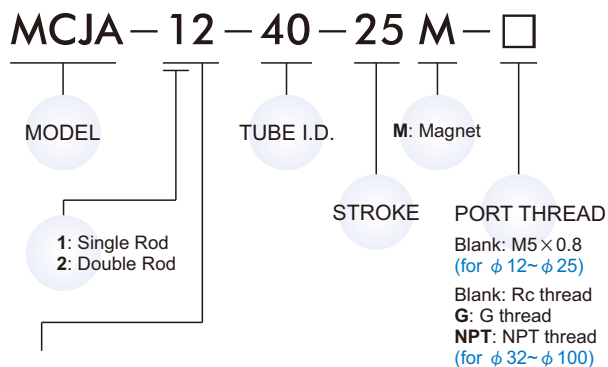


### Order example



#### STYLE

Code	Symbol	Description
1 1		Double acting / Male thread
1 2		Double acting / Female thread
1 3		Single acting / Normally extended male thread
1 4		Single acting / Normally extended female thread
1 5		Single acting / Normally returned male thread
1 6		Single acting / Normally returned female thread
2 1		Double rod / Male thread
2 2		Double rod / Female thread
2 7		Double rod / Adjustable male thread
2 8		Double rod / Adjustable female thread

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

### Features

- Ultra Compact, light weight and space saving cylinder.
- Wide range of bore sizes and strokes (12mm~100mm).
- Single and double acting available.
- Ideal for use in machinery where space is limited and incorporating sensor groove which enables flush fitting of sensors.

### Specification

Model	MCJA									
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 (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°C~+60°C (No freezing)									
Available speed range	50~500 mm/sec									
Sensor switch (※)	RCB, RCE, RCE1, RDEP									

※ RCB, RCE, RCE1, RDEP specification, please refer to page 8-8, 10, 15.

### Double acting-Table for standard stroke

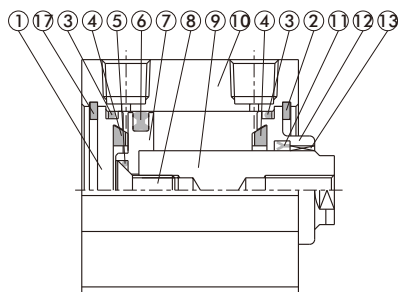
	Tube I.D.	Stroke (mm)	Max. stroke
Single rod	φ 12, φ 16	5, 10, 15, 20, 25, 30	300
	φ 20,25,32	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	300
	φ 40,50,63	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	125
Dual rod	φ 12, φ 16	5, 10, 15, 20, 25, 30	300
	φ 20,25,32	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	300
	φ 40,50,63	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	125

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

### Single acting - Table for standard stroke

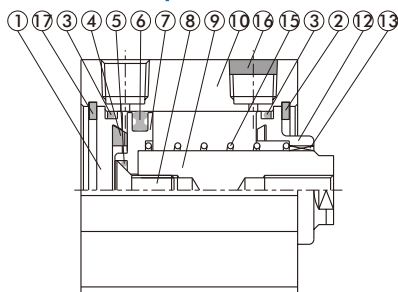
Tube I.D.	Stroke (mm)
φ 12, 16, 20, 25, 32, 40	5, 10
φ 50	10, 20

### Double acting



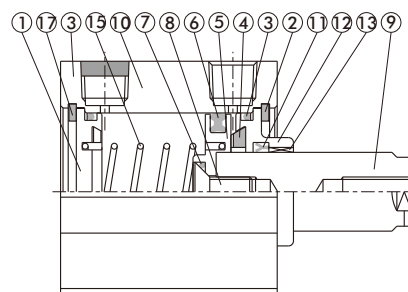
### Single acting

#### Normally returned



### Single acting

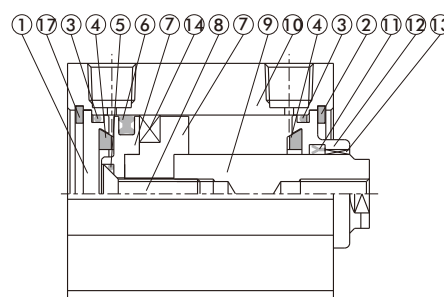
#### Normally extended



### Seal kit

Acting type	Rod packing		Piston packing		Cover ring	Piston gasket
	Double action normally extended	Normally returned	Double action	Single action	Double action single action	Double action single action
Qty.	1	0	1	1	2	1
12	KSYR-6	—	OPA-12	OPA-12	S-12	d4 × w1
16	KSYR-6	—	OPA-16	OPA-16	S-14	d4 × w1
20	KSYR-8	—	OPA-20	OPA-20	S-18	d6 × w1
25	KSYR-10	—	OPA-25	OPA-25	S-22	d8 × w1
32	KSYR-12	—	OPA-32	OPA-32	d28 × w2	S-9
40	KSYR-16	—	OPA-40	OPA-40	S-36	S-9
50	KSYR-20	—	OPA-50	OPA-50	AS-31	S-16
63	KSYR-20	—	OPA-63	—	AS-36	S-16
80	ORA-25	—	OPA-80	—	AS-41	d20 × w1
100	SDR-30	—	OPA-100	—	S-95	S-26

### Double acting (with magnet)



### Material

No.	Part name	Tube I.D.	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)	SUS	※		SUS	Spring steel						1	●		
3	Cover ring		NBR										2	●	●
4	Cushion packing	—	NBR										2	●	●
5	Piston gasket		NBR										1	●	●
6	Piston packing		NBR										1	●	●
7	Piston		Aluminum alloy										1	●	
8	Screw	With magnet	Stainless steel		SCM						1	●			
		Without magnet	SCM	SUS	SCM						1	●			
9	Piston rod	With magnet	Stainless steel		Carbon steel						1				
		Without magnet	SUS	Carbon steel						1					
10	Body		Aluminum alloy										1		
11	Rod packing		NBR										1	●	●
12	Rod cover		Aluminum alloy										1	●	
13	Bush		—	Bearing alloy						1	●				
14	Magnet		Plastic										1	●	
15	Spring		SWP		—						1	●			
16	Silencer		Brass						—		1	●			
17	Snap ring (Rear end)		Stainless steel		Spring steel						1	●			

※ Spring steel

### Order example Component parts

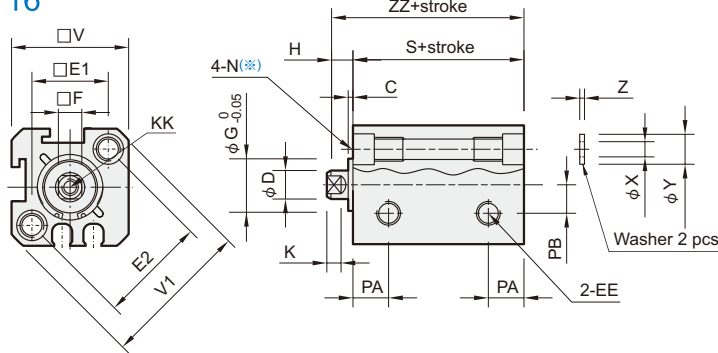
Tube I.D.	Component parts
φ 12	CP-MCJA-12(M)
φ 16	CP-MCJA-16(M)
φ 20	CP-MCJA-20(M)
φ 25	CP-MCJA-25(M)
φ 32	CP-MCJA-32(M)
φ 40	CP-MCJA-40(M)
φ 50	CP-MCJA-50(M)
φ 63	CP-MCJA-63(M)
φ 80	CP-MCJA-80(M)
φ 100	CP-MCJA-100(M)

M: With magnet

### Repair kits

Tube I.D.	Repair kits
φ 12	PS-MCJA-12
φ 16	PS-MCJA-16
φ 20	PS-MCJA-20
φ 25	PS-MCJA-25
φ 32	PS-MCJA-32
φ 40	PS-MCJA-40
φ 50	PS-MCJA-50
φ 63	PS-MCJA-63
φ 80	PS-MCJA-80
φ 100	PS-MCJA-100

### $\phi 12, \phi 16$

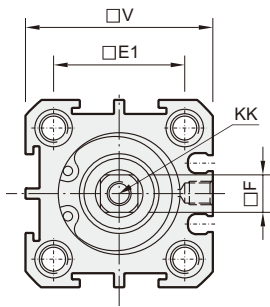


$\phi 20\sim\phi 100$  Long stroke  
(Without counter bore)

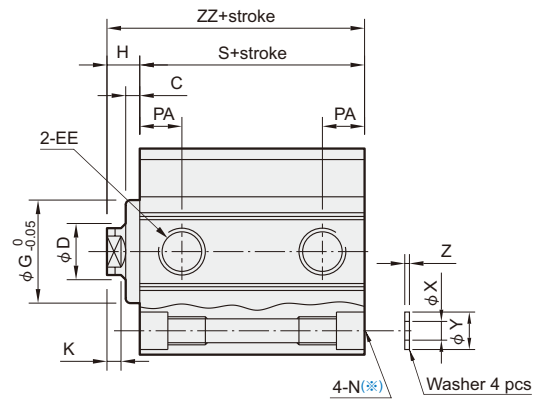
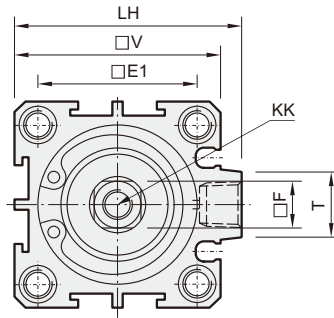


- ※ With magnet type: the stroke length must be over 100mm.
- ※ Without magnet type: the stroke length must be over 110mm.

### $\phi 20, \phi 25$



### $\phi 32\sim\phi 100$



Code Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	N	PA	PB
12	1	6	M5×0.8	16.3	23	5	11	5	3	M3×0.5×6depth	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	6.5	6
16	1.5	6	M5×0.8	19.8	28	5	11	5.5	3	M3×0.5×6depth	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	7	6.5
20	1.5	8	M5×0.8	24	-	6	15	5.5	3	M4×0.7×8depth	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	7.5	-
25	2	10	M5×0.8	28	-	8	17	6	3	M5×0.8×10depth	-	9×7depth, $\phi 5.1$ thru, M6×1×10depth	8	-
32	3	12	Rc1/8 (※1)	34	-	10	22	7	3	M6×1×12depth	48.5	9×7depth, $\phi 5.1$ thru, M6×1×10depth	9	-
40	3	16	Rc1/8 (※1)	40	-	14	28	7	3	M8×1.25×12depth	56.5	10.5×8depth, $\phi 6.9$ thru, M8×1.25×12.5depth	10	-
50	4	20	Rc1/4 (※2)	48	-	17	38	9	3	M10×1.5×15depth	70	11×8.5depth, $\phi 6.9$ thru, M8×1.25×16.5depth	10	-
63	4	20	Rc1/4 (※2)	60	-	17	40	9	3	M10×1.5×15depth	83	11×8.5depth, $\phi 6.9$ thru, M8×1.25×16.5depth	12	-
80	5	25	Rc3/8 (※3)	74	-	22	45	11	4	M14×1.5×20depth	102	14×10.5depth, $\phi 10.5$ thru, M12×1.75×12depth	13	-
100	5	30	Rc3/8 (※3)	90	-	27	55	12	4	M18×1.5×20depth	122	17.5×13depth, $\phi 12.3$ thru, M14×2×17depth	17	-

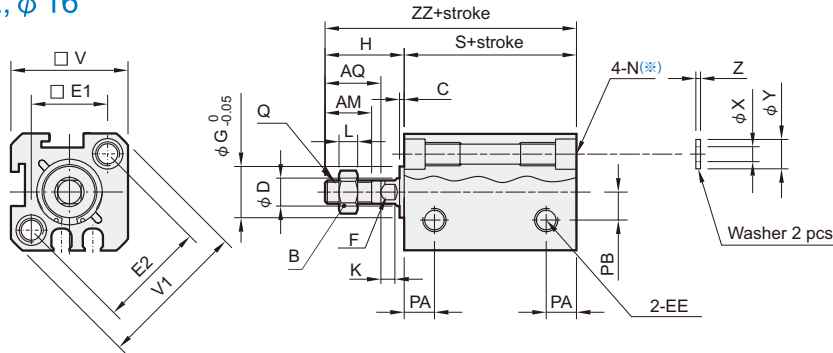
※1. Without magnet with stroke=5mm, EE=M5×0.8

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

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

Code Tube I.D.	T	V	V1	X	Y	Z	Without magnet		Magnet	
							S	ZZ	S	ZZ
12	-	25	32	3.2	6.3	1	17	22	27	32
16	-	29	38	3.2	6.3	1	18.5	24	28.5	34
20	-	34	-	3.2	6.3	1	19.5	25	29.5	35
25	-	40	-	4.2	7.8	1	21	27	31	37
32	14	44	-	4.2	7.8	1	24.5	31.5	34.5	41.5
40	14	52	-	6.2	10.3	1.6	26	33	36	43
50	19	62	-	6.2	10.8	1.6	28	37	38	47
63	20	75	-	6.2	10.8	1.6	32	41	42	51
80	27	94	-	8.2	13.8	1.6	41	52	51	62
100	26	114	-	10.2	17.3	2	51	63	61	73

### $\phi 12, \phi 16$

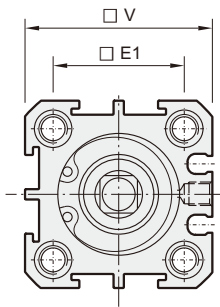


$\phi 20\sim\phi 100$  Long stroke  
(Without counter bore)

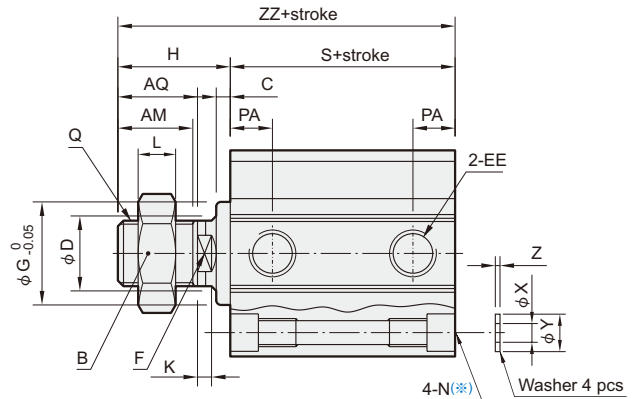
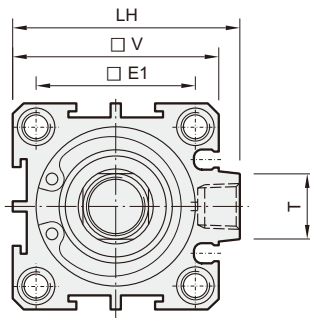


- ※ With magnet type: the stroke length must be over 100mm.
- ※ Without magnet type: the stroke length must be over 110mm.

### $\phi 20, \phi 25$



### $\phi 32\sim\phi 100$



Code Tube I.D.	AM	AQ	B	C	D	EE	E1	E2	F	G	H	K	L	LH	N	PA	PB
12	10	12	8	1	6	M5×0.8	16.3	23	5	11	17	3	4	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	6.5	6
16	10	12	8	1.5	6	M5×0.8	19.8	28	5	11	17.5	3	4	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	7	6.5
20	13	15	10	1.5	8	M5×0.8	24	-	6	15	20.5	3	5	-	6.5×4.5depth, $\phi 4.3$ thru, M5×0.8×7.5depth	7.5	-
25	15	17	13	2	10	M5×0.8	28	-	8	17	23	3	5	-	9×7depth, $\phi 5.1$ thru, M6×1×10depth	8	-
32	15	18	17	3	12	Rc1/8 (※1)	34	-	10	22	25	3	6	48.5	9×7depth, $\phi 5.1$ thru, M6×1×10depth	9	-
40	25	28	22	3	16	Rc1/8 (※1)	40	-	14	28	35	3	8	56.5	10.5×8depth, $\phi 6.9$ thru, M8×1.25×12.5depth	10	-
50	25	28	26	4	20	Rc1/4 (※2)	48	-	17	38	37	3	11	70	11×8.5depth, $\phi 6.9$ thru, M8×1.25×16.5depth	10	-
63	25	28	26	4	20	Rc1/4 (※2)	60	-	17	40	37	3	11	83	11×8.5depth, $\phi 6.9$ thru, M8×1.25×16.5depth	12	-
80	30	33	32	5	25	Rc3/8 (※3)	74	-	22	45	44	4	13	102	14×10.5depth, $\phi 10.5$ thru, M12×1.75×12depth	13	-
100	35	38	35	5	30	Rc3/8 (※3)	90	-	27	55	50	4	14	122	17.5×13depth, $\phi 12.3$ thru, M14×2×17depth	17	-

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

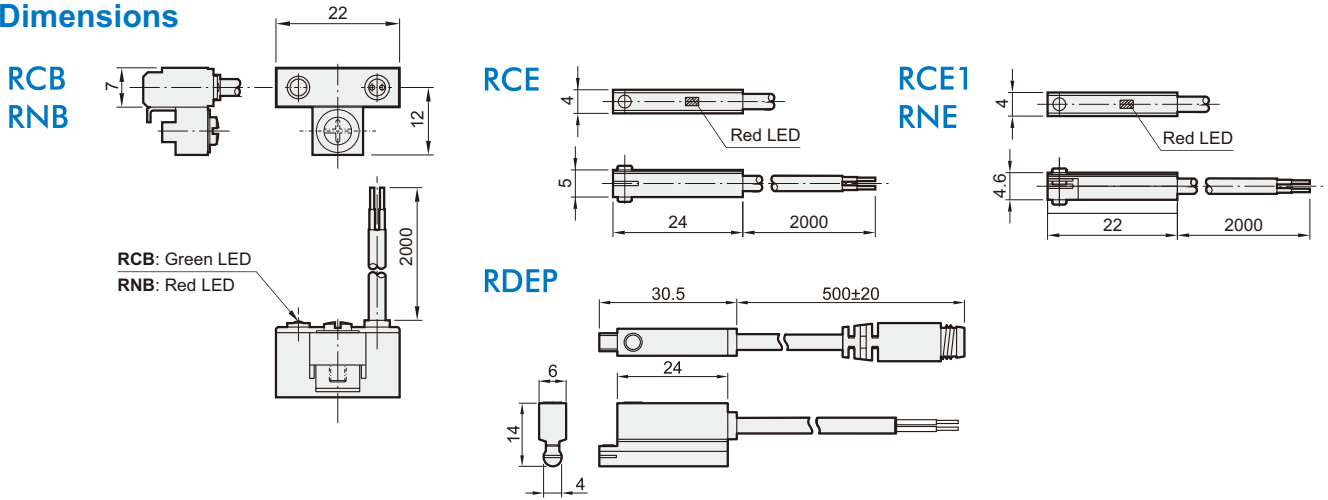
※3. Without magnet with stroke=5mm, EE=Rc1/4

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

Code Tube I.D.	Q	T	V	V1	X	Y	Z	Without magnet		Magnet	
								S	ZZ	S	ZZ
12	M5×0.8	-	25	32	3.2	6.3	1	17	34	27	44
16	M5×0.8	-	29	38	3.2	6.3	1	18.5	36	28.5	46
20	M6×1	-	34	-	3.2	6.3	1	19.5	40	29.5	50
25	M8×1.25	-	40	-	4.2	7.8	1	21	44	31	54
32	M10×1.25	14	44	-	4.2	7.8	1	24.5	49.5	34.5	59.5
40	M14×1.5	14	52	-	6.2	10.3	1.6	26	61	36	71
50	M18×1.5	19	62	-	6.2	10.8	1.6	28	65	38	75
63	M18×1.5	20	75	-	6.2	10.8	1.6	32	69	42	79
80	M22×1.5	27	94	-	8.2	13.8	1.6	41	85	51	95
100	M26×1.5	26	114	-	10.2	17.3	2	51	101	61	111

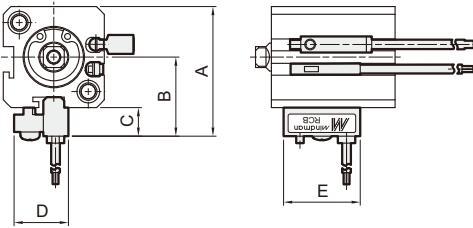
## COMPACT CYLINDER

### Dimensions

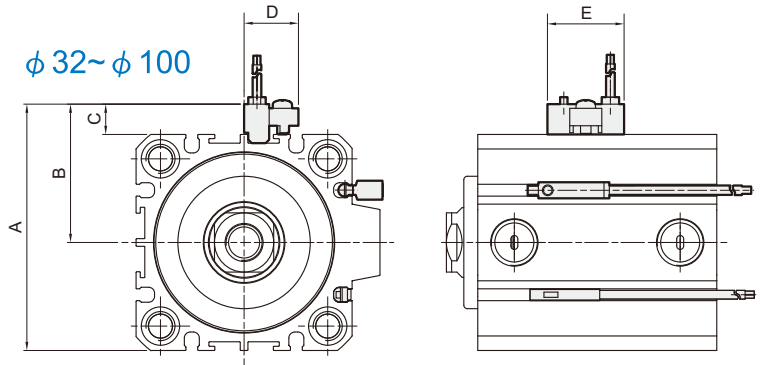


### Installation of sensor switch

$\phi 12, \phi 16$



$\phi 32 \sim \phi 100$



### Order example

RCB — □

MODEL

RCB / RCE / RCE1 (C: Reed switch)  
RNB / RNE (N: Solid state switch)  
RDEP (Solid state switch)

Blank: Lead wire  
QD: Connector

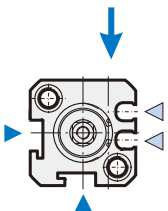
Code Tube I.D.	A	B	C	D	E
12	33.5	21.5	8.5	16	22
16	37.5	23	8.5	16	22
20	42.5	25.5	8.5	16	22
25	49	29	9	16	22
32	53	31	9	16	22

Code Tube I.D.	A	B	C	D	E
40	61	35	9	16	22
50	71	40	9	16	22
63	84	46.5	9	16	22
80	103	56	9	16	22
100	123	66	9	16	22

### Description

▼ RCB switch

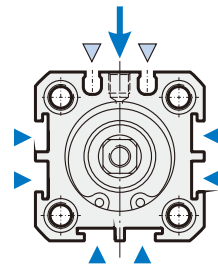
$\phi 12, \phi 16$



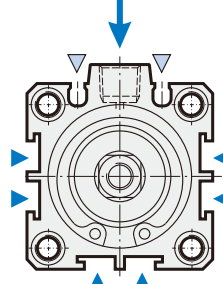
↓ Port

▼ RCE, RCE1, RDEP switch

$\phi 20, \phi 25$



$\phi 32, \phi 40$



$\phi 50 \sim \phi 100$

