



Special spec



Technical data



Caution for safety
(Read before installing)



Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø10,12	10,25,40,50,80,100,150,200	300
ø16		500
ø20,25	15,25,50,75,100,150,200	500

* Intermediate stroke are available, please contact us.

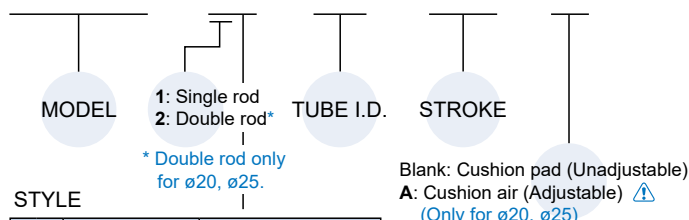
Tightening torque

Tube I.D.	Bolt	Max. tightening torque (kgf·cm)	Tube I.D.	Bolt	Max. tightening torque (kgf·cm)
ø10	M4×0.7	11.8	ø20	M8×1.25	170
ø12, 16	M6×1.0	41.0	ø25	M10×1.25	340

- Make sure the tightening torque of rod thread does not exceed the value above.
- Tightening torque tolerance ±5%.

Order example

MCMIS – 11 – 16 – 100 – A



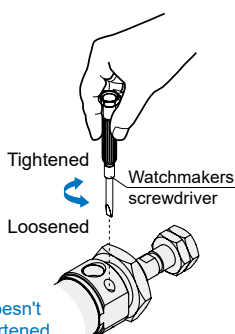
STYLE

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

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.



Feature

■ Non lubrication

Special housing and bushing enables self lubrication of piston rod.

■ High strength steel & chemical resistance

Highly resistant with crimped covers and entirely built in stainless steel. Available with or without adjustable cushioning, double acting or through piston rod.

On request complaint with 2014/34/UE ATEX directive.

■ ISO 6432 standard

Enables world-wide inter-changeability.

■ Cylinder mountings

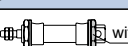
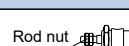
Available with a comprehensive range of accessories for rigid or flexible mounting.

■ Magnetic as standard

Specification

Model		MCMIS				
Tube I.D. (mm)		10	12	16	20	25
Port size		M5×0.8			G1/8	
Medium		Air				
Max. operating perssure		1.0 MPa				
Min. operating perssure		0.1 MPa		0.08 MPa		
Proof pressure		1 MPa				
Lubricator		Not required				
Ambient temperature		-35~-+80°C (No freezing)				
Available speed range		50~500 mm/sec				
Sensor switch		RDC, RQC  , RDT, RQT  , RCM 				
Sensor switch band	R°C	BKC-1 (Not for R°CV angle cable)				
	R*T	BKT-1				
	RCM	BM10	BM12	BM16	BM20	BM25

Order example of mounting accessories

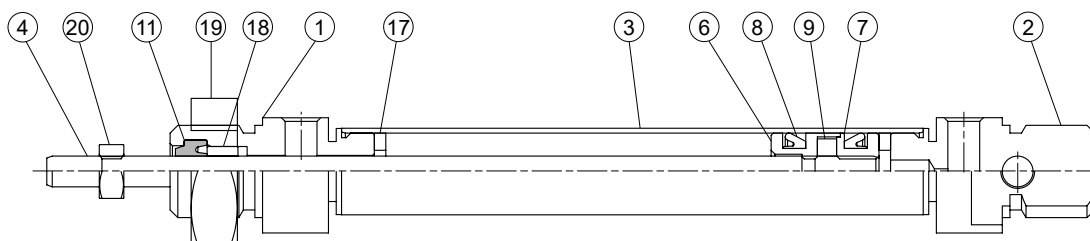
Accessories			
Code	LB (LB×2, with cover nut ×1)	NUT	
Mounting Tube I.D.		Rod nut 	Cover nut 
ø10	LB-M6-8x2	NUT-S-M4x0.7x3.2Hx7B	NUT-S-M12x1.25x7Hx19B
ø12	LB-M6-12x2	NUT-S-M6x1.0x4Hx10B	NUT-S-M16x1.5x5Hx22B
ø16			
ø20	LB-M6-20x2	NUT-S-M8x1.25x5Hx13B	NUT-S-M22x1.5x8Hx27B
ø25		NUT-S-M10x1.25x6Hx17B	

Accessories			Connector
Code	FA	FB	SDB (with pin×1 + snap ring×2)
Mounting Tube I.D.			
ø10	FA-M6-8		SDB-M6-8
ø12	FA-M6-12		SDB-M6-12
ø16			YP-M6-12
ø20	FA-M6-20		SDB-M6-20
ø25			YP-M6-25

* Material: Stainless steel

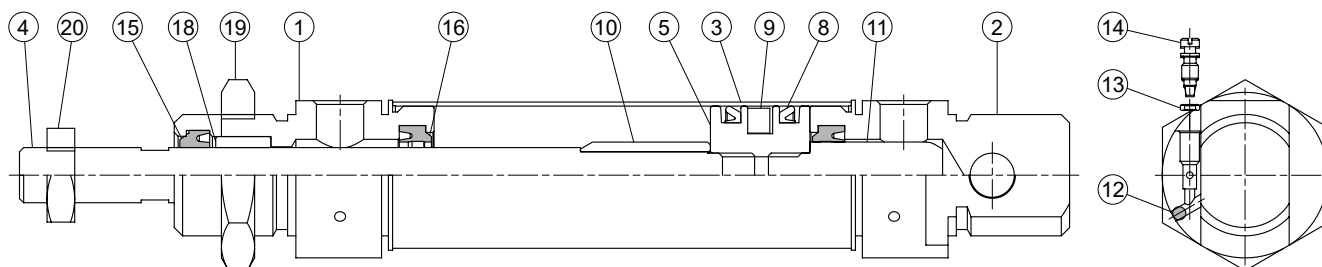
Cushion pad

Unadjustable



Cushion air

Adjustable



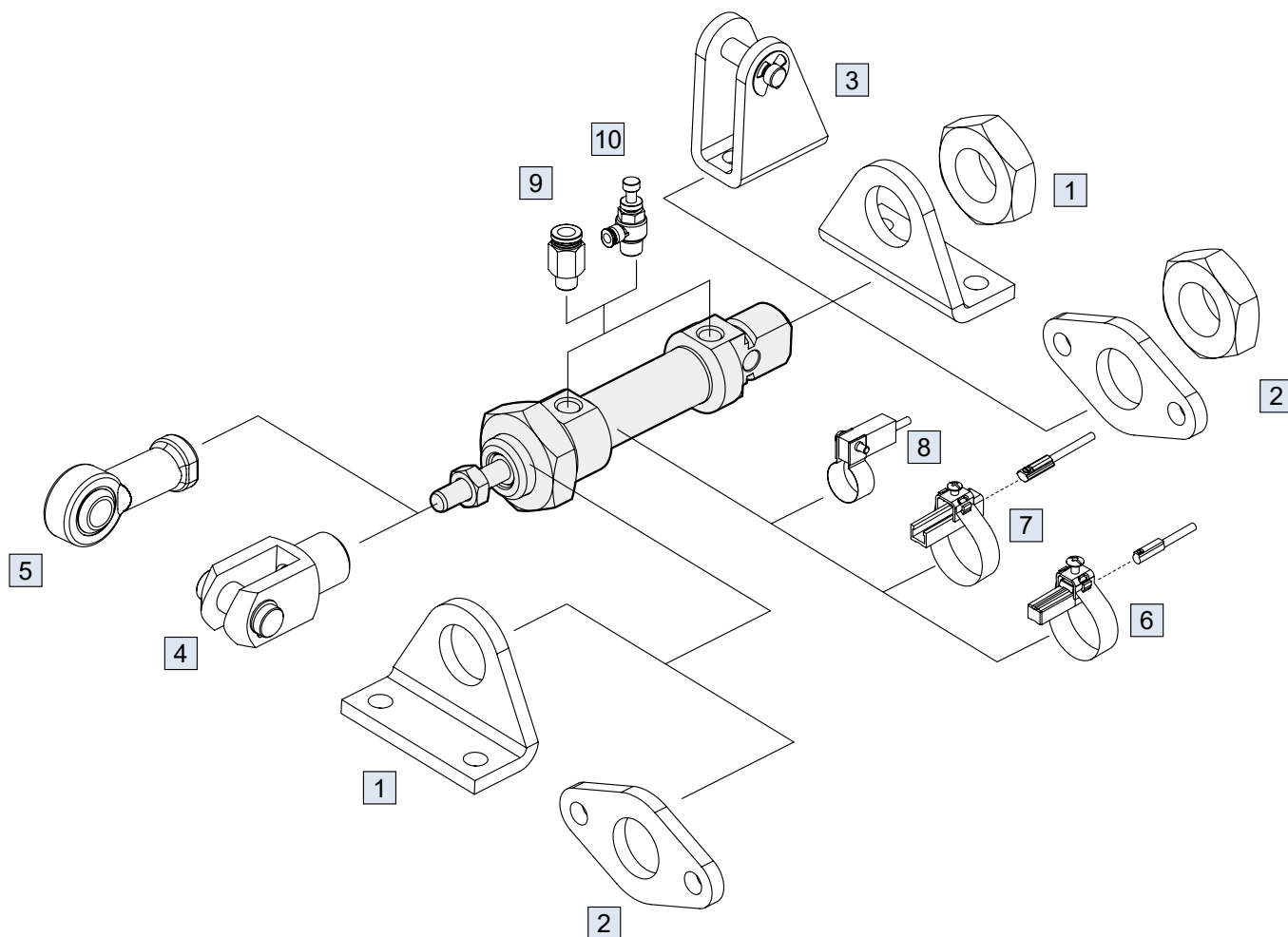
Material

No.	Cushion		Part name	Material	Q'y	Component parts (inclusion)	
	Pad	Air				Pad	Air
1	●	●	Head cover	SUS304	1	●	●
2	●	●	Rear cover	SUS304	1	●	●
3	●	●	Cylinder	SUS304	1		
4	●	●	Piston rod	SUS316	1		
5		●	Piston	Brass	1		●
6	●		Piston-H	Brass	1	●	
7	●		Piston-R	Brass	1	●	
8	●	●	Piston packing	PU	2	●	●
9	●	●	Magnet ring	Magnet	1	●	●
10		●	#1 Shock absorber axis	Aluminum alloy	1		●
11		●	#2 Shock absorber axis	Aluminum alloy	1		●
12		●	Steel ball	Stainless steel	2		●
13		●	Needle valve packing	NBR	2		●
14		●	Needle valve	Stainless steel	2		●
15	●	●	Rod packing	PU	1	●	●
16		●	Cushion ring	NBR	2		●
17	●		Cushion pad	NBR	2	●	
18	●	●	Bushing	Copper alloy	1	●	●
19	●	●	Nut	SUS304	1	●	●
20	●	●	Nut	SUS304	1	●	●

Order example of Component parts

Tube I.D.	Cushion pad
ø10	CP-MCMIS-10
ø12	CP-MCMIS-12
ø16	CP-MCMIS-16
ø20	CP-MCMIS-20
ø25	CP-MCMIS-25

Tube I.D.	Cushion air
ø20	CP-MCMIS-20A
ø25	CP-MCMIS-25A



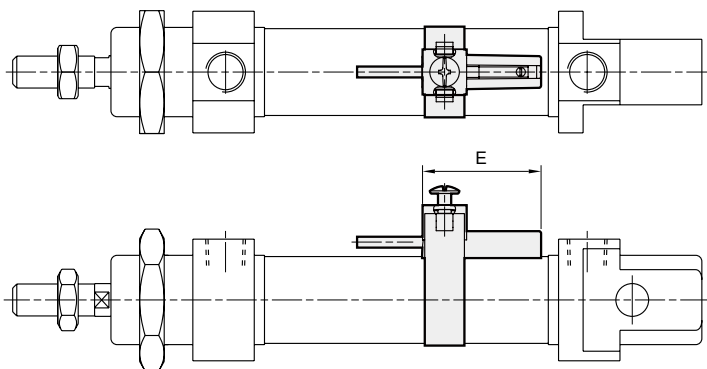
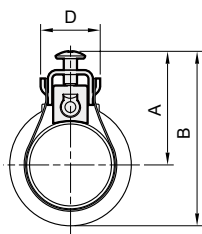
No.	Accessories	Material	Page link
1	Mounting accessories LB	SUS304	Link
2	Mounting accessories FA/FB	SUS304	Link
3	Mounting accessories SDB+PIN	SUS304	Link
4	Accessories Y+PIN	SUS303	Link
5	Female rod ends PHS-S	Stainless steel	Link
6	Sensor switch R*C+BKC-1	—	Link
7	Sensor switch R*T+BKT-1	—	Link
8	Sensor switch RCM+BM**	—	Link
9	Fitting PC (PISCO)	—	Link
10	Fitting JSC (PISCO)	—	Link

Installation of sensor switch

Sensor switch: R*C / R*T

Band: BKC-1 / BKT-1

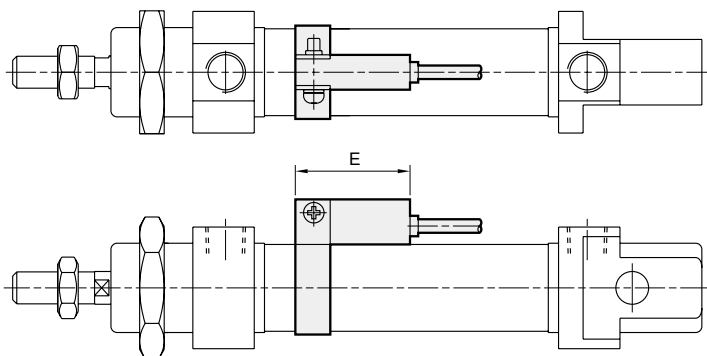
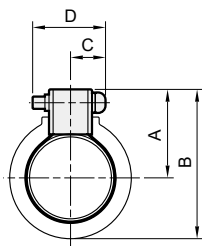
Code Band Tube I.D.	A		B		D	E	
	BKC-1	BKT-1	BKC-1	BKT-1		BKC-1	BKT-1
10	21.5	23	29.5	31	13.5	27	30
12	22.5	24.5	32	33.5	13.5	27	30
16	25	26.5	34.5	36	13.5	27	30
20	27	28.5	40.5	42	13.5	27	30
25	29.5	31	44.5	46	13.5	27	30



Sensor switch: RCM

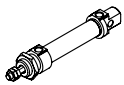
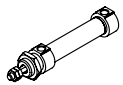
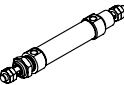
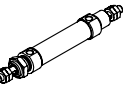
Band: BM**

Code Tube I.D.	A	B	C	D	E
10	17	24.5	10	16	28
12	18	28	10	16	28
16	20	30	10	16	28
20	22	35.5	10	16	28
25	25	38.5	10	16	28



Cylinder weight

Unit: g

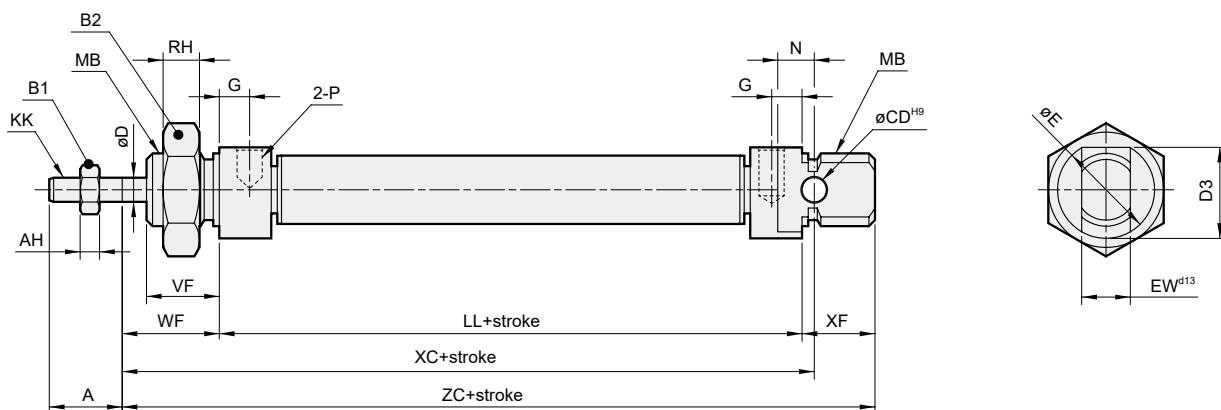
Model	Basic weight MCMIS-11	Stroke 25 mm MCMIS-11	Basic weight MCMIS-11-A	Stroke 25 mm MCMIS-11-A	Basic weight MCMIS-21	Stroke 25 mm MCMIS-21	Basic weight MCMIS-21-A	Stroke 25 mm MCMIS-21-A
Tube I.D.								
ø10	68	6	—	—	80	12	—	—
ø12	119	10	—	—	135	19	—	—
ø16	147	12	—	—	167	23	—	—
ø20	307	20	298	20	335	38	326	38
ø25	409	27	398	27	447	52	436	52

Accessories weight

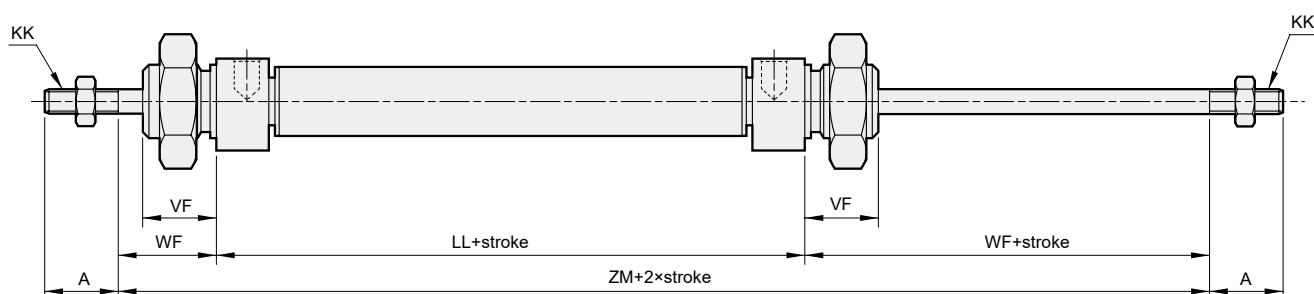
Unit: g

Model	LB	FA/FB	SDB	YP	Rod nut	Cover nut
Tube I.D.						
ø10	23	11	24	7	2	10
ø12	44	26	41	20	3	19
ø16	44	26	41	20	3	19
ø20	96	53	86	58	5	24
ø25	96	53	86	106	10	24

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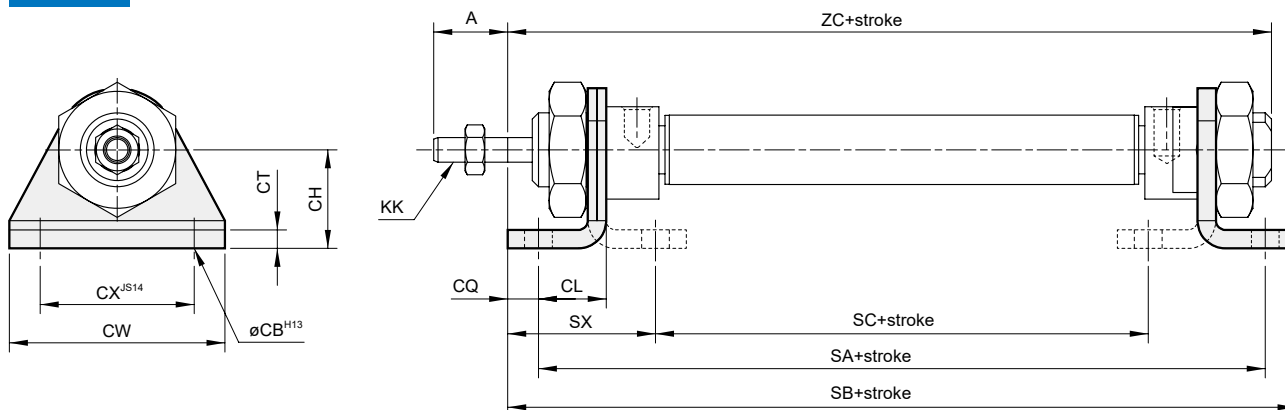


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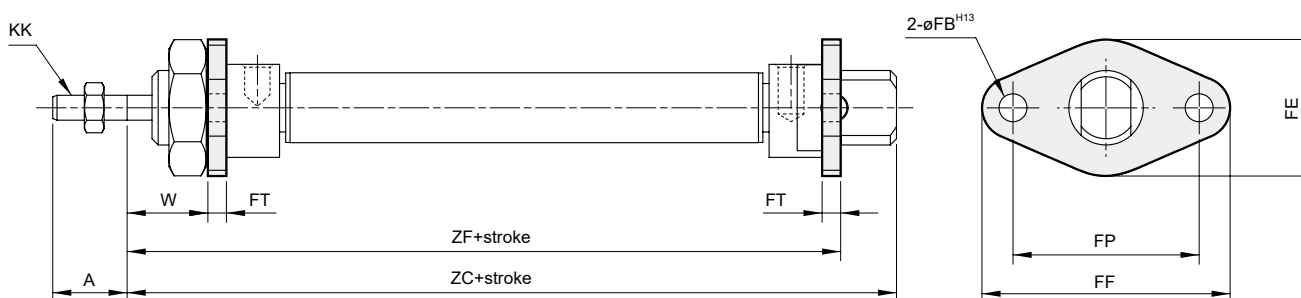
Code Tube I.D.	A	AH	B1	B2	CD	D	D3	E	EW	G	KK	LL	MB	N	ND	P	RH	VF	WF	XC	XF	ZC	ZM
10	12	3.2	7	19	4	4	15	16	8	5	M4×0.7	46	M12×1.25	6	12	M5×0.8	7	12	16	64	12	74	—
12	16	4	10	22	6	6	18	19	12	5	M6×1.0	48	M16×1.5	9	16	M5×0.8	5	17	22	75	18	88	—
16	16	4	10	22	6	6	18	19	12	4.5	M6×1.0	53	M16×1.5	9	16	M5×0.8	5	18	22	82	18	93	—
20	20	5	13	27	8	8	25.5	27	16	8	M8×1.25	67	M22×1.5	12	22	G1/8	8	20	24	95	20	111	115
25	22	6	17	27	8	10	28.5	30	16	8	M10×1.25	68	M22×1.5	12	22	G1/8	8	22	28	104	22	118	124

LB



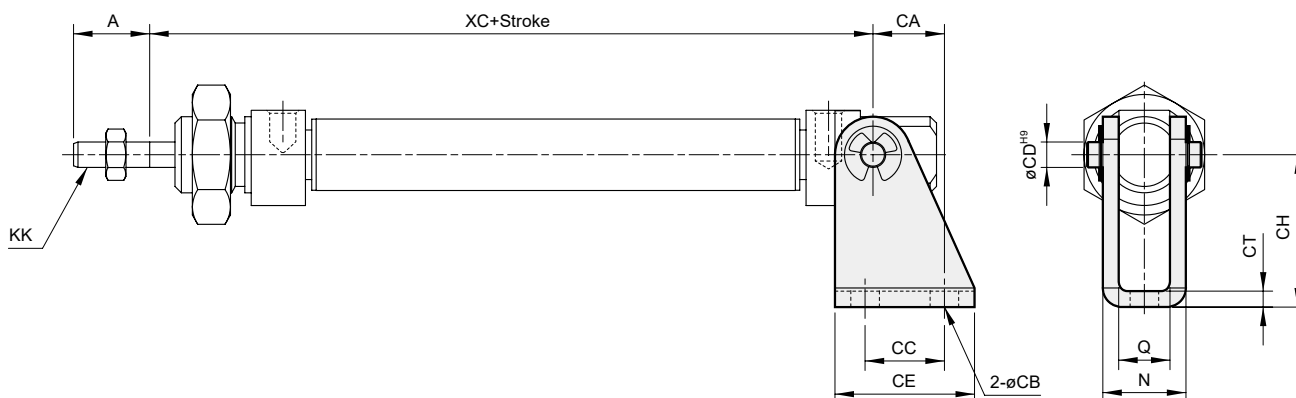
Code Tube I.D.	A	CB	CH	CL	CQ	CT	CW	CX	KK	SA	SB	SC	SX	ZC
10	12	4.5	16	11	5	3	35	25	M4×0.7	68	78	30	24	74
12	16	5.5	20	14	6	4	42	32	M6×1.0	76	90	28	32	88
16	16	5.5	20	14	6	4	42	32	M6×1.0	81	95	33	32	93
20	20	6.6	25	17	8	5	54	40	M8×1.25	101	116	43	36	111
25	22	6.6	25	17	8	5	54	40	M10×1.25	102	121	44	40	118

FA / FB



Code Tube I.D.	A	FB	FE	FF	FP	FT	KK	W	ZC	ZF
10	12	4.5	22	40	30	3	M4×0.7	13	74	65
12	16	5.5	30	52	40	4	M6×1.0	18	88	74
16	16	5.5	30	52	40	4	M6×1.0	18	93	79
20	20	6.6	40	66	50	5	M8×1.25	19	111	96
25	22	6.6	40	66	50	5	M10×1.25	23	118	101

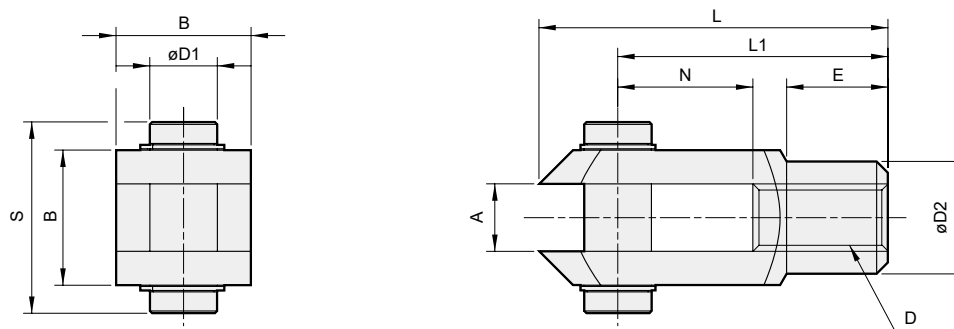
SDB



Code Tube I.D.	A	CA	CB	CC	CD	CE	CH	CT	KK	N	Q	XC
10	12	11.25	4.5	12.5	4	22	24	2.5	M4×0.7	13.1	8.1	64
12	16	13	5.5	15	6	25	27	3	M6×1.0	18.1	12.1	75
16	16	13	5.5	15	6	25	27	3	M6×1.0	18.1	12.1	82
20	20	16	6.6	20	8	32	30	4	M8×1.25	24.1	16.1	95
25	22	16	6.6	20	8	32	30	4	M10×1.25	24.1	16.1	104

YP

Y+Pin



Code Tube I.D.	A	B	D	D1	D2	E	L	L1	N	S
12, 16	6	12	M6×1.0	6	10	9	31	24	12	17
20	8	16	M8×1.25	8	14	12	42	32	16	21
25	10	20	M10×1.25	10	18	15	52	40	20	25