MCB* series

ROD LOCKING CYLINDER

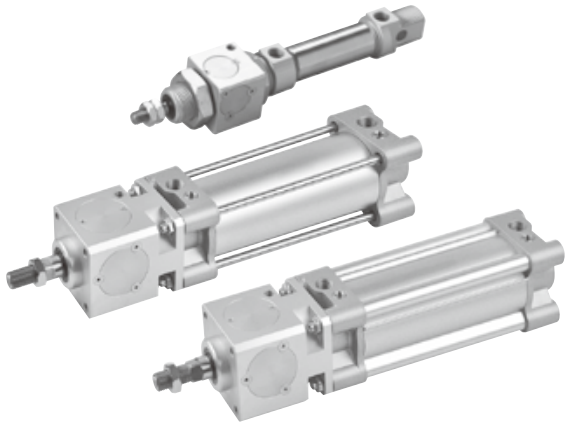


Table for standard stroke

Tube I.D.	Stroke (mm)	Max. stroke (mm)
ø20,25	10,25,50,75,100,125, 150,200,300,400,500	800
ø32,40	50,75,100,125,150, 175,200,250,300, 350,400,450,500	1600
ø50,63		1800
ø80,100		2300
ø125		1800

* Intermediate stroke are available, please contact us.

Order example

MCBQV3 — 11 — 40 — 100M — S

1: Single rod | TUBE I.D. | STROKE | **M**: Magnet

STYLE

Code		Symbol	Description
1	1		Double acting / Male thread

MODEL

MODEL	Tube I.D.
MCBMI	ø20, ø25

MODEL	Tube I.D.
MCBQV3	ø32~ø100
MCBQI3	ø32~ø100
MCBQV	ø125

CUSHION TYPE

Blank: Cushion pad	**A**: Cushion air (Adjustable)
●	●

Blank: Cushion air (Adjustable)	**S**: Cushion air (Automatic)
●	●
●	●
●	

* **Rc** or **NPT** thread are also available, please contact us.

Features

■ Multi-specification

MCB unit is applicable in 9 different bore sizes (ø20~125), piston rod can be locked at any position within the stroke range.

■ Brake function

Brake function is applicable in both directions.

■ Non lubrication

No lubricant is required for the piston rod. Utilize oil-containing alloys and special bearing bush to eliminate the necessity of lubrication on piston rod.

■ High quality long service life

Hard anodized aluminum tube and stainless steel tube allows cylinder to have better corrosion and abrasion resistance.

■ ISO 15552 & ISO 6432 standard specification

Conform to ISO 15552 & ISO 6432 standards. Unified design, most parts and mounting accessories are interchangeable.

■ Cylinder mountings

Variety of mounting accessories are available for different applications.

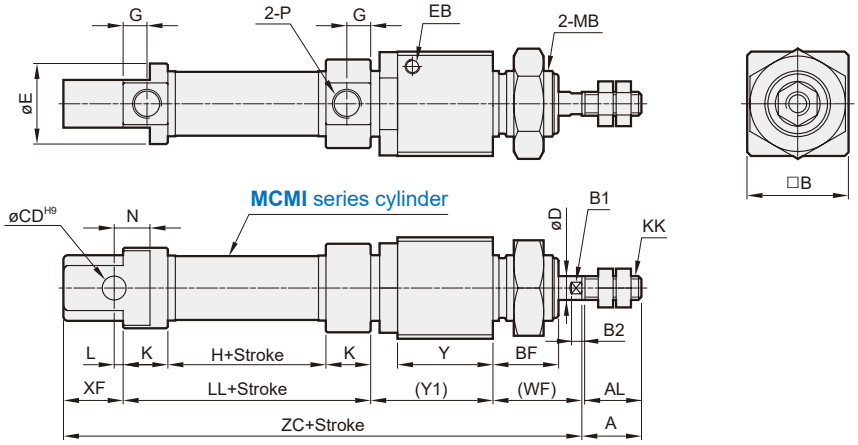
Specification

Model	MCBMI		MCBQI3					
Tube I.D. (mm)	20	25	32	40	50	63	80	100
Medium	Air							
Operating perssure range	0.3~0.6 MPa							
Proof pressure	1.5 MPa							
Ambient temperature	-5~+60°C (No freezing)							
Min. working pressure	0.3 MPa							
Available speed range	50~750		50~500 mm/sec					
Locking mode	Secure locking of piston rod in any position							
Lock retention forces (N)	490	490	790	1240	1930	3060	5400	7700
Sensor switch (*)	RCM		RCI					
Sensor switch (band)	BM20	BM25	—					

Model	MCBQV3						MCBQV
Tube I.D. (mm)	32	40	50	63	80	100	125
Medium	Air						
Operating perssure range	0.3~0.6 MPa						
Proof pressure	1.5 MPa						
Ambient temperature	-5~+60°C (No freezing)						
Min. working pressure	0.3 MPa						
Available speed range	50~500 mm/sec						
Locking mode	Secure locking of piston rod in any position						
Lock retention forces (N)	790	1240	1930	3060	5400	7700	12040
Sensor switch (*)	RCA						
Sensor switch (holder)	HV1		HV2		HV3		HV4

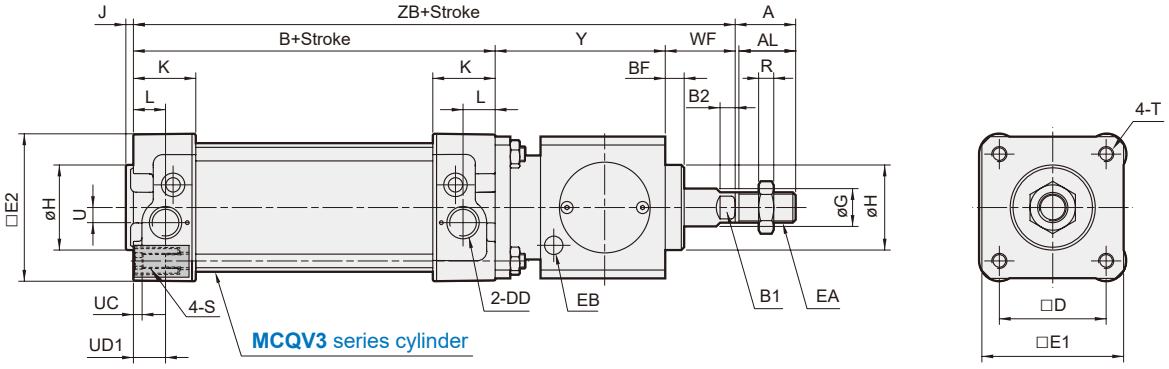
* RCA, RCI, RCM specification, please refer to page 8-8, 14, 16.

MCBMI

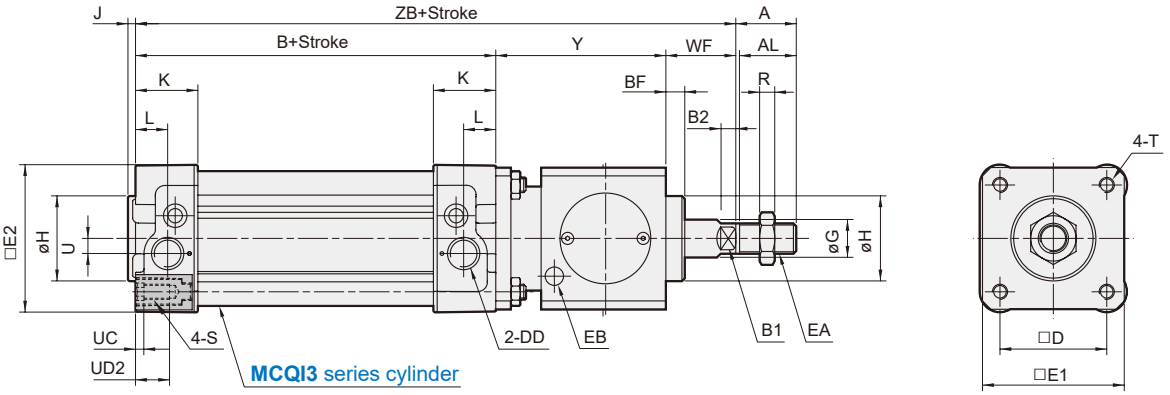


Code / Tube I.D.	A	AL	B	B1	B2	BF	CD	D	E	EB	G	H	K	KK	L	LL	MB	N	P	WF	XF	Y	Y1	ZC
20	20	20	34	7	3.5	22	8	8	27	M5	8	38	15	M8×1.25	3	68	M22×1.5	12	G1/8	26	20	32	43	157
25	22	19.5	34	9	5	22	8	10	27	M5	7.5	37	15	M10×1.25	9	67	M22×1.5	12	G1/8	28	22	32	45	162

MCBQV3



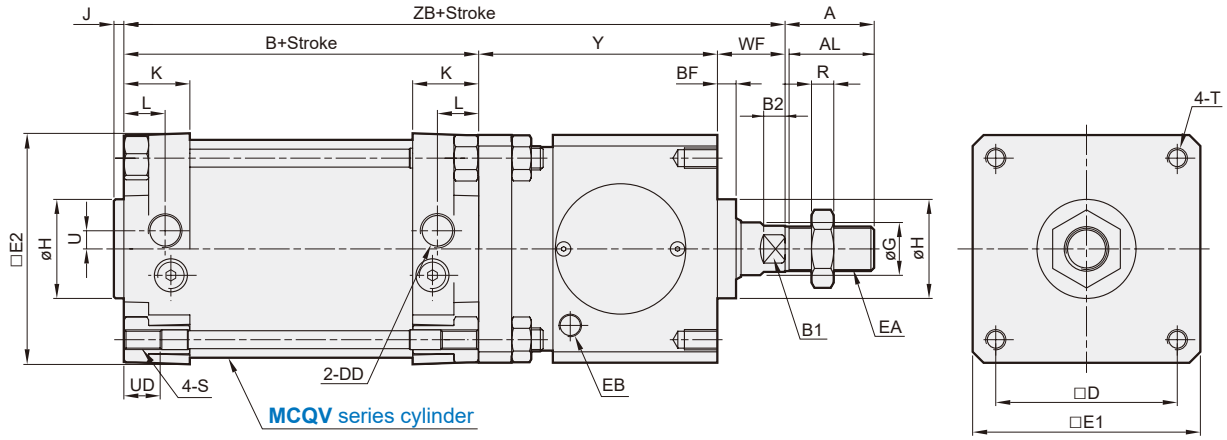
MCBQI3



Code / Tube I.D.	A	AL	B	BF	B1	B2	D	DD	E1	E2	EA	EB	G	H	J	K	L	R	S	T	U	UC	UD1	UD2	WF	Y	ZB
32	22	20	94	7.5	10	4	32.5	G1/8	47	47	M10×1.25	G1/8	12	30	4	30.5	20	5	M6×1.0	M6×12L	4.5	4.5	12	M6×1.0×15L	26	60	180
40	24	22	105	10	13	6.5	38	G1/4	54	53	M12×1.25	G1/8	16	34.9	4	34	14.5	6	M6×1.0	M6×12L	5.3	4.5	12	M6×1.0×15L	30	70	205
50	32	30	106	10	17	6	46.5	G1/4	65	65	M16×1.5	G1/8	20	40	4	31	16	8	M8×1.25	M8×14L	8.5	4.5	16	M8×1.25×18L	37	90	233
63	32	30	121	10	17	8	56.5	G3/8	75	78	M16×1.5	G1/8	20	45	4	33	16	8	M8×1.25	M8×14L	8	4.5	16	M8×1.25×18L	37	90	248
80	40	38	128	10	22	10	72	G3/8	95	95	M20×1.5	G1/4	25	45	4	35.5	20.5	10	M10×1.5	M10×16L	9	4.5*1	18	M10×1.5×19L	46	110	284
100	40	38	138	10	22	10	89	G1/2	114	115	M20×1.5	G1/4	25	55	4	37	19	10	M10×1.5	M10×16L	13	4.5*1	18	M10×1.5×19L	51	110	299

* **MCQI3** series UC=5.5

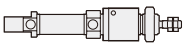
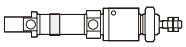
MCBQV

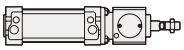
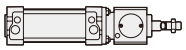
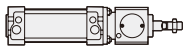
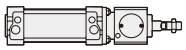
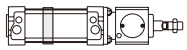


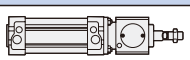
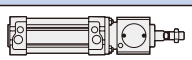
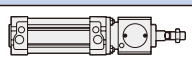
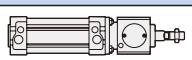
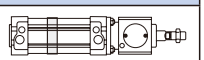
Code / Tube I.D.	A	AL	B	B1	B2	BF	D	DD	E1	E2	EA	EB	G	H	J	K	L	R	S	T	U	UD	WF	Y	ZB
125	54	52	160	27	13	16	110	G1/2	138	140	M27×2.0	G1/4	32	60	6	40	25	13.5	M12×1.75	M12×20L	11	22	65	140	365

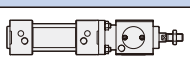
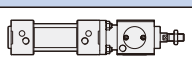
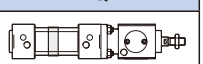
Cylinder weight

Unit: kg

Model	Basic weight (magnet) **MCBMI-11**	Stroke 25 mm **MCBMI-11**
Tube I.D.		
ø20	0.422	0.028
ø25	0.758	0.050

Model	Basic weight **MCBQV3-11**	Basic weight (magnet) **MCBQV3-11**	Basic weight **MCBQV3-11-S**	Basic weight (magnet) **MCBQV3-11-S**	Stroke 25 mm **MCBQV3-11(-S)**
Tube I.D.					
ø32	0.960	0.966	0.9	0.906	0.050
ø40	1.417	1.429	1.397	1.409	0.068
ø50	2.414	2.431	2.401	2.418	0.108
ø63	3.389	3.409	3.373	3.393	0.125
ø80	5.434	5.461	5.415	5.442	0.187
ø100	7.552	7.587	7.483	7.518	0.210

Model	Basic weight **MCBQI3-11**	Basic weight (magnet) **MCBQI3-11**	Basic weight **MCBQI3-11-S**	Basic weight (magnet) **MCBQI3-11-S**	Stroke 25 mm **MCBQI3-11(-S)**
Tube I.D.					
ø32	0.984	0.99	0.981	0.987	0.062
ø40	1.489	1.501	1.483	1.495	0.088
ø50	2.6	2.617	2.593	2.61	0.120
ø63	3.485	3.505	3.474	3.494	0.129
ø80	5.623	5.65	5.608	5.635	0.185
ø100	7.819	7.854	7.755	7.79	0.236

Model	Basic weight **MCBQV-11**	Basic weight (magnet) **MCBQV-11**	Stroke 25 mm **MCBQV-11**
Tube I.D.			
ø125	13.845	13.888	0.372