



Features

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



How to order

MCFR	10	B50	- A	-	SR	1
Type	Bore size	Stroke	Cushion	Sensor type		Number of sensor
MCFR : Right slide	10 : $\phi 10$	$\phi 10$: 30,50	Blank : W/O cushion	Blank : W/O sensor		1 pc
MCFL : Left slide	16 : $\phi 16$	$\phi 16$: 30,50,75,100	A : Stroke adjuster on both ends	SR : Round type		2 pcs
			AS : Stroke adjuster on front end	SU : Square type		
			AF : Stroke adjuster on rear end			
			B : Shock absorber on both ends			
			BS : Shock absorber on front end			
			BF : Shock absorber on rear end			

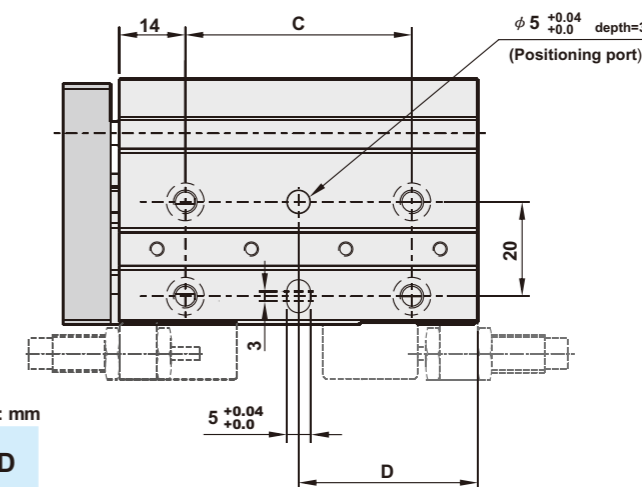
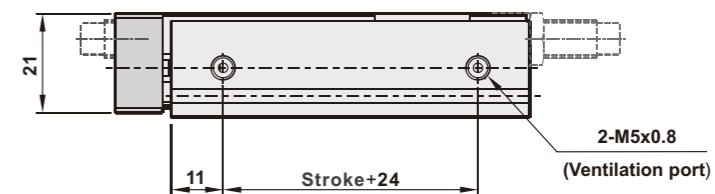
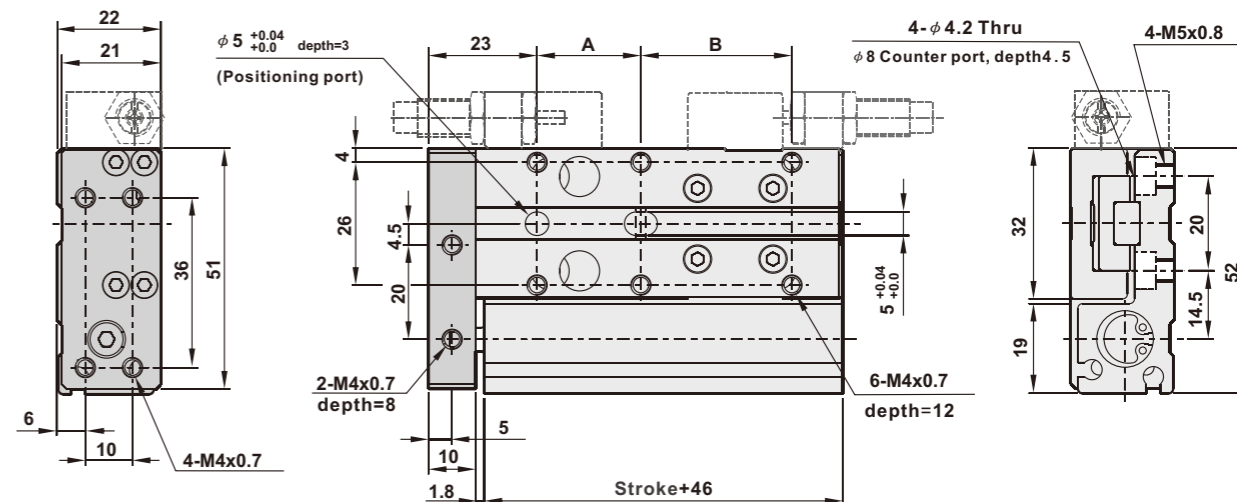
*Please refer to P3-181, P3-183

* Please refer to P 5-19 "SHOCK ABSORBER" for specification of shock absorber $\phi 10$: DA0806-NC, $\phi 16$: DA1008-NC

Bore size	$\phi 10$	$\phi 16$
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	0 ~ 10mm	
Magnet	Built-in	
Cushion	Rubber	
Ambient temperature	0°C ~ 60°C (Unfrozen)	
Piston speed mm/Sec	50~500	

Dimensions

MCFR(L)10

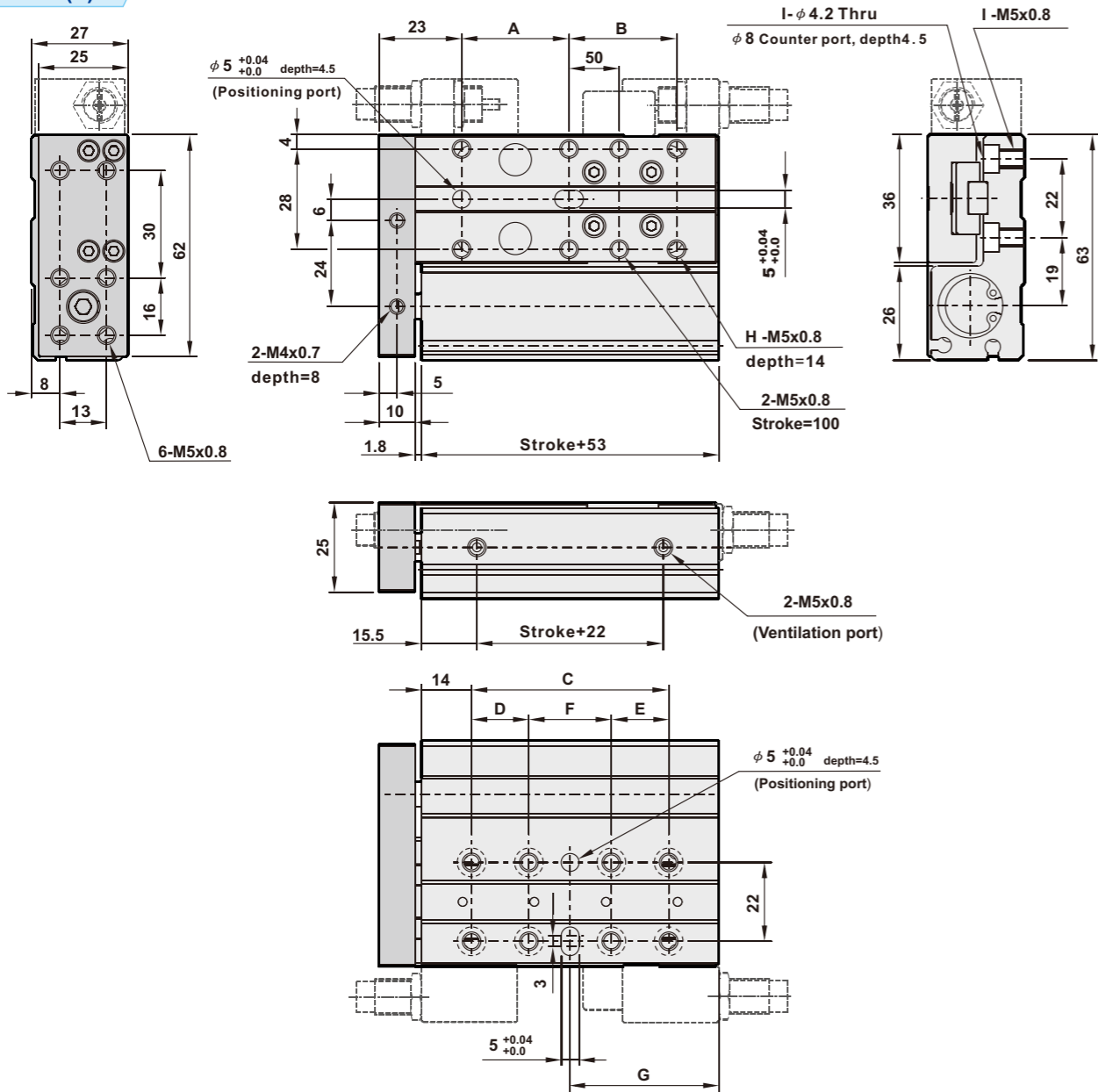


unit: mm

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

■ Dimensions

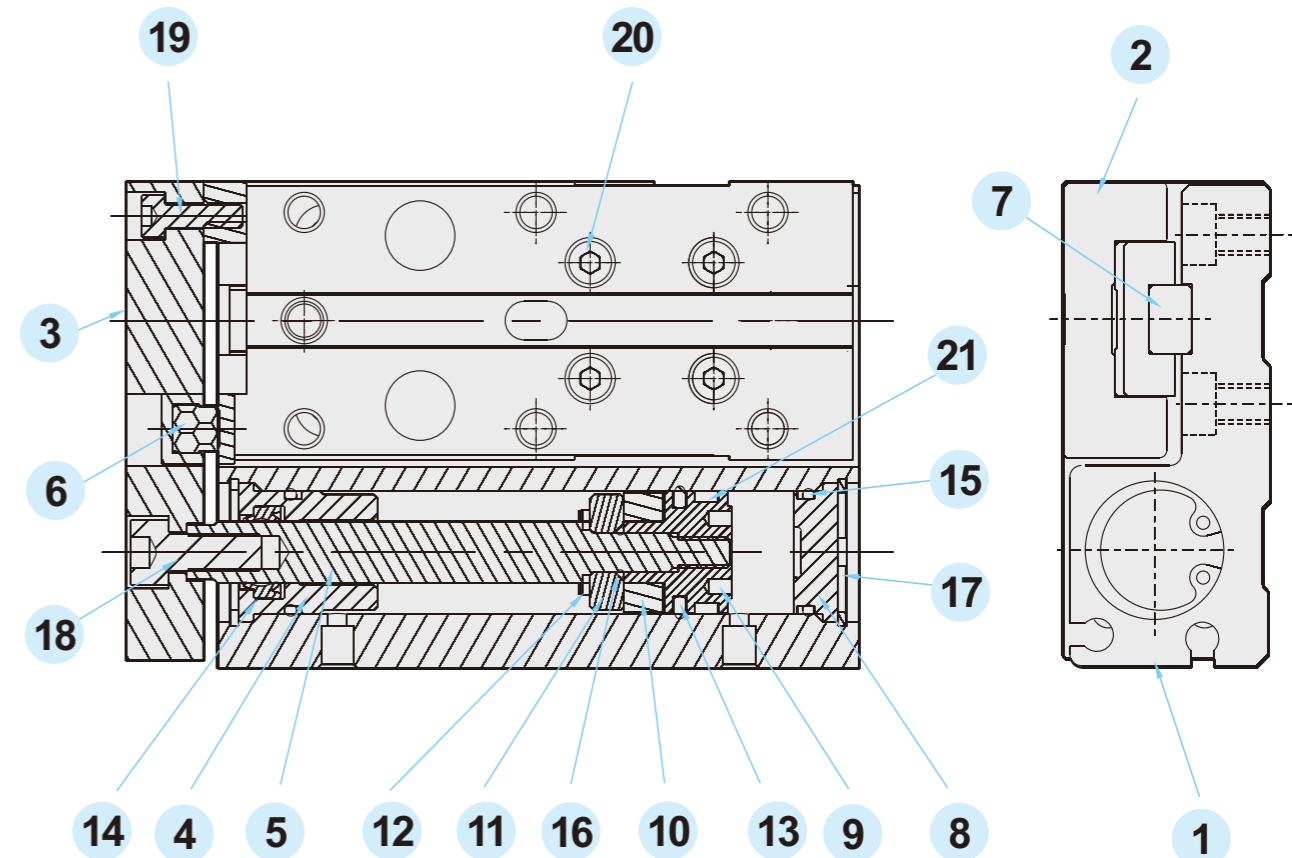
MCFR(L)16



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	45	40	40	76.5	8	8

■ Material of parts



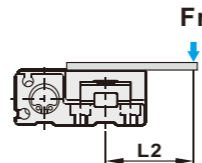
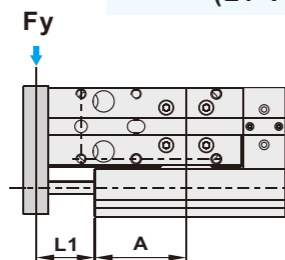
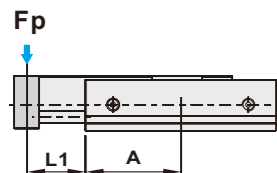
No.	Description	Material	Qty.	No.	Description	Material	Qty.
1	Body	Aluminum alloy	1	12	Cushion pad	NBR	1
2	Slide table	Aluminum alloy	1	13	U-Piston seal	NBR	1
3	Front plate	Aluminum alloy	1	14	Rod seal	NBR	1
4	Front cover	Aluminum alloy	1	15	O-ring 1	NBR	2
5	Piston rod	S45C+Cr	1	16	O-ring 2	NBR	1
6	Front 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				

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 $F_r = \frac{M_r \times 1000}{L_2}$



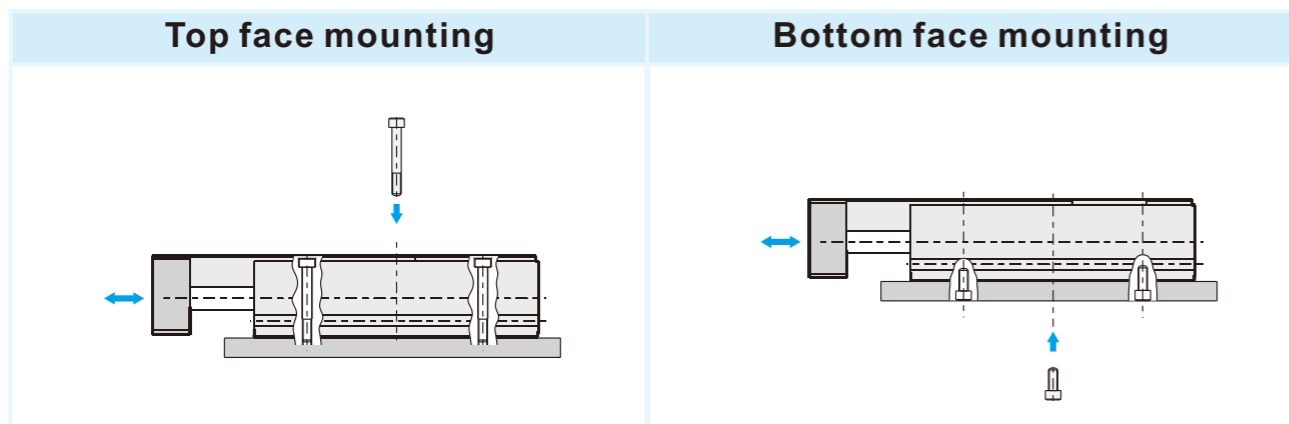
- L1: Distance between body and load point
- A: Distance between body and the center of rail
- L2: Distance between loading point (Fr) and the center of rail

N·m(kgf·m)

Bore size(mm)	φ 10	φ 16
Mp Pitch moment torque	16.67(1.63)	16.67(1.63)
My Yam moment torque	16.67(1.63)	16.67(1.63)
Mr Roll moment torque	14.7(1.44)	14.7(1.44)

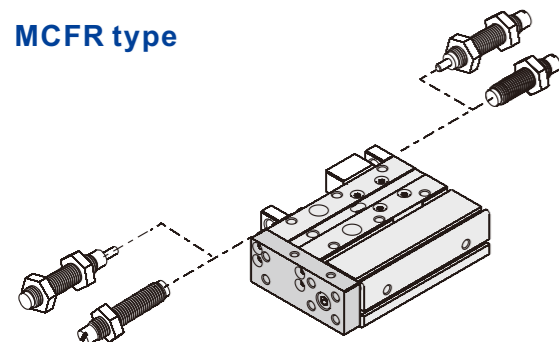
Note:
Do not exceed load limit, or the accuracy of guiding rail will be affected. Avoid impact with great force on the cylinder. The inertia load must be within 1/10 of allowable static load.

Mounting example

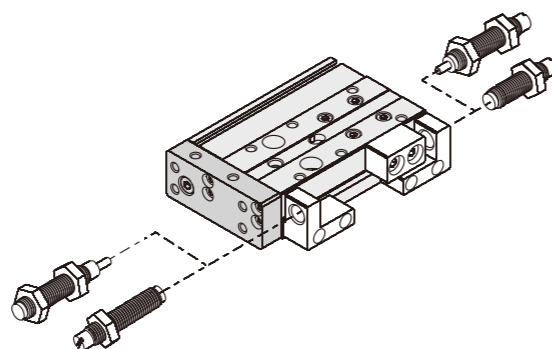


Installation example of cushion device

MCFR type



MCFL type



Memo...

