



Specification

Model	MCCN						
Acting type	Double acting						
Tube I.D. (mm)	20	25	32	40	50	63	
Port size	NPT1/8				NPT1/4		
Medium	Air						
Max. operating perssure	1 MPa						
Min. operating perssure	0.05 MPa						
Proof pressure	1.5 MPa						
Lubrication	Not required						
Ambient temperature	-5~+60°C (No freezing)						
Available speed range	50~500 mm/sec						
Max. allowable kinetic energy (J)	Cushion pad	0.07	0.10	0.17	0.3	0.5	0.85
	Cushion air	0.09	0.14	0.23	0.45	0.85	1.23
Sensor switch	RCM (Please refer to page 8-13)						
Sensor switch band	BMG20	BMG25	BMG32	BMG40	BMG50	BMG63	

Table for standard stroke

Unit: inch

Tube I.D.	Stroke	Long stroke
3/4"	1, 2, 3, 4, 5, 6, 8	8.01~14
1"	1, 2, 3, 4, 5, 6, 8, 10, 12	12.01~16
1 1/4"		12.01~18
1 1/2"		12.01~32
2"		12.01~48
2 1/2"		12.01~27.5

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

Order example

MCCN - 11 - 40 - 0425M - A

MODEL 1: Single rod

TUBE I.D.

20: 3/4"
25: 1"
32: 1 1/4"
40: 1 1/2"
50: 2"
63: 2 1/2"

STANDARD STROKE
(Inches)
04=4" stroke

STROKE
(Hundred of an inch)
12=0.125 (1/8) inch stroke
25=0.25 (1/4)
37=0.375 (3/8)

M: Magnet

Blank: Cushion pad (Unadjustable)
A: Cushion air (Adjustable)

STYLE

Code	Symbol	Description
1 1		Double acting / Male thread

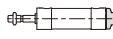
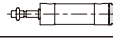
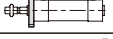
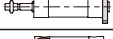
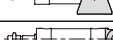
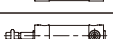
Mounting accessories

FAC - MCCN - 40

MODEL

TUBE I.D.

MOUNTING TYPE

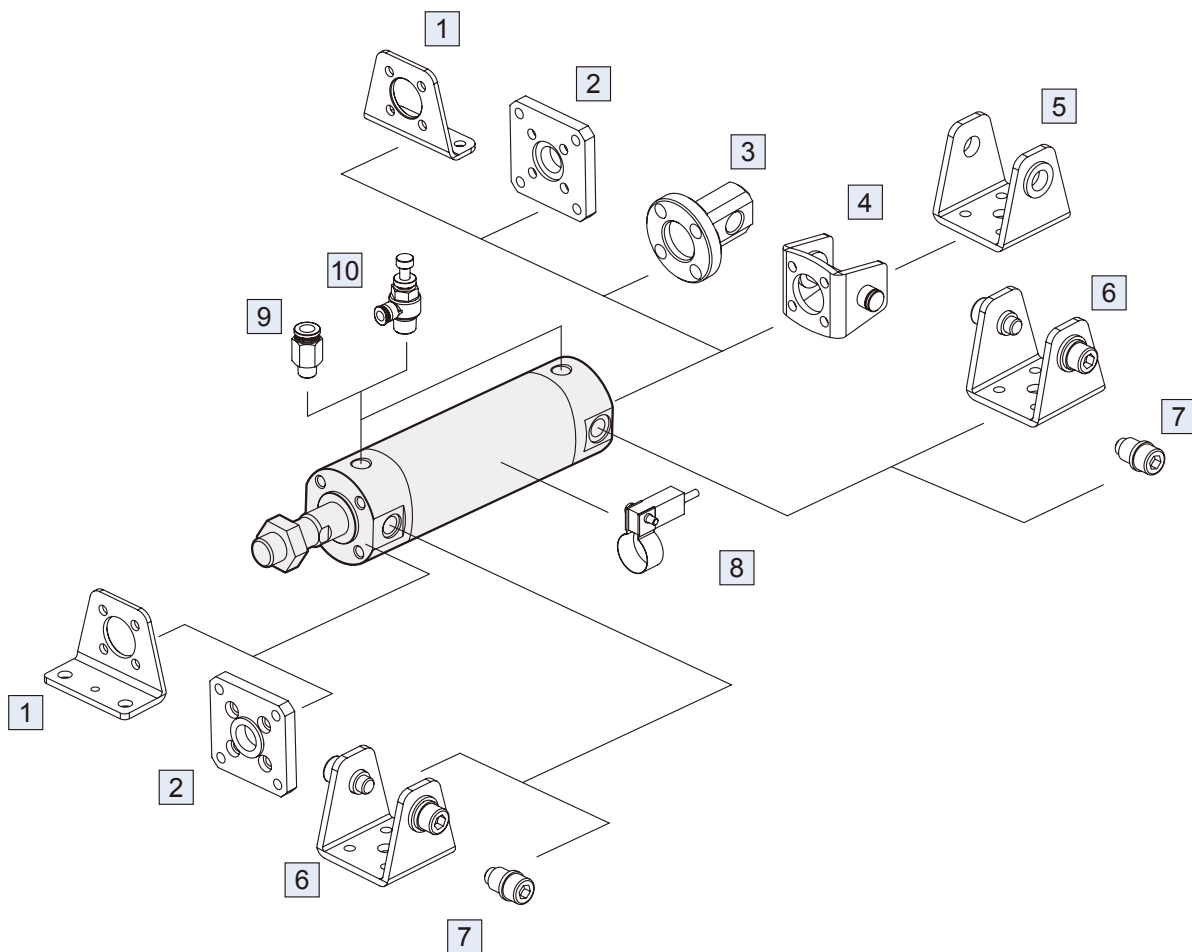
	LB
	CA
	CB
	FAC
	FBC
	SDB-R
	SDB-H
	CB+SDB
	TA
	TB

Mounting procedures please refer to page 3-77.

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

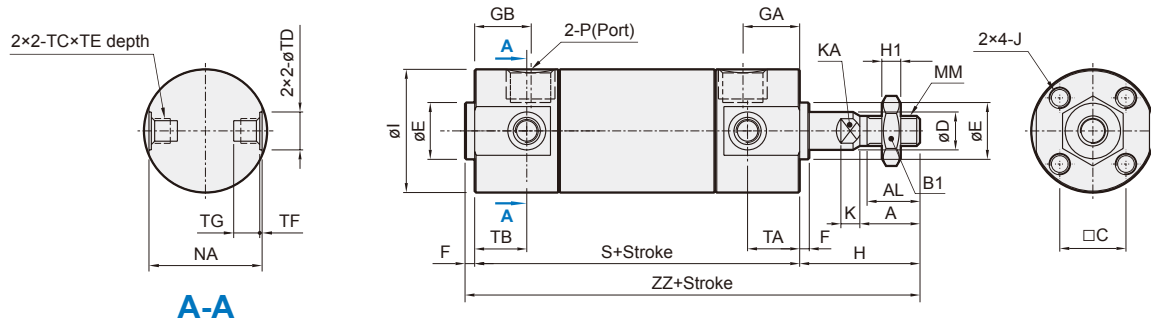
* Order example for component parts and repair kits, refer to page 3-72.

* CB+SDB: SDB + PIN was extra purchase.



No.	Accessories	Page
1	Mounting accessories LB	3-83
2	Mounting accessories FAC/FBC	3-83
3	Mounting accessories CA	3-84
4	Mounting accessories CB+PIN	3-84, 86
5	Mounting accessories SDB	3-85
6	Mounting accessories SDB-R/H	3-85
7	Mounting accessories TA/TB	3-86
8	Sensor switch RCM+BMG**	8-13
9	Fitting PC (PISCO)	8-5 (Vol.1)
10	Speed controller JSC (PISCO)	8-18 (Vol.1)

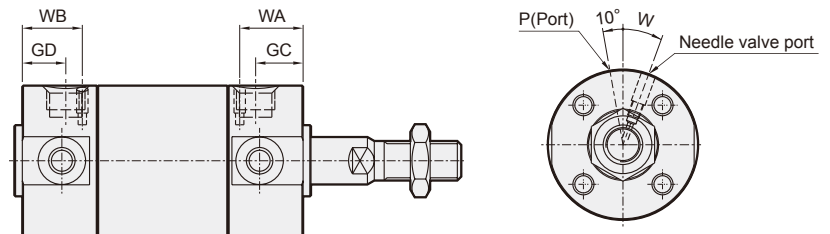
ROUND CYLINDER



A-A

Cushion air (Adjustable)

A



Unit: inch

Code Tube I.D.	Standard stroke range	Long stroke range	A	AL	B1	C	D	E	F	GA	GB	GC	GD	H	H1	I	J	K
20	~ 8	8.01 ~ 14	0.50	0.44	0.44	0.55	0.315	0.472 ⁺⁰ _{-0.002}	0.08	0.47	0.47 (0.47)	0.47	0.47 (0.47)	1	0.16	1.02	#8-32×0.28 dp	0.157
25	~12	12.01 ~ 16	0.50	0.44	0.50	0.65	0.394	0.551 ⁺⁰ _{-0.002}	0.08	0.47	0.47 (0.47)	0.47	0.47 (0.47)	1.12	0.19	1.22	#10-32×0.30 dp	0.197
32	~12	12.01 ~ 18	0.75	0.69	0.69	0.79	0.472	0.709 ⁺⁰ _{-0.002}	0.08	0.47	0.43 (0.47)	0.47	0.43 (0.47)	1.63	0.26	1.50	#10-32×0.30 dp	0.217
40	~12	12.01 ~ 32	0.75	0.69	0.69	1.02	0.630	0.984 ⁺⁰ _{-0.002}	0.08	0.51	0.47 (0.51)	0.51	0.39 (0.51)	1.63	0.26	1.85	1/4-28×0.47 dp	0.3
50	~12	12.01 ~ 48	0.88	0.84	0.75	1.26	0.787	1.181 ⁺⁰ _{-0.002}	0.08	0.55	0.51 (0.51)	0.55	0.47 (0.55)	2.07	0.32	2.28	5/16-24×0.63 dp	0.276
63	~12	12.01 ~ 27.5	0.88	0.84	0.75	1.50	0.787	1.260 ⁺⁰ _{-0.002}	0.08	0.55	0.51 (0.51)	0.55	0.47 (0.55)	2.07	0.32	2.83	3/8-24×0.63 dp	0.276

Code Tube I.D.	KA	MM	NA	P	S	TA	TB	TC	TD _{H9}	TE	TF	TG	W	WA	WB	ZZ
20	0.24	1/4-28 UNF	0.94	NPT1/8	2.72 (3.03)	0.43	0.43 (0.43)	M5×0.8	0.315	0.157	0.020	0.217	40°	0.551	0.551 (0.551)	3.80 (4.11)
25	0.31	5/16-24 UNF	1.14	NPT1/8	2.72 (3.03)	0.43	0.43 (0.43)	M6×0.75	0.394	0.197	0.039	0.256	40°	0.551	0.511 (0.511)	3.92 (4.23)
32	0.39	7/16-20 UNF	1.42	NPT1/8	2.80 (3.11)	0.43	0.39 (0.43)	M8×1.0	0.472	0.217	0.049	0.295	30°	0.551	0.511 (0.511)	4.51 (4.82)
40	0.55	7/16-20 UNF	1.73	NPT1/8	3.07 (3.43)	0.47	0.39 (0.47)	M10×1.25	0.551	0.236	0.049	0.315	20°	0.629	0.590 (0.629)	4.78 (5.14)
50	0.71	1/2-20 UNF	2.17	NPT1/4	3.54 (4.02)	0.51	0.47 (0.51)	M12×1.25	0.630	0.295	0.079	0.394	20°	0.629	0.629 (0.629)	5.69 (6.17)
63	0.71	1/2-20 UNF	2.72	NPT1/4	3.54 (4.02)	0.51	0.47 (0.51)	M14×1.5	0.709	0.453	0.118	0.571	20°	0.708	0.708 (0.708)	5.69 (6.17)

(): Dimension for long stroke.

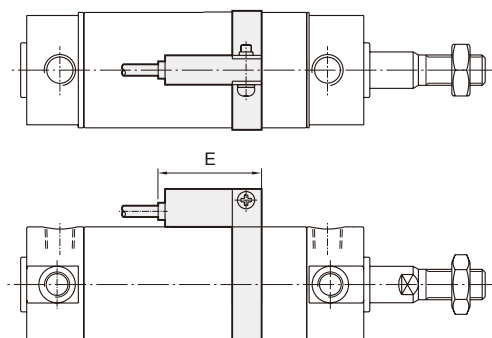
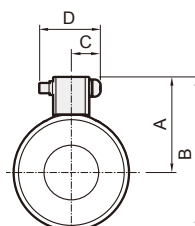
Installation of sensor switch

Sensor switch: RCM

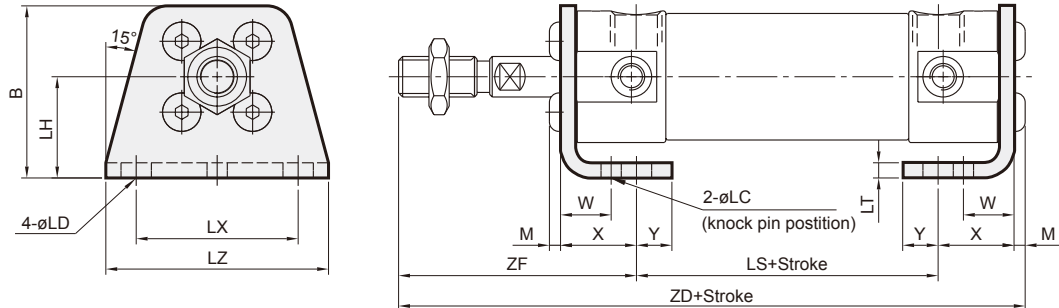
Sensor switch band: BMG**

Unit: inch

Code Tube I.D.	A	B	C	D	E
20	0.9449	1.4764	0.2756	0.6299	1.1024
25	1.0433	1.6732	0.2756	0.6299	1.1024
32	1.2008	1.9882	0.2756	0.6299	1.1024
40	1.3780	2.3425	0.2756	0.6299	1.1024
50	1.5945	2.7756	0.2756	0.6299	1.1024
63	1.8701	3.3268	0.2756	0.6299	1.1024



LB

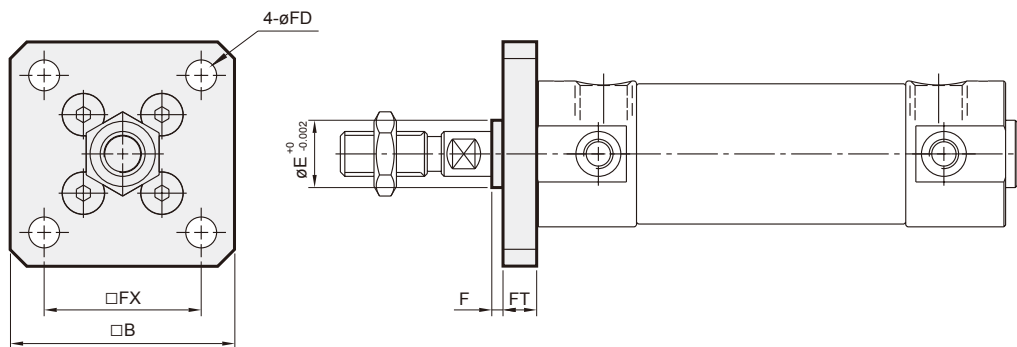


Unit: inch

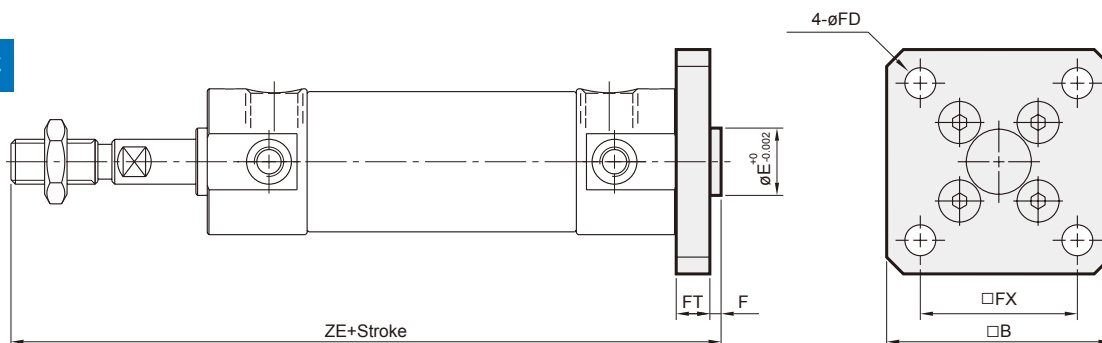
Code Tube I.D.	B	LC	LD	LH	LS	LT	LX	LZ	M	W	X	Y	ZD	ZF
20	1.34	0.16	0.24	0.79	1.78 (2.09)	0.12	1.26	1.73	0.09	0.39	0.59	0.28	3.93 (4.24)	1.47
25	1.52	0.16	0.24	0.87	1.78 (2.09)	0.12	1.42	1.93	0.11	0.39	0.59	0.28	4.07 (4.38)	1.59
32	1.77	0.16	0.26	0.98	1.78 (2.09)	0.12	1.73	2.28	0.11	0.39	0.63	0.31	4.66 (4.97)	2.14
40	2.15	0.16	0.26	1.18	2.01 (2.37)	0.12	2.13	2.80	0.13	0.39	0.65	0.33	4.95 (5.31)	2.16
50	2.78	0.20	0.35	1.57	2.16 (2.64)	0.18	2.60	3.39	0.17	0.69	0.87	0.43	5.96 (6.44)	2.76
63	3.25	0.20	0.43	1.77	2.16 (2.64)	0.18	3.23	4.17	0.22	0.69	0.87	0.51	6.01 (6.49)	2.76

(): Dimension for long stroke.

FAC



FBC

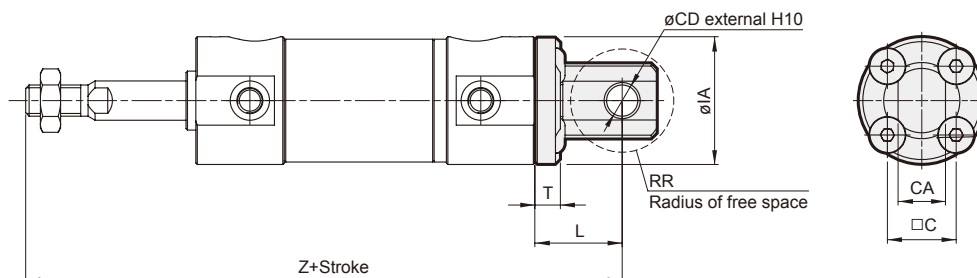


Unit: inch

Code Tube I.D.	B	E	F	FX	FD	FT	ZE
20	1.57	0.472	0.08	1.10	0.22	0.24	4.04 (4.35)
25	1.73	0.551	0.08	1.26	0.22	0.28	4.20 (4.51)
32	2.09	0.709	0.08	1.50	0.26	0.28	4.79 (5.10)
40	2.40	0.984	0.08	1.81	0.26	0.31	5.09 (5.45)
50	2.99	1.181	0.08	2.28	0.35	0.35	6.04 (6.52)
63	3.62	1.260	0.08	2.76	0.43	0.35	6.04 (6.52)

(): Dimension for long stroke.

CA

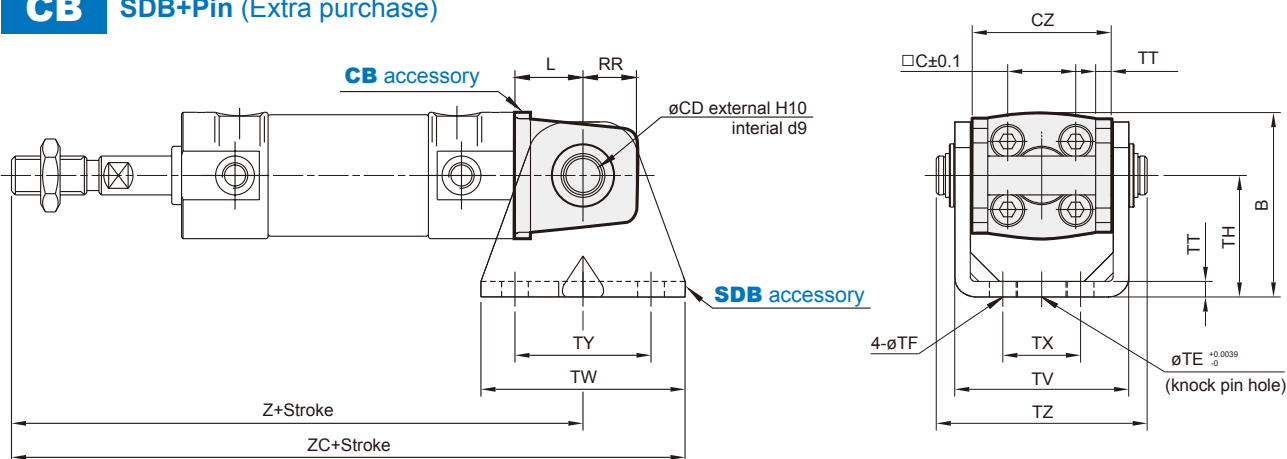


Unit: inch

Code Tube I.D.	C	CA	CD	IA	L	RR	T	Z
20	0.55	0.38	0.25	1.02	0.70	0.42	0.20	4.42(4.73)
25	0.65	0.38	0.25	1.22	0.68	0.75	0.21	4.52(4.83)
32	0.79	0.5	0.25	1.49	1.07	0.60	0.47	5.50(5.81)
40	1.02	0.62	0.375	1.85	0.88	0.65	0.25	5.58(5.94)
50	1.26	0.75	0.375	2.28	0.91	0.38	0.29	6.52(7)
63	1.5	0.75	0.375	2.83	0.91	0.38	0.29	6.52(7)

(): Dimension for long stroke.

CB SDB+Pin (Extra purchase)

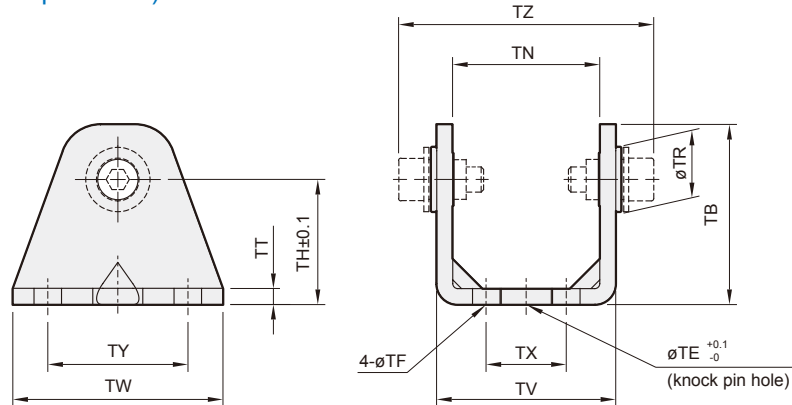


Unit: inch

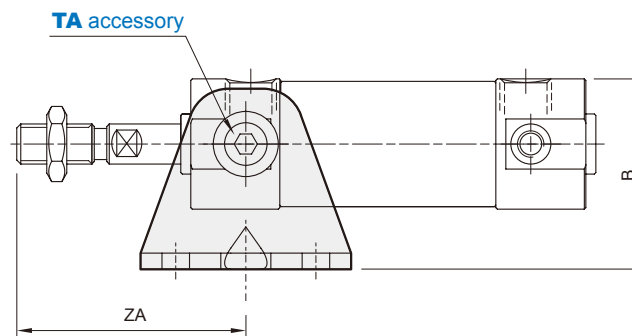
Code Tube I.D.	B	CD	CZ	L	RR	TE	TF	TH	TT	TV	TW	TX	TY	TZ	Z	ZC
20	1.50	0.315	1.14	0.55	0.43	0.394	0.22	0.98	0.13	1.41	1.65	0.63	1.10	1.71	4.27 (4.58)	5.10 (5.41)
25	1.79	0.394	1.30	0.63	0.51	0.394	0.22	1.18	0.13	1.57	1.65	0.79	1.10	1.89	4.47 (4.78)	5.30 (5.61)
32	2.13	0.472	1.57	0.79	0.59	0.394	0.26	1.38	0.18	1.94	1.89	0.87	1.10	2.34	5.22 (5.53)	6.16 (6.47)
40	2.50	0.551	1.93	0.87	0.71	0.394	0.26	1.57	0.18	2.30	2.20	1.18	1.18	2.81	5.57 (5.93)	6.67 (7.03)
50	3.11	0.630	2.36	0.98	0.79	0.787	0.35	1.97	0.24	2.85	2.52	1.42	1.42	3.39	6.59 (7.07)	7.85 (8.33)
63	3.78	0.709	2.91	1.18	0.87	0.787	0.43	2.36	0.31	3.56	2.91	1.81	1.81	4.15	6.79 (7.27)	8.25 (8.73)

(): Dimension for long stroke.

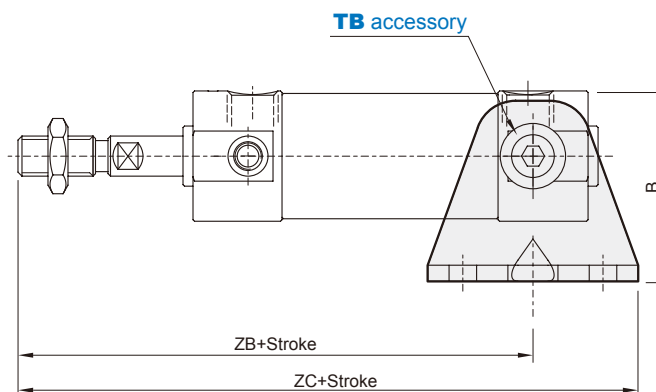
SDB TA/TB (Extra purchase)



SDB-R



SDB-H

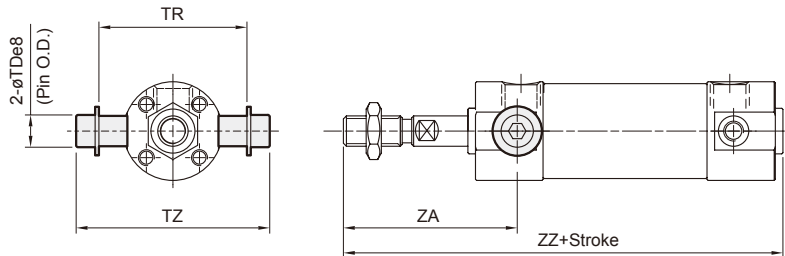


Unit: inch

Code Tube I.D.	B	TB	TE	TF	TH	TN	TR	TT	TV	TW	TX	TY	TZ	ZA	ZB	ZC	Applicable pin O.D.
20	1.50	1.42	0.394	0.22	0.98	1.15	0.51	0.13	1.41	1.65	0.63	1.10	2.00	1.43	3.29(3.6)	3.80(4.11)	0.315 -0.0016 -0.0030
25	1.79	1.69	0.394	0.22	1.18	1.30	0.59	0.13	1.57	1.65	0.79	1.10	2.29	1.55	3.41(3.72)	3.92(4.23)	0.394 -0.0016 -0.0030
32	2.13	1.97	0.394	0.26	1.38	1.59	0.67	0.18	1.94	1.89	0.87	1.10	2.81	2.06	4.04(4.31)	4.51(4.82)	0.472 -0.0020 -0.0037
40	2.50	2.28	0.394	0.26	1.57	1.94	0.83	0.18	2.30	2.20	1.18	1.18	3.48	2.10	4.31(4.59)	4.78(5.14)	0.551 -0.0020 -0.0037
50	3.11	2.76	0.787	0.35	1.97	2.38	0.94	0.24	2.85	2.52	1.42	1.42	4.29	2.58	5.14(5.58)	5.69(6.17)	0.630 -0.0020 -0.0037
63	3.78	3.23	0.787	0.43	2.36	2.94	1.02	0.31	3.56	2.91	1.81	1.81	5.15	2.58	5.14(5.58)	5.69(6.17)	0.709 -0.0020 -0.0037

(): Dimension for long stroke.

TA Front trunnion

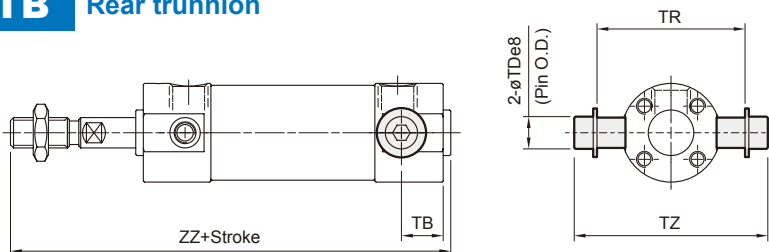


Unit: inch

Code Tube I.D.	TB	TDe8	TR	TZ
20	0.43(0.43)	0.315	1.54	2.00
25	0.43(0.43)	0.394	1.69	2.29
32	0.39(0.43)	0.472	2.11	2.81
40	0.39(0.47)	0.551	2.54	3.48
50	0.47(0.51)	0.630	3.15	4.29
63	0.47(0.51)	0.709	3.86	5.15

(): Dimension for long stroke.

TB Rear trunnion



Unit: inch

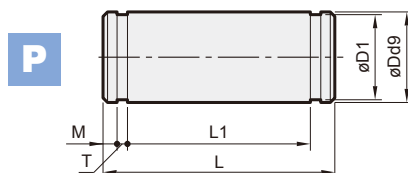
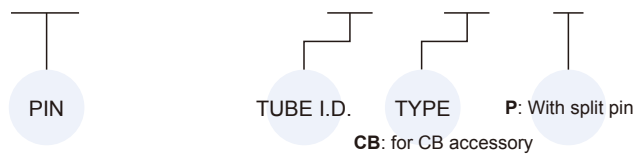
Code Tube I.D.	ZA	ZB	ZZ
20	1.43	3.29 (3.60)	3.80 (4.11)
25	1.55	3.41 (3.72)	3.92 (4.23)
32	2.06	4.04 (4.31)	4.51 (4.82)
40	2.10	4.31 (4.59)	4.78 (5.14)
50	2.58	5.14 (5.58)	5.69 (6.17)
63	2.58	5.14 (5.58)	5.69 (6.17)

(): Dimension for long stroke.

PIN

Order example * MCCG / MCCN are common accessories.

PIN — MCCG — 32 — CB — P



for CB

Unit: inch

Code Tube I.D.	Dd9	D1	L	L1	M	T	Snap ring
20	0.315 ^{-0.0016} / _{-0.0030}	0.30	1.71	1.52	0.06	0.04	STW-8
25	0.394 ^{-0.0016} / _{-0.0030}	0.38	1.89	1.68	0.06	0.05	STW-10
32	0.472 ^{-0.0020} / _{-0.0037}	0.45	2.34	2.13	0.06	0.05	STW-12
40	0.551 ^{-0.0020} / _{-0.0037}	0.53	2.81	2.56	0.08	0.05	STW-14
50	0.630 ^{-0.0020} / _{-0.0037}	0.60	3.39	3.13	0.08	0.05	STW-16
63	0.709 ^{-0.0020} / _{-0.0037}	0.67	4.15	3.85	0.10	0.05	STW-18