## **MCKMB** series

#### MINIATURE CYLINDER WITH NON-ROTATING ROD





#### Table for standard stroke

Tube I.D.	Stroke (mm)			
ø20,25,32,40	25,50,75,100,125,150,200,250,300			
* Please contact us if the stroke is out of specification.				

#### Sensor switch / Sensor switch band

Sensor switch	RCM (Please refer to page 8-16)					
Sensor switch band	BM20	BM25	BM32	BM40		

TUBE

I.D.

### **Order example**

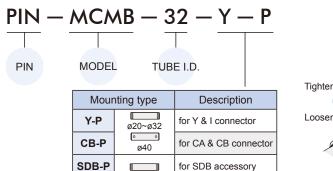
MODEL	1: Single rod

STYLE

Code Symbol		Symbol	Description		
1	1		Double acting / Male thread		

\* Order example for special specification, refer to page 0-7.

Pin \* Use the same pin with MCMB.



\*P: With split pin / Snap ring

M *i*ndman

Blank: Cushion pad PORT THREAD STROKE (Unadjustable) Blank: Rc thread A: Cushion air G: G thread NPT: NPT thread (Adjustable) 1 END COVER TYPE

Code	Symbol	Description
Blank		Standard type
Ν		End-plain
Е		With pivot type



3-27

#### **Features**

#### Non lubrication

- Special housing and bushing enables self lubrication of piston rod.
- High quality long service life
  - Cylinder with hexagonal rod design enables non-rotation of rod.
  - Hard anodised stainless steel cylinder tubes offer a high resistance to corrosion and low internal friction.
  - · Cylinder mountings, available with a comprehensive range of accessories for rigid or flexible mounting.
  - · Magnetic as standard

#### **Specification**

Mod	el		MCł	KMB		
Tube I.D. (mm)		20	25	32	40	
Port size			Rc1/8		Rc1/4	
Medium			А	ir		
Operating perss	ure range		0.05~0	.7 MPa		
Proof pressure			1 MPa			
Lubricator		Not required				
Ambient temper	ature	-5~+60°C (No freezing)				
Available speed	range		50~750	mm/sec		
Max. allowable	Cushion pad	0.27	0.4	0.65	1.2	
kinetic energy (J)	Cushion air	0.54	0.78	1.27	2.35	
Rod non-rotating	g accuracy	±0	.7°	±0	.5°	
Allowable rotation	onal torque	2.0 kgf-cm	2.5 kgf-cm	2.5 kgf-cm	4.5 kgf-cm	

\* The cylinder is allowed little leakage. Before the cylinder is sale, it has passed the standard of leakage test.

\* For precautions, please refer to page 3-2.

\* Use the same accessories with MCMB. Mounting accessories



	N	ODEL TUBE	I.D.
IOUNTING T	YPE		
■∄□□₽	LB	₽Ĩ□Ţſ	SDB*
	СА		ТА
	СВ		тв
	FA		Y

Т

\* For end cover "E" type.

●□□₽

#### ✓ Caution

For (A) Cushion air (Adjustable)

1. To adjust a cushion needle, please slowly turn the needle valve from the fully closed status to the required status which needs to be within 2.5 turns.

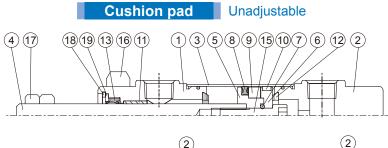
FB

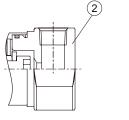
2. If the needle valve loosen excessively, the buffer doesn't take effect and the lifetime of cylinder would be shortened.

Standard cylinder



## MCKMB Inside structure & Parts list MINIATURE CYLINDER WITH NON-ROTATING ROD







N type

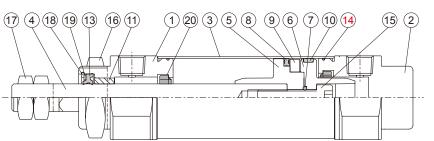
E type

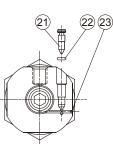
#### **Order example Component parts**

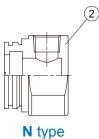
Tube I.D.	Cushion pad
ø20	CP-MCKMB-20
ø25	CP-MCKMB-25
ø32	CP-MCKMB-32
ø40	CP-MCKMB-40

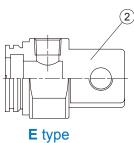
Tube I.D.	Cushion air
ø20	CP-MCKMB-20A
ø25	CP-MCKMB-25A
ø32	CP-MCKMB-32A
ø40	CP-MCKMB-40A

Cushion air Adjustable









# **Material**

Material * CP: Component parts (inclusion)							
No.	Cushion		shion Part name	Material	Q'y	CP *	
INU.	Pad	Air	Fait name	Iviaterial	Qy	Pad	Air
1			Rod cover	Aluminum alloy	1		
2			Head cover	Aluminum alloy	1		
3			Tube	Stainless steel	1		
4			Piston rod	Stainless steel	1		
5			Piston-R	Aluminum alloy	1		
6			Piston-H	Aluminum alloy	1		
7			Piston gasket	NBR	1		
8			Piston packing	NBR	1		
9			Magnet ring	Magnet material	1		
10			Wear ring	Resin	1		
11			Rod bush	Bearing alloy	1		
12			Cushion gasket	NBR	2		

No. Cushi	Cushion	Part name	Material	Q'y	CP *		
110.	Pad	Air	Fait name	Ivialenai	Qy	Pad	Air
13			Rod packing	NBR	1		
14			Cover ring *1	NBR	2		
15			Piston bolt	SCM	1		
16			Tie nut	Carbon steel	1		
17			Rod front nut	Carbon steel	2		
18			Snap ring	Spring steel	1		
19			Washer	Carbon steel	1		
20			Cushion packing	NBR	2		
21			Needle valve packing	NBR	2		
22			Needle valve	Carbon steel	2		
23			Steel ball	Stainless steel	2		

\*1. ø20, ø25 without this part.

