

### Feature

- **High strength steel & chemical resistance**

Made of AISI 316 stainless steel.

- **ISO 15552 standard specification**

Conform to ISO 15552 specification, enabling worldwide interchangeability.

- **Cylinder mountings**

Available with comprehensive internationally recognised range of fixed and flexible mountings.

- **Magnetic as standard**

### Specification

Model	MCQVS		
Tube I.D. (mm)	32,40	50,63	80,100
Medium	Air		
Operating pressure range	0.1~1 MPa		
Proof pressure	1.5 MPa		
Ambient temperature	-10~+80°C (No freezing)		
Available speed range	50~1000 mm/sec		
Sensor switch	RCV (Please refer to page 8-8)		
Sensor switch band	BV125		

### Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø32~ø100	25,50,75,100,125,150,175,200,250,300,350,400,450,500,600,700,800,900	1000

\* Intermediate stroke are available, please contact us.

\* Made to order.

### Order example

**MCQVS — 11 — 40 — 100M**

MODEL

1: Single rod  
2: Double rod

TUBE I.D.

STROKE

M: Magnet

\* Magnetic as standard.

STYLE

Code	Symbol	Description	Max adjustable stroke
1 1		Double acting / Male thread	-
2 1		Double rod / Male thread	
2 7		Double rod / Adjustable male thread Please mark "adjustable stroke" at order list	200 mm



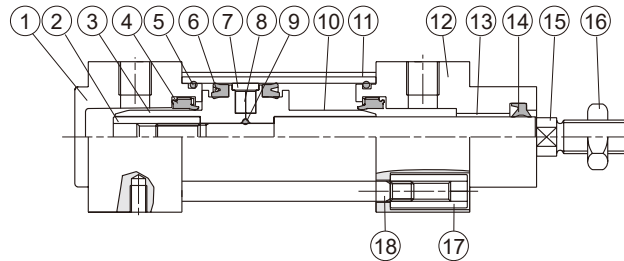
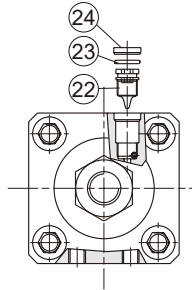
# MCQVS-11 Inside structure & Parts list

ISO 15552 **STANDARD CYLINDER (STAINLESS STEEL)**

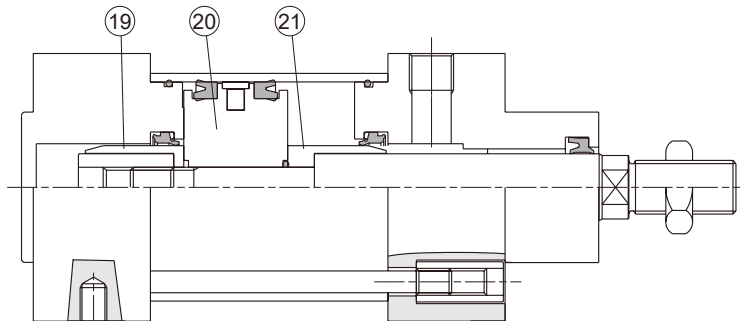
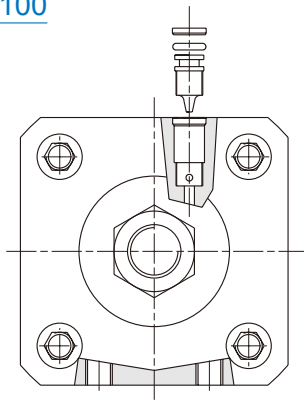


## Single rod 11 type

ø32, ø40



ø50~ø100



No.	Part name	Material	Q'y	Component parts (inclusion)		Repair kits (inclusion)	Note
				ø30, ø40	ø50~ø100		
1	Head cover	SUS316	1	●	●		
2	Piston nut	Carboon steel	1	●	●		
3	Piston-H	Aluminum alloy	1	●			
4	Cushion packing	NBR	2	●	●	●	
5	O-ring	NBR	2	●	●	●	
6	Piston packing	NBR	2	●	●	●	
7	Wear ring	Resin	1	●	●		
8	Magnet ring	Magnet material	1 or 2	◎	◎	◎	ø32,40 (Q'y 2) ◎ Option
9	O-ring	NBR	1	●	●	●	
10	Piston-R	Aluminum alloy	1	●			
11	Cylinder tube	SUS316	1				
12	Rod cover	SUS316	1	●	●		
13	Bush	Resin	1	●	●		
14	Rod packing	NBR	1	●	●	●	
15	Piston rod	SUS316	1				
16	Hex nut	SUS316	1	●	●		
17	Tie rod nut	SUS316	8	●	●		
18	Tie rod	SUS316	4				
19	Cushioning rod - H	Aluminum alloy	1		●		
20	Piston	Aluminum alloy	1		●		
21	Cushioning rod - R	Aluminum alloy	1		●		
22	Needle valve	SUS316	2	●	●		
23	O-ring	NBR	2	●	●	●	
24	Needle valve washer	SUS316	2	●	●		

# MCQVS-2\* Inside structure & Parts list

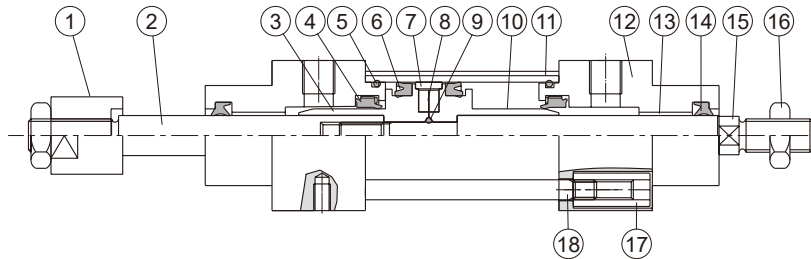
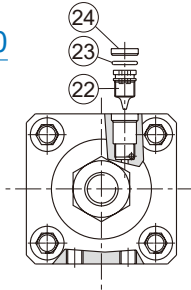
ISO 1552 **STANDARD CYLINDER** (STAINLESS STEEL)



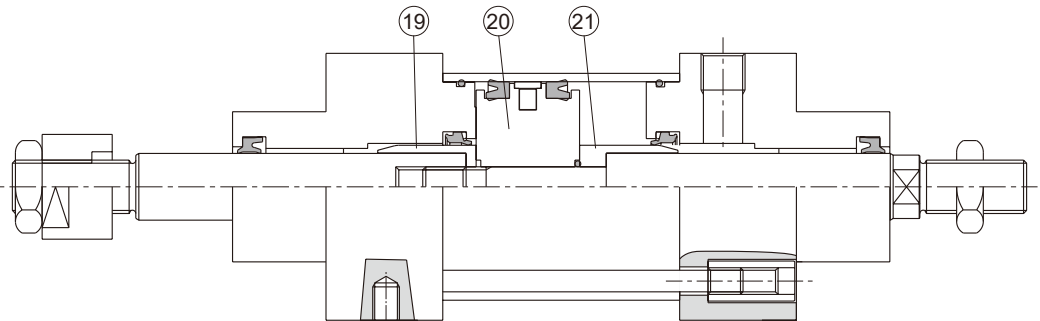
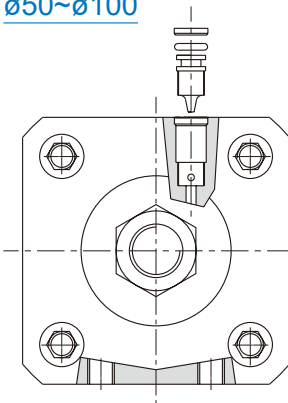
Mindman

## Double rod 21 / 27 type

ø32, ø40



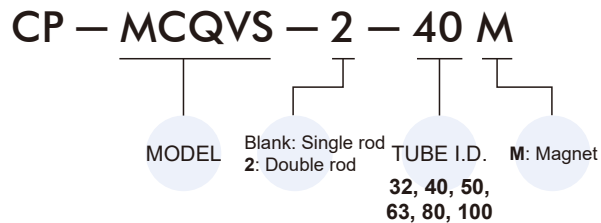
ø50~ø100



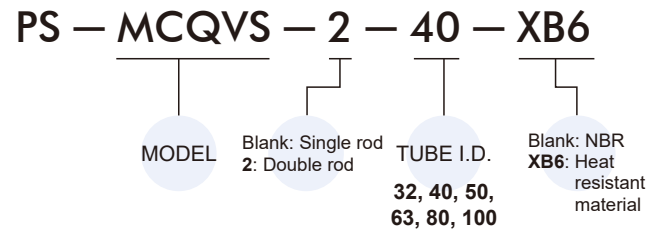
No.	21 type		27 type		Part name	Material	Q'y	Component parts (inclusion)		Repair kits (inclusion)	Note
	A	B	A	B				ø32, ø40	ø50~ø100		
1			●	●	Adjustable nut	SUS316	1				
2	●	●	●	●	Piston rod #2	SUS316	1				
3	●		●		Piston-H	Aluminum alloy	1	●			
4	●	●	●	●	Cushion packing	NBR	2	●	●	●	
5	●	●	●	●	O-ring	NBR	2	●	●	●	
6	●	●	●	●	Piston packing	NBR	2	●	●	●	
7	●	●	●	●	Wear ring	Resin	1	●	●		
8	●	●	●	●	Magnet ring	Magnet material	1 or 2	◎	◎	◎	ø32,40 (Q'y 2) ◎ Option
9	●	●	●	●	O-ring	NBR	1	●	●	●	
10	●		●		Piston-R	Aluminum alloy	1	●			
11	●	●	●	●	Cylinder tube	SUS316	1				
12	●	●	●	●	Rod cover	SUS316	2	●	●		
13	●	●	●	●	Bush	Resin	2	●	●		
14	●	●	●	●	Rod packing	NBR	2	●	●	●	
15	●	●	●	●	Piston rod #1	SUS316	1				
16	●	●	●	●	Hex nut	SUS316	2	●	●		
17	●	●	●	●	Tie rod nut	SUS316	8	●	●		
18	●	●	●	●	Tie rod	SUS316	4				
19		●		●	Cushioning rod - H	Aluminum alloy	1		●		
20		●		●	Piston	Aluminum alloy	1		●		
21		●		●	Cushioning rod - R	Aluminum alloy	1		●		
22	●	●	●	●	Needle valve	SUS316	2	●	●		
23	●	●	●	●	O-ring	NBR	2	●	●	●	
24	●	●	●	●	Needle valve washer	SUS316	2	●	●		

A: ø32, ø40, B: ø50~ø100

### Order example of component parts



### Order example of repair kits



### Cylinder & accessories weight

#### Cylinder weight

Unit: kg

Model	Basic weight MCQVS-11	Basic weight (magnet) MCQVS-11	Stroke 25 mm MCQVS-11	Basic weight MCQVS-21	Basic weight (magnet) MCQVS-21	Stroke 25 mm MCQVS-21
Tube I.D.						
$\varnothing 32$	1.061	1.067	0.088	1.184	1.19	0.108
$\varnothing 40$	1.797	1.809	0.128	2.008	2.02	0.165
$\varnothing 50$	2.597	2.614	0.180	2.953	2.97	0.243
$\varnothing 63$	4.389	4.409	0.200	4.770	4.79	0.263
$\varnothing 80$	6.750	6.777	0.310	7.425	7.45	0.413
$\varnothing 100$	11.227	11.262	0.350	12.033	12.07	0.443

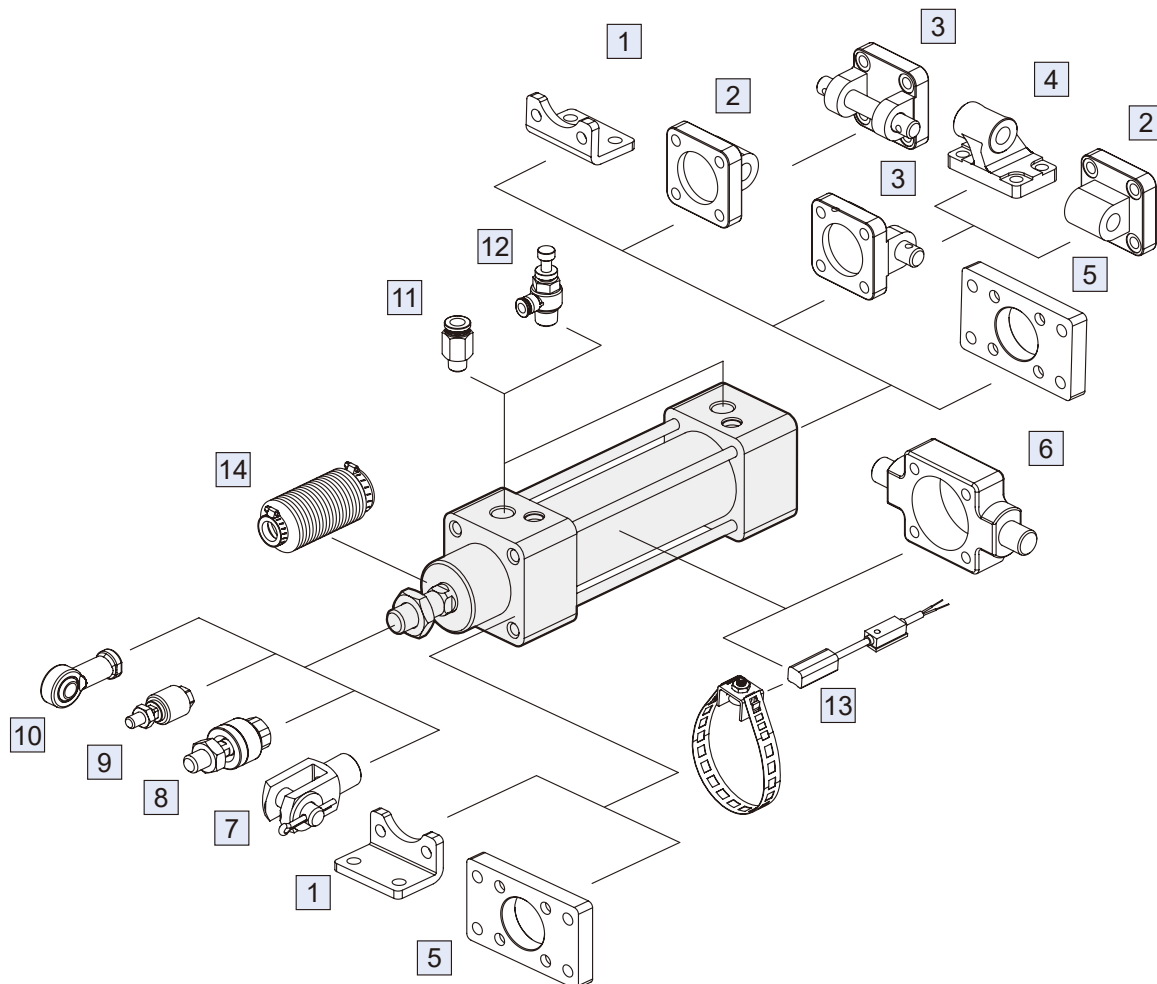
Style 27	Cylinder (A)			Adjustable nut (B)	
Model	Basic weight MCQVS-27	Basic weight (magnet) MCQVS-27	Stroke 25 mm MCQVS-27	Basic weight MCQVS-27	Adjustable stroke 25 mm MCQVS-27
Tube I.D.					
$\varnothing 32$	1.166	1.170	0.108	0.037	0.039
$\varnothing 40$	1.982	1.989	0.166	0.109	0.097
$\varnothing 50$	2.883	2.893	0.242	0.150	0.183
$\varnothing 63$	4.704	4.714	0.262	0.150	0.183
$\varnothing 80$	7.279	7.295	0.405	0.388	0.201
$\varnothing 100$	11.895	11.913	0.442	0.407	0.201

\* Total weight of style 27 = A + B

#### Accessories weight

Unit: kg

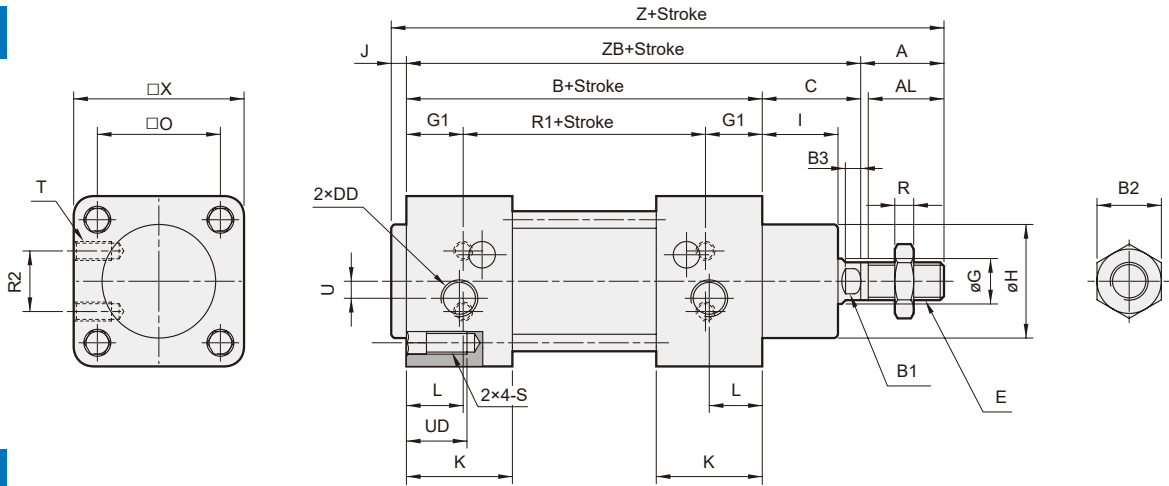
Model	LB	CA	CB	CDB	FAC/FBC	TC	YP	Pin CA / CB
Tube I.D.								
$\varnothing 32$	0.060	0.176	0.138	0.158	0.192	0.128	0.090	0.032
$\varnothing 40$	0.072	0.274	0.230	0.238	0.250	0.308	0.153	0.052
$\varnothing 50$	0.160	0.368	0.338	0.418	0.482	0.370	0.317	0.060
$\varnothing 63$	0.180	0.682	0.540	0.526	0.626	0.690	0.317	0.122
$\varnothing 80$	0.370	1.196	1.000	1.055	1.436	0.894	0.680	0.152
$\varnothing 100$	0.432	2.100	1.700	1.510	1.994	1.584	0.680	0.290



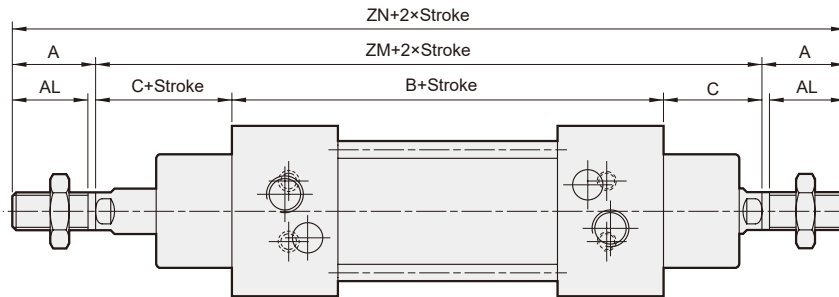
No.	Accessories	Material	Page
1	Mounting accessories LB	SUS316	1-61
2	Mounting accessories CA	SUS316	1-61
3	Mounting accessories CB+PIN	SUS316	1-61, 64
4	Mounting accessories CDB	SUS316	1-60
5	Mounting accessories FAC/FBC	SUS316	1-63
6	Mounting accessories TC	SUS316	1-62
7	Accessories YP (Y+PIN)	SUS316	1-64

No.	Accessories	Material	Page
8	Floating joint MFC	Carbon steel	8-2
9	Floating joint MFCS	Carbon steel	8-5
10	Female rod ends PHS-S	SUS	8-7
11	Fitting PC (PISCO)	—	8-3 (Vol.1)
12	Speed controller JSC (PISCO)	—	8-15 (Vol.1)
13	Sensor switch RCV+BV125	—	8-8
14	Protective bellows kit	NBR	—

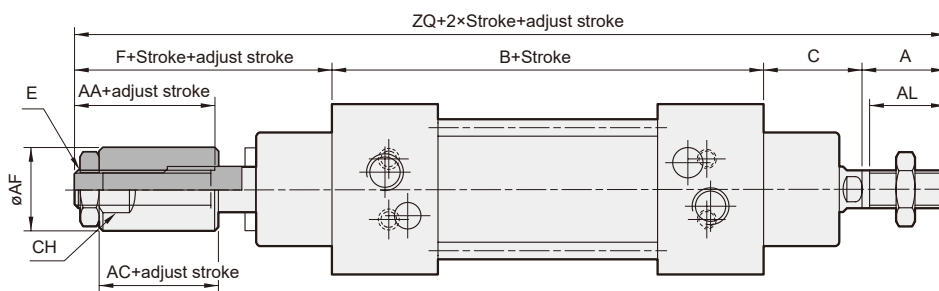
11



21

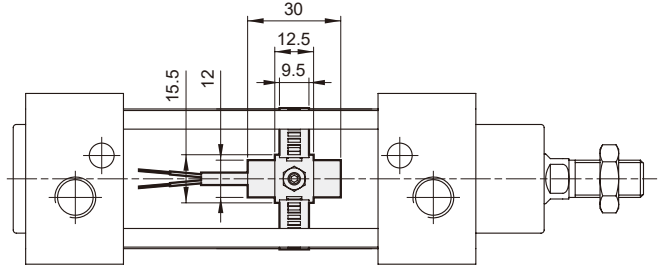
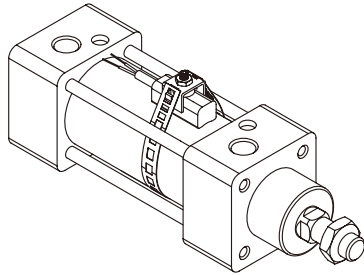


27

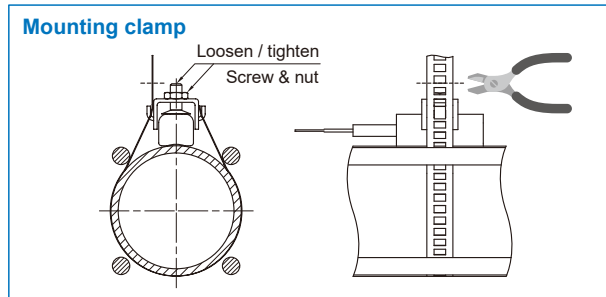
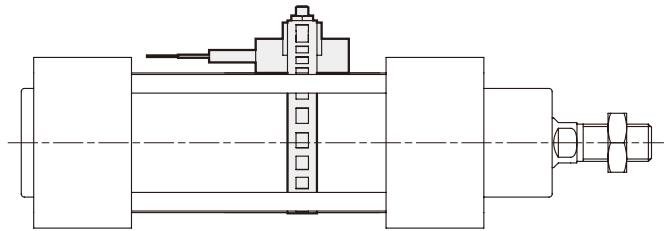
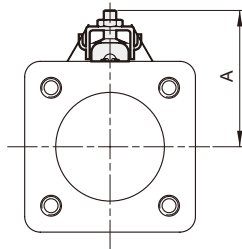


Code Tube I.D.	A	AA	AC	AF	AL	B	B1	B2	B3	C	CH	DD	E	F	G	G1	H	I	J	K	L	O	R	R1	R2
32	22	28	20	20	20	94	10	17	4	26	17	G1/8	M10×1.25	48	12	15	30	20	4	28	14	32.5	6	64	16
40	24	30.5	24	30	22	105	13	19	6	30	27	G1/4	M12×1.25	54	16	17.5	35	22	4	31.5	16	38	7	70	21
50	32	28	19	40	30	106	17	24	5.5	37	36	G1/4	M16×1.5	59	20	16	40	28	4	31.5	21	46.5	8	74	24
63	32	28	19	40	30	121	17	24	5.5	37	36	G3/8	M16×1.5	59	20	18	45	28	4	35	22	56.5	8	85	33
80	40	45	32	50	37	128	22	30	9	46	46	G3/8	M20×1.5	81	25	18	45	34	4	36	23	72	9	92	34
100	40	45	35	50	37	138	22	30	9	51	46	G1/2	M20×1.5	86	25	19	55	38	4	41	26	89	9	100	58

Code Tube I.D.	S	T	U	UD	X	Z	ZB	ZM	ZN	ZQ
32	M6×1.0	M5×0.8×10L	4.5	16	45	146	120	146	190	190
40	M6×1.0	M6×1.0×10L	5.5	16	55	163	135	165	213	213
50	M8×1.25	M8×1.25×12L	8.5	16	65	179	143	180	244	234
63	M8×1.25	M8×1.25×12L	8.5	16	80	194	158	195	259	249
80	M10×1.5	M10×1.5×15L	8.5	16	95	218	174	220	300	295
100	M10×1.5	M10×1.5×15L	10	16	115	233	189	240	320	315

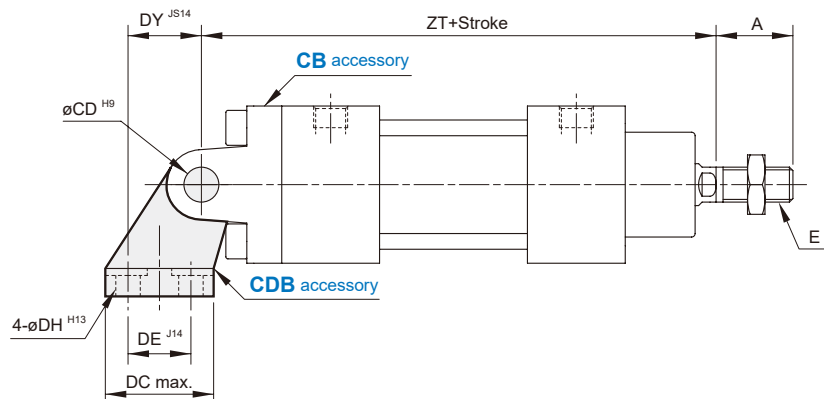
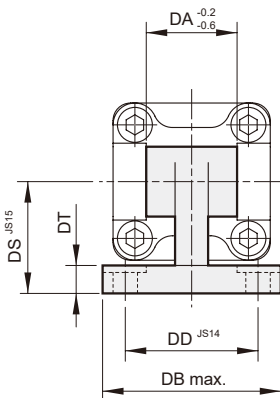


Code Tube I.D.	Sensor switch	A
32	RCV + BV125 (Band)	41
40		46
50		50
63		52
80		65
100		75



### ■ Mounting accessories

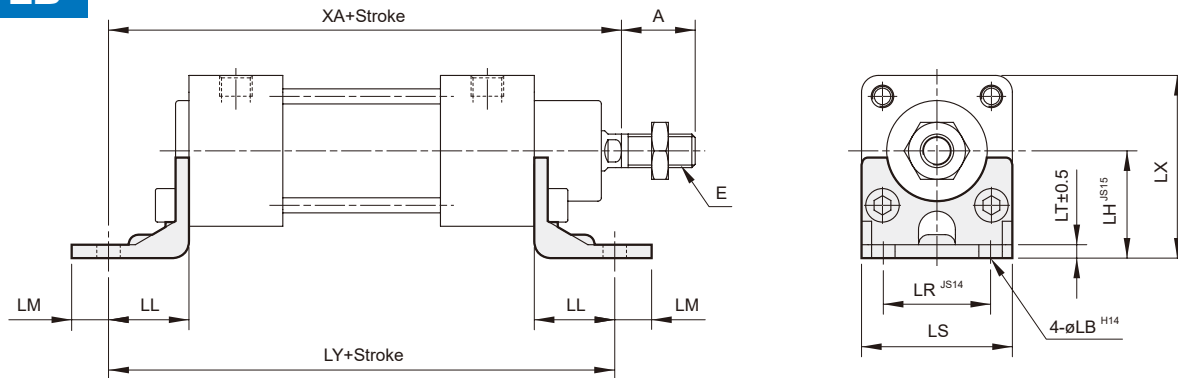
#### **CDB** CB+Pin (Extra purchase)



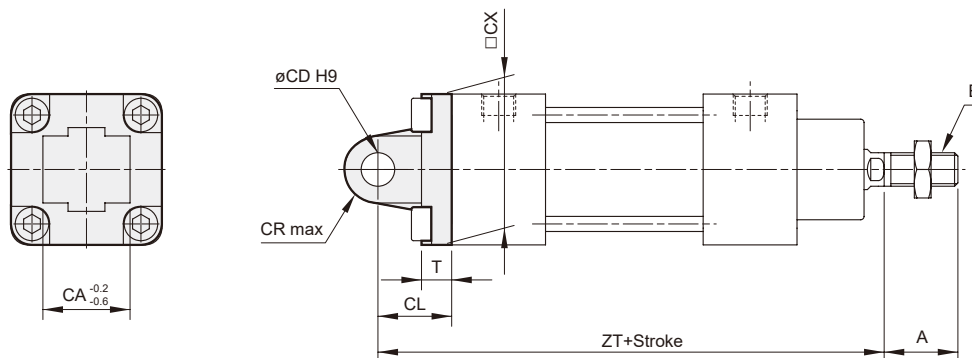
Code Tube I.D.	A	CD	DA	DB	DC	DD	DE	DH	DS	DT	DY	E	ZT
32	22	10	26	51	31	38	18	6.6	32	8	21	M10×1.25	142
40	24	12	28	54	35	41	22	6.6	36	10	24	M12×1.25	160
50	32	12	32	65	45	50	30	9	45	12	33	M16×1.5	170
63	32	16	40	67	50	52	35	9	50	12	37	M16×1.5	190
80	40	16	50	86	60	66	40	11	63	14	47	M20×1.5	210
100	40	20	60	96	70	76	50	11	71	17	55	M20×1.5	230



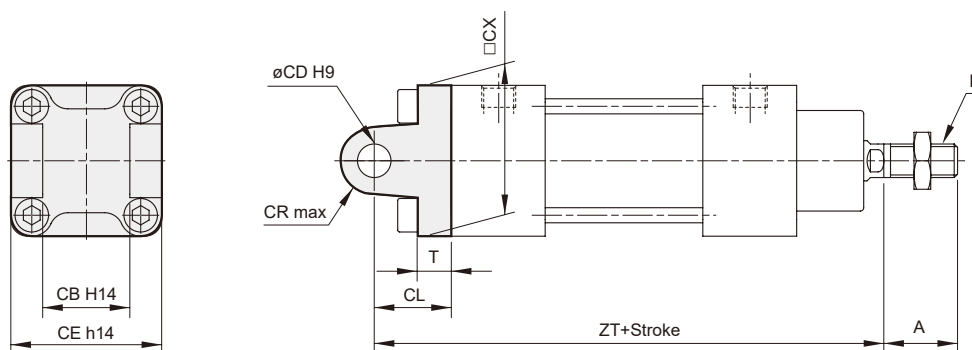
### LB



### CA

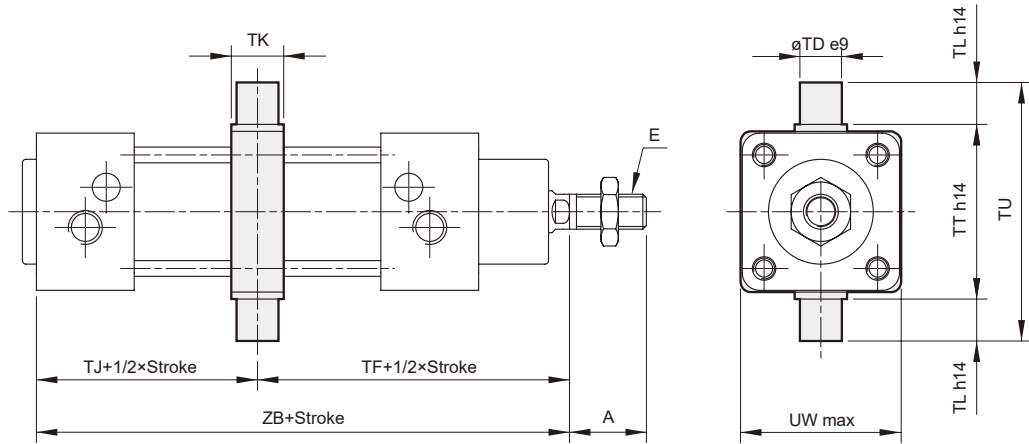


### CB



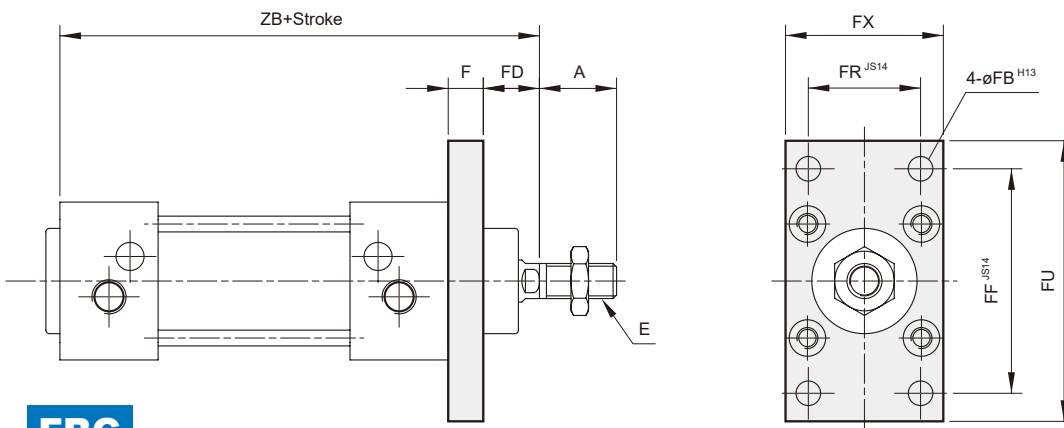
Code Tube I.D.	A	CA	CB	CD	CE	CL	CR	CX	E	LB	LH	LL	LM	LR	LS	LT	LX	LY	T	XA	ZT
32	22	26	26	10	45	22	10	45	M10×1.25	7	32	24	11	32	45	4	54.5	142	10	144	142
40	24	28	28	12	52	25	12	55	M12×1.25	9	36	28	8	36	52	4	63.5	161	10	163	160
50	32	32	32	12	60	27	12	65	M16×1.5	9	45	32	15	45	65	5	77.5	170	10	175	170
63	32	40	40	16	70	32	16	75	M16×1.5	9	50	32	13	50	75	5	90	185	12	190	190
80	40	50	50	16	90	36	16	95	M20×1.5	12	63	41	14	63	95	6	110.5	210	14	215	210
100	40	60	60	20	110	41	20	115	M20×1.5	14	71	41	16	75	115	6	128.5	220	16	230	230

### TC

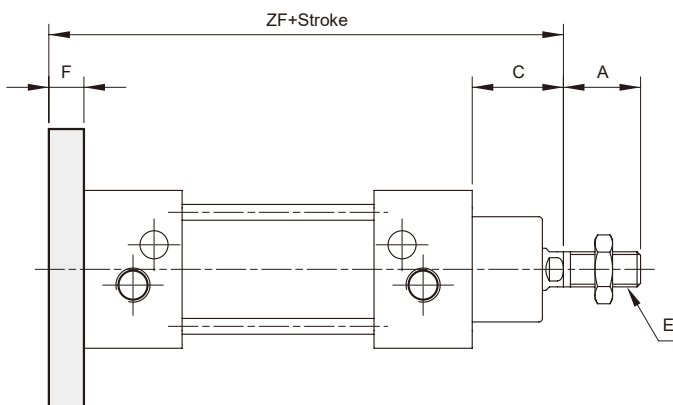


Code Tube I.D.	A	E	TD	TF	TJ	TK	TL	TT	TU	UW	ZB
32	22	M10×1.25	12	73	47	15	12	50	74	46	120
40	24	M12×1.25	16	82.5	53	20	16	63	95	59	135
50	32	M16×1.5	16	90	53	20	16	75	107	69	143
63	32	M16×1.5	20	98	61	25	20	90	130	84	158
80	40	M20×1.5	20	110	64	25	20	110	150	102	174
100	40	M20×1.5	25	120	69	30	25	132	182	125	189

### FAC

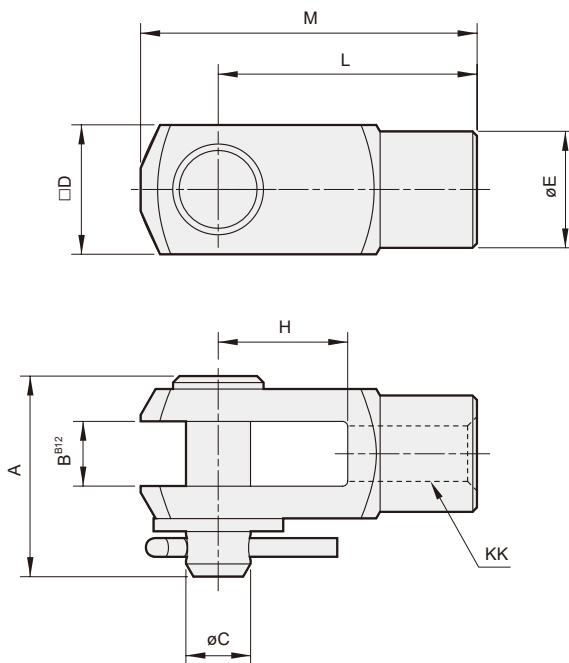


### FBC



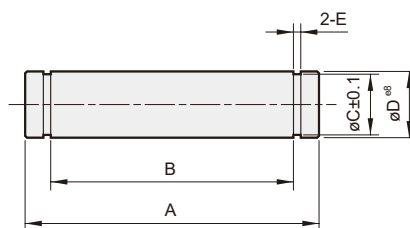
Code Tube I.D.	A	C	E	F	FB	FD	FF	FR	FU	FX	ZB	ZF
32	22	26	M10×1.25	10	7	16	64	32	80	45	120	130
40	24	30	M12×1.25	10	9	20	72	36	90	52	135	145
50	32	37	M16×1.5	12	9	25	90	45	110	65	143	155
63	32	37	M16×1.5	12	9	25	100	50	120	75	158	170
80	40	46	M20×1.5	16	12	30	126	63	150	95	174	190
100	40	51	M20×1.5	16	14	35	150	75	170	115	189	205

### YP connector



Code Tube I.D.	A	B	C	D	E	H	L	M	KK
32	31	10	10	20	18	20	40	52	M10×1.25
40	38	12	12	24	20	24	48	62	M12×1.25
50	49	16	16	32	26	32	64	83	M16×1.5
63	49	16	16	32	26	32	64	83	M16×1.5
80	57.5	20	20	40	34	40	80	105	M20×1.5
100	57.5	20	20	40	34	40	80	105	M20×1.5

### PIN



#### for CA & CB

Code Tube I.D.	A	B	C	D	E	Snap ring
32	51	46	9.6	10	1.1	A10
40	59	53	11.5	12	1.1	A12
50	66.5	61	11.5	12	1.1	A12
63	77	71	15.2	16	1.1	A16
80	97	91	15.2	16	1.1	A16
100	120	111	19	20	1.3	A20