

Features

- * High precise linear guiding rail provides low friction and quick response.
- * Integration of guiding rail and cylinder body for space saving.
- * Position port on slide table ensures high precise placement for repeated mounting.
- * Left or right slide type for selection.
- * Stroke adjustable screw and shock absorber are optional accessories.



How to order

MCFR		10	B	50	SR	1	
Type		Bore size		Stroke		Sensor type	
MCFR	Right slide	10	φ 10	Bore	Standard stroke	Blank	W/O sensor
MCFL	Left slide	16	φ 16	φ 10	30.50	SR	Round type
				φ 16	30.50.75.100	SU	Square type
						AL-07R	
						AL-16R	
						Number of sensor	
						1 pc	
						2 pcs	

How to order accessories

ZMCF	B	A	1	10
MCF series	Mounting bracket c/w block 1pc L type bracket 2pcs	Accessory	Number of accessory	Bore size
		A	1 pc	10 φ 10
		D	2 pcs	16 φ 16

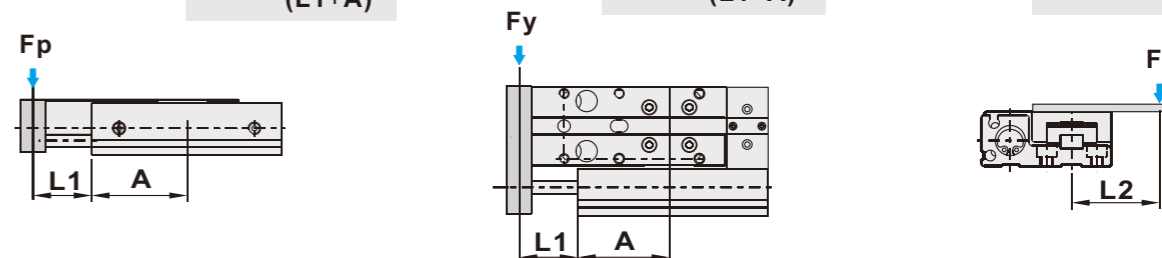
* Please refer to P 6-13 "SHOCK ABSORBER" for specification of shock absorber φ 10 : DA0806-NC, φ 16 : DA1008-NC

Specifications

Bore size	φ 10	φ 16
Port size	M5xP0.8	
Fluid	Compressed air (lubrication free)	
Acting	Double acting	
Operating pressure range	1.5 ~ 9 kgf/cm ²	
Proof pressure	10 kgf/cm ²	
Stroke adjustable range	Extension end:5mm, Retraction end:5mm	
Magnet	Built-in	
Cushion	Rubber	
Ambient temperature	0°C ~ 60°C (Unfrozen)	
Piston speed mm/Sec	100~500	

Formula for allowable static load

Pitch moment $F_p = \frac{M_p \times 1000}{(L_1 + A)}$
 Yaw moment $F_y = \frac{M_y \times 1000}{(L_1 + A)}$
 Roll moment $F_r = \frac{M_r \times 1000}{L_2}$

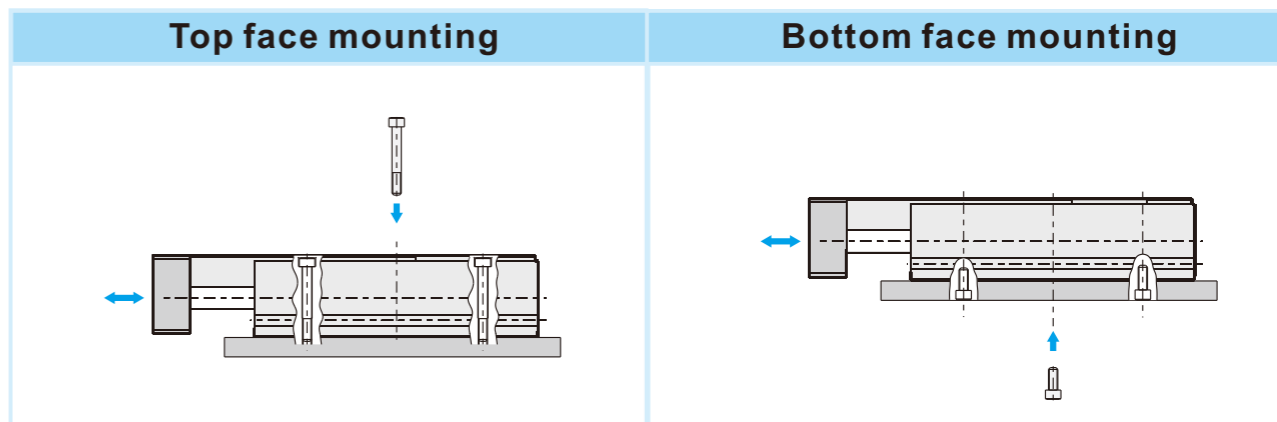


Bore size(mm)	φ10	φ16
Mp Pitch moment torque	16.67(1.63)	16.67(1.63)
My Yaw moment torque	16.67(1.63)	16.67(1.63)
Mr Roll moment torque	14.7(1.44)	14.7(1.44)

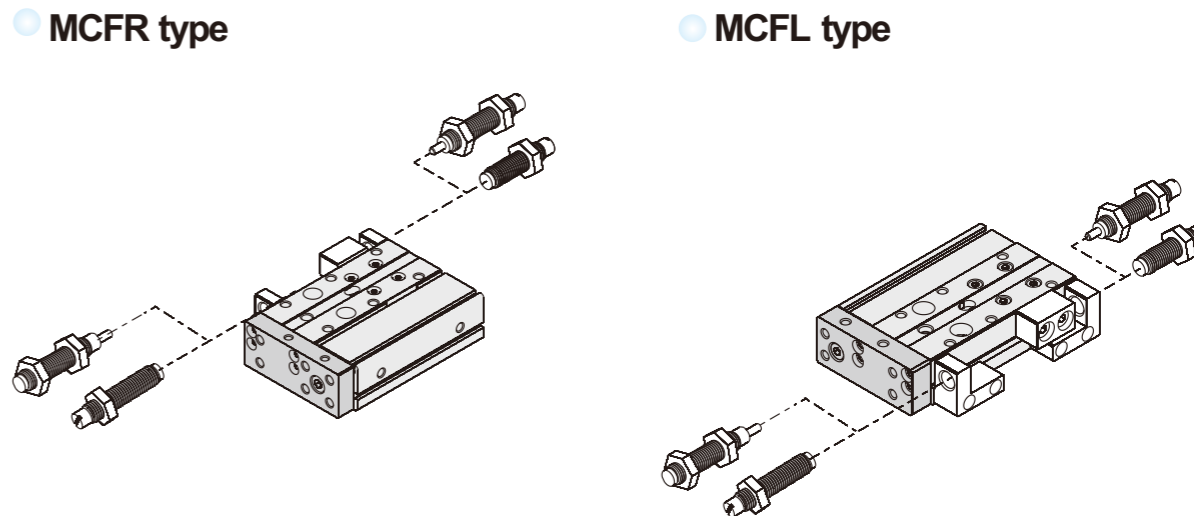
L1: Distance between body and load point
 A : Distance between body and the center of rail
 L2: Distance between loading point (Fr) and the center of rail

Note:
 Do not exceed load limit, or the accuracy of guiding rail will be affected. Avoid impact with great force on the cylinder. The inertia load must be within 1/10 of allowable static load.

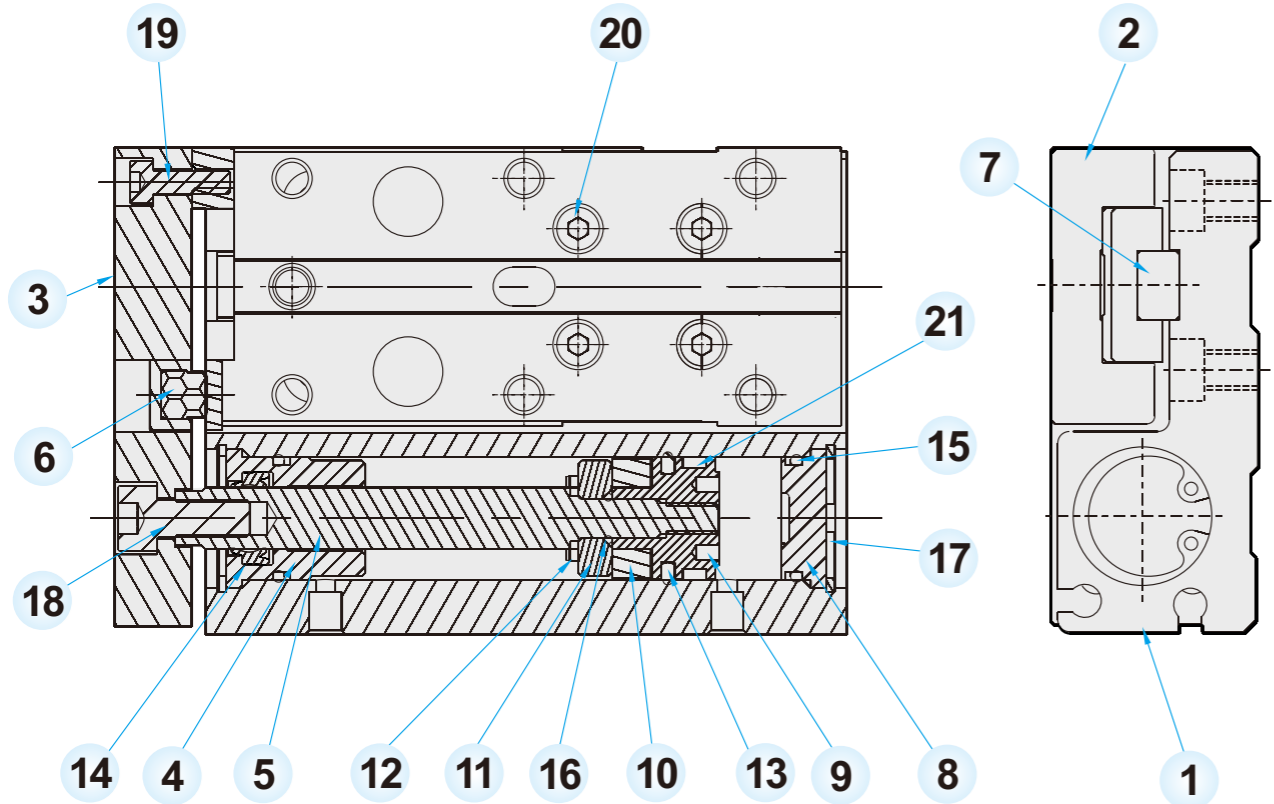
Mounting example



Installation example of cushion device

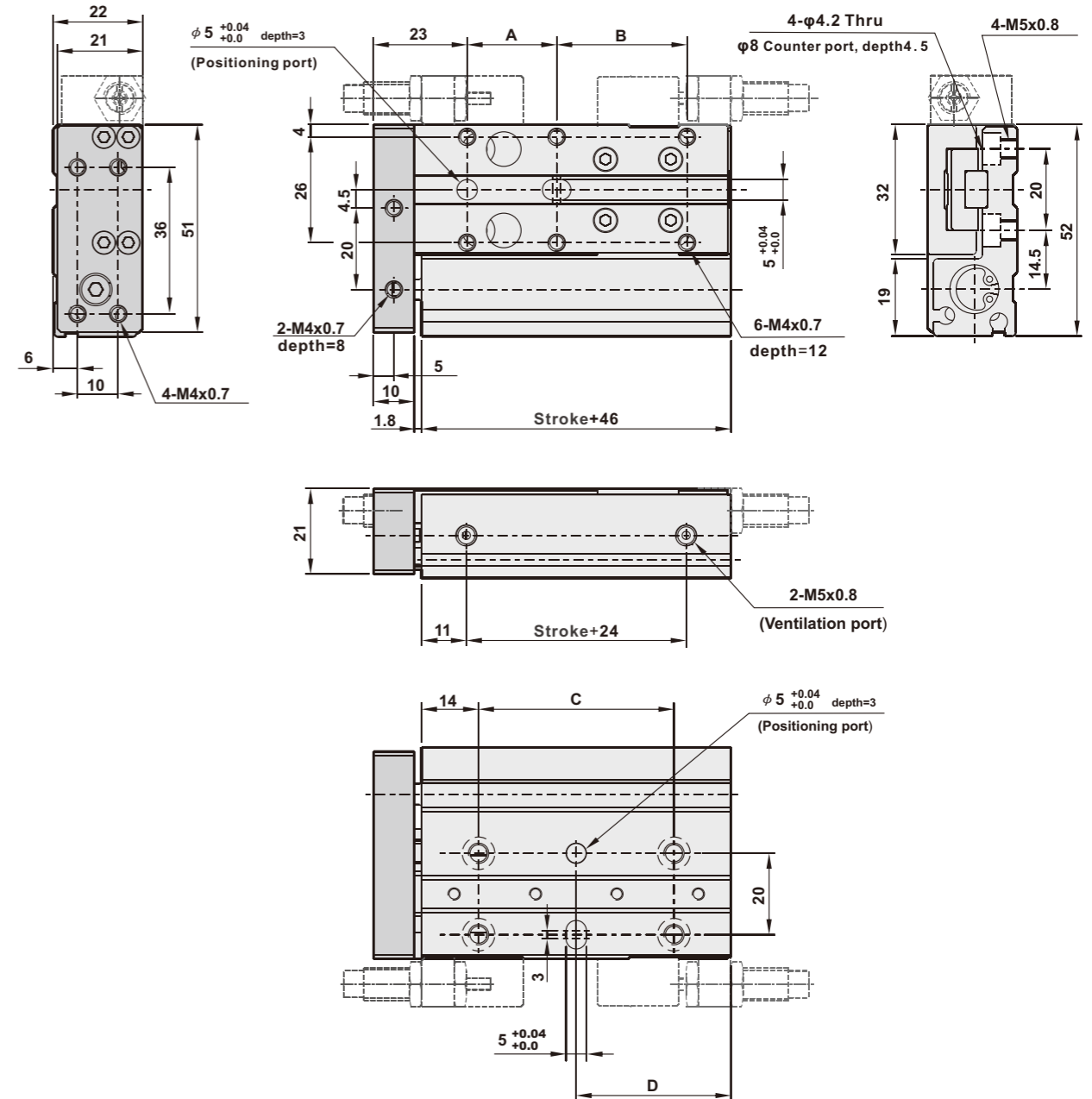


Material of parts



Dimensions

MCFR(L)10



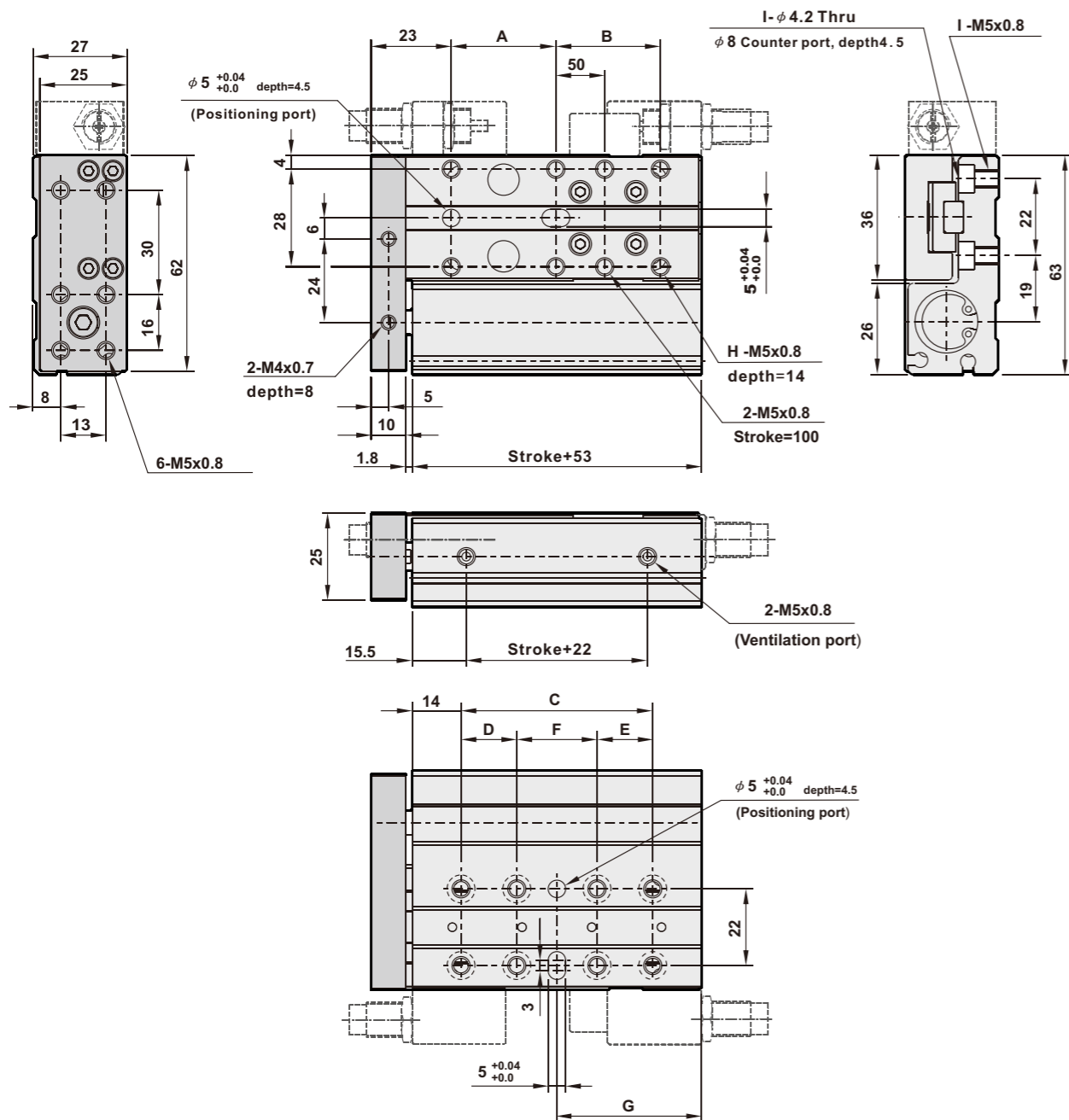
No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Body	Aluminum alloy	1	12	Cushion pad	NBR	1
2	Slide table	Aluminum alloy	1	13	U-Piston seal	NBR	1
3	Front plate	Aluminum alloy	1	14	Rod seal	NBR	1
4	Front cover	Aluminum alloy	1	15	O-ring 1	NBR	2
5	Piston rod	S45C+Cr	1	16	O-ring 2	NBR	1
6	Front plate cushion pad	NBR	1	17	C type clip	Fe+Ni	2
7	Mini linear rail	Bearing steel	1	18	Hex. Fixing bolt 1	Fe+Ni	1
8	Rear cover	Aluminum alloy	1	19	Hex. Fixing bolt 2	Fe+Ni	4
9	Piston A	Aluminum alloy	1	20	Hex. Fixing bolt 3	Fe+Ni	8
10	Magnet	Rubber	1	21	Wear ring	Plastic	1
11	Piston B	Aluminum alloy	1				

unit: mm

Stroke	A	B	C	D
30	22	32	48	38
50	32	42	68	48

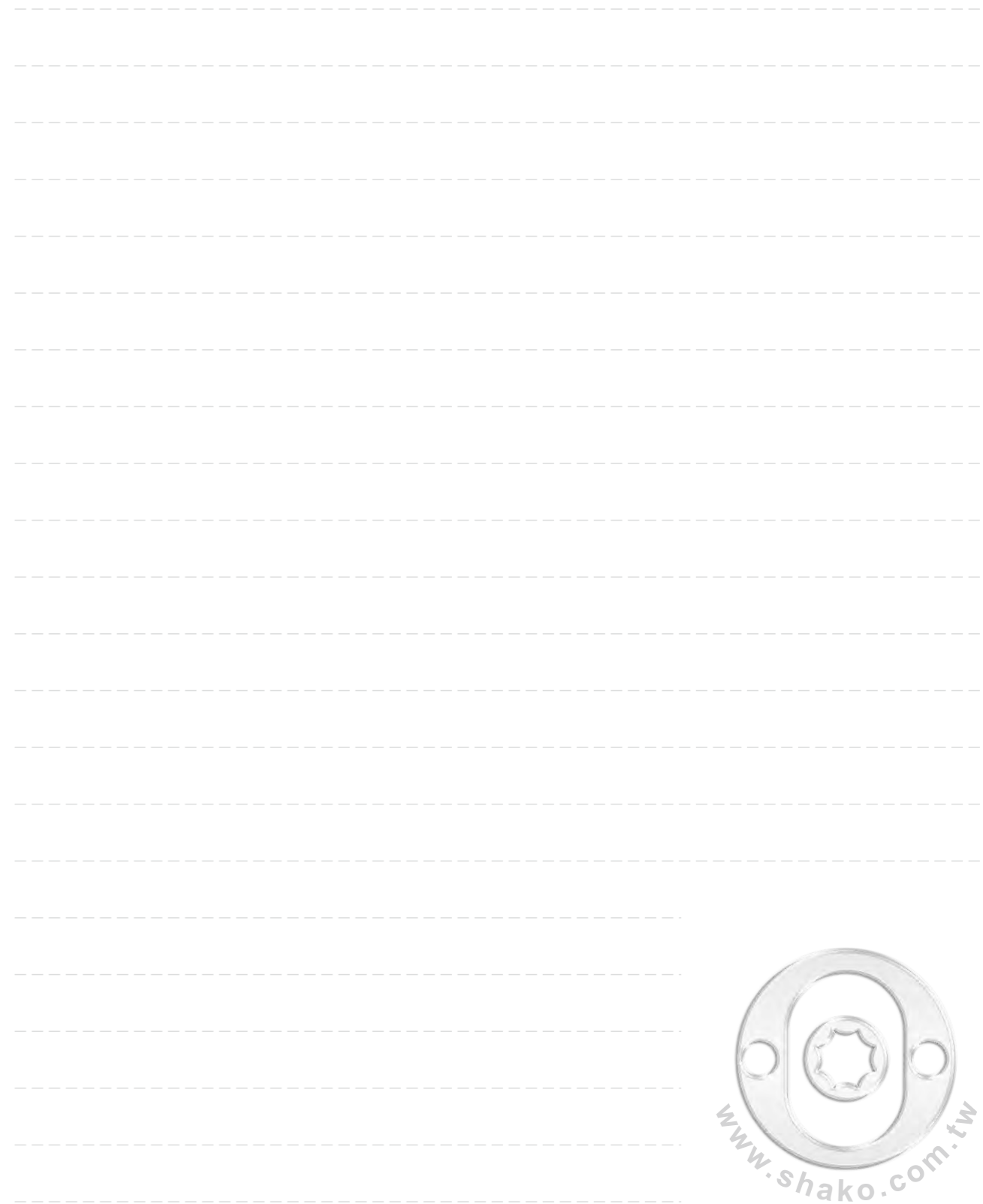
Dimensions

MCFR(L)16



unit: mm

Stroke	A	B	C	D	E	F	G	H	I
30	30	30	55	---	---	---	41.5	6	4
50	50	30	75	---	---	---	51.5	6	4
75	50	55	100	32	32	36	64	6	8
100	50	80	125	40	40	45	76.5	8	8



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