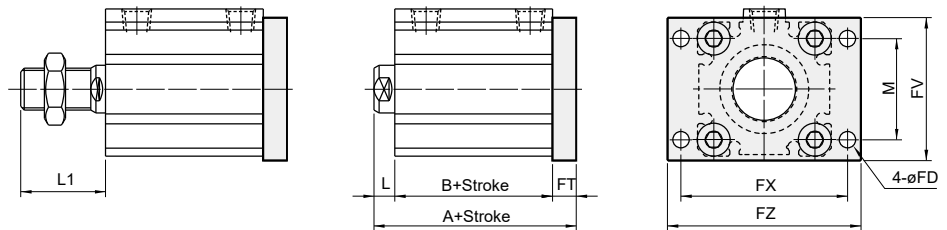
Code	Standard stroke					Long stroke			FD	FT	FV	FX	FZ	L	L1	M
	Stroke range	Without magnet		Magnet		Stroke range	A	B								
Tube I.D.		A	B	A	B											
32	5~50	40	23	50	33	125~300	62.5	45.5	5.5	8	48	56	65	17	38.5	34
	75,100	50	33													
40	5~50	46.5	29.5	56.5	39.5	125~300	72	55	5.5	8	54	62	72	17	38.5	40
	75,100	56.5	39.5													
50	5~50	48.5	30.5	58.5	40.5	125~300	73.5	55.5	6.6	9	67	76	89	18	43.5	50
	75,100	58.5	40.5													
63	5~50	54	36	64	46	125~300	75	57	9	9	80	92	108	18	43.5	60
	75,100	64	46													
80	5~50	63.5	43.5	73.5	53.5	125~300	86	66	11	11	99	116	134	20	53.5	77
	75,100	73.5	53.5													
100	5~50	75	53	85	63	125~300	—	—	11	11	117	136	154	22	53.5	94
	75,100	85	63													

### FBC

#### Standard stroke

#### Male thread

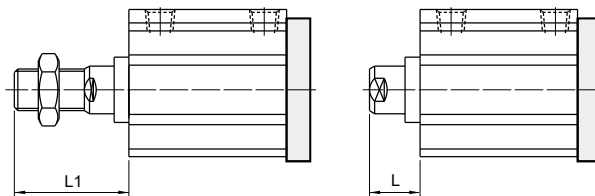
#### Female thread



#### Long stroke

#### Male thread

#### Female thread

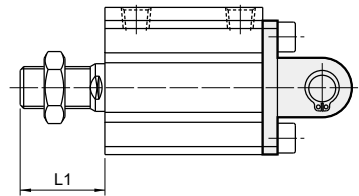


Code	Standard stroke								Long stroke									
	Stroke range	Without magnet		Magnet		L	L1	Stroke range	A	B	L	L1	FD	FT	FV	FX	FZ	M
		A	B	A	B													
32	5~50	38	23	48	33	7	28.5	125~300	70.5	45.5	17	38.5	5.5	8	48	56	65	34
	75,100	48	33															
40	5~50	44.5	29.5	54.5	39.5	7	28.5	125~300	80	55	17	38.5	5.5	8	54	62	72	40
	75,100	54.5	39.5															
50	5~50	47.5	30.5	57.5	40.5	8	33.5	125~300	82.5	55.5	18	43.5	6.6	9	67	76	89	50
	75,100	57.5	40.5															
63	5~50	53	36	63	46	8	33.5	125~300	84	57	18	43.5	9	9	80	92	108	60
	75,100	63	46															
80	5~50	64.5	43.5	74.5	53.5	10	43.5	125~300	97	66	20	53.5	11	11	99	116	134	77
	75,100	74.5	53.5															
100	5~50	76	53	86	63	12	43.5	125~300	-	-	-	-	11	11	117	136	154	94
	75,100	86	63															

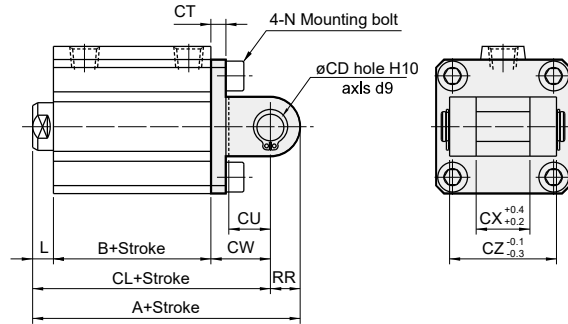
### CB

#### Standard stroke

#### Male thread

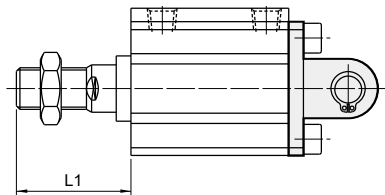


#### Female thread

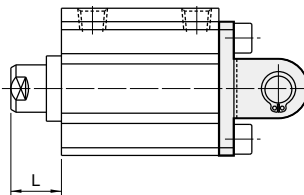


#### Long stroke

#### Male thread

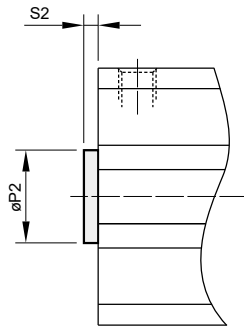


#### Female thread



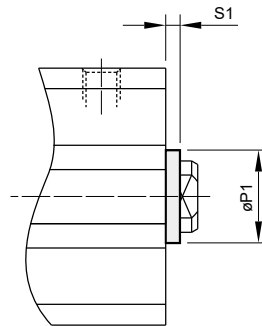
Code	Standard stroke										Long stroke					CD	CT	CU	CW	CX	CZ	N	RR
	Stroke range	Without magnet			Magnet			L	L1	Stroke range	A	B	CL	L	L1								
		A	B	CL	A	B	CL																
32	5~50	60	23	50	70	33	60	7	28.5	125~300	92.5	45.5	82.5	17	38.5	10	5	14	20	18	36	M6×1.0	10
	75,100	70	33	60																			
40	5~50	68.5	29.5	58.5	78.5	39.5	68.5	7	28.5	125~300	104	55	94	17	38.5	10	6	14	22	18	36	M6×1.0	10
	75,100	78.5	39.5	68.5																			
50	5~50	80.5	30.5	66.5	90.5	40.5	76.5	8	33.5	125~300	115.5	55.5	101.5	18	43.5	14	7	20	28	22	44	M8×1.25	14
	75,100	90.5	40.5	76.5																			
63	5~50	88	36	74	98	46	84	8	33.5	125~300	119	57	105	18	43.5	14	8	20	30	22	44	M10×1.5	14
	75,100	98	46	84																			
80	5~50	109.5	43.5	91.5	119.5	53.5	101.5	10	43.5	125~300	142	66	124	20	53.5	18	10	27	38	28	56	M12×1.75	18
	75,100	119.5	53.5	101.5																			
100	5~50	132	53	110	142	63	120	12	43.5	125~300	-	-	-	-	-	22	13	31	45	32	64	M12×1.75	22
	75,100	142	63	120																			

### F Rear flange



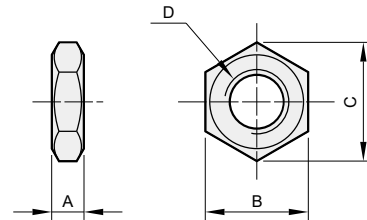
Code Tube I.D.	P2 <sup>hg</sup>	S2
12	6	1.5
16	10	1.5
20	13	2
25	15	2
32	21	2
40	28	2
50	35	2
63	35	2
80	43	2
100	59	2

### RF



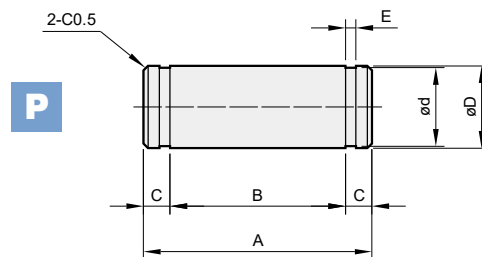
Code Tube I.D.	P1 <sup>hg</sup>	S1
12	15	1.5
16	20	1.5
20	13	2
25	15	2
32	21	2
40	28	2
50	35	2
63	35	2
80	43	2
100	59	2

### Rod front nut



Code Tube I.D.	A	B	C	D
12	4	8	9.2	M5×0.8
16	5	10	11.5	M6×1.0
20	5	13	15	M8×1.25
25	6	17	19.6	M10×1.25
32,40	8	22	25.4	M14×1.5
50,63	11	27	31.4	M18×1.5
80	13	32	37	M22×1.5
100	16	41	47.3	M26×1.5

### Pin for CB









Code Tube I.D.	A	B	C	$\phi D^{g9}$	$\phi d$	E	Snap ring
12	14.6	10.2	2.2	5 <sup>-0.03 -0.06</sup>	4.8 <sup>0 -0.04</sup>	0.7 <sup>+0.10 0</sup>	STW-5
16	16.6	12.2	2.2	5 <sup>-0.03 -0.06</sup>	4.8 <sup>0 -0.04</sup>	0.7 <sup>+0.10 0</sup>	STW-5
20	21	16.2	2.4	8 <sup>-0.04 -0.08</sup>	7.6 <sup>0 -0.06</sup>	0.9 <sup>+0.10 0</sup>	STW-8
25	25.6	20.2	2.7	10 <sup>-0.04 -0.08</sup>	9.6 <sup>0 -0.06</sup>	1.15 <sup>+0.14 0</sup>	STW-10
32,40	41.6	36.2	2.7	10 <sup>-0.04 -0.08</sup>	9.6 <sup>0 -0.09</sup>	1.15 <sup>+0.14 0</sup>	STW-10
50,63	50.6	44.2	3.2	14 <sup>-0.05 -0.10</sup>	13.4 <sup>0 -0.11</sup>	1.15 <sup>+0.14 0</sup>	STW-14
80	64	56.2	3.9	18 <sup>-0.05 -0.10</sup>	17.0 <sup>0 -0.11</sup>	1.35 <sup>+0.14 0</sup>	STW-18
100	72	64.2	3.9	22 <sup>-0.07 -0.12</sup>	21.0 <sup>0 -0.21</sup>	1.35 <sup>+0.14 0</sup>	STW-22

### Cylinder weight


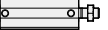

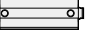

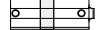
#### Standard stroke

Unit: g

Model		Basic weight MCJQ3-11	Basic weight (magnet) MCJQ3-11	Stroke 5 mm MCJQ3-11	Basic weight MCJQ3-12	Basic weight (magnet) MCJQ3-12	Stroke 5 mm MCJQ3-12
Tube I.D.	Stroke range (mm)						
$\phi 12$	5~30	22	31	7	19	28	7
$\phi 16$	5~30	33	42	8	28	37	8
$\phi 20$	5~50	55	82	13	48	75	13
$\phi 25$	5~50	92	140	16	75	123	16
$\phi 32$	5~50	129	215	22	109	166	22
	51~100	206	215	22	157	166	22
$\phi 40$	5~50	226	315	24	184	266	24
	51~100	298	315	24	249	266	24
$\phi 50$	5~50	367	500	35	317	409	35
	51~100	476	500	35	386	409	35
$\phi 63$	5~50	530	714	41	446	622	41
	51~100	685	714	41	594	622	41
$\phi 80$	5~50	1032	1278	65	904	1109	65
	51~100	1240	1278	65	1072	1109	65
$\phi 100$	5~50	1864	2278	90	1679	2030	90
	51~100	2230	2278	90	1982	2030	90








#### Long stroke

Unit: g

Model		Basic weight MCJQ3-11	Basic weight (magnet) MCJQ3-11	Stroke 5 mm MCJQ3-11	Basic weight MCJQ3-12	Basic weight (magnet) MCJQ3-12	Stroke 5 mm MCJQ3-12
Tube I.D.	Stroke range (mm)						
$\phi 12$	31~100	46	47	7	43	44	7
$\phi 16$	31~100	68	70	8	63	65	8
$\phi 20$	51~200	116	120	13	106	110	13
$\phi 25$	51~300	172	180	16	153	161	16
$\phi 32$	101~300	287	295	22	238	247	22
$\phi 40$	101~300	409	426	24	360	377	24
$\phi 50$	101~300	658	682	35	566	589	35
$\phi 63$	101~300	852	881	41	760	789	41
$\phi 80$	101~300	1531	1568	65	1398	1436	65

#### Accessories weight

Unit: g

Model	LB	CB	FAC/FBC	F	RF	Pin	Nut
Tube I.D.							
$\phi 12$	51	31	56	1	1	2	1
$\phi 16$	60	37	67	2	1	3	2
$\phi 20$	145	61	135	3	1	8	4
$\phi 25$	166	94	153	4	2	16	6
$\phi 32$	107	136	165	9	3	25	18
$\phi 40$	125	171	203	17	9	25	18
$\phi 50$	209	331	357	28	16	61	32
$\phi 63$	296	538	547	52	30	61	32
$\phi 80$	586	1034	1046	107	52	127	56
$\phi 100$	960	1765	1328	175	82	214	56