

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)	Rc1/8				Rc1/4	
Medium	Air					
Max operating pressure	1 MPa					
Min operating pressure	0.05 MPa					
Proof pressure	1.5 MPa					
Stroke length tolerance	1~1000 ST : $\begin{smallmatrix} +1.4 \\ -0\text{mm} \end{smallmatrix}$					
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

※ RCA specification, please refer to page V-07.

Table for standard stroke

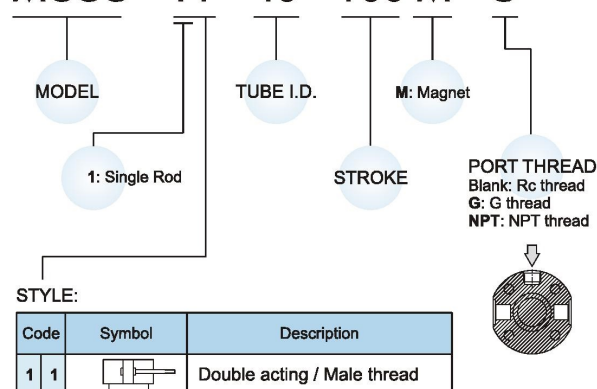
Tube I.D.(mm)	Stroke (mm)
φ 20	25, 50, 75, 100, 125, 150, 200
φ 25, 32, 40, φ 50, 63	25, 50, 75, 100, 125, 150, 200, 250, 300

Long stroke

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

Order example

MCCG - 11 - 40 - 100 M - G



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

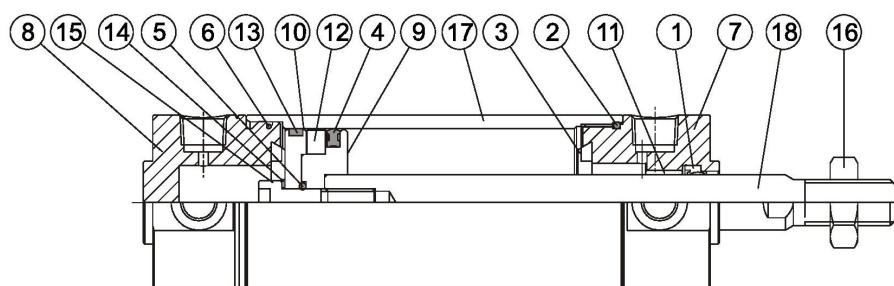
Mounting accessories

FAC - MCCG - 40

MODEL	TUBE I.D.
MOUNTING TYPE	
	LB
	CB
	FAC
	FBC
	SDB-R
	SDB-H
	CB+SDB
	TA
	TB
	Y
	I

MCCG / MCCN Inside structure & Parts list

ROUND CYLINDERS



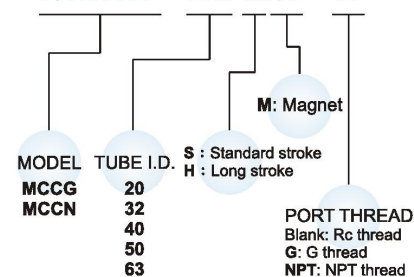
Material

No.	Part name	Material	Q'y	A	B	Note
				(inclusion)		
1	Rod packing	NBR	1	●	●	
2	O-ring	NBR	1 or 2	●	●	φ 50, 63 (Q'y =2\
3	Cushion pad	NBR	2	●	●	
4	Piston packing	NBR	1	●	●	
5	O-ring	NBR	1	●	●	
6	O-ring	NBR	1	●		for φ 50, φ 63
7	Rod cover	Aluminum alloy	1	●		
8	Head cover	Aluminum alloy	1	●		
9	Piston-R	Aluminum alloy	1	●		
10	Piston-H	Aluminum alloy	1	●		
11	Bush	Bearing alloy	1	●		
12	Magnet ring	Magnet material	1	◎		◎ Option
	Spacer ring	Aluminum alloy	1	●		for φ 20~ φ 32
13	Wear ring	Teflon	1	●		
14	Washer	Carbon steel	1	●		φ 20 without
15	Piston bolt	Carbon steel	1	●		
16	Nut	Carbon steel	1	●		
17	Cylinder tube	Aluminum alloy	1			
18	Piston rod	Carbon steel	1			φ 20-25 stainless steel

A: Component parts, B: Repair kits

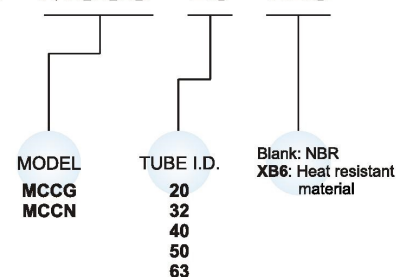
Order example of component parts

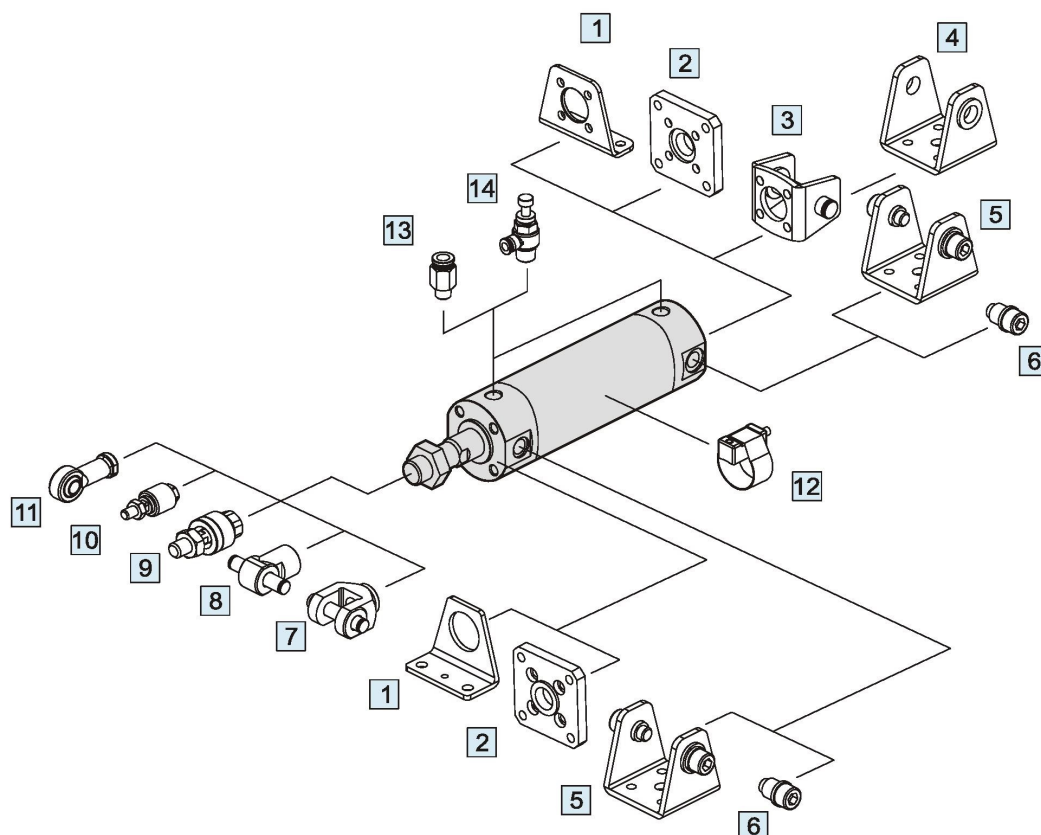
CP—MCCG—20 SM—G



Order example of repair kits

PS—MCCG—20—XB6





No.	Accessories	Page
1	Mounting accessories LB	L-82
2	Mounting accessories FAC/FBC	L-83
3	Mounting accessories CB+PIN	L-82,85
4	Mounting accessories SDB	L-84
5	Mounting accessories SDB-R/H	L-84,86
6	Mounting accessories TA/TB	L-84
7	Accessories Y+PIN	L-85
8	Accessories I+PIN	L-85

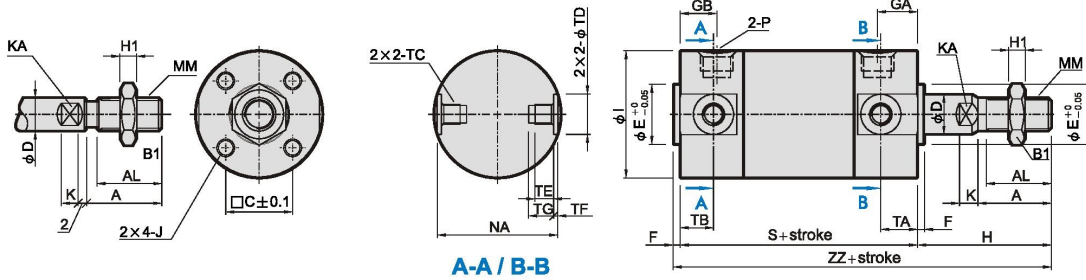
No.	Accessories	Page
9	Floating joint MFC	V-01
10	Floating joint MFCS	V-03
11	Female rod ends PHS	V-04
12	Sensor switch RCA+BGA**	V-05
13	Fitting PC (PISCO)	H-03
14	Speed controller JSC (PISCO)	H-14

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

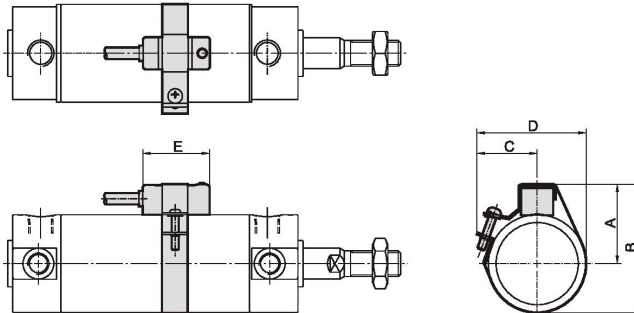
Code Tube I.D.	P	S	TA	TB	TC	TD H9	TE	TF	TG	ZZ
20	Rc1/8	69 (77)	11	11	M5×0.8	8 ^{+0.036} ₋₀	4	0.5	5.5	106 (114)
25	Rc1/8	69 (77)	11	11	M6×0.75	10 ^{+0.036} ₋₀	5	1	6.5	111 (119)
32	Rc1/8	71 (79)	11	10	M8×1.0	12 ^{+0.043} ₋₀	5.5	1.25	7.5	113 (121)
40	Rc1/8	78 (87)	12	10	M10×1.25	14 ^{+0.043} ₋₀	6	1.25	8.5	130 (139)
50	Rc1/4	90 (102)	13	12	M12×1.25	16 ^{+0.043} ₋₀	7.5	2	10	150 (162)
63	Rc1/4	90 (102)	13	12	M14×1.5	18 ^{+0.043} ₋₀	11.5	3	14.5	150 (162)

(): Dimension for long stroke.

Installation of sensor switch

Sensor switch: RCA

Sensor switch band: BGA**

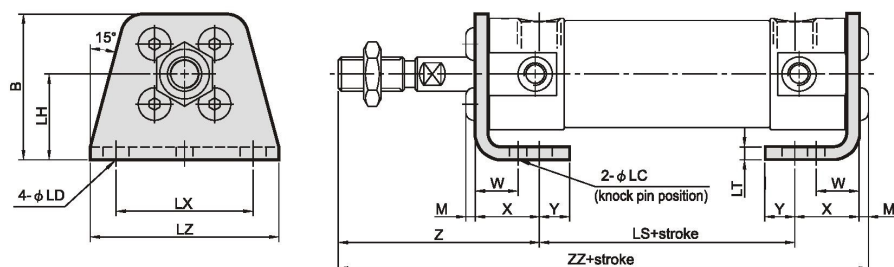


Code Tube I.D.	A	B	C	D	E
20	18	31	25	38	26
25	20	35	27	42	26
32	24	43	31	50	26
40	29	53	36	60	26
50	34	63	41	70	26
63	41	77	48	84	26

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

ROUND CYLINDERS

LB

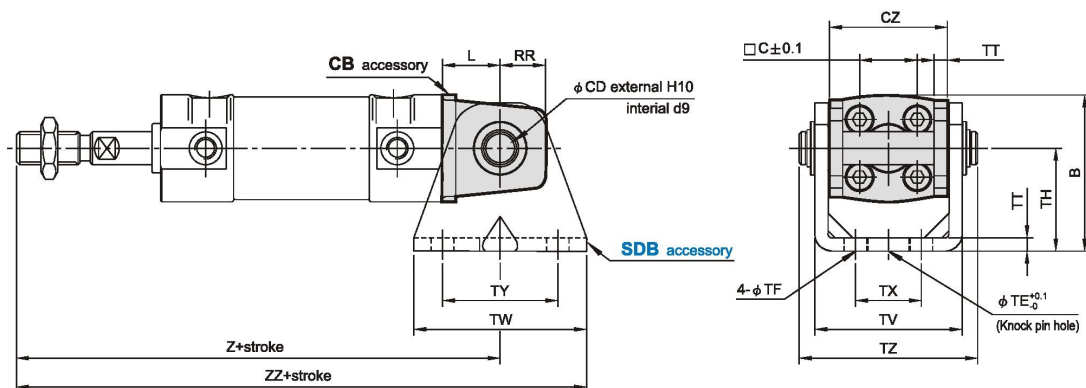


Code Tube I.D.	B	LC	LD	LH	LS	LT	LX	LZ	M	W	X	Y	Z	ZZ
20	34	4	6	20	45 (53)	3	32	44	2.2	10	15	7	47	109.2 (117.2)
25	38.5	4	6	22	45 (53)	3	36	49	2.8	10	15	7	52	114.8 (122.8)
32	45	4	6.6	25	45 (53)	3	44	58	2.8	10	16	8	53	116.8 (124.8)
40	54.5	4	6.6	30	51 (60)	3	54	71	3.3	10	16.5	8.5	63.5	134.3 (143.3)
50	70.5	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)



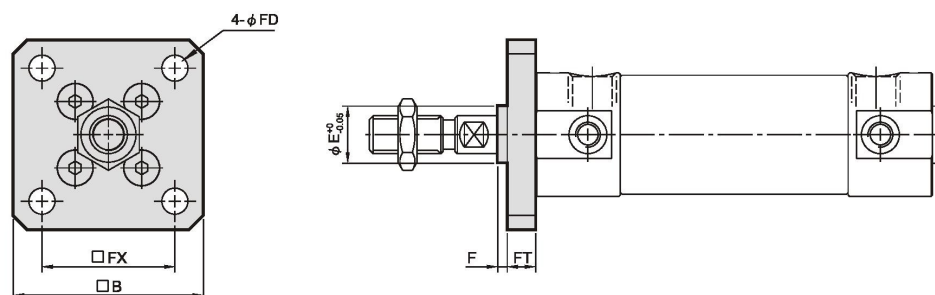
Code Tube I.D.	B	CD	CZ	L	RR	TE	TF	TH	TT	TV	TW	TX	TY	TZ	Z	ZZ
20	38	8	29	14	11	10	5.5	25	3.2	35.8	42	16	28	43.4	118 (126)	139 (147)
25	45.5	10	33	16	13	10	5.5	30	3.2	39.8	42	20	28	48	125 (133)	146 (154)
32	54	12	40	20	15	10	6.6	35	4.5	49.4	48	22	28	59.4	131 (139)	155 (163)
40	63.5	14	49	22	18	10	6.6	40	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.

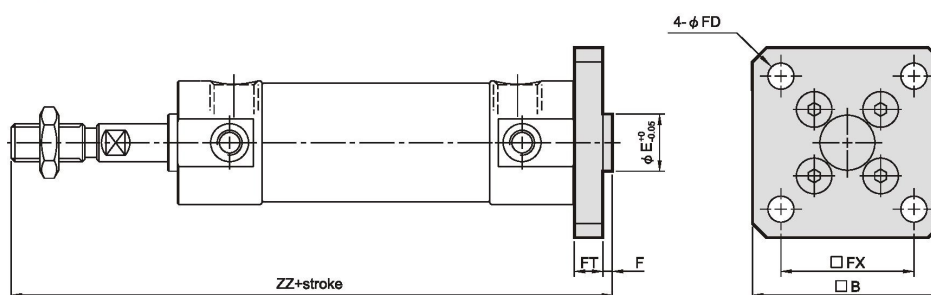
MCCG Mounting accessories $\phi 20 \sim \phi 63$

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)

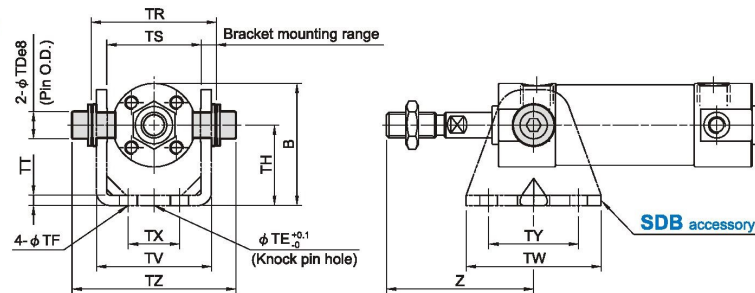
(): Dimension for long stroke.

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

ROUND CYLINDERS

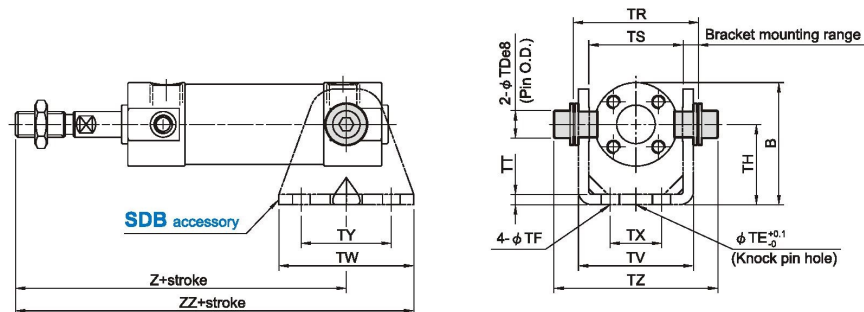
TA

Front trunnion



TB

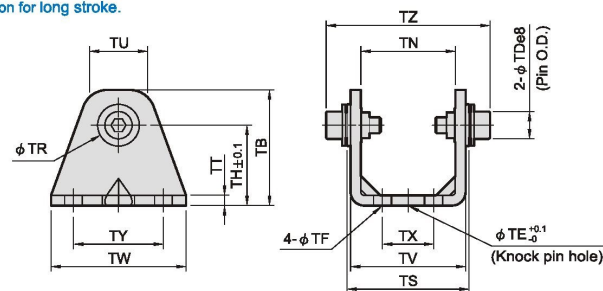
Rear trunnion



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

(): Dimension for long stroke.

SDB



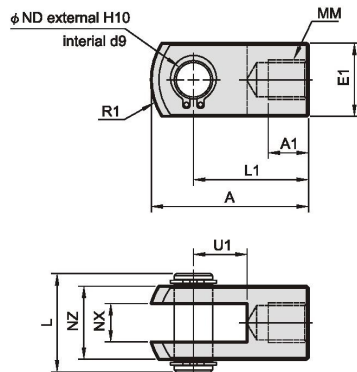
Code Tube I.D.	TB	TE	TF	TH	TN	TR	TT	TU	TV	TW	TX	TY	TS	TZ	Applicable pin O.D.
20	36	10	5.5	25	29.3	13	3.2	18.1	35.8	42	16	28	38	51	8d9 ^{-0.040} _{-0.076}
25	43	10	5.5	30	33.1	15	3.2	20.7	39.8	42	20	28	42	57.9	10d9 ^{-0.040} _{-0.076}
32	50	10	6.6	35	40.4	17	4.5	23.6	49.4	48	22	28	52.4	73.3	12d9 ^{-0.050}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

MCCG Accessories $\phi 20 \sim \phi 63$

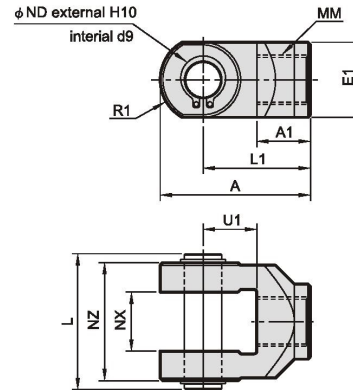
ROUND CYLINDERS

Y connector

$\phi 20 \sim \phi 32$



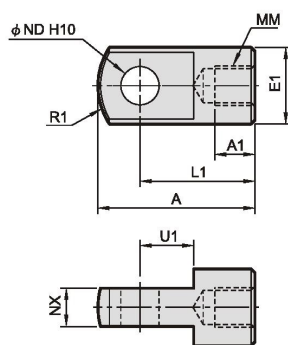
$\phi 40 \sim \phi 63$



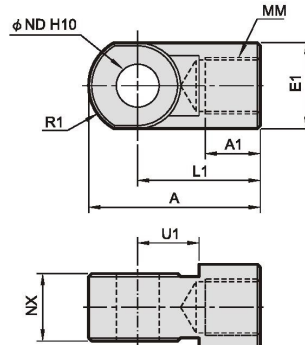
Code Tube I.D.	A	A1	E1	L	L1	MM	R1	U1	ND	NX	NZ
20	34	8.5	$\phi 16$	21	25	M8 \times 1.25	14	11.5	8	$8^{+0.4}_{-0.2}$	15.88
25,32	41	10.5	$\phi 20$	25.6	30	M10 \times 1.25	18	14	10	$10^{+0.4}_{-0.2}$	19.05
40	42	16	$\phi 22$	41.6	30	M14 \times 1.5	12	14	10	$18^{+0.5}_{-0.3}$	36
50,63	56	20	$\phi 28$	50.6	40	M18 \times 1.5	16	20	14	$22^{+0.5}_{-0.3}$	44

I connector

$\phi 20 \sim \phi 32$

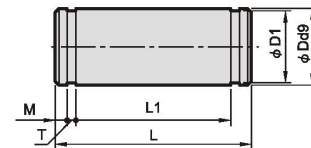


$\phi 40 \sim \phi 63$



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

Pin



Order example

PIN-MCCG-32-CB-P

PIN

TUBE I.D.

P : with split pin

TYPE

Y : for Y&I connector
CB : for CB accessory

for CB

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

for Y & I connector

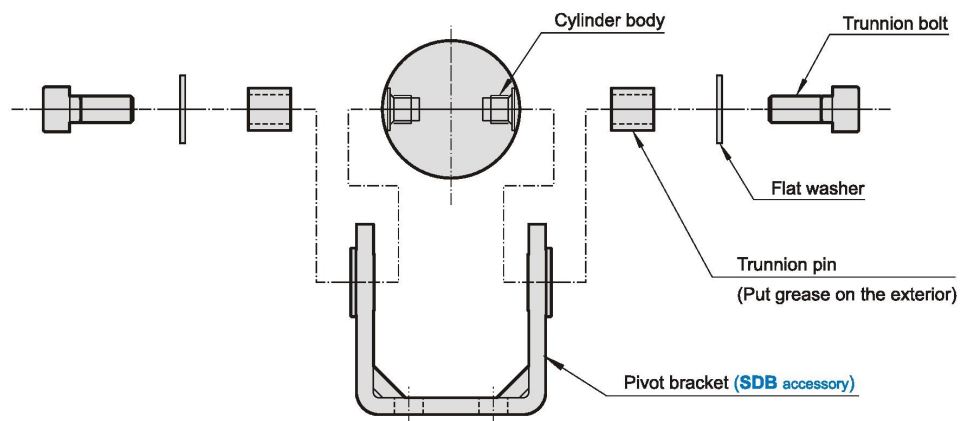
Code Tube I.D.	Dd9	D1	L	L1	M	T	Snap ring
20	$8^{+0.04}_{-0.06}$	7.6	21	16.2	1.5	0.9	STW-8
25,32	$10^{+0.04}_{-0.08}$	9.6	25.6	20.2	1.55	1.15	STW-10
40	$10^{+0.04}_{-0.08}$	9.6	41.6	36.2	1.55	1.15	STW-10
50,63	$14^{+0.05}_{-0.09}$	13.4	50.6	44.2	2.05	1.15	STW-14

MCCG / MCCN Mounting procedures

ROUND CYLINDERS

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.

