

### Order example

MCJA – 12 – 40 – 25 M – □

MODEL

1: Single rod  
2: Double rod













TUBE I.D.

STROKE

M: Magnet

PORT THREAD  
Blank: M5×0.8  
(for ø12~ø25)  
Blank: Rc thread  
G: G thread  
NPT: NPT thread  
(for ø32~ø100)

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 3		Single acting / Double rod / Male thread
2 4		Single acting / 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 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°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 8-10, 12, 13, 18. RDEP only for tube I.D. ø12~ø50.

### Double acting – Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke
ø12, 16	5, 10, 15, 20, 25, 30	300
ø20, 25, 32, 40, 50, 63, 80	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	300
ø100	5, 10, 15, 20, 25, 30, 35, 40, 45, 50	125

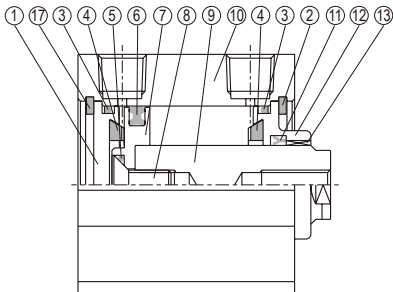
\* Please contact us if the stroke is out of specification.

### 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

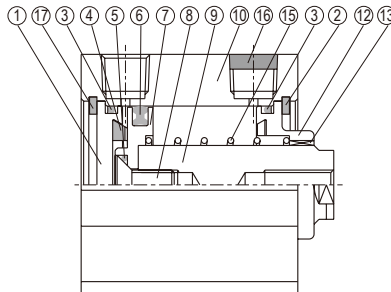
\* Please contact us if the stroke is out of specification.

### Double acting



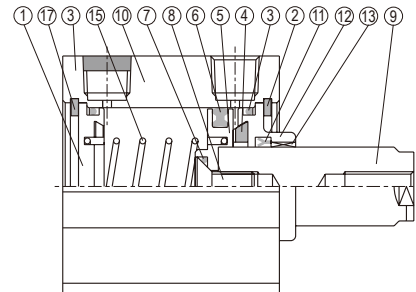
### Single acting

#### Normally returned



### Single acting

#### Normally extended

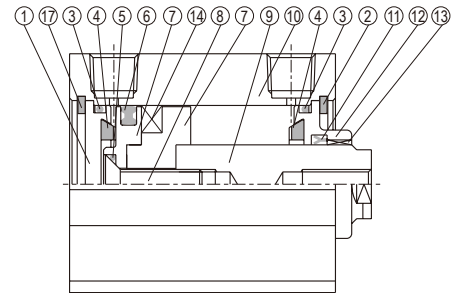


### Seal kit

Acting type	Rod packing		Piston packing		Cover ring	Piston gasket
	Double action normally extended	Normally returned	Double acting	Single acting	Double acting single acting	Double acting single acting
Q'y	1	0	1	1	2	1
ø12	KSYR-6	—	OPA-12	OPA-12	S-12	d4×w1
ø16	KSYR-6	—	OPA-16	OPA-16	S-14	d4×w1
ø20	KSYR-8	—	OPA-20	OPA-20	S-18	d6×w1
ø25	KSYR-10	—	OPA-25	OPA-25	S-22	d8×w1
ø32	KSYR-12	—	OPA-32	OPA-32	d28×w2	S-9
ø40	KSYR-16	—	OPA-40	OPA-40	S-36	S-9
ø50	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

### Double acting

#### (with magnet)



### Order example Component parts

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

M: 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	Head cover	Aluminum alloy										1	●		
2	Snap ring (Front end)	SUS	spring steel	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 *1	With magnet	Stainless steel		Carbon steel						1				
		Without magnet	SUS	Carbon steel						1					
10	Body	Aluminum alloy										1			
11	Rod packing	NBR										1*2	●	●	
12	Rod cover	Aluminum alloy										1	●		
13	Bush	—	Bearing alloy								1	●			
14	Magnet ring	Magnet material										1	●		
15	Spring	SWP		—						1	●				
16	Silencer	Brass		—						1	●				
17	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. Single acting / Normally returned, Q'y=0.

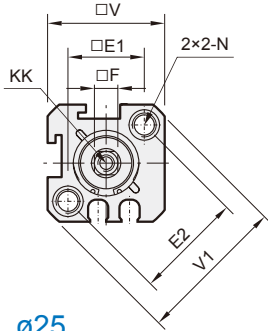
### Repair kits

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

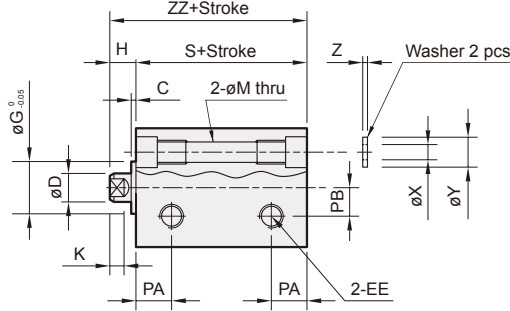
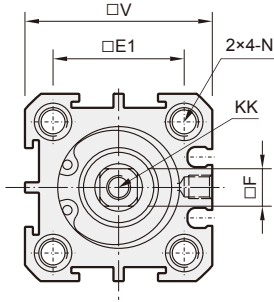
## COMPACT CYLINDER

### 12

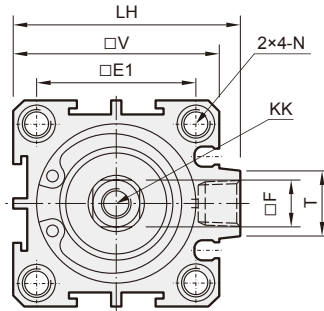
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32\sim\phi 100$



Long stroke

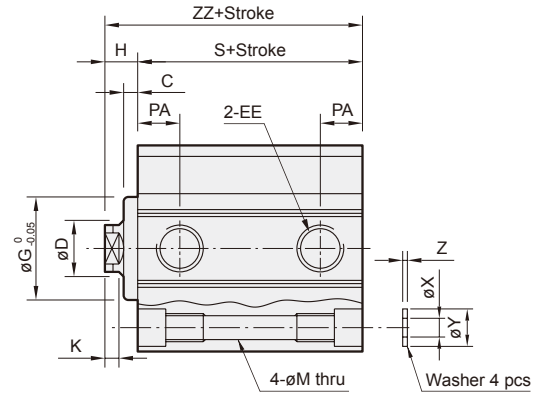
Without counter bore

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

$\phi 12, \phi 16$



$\phi 20\sim\phi 100$



Code Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	M	N	PA	PB
12	1	6	M5×0.8	16.3	23	5	11	5	3	M3×0.5×6depth	—	4.3	$\phi 6.5\times 4.5$ depth, 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	—	4.3	$\phi 6.5\times 4.5$ depth, 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	—	4.3	$\phi 6.5\times 4.5$ depth, M5×0.8×7.5depth	7.5	—
25	2	10	M5×0.8	28	—	8	17	6	3	M5×0.8×10depth	—	5.1	$\phi 9\times 7$ depth, M6×1.0×10depth	8	—
32	3	12	Rc1/8 (*1)	34	—	10	22	7	3	M6×1.0×12depth	48.5	5.1	$\phi 9\times 7$ depth, M6×1.0×10depth	9	—
40	3	16	Rc1/8 (*1)	40	—	14	28	7	3	M8×1.25×12depth	56.5	6.9	$\phi 10.5\times 8$ depth, M8×1.25×12depth	10	—
50	4	20	Rc1/4 (*2)	48	—	17	38	9	3	M10×1.5×15depth	70	6.9	$\phi 11\times 8.5$ depth, M8×1.25×16.5depth	10	—
63	4	20	Rc1/4 (*2)	60	—	17	40	9	3	M10×1.5×15depth	83	6.9	$\phi 11\times 8.5$ depth, M8×1.25×16.5depth	12	—
80	5	25	Rc3/8 (*3)	74	—	22	45	11	4	M14×1.5×20depth	102	10.5	$\phi 14\times 10.5$ depth, M12×1.75×12depth	13	—
100	5	30	Rc3/8 (*3)	90	—	27	55	12	4	M18×1.5×20depth	122	12.3	$\phi 18.5\times 13$ depth, M14×2×17depth	17	—

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

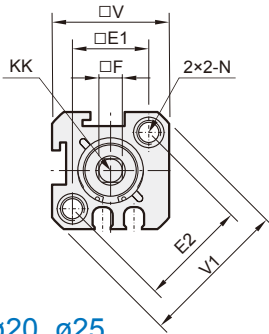
\*2. Without magnet with stroke=5mm, EE=Rc1/8

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

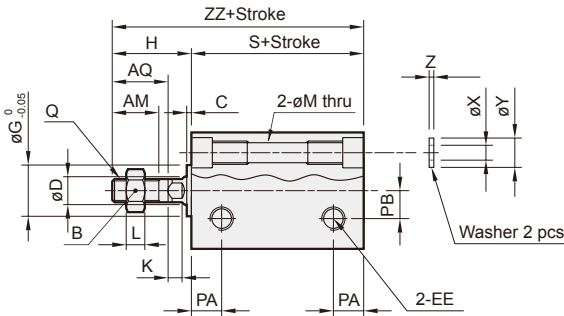
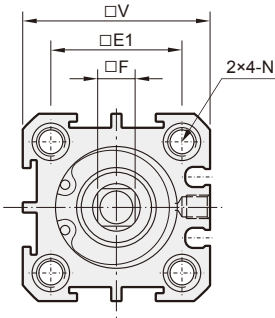
Code Tube I.D.	T	V	V1	X	Y	Z	Without magnet		Magnet	
							S	ZZ	S	ZZ
12	—	25	32	3.2	6.3	1	17	22	27	32
16	—	29	38	3.2	6.3	1	18.5	24	28.5	34
20	—	34	—	3.2	6.3	1	19.5	25	29.5	35
25	—	40	—	4.2	7.8	1	21	27	31	37
32	14	44	—	4.2	7.8	1	24.5	31.5	34.5	41.5
40	14	52	—	6.2	10.3	1.6	26	33	36	43
50	19	62	—	6.2	10.8	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

### 11

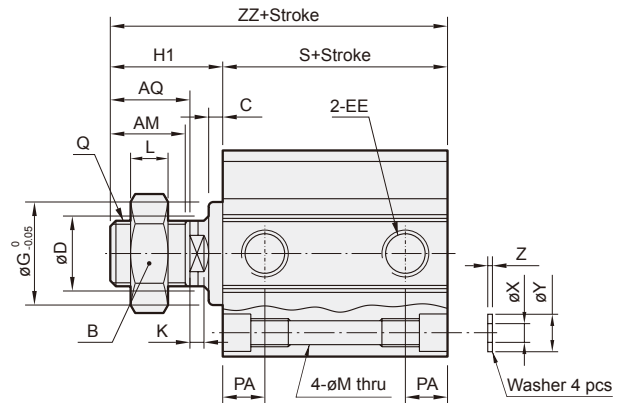
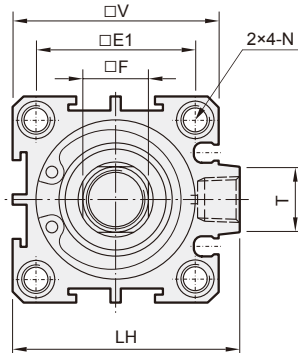
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32\sim\phi 100$



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.

$\phi 12, \phi 16$



$\phi 20\sim\phi 100$



Code Tube I.D.	AM	AQ	B	C	D	EE	E1	E2	F	G	H1	K	L	LH	M	N	PA	PB
12	10	12	8	1	6	M5×0.8	16.3	23	5	11	17	3	4	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, M5×0.8×7.5depth	7.5	—
25	15	17	13	2	10	M5×0.8	28	—	8	17	23	3	5	—	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	8	—
32	15	18	17	3	12	Rc1/8 (*1)	34	—	10	22	25	3	6	48.5	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	9	—
40	25	28	22	3	16	Rc1/8 (*1)	40	—	14	28	35	3	8	56.5	6.9	$\phi 10.5 \times 8$ depth, M8×1.25×12depth	10	—
50	25	28	26	4	20	Rc1/4 (*2)	48	—	17	38	37	3	11	70	6.9	$\phi 11 \times 8.5$ depth, M8×1.25×16.5depth	10	—
63	25	28	26	4	20	Rc1/4 (*2)	60	—	17	40	37	3	11	83	6.9	$\phi 11 \times 8.5$ depth, M8×1.25×16.5depth	12	—
80	30	33	32	5	25	Rc3/8 (*3)	74	—	22	45	44	4	13	102	10.5	$\phi 14 \times 10.5$ depth, M12×1.75×12depth	13	—
100	35	38	35	5	30	Rc3/8 (*3)	90	—	27	55	50	4	14	122	12.3	$\phi 18.5 \times 13$ depth, M14×2×17depth	17	—

\*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

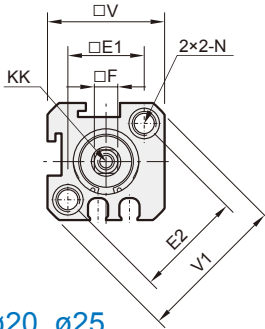
Code Tube I.D.	Q	T	V	V1	X	Y	Z	Without magnet		Magnet	
								S	ZZ	S	ZZ
12	M5×0.8	—	25	32	3.2	6.3	1	17	34	27	44
16	M5×0.8	—	29	38	3.2	6.3	1	18.5	36	28.5	46
20	M6×1.0	—	34	—	3.2	6.3	1	19.5	40	29.5	50
25	M8×1.25	—	40	—	4.2	7.8	1	21	44	31	54
32	M10×1.25	14	44	—	4.2	7.8	1	24.5	49.5	34.5	59.5
40	M14×1.5	14	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

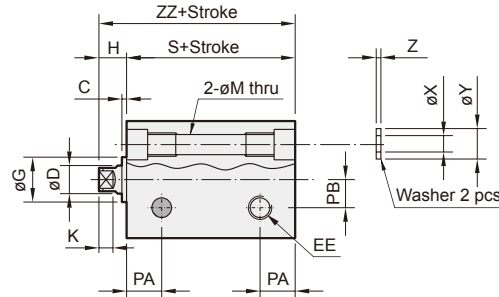
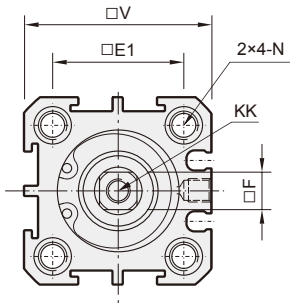
Mindman

### 16

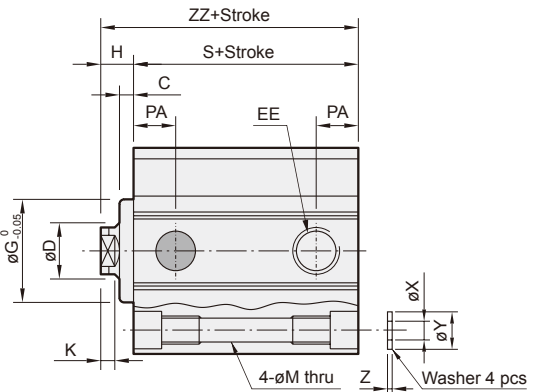
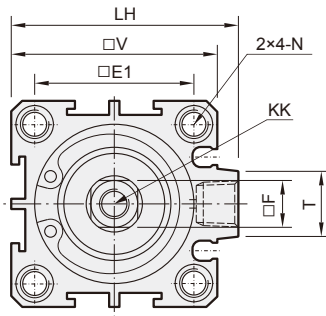
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32\sim\phi 50$



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.

$\phi 12, \phi 16$



$\phi 20\sim\phi 50$



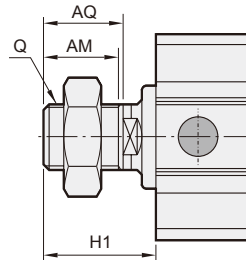
### Single acting – Table for standard stroke

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

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

### 15

Male thread



Code Tube I.D.	AM	AQ	H1	Q
12	10	12	17	M5×0.8
16	10	12	17.5	M5×0.8
20	13	15	20.5	M6×1.0
25	15	17	23	M8×1.25
32	15	18	25	M10×1.25
40	25	28	35	M14×1.5
50	25	28	37	M18×1.5

Code Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	M	N	PA	PB
12	1	6	M5×0.8	16.3	23	5	11	5	3	M3×0.5×6depth	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, M5×0.8×7.5depth	7.5	—
25	2	10	M5×0.8	28	—	8	17	6	3	M5×0.8×10depth	—	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	8	—
32	3	12	Rc1/8	34	—	10	22	7	3	M6×1.0×12depth	48.5	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	9	—
40	3	16	Rc1/8	40	—	14	28	7	3	M8×1.25×12depth	56.5	6.9	$\phi 10.5 \times 8$ depth, M8×1.25×12depth	10	—
50	4	20	Rc1/4 (*)	48	—	17	38	9	3	M10×1.5×15depth	70	6.9	$\phi 11 \times 8.5$ depth, M8×1.25×16.5depth	10	—

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

Code Tube I.D.	T	V	V1	X	Y	Z
12	—	25	32	3.2	6.3	1
16	—	29	38	3.2	6.3	1
20	—	34	—	3.2	6.3	1
25	—	40	—	4.2	7.8	1
32	14	44	—	4.2	7.8	1
40	14	52	—	6.2	10.3	1.6
50	19	62	—	6.2	10.8	1.6

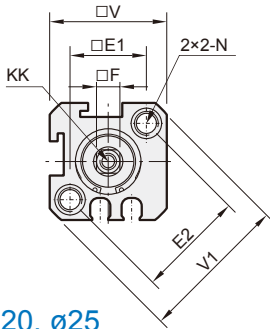
Code Tube I.D.	Without magnet				Magnet			
	Stroke 5,10		Stroke 15~30		Stroke 5,10		Stroke 15~30	
	S	ZZ	S	ZZ	S	ZZ	S	ZZ
12	27	32	37	42	37	42	47	52
16	28.5	34	38.5	44	38.5	44	48.5	54
20	29.5	35	39.5	45	39.5	45	49.5	55
25	31	37	41	47	41	47	51	57
32	34.5	41.5	44.5	51.5	44.5	51.5	54.5	61.5
40	36	43	46	53	46	53	56	63

Code Tube I.D.	Without magnet				Magnet			
	Stroke 5~20				Stroke 5~20			
	S	ZZ	S	ZZ	S	ZZ	S	ZZ
50	28	37	38	47				

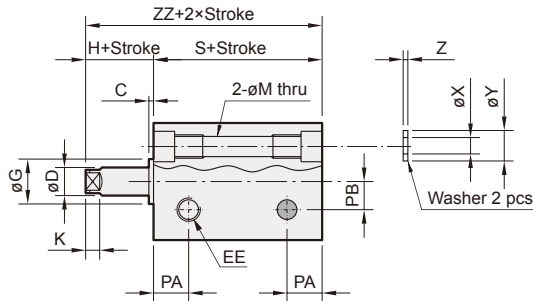
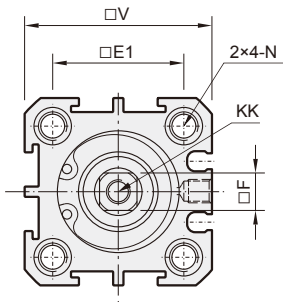
## COMPACT CYLINDER

**14**

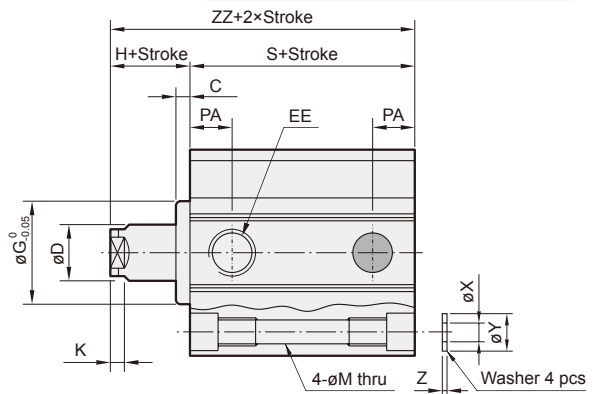
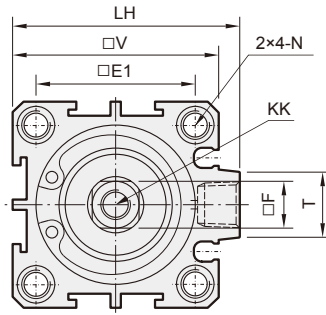
$\varnothing 12, \varnothing 16$



$\varnothing 20, \varnothing 25$



$\varnothing 32\sim\varnothing 50$



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.

$\varnothing 12, \varnothing 16$



$\varnothing 20\sim\varnothing 50$



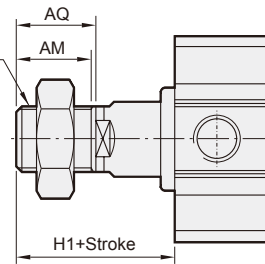
### Single acting – Table for standard stroke

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

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

**13**

Male thread



Code Tube I.D.	AM	AQ	H1	Q
12	10	12	17	M5×0.8
16	10	12	17.5	M5×0.8
20	13	15	20.5	M6×1.0
25	15	17	23	M8×1.25
32	15	18	25	M10×1.25
40	25	28	35	M14×1.5
50	25	28	37	M18×1.5

Code Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	M	N	PA	PB
12	1	6	M5×0.8	16.3	23	5	11	5	3	M3×0.5×6depth	—	4.3	$\varnothing 6.5 \times 4.5$ depth, 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	—	4.3	$\varnothing 6.5 \times 4.5$ depth, 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	—	4.3	$\varnothing 6.5 \times 4.5$ depth, M5×0.8×7.5depth	7.5	—
25	2	10	M5×0.8	28	—	8	17	6	3	M5×0.8×10depth	—	5.1	$\varnothing 9 \times 7$ depth, M6×1.0×10depth	8	—
32	3	12	Rc1/8	34	—	10	22	7	3	M6×1.0×12depth	48.5	5.1	$\varnothing 9 \times 7$ depth, M6×1.0×10depth	9	—
40	3	16	Rc1/8	40	—	14	28	7	3	M8×1.25×12depth	56.5	6.9	$\varnothing 10.5 \times 8$ depth, M8×1.25×12depth	10	—
50	4	20	Rc1/4 (*)	48	—	17	38	9	3	M10×1.5×15depth	70	6.9	$\varnothing 11 \times 8.5$ depth, M8×1.25×16.5depth	10	—

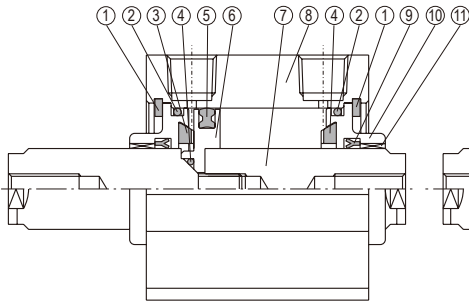
\* Without magnet with stroke=5mm, EE=Rc1/8

Code Tube I.D.	T	V	V1	X	Y	Z
12	—	25	32	3.2	6.3	1
16	—	29	38	3.2	6.3	1
20	—	34	—	3.2	6.3	1
25	—	40	—	4.2	7.8	1
32	14	44	—	4.2	7.8	1
40	14	52	—	6.2	10.3	1.6
50	19	62	—	6.2	10.8	1.6

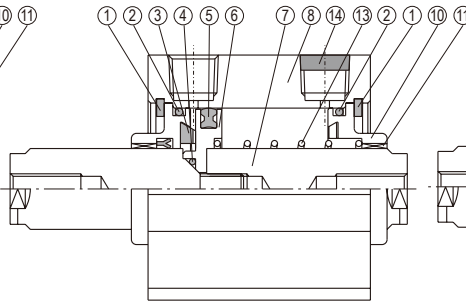
Code Tube I.D.	Without magnet				Magnet			
	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30
	S	ZZ	S	ZZ	S	ZZ	S	ZZ
12	27	32	37	42	37	42	47	52
16	28.5	34	38.5	44	38.5	44	48.5	54
20	29.5	35	39.5	45	39.5	45	49.5	55
25	31	37	41	47	41	47	51	57
32	34.5	41.5	44.5	51.5	44.5	51.5	54.5	61.5
40	36	43	46	53	46	53	56	63

Code Tube I.D.	Without magnet				Magnet			
	Stroke 5~20				Stroke 5~20			
	S	ZZ	S	ZZ	S	ZZ	S	ZZ
50	28	37	38	47				

### Double acting

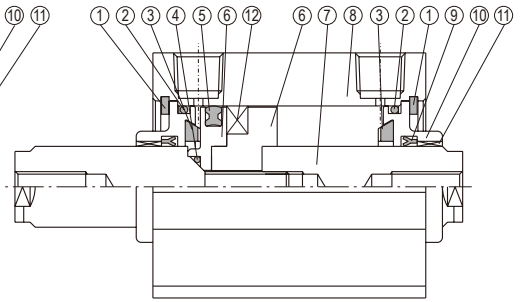


### Single acting



### Double acting

(with magnet)



### Seal kit

Acting type	Rod packing		Piston packing		Cover ring	Piston gasket
	Double acting	Single acting	Double acting	Single acting	Double acting single acting	Double acting single acting
Q'y	2	1	1	1	2	1
ø12	KSYR-6	KSYR-6	OPA-12	OPA-12	d11×w1	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	d6×w1
ø32	KSYR-12	KSYR-12	OPA-32	OPA-32	d28×w2	d8×w1
ø40	KSYR-16	KSYR-16	OPA-40	OPA-40	S-36	d11×w1
ø50	KSYR-20	KSYR-20	OPA-50	OPA-50	AS-31	S-14
ø63	KSYR-20	—	OPA-63	—	AS-35	S-14
ø80	ORA-25	—	OPA-80	—	AS-41	S-18
ø100	SDR-30	—	OPA-100	—	S-95	S-26

### Material

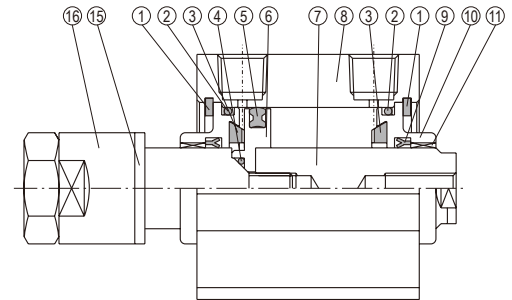
No.	Tube I.D. Part name	12	16	20	25	32	40	50	63	80	100	Q'y	Component parts (inclusion)	Repair kits (inclusion)	
1	Snap ring (Front end)	SUS	Spring steel	SUS	Spring steel							2	●		
2	Cover ring	NBR										2	●	●	
3	Cushion packing	—	NBR										2	●	●
4	Piston gasket	NBR										1	●	●	
5	Piston packing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

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

\*2. Single acting type, Q'y=1

### Double acting

Adjustable stroke



### Order example Component parts

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

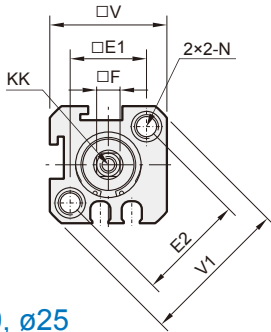
M: With magnet

### Repair kits

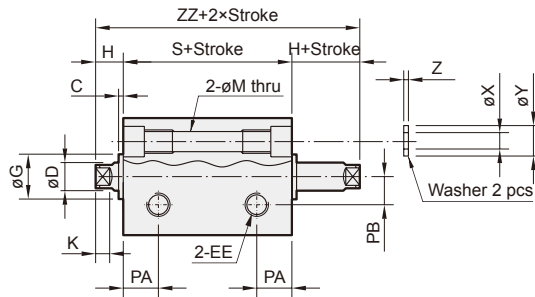
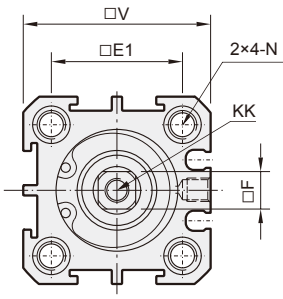
Tube I.D.	Repair kits
ø12	PS-MCJA-2-12
ø16	PS-MCJA-2-16
ø20	PS-MCJA-2-20
ø25	PS-MCJA-2-25
ø32	PS-MCJA-2-32
ø40	PS-MCJA-2-40
ø50	PS-MCJA-2-50
ø63	PS-MCJA-2-63
ø80	PS-MCJA-2-80
ø100	PS-MCJA-2-100

### 22

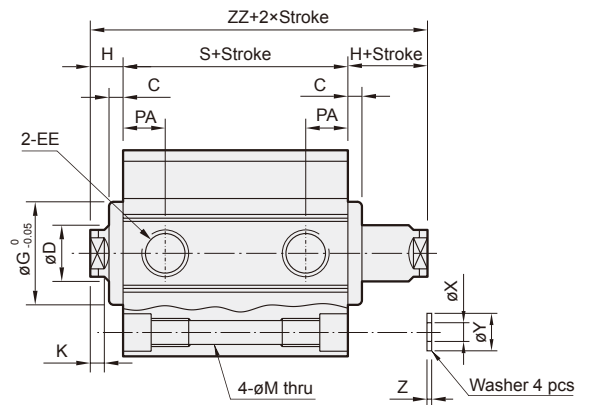
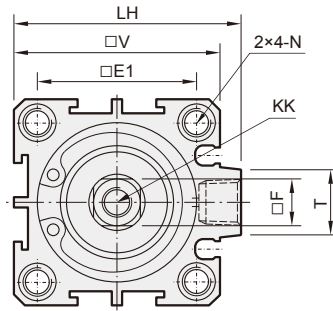
$\phi 12, \phi 16$



$\phi 20, \phi 25$



$\phi 32\sim\phi 100$



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.

$\phi 12, \phi 16$



$\phi 20\sim\phi 100$



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

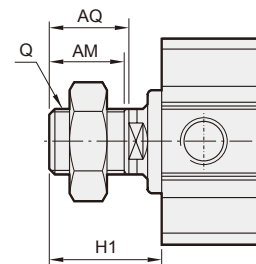
\*1. Without magnet with stroke=5mm, EE=M5×0.8

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

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

### 21

Male thread



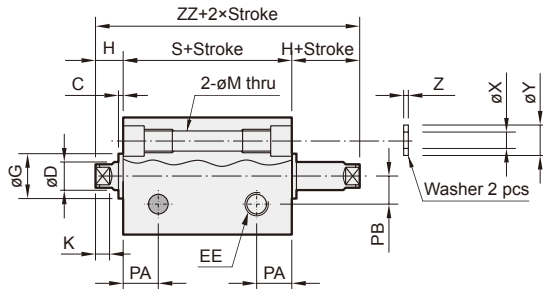
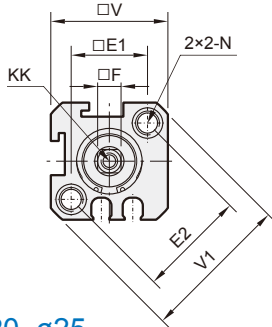
Code Tube I.D.	KK	LH	M	N	PA	PB	Q	T	V	V1	X	Y	Z	Without magnet		Magnet	
														S	ZZ	S	ZZ
12	M3×0.5×6 dp	—	4.3	ø6.5×4.5 dp, M5×0.8×7.5 dp	6.5	6	M5×0.8	—	25	32	3.2	6.3	1	17	27	27	37
16	M3×0.5×6 dp	—	4.3	ø6.5×4.5 dp, M5×0.8×7.5 dp	7	6.5	M5×0.8	—	29	38	3.2	6.3	1	18.5	29.5	28.5	39.5
20	M4×0.7×8 dp	—	4.3	ø6.5×4.5 dp, M5×0.8×7.5 dp	7.5	—	M6×1.0	—	34	—	3.2	6.3	1	19.5	30.5	29.5	40.5
25	M5×0.8×10 dp	—	5.1	ø9×7 dp, M6×1.0×10 dp	8	—	M8×1.25	—	40	—	4.2	7.8	1	21	33	31	43
32	M6×1.0×12 dp	48.5	5.1	ø9×7 dp, M6×1.0×10 dp	9	—	M10×1.25	14	44	—	4.2	7.8	1	24.5	38.5	34.5	48.5
40	M8×1.25×12 dp	56.5	6.9	ø10.5×8 dp, M8×1.25×12 dp	10	—	M14×1.5	14	52	—	6.2	10.3	1.6	26	40	36	50
50	M10×1.5×15 dp	70	6.9	ø11×8.5 dp, M8×1.25×16.5 dp	10	—	M18×1.5	19	62	—	6.2	10.8	1.6	28	46	38	56
63	M10×1.5×15 dp	83	6.9	ø11×8.5 dp, M8×1.25×16.5 dp	12	—	M18×1.5	20	75	—	6.2	10.8	1.6	32	50	42	60
80	M14×1.5×20 dp	102	10.5	ø14×10.5 dp, M12×1.75×12 dp	13	—	M22×1.5	27	94	—	8.2	13.8	1.6	41	63	51	73
100	M18×1.5×20 dp	122	12.3	ø18.5×13 dp, M14×2×17 dp	17	—	M26×1.5	26	114	—	10.2	17.3	2	51	75	61	85



## COMPACT CYLINDER

### 24

$\phi 12, \phi 16$



#### 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.

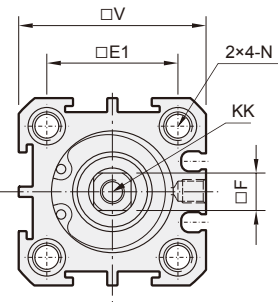
$\phi 12, \phi 16$



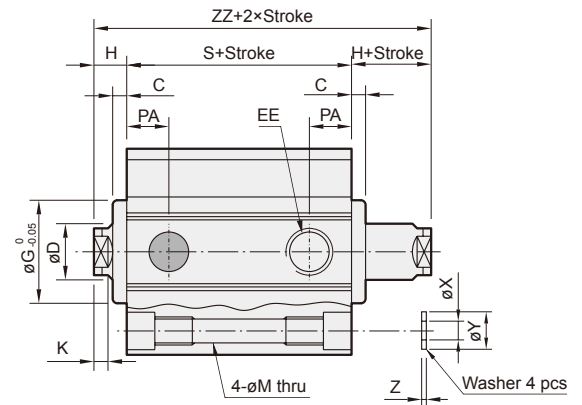
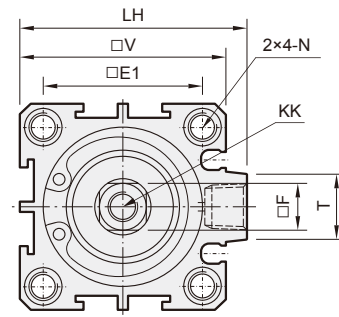
$\phi 20\sim\phi 50$



$\phi 20, \phi 25$



$\phi 32\sim\phi 50$



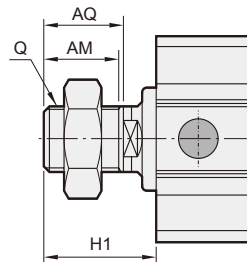
### Single acting – Table for standard stroke

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

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

### 23

#### Male thread



Code Tube I.D.	AM	AQ	H1	Q
12	10	12	17	M5×0.8
16	10	12	17.5	M5×0.8
20	13	15	20.5	M6×1.0
25	15	17	23	M8×1.25
32	15	18	25	M10×1.25
40	25	28	35	M14×1.5
50	25	28	37	M18×1.5

Code Tube I.D.	C	D	EE	E1	E2	F	G	H	K	KK	LH	M	N	PA	PB
12	1	6	M5×0.8	16.3	23	5	11	5	3	M3×0.5×6depth	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, 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	—	4.3	$\phi 6.5 \times 4.5$ depth, M5×0.8×7.5depth	7.5	—
25	2	10	M5×0.8	28	—	8	17	6	3	M5×0.8×10depth	—	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	8	—
32	3	12	Rc1/8	34	—	10	22	7	3	M6×1.0×12depth	48.5	5.1	$\phi 9 \times 7$ depth, M6×1.0×10depth	9	—
40	3	16	Rc1/8	40	—	14	28	7	3	M8×1.25×12depth	56.5	6.9	$\phi 10.5 \times 8$ depth, M8×1.25×12depth	10	—
50	4	20	Rc1/4 (*)	48	—	17	38	9	3	M10×1.5×15depth	70	6.9	$\phi 11 \times 8.5$ depth, M8×1.25×16.5depth	10	—

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

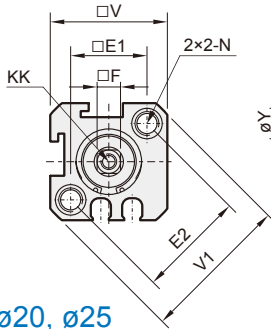
Code Tube I.D.	T	V	V1	X	Y	Z
12	—	25	32	3.2	6.3	1
16	—	29	38	3.2	6.3	1
20	—	34	—	3.2	6.3	1
25	—	40	—	4.2	7.8	1
32	14	44	—	4.2	7.8	1
40	14	52	—	6.2	10.3	1.6
50	19	62	—	6.2	10.8	1.6

Code Tube I.D.	Without magnet				Magnet			
	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30	Stroke 5,10	Stroke 15~30
	S	ZZ	S	ZZ	S	ZZ	S	ZZ
12	27	37	37	47	37	47	47	57
16	28.5	39.5	38.5	49.5	38.5	49.5	48.5	59.5
20	29.5	40.5	39.5	50.5	39.5	50.5	49.5	60.5
25	31	43	41	53	41	53	51	63
32	34.5	48.5	44.5	58.5	44.5	58.5	54.5	68.5
40	36	50	46	60	46	60	56	70

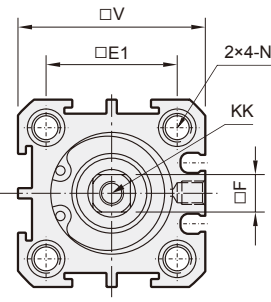
Code Tube I.D.	Without magnet		Magnet	
	Stroke 5~20			
	S	ZZ	S	ZZ
50	28	46	38	56

### 28

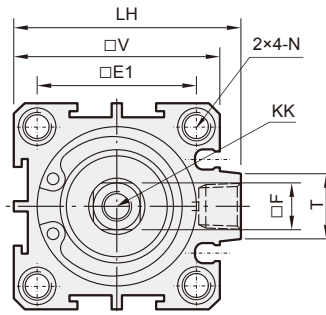
$\phi 12, \phi 16$



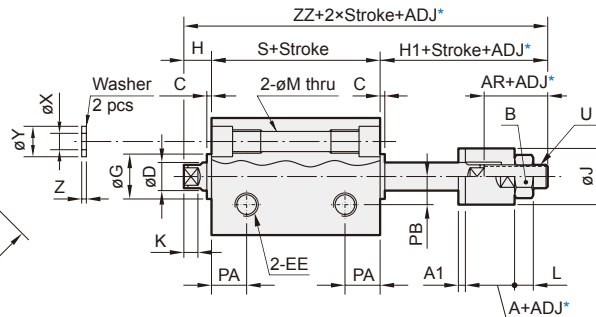
$\phi 20, \phi 25$



$\phi 32\sim\phi 100$



\*ADJ: Adjustable stroke



Long stroke

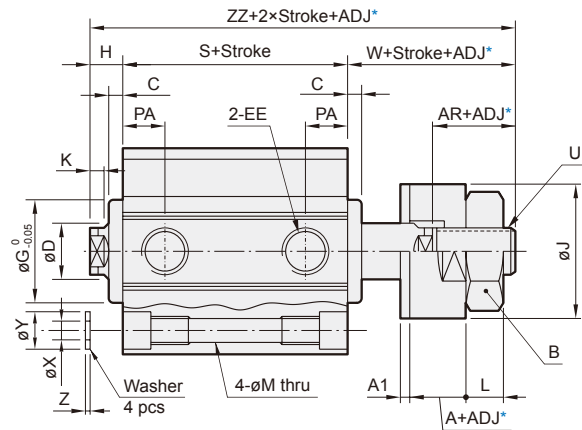
Without counter bore

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

$\phi 12, \phi 16$



$\phi 20, \phi 100$



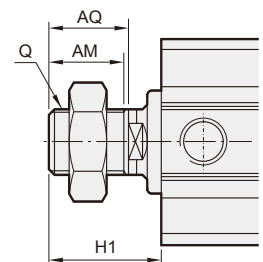
Code Tube I.D.	A	AM	AQ	A1	AR	B	C	D	EE	E1	E2	F	G	H	H1	J	K	KK
12	13	10	12	2	16	8	1	6	M5×0.8	16.3	23	5	11	5	17	12	3	M3×0.5×6 dp
16	13	10	12	2	16.5	8	1.5	6	M5×0.8	19.8	28	5	11	5.5	17.5	12	3	M3×0.5×6 dp
20	15	13	15	2	19	13	1.5	8	M5×0.8	24	—	6	15	5.5	20.5	16	3	M4×0.7×8 dp
25	15	15	17	2	19.5	13	2	10	M5×0.8	28	—	8	17	6	23	16	3	M5×0.8×10 dp
32	12	15	18	2	18	17	3	12	Rc1/8 (*1)	34	—	10	22	7	25	20	3	M6×1.0×12 dp
40	12	25	28	2	20	19	3	16	Rc1/8 (*1)	40	—	14	28	7	35	30	3	M8×1.25×12 dp
50	15	25	28	2	22	24	4	20	Rc1/4 (*2)	48	—	17	38	9	37	40	3	M10×1.5×15 dp
63	15	25	28	2	22	24	4	20	Rc1/4 (*2)	60	—	17	40	9	37	40	3	M10×1.5×15 dp
80	20	30	33	3	33	32	5	25	Rc3/8 (*3)	74	—	22	45	11	44	50	4	M14×1.5×20 dp
100	20	35	38	3	33	32	5	30	Rc3/8 (*3)	90	—	27	55	12	50	50	4	M18×1.5×20 dp

\*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

### 27 Male thread

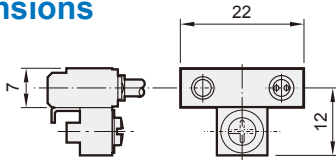


Code Tube I.D.	L	LH	M	N	PA	PB	Q	T	U	V	V1	W	X	Y	Z	Without magnet		Magnet	
																S	ZZ	S	ZZ
12	4	—	4.3	$\phi 6.5 \times 4.5$ dp, M5×0.8×7.5 dp	6.5	6	M5×0.8	—	M5×0.8	25	32	22.5	3.2	6.3	1	17	44.5	27	54.5
16	4	—	4.3	$\phi 6.5 \times 4.5$ dp, M5×0.8×7.5 dp	7	6.5	M5×0.8	—	M5×0.8	29	38	23.5	3.2	6.3	1	18.5	47.5	28.5	57.5
20	5	—	4.3	$\phi 6.5 \times 4.5$ dp, M5×0.8×7.5 dp	7.5	—	M6×1.0	—	M8×1.25	34	—	26	3.2	6.3	1	19.5	51	29.5	61
25	5	—	5.1	$\phi 9 \times 7$ dp, M6×1.0×10 dp	8	—	M8×1.25	—	M8×1.25	40	—	27.2	4.2	7.8	1	21	54.2	31	64.2
32	6	48.5	5.1	$\phi 9 \times 7$ dp, M6×1.0×10 dp	9	—	M10×1.25	14	M10×1.25	44	—	26	4.2	7.8	1	24.5	57.5	34.5	67.5
40	7	56.5	6.9	$\phi 10.5 \times 8$ dp, M8×1.25×12 dp	10	—	M14×1.5	14	M12×1.25	52	—	28	6.2	10.3	1.6	26	61	36	71
50	8	70	6.9	$\phi 11 \times 8.5$ dp, M8×1.25×16.5 dp	10	—	M18×1.5	19	M16×1.5	62	—	31	6.2	10.8	1.6	28	68	38	78
63	8	83	6.9	$\phi 11 \times 8.5$ dp, M8×1.25×16.5 dp	12	—	M18×1.5	20	M16×1.5	75	—	31	6.2	10.8	1.6	32	72	42	82
80	13	102	10.5	$\phi 14 \times 10.5$ dp, M12×1.75×12 dp	13	—	M22×1.5	27	M22×1.5	94	—	44	8.2	13.8	1.6	41	96	51	106
100	13	122	12.3	$\phi 18.5 \times 13$ dp, M14×2×17 dp	17	—	M26×1.5	26	M22×1.5	114	—	44	10.2	17.3	2	51	107	61	117

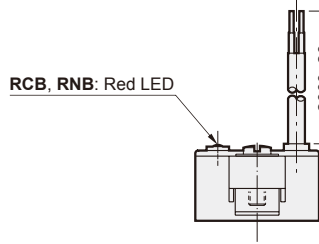
## COMPACT CYLINDER

### Dimensions

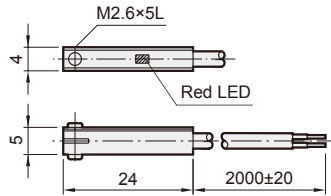
**RCB  
RNB**



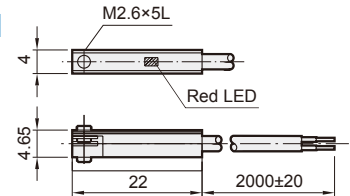
RCB, RNB: Red LED



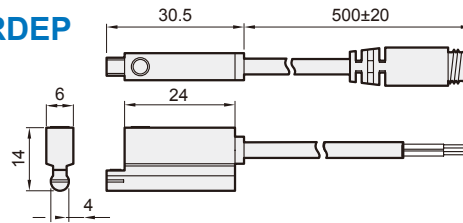
**RCE**



**RCE1  
RNE**

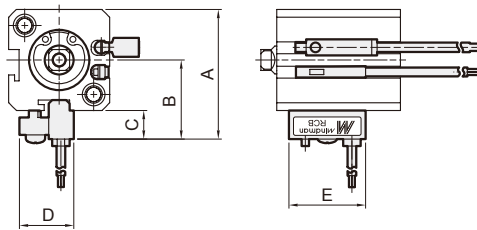


**RDEP**

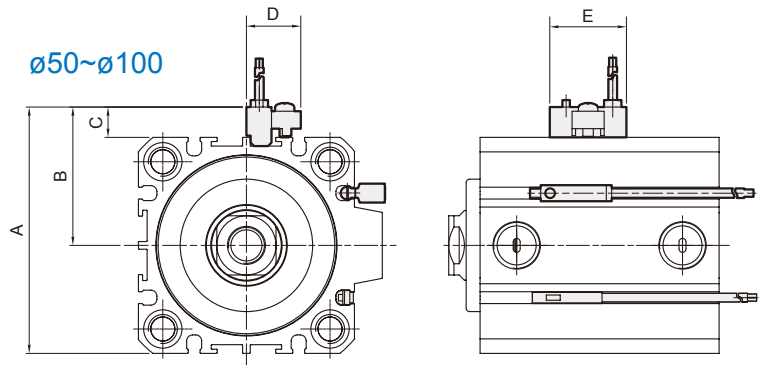


### Installation of sensor switch

$\varnothing 12\sim\varnothing 40$



$\varnothing 50\sim\varnothing 100$



### Order example

RCE1 — □

MODEL

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

WIRE LENGTH

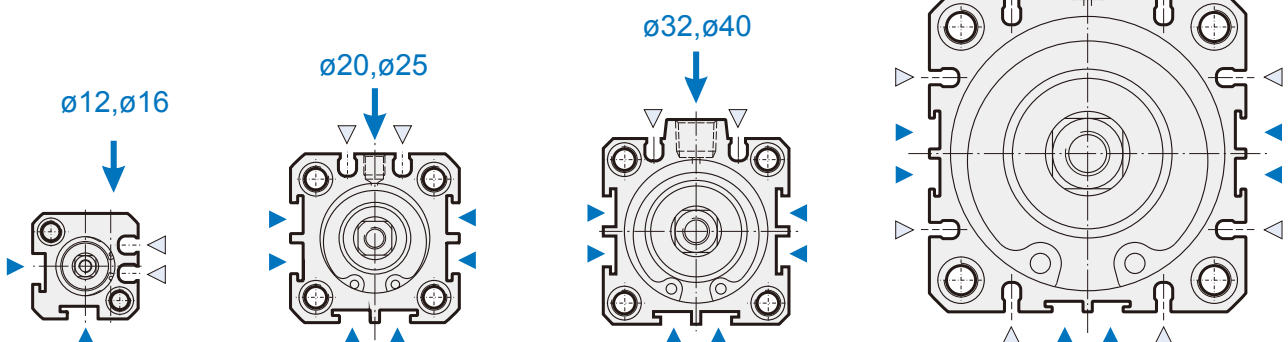
Blank: L=2000m  
1M: L=1000m  
QD: M8 3Pin connector  
EQD: M8 3Pin connector

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 ▼ RCE, RCE1, RDEP switch ↓ Port




### Cylinder weight

Unit: g

Model	Basic weight MCJA-11	Basic weight (magnet) MCJA-11	Stroke 5 mm MCJA-11	Basic weight MCJA-12	Basic weight (magnet) MCJA-12	Stroke 5 mm MCJA-12
Tube I.D.						
$\varnothing 12$	43	45	6	41	43	6
$\varnothing 16$	60	65	8	57	63	8
$\varnothing 20$	84	92	11	79	87	11
$\varnothing 25$	101	114	14	106	120	14
$\varnothing 32$	170	187	16	155	173	16
$\varnothing 40$	274	300	23	235	261	23
$\varnothing 50$	448	479	32	384	415	32
$\varnothing 63$	635	699	40	571	634	40
$\varnothing 80$	1178	1275	61	1057	1153	61
$\varnothing 100$	2058	2231	83	1806	1980	83

\* The weight is based on 5 mm stroke.

### Accessories weight

Model	Rod nut
Tube I.D.	
$\varnothing 12$	1
$\varnothing 16$	1
$\varnothing 20$	2
$\varnothing 25$	4
$\varnothing 32$	8
$\varnothing 40$	18
$\varnothing 50$	32
$\varnothing 63$	32
$\varnothing 80$	56
$\varnothing 100$	56