SCP*2

CAT

FC* STK

ULK*

JSK/M2

JSG

JSC3

USSD

USC

JSB3

LMB

STG

STS/L

LCS

LCG

LCM LCT LCY

STR2 UCA2 HCM

HCA SRL2 SRG SRM SRT MRI 2 MRG2 SM-25 CAC3 UCAC RCC2 MFC SHC GLC Ending

Operational principle



Roller A Roller B Rail Body A-A' sectional view

When the lock release port is pressurized with air, the piston and the tapered movable swash plate connected to the piston move in the direction of the arrow, releasing the contact of roller B and the movable swash plate.

The pressurizing force of the lock shoes against the rail is eased, and the lock is released.

When locked





B-B' sectional view

When air is exhausted from the lock release port, the piston and the tapered movable swash plate connected to the piston are moved in the direction of the arrow by the lock spring. The amplifying effect of the taper is passed through roller B so that the lock shoes press the rail with force.

Frictional force is generated on the rail by the three-directional pressurizing force as shown with the arrows in the B-B' sectional view, and the rail is held with force.

Applications

Table fixing and position locking



Table fixing and holding at the desired position





Pneumatic components

Safety precautions

Always read this section before starting use.

Refer to Intro 71 for general precautions of the cylinder, and to Intro 78 for general precautions of the cylinder switch.

Linear guide lock LMB Series

Design & Selection

Installation & Adjustment

- Consult CKD if impact load is applied. (Impact could cause the unit to slip.)
- Do not apply the lateral load moment to a lock unit.
- Avoid use in areas with high levels of dust, or where water or oil could come in contact. (The holding force could drop.)
- Do not place a workpiece directly onto the lock unit.

■ How to unlock manually



- Confirm that external force is not applied when there is no air at the lock release port, and then disconnect the plug.
- Insert the M3 x 18 (LMB-SR-15) and M4 x 22 (LMB-SR-20, 25) hexagon socket head cap screw into the hole from which the plug was removed until the threads are caught. When inserting the hexagon socket head cap screw, insert a plain washer, and make sure that the bolt seat does not contact the dust cover.
- Once the threads are caught, if the screw is screwed in until it no longer moves, the lock will be released and freed.
- Note 1) The product is in the manual release state when shipped. Take care not to lose the hexagon socket head cap screw or plain washer.
- Note 2) Do not use a hexagon socket head cap screw other than the above size. (The screw could be damaged or lock could not be released.)
- Note 3) If unlocked manually while the seat of the hexagon socket head cap screw and dust cover are contacting, the dust cover could be shaved and dust generated. It may not be possible to screw in the plug, so always insert a plain washer, and manually release when the screw and dust cover are not contacting.

How to install the product

• Example of Y rod eye/clevis installation



Example of installation from the top





Insert a shaft (pin) into the bearing for installation and connect with the slide table. Provide a clearance as shown above in this case. (Due to the structure, the LMB body lowers during locking, so if the bearings are fixed without a clearance, the lock will not be applied.

During Use & Maintenance

WARNING

Do not disassemble the lock unit, or could result in a dangerous situation.

CMK2 CMA2 SCM SCG SCA2 SCS CKV2 CA/OV2 SSD CAT MDC2 MVC SMD2 MSD³ FC* STK ULK* JSK/M2 JSG JSC3 USSD USC JSB3 LMB STG STS/L LCS LCG LCM LCT LCY STR2 UCA2 HCM HCA SRL2 SRG SRM SRT MRI 2 MRG2 SM-25 CAC3 UCAC RCC2 MFC SHC GLC Ending Linear guide lock With brake

SCP*2

1433



Linear guide lock





Specifications

Descriptions	LMB-SR-15	LMB-SR-20	LMB-SR-25									
Applicable voile	SR-15/SSR-15	SR-20/SSR-20	SR-25/SSR-25									
	ТНК	ТНК	ТНК									
Working fluid	Compressed air											
Max. working pressure MPa	1.0											
Min. working pressure MPa		0.35										
Withstanding pressure MPa		1.5										
Ambient temperature °C		-5 to 60°C (no freezing)										
Lubrication		Not available										
Port size		Rc1/8										
Holding force N (Note 1)	1175	1960	2450									
Weight g	600	1100	1900									

Note: 1: Holding force (maximum static load) is the performance to hold a static load without vibration and shock with unit locked in a loadless state.

How to order

LMB-SR - 15

	Symbol	Descriptions				
	- A A	Applicable rail size				
Applicable rail size	15	SR-15/SSR-15				
	20	SR-20/SSR-20				
	25	SR-25/SSR-25				

LMB Series

Dimensions



Model no.	А	В	С	D	E	F	G	Н	I	J	К	L	М	Ν	0	Р	Q
LMB-SR-15	100	24	76	10	7	10 +0.15	7	8	8	16.5	47	47.5	6.5	40.5	17.5	35	13
LMB-SR-20	110	27	83	12	7	12 ^{+0.15}	9.5	10	13	22.5	60.5	61	7.5	53	22.5	45	16.5
LMB-SR-25	125	32	93	13.5	7	15 ^{+0.15}	13	10	17	27.5	73	73.5	9	64	27.5	55	19.5