

MCFA2 series

MULTI-MOUNT CYLINDER



Technical data



Features

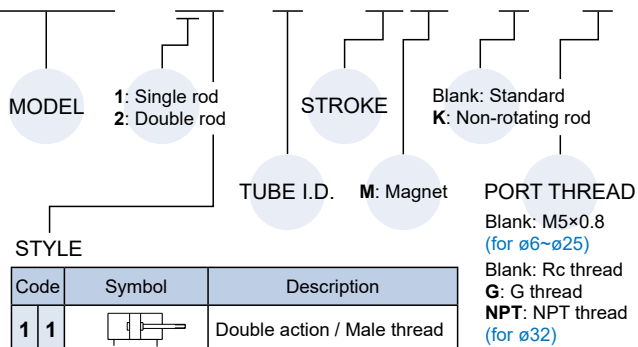
- Compact and space saving.
- Embedded sensor design.

Specification

Model	MCFA2					
Acting type	Double acting					
Tube I.D. (mm)	6	10	16	20	25	32
Port size	M5×0.8					Rc1/8
Medium	Air					
Max. operating pressure	0.7 MPa					
Min. operating pressure (MPa)	0.12	0.06			0.05	
Proof pressure	1 MPa					
Cushion	With rubber cushion pad					
Lubrication	Not required					
Ambient temperature	-5~+60°C (No freezing)					
Available speed range	50~500 mm/sec					
Sensor switch	RDC, RQC					

Order example

MCFA2 - 11 - 6 - 10M - K - □



STYLE

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

Table for standard stroke

Tube I.D.	Stroke (mm)
ø6, 10, 16	5,10,15,20,25,30
ø20, 25, 32	5,10,15,20,25,30,40,50

Tightening torque

When mounting MCFA2 series, refer to the below table.

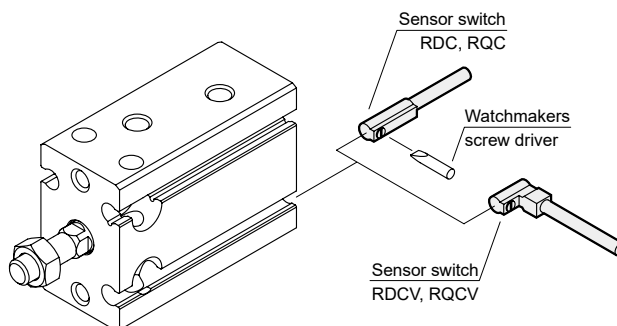
Tube I.D.	Hexagon socket head cap screw dia.(mm)	Proper tightening torque N.m[kgf.cm]
ø6, 10	M3	1.1 [11.2] ± 10%
ø16	M4	2.5 [25.5] ± 10%
ø20, 25	M5	5.0 [51.0] ± 10%
ø32	M6	8.0 [81.6] ± 10%

Cylinder weight

Unit: g

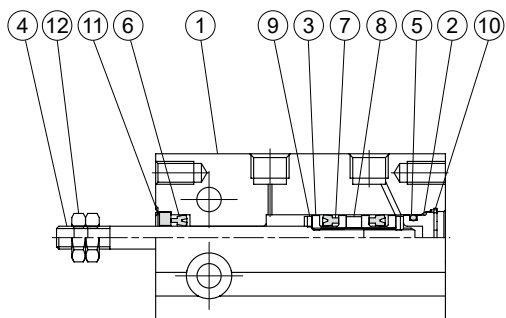
Model	Basic weight MCFA2-11	Basic weight (magnet) MCFA2-11	Stroke 5 mm MCFA2-11
Tube I.D.			
ø6	20	18	3
ø10	32	31	3
ø16	42	58	6
ø20	90	118	10
ø25	161	202	17
ø32	268	330	26

Installation of sensor switch

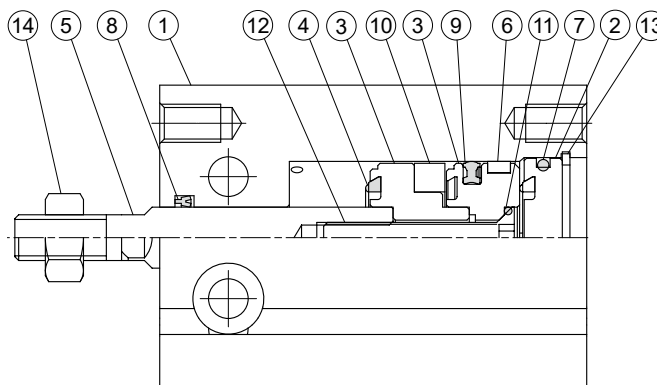


Double acting

$\phi 6$



$\phi 10 \sim \phi 32$



Material

No.	Tube I.D. Part name	6	Note
1	Body	Aluminum alloy	
2	Head cover	Aluminum alloy	
3	Piston	Aluminum alloy	
4	Rod	Stainless steel	
5	Cover ring	NBR	
6	Rod packing	NBR	
7	Piston packing	NBR	
8	Magnet ring	Magnet material	for with magnet
9	Cushion packing	PU	
10	Snap ring	Spring steel	
11	Fixed ring	Aluminum alloy	
12	Rod front nut	Carbon steel	

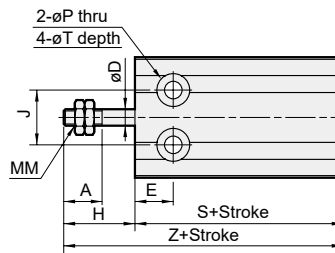
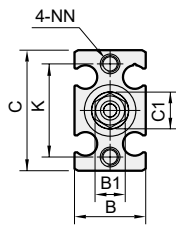
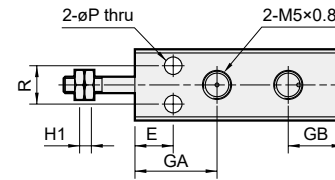
No.	Tube I.D. Part name	10	16	20	25	32	Note
1	Body	Aluminum alloy					
2	Head cover	Aluminum alloy					
3	Piston	Aluminum alloy					
4	Cushion packing	NBR					
5	Rod *1	Stainless steel			*2		
6	Wear ring	Resin					
7	Cover ring	NBR					
8	Rod packing	NBR					
9	Piston packing	NBR					
10	Magnet ring	Magnet material					for with magnet
11	Piston gasket	-	NBR				
12	Piston bolt	-	SCM			for without magnet	
		-	Stainless steel			for with magnet	
13	Snap ring	Spring steel					
14	Rod front nut	Carbon steel					

*1. When customized material is bearing steel, only two-side across flat (wrench flat) is available.

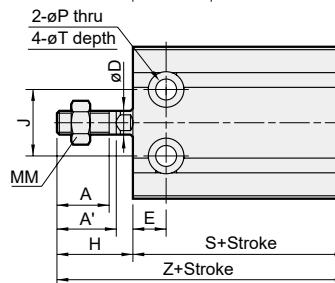
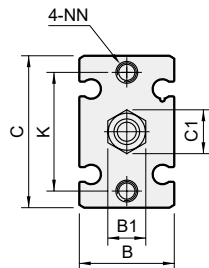
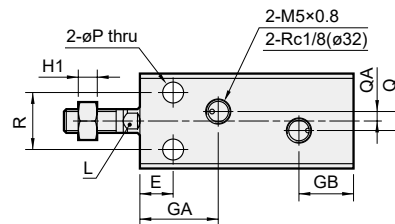
*2. Medium carbon steel

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$\phi 6, \phi 10$



$\phi 16\sim\phi 32$



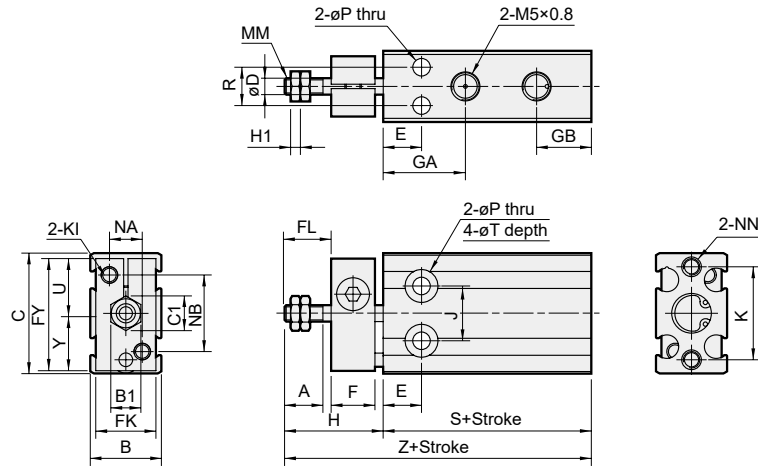
Code Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R
6	7	—	13	5.5	22	6.4	3	7	15	10	13	1.8	10	17	—	M3×0.5	M3×0.5×5depth	3.2	—	—	7
10	10	—	15	7	24	8.1	4	7	16.5	10	16	2.4	11	18	—	M4×0.7	M3×0.5×5depth	3.2	—	—	9
16	11	12.5	20	8	32	9.2	6	7	16.5*	11.5	16	4	14	25	5	M5×0.8	M4×0.7×6depth	4.5	4	2	12
20	12	14	26	10	40	11.5	8	9	19	12.5	19	5	16	30	6	M6×1.0	M5×0.8×8depth	5.5	9	4.5	16
25	15.5	18	32	13	50	15.0	10	10	21.5	13	23	5	20	38	8	M8×1.25	M5×0.8×8depth	5.5	9	4.5	20
32	19.5	22	40	17	62	19.6	12	11	23	12.5	27	6	24	48	10	M10×1.25	M6×1.0×9depth	6.6	13.5	4.5	24

* Without magnet with stroke=5mm, GA=14.5mm.

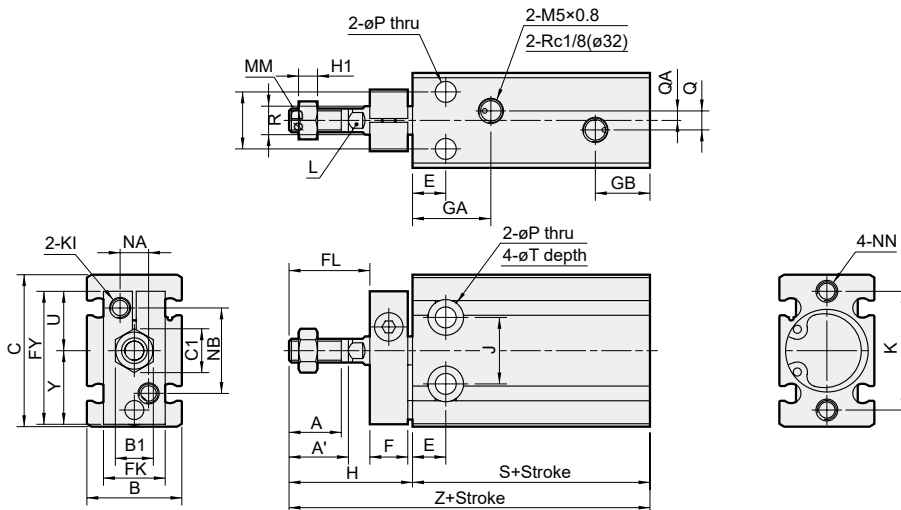
Code Tube I.D.	T	Without magnet		Magnet	
		S	Z	S	Z
6	6×4.8depth	33	46	33	46
10	6×5depth	36	52	36	52
16	7.6×6.5depth	30	46	40	56
20	9.3×8depth	36	55	46	65
25	9.3×9depth	40	63	50	73
32	11×11.5depth	42	69	52	79

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$\phi 6, \phi 10$



$\phi 16\sim\phi 32$



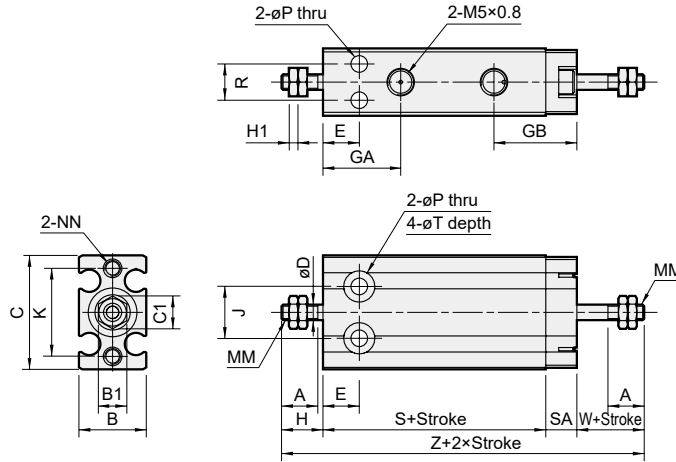
Code Tube I.D.	A	A'	B	B1	C	C1	D	E	F	FL	FK	FY	GA	GB	H	H1	J	K	KI	L	MM	NA	NB
6	7	—	13	5.5	22	6.4	3	7	8	9	11	20.5	15	10	18	1.8	10	17	M3×0.5	—	M3×0.5	6	14
10	10	—	15	7	24	8.1	4	7	8	12	12	22	16.5	10	21	2.4	11	18	M3×0.5	—	M4×0.7	7	15
16	11	12.5	20	8	32	9.2	6	7	8	17	13	28	16.5*	11.5	26	4	14	25	M4×0.7	5	M5×0.8	6	18
20	12	14	26	10	40	11.5	8	9	8	20	16	33	19	12.5	29	5	16	30	M4×0.7	6	M6×1.0	8	20
25	15.5	18	32	13	50	15.0	10	10	10	22	20	43.5	21.5	13	33	5	20	38	M5×0.8	8	M8×1.25	10	28
32	19.5	22	40	17	62	19.6	12	11	12	29	24	51.5	23	12.5	42	6	24	48	M5×0.8	10	M10×1.25	12	32

* Without magnet with stroke=5mm, GA=14.5mm.

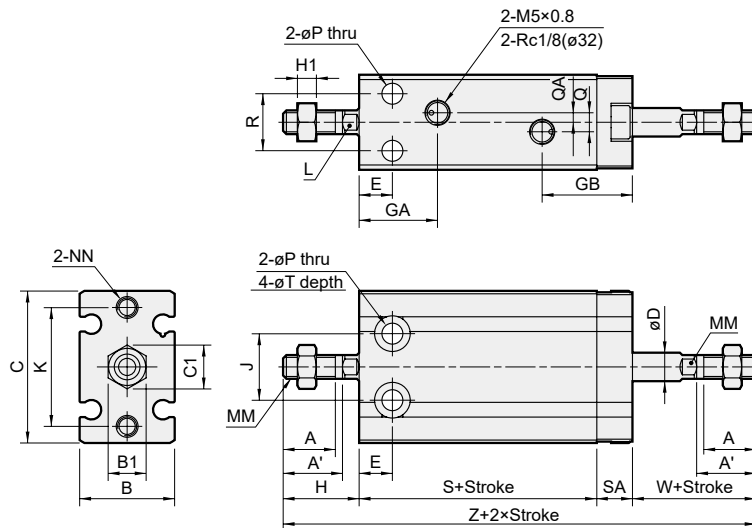
Code Tube I.D.	NN	P	Q	QA	R	T	U	Y	Without magnet		Magnet	
									S	Z	S	Z
6	M3×0.5×5depth	3.2	—	—	7	6×4.8depth	10	10.5	33	51	33	51
10	M3×0.5×5depth	3.2	—	—	9	6×5depth	10.5	11.5	36	57	36	57
16	M4×0.7×6depth	4.5	4	2	12	7.6×6.5depth	12.5	15.5	30	56	40	66
20	M5×0.8×8depth	5.5	9	4.5	16	9.3×8depth	13.5	19.5	36	65	46	75
25	M5×0.8×8depth	5.5	9	4.5	20	9.3×9depth	19	24.5	40	73	50	83
32	M6×1.0×9depth	6.6	13.5	4.5	24	11×11.5depth	21	30.5	42	84	52	94

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$\phi 6, \phi 10$



$\phi 16\sim\phi 32$



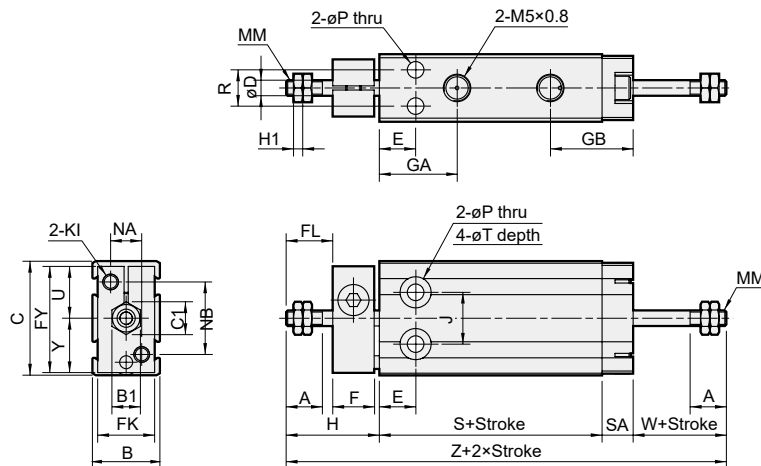
Code Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R	SA
6	7	—	13	5.5	22	6.4	3	7	15	16	13	1.8	10	17	—	M3×0.5	M3×0.5×5depth	3.2	—	—	7	6
10	10	—	15	7	24	8.1	4	7	16.5	16	16	2.4	11	18	—	M4×0.7	M3×0.5×5depth	3.2	—	—	9	6
16	11	12.5	20	8	32	9.2	6	7	16.5*	19	16	4	14	25	5	M5×0.8	M4×0.7×6depth	4.5	4	2	12	7.5
20	12	14	26	10	40	11.5	8	9	19	21.5	19	5	16	30	6	M6×1.0	M5×0.8×8depth	5.5	9	4.5	16	9
25	15.5	18	32	13	50	15.0	10	10	21.5	22	23	5	20	38	8	M8×1.25	M5×0.8×8depth	5.5	9	4.5	20	9
32	19.5	22	40	17	62	19.6	12	11	23	22.5	27	6	24	48	10	M10×1.25	M6×1.0×9depth	6.6	13.5	4.5	24	10

* Without magnet with stroke=5mm, GA=14.5mm.

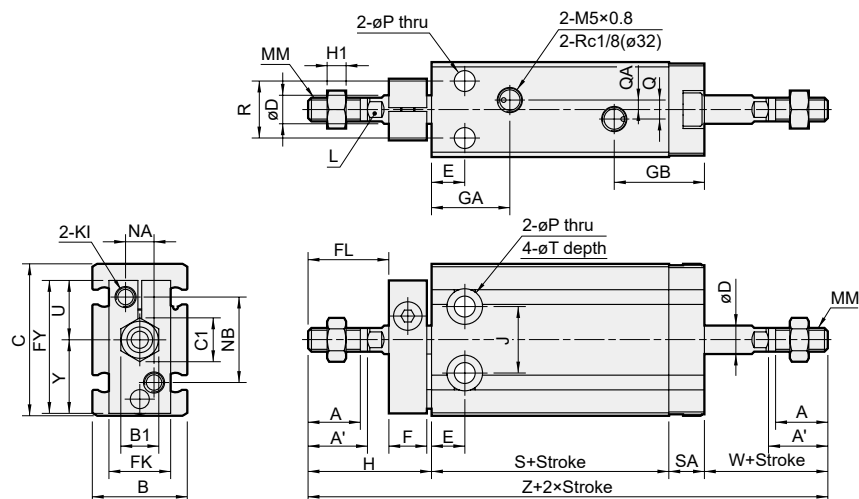
Code Tube I.D.	T	W	Without magnet		Magnet	
			S	Z	S	Z
6	6×4.8depth	13	38	70	38	70
10	6×5depth	16	36	74	36	74
16	7.6×6.5depth	16	30	69.5	40	79.5
20	9.3×8depth	19	36	83	46	93
25	9.3×9depth	23	40	95	50	105
32	11×11.5depth	27	42	106	52	116

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$\phi 6, \phi 10$



$\phi 16 \sim \phi 32$



Code Tube I.D.	A	A'	B	B1	C	C1	D	E	F	FL	FK	FY	GA	GB	H	H1	J	KI	L	MM	NA	NB	P	Q
6	7	—	13	5.5	22	6.4	3	7	8	9	11	20.5	15	16	18	1.8	10	M3×0.5	—	M3×0.5	6	14	3.2	—
10	10	—	15	7	24	8.1	4	7	8	12	12	22	16.5	16	21	2.4	11	M3×0.5	—	M4×0.7	7	15	3.2	—
16	11	12.5	20	8	32	9.2	6	7	8	17	13	28	16.5*	19	26	4	14	M4×0.7	5	M5×0.8	6	18	4.5	4
20	12	14	26	10	40	11.5	8	9	8	20	16	33	19	21.5	29	5	16	M4×0.7	6	M6×1.0	8	20	5.5	9
25	15.5	18	32	13	50	15.0	10	10	10	22	20	43.5	21.5	22	33	5	20	M5×0.8	8	M8×1.25	10	28	5.5	9
32	19.5	22	40	17	62	19.6	12	11	12	29	24	51.5	23	22.5	42	6	24	M5×0.8	10	M10×1.25	12	32	6.6	13.5

* Without magnet with stroke=5mm, GA=14.5mm.

Code Tube I.D.	QA	R	SA	T	U	W	Y	Without magnet		Magnet	
								S	Z	S	Z
6	—	7	6	6×4.8depth	10	13	10.5	38	75	38	75
10	—	9	6	6×5depth	10.5	16	11.5	36	79	36	79
16	2	12	7.5	7.6×6.5depth	12.5	16	15.5	30	79.5	40	89.5
20	4.5	16	9	9.3×8depth	13.5	19	19.5	36	93	46	103
25	4.5	20	9	9.3×9depth	19	23	24.5	40	105	50	115
32	4.5	24	10	11×11.5depth	21	27	30.5	42	121	52	131