



Technical data



Caution for safety
(Read before installing)



Features

- Compact and space saving.

Specification

Model	MCFA					
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 perssure	0.7 MPa					
Min. operating perssure (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	RCE  , RCE1  , RDEP 					

Order example

MCFA — 11 — 6 — 10M — K — □

MODEL

1: Single rod
2: Double rod

STROKE

Blank: Standard
K: Non-rotating rod

TUBE I.D.

M: Magnet

PORT THREAD
Blank: M5×0.8
(for ø6~ø25)
Blank: Rc thread
G: G thread
NPT: NPT thread
(for ø32)

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

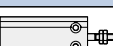
Tightening torque

When mounting MCFA series, refer to the below table.

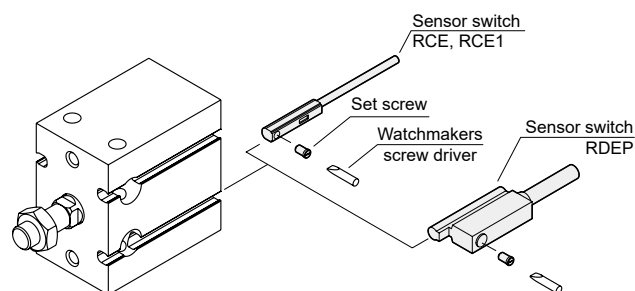
Tube I.D.	Hexagon socket head cap screw dia.(mm)	Proper tightening torque N.m[kgf.cm]
ø6, 10	M3	1.1 [11.2] ± 10%
ø16	M4	2.5 [25.5] ± 10%
ø20, 25	M5	5.0 [51.0] ± 10%
ø32	M6	8.0 [81.6] ± 10%

Cylinder weight

Unit: g

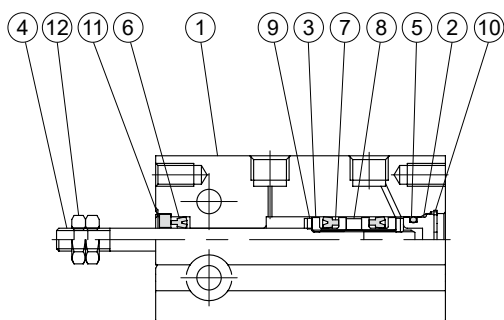
Model	Basic weight MCFA-11	Basic weight (magnet) MCFA-11	Stroke 5 mm MCFA-11
Tube I.D.			
ø6	20	18	3
ø10	32	31	3
ø16	42	58	6
ø20	90	118	10
ø25	161	202	17
ø32	268	330	26

Installation of sensor switch

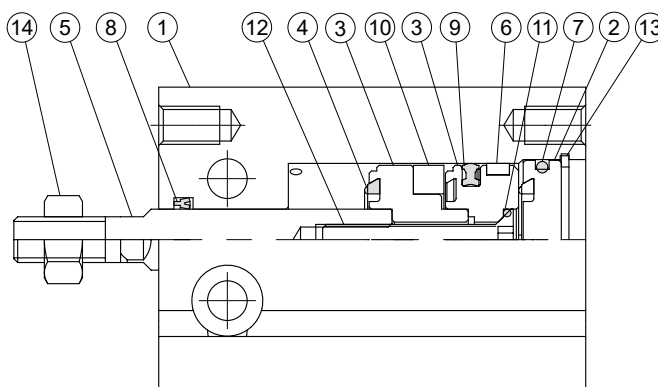


Double acting

ø6



ø10~ø32



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	

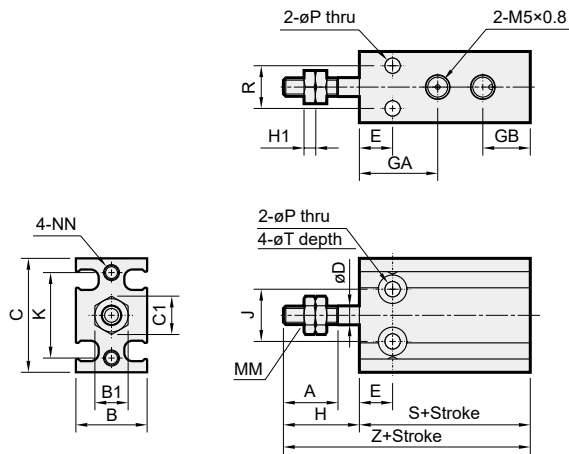
No.	Tube I.D. Part name	10	16	20	25	32	Note
1	Body	Aluminum alloy					
2	Head cover	Aluminum alloy					
3	Piston	Aluminum alloy					
4	Cushion packing	NBR					
5	Rod *1	Stainless steel				*2	
6	Wear ring	Resin					
7	Cover ring	NBR					
8	Rod packing	NBR					
9	Piston packing	NBR					
10	Magnet ring	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.

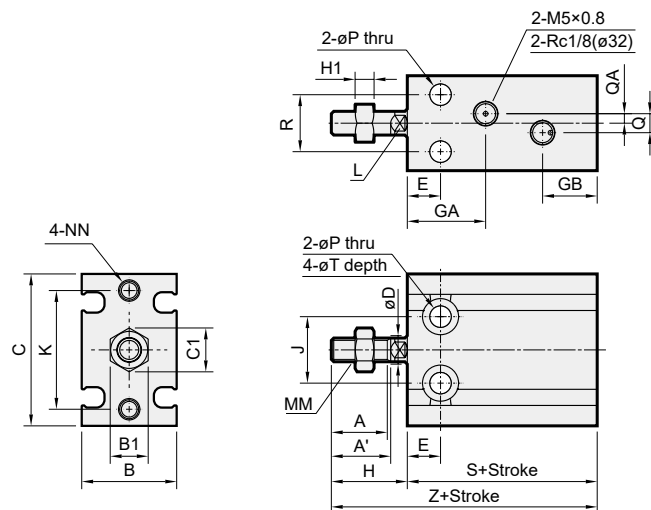
*2. Medium carbon steel

11

$\phi 6, \phi 10$



$\phi 16 \sim \phi 32$

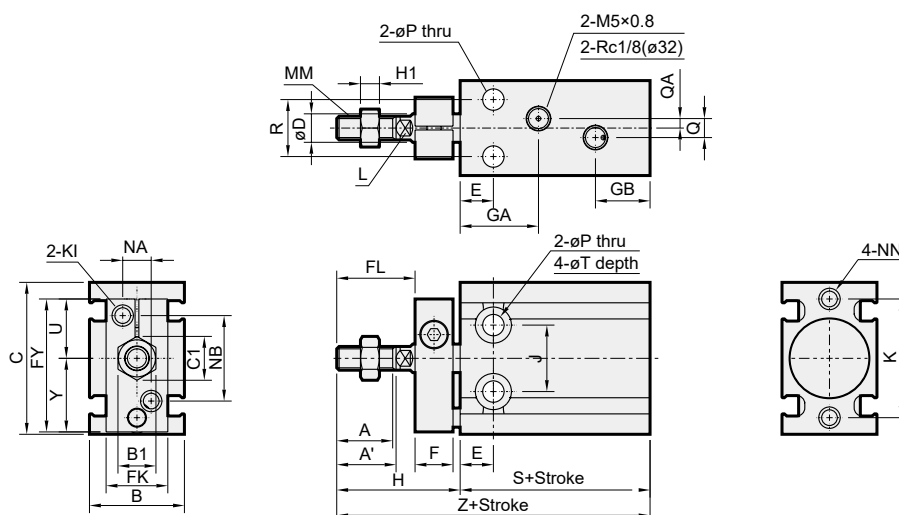


Code Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R
6	7	—	13	5.5	22	6.4	3	7	15	10	13	1.8	10	17	—	M3×0.5	M3×0.5×5depth	3.2	—	—	7
10	10	—	15	7	24	8.1	4	7	16.5	10	16	2.4	11	18	—	M4×0.7	M3×0.5×5depth	3.2	—	—	9
16	11	12.5	20	8	32	9.2	6	7	16.5*	11.5	16	4	14	25	5	M5×0.8	M4×0.7×6depth	4.5	4	2	12
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

ø6, ø10

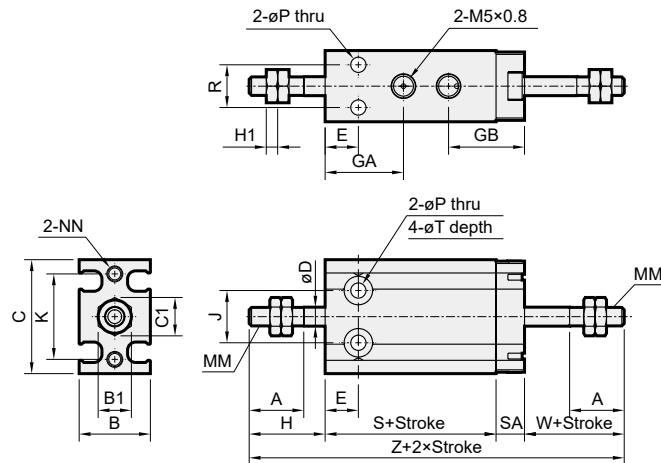


* Without magnet with stroke=5mm, GA=14.5mm.

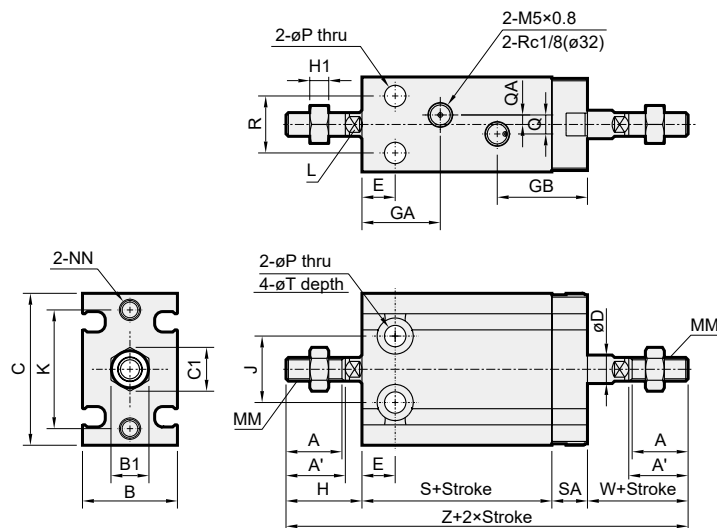
Code Tube I.D.	NN	P	Q	QA	R	T	U	Y	Without magnet		Magnet	
									S	Z	S	Z
6	M3×0.5×5depth	3.2	—	—	7	6×4.8depth	10	10.5	33	51	33	51
10	M3×0.5×5depth	3.2	—	—	9	6×5depth	10.5	11.5	36	57	36	57
16	M4×0.7×6depth	4.5	4	2	12	7.6×6.5depth	12.5	15.5	30	56	40	66
20	M5×0.8×8depth	5.5	9	4.5	16	9.3×8depth	13.5	19.5	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

21

$\phi 6, \phi 10$



$\phi 16 \sim \phi 32$



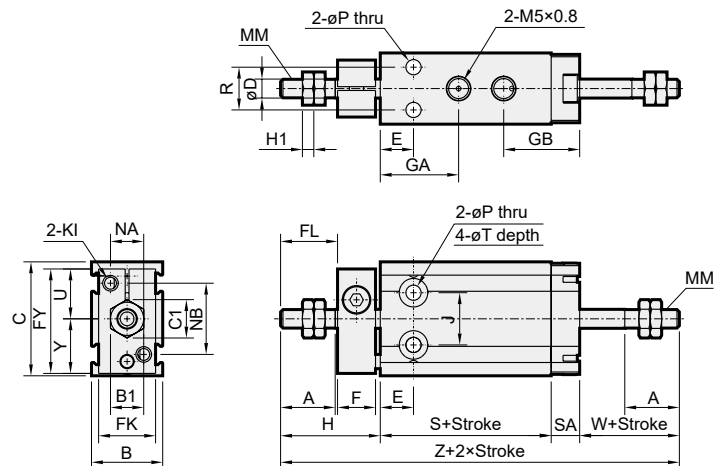
Code Tube I.D.	A	A'	B	B1	C	C1	D	E	GA	GB	H	H1	J	K	L	MM	NN	P	Q	QA	R	SA
6	7	—	13	5.5	22	6.4	3	7	15	16	13	1.8	10	17	—	M3×0.5	M3×0.5×5depth	3.2	—	—	7	6
10	10	—	15	7	24	8.1	4	7	16.5	16	16	2.4	11	18	—	M4×0.7	M3×0.5×5depth	3.2	—	—	9	6
16	11	12.5	20	8	32	9.2	6	7	16.5*	19	16	4	14	25	5	M5×0.8	M4×0.7×6depth	4.5	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.

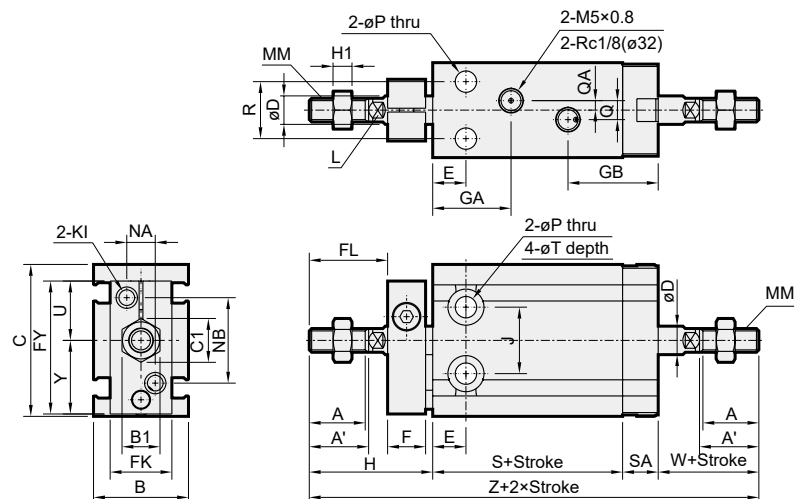
Code Tube I.D.	T	W	Without magnet		Magnet	
			S	Z	S	Z
6	6×4.8depth	13	38	70	38	70
10	6×5depth	16	36	74	36	74
16	7.6×6.5depth	16	30	69.5	40	79.5
20	9.3×8depth	19	36	83	46	93
25	9.3×9depth	23	40	95	50	105
32	11×11.5depth	27	42	106	52	116

21

$\phi 6, \phi 10$



$\phi 16 \sim \phi 32$



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