

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.
- Sensor can be mounted on any one of three faces on 12 and 16 bore and on four faces on 20~100 bore.

Specification

Model	MCJQ				
Acting type	Double acting				
Tube I.D.(mm)	12, 16	20, 25	32, 40	50, 63	80, 100
Port size	M5×0.8		Rc1/8	Rc1/4	Rc3/8
Medium	Air				
Operating pressure range	0.07~1	0.05~1 MPa			
Proof pressure	1.5 MPa				
Ambient temperature	-5°C~+60°C (No freezing)				
Available speed range	50~500 mm/sec				
Sensor switch (※)	RCE, RCE1, RDEP		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.	Standard stroke	Long stroke (mm)
φ 12, 16	5, 10, 15, 20, 25, 30	35, 40, 45, 50, 75, 100
φ 20	5, 10, 15, 20, 25,	75, 100, 125, 150, 175, 200
	30, 35, 40, 45, 50	
φ 25	5, 10, 15, 20, 25, 30,	125, 150, 175, 200, 250, 300
	35, 40, 45, 50, 75, 100	
φ 32~80	5, 10, 15, 20, 25, 30,	125, 150, 175, 200, 250, 300
	35, 40, 45, 50, 75, 100	

Tube I.D.	Standard stroke (mm)
φ 100	5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 75, 100

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

Order example

MCJQ – 12 – 20 – 25M – F – G

MODEL: 1: Single Rod



TUBE I.D.: 12

STROKE: 20

M: Magnet

PORT THREAD: Blank: Standard, F: Rear flange

STYLE






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

PORT THREAD: Blank: M5×0.8 (for φ 12~φ 25), Blank: Rc thread, G: G thread, NPT: NPT thread (for φ 32~φ 100)

Mounting accessories

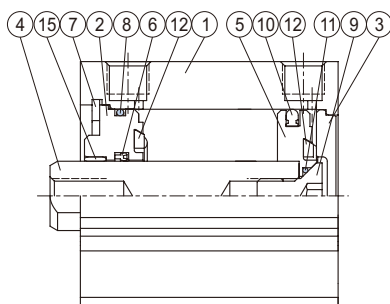
FAC – MCJQ – 20

MOUNTING TYPE

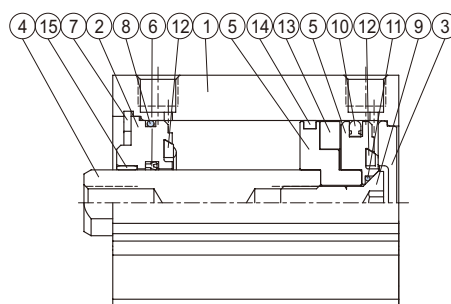
	LB
	CB
	FAC
	FBC
	RF

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

Standard stroke



Standard stroke (with magnet)



Standard stroke — Material

No.	Part name	Tube I.D.									Note	Q'y	Component parts (inclusion)	Repair kits (inclusion)	
		12	16	20	25	32	40	50	63	80					100
1	Body	Aluminum alloy									Hard anodized	1			
2	Rod cover	Aluminum alloy									ϕ 12- ϕ 32 hard anodized ϕ 40- ϕ 100 anodized	1	●		
3	End cover	Aluminum alloy									Anodized	1	●		
4	Piston rod	With magnet	Stainless steel			Carbor steel							1		
		Without magnet	SUS	Carbor steel										1	
5	Piston	Aluminum alloy									ϕ 12-32 anodized	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	Plastic										1	●		
14	Wear ring	—			Teflon							1	●		
15	Bush	—			Bearing alloy							1	●		

Standard stroke — Seal kit

	Rod packing	Piston packing	Cover ring	Piston gasket
Acting type	Double action			
Qty.	1	1	1	1
12	KSYR-6	OPA-12	S-11	d4 × w1
16	KSYR-8	OPA-16	S-14	d5 × w1
20	KSYR-10A	OPA-20	S-18	d6 × w1
25	KSYR-12	OPA-25	S-22.4	d8 × w1
32	KSYR-16	OPA-32	S-28	S-9
40	KSYR-16	OPA-40	S-36	S-10
50	KSYR-20	OPA-50	S-46	S-16
63	KSYR-20	OPA-63	S-60	S-16
80	ORA-25	OPA-80	G-75	d20 × w1
100	ORA-30	OPA-100	G-95	S-26

Order example

Component parts

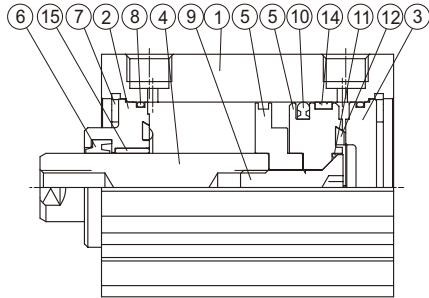
Tube I.D.	Component parts
ϕ 12	CP-MCJQ-12-12(M)
ϕ 16	CP-MCJQ-12-16(M)
ϕ 20	CP-MCJQ-12-20(M)
ϕ 25	CP-MCJQ-12-25(M)
ϕ 32	CP-MCJQ-12-32(M)
ϕ 40	CP-MCJQ-12-40(M)
ϕ 50	CP-MCJQ-12-50(M)
ϕ 63	CP-MCJQ-12-63(M)
ϕ 80	CP-MCJQ-12-80(M)
ϕ 100	CP-MCJQ-12-100(M)

Repair kits

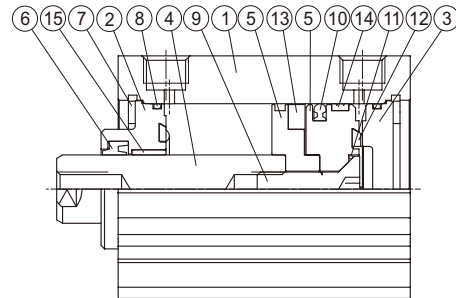
Tube I.D.	Repair kits
ϕ 12	PS-MCJQ-12-12
ϕ 16	PS-MCJQ-12-16
ϕ 20	PS-MCJQ-12-20
ϕ 25	PS-MCJQ-12-25
ϕ 32	PS-MCJQ-12-32
ϕ 40	PS-MCJQ-12-40
ϕ 50	PS-MCJQ-12-50
ϕ 63	PS-MCJQ-12-63
ϕ 80	PS-MCJQ-12-80
ϕ 100	PS-MCJQ-12-100

M: With magnet

Long stroke



Long stroke
(with magnet)



Long stroke — Material

No.	Part name	Tube I.D.								Note	Q'y	Component parts (inclusion)	Repair kits (inclusion)
		12	16	20	25	32	40	50	63				
1	Body	Aluminum alloy								Hard anodized	1		
2	Rod cover	Aluminum alloy								ϕ 12- ϕ 32 hard anodized ϕ 40- ϕ 80 anodized	1	●	
3	End cover	Aluminum alloy								Anodized	1	●	
4	Piston rod	With magnet	Stainless steel			Carbor steel						1	
		Without magnet	SUS	Carbor steel									1
5	Piston	Aluminum alloy								ϕ 12-32 anodized	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	Plastic									1	●	
14	Wear ring	Teflon									1	●	
15	Bush	—			Bearing alloy						1	●	

Long stroke — Seal kit

	Rod packing	Piston packing	Cover ring	Piston gasket
Acting type	Double action			
Qty.	1	1	2	1
12	KSYR-6	OPA-12	S-11	d4 × w1
16	KSYR-8	OPA-16	S-14	d5 × w1
20	KSYR-10A	OPA-20	S-18	d6 × w1
25	KSYR-12	OPA-25	S-22	d8 × w1
32	KSYR-16	OPA-32	d28 × w2	S-9
40	ORA-16	OPA-40	S-36	S-10
50	ORA-20	OPA-50	S-46	S-16
63	ORA-20	OPA-63	S-60	S-16
80	ORA-25	OPA-80	AS-41 G-75	d20 × w1

Order example

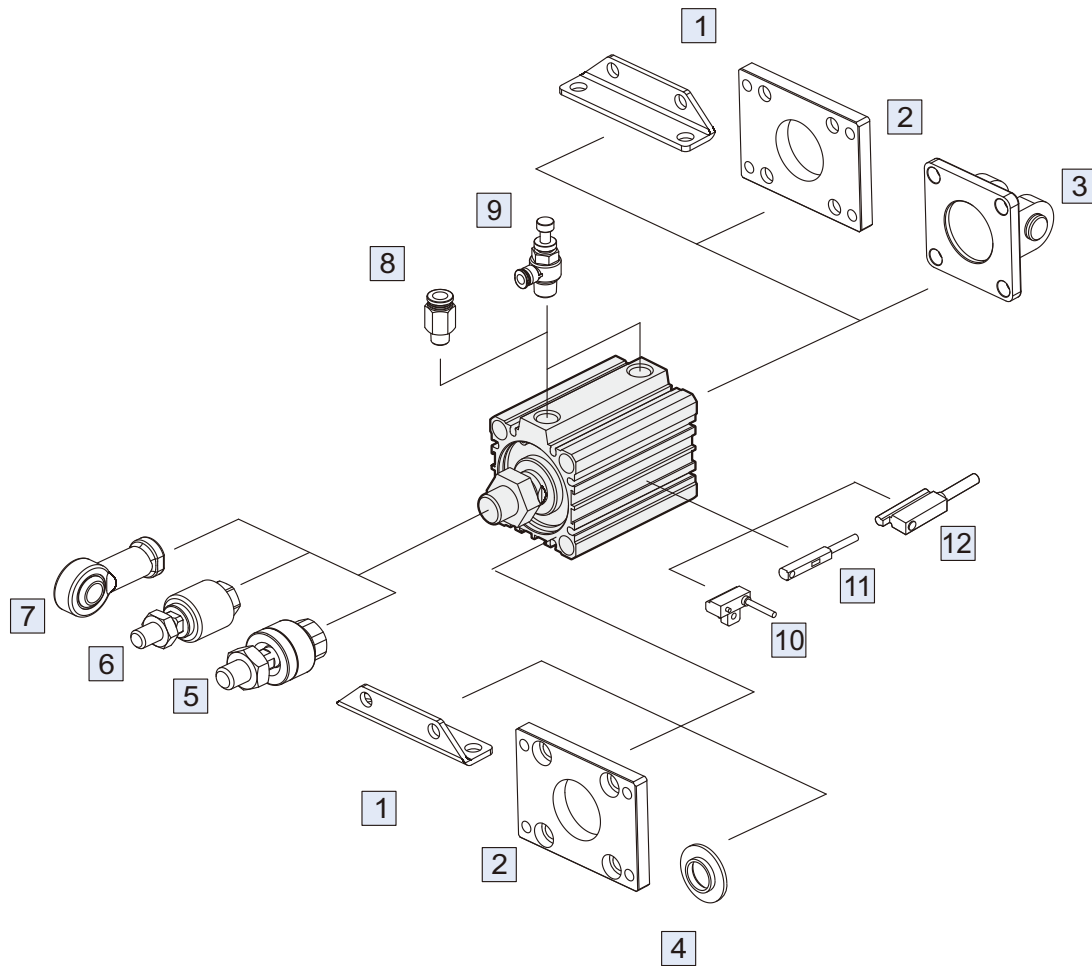
Component parts

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

Repair kits

Tube I.D.	Repair kits
ϕ 12	PSL-MCJQ-12-12
ϕ 16	PSL-MCJQ-12-16
ϕ 20	PSL-MCJQ-12-20
ϕ 25	PSL-MCJQ-12-25
ϕ 32	PSL-MCJQ-12-32
ϕ 40	PSL-MCJQ-12-40
ϕ 50	PSL-MCJQ-12-50
ϕ 63	PSL-MCJQ-12-63
ϕ 80	PSL-MCJQ-12-80

M: With magnet



No.	Accessories	Page
1	Mounting accessories LB	2-9, 11
2	Mounting accessories FAC/FBC	2-9, 10, 12, 13
3	Mounting accessories CB+PIN	2-10, 14
4	Mounting accessories RF	2-15
5	Floating joint MFC	8-2
6	Floating joint MFCS	8-4
7	Female rod ends PHS	8-5

No.	Accessories	Page
8	Fitting PC (PISCO)	8-5 (Vol.1)
9	Speed controller JSC (PISCO)	8-18 (Vol.1)
10	Sensor switch RCB	8-8
11	Sensor switch RCE/RCE1	8-10
12	Sensor switch RDEP	8-15

COMPACT CYLINDER

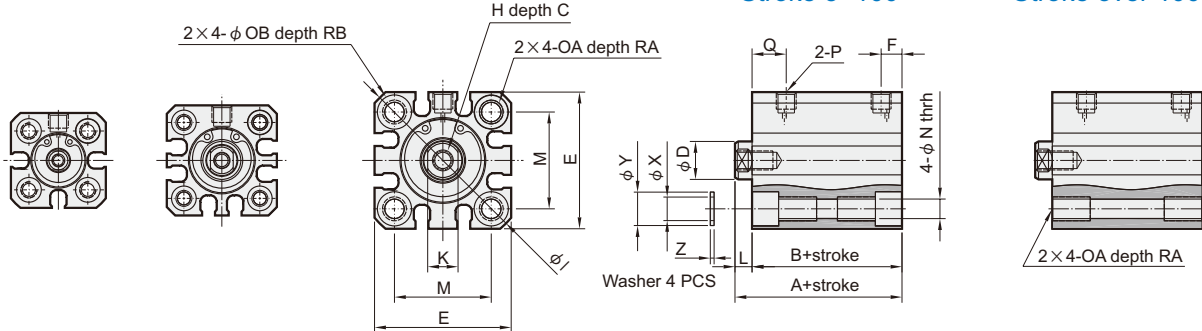
$\phi 12$

$\phi 16$

$\phi 20, \phi 25$

Stroke 5~100

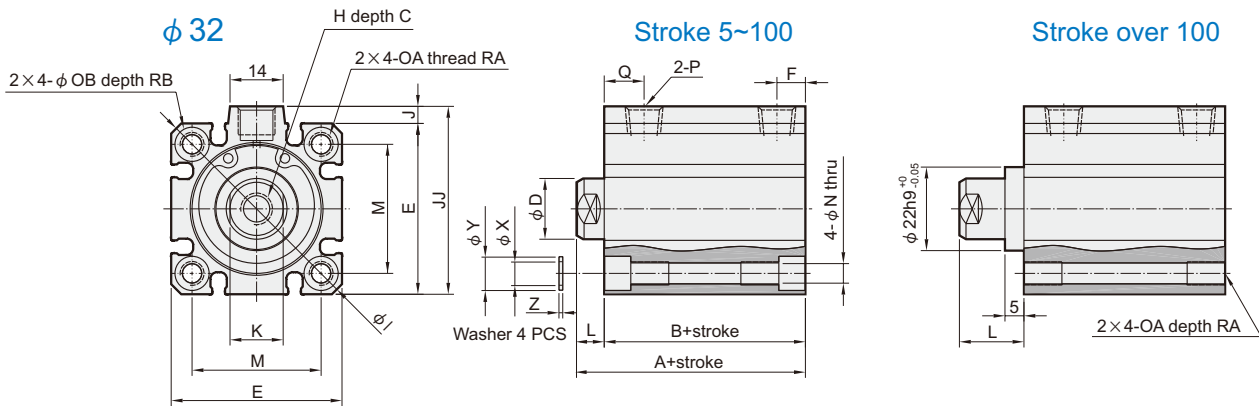
Stroke over 100



$\phi 32$

Stroke 5~100

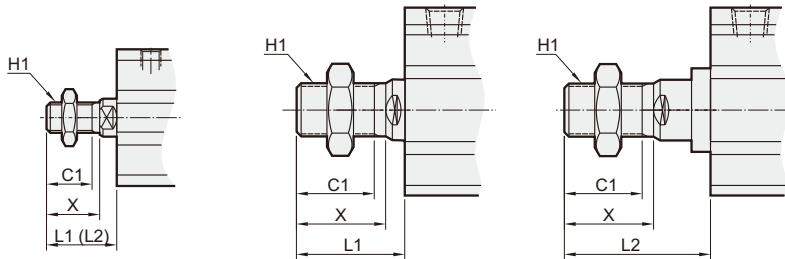
Stroke over 100



$\phi 12 \sim 25$

$\phi 32$ for Stroke 5~100

$\phi 32$ for Stroke over 100



※ L1 :Standard stroke, L2 :Long stroke

MCJQ-11 male thread size

Code Tube I.D.	C1	H1	L1	L2	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

$\phi 12 \sim 25$

Code Tube I.D.	Standard stroke										Long stroke																					
	Without magnet					Magnet					Stroke range	A	B	F	L	C	D	E	H	I	K	M	N	OA	OB	P	Q	RA	RB	X	Y	Z
	A	B	F	L	A	B	F	L																								
12	5~30	20.5	17	5	3.5	25.5	22	5	3.5	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	5	3.5	25.5	22	5	3.5	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	5.5	4.5	34	29.5	5.5	4.5	51~200	55.5	41	9	14.5	7	10	36	M5×0.8	47	8	25.5	5.4	M6×1.0	9	M5×0.8	9	10	7	6.2	8.8	1	
25	5~50	27.5	22.5	5.5	5	37.5	32.5	5.5	5	51~300	59	44	11	15	12	12	40	M6×1.0	52	10	28	5.4	M6×1.0	9	M5×0.8	11	10	7	6.2	8.8	1	

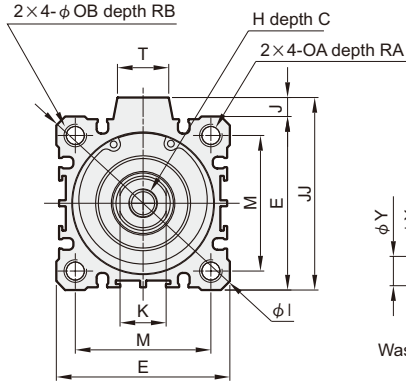
$\phi 32$

Code Tube I.D.	Standard stroke							Long stroke																									
	Stroke range	Without magnet		Magnet			F	L	Q	Stroke range	A	B	F	L	Q	P	C	D	E	H	I	J	JJ	K	M	N	OA	OB	RA	RB	X	Y	Z
		A	B	A	B																												
32	5~50	30	23	40	33	7.5	7	10.5	101~300	62.5	45.5	12.5	17	12.5	Rc1/8 (※1)	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	
	51~100	40	33	40	33	7.5	7	10.5																									

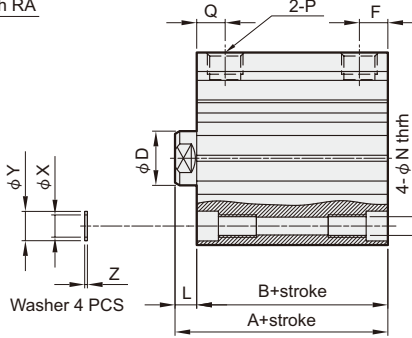
※1. Without magnet with stroke=5mm, P=M5×0.8、Q=11.5、F=5.5

COMPACT CYLINDER

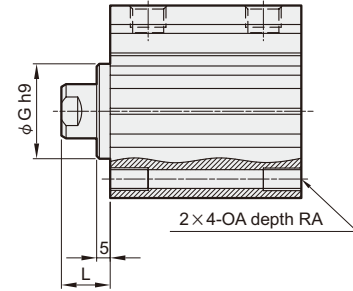
$\phi 50 \sim \phi 100$



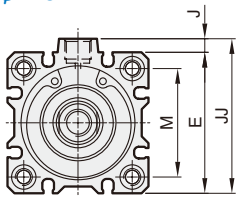
Stroke 5~100



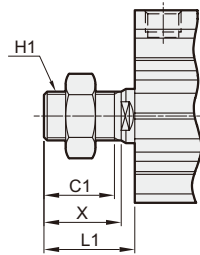
Stroke over 100



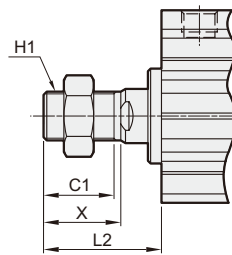
$\phi 40$



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



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



MCJQ-11 male thread size

Code Tube I.D.	C1	H1	L1	L2	X
40	20.5	M14×1.5	28.5	38.5	23.5
50	26	M18×1.5	33.5	43.5	28.5
63	26	M18×1.5	33.5	43.5	28.5
80	32.5	M22×1.5	43.5	53.5	35.5
100	32.5	M26×1.5	43.5	—	35.5

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

Code Tube I.D.	C	D	E	G ^{h9}	H	I	J	JJ	K	M	N	OA	OB	P	RA	RB	T	X	Y	Z
40	13	16	52	28 ⁺⁰ _{-0.052}	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 ⁺⁰ _{-0.062}	M10×1.5	86	7	71	17	50	6.6	M8×1.25	11	Rc1/4 (※1)	14	8	19	8.2	10.8	1
63	15	20	77	35 ⁺⁰ _{-0.062}	M10×1.5	103	7	84	17	60	9	M10×1.5	14	Rc1/4 (※2)	18	10.5	19	10.2	13.8	1
80	21	25	98	43 ⁺⁰ _{-0.062}	M16×2.0	132	6	104	22	77	11	M12×1.75	17.5	Rc3/8 (※3)	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 (※3)	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

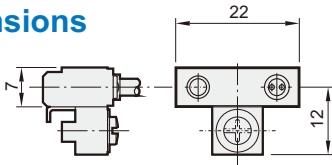
MCJQ Installation of sensor switch $\phi 12 \sim \phi 100$

COMPACT CYLINDER



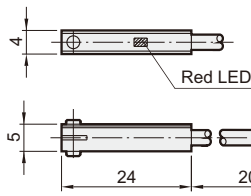
Dimensions

RCB
RNB

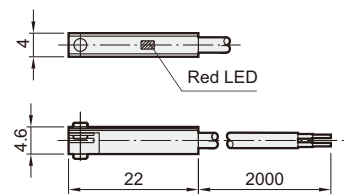


RCB: Green LED
RNB: Red LED

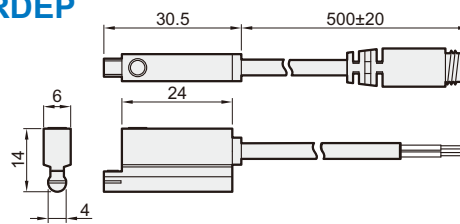
RCE



RCE1
RNE

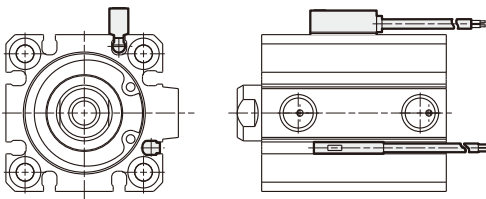


RDEP

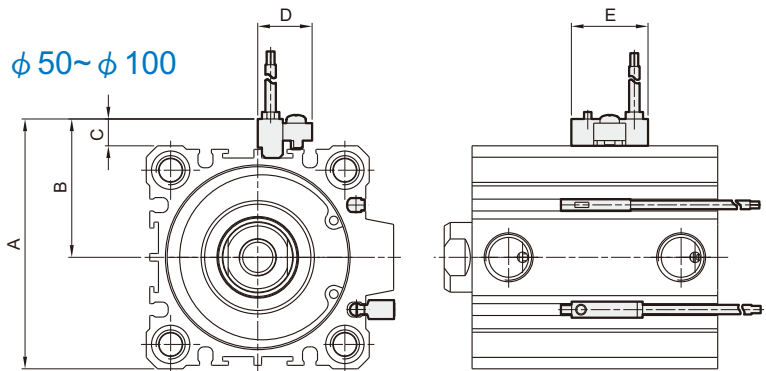


Installation of sensor switch

$\phi 12 \sim \phi 40$



$\phi 50 \sim \phi 100$



Order example

RCE1 — □

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
50	72	40	8	16	22
63	85	46.5	8	16	22
80	106	57	8	16	22
100	125	66.5	8	16	22

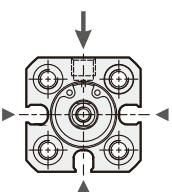
Description

▽ RCB switch

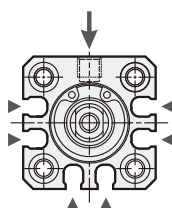
Port

▽ RCE, RCE1, RDEP switch

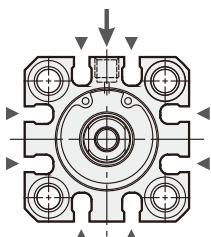
$\phi 12$



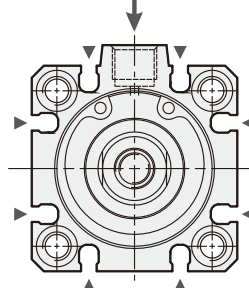
$\phi 16$



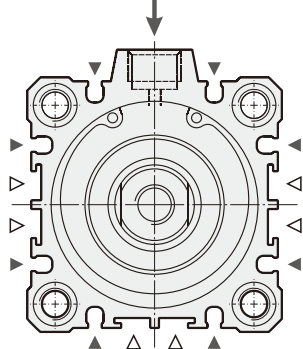
$\phi 20, \phi 25$



$\phi 32, \phi 40$



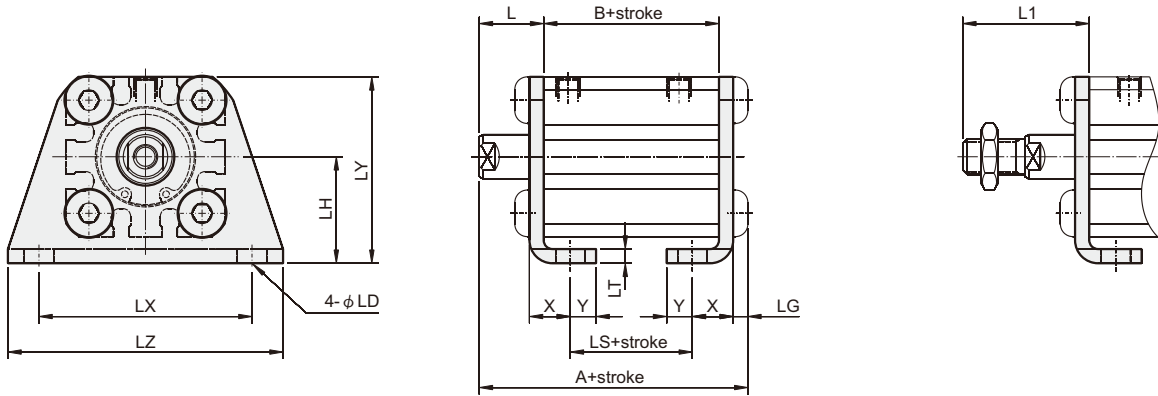
$\phi 50 \sim \phi 100$



LB

Female thread

Male thread

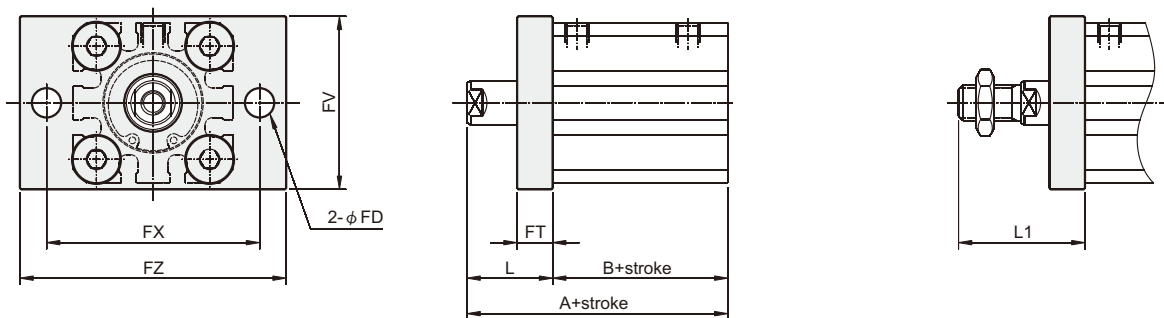


Code Tube I.D.	Stroke range	Standard stroke						Long stroke			L	L1	LD	LG	LH	LT	LX	LY	LZ	X	Y	
		Without magnet			Magnet			Stroke range	A	B												LS
		A	B	LS	A	B	LS															
12	5~30	35.3	17	5	40.3	22	10	35~100	50.3	32	20	13.5	24	4.5	2.8	17	2	34	29.5	44	8	4.5
16	5~30	35.3	17	5	40.3	22	10	35~100	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

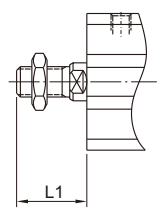
Male thread



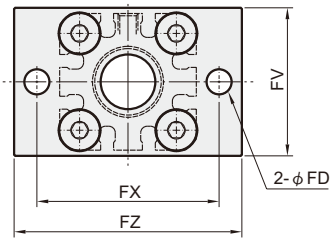
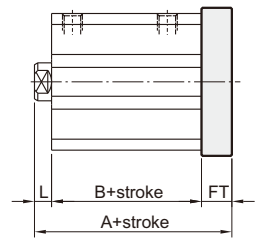
Code Tube I.D.	Stroke range	Standard stroke				Long stroke		FD	FT	FV	FX	FZ	L	L1	
		Without magnet		Magnet		Stroke range	A								B
		A	B	A	B										
12	5~30	30.5	17	35.5	22	35~100	45.5	32	4.5	5.5	25	45	55	13.5	24
16	5~30	30.5	17	35.5	22	35~100	45.5	32	4.5	5.5	30	45	55	13.5	25.5
20	5~50	34	19.5	44	29.5	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

FBC

Male thread



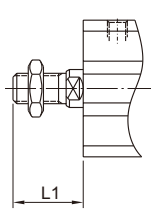
Female thread



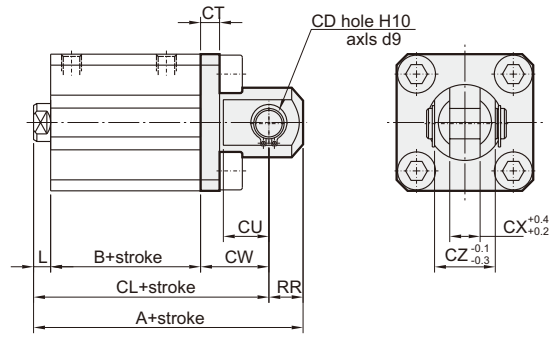
Code Tube I.D.	Stroke range	Standard stroke								Long stroke					FD	FT	FV	FX	FZ
		Without magnet				Magnet				Stroke range	A	B	L	L1					
		A	B	L	L1	A	B	L	L1										
12	5~30	26	17	3.5	14	31	22	3.5	14	35~100	51	32	13.5	24	4.5	5.5	25	45	55
16	5~30	26	17	3.5	15.5	31	22	3.5	15.5	35~100	51	32	13.5	25.5	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

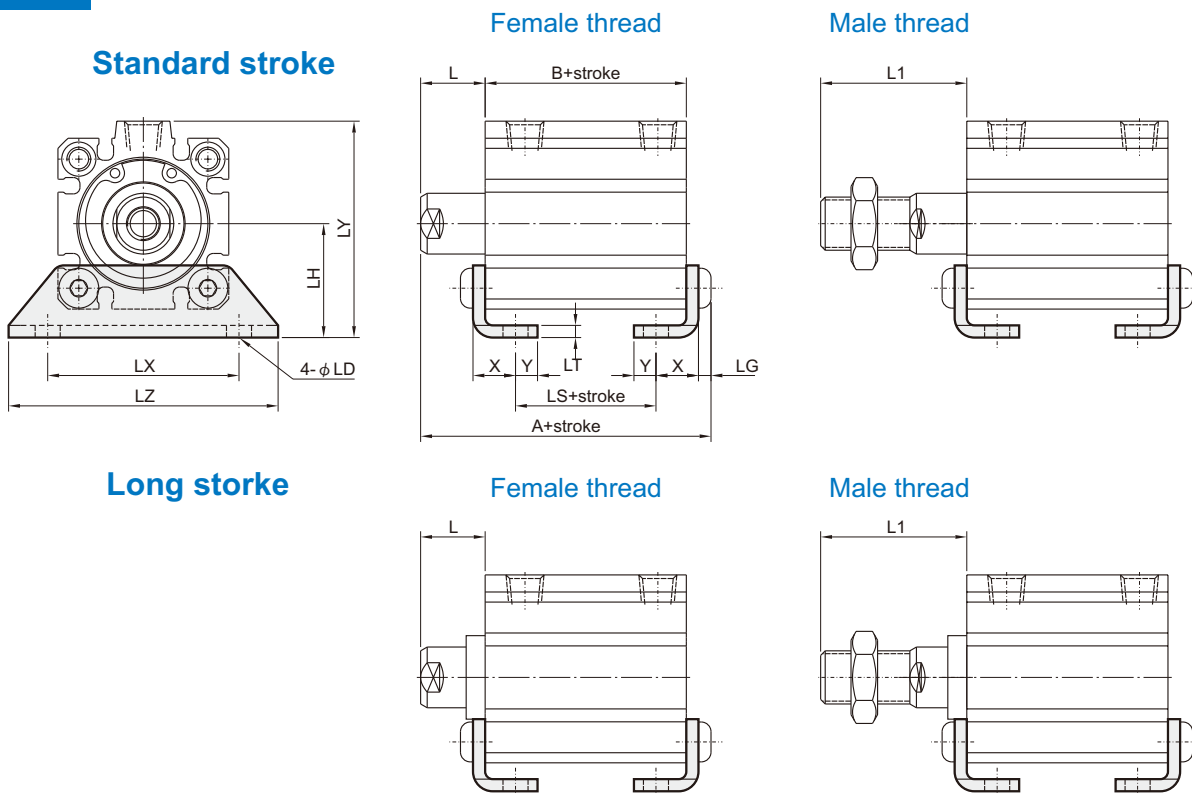


Female thread



Code Tube I.D.	Stroke range	Standard stroke										Long stroke					CD	CT	CU	CW	CX	CZ	RR	
		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

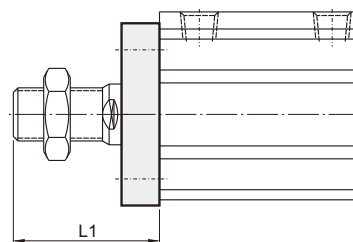
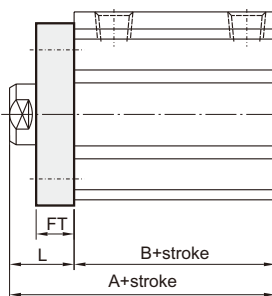
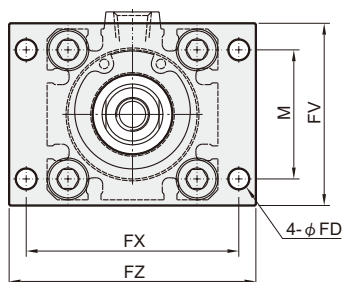


Code Tube I.D.	Standard stroke						Long stroke						L	L1	LD	LG	LH	LT	LX	LY	LZ	X	Y
	Stroke range	Without magnet			Magnet			Stroke range	A	B	LS												
		A	B	LS	A	B	LS																
32	5~50	47.2	23	7	57.2	33	17	125~300	69.7	45.5	29.5	17	38.5	6.6	4	30	3.2	57	57	71	11.2	5.8	
	75, 100	57.2	33	17																			
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

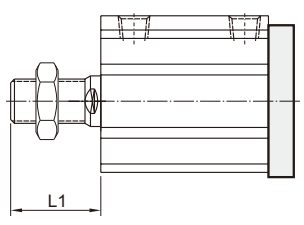


Code Tube I.D.	Standard stroke				Long stroke			FD	FT	FV	FX	FZ	L	L1	M	
	Stroke range	Without magnet		Magnet		Stroke range	A									B
		A	B	A	B											
32	5~50	40	23	50	33	125~300	62.5	45.5	5.5	8	48	56	65	17	38.5	34
	75, 100	50	33													
40	5~50	46.5	29.5	56.5	39.5	125~300	72	55	5.5	8	54	62	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													

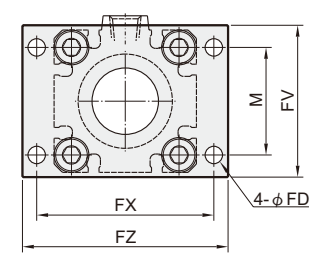
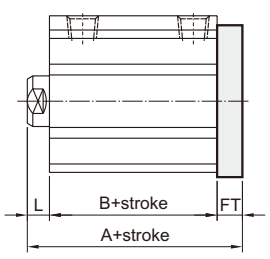
FBC

Standard stroke

Male thread

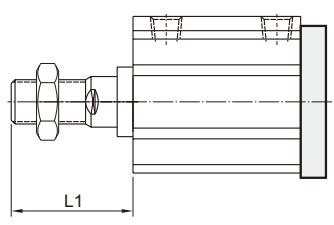


Female thread

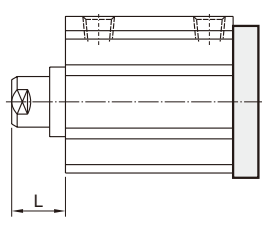


Long storke

Male thread



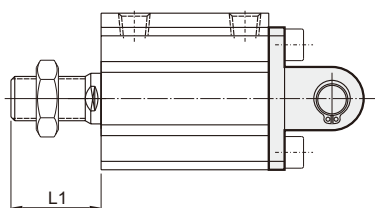
Female thread



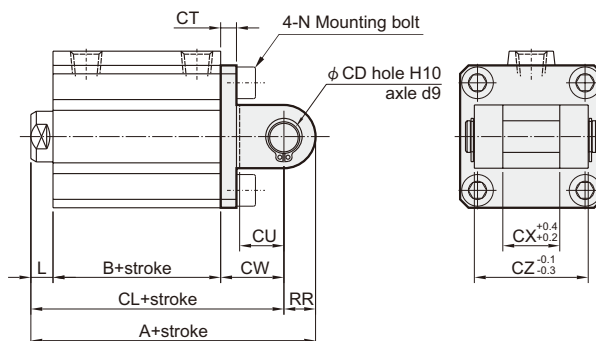
Code	Standard stroke								Long stroke				FD	FT	FV	FX	FZ	M
	Stroke range	Without magnet		Magnet		L	L1	Stroke range	A	B	L	L1						
		A	B	A	B													
32	5~50	38	23	48	33	7	28.5	125~300	70.5	45.5	17	38.5	5.5	8	48	56	65	34
	75, 100	48	33															
40	5~50	44.5	29.5	54.5	39.5	7	28.5	125~300	80	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

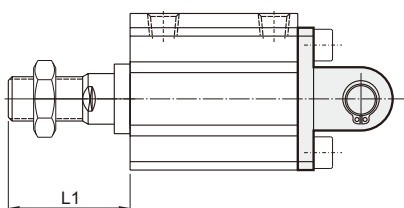


Female thread

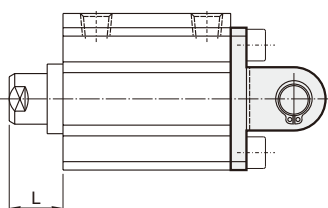


Long storke

Male thread

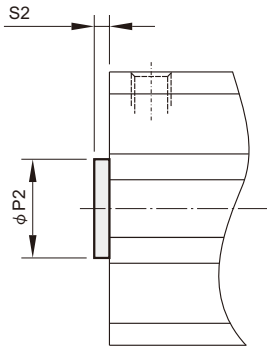


Female thread



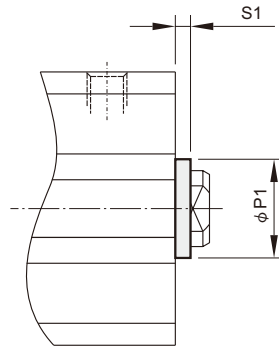
Code Tube I.D.	Standard stroke									Long stroke						CD	CT	CU	CW	CX	CZ	N	RR
	Stroke range	Without magnet			Magnet			L	L1	Stroke range	A	B	CL	L	L1								
		A	B	CL	A	B	CL																
32	5~50	60	23	50	70	33	60	7	28.5	125~300	92.5	45.5	82.5	17	38.5	10	5	14	20	18	36	M6×1.0	10
	75, 100	70	33	60	70	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
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	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
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	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
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	98	46	84	8	33.5	125~300	119	57	105	18	43.5	14	8	20	30	22	44	M10×1.5	14
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	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
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	142	63	120	12	43.5	125~300	—	—	—	—	—	22	13	31	45	32	64	M12×1.75	22

F Rear flange



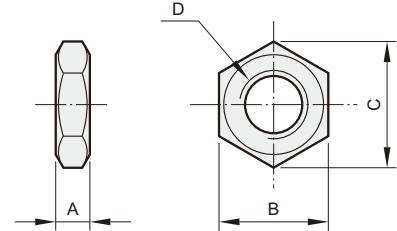
Code Tube I.D.	P2 ^{h9}	S2
12	6	1.5
16	10	1.5
20	13	2
25	15	2
32	21	2
40	28	2
50	35	2
63	35	2
80	43	2
100	59	2

RF



Code Tube I.D.	P1 ^{h9}	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

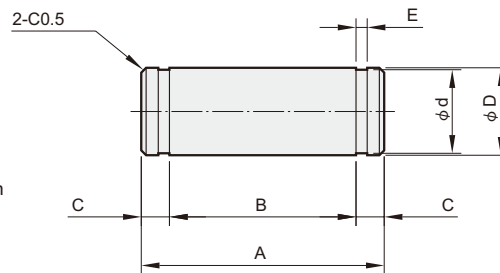
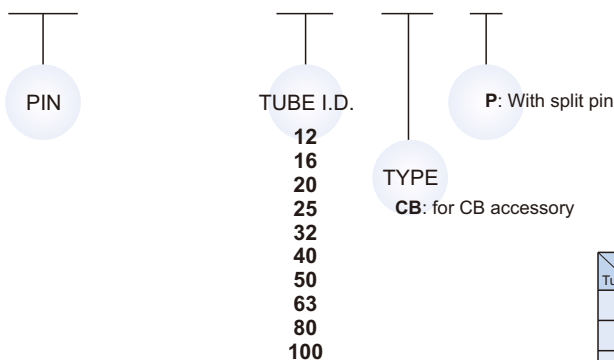


Code Tube I.D.	A	B	C	D
12	4	8	9.2	M5×0.8
16	5	10	11.5	M6×1.0
20	5	13	15	M8×1.25
25	6	17	19.6	M10×1.25
32,40	8	22	25.4	M14×1.5
50,63	11	27	31.4	M18×1.5
80	13	32	37	M22×1.5
100	16	41	47.3	M26×1.5

Pin for CB

Order example

PIN — MCJQ — 20 — CB — P



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