

# MCCG series

## ROUND CYLINDERS



### Features:

- Many mounting options available.
- Interchangeable with other manufacturers.

### Specification:

Model	MCCG					
Acting type	Double acting					
Tube I.D. (mm)	20	25	32	40	50	63
Port size Rc(PT)	PT 1/8				PT 1/4	
Medium	Air					
Max operating pressure	9.9 kgf/cm <sup>2</sup>					
Min operating pressure	0.5 kgf/cm <sup>2</sup>					
Proof pressure	15 kgf/cm <sup>2</sup>					
Stroke length tolerance	1~1000 ST <sup>+1.4</sup> <sub>-0mm</sub>					
Ambient temperature	-5~+60℃ (No freezing)					
Lubrication	Not required					
Available speed range	50~500 mm/sec					
Cushion	With rubber cushion pad					
Sensor switch	RCA					
Sensor switch holder	BGA20	BGA25	BGA32	BGA40	BGA50	BGA63

### Table for standard stroke

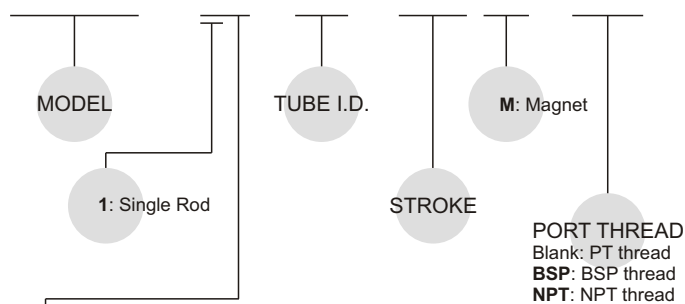
Tube I.D.(mm)	Stroke (mm)
φ 20	25, 50, 75, 100, 125, 150, 200
φ 25, 32, 40, φ 50, 63	25, 50, 75, 100, 125, 150, 200, 250, 300

### Long stroke:

Please reconfirm the dimension with our sales department when the stroke over our standard.

### Order example:

**MCCG — 11 — 40 — 100 M — BSP**



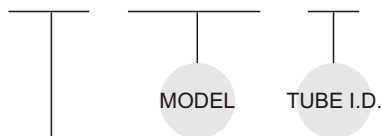
### STYLE:

Code	Symbol	Description
1	1	Double acting / Male thread

※ Order example for special specification, refer to page H-03.

### Mounting accessories:

**FAC — MCCG — 40**

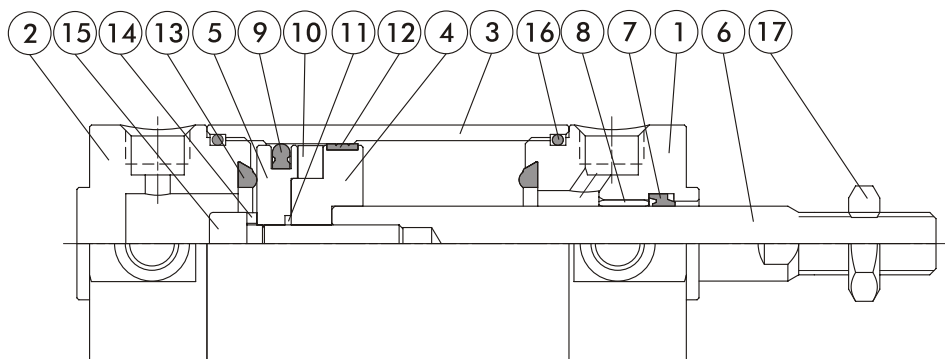


### MOUNTING TYPE

	LB
	CB
	FAC
	FBC
	SDB-R
	SDB-H
	CB+SDB
	TA
	TB
	Y
	I

# MCCG / MCCN Inside structure & Parts list

## ROUND CYLINDERS



### Material

No.	Part name	Material	Note
1	Rod cover	Aluminum alloy	
2	Head cover	Aluminum alloy	
3	Tube	Aluminum alloy	
4	Piston-R	Aluminum alloy	φ 25 - Polyurethane
5	Piston-H	Aluminum alloy	φ 25 - Polyurethane
6	Piston rod	Medium carbon steel	
7	Rod packing	NBR	
8	Rod bush	Copper	
9	Pistion packing	NBR	
10	Magnet ring	Magnet material	
11	Piston gasket	NBR	
12	Wear ring	Teflon	
13	Cushion gasket	NBR	
14	Spring washer	Spring steel	
15	Piston screw	SCM	
16	Cover ring	NBR	
17	Rod front nut	Carbon steel	

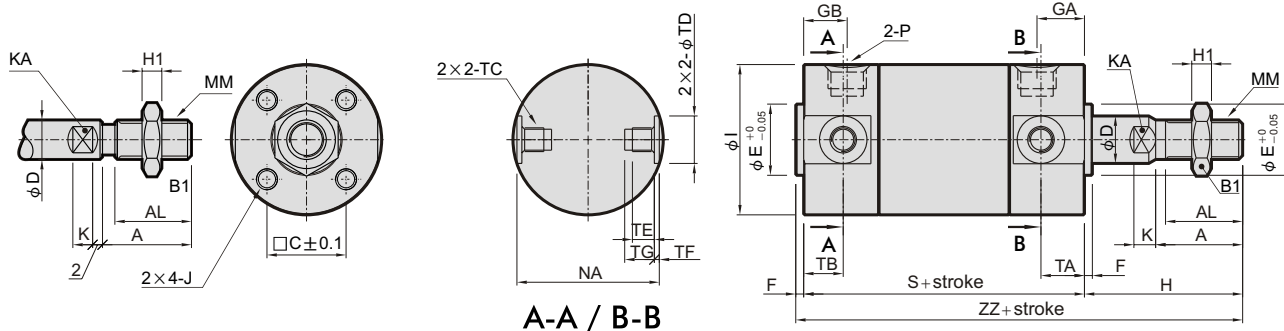
# MCCG Dimensions $\phi 20 \sim \phi 63$

## ROUND CYLINDERS



$\phi 20, \phi 25$

$\phi 32 \sim \phi 63$



unit: mm

Code Tube I.D.	Standard stroke range	Long stroke range	A	AL	B1	C	D	E	F	GA	GB	H	H1	I	J	K	KA	MM	NA
20	~200	201~350	18	15.5	13	14	8	12	2	12	12	35	5	26	M4×0.7×7 dp	4	6	M8×1.25	24
25	~300	301~400	22	19.5	17	16.5	10	14	2	12	12	40	6	31	M5×0.8×7.5 dp	5	8	M10×1.25	29
32	~300	301~450	22	19.5	17	20	12	18	2	12	11	40	6	38	M5×0.8×8 dp	5.5	10	M10×1.25	36
40	~300	301~800	30	27	22	26	16	25	2	13	12	50	8	47	M6×1.0×12 dp	6	14	M14×1.5	44
50	~300	301~1200	35	32	27	32	20	30	2	14	13	58	11	58	M8×1.25×16 dp	7	18	M18×1.5	55
63	~300	301~1200	35	32	27	38	20	32	2	14	13	58	11	72	M10×1.5×16 dp	7	18	M18×1.5	69

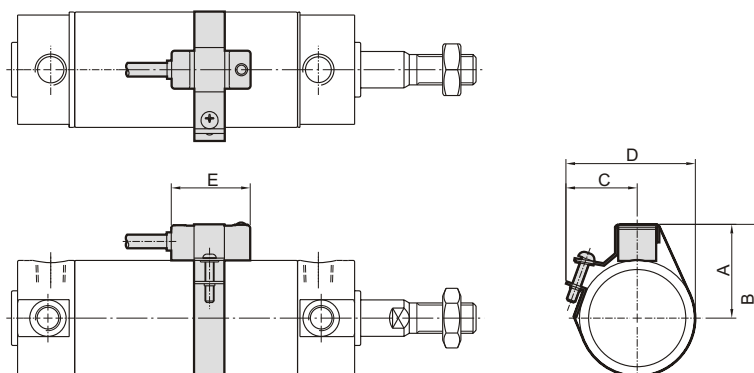
Code Tube I.D.	P	S	TA	TB	TC	TD <sub>H9</sub>	TE	TF	TG	ZZ
20	PT 1/8	69 (77)	11	11	M5×0.8	8 <sup>+0.036</sup> <sub>-0</sub>	4	0.5	5.5	106 (114)
25	PT 1/8	69 (77)	11	11	M6×0.75	10 <sup>+0.036</sup> <sub>-0</sub>	5	1	6.5	111 (119)
32	PT 1/8	71 (79)	11	10	M8×1.0	12 <sup>+0.043</sup> <sub>-0</sub>	5.5	1.25	7.5	113 (121)
40	PT 1/8	78 (87)	12	10	M10×1.25	14 <sup>+0.043</sup> <sub>-0</sub>	6	1.25	8.5	130 (139)
50	PT 1/4	90 (102)	13	12	M12×1.25	16 <sup>+0.043</sup> <sub>-0</sub>	7.5	2	10	150 (162)
63	PT 1/4	90 (102)	13	12	M14×1.5	18 <sup>+0.043</sup> <sub>-0</sub>	11.5	3	14.5	150 (162)

( ): Dimension for long stroke.

## Installation of sensor switch

Sensor switch: RCA

Sensor switch band: BGA\*\*



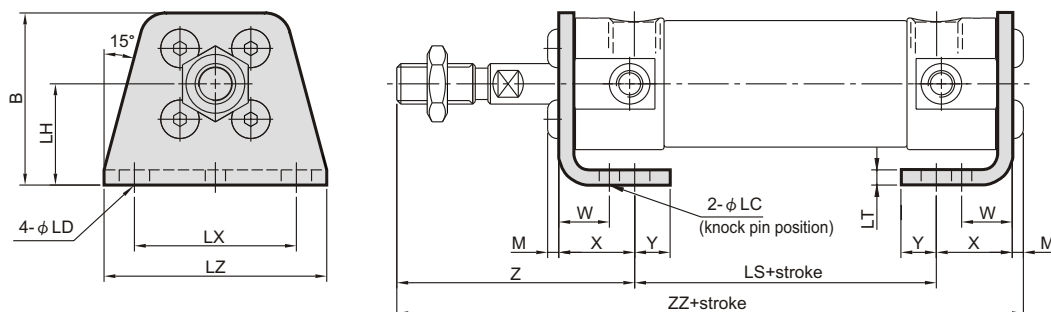
Code Tube I.D.	A	B	C	D	E
20	18	31	25	38	26
25	20	35	27	42	26
32	24	43	31	50	26
40	29	53	36	60	26
50	34	63	41	70	26
63	41	77	48	84	26

# MCCG Mounting accessories $\phi 20 \sim \phi 63$

## ROUND CYLINDERS



**LB**

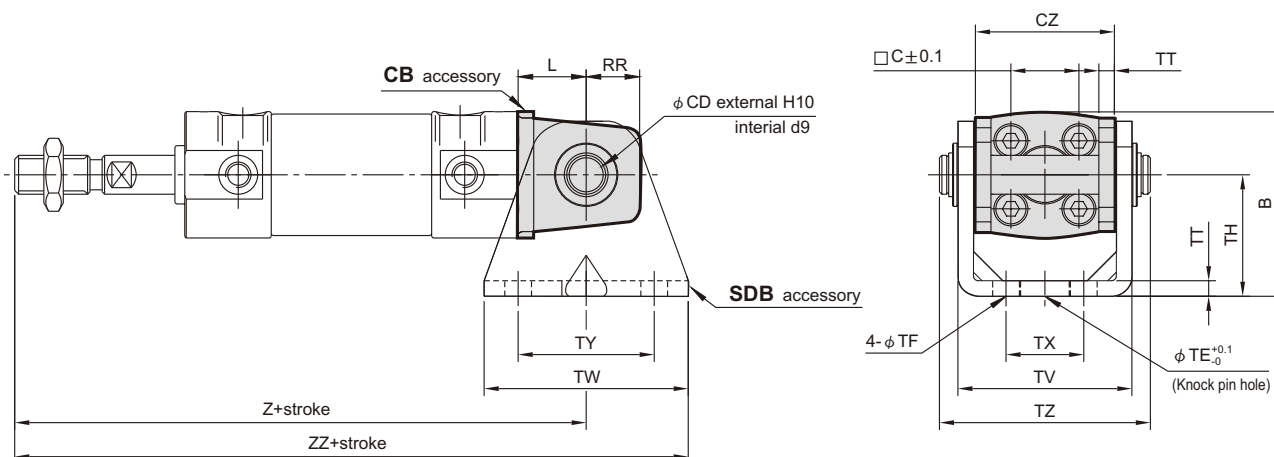


Code Tube I.D.	B	LC	LD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
20	34	4	6	20	45 (53)	3	32	44	2.2	10	15	7	47	109.2 (117.2)
25	38.5	4	6	22	45 (53)	3	36	49	2.8	10	15	7	52	114.8 (122.8)
32	45	4	6.6	25	45 (53)	3	44	58	2.8	10	16	8	53	116.8 (124.8)
40	54.5	4	6.6	30	51 (60)	3	54	71	3.3	10	16.5	8.5	63.5	134.3 (143.3)
50	70.5	5	9	40	55 (67)	4.5	66	86	4.4	17.5	22	11	75.5	156.9 (168.9)
63	82.5	5	11	45	55 (67)	4.5	82	106	5.5	17.5	22	13	75.5	158.0 (170.0)

( ): Dimension for long stroke.

**CB**

SDB+Pin (Extra purchase)



Code Tube I.D.	B	CD	CZ	L	RR	TE	TF	TH	TT	TV	TW	TX	TY	TZ	Z	ZZ
20	38	8	29	14	11	10	5.5	25	3.2	35.8	42	16	28	43.4	118 (126)	139 (147)
25	45.5	10	33	16	13	10	5.5	30	3.2	39.8	42	20	28	48	125 (133)	146 (154)
32	54	12	40	20	15	10	6.6	35	4.5	49.4	48	22	28	59.4	131 (139)	155 (163)
40	63.5	14	49	22	18	10	6.6	40	4.5	58.4	56	30	30	71.4	150 (159)	178 (187)
50	79	16	60	25	20	20	9	50	6	72.4	64	36	36	86	173 (185)	205 (217)
63	96	18	74	30	22	20	11	60	8	90.4	74	46	46	105.4	178 (190)	215 (227)

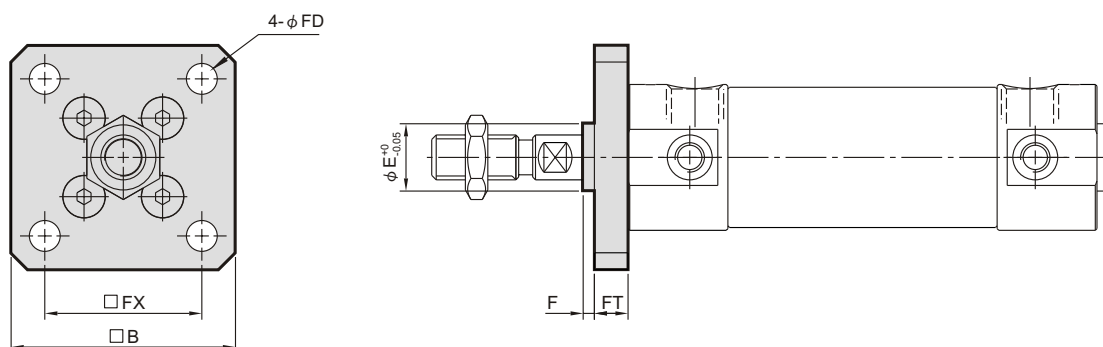
( ): Dimension for long stroke.

# MCCG Mounting accessories $\phi 20 \sim \phi 63$

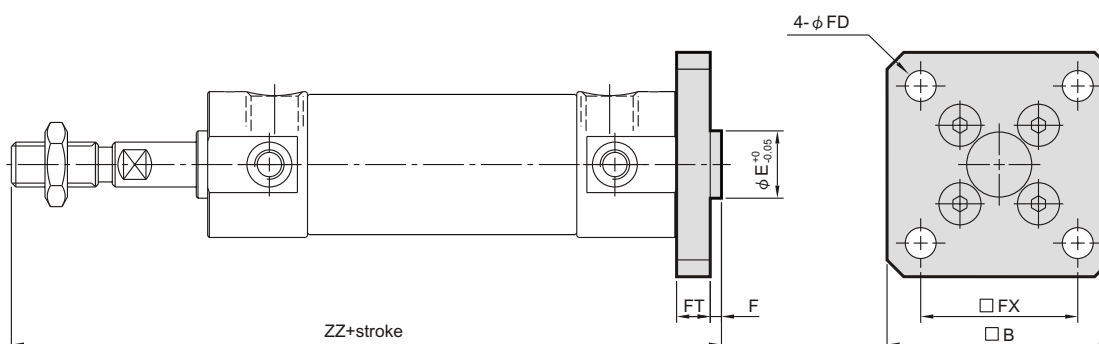
## ROUND CYLINDERS



### FAC



### FBC

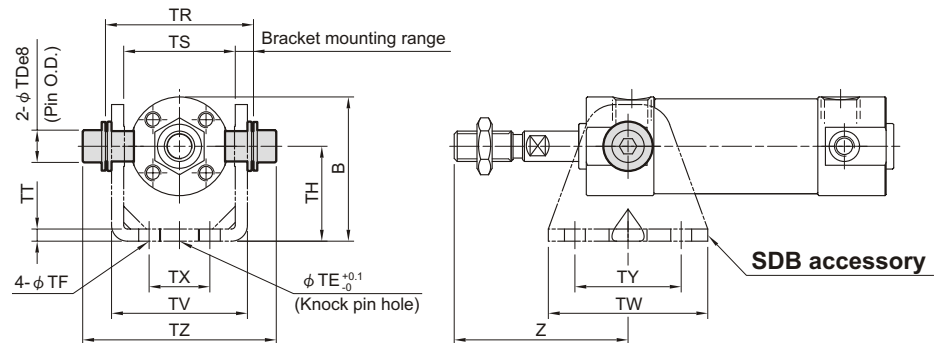


Code Tube I.D.	B	E	F	FX	FD	FT	ZZ
20	40	12	2	28	5.5	6	112 (120)
25	44	14	2	32	5.5	7	118 (126)
32	53	18	2	38	6.6	7	120 (128)
40	61	25	2	46	6.6	8	138 (147)
50	76	30	2	58	9	9	159 (171)
63	92	32	2	70	11	9	159 (171)

( ): Dimension for long stroke.

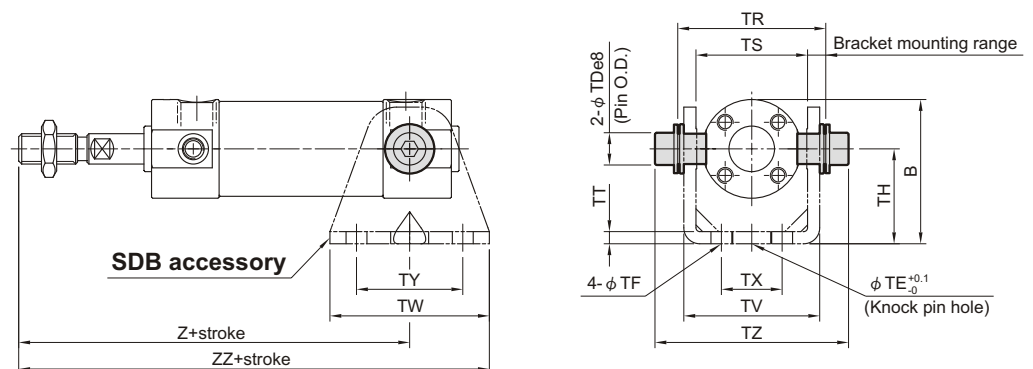
### TA

#### Front trunnion



### TB

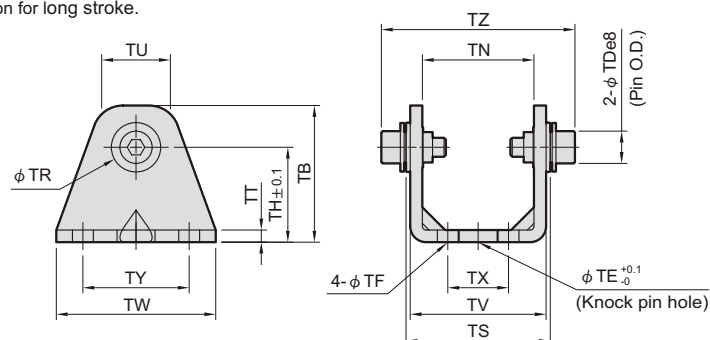
#### Rear trunnion



Code Tube I.D.	B	TDe8	TE	TF	TH	TR	TS	TT	TV	TW	TX	TY	TZ	Front	Rear	
														Z	Z	ZZ
20	38	8 <sup>-0.025/-0.047</sup>	10	5.5	25	39	29	3.2	35.8	42	16	28	51	46	93 (101)	114 (122)
25	45.5	10 <sup>-0.025/-0.047</sup>	10	5.5	30	43	33	3.2	39.8	42	20	28	57.9	51	98 (106)	119 (127)
32	54	12 <sup>-0.032/-0.059</sup>	10	6.6	35	53.5	40	4.5	49.4	48	22	28	73.3	51	101 (109)	125 (133)
40	63.5	14 <sup>-0.032/-0.059</sup>	10	6.6	40	64.5	49	4.5	58.4	56	30	30	89.5	62	118 (127)	146 (155)
50	79	16 <sup>-0.032/-0.059</sup>	20	9	50	80	60	6	72.4	64	36	36	109.2	71	136 (148)	168 (180)
63	96	18 <sup>-0.032/-0.059</sup>	20	11	60	98	74	8	90.4	74	46	46	131	71	136 (148)	173 (185)

( ) : Dimension for long stroke.

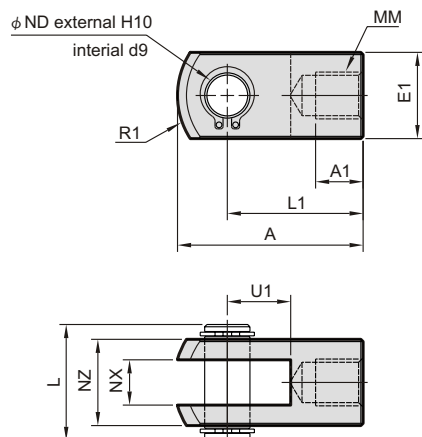
### SDB



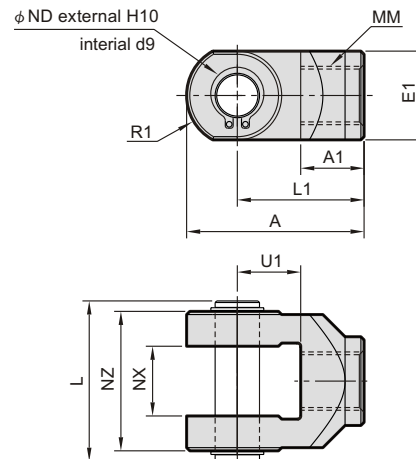
Code Tube I.D.	TB	TE	TF	TH	TN	TR	TT	TU	TV	TW	TX	TY	TS	TZ	Applicable pin O.D.
20	36	10	5.5	25	29.3	13	3.2	18.1	35.8	42	16	28	38	51	8d9 <sup>-0.040/-0.076</sup>
25	43	10	5.5	30	33.1	15	3.2	20.7	39.8	42	20	28	42	57.9	10d9 <sup>-0.040/-0.076</sup>
32	50	10	6.6	35	40.4	17	4.5	23.6	49.4	48	22	28	52.4	73.3	12d9 <sup>-0.050/-0.093</sup>
40	58	10	6.6	40	49.2	21	4.5	27.3	58.4	56	30	30	63.4	89.5	14d9 <sup>-0.050/-0.093</sup>
50	70	20	9	50	60.4	24	6	29.7	72.4	64	36	36	78.8	109.2	16d9 <sup>-0.050/-0.093</sup>
63	82	20	11	60	74.6	26	8	34.3	90.4	74	46	46	76.6	131	18d9 <sup>-0.050/-0.093</sup>

### Y Connector

$\phi 20 \sim \phi 32$



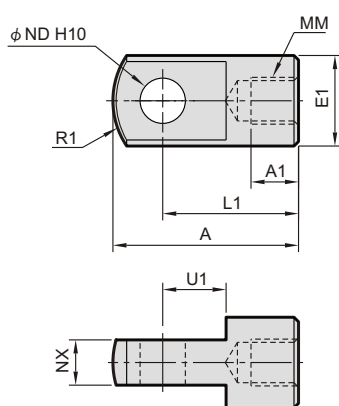
$\phi 40 \sim \phi 63$



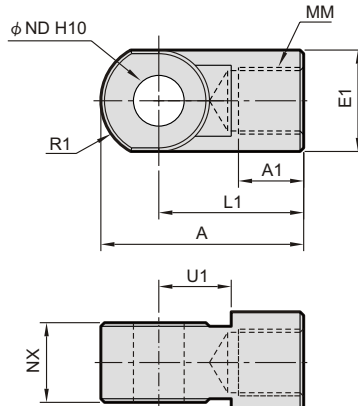
Code Tube I.D.	A	A1	E1	L	L1	MM	R1	U1	ND	NX	NZ
20	34	8.5	16	21	25	M8 $\times$ 1.25	14	11.5	8	8 <sup>+0.4</sup> <sub>+0.2</sub>	16
25,32	41	10.5	20	25.6	30	M10 $\times$ 1.25	18	14	10	10 <sup>+0.4</sup> <sub>+0.2</sub>	20
40	42	16	22	41.6	30	M14 $\times$ 1.5	12	14	10	18 <sup>+0.5</sup> <sub>+0.3</sub>	36
50,63	56	20	28	50.6	40	M18 $\times$ 1.5	16	20	14	22 <sup>+0.5</sup> <sub>+0.3</sub>	44

### I Connector

$\phi 20 \sim \phi 32$

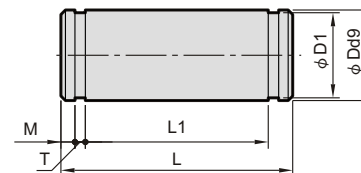


$\phi 40 \sim \phi 63$



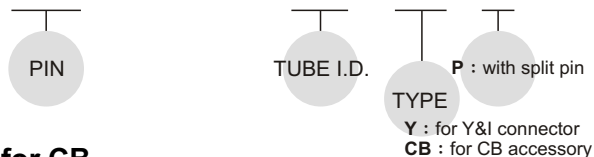
Code Tube I.D.	A	A1	E1	L1	MM	R1	U1	NDH10	NX
20	34	8.5	16	25	M8 $\times$ 1.25	14	11.5	8 <sup>+0.058</sup> <sub>0</sub>	8 <sup>-0.2</sup> <sub>-0.4</sub>
25,32	41	10.5	20	30	M10 $\times$ 1.25	18	14	10 <sup>+0.058</sup> <sub>0</sub>	10 <sup>-0.2</sup> <sub>-0.4</sub>
40	42	14	22	30	M14 $\times$ 1.5	12	14	10 <sup>+0.058</sup> <sub>0</sub>	18 <sup>-0.3</sup> <sub>-0.5</sub>
50,63	56	18	28	40	M18 $\times$ 1.5	16	20	14 <sup>+0.070</sup> <sub>0</sub>	22 <sup>-0.3</sup> <sub>-0.5</sub>

### Pin



Order example:

**PIN – MCCG – 32 – CB – P**



for CB

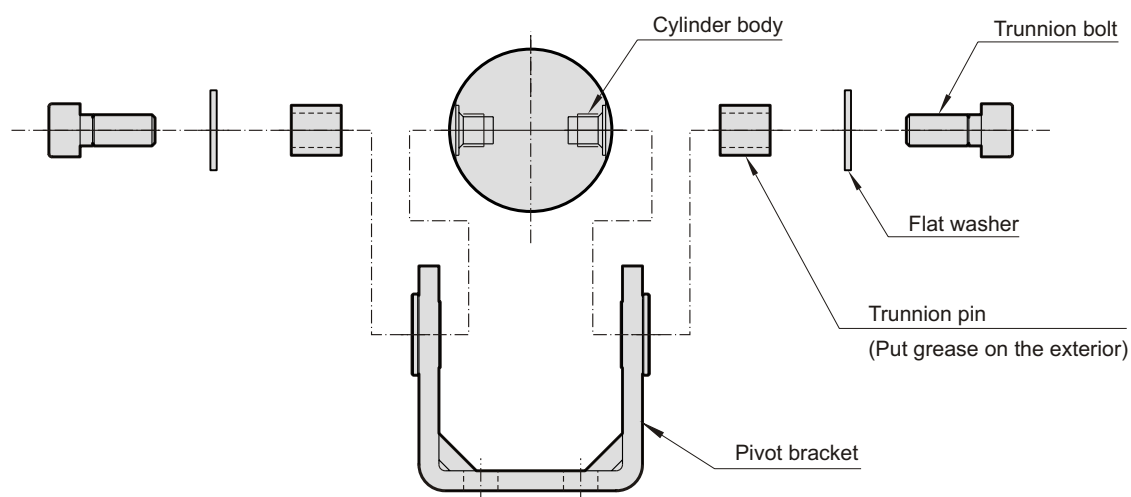
Code Tube I.D.	Dd9	D1	L	L1	M	T	Snap ring
20	8 <sup>-0.040</sup> <sub>-0.076</sub>	7.6	43.4	38.6	1.5	0.9	STW-8
25	10 <sup>-0.040</sup> <sub>-0.076</sub>	9.6	48	42.6	1.55	1.15	STW-10
32	12 <sup>-0.050</sup> <sub>-0.093</sub>	11.5	59.4	54	1.55	1.15	STW-12
40	14 <sup>-0.050</sup> <sub>-0.093</sub>	13.4	71.4	65	2.05	1.15	STW-14
50	16 <sup>-0.050</sup> <sub>-0.093</sub>	15.2	86	79.6	2.05	1.15	STW-16
63	18 <sup>-0.050</sup> <sub>-0.093</sub>	17.0	105.4	97.8	2.45	1.35	STW-18

for Y & I connector

Code Tube I.D.	Dd9	D1	L	L1	M	T	Snap ring
20	8 <sup>-0.04</sup> <sub>-0.08</sub>	7.6	21	16.2	1.5	0.9	STW-8
25,32	10 <sup>-0.04</sup> <sub>-0.08</sub>	9.6	25.6	20.2	1.55	1.15	STW-10
40	10 <sup>-0.04</sup> <sub>-0.08</sub>	9.6	41.6	36.2	1.55	1.15	STW-10
50,63	14 <sup>-0.05</sup> <sub>-0.09</sub>	13.4	50.6	44.2	2.05	1.15	STW-14

### Trunnion

Follow the procedures below when mounting a pivot bracket on the trunnion.



### Clevis

Follow the procedures below when mounting a pivot bracket on the clevis.

