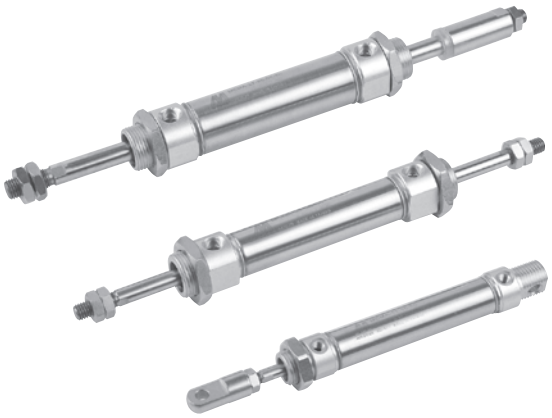
MCMA series

MINIATURE CYLINDER



Features

■ Non lubrication

- Special housing and bushing enable self lubrication of piston rod.

■ High quality long service life

- Hard anodised stainless steel cylinder tubes offer a high resistance to corrosion and low internal friction.
- Cylinder mountings, available with a comprehensive range of accessories for rigid or flexible mounting.
- Operation, with the exception of MCMA-11, single and doubling type available MCMA-13 / 15.

■ Magnetic as standard

Specification

Model		MCMA				
Tube I.D.		16	20	25	32	40
Port size		M5×0.8	Rc1/8			
Medium		Air				
Max. operating perssure		0.7 MPa				
Min. operating perssure		Double: 0.06 MPa ; Single: 0.15 MPa				
Proof pressure		1 MPa				
Lubricator		Not required				
Ambient temperature		-5~+60°C (No freezing)				
Available speed range		50~750 mm/sec				
Max. allowable kinetic energy (J)	Cushion pad	0.16	0.27	0.4	0.65	1.2
	Cushion air	0.32	0.54	0.78	1.27	2.35
Sensor switch		RCM (Please refer to page 8-16)				
Sensor switch (band)		BM16	BM20	BM25	BM32	BM40

* For precautions, please refer to page 3-2.

Table for standard stroke

Acting type		Tube I.D.	Stroke (mm)	Max. stroke (mm)
Single acting	13/15/23	ø16,20,25 ø32,40	15,25,50,75,100	150
Double acting	11	ø16,20,25 ø32,40	↑ 125,150,200, 300,400,500	1000
	21/27		↑ 125,150,200, 300,400	450

* Available with double action type cylinder with stroke more than 500 mm. Sub-piston increases the total length of cylinder by 10 mm and provides further stability.

* Intermediate stroke are available, please contact us.

Order example

MCMA — 11 — 32 — 100 — A — N — □

MODEL

STYLE

1: Single rod
2: Double rod

Code		Symbol	Description
1	1		Double acting / Male thread
1	3		Single acting / Normally extended male thread
1	5		Single acting / Normally returned male thread
2	1		Double rod / Male thread
2	3		Single acting / Double rod male thread
2	7		Double rod / Adjustable male thread Please mark "adjustable stroke" at order list

TUBE I.D.

STROKE

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

TYPE

Blank: Standard
N: Non-pivot type (end-plain)

PORT THREAD

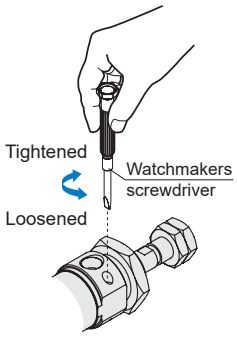
Blank: M5×0.8 (for ø16)
Blank: Rc thread
G: G thread
NPT: NPT thread (for ø20~ø40)

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

⚠ Caution

For (**A**) Cushion air (Adjustable)

1. To adjust a cushion needle, please slowly turn the needle valve from the fully closed status to the required status which needs to be within 2.5 turns.
2. If the needle valve loosen excessively, the buffer doesn't take effect and the lifetime of cylinder would be shortened.



Accessories & Connector

Code	Accessories			
	LB (LB×2, with cover nut ×1)	LB (LB×1, without cover nut)	NUT	
Cover type	Standard type	Non-pivot type (N)	–	
Mounting / Tube I.D.	with nut		Rod nut	Cover nut
ø16	LB-M1-16x2	LB-M1-16	NUT-M6x1.0x5Hx10B	NUT-M16x1.5x6Hx22B
ø20	LB-M3-20x2	LB-M3-20	NUT-M8x1.25x5Hx13B	NUT-M22x1.5x6Hx30B
ø25			NUT-M10x1.25x6Hx17B	
ø32	LB-M1-32x2	LB-M1-32		NUT-M24x2.0x8Hx32B
ø40	LB-M1-40x2	LB-M1-40	NUT-M12x1.25x7Hx19B	NUT-M30x2.0x8Hx41B

Code	Accessories			Connector		
	FA	FB	SDB (with pin×1 + snap ring×2)	Y	I	YS (Y+Floating pin)
Cover type	All applicable	Standard type	Standard type	All applicable		
Mounting / Tube I.D.						
ø16	FA-M3-12		SDB-M1-16	Y-M3-12	I-M3-12	YS-M3-16
ø20	FA-M3-20		SDB-M1-20	Y-M3-20	I-M3-20	YS-M3-20
ø25				Y-Q2-32	I-Q2-32	YS-Q2-32
ø32	FA-M1-32		SDB-M1-32			
ø40	FA-M1-40		SDB-M1-40	Y-Q2-40	I-Q2-40	YS-Q2-40

Pin

Applicable	YS connector	Y&I connector	SDB connector
Code	PIN-S	PIN-Y-P (with split pin / snap ring)	PIN-SDB-P (with snap ring)
Fig / Tube I.D.		ø16 ø20~ø40	
ø16	PIN-M3-16-S	PIN-M3-12-2-P	PIN-M1-16-1-P
ø20	PIN-M3-20-S	PIN-M3-20-2-P	PIN-M3-20-1-P
ø25	PIN-Q2-32-S	PIN-Q2-32-2-P	
ø32			PIN-M1-32-1-P
ø40	PIN-Q2-40-S	PIN-Q2-40-2-P	PIN-M1-40-1-P

Cylinder & accessories weight

Cylinder weight

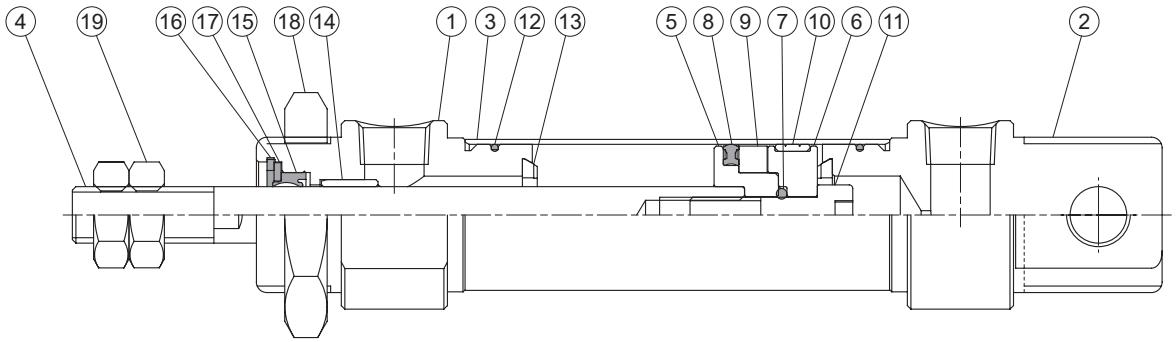
Unit: g

Model	Basic weight MCMA-11	Basic weight MCMA-11-N	Stroke 25 mm MCMA-11	Basic weight MCMA-11-A	Stroke 25 mm MCMA-11-A
Tube I.D.					
ø16	76	70	12	74	13
ø20	178	162	23	159	24
ø25	230	214	30	202	27
ø32	295	277	39	363	39
ø40	496	462	60	506	60

Accessories weight

Unit: g

Model	LB	FA/FB	SDB	Y	I	YS	Pin	Floating pin	Rod nut	Cover nut
Tube I.D.										
ø16	65	25	24	13	15	18	5	5	2	11
ø20	103	67	103	40	42	50	10	10	4	20
ø25	103	67	103	72	82	90	19	18	8	20
ø32	200	95	153	72	72	90	19	18	8	29
ø40	233	110	184	96	96	128	33	32	11	47



Material

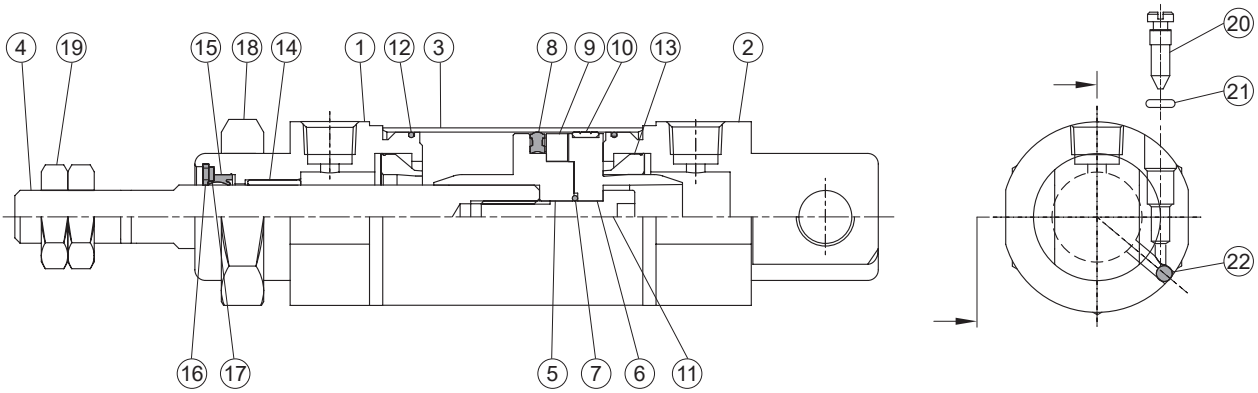
No.	Tube I.D. / Part name	16	20	25	32	40	Q'y 11 type	Q'y 21 type	Component parts (inclusion) 11 type	Component parts (inclusion) 21 type
1	Rod cover	Aluminum alloy					1	2	●	●
2	Head cover	Aluminum alloy					1	–	●	
3	Tube	Stainless steel					1	1		
4	Piston rod	*1	Carbon steel				1	1		
5	Piston-R	Aluminum alloy					1	1	●	●
6	Piston-H	Aluminum alloy					1	1	●	●
7	Piston gasket	NBR					1	1	●	●
8	Piston packing	NBR					1	1	●	●
9	Magnet ring	Magnet material					1	1	●	●
10	Wear ring	Resin					1	1	●	●
11	Piston bolt	SCM					1	–	●	
12	Cover ring	NBR	–			NBR	2	2	●	●
13	Cushion gasket	NBR					2	2	●	●
14	Rod bush	Bearing alloy					1	2	●	●
15	Rod packing *2	NBR					1	2	●	●
16	Snap ring	Spring steel					1	2	●	●
17	Washer	Carbon steel					1	2	●	●
18	Tie nut	Carbon steel					1	2	●	●
19	Rod front nut	Carbon steel					2	2	●	●

*1. Stainless steel
*2. Only the rod packing is repairable, please contact our sales if needed.

Order example of component parts

CP – MCMA – 2 – 16 – N

- MODEL
- Blank: Single rod
  2: Double rod
- TUBE I.D.
- END COVER TYPE
  Blank: Standard type
  N: Non-pivot type



Material

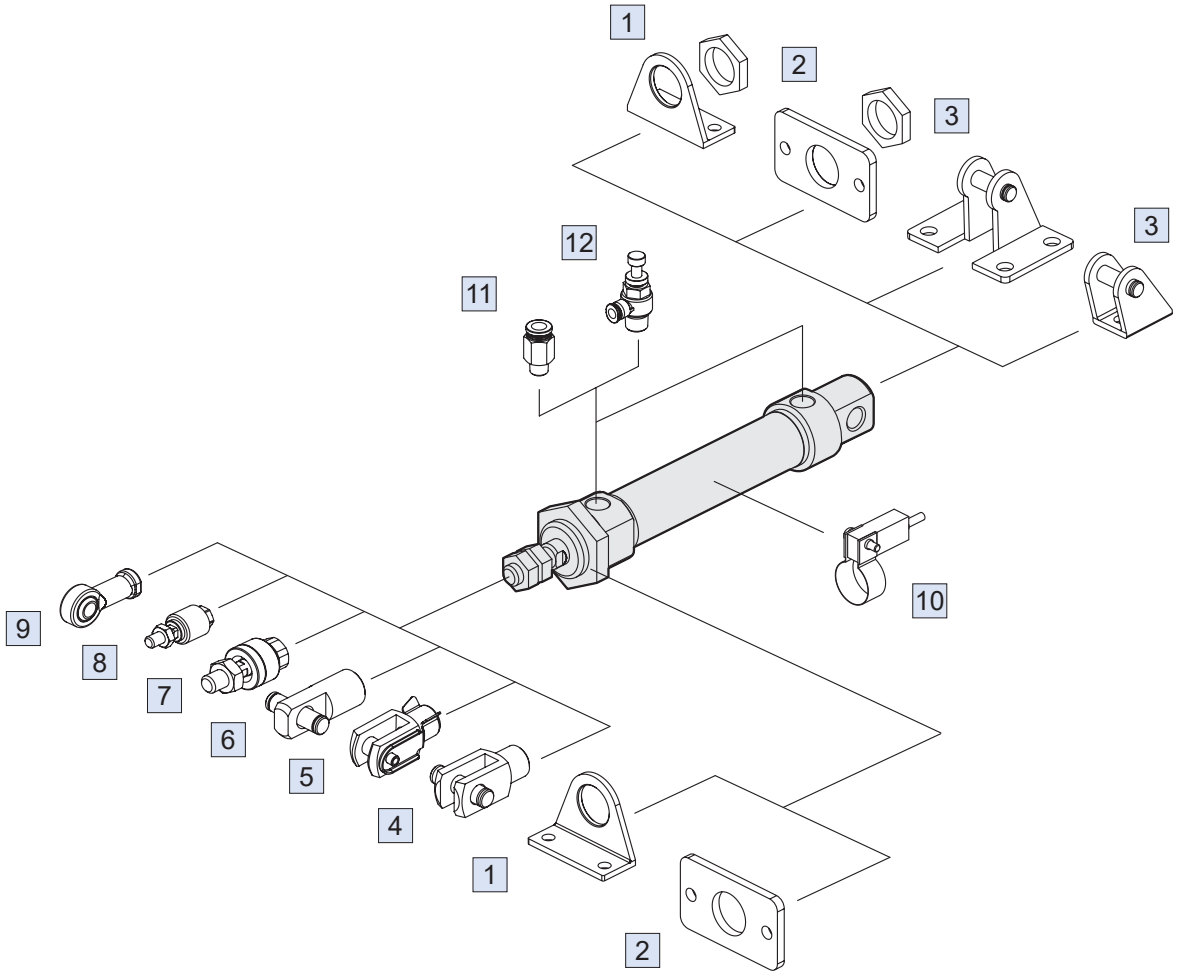
No.	Tube I.D. / Part name	16	20	25	32	40	Q'y 11 type	Q'y 21 type	Component parts (inclusion) 11 type	Component parts (inclusion) 21 type
1	Rod cover	Aluminum alloy					1	2	●	●
2	Head cover	Aluminum alloy					1	–	●	
3	Tube	Stainless steel					1	1		
4	Piston rod	*1	Carbon steel				1	1		
5	Piston-R	Aluminum alloy					1	1	●	●
6	Piston-H	Aluminum alloy					1	1	●	●
7	Piston gasket	NBR					1	1	●	●
8	Piston packing	NBR					1	1	●	●
9	Magnet ring	Magnet material					1	1	●	●
10	Wear ring	Resin					1	1	●	●
11	Piston bolt	SCM					1	–	●	
12	Cover ring	NBR	–		NBR		2	–	●	●
13	Cushion packing	NBR					2	2	●	●
14	Rod bush	Bearing alloy					1	2	●	●
15	Rod packing *2	NBR					1	2	●	●
16	Snap ring	Spring steel					1	2	●	●
17	Washer	Carbon steel					1	2	●	●
18	Tie nut	Carbon steel					1	2	●	●
19	Rod front nut	Carbon steel					2	2	●	●
20	Needle valve	Stainless steel			Carbon steel		2	2	●	●
21	Needle valve packing	NBR					2	2	●	●
22	Steel ball	Stainless steel					2	2	●	●

*1. Stainless steel
*2. Only the rod packing is repairable, please contact our sales if needed.

Order example of component parts

CP — MCMA — 2 — 16 — A — N

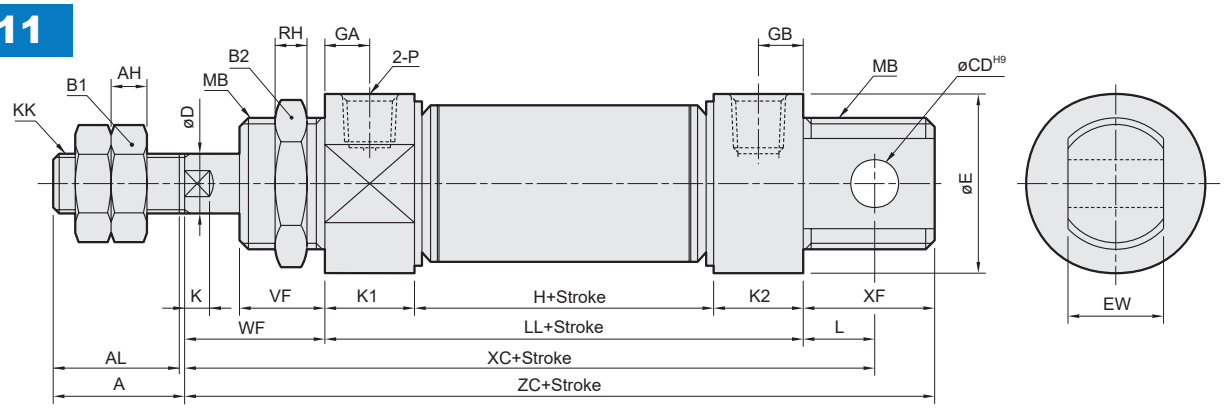
- MODEL
- Blank: Single rod
  2: Double rod
- TUBE I.D.
- **A**: Cushion air (Adjustable)
- END COVER TYPE
  Blank: Standard type
  N: Non-pivot type



No.	Accessories	Material	Page
1	Mounting accessories LB	Carbon steel	3-8, 12
2	Mounting accessories FA/FB	Carbon steel	3-9, 13
3	Mounting accessories SDB+PIN	Carbon steel	3-9, 13, 14
4	Accessories Y+PIN	Carbon steel	3-14
5	Accessories YS (Y+Floating pin)	Carbon steel	3-14
6	Accessories I+PIN	Carbon steel	3-14

No.	Accessories	Material	Page
7	Floating joint MFC	Carbon steel	8-2
8	Floating joint MFCS	Carbon steel	8-5
9	Female rod ends PHS	Carbon steel	8-6
10	Sensor switch RCM+BM**	–	8-16
11	Fitting PC (PISCO)	–	8-3 (Vol.1)
12	Speed controller JSC (PISCO)	–	8-15 (Vol.1)

11



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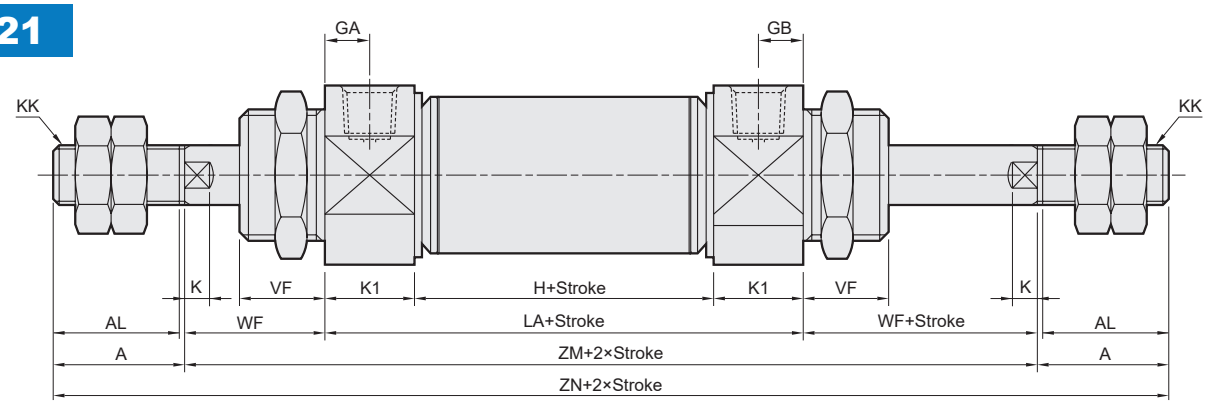

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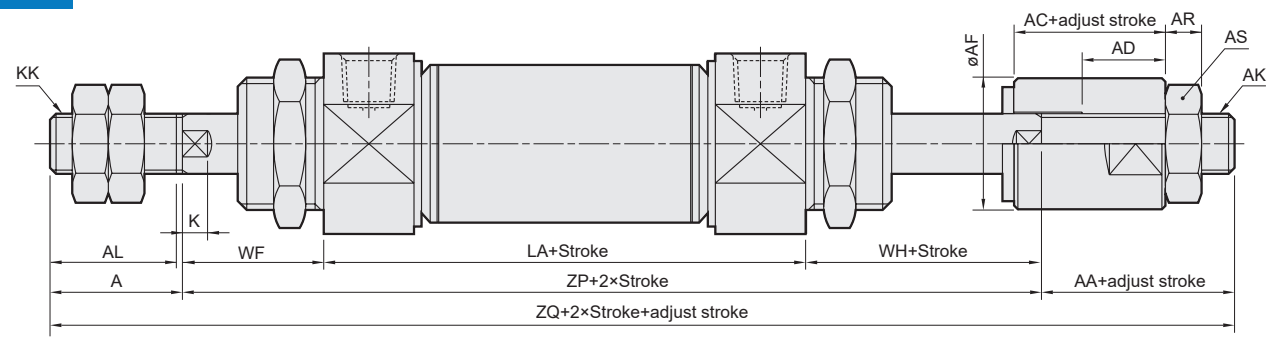
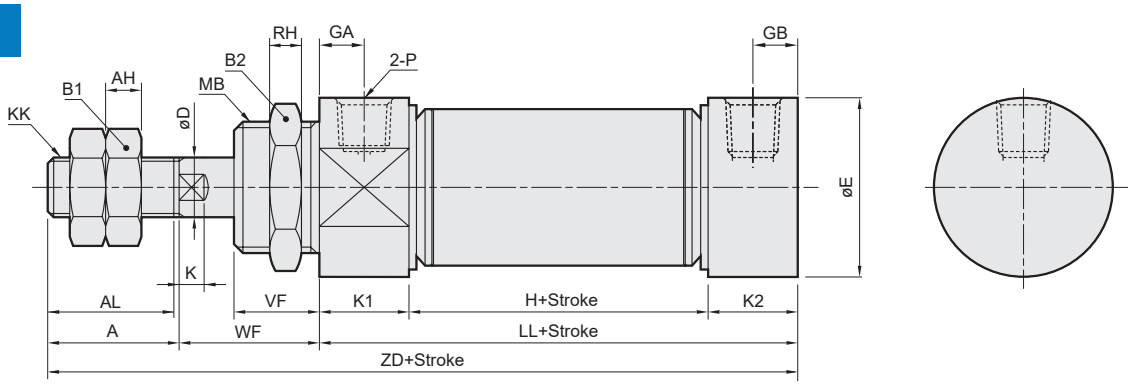


Code / Tube I.D.	A	AA	AC	AD	AF	AH	AL	AR	AS	AK	B1	B2	CD	D	E	EW	GA	GB	H	K	KK
16	16	16	13	7.5	12	5	14	4	8	M5×0.8	10	22	6	6	19.7	12 $^{-0.05}_{-0.4}$	5	5	34	4	M6×1.0
20	20	19	15	9.5	16	5	17.5	5	13	M8×1.25	13	30	8	8	26.7	16 $^{-0.05}_{-0.4}$	7.5	7.5	40	3.5	M8×1.25
25	22	19	15	9.5	16	6	19.5	5	13	M8×1.25	17	30	8	10	29.7	16 $^{-0.05}_{-0.4}$	7.5	7.5	40	5	M10×1.25
32	22	18	12	7	20	6	19.5	6	17	M10×1.25	17	32	10	12	36	16 $^{-0.05}_{-0.4}$	7.5	10.5	37	8	M10×1.25
40	30	18	12	7	30	7	27	7	19	M12×1.25	19	41	12	14	45	20 $^{-0.05}_{-0.4}$	7.5	10.5	42	7	M12×1.25

Code / Tube I.D.	K1	K2	L	LA	LL	MB	P	RH	VF	WF	WH	XC	XF	ZC	ZM	ZN	ZP	ZQ
16	10	10	9	54	54	M16×1.5	M5×0.8	6	12	22	19.5	85	16	92	98	130	95.5	127.5
20	15	15	12	70	70	M22×1.5	Rc1/8	6	12	18	19.5	100	21	109	106	146	107.5	146.5
25	15	15	12	70	70	M22×1.5	Rc1/8	6	15	27	22.5	109	21	118	124	168	119.5	160.5
32	15	18	14	67	70	M24×2.0	Rc1/8	8	18	30	24	114	24	124	127	171	121	161
40	15	18	16	72	75	M30×2.0	Rc1/8	8	17	27	24	118	28	130	126	186	123	171

N

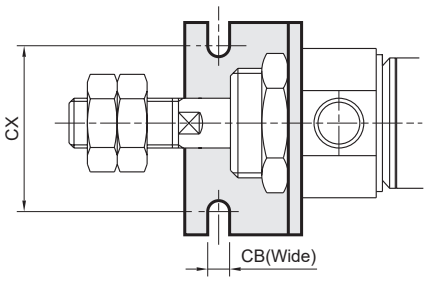


Code / Tube I.D.	A	AH	AL	B1	B2	D	E	GA	GB	H	K	KK	K1	K2	LL	MB	P	RH	VF	WF	ZD
16	16	5	14	10	22	6	19.7	5	5	34	4	M6×1.0	10	10	54	M16×1.5	M5×0.8	6	12	22	92
20	20	5	17.5	13	30	8	26.7	7.5	7.5	40	3.5	M8×1.25	15	15	70	M22×1.5	Rc1/8	6	12	18	108
25	22	6	19.5	17	30	10	29.7	7.5	7.5	40	5	M10×1.25	15	15	70	M22×1.5	Rc1/8	6	15	27	119
32	22	6	19.5	17	32	12	36	7.5	10.5	37	8	M10×1.25	15	18	70	M24×2.0	Rc1/8	8	18	30	122
40	30	7	27	19	41	14	45	7.5	10.5	42	7	M12×1.25	15	18	75	M30×2.0	Rc1/8	8	17	27	132

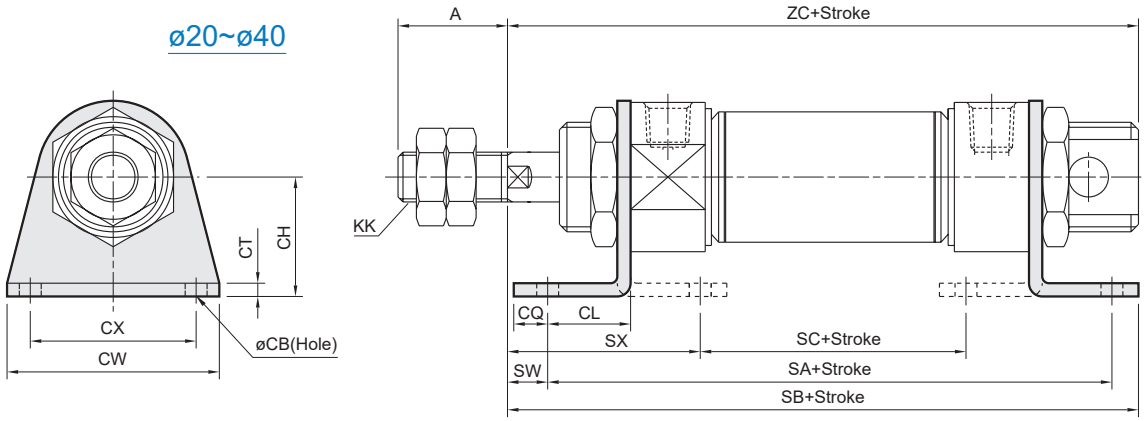
Mounting accessories

LB

ø16

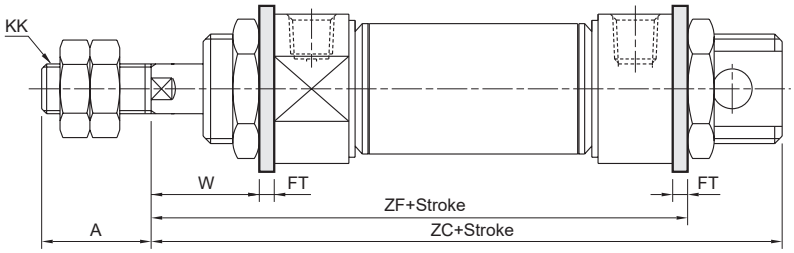


ø20~ø40

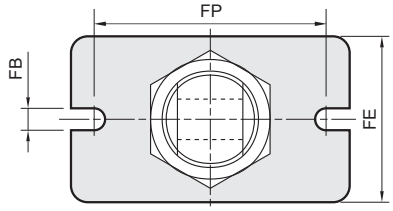


Code / Tube I.D.	A	CB	CH	CL	CQ	CT	CW	CX	KK	SA	SB	SC	SW	SX	ZC
16	16	5.5	20	13	6	3.2	44	32	M6×1.0	80	95	34.4	9	31.8	92
20	20	6.6	25	15	8	3.2	54	40	M8×1.25	100	111	46.4	3	29.8	109
25	22	6.6	25	15	8	3.2	54	40	M10×1.25	100	120	46.4	12	38.8	118
32	22	6.6	32	25	8	4	59	45	M10×1.25	120	133	28	5	51	124
40	30	6.6	36	25	8	4	64	50	M12×1.25	125	135	33	2	48	130

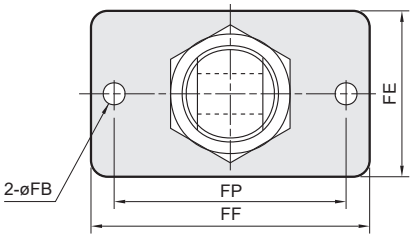
FA / FB



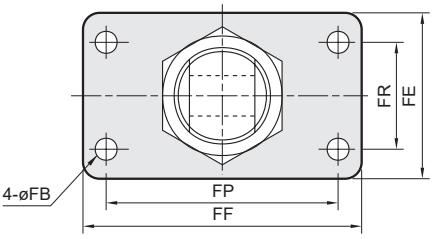
ø16



ø20, ø25

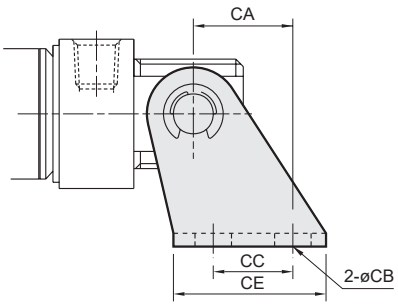


ø32, ø40

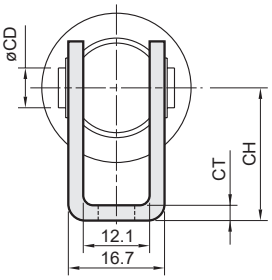


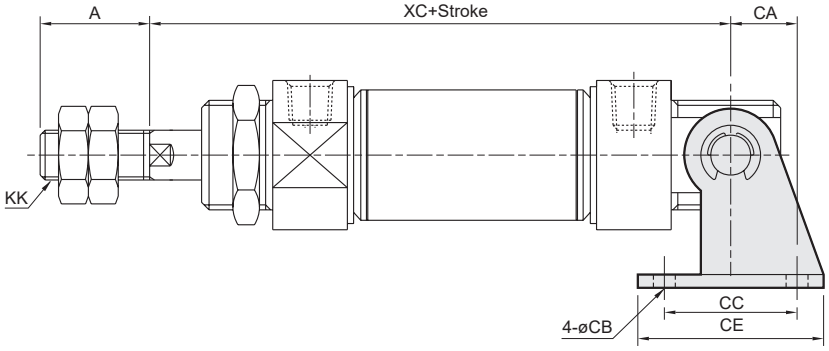
Code / Tube I.D.	A	FB	FE	FF	FP	FR	FT	KK	W	ZC	ZF
16	16	5.5	26	52	40	–	3.2	M6×1.0	18.8	92	79.2
20	20	6.6	38	64	50	–	4.5	M8×1.25	13.5	109	92.5
25	22	6.6	38	64	50	–	4.5	M10×1.25	22.5	118	101.5
32	22	6.6	47	72	58	33	4.5	M10×1.25	25.5	124	104.5
40	30	6.6	50	84	70	36	4.5	M12×1.25	22.5	130	105.5

SDB

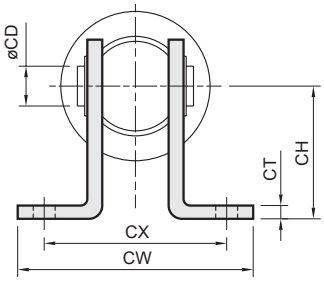


ø16



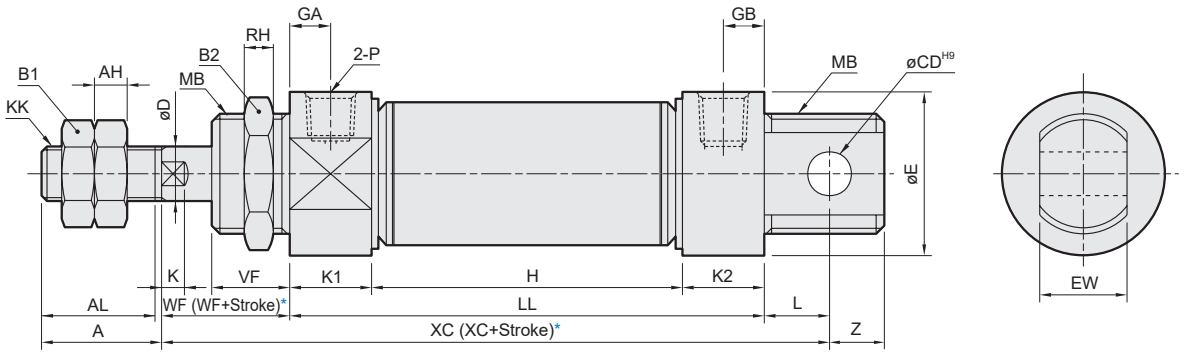


ø20~ø40



Code / Tube I.D.	A	CA	CB	CC	CD	CE	CH	CT	CW	CX	KK	XC
16	16	15	5.5	12	6	23	20	2.3	–	–	M6×1.0	85
20	20	16	6.6	32	8	48	32	3.2	67	51	M8×1.25	100
25	22	16	6.6	32	8	48	32	3.2	67	51	M10×1.25	109
32	22	18	6.6	36	10	52	36	4	67	51	M10×1.25	114
40	30	20	6.6	40	12	56	40	4	69	53	M12×1.25	118

13 15

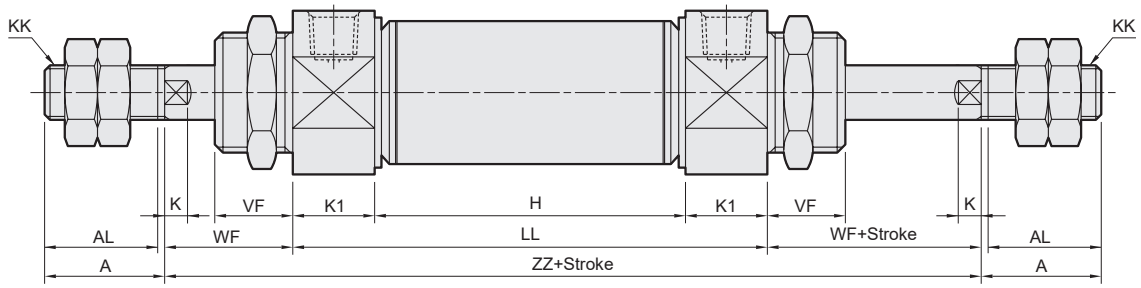


* ( ) Dimension for 13 type.

Code / Tube I.D.	A	AH	AL	B1	B2	CD	D	E	EW	GA	GB	K	KK	K1	K2	L	MB	P	RH	VF	WF	Z
16	16	5	14	10	22	6	6	19.7	12 $^{-0.05}_{-0.4}$	5	5	4	M6×1.0	10	10	9	M16×1.5	M5×0.8	6	12	22	7
20	20	5	17.5	13	30	8	8	26.7	16 $^{-0.05}_{-0.4}$	7.5	7.5	3.5	M8×1.25	15	15	12	M22×1.5	Rc1/8	6	12	18	9
25	22	6	19.5	17	30	8	10	29.7	16 $^{-0.05}_{-0.4}$	7.5	7.5	5	M10×1.25	15	15	12	M22×1.5	Rc1/8	6	15	27	9
32	22	6	19.5	17	32	10	12	36	16 $^{-0.05}_{-0.4}$	7.5	10.5	8	M10×1.25	15	18	14	M24×2.0	Rc1/8	8	18	30	10

Code / Stroke / Tube I.D.	H							LL							XC						
	15	25	50	75	100	125	150	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	64	74	114	154	194	–	–	84	94	134	174	214	–	–	115	125	165	205	245	–	–
20	80	90	140	190	240	290	340	110	120	170	220	270	320	370	140	150	200	250	300	350	400
25	80	90	140	190	240	290	340	110	120	170	220	270	320	370	149	159	209	259	309	359	409
32	77	87	137	187	237	287	337	110	120	170	220	270	320	370	154	164	214	264	314	364	414

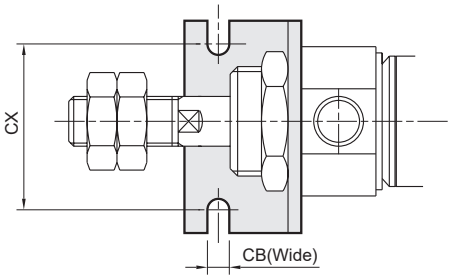
23



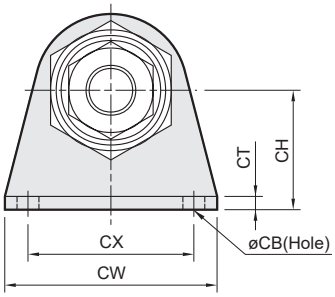
Code / Stroke / Tube I.D.	H							LL							ZZ						
	15	25	50	75	100	125	150	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	64	74	114	154	194	–	–	84	94	134	174	214	–	–	125	135	175	215	255	–	–
20	80	90	140	190	240	290	340	110	120	170	220	270	320	370	146	156	206	256	306	356	406
25	80	90	140	190	240	290	340	110	120	170	220	270	320	370	164	174	224	274	324	374	424
32	77	87	137	187	237	287	337	107	117	167	217	267	317	367	167	177	227	277	327	377	427

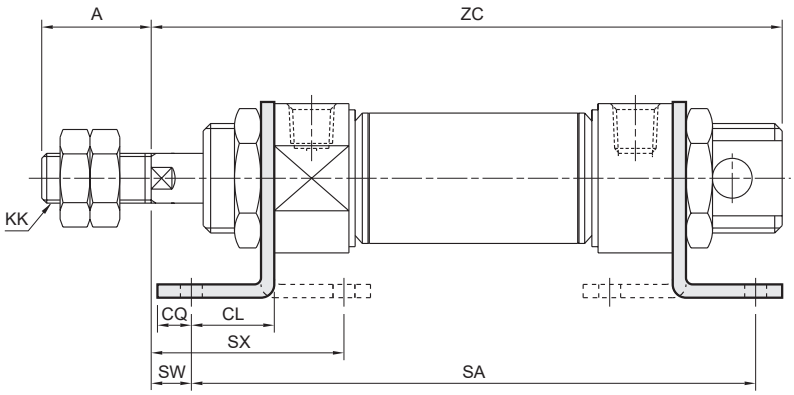
LB

ø16



ø20~ø32



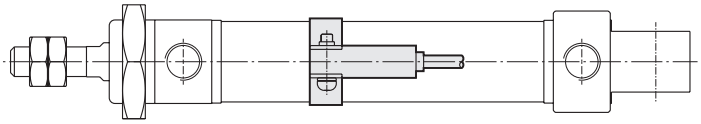


Code / Tube I.D.	A	CB	CH	CL	CQ	CT	CW	CX	KK	SW	SX
16	16	5.5	20	13	6	3.2	44	32	M6×1.0	9	31.8
20	20	6.6	25	15	8	3.2	54	40	M8×1.25	3	29.8
25	22	6.6	25	15	8	3.2	54	40	M10×1.25	12	38.8
32	22	6.6	32	25	8	4	59	45	M10×1.25	5	51

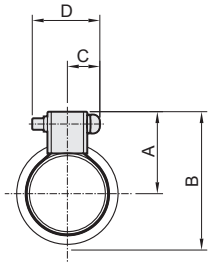
Code / Stroke / Tube I.D.	SA							ZC						
	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	110	120	160	200	240	–	–	121	131	171	211	251	–	–
20	140	150	200	250	300	350	400	146	156	206	256	306	356	406
25	140	150	200	250	300	350	400	155	165	215	265	315	365	415
32	160	170	220	270	320	370	420	162	172	222	272	322	372	422

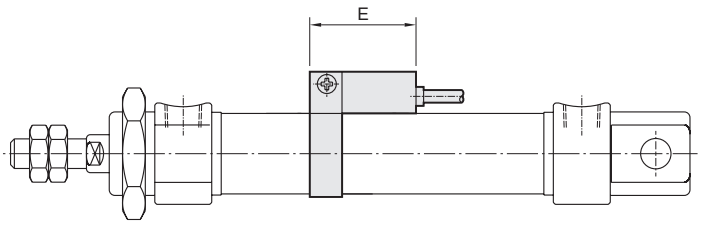
Installation of sensor switch

Sensor switch: RCM
Sensor switch band: BM**

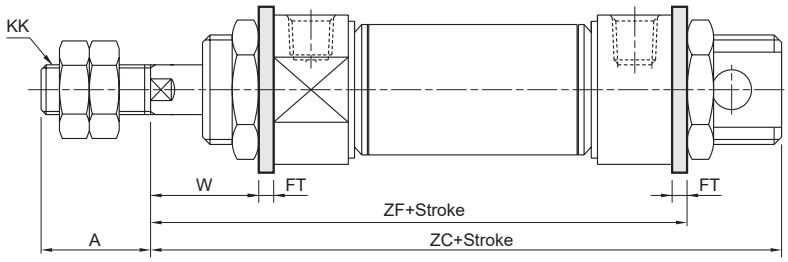


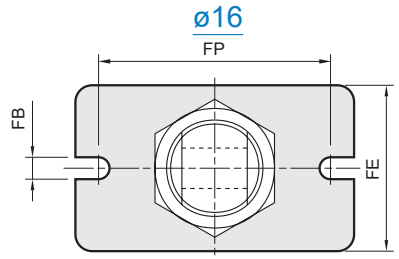
Code / Tube I.D.	A	B	C	D	E
16	20	30	10	16	28
20	22	36	10	16	28
25	25	40	10	16	28
32	28	46	10	16	28
40	32	55	10	16	28

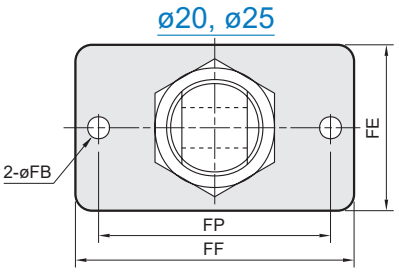


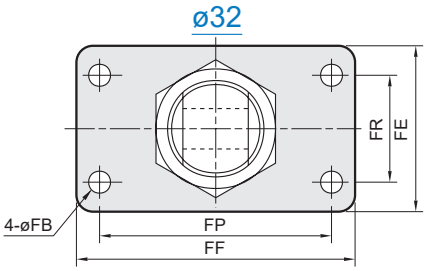


FA / FB





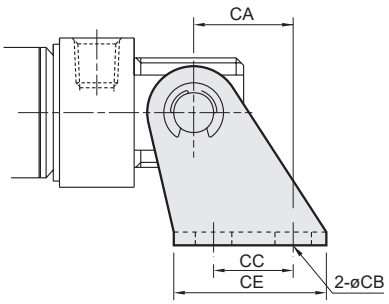


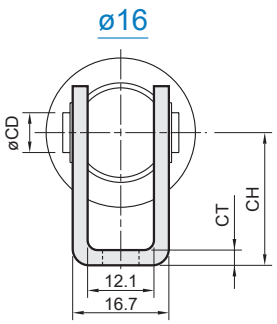


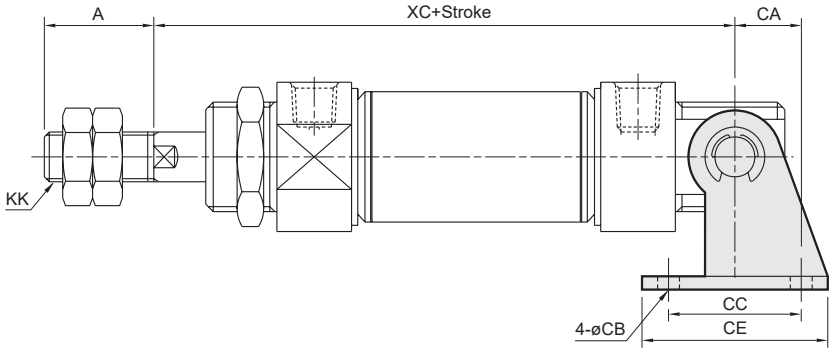
Code / Tube I.D.	A	FB	FE	FF	FP	FR	FT	KK	W
16	16	5.5	26	52	40	–	3.2	M6×1.0	18.8
20	20	6.6	38	64	50	–	4.5	M8×1.25	13.5
25	22	6.6	38	64	50	–	4.5	M10×1.25	22.5
32	22	6.6	47	72	58	33	4.5	M10×1.25	25.5

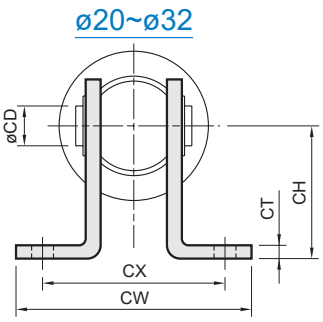
Code / Stroke / Tube I.D.	ZC							ZF						
	15	25	50	75	100	125	150	15	25	50	75	100	125	150
16	121	131	171	211	251	–	–	109.2	119.2	159.2	199.2	239.2	–	–
20	146	156	206	256	306	356	406	132.5	142.5	192.5	242.5	292.5	342.5	392.5
25	155	165	215	265	315	365	415	141.5	151.5	201.5	251.5	301.5	351.5	401.5
32	162	172	222	272	322	372	422	144.5	154.5	204.5	254.5	304.5	354.5	404.5

SDB









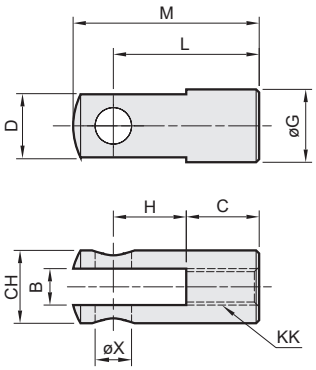
Code / Tube I.D.	A	CA	CB	CC	CD	CE	CH	CT	CW	CX	KK
16	16	15	5.5	12	6	23	20	2.3	–	–	M6×1.0
20	20	16	6.6	32	8	48	32	3.2	67	51	M8×1.25
25	22	16	6.6	32	8	48	32	3.2	67	51	M10×1.25
32	22	18	6.6	36	10	52	36	4	67	51	M10×1.25

Code / Stroke / Tube I.D.	XC						
	15	25	50	75	100	125	150
16	107	117	157	197	257	–	–
20	139	149	199	249	299	349	399
25	141	151	172	222	272	322	372
32	142	152	173	223	273	323	373

Y connector

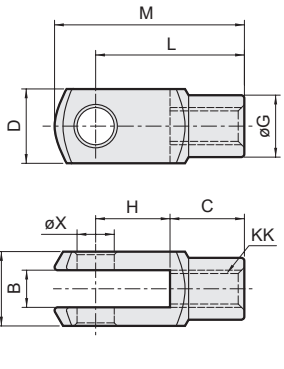
ø8~ø16

Not suitable for (S) floating pin

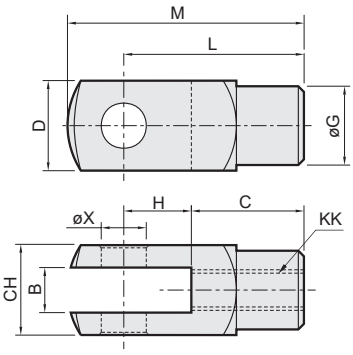


ø16*

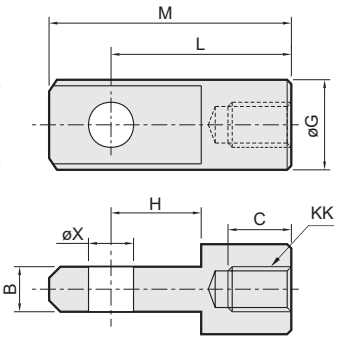
For (S) floating pin



ø20~ø40



I connector

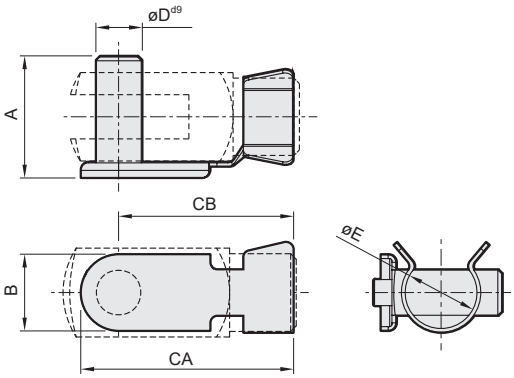


Code / Tube I.D.	B		C		CH		D		G		H		L		M		X
	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	Y	I	
8,10	4 $^{+0.4}_{+0.1}$	–	8	–	8	–	8	–	–	–	8	–	16	–	20.75	–	4 $^{+0.1}_{+0.01}$
12,16	6 $^{+0.4}_{+0.1}$	6 $^{-0.2}_{-0.3}$	12	8	12	–	–	–	12	12	12	10	24	21	31	28	6 $^{+0.1}_{+0.01}$
16*	6 $^{+0.4}_{+0.1}$	–	12	–	12	–	12	–	10	–	12	–	24	–	31	–	6 $^{+0.03}_{0}$
20	8 $^{+0.5}_{+0.15}$	8 $^{-0.1}_{-0.2}$	16	14	16	–	16	–	14	16	16	12	32	32	42	42	8 $^{+0.1}_{+0.01}$
25,32	10 $^{+0.5}_{+0.15}$	10 $^{-0.1}_{-0.2}$	20	17	19	–	19	–	18	20	20	15	40	40	52	52	10 $^{+0.1}_{+0.01}$
40	12 $^{+0.5}_{+0.15}$	12 $^{-0.1}_{-0.2}$	24	21	22	–	22	–	20	24	24	18	48	48	62	62	12 $^{+0.1}_{+0.01}$

Code / Tube I.D.	KK (MCMA)		KK (MCMI)	
	Y	I	Y	I
8,10	M4×0.7	–	M4×0.7	–
12,16,16*	M6×1.0			
20	M8×1.25			
25	M10×1.25			
32	M10×1.25		M10×1.5	
40	M12×1.25		M12×1.75	

PIN

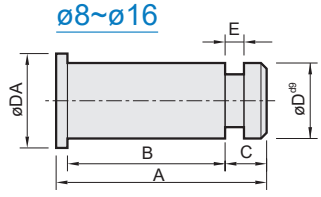
S ø16*~ø40



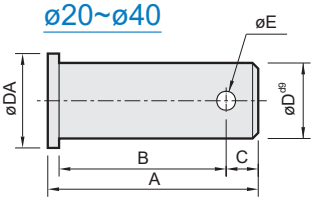
for floating pin

Code / Tube I.D.	A	B	CA	CB	D^{d9}	E
16*	16	10	28	23	ø6 $^{-0.03}_{-0.06}$	9.5
20	22	12	37	31	ø8 $^{-0.04}_{-0.08}$	13.5
25,32	26	14	45	38	ø10 $^{-0.04}_{-0.08}$	17
40	31	16	54	46	ø12 $^{-0.05}_{-0.09}$	19

P ø8~ø16



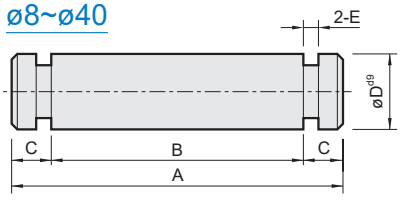
ø20~ø40



for Y & I connector

Code / Tube I.D.	A	B	C	D^{d9}	DA	E	Split pin
8,10	12	8.5	2	4 $^{-0.03}_{-0.06}$	8	0.7	E3
12,16	18.5	15	2	6 $^{-0.03}_{-0.06}$	10	0.7	E4
20	24.5	20.5	2.5	8 $^{-0.04}_{-0.08}$	12	ø2.5	2.5×16L
25,32	30	25	3.5	10 $^{-0.04}_{-0.08}$	14	ø3.2	3.2×20L
40	37	30	5	12 $^{-0.05}_{-0.09}$	16	ø3.2	3.2×20L

P ø8~ø40



for SDB

Code / Tube I.D.	A	B	C	D^{d9}	E	Split pin
8,10	18	14	2	4 $^{-0.03}_{-0.06}$	0.7	E3.2
12	23.5	19.5	2	6 $^{-0.03}_{-0.06}$	0.7	E5
16	21	17	2	6 $^{-0.03}_{-0.06}$	0.7	E5
20,25	30	25	2.5	8 $^{-0.04}_{-0.08}$	0.9	E7
32	33	27	3	10 $^{-0.04}_{-0.08}$	0.9	E9
40	37	31	3	12 $^{-0.05}_{-0.09}$	0.9	E9