MCQVS series

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

Technical data

Caution for safety
(Read before installing)



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 perssure 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		
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.

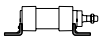
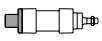
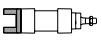
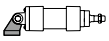
Order example

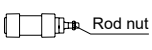
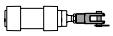
MCQVS – 11 – 40 – 100M – 10

- MODEL
- STYLE — **1**: Single rod, **2**: Double rod
- TUBE I.D.
- STROKE
- **M**: Magnet * Magnetic as standard.
- ADJUSTABLE STROKE * Only for STYLE 27.

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	200 mm

Accessories & Connector

Code	Accessories					
	LB (Purchase 2 pcs)	**CA**	**CB**	**CDB** (Purchase CB+PIN)	**FAC**	**FBC**
Mounting / Tube I.D.						
ø32	**LB-Q4-32**	**CA-Q4-32**	**CB-Q4-32**	**CDB-Q4-32**	**FAC-Q4-32**	
ø40	**LB-Q4-40**	**CA-Q4-40**	**CB-Q4-40**	**CDB-Q4-40**	**FAC-Q4-40**	
ø50	**LB-Q4-50**	**CA-Q4-50**	**CB-Q4-50**	**CDB-Q4-50**	**FAC-Q4-50**	
ø63	**LB-Q4-63**	**CA-Q4-63**	**CB-Q4-63**	**CDB-Q4-63**	**FAC-Q4-63**	
ø80	**LB-Q4-80**	**CA-Q4-80**	**CB-Q4-80**	**CDB-Q4-80**	**FAC-Q4-80**	
ø100	**LB-Q4-100**	**CA-Q4-100**	**CB-Q4-100**	**CDB-Q4-100**	**FAC-Q4-100**	

	Accessories		Connector
Code	**NUT**	**TC** ⚠	**YP** (Y+Pin)
Mounting / Tube I.D.	 Rod nut		
ø32	**NUT-S-M10x1.25x6Hx17B**	**TC-Q4-32**	**YP-Q4-32**
ø40	**NUT-S-M12x1.25x7Hx19B**	**TC-Q4-40**	**YP-Q4-40**
ø50	**NUT-S-M16x1.5x8Hx24B**	**TC-Q4-50**	**YP-Q4-50**
ø63		**TC-Q4-63**	
ø80	**NUT-S-M20x1.5x9Hx30B**	**TC-Q4-80**	**YP-Q4-80**
ø100		**TC-Q4-100**	

⚠ Factory-installed, not available for separate purchase or field assembly.

Pin

Applicable	CA&CB accessories
Code	**PIN-CB-P** (with snap pin)
Fig / Tube I.D.	
ø32	**PIN-Q4-32-1-P**
ø40	**PIN-Q4-40-1-P**
ø50	**PIN-Q4-50-1-P**
ø63	**PIN-Q4-63-1-P**
ø80	**PIN-Q4-80-1-P**
ø100	**PIN-Q4-100-1-P**

Order example of self-assembled

The tube I.D. ø63 of LB accessories, YP connector and pin.

No.	Order number	Qty
1	**LB-Q4-63**	2
2	**YP-Q4-50**	1
3	**PIN-Q4-63-1-P**	1

* To order accessories/connectors/ pin separately, please place orders separately according to the order codes in the above table.

Order example of factory assembled

⚠ Cylinders and accessories are distinguished by the symbol " + ".

MCQVS – Standard model no. + TA

CYLINDER ACCESSORIES

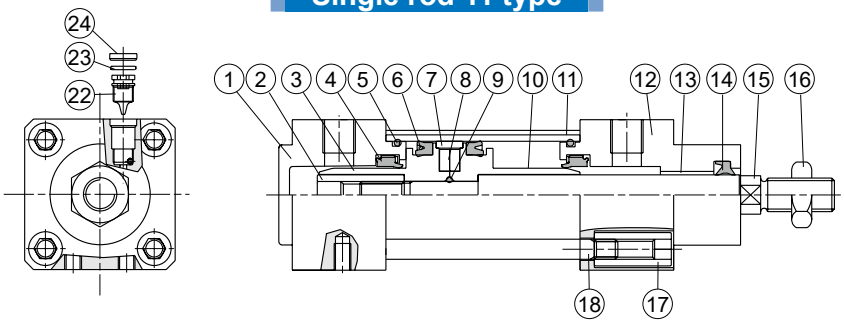
MCQVS-11 Inside structure & Parts list

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

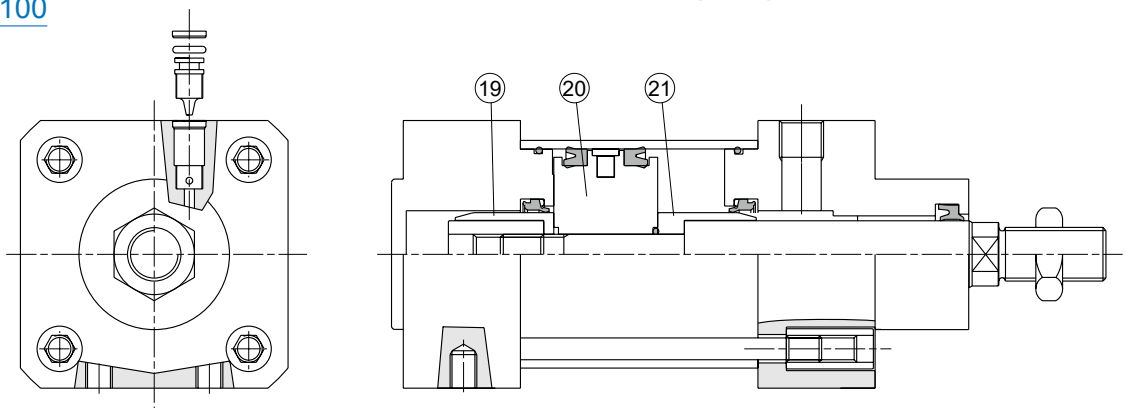
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Single rod 11 type

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	●	●		

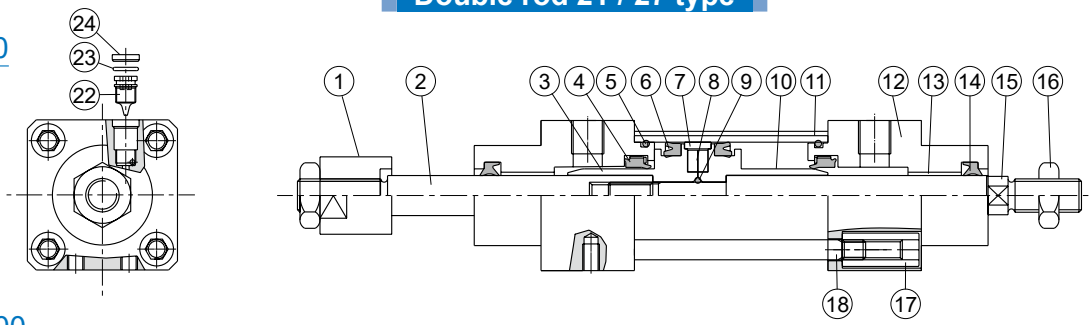
MCQVS-2* Inside structure & Parts list

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

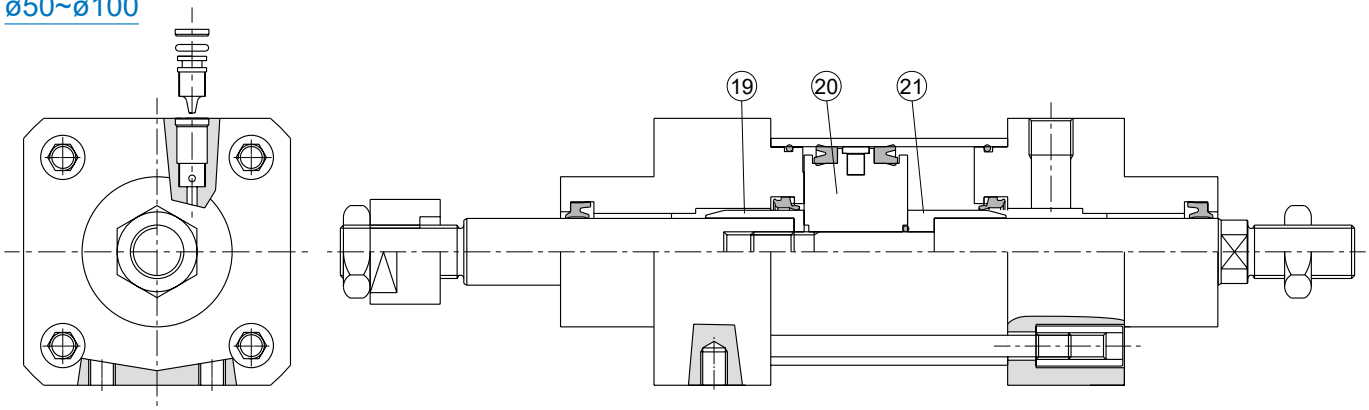
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Double rod 21 / 27 type

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

MCQVS Weight ø32~ø100

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

Order example of component parts

CP — MCQVS — 2 — 40 M

- MODEL
- Blank: Single rod / **2**: Double rod
- TUBE I.D. **32, 40, 50, 63, 80, 100**
- **M**: Magnet

Order example of repair kits

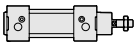
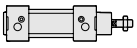
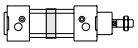
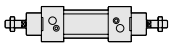
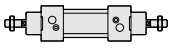
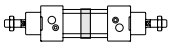
PS — MCQVS — 2 — 40 — XB6

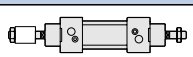
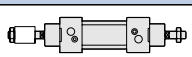
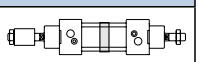
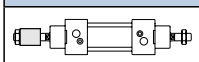
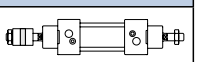
- MODEL
- Blank: Single rod / **2**: Double rod
- TUBE I.D. **32, 40, 50, 63, 80, 100**
- Blank: NBR / **XB6**: Heat resistant material

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.						
ø32	1.061	1.067	0.088	1.184	1.19	0.108
ø40	1.797	1.809	0.128	2.008	2.02	0.165
ø50	2.597	2.614	0.180	2.953	2.97	0.243
ø63	4.389	4.409	0.200	4.770	4.79	0.263
ø80	6.750	6.777	0.310	7.425	7.45	0.413
ø100	11.227	11.262	0.350	12.033	12.07	0.443

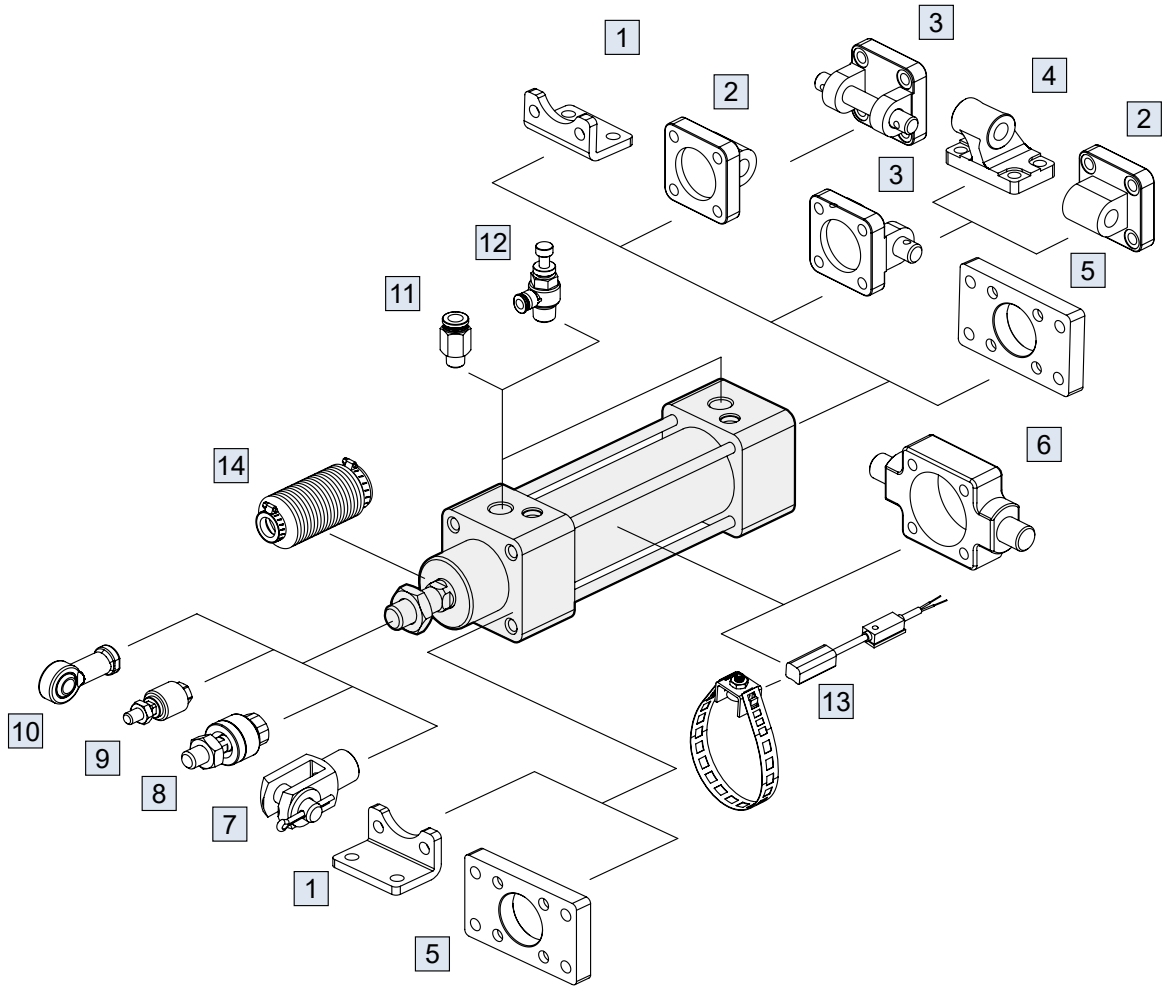
Style 27	Cylinder (A)			Adjustable nut (B)	
Model	Basic weight **MCQVS-27**	Basic weight (magnet) **MCQVS-27**	Stroke 25 mm **MCQVS-27**	Basic weight **MCQVS-27**	Adjustable stroke 25 mm **MCQVS-27**
Tube I.D.					
ø32	1.166	1.170	0.108	0.037	0.039
ø40	1.982	1.989	0.166	0.109	0.097
ø50	2.883	2.893	0.242	0.150	0.183
ø63	4.704	4.714	0.262	0.150	0.183
ø80	7.279	7.295	0.405	0.388	0.201
ø100	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.								
ø32	0.060	0.176	0.138	0.158	0.192	0.128	0.090	0.032
ø40	0.072	0.274	0.230	0.238	0.250	0.308	0.153	0.052
ø50	0.160	0.368	0.338	0.418	0.482	0.370	0.317	0.060
ø63	0.180	0.682	0.540	0.526	0.626	0.690	0.317	0.122
ø80	0.370	1.196	1.000	1.055	1.436	0.894	0.680	0.152
ø100	0.432	2.100	1.700	1.510	1.994	1.584	0.680	0.290



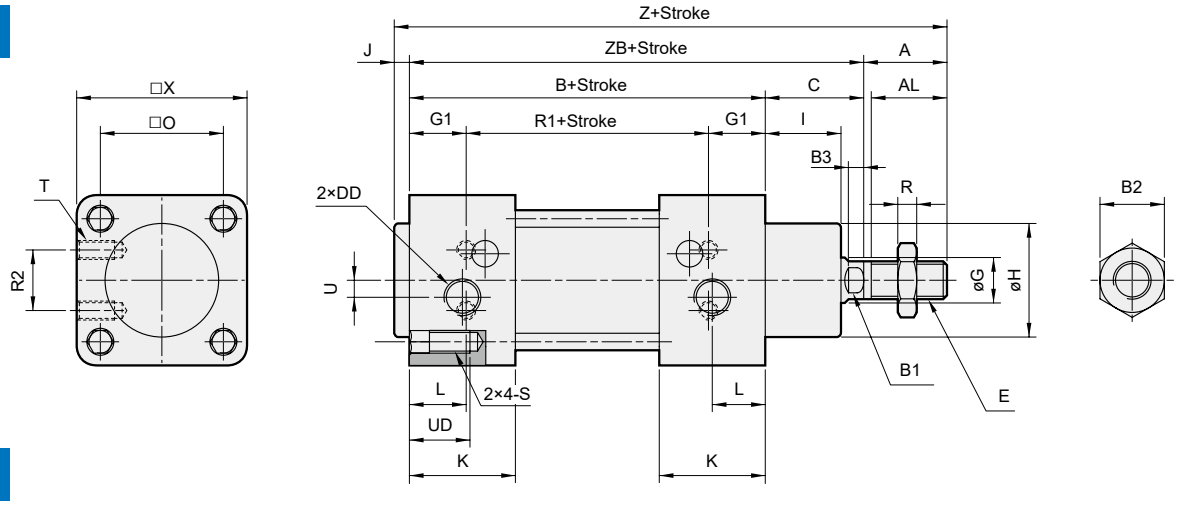
No.	Accessories	Material	Page link
1	Mounting accessories LB	SUS316	
2	Mounting accessories CA	SUS316	
3	Mounting accessories CB+PIN	SUS316	,
4	Mounting accessories CDB	SUS316	
5	Mounting accessories FAC/FBC	SUS316	
6	Mounting accessories TC	SUS316	
7	Accessories YP (Y+PIN)	SUS316	

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

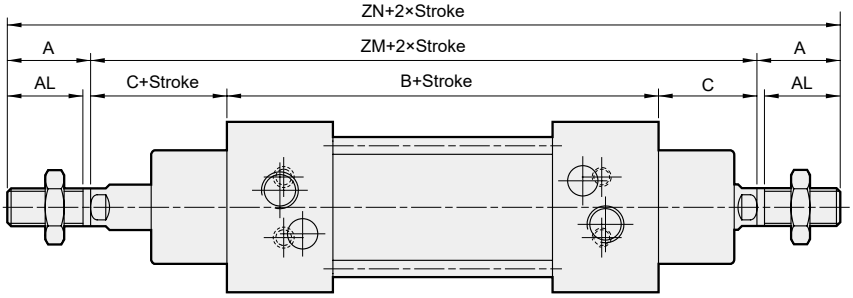
MCQVS Dimensions ø32~ø100

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

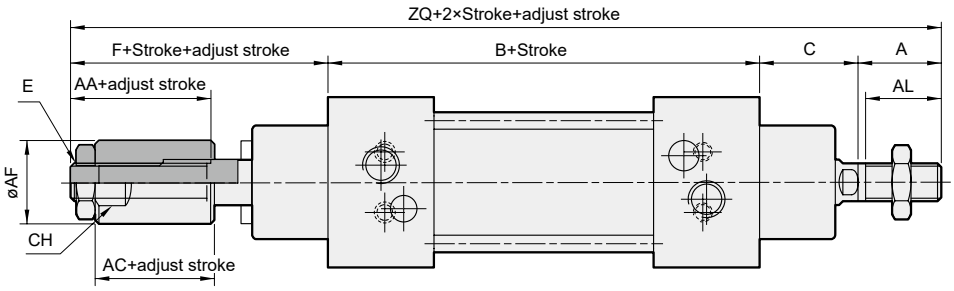
11



21



27

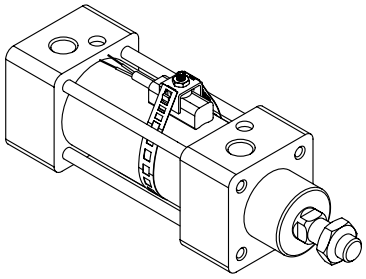


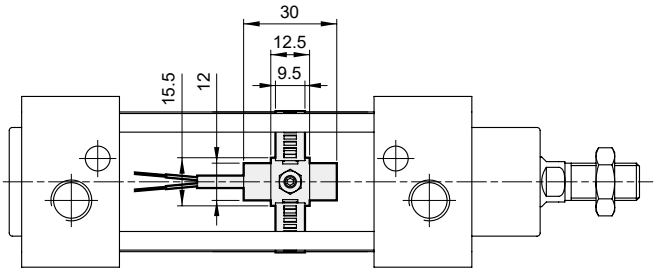
Code / Tube I.D.	A	AA	AC	AF	AL	B	B1	B2	B3	C	CH	DD	E	F	G	G1	H	I	J	K	L	O	R	R1	R2
32	22	28	20	20	20	94	10	17	4	26	17	G1/8	M10×1.25	48	12	15	30	20	4	28	14	32.5	6	64	16
40	24	30.5	24	30	22	105	13	19	6	30	27	G1/4	M12×1.25	54	16	17.5	35	22	4	31.5	16	38	7	70	21
50	32	28	19	40	30	106	17	24	5.5	37	36	G1/4	M16×1.5	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

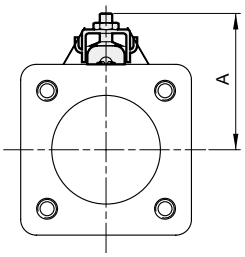
MCQVS Installation of sensor switch ø32~ø100

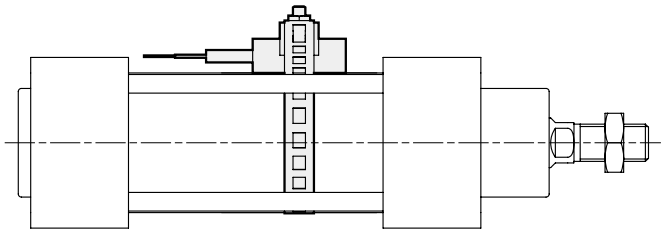
ISO 15552 **STANDARD CYLINDER** (STAINLESS STEEL)



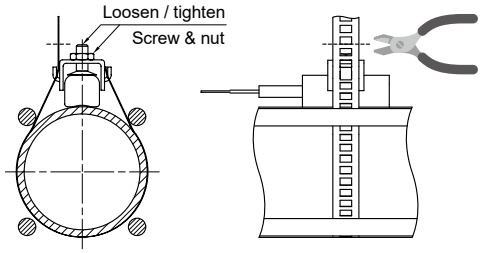


Code / Tube I.D.	Sensor switch	A
32	RCV + BV125 (Band)	41
40		46
50		50
63		52
80		65
100		75



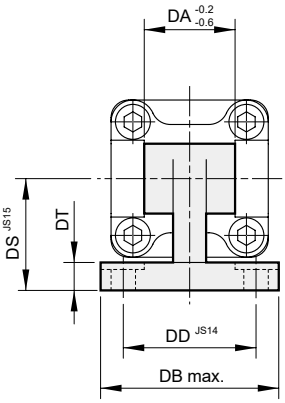


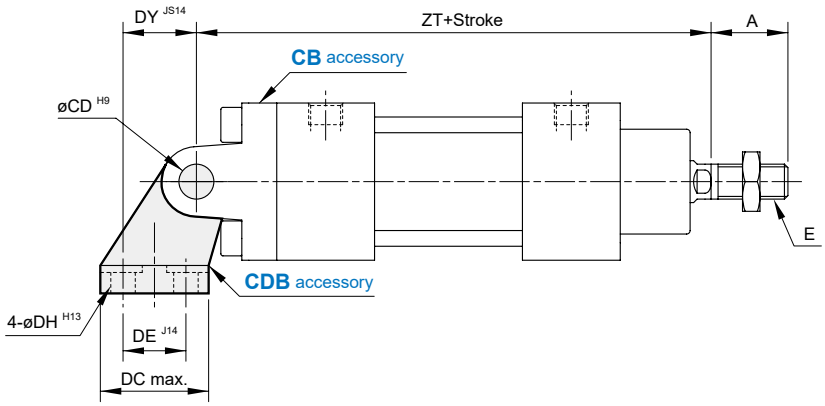
Mounting clamp



Mounting accessories

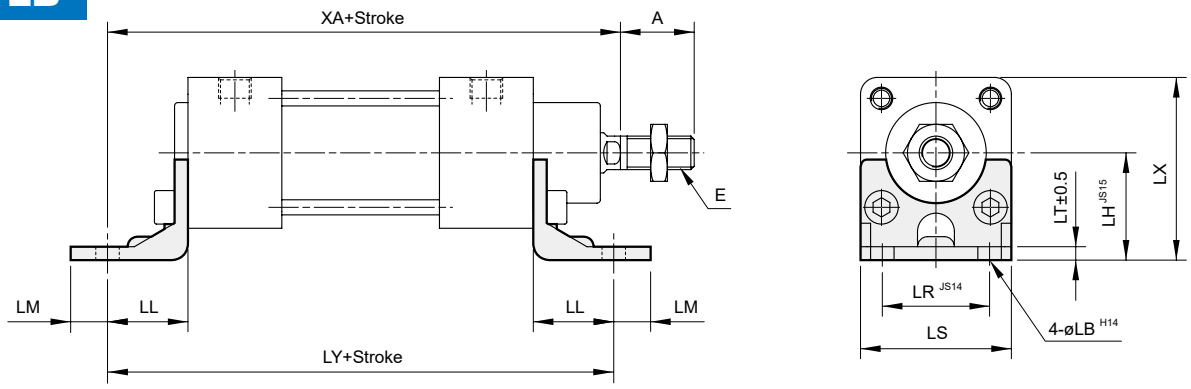
CDB CB+Pin (Extra purchase)



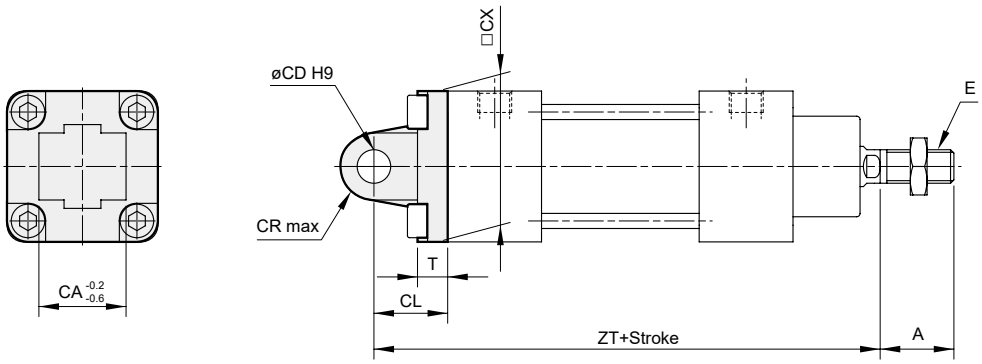


Code / Tube I.D.	A	CD	DA	DB	DC	DD	DE	DH	DS	DT	DY	E	ZT
32	22	10	26	51	31	38	18	6.6	32	8	21	M10×1.25	142
40	24	12	28	54	35	41	22	6.6	36	10	24	M12×1.25	160
50	32	12	32	65	45	50	30	9	45	12	33	M16×1.5	170
63	32	16	40	67	50	52	35	9	50	12	37	M16×1.5	190
80	40	16	50	86	60	66	40	11	63	14	47	M20×1.5	210
100	40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

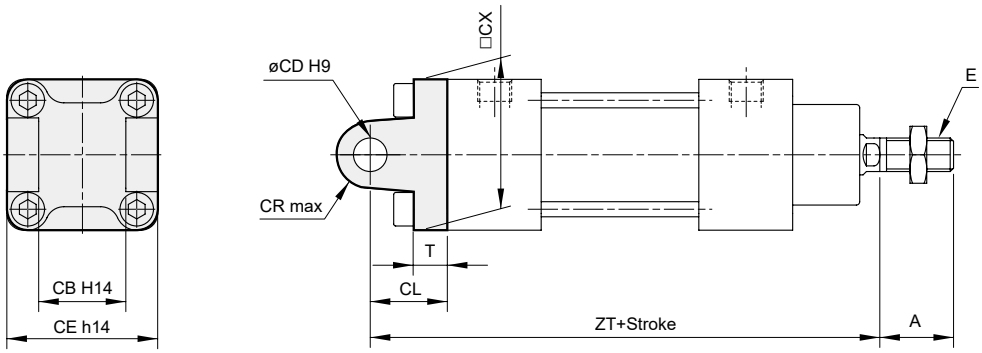
LB



CA

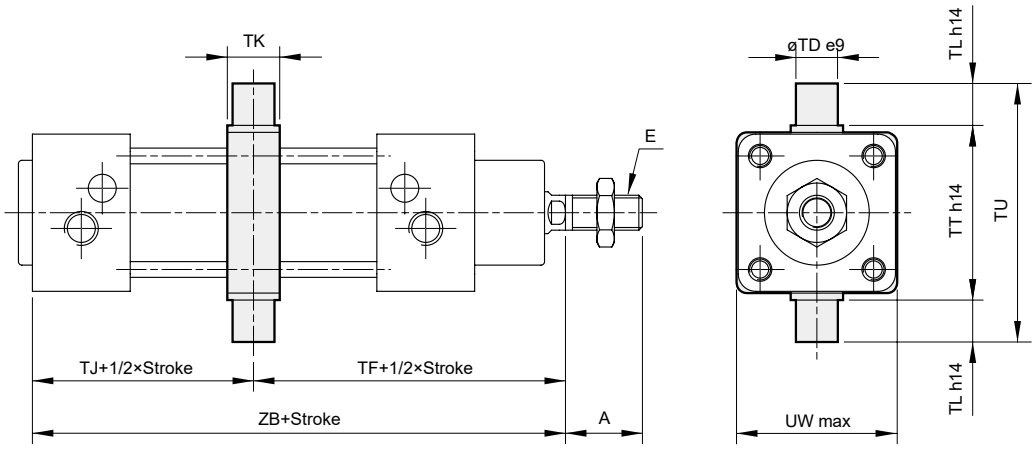


CB



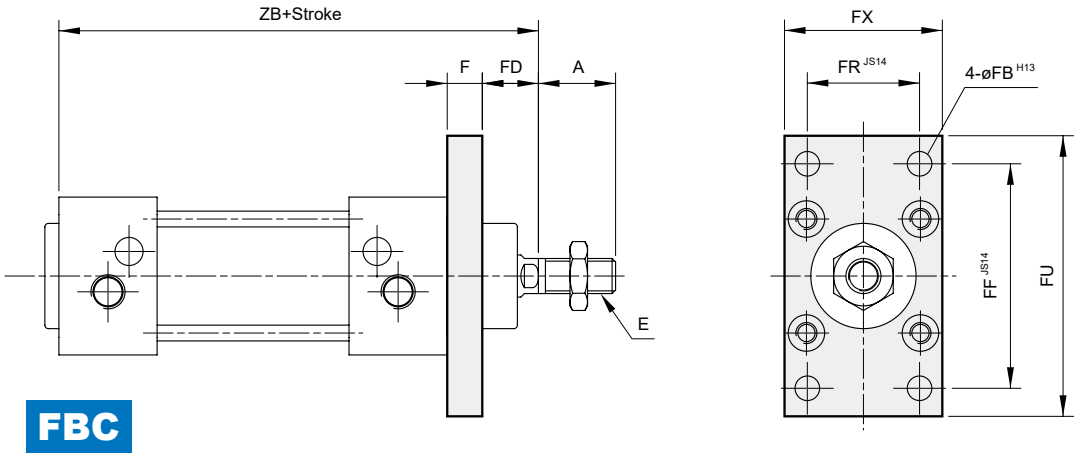
Code / Tube I.D.	A	CA	CB	CD	CE	CL	CR	CX	E	LB	LH	LL	LM	LR	LS	LT	LX	LY	T	XA	ZT
32	22	26	26	10	45	22	10	45	M10×1.25	7	32	24	11	32	45	4	54.5	142	10	144	142
40	24	28	28	12	52	25	12	55	M12×1.25	9	36	28	8	36	52	4	63.5	161	10	163	160
50	32	32	32	12	60	27	12	65	M16×1.5	9	45	32	15	45	65	5	77.5	170	10	175	170
63	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

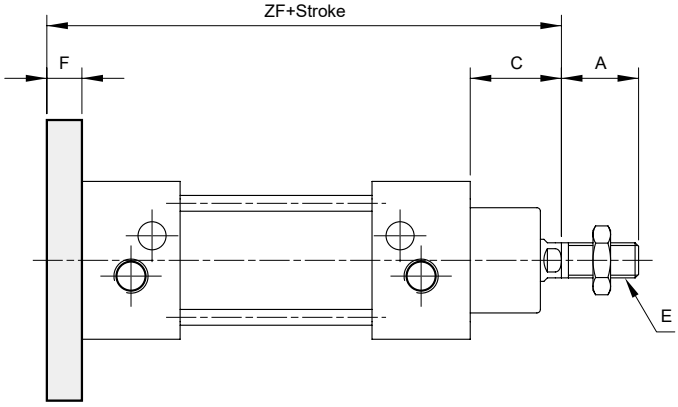


Code / Tube I.D.	A	E	TD	TF	TJ	TK	TL	TT	TU	UW	ZB
32	22	M10×1.25	12	73	47	15	12	50	74	46	120
40	24	M12×1.25	16	82.5	53	20	16	63	95	59	135
50	32	M16×1.5	16	90	53	20	16	75	107	69	143
63	32	M16×1.5	20	98	61	25	20	90	130	84	158
80	40	M20×1.5	20	110	64	25	20	110	150	102	174
100	40	M20×1.5	25	120	69	30	25	132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

FAC

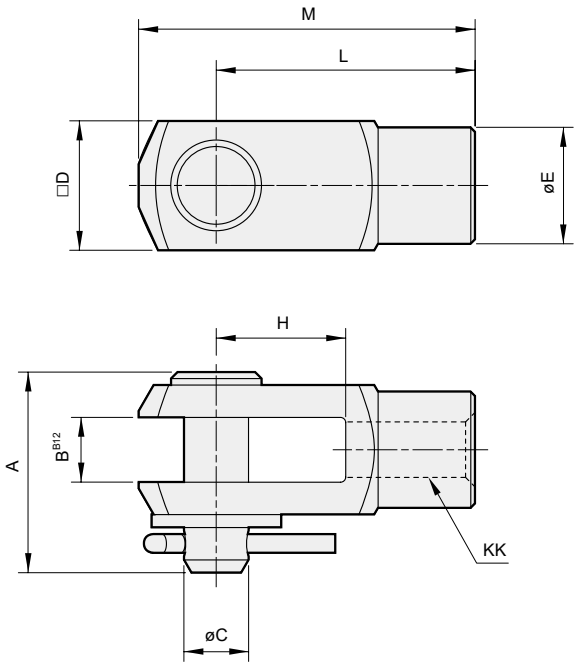


FBC



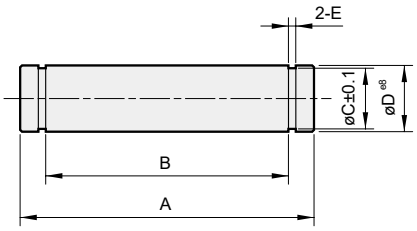
Code / Tube I.D.	A	C	E	F	FB	FD	FF	FR	FU	FX	ZB	ZF
32	22	26	M10×1.25	10	7	16	64	32	80	45	120	130
40	24	30	M12×1.25	10	9	20	72	36	90	52	135	145
50	32	37	M16×1.5	12	9	25	90	45	110	65	143	155
63	32	37	M16×1.5	12	9	25	100	50	120	75	158	170
80	40	46	M20×1.5	16	12	30	126	63	150	95	174	190
100	40	51	M20×1.5	16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