MCQI2 series

ISO-VDMA **STANDARD** PROFILE **CYLINDERS**

Mindman

Features:

■ Non lubrication:

Special housing and bushing enables self lubrication of piston rod.

■ High quality long service life:

Hard anodised aluminium cylinder tubes offer a high resistance to corrosion and low internal friction.

■ ISO-VDMA standard specification:

Conforms to ISO-6431 and VDMA 24562 specification enabling worldwide interchangeability.

■ Easy to insert reed switch:

With four grooves on the tube, proximity and reed sensors can be easily inserted into any position.

Table for standard stroke :

Tube I.D.	Stroke (mm)
ϕ 32, 40	50,75,100,125,150,175,200,250,300,350,400,450,500
ϕ 50, 63	↑ 600
ϕ 80, 100	↑ 600,700

- Stroke out of specification is also available.
- Please consult us if stroke out of specification.

Specification:

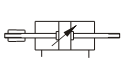
Model	**MCQI2**
Tube I.D.(mm)	32,40,50,63,80,100
Medium	Air
Operating pressure range	0.5~9.9 kgf/cm^2
Proof pressure	15 kgf/cm^2
Ambient temperature	−5℃~+60℃ (no freezing)
Sensor switch	RCI

Order example :

MCQI2 − 11 − 50 − 100 M

- MCQI2 — MODEL
- 11 — STYLE: **1**: Single Rod, **2**: Double Rod
- 50 — TUBE I.D.
- 100 — STROKE
- M — **M**: Magnet

STYLE:

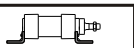
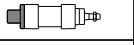
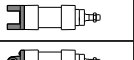
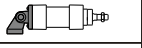
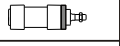
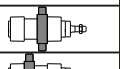
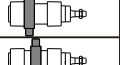
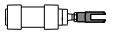
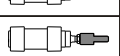
Code		Symbol	Description
1	1		Double acting / Male thread
2	1		Double rod / Double acting / Male thread
2	7		Double rod / Adjustable male thread (Please mark "adjustable distance(mm)" at order list)

※ Order example for special specification, refer to page **H-03**.

Mounting accessories: ※ Use the same accessories with MCQV.

FAC − MCQV − 50

- FAC — MOUNTING TYPE
- MCQV — MODEL
- 50 — TUBE I.D.

	**LB**
	**CA**
	**CB**
	**CDB** (+CB+Pin)
	**FAC**
	**FBC**
	**TA**
	TB
	**TC**
	**Y**
	**I**

Model is MCQI2

Refer to MCQV dimension

MCQI2 Dimensions ϕ32~ϕ100

ISO-VDMA **STANDARD** PROFILE **CYLINDERS**

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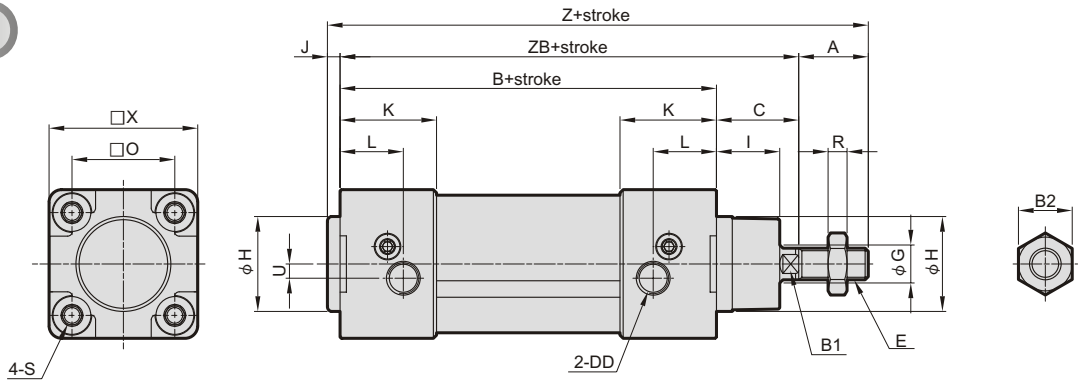

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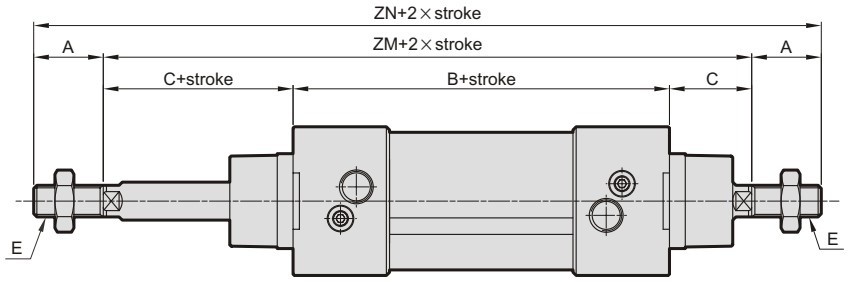

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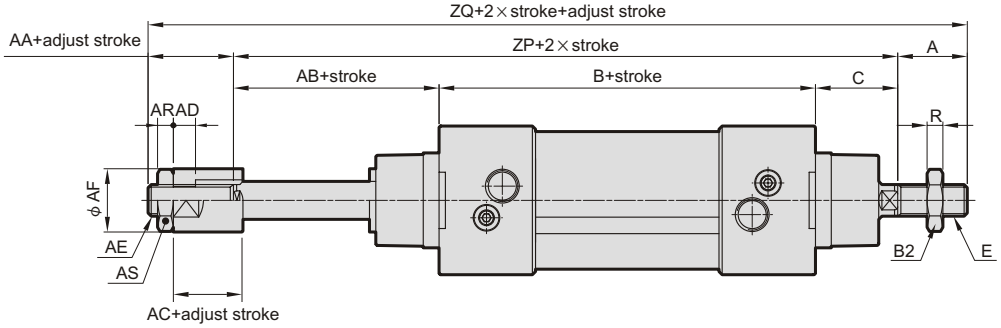
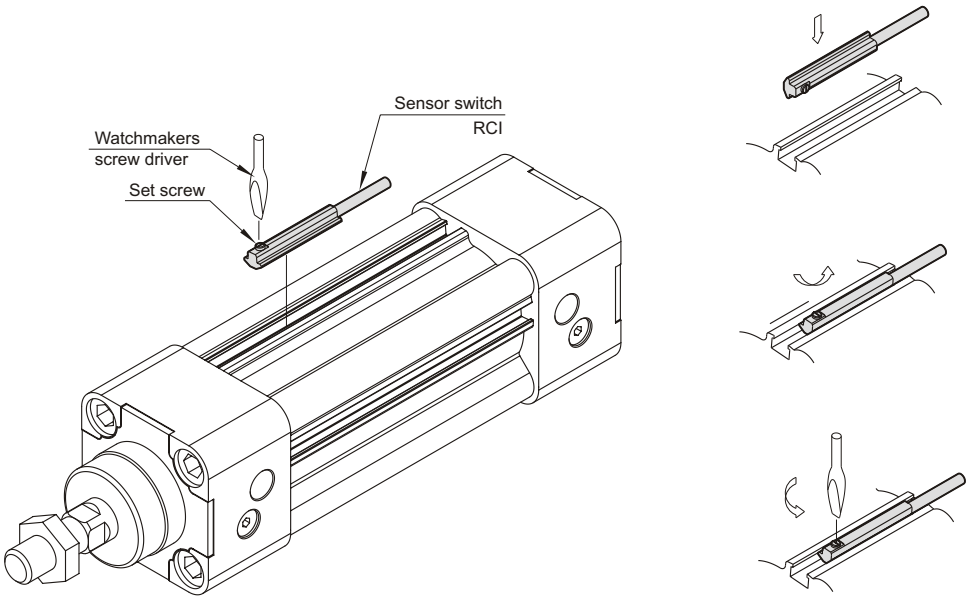


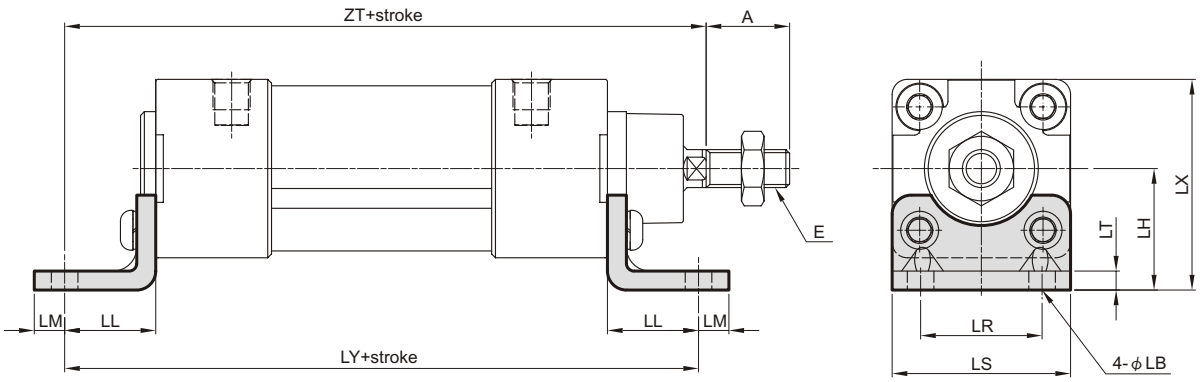
Code / Tube I.D	A	AA	AB	AC	AD	AE	AF	AR	AS	B	B1	B2	C	DD	E	G	H	I	J	K	L	O
32	22	16	26	12	7	M10×1.25	20	5	17	94	10	17	26	G 1/8	M10×1.25	12	30	20	4	30.5	20	32.5
40	24	20	27	12	7	M12×1.25	30	6	19	105	13	19	30	G 1/4	M12×1.25	16	35	20.5	4	34	14.5	38
50	32	18	34	15	10	M16×1.5	40	8	24	106	16	24	37	G 1/4	M16×1.5	20	40	28	4	31	16	46.5
63	32	20	32	15	10	M16×1.5	40	8	24	121	16	24	37	G 3/8	M16×1.5	20	45	26	4	33	16	56.5
80	40	32	41	20	14	M22×1.5	50	13	32	128	21	30	46	G 3/8	M20×1.5	25	45	32.5	4	35.5	20.5	72
100	40	30	46	20	14	M22×1.5	50	13	32	138	21	30	51	G 1/2	M20×1.5	25	55	37.5	4	37	19	89

Code / Tube I.D	R	S	U	X	Z	ZB	ZM	ZN	ZP	ZQ
32	5	M6×1.0	4.5	47	146	120	146	190	146	184
40	6	M6×1.0	5.3	55	163	135	165	213	162	206
50	8	M8×1.25	8.5	65	179	143	180	244	177	227
63	8	M8×1.25	8	78	194	158	195	259	190	242
80	10	M10×1.5	9	95	218	174	220	300	215	287
100	10	M10×1.5	13	115	233	189	240	320	235	305



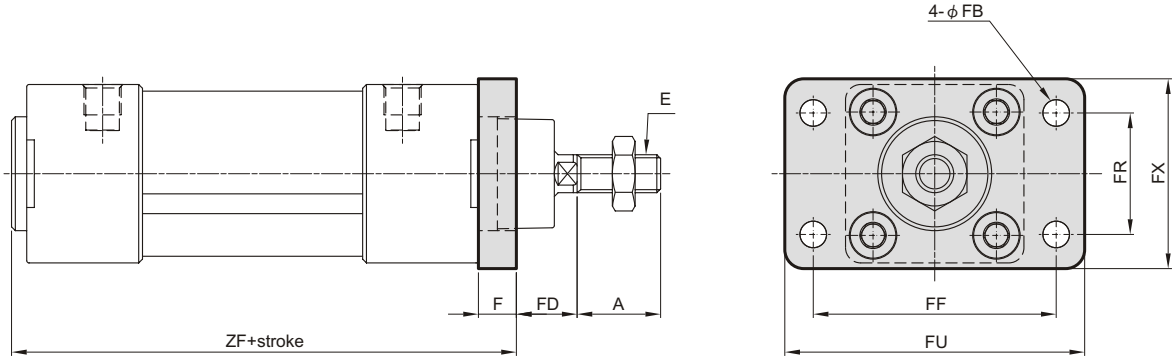
■ Mounting accessories

LB



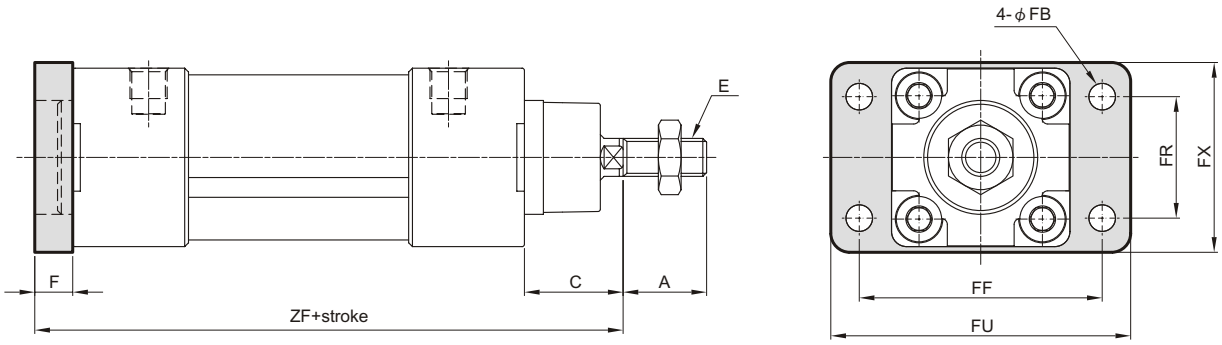
Code / Tube I.D	A	E	LB	LH	LL	LM	LR	LS	LT	LX	LY	ZT
32	22	M10×1.25	7	32	24	8	32	47	5	55.5	142	144
40	24	M12×1.25	9	36	28	10	36	53	5	63.2	161	163
50	32	M16×1.5	9	45	32	10	45	65	5	77.5	170	175
63	32	M16×1.5	9	50	32	10	50	75	5	89	185	190
80	40	M20×1.5	12	63	41	13	63	95	6	110.5	210	215
100	40	M20×1.5	14	71	41	13	75	115	6	128.5	220	230

FAC



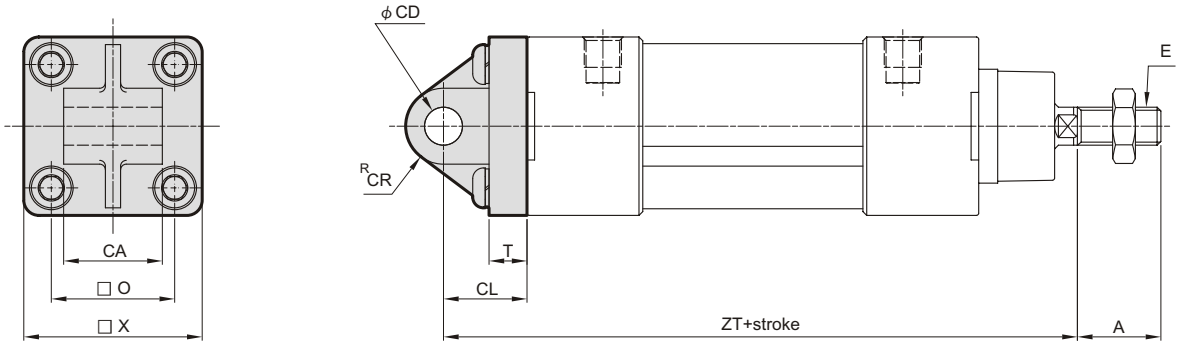
Code / Tube I.D	A	E	F	FB	FD	FF	FR	FU	FX	ZF
32	22	M10×1.25	10	7	16	64	32	79	50	108
40	24	M12×1.25	10	9	20	72	36	90	52	120
50	32	M16×1.5	12	9	25	90	45	110	65	123
63	32	M16×1.5	12	9	25	100	50	125	76	137
80	40	M20×1.5	16	12	30	126	63	154	94	148
100	40	M20×1.5	16	14	35	150	75	180	112	158

FBC



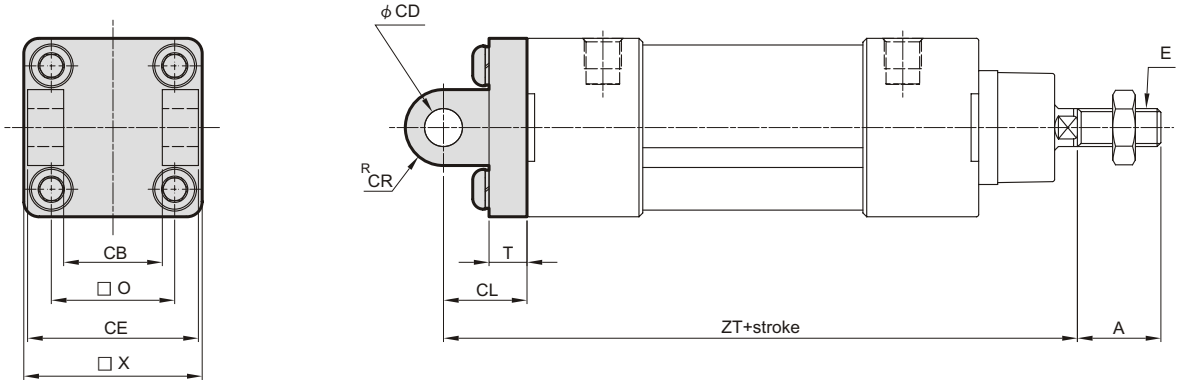
Code / Tube I.D	A	C	E	F	FB	FF	FR	FU	FX	ZF
32	22	26	M10×1.25	10	7	64	32	79	50	130
40	24	30	M12×1.25	10	9	72	36	90	52	145
50	32	37	M16×1.5	12	9	90	45	110	65	155
63	32	37	M16×1.5	12	9	100	50	125	76	170
80	40	46	M20×1.5	16	12	126	63	154	94	190
100	40	51	M20×1.5	16	14	150	75	180	112	205

CA



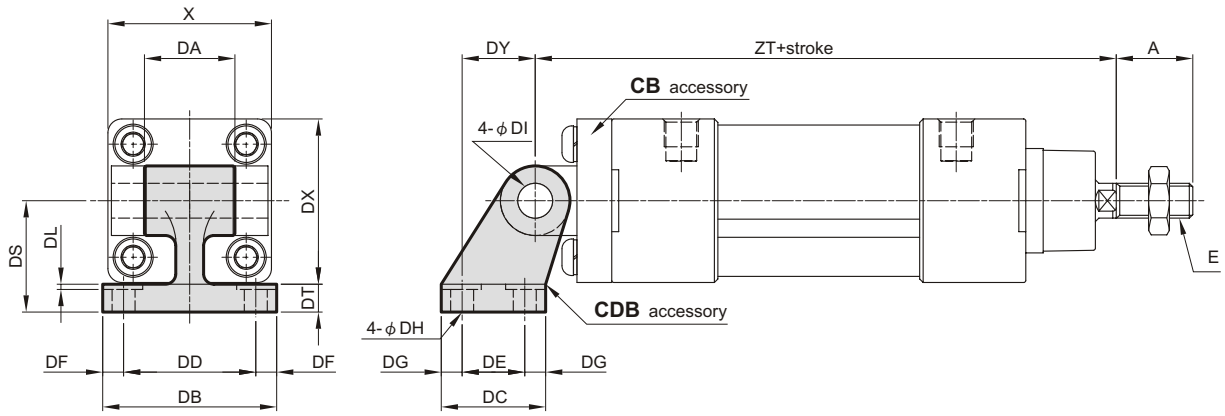
Code / Tube I.D	A	CA	CD	CL	CR	E	O	T	X	ZT
32	22	$26^{-0.1}_{-0.3}$	10^{H9}	22	10.5	M10×1.25	32.5	10	47	142
40	24	$28^{-0.1}_{-0.3}$	12^{H9}	25	12	M12×1.25	38	9	53	160
50	32	$32^{-0.1}_{-0.3}$	12^{H9}	27	14	M16×1.5	46.5	9	65	170
63	32	$40^{-0.1}_{-0.3}$	16^{H9}	32	18	M16×1.5	56.5	9	75	190
80	40	$50^{-0.1}_{-0.3}$	16^{H9}	36	17	M20×1.5	72	12	95	210
100	40	$60^{-0.1}_{-0.3}$	20^{H9}	41	21	M20×1.5	89	11	115	230

CB



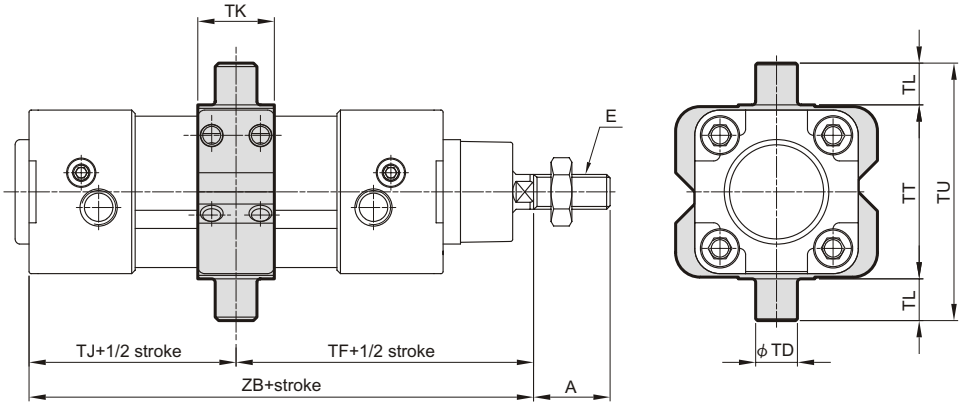
Code / Tube I.D	A	CB	CD	CE	CL	CR	E	O	T	X	ZT
32	22	$26^{+0.3}_{+0.1}$	10^{H9}	45	22	10.5	M10×1.25	32.5	10	47	142
40	24	$28^{+0.3}_{+0.1}$	12^{H9}	52	25	12	M12×1.25	38	9	53	160
50	32	$32^{+0.3}_{+0.1}$	12^{H9}	60	27	14	M16×1.5	46.5	9	65	170
63	32	$40^{+0.3}_{+0.1}$	16^{H9}	70	32	18	M16×1.5	56.5	9	75	190
80	40	$50^{+0.3}_{+0.1}$	16^{H9}	90	36	17	M20×1.5	72	12	95	210
100	40	$60^{+0.3}_{+0.1}$	20^{H9}	110	41	21	M20×1.5	89	11	115	230

CDB CB+Pin (Extra purchase)



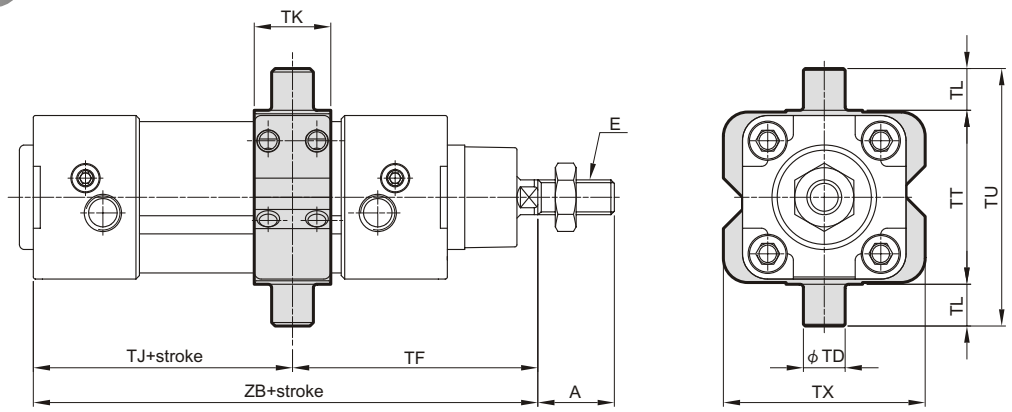
Code / Tube I.D	A	DA	DB	DC	DD	DE	DF	DG	DH	DI	DL	DS	DT	DX	DY	E	X	ZT
32	22	26	50	30	38	18	6	6	6.6	10	1.5	32	8	47.5	21	M10×1.25	47	142
40	24	28	53	34	41	22	6	6	6.6	12	1.5	36	10	52.5	24	M12×1.25	53	160
50	32	32	65	45	50	30	7.5	7.5	9	12	1.5	45	12	65.5	33	M16×1.5	65	170
63	32	40	67	50	52	35	7.5	7.5	9	16	1.5	50	12	75.5	37	M16×1.5	75	190
80	40	50	86	60	66	40	10	10	11	16	2.5	63	14	96.5	47	M20×1.5	95	210
100	40	60	96	70	76	50	10	10	11	20	2.5	71	15	113.5	55	M20×1.5	115	230

TC



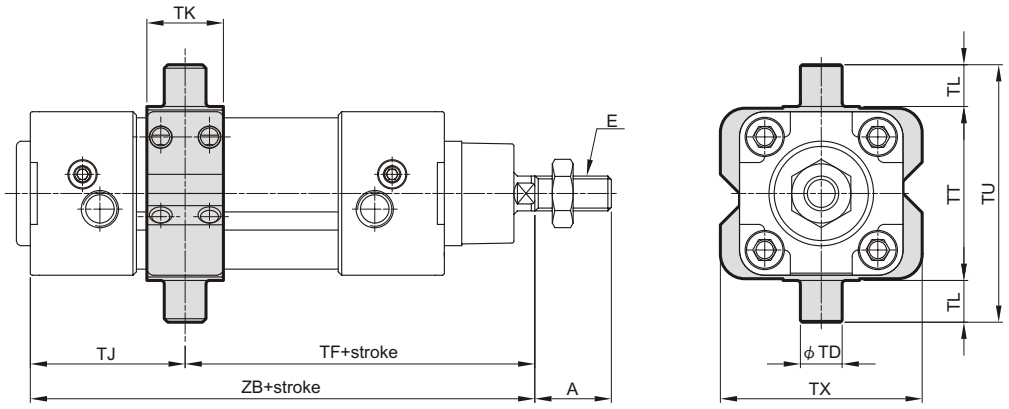
Code / Tube I.D	A	E	TD	TF	TJ	TK	TL	TT	TU	TX	ZB
32	22	M10×1.25	12^{e8}	73	47	22	12	50	74	58	120
40	24	M12×1.25	16^{e8}	82.5	52.5	28	16	63	95	70	135
50	32	M16×1.5	16^{e8}	90	53	32	16	75	107	85	143
63	32	M16×1.5	20^{e8}	97.5	60.5	35	20	90	130	100	158
80	40	M20×1.5	20^{e8}	110	64	40	20	110	150	120	174
100	40	M20×1.5	25^{e8}	120	69	45	25	132	182	145	189

TA



Code / Tube I.D.	A	E	TD	TF	without magnet		magnet		TK	TL	TT	TU	TX
					TJ	ZB	TJ	ZB					
32	22	M10×1.25	12^{e8}	70.5	49.5	120	79.5	150	22	12	50	74	58
40	24	M12×1.25	16^{e8}	81	54	135	84	165	28	16	63	95	70
50	32	M16×1.5	16^{e8}	87	56	143	86	173	32	16	75	107	85
63	32	M16×1.5	20^{e8}	90.5	67.5	158	97.5	188	35	20	90	130	100
80	40	M20×1.5	20^{e8}	104.5	69.5	174	109.5	214	40	20	110	150	120
100	40	M20×1.5	25^{e8}	113.5	75.5	189	115.5	229	45	25	132	182	145

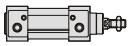
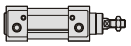
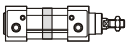
TB



Code / Tube I.D.	A	E	TD	TJ	without magnet		magnet		TK	TL	TT	TU	TX
					TF	ZB	TF	ZB					
32	22	M10×1.25	12^{e8}	44.5	75.5	120	105.5	150	22	12	50	74	58
40	24	M12×1.25	16^{e8}	51	84	135	114	165	28	16	63	95	70
50	32	M16×1.5	16^{e8}	50	93	143	123	173	32	16	75	107	85
63	32	M16×1.5	20^{e8}	53.5	104.5	158	134.5	188	35	20	90	130	100
80	40	M20×1.5	20^{e8}	58.5	115.5	174	155.5	214	40	20	110	150	120
100	40	M20×1.5	25^{e8}	62.5	126.5	189	166.5	229	45	25	132	182	145

Cylinder weight

unit:kg

Model	Basic weight **MCQI2-11**	Basic weight (magnet) **MCQI2-11**	Stroke 25 mm **MCQI2-11**
Tube I.D.			
ϕ32	0.544	0.550	0.064
ϕ40	0.822	0.834	0.091
ϕ50	1.260	1.277	0.128
ϕ63	1.838	1.858	0.116
ϕ80	2.754	2.781	0.209
ϕ100	4.086	4.121	0.234

Model	**LB**	**CA**	**CB**	**CDB**	**FAC/FBC**	**TA/TB/TC**	**Y**	**I**	**Pin** (Y&I)	**Pin** (CA&CB)
Tube I.D.										
ϕ32	0.163	0.213	0.185	0.170	0.235	0.208	—	—	—	—
ϕ40	0.211	0.253	0.211	0.230	0.265	0.282	0.115	0.141	—	—
ϕ50	0.315	0.390	0.352	0.410	0.460	0.377	0.272	0.334	—	—
ϕ63	0.395	0.670	0.544	0.550	0684	0.675	0.272	0.334	—	—
ϕ80	0.816	1.076	0.982	0.870	1.508	1.025	0.551	0.553	—	—
ϕ100	1.014	1.587	1.493	1.400	1.975	1.680	0.551	0.553	—	—