

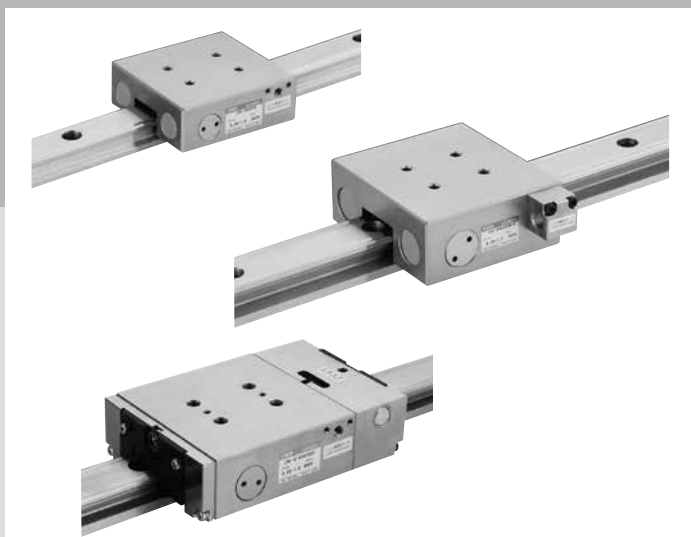
LML

Linear guide lock

With brake/position locking

Overview

When used with a system incorporating a linear guide, this lock unit can lock the position of a workpiece after moving it to the specified position, hold it during stop for safety and prevent it from falling off.



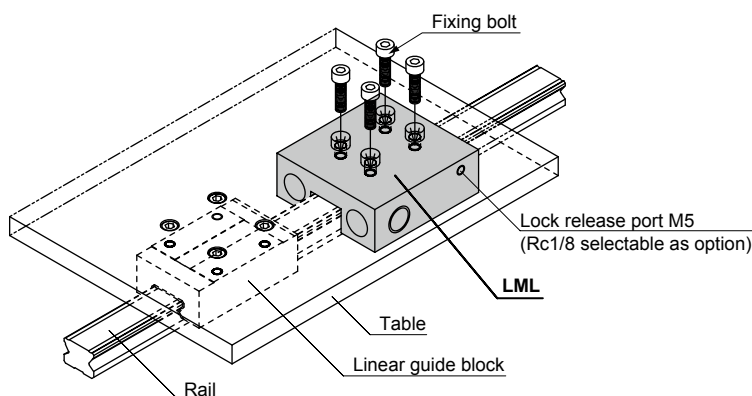
CONTENTS

Product introduction and application examples	946
● LML	947
⚠ Safety precautions	949

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

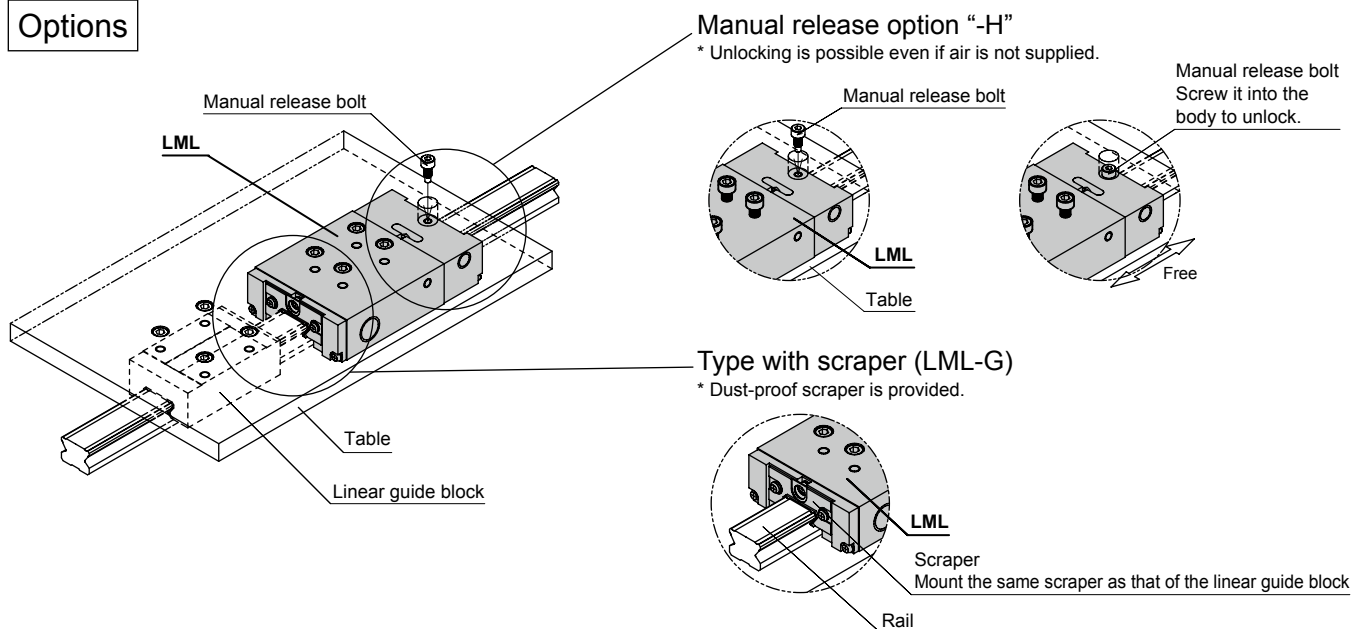
Product introduction

Since it is the same height as the linear guide block, the lock can make good use of the empty space.



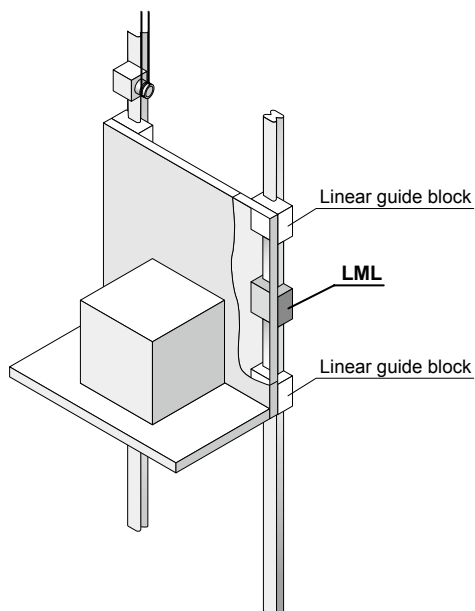
- ◆ Compact but powerful holding force.
- ◆ Unlocked by air supply
(Manual release option is available separately.)
- ◆ Useful for holding the cylinder during stop and position locking (holding the cylinder stationary)
- ◆ RoHS compliant

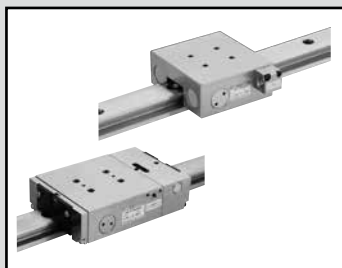
Options



Applications

- Table fixing, position locking and holding





Linear guide lock

LML Series

RoHS

Specifications

Item		LML-15	LML-20	LML-25	LML-30	LML-35
Rail width	mm	15	20	25	30	35 *1
Manufacturers of compatible guides		THK/IKO				
Working fluid		Compressed air				
Max. working pressure	MPa	1.0 (≈150 psi, 10 bar)				
Min. working pressure	MPa	0.35 (≈51 psi, 3.5 bar)				
Proof pressure	MPa	1.5 (≈220 psi, 15 bar)				
Ambient temperature	°C	-5 (23°F) to 60 (140°F) (no freezing)				
Lubrication		Not available				
Port size		M5 (Rc1/8: Option selection)				
Holding force	N (*2)	300	450	600	850	1150
Default backlash		±0.05				
Weight g	Body	600	900	1200	1900	2800
	Scraper additional weight	50	70	100	180	220
	Manual release additional weight	160	230	340	550	820

*1 For compatible rail, refer to "How to order".

*2 The holding force is the force that can retain the static load without vibration or impact when the lock is ON in absence of load.

The holding force above is the value when Alvania grease No. 2 (Showa Shell Sekiyu K.K.) is applied. Note that the holding force may vary in some environments.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

How to order

Compatible guide: THK

● Without scraper

LML - **SR** **20** **W** - **B** **H**

● With scraper

LML-G - **SR** **20** **W** - **B** **H**

A Operating rail

B Operating rail width

C Operating unit

D Port

E Manual release

Code	Description
A Operating rail	
SR	Refer to the table below for combinations of operating rail, operating rail width, and operating unit.
SSR	
HSR	
SHS	
NR	
NRS	
SNR	
SNS	
B Operating rail width	
15	Refer to the table below for combinations of operating rail, operating rail width, and operating unit.
20	
25	
30	
35	
C Operating unit	
Refer to the table below for codes.	
D Port	
Blank	Lock release port M5
B	Lock release port Rc1/8
E Manual release	
Blank	None
H	With
	Note

Note: Be sure to mount LML on rail before operating manual release.

Table

B Operating rail width	A Operating rail																										
	SR						SSR		HSR						SHS												
15	●		-				●	●	●		-				●		●										
20	●		-				●	●	●		●				●		-	-									
25	-		●				●	●	●		●				●		●	●									
30	●		-				●	-	●		●				●		●	●									
35	●		-				●	-	●		●				●		●	●									
C Operating unit	W	V	TB	SB	WY	VY	TBY	SBY	XW	XV	XTB	A	B	R	LA	LB	LR	CA	HA	CB	HB	C	LC	V	LV	R	LR

B Operating rail width	A Operating rail																			
	NR				NRS				SNR				SNS							
15	-				-				-				-							
20	-				-				-				-							
25	-				-				-				-							
30	●				●				●				●							
35	●				●				●				●							
C Operating unit	A	LA	B	LB	R	LR	A	LA	B	LB	R	LR	C	LC	R	LR	C	LC	R	LR

How to order

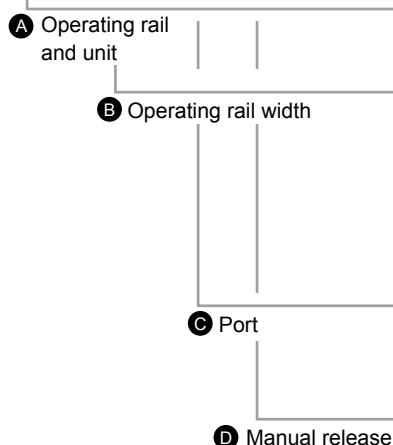
Compatible guide: IKO

● Without scraper

LML - ME 20 - B H

● With scraper

LML-G - ME 20 - B H



Code	Description
A Operating rail and unit	
Refer to the table below for codes.	
B Operating rail width	
15	Refer to the table below for combinations of operating rail and operating rail width.
20	
25	
30	
35	
C Port	
Blank	Lock release port M5
B	Lock release port Rc1/8
D Manual release	
Blank	None
H	With
	Note

Note: Be sure to mount LML on rail before operating manual release.

Table

B Operating rail width	A Operating rail and unit															
	ME	MEC	MET	METC	LWE	LWEC	LWET	LWETC	MES	MESC	LWES	LWESC	MEG	METG	LWEG	LWETG
15		●				●			●		●				●	
20		●				●			●		●				●	
25		●				●			●		●				●	
30		●				●			●		●				●	
35		●				●			●		●				-	

B Operating rail width	A Operating rail and unit															
	LWH	LWHT	LWHD	LWHS	MH	MHT	MHD	MHS	LWHTG	MHG	MHTG	LWHS	MHSG	LWHG	MHDG	LWHDG
15	●	●	●	●	●	●	●		-			-		-	-	-
20	●	-	●	●	●	-	●		●			●		●	-	-
25	●	●	●	●	●	●	●		●			●		●	●	●
30	●	●	●	●	●	●	●		●			●		●	●	●
35	●	●	-	●	●	●	-		●			-		●	●	●

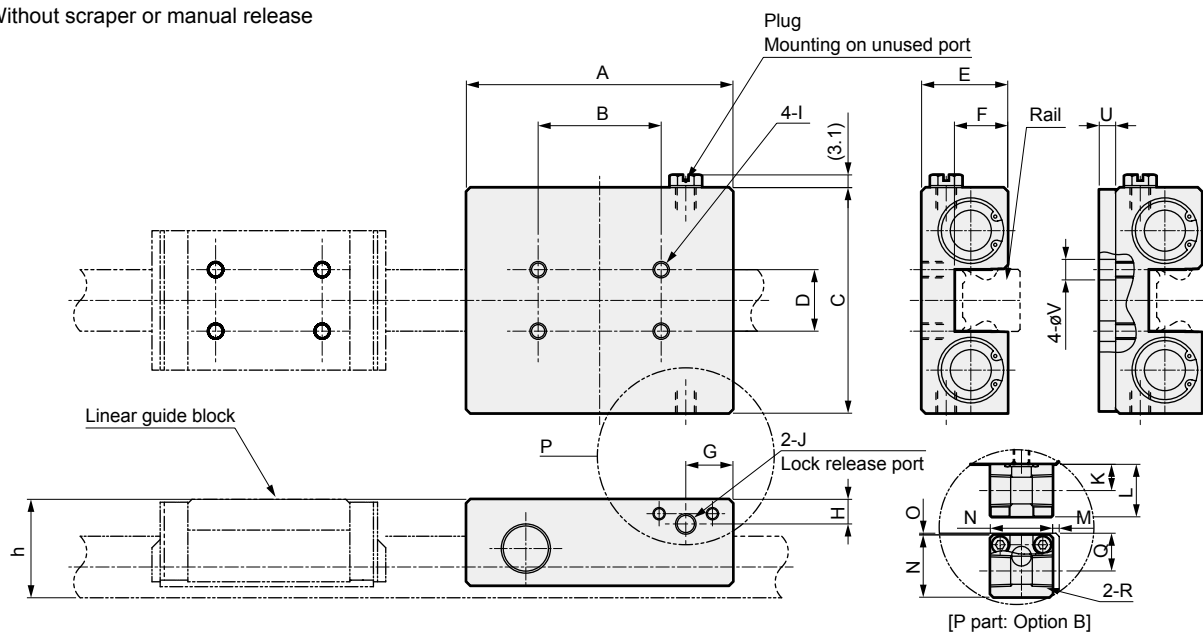
⚠ Safety precautions

- The product cannot function as brake (to stop a moving workpiece).
When using it for position locking (holding the cylinder stationary), the dynamic force should not exceed 50% of the holding force.
- For the manual release option -H, use the special release bolt attached with the product to prevent failure.

LCM
LCR
LCG
LCW
LCX
STM
STG
STS/STL
STR2
UCA2
ULK*
JSK/M2
JSG
JSC3/JSC4
USSD
UFCD
USC
UB
JSB3
LMB
LML
HCM
HCA
LBC
CAC4
UCAC2
CAC-N
UCAC-N
RCS2
RCC2
PCC
SHC
MCP
GLC
MFC
BBS
RRC
GRC
RV3*
NHS
HRL
LN
Hand
Chuk
MechHnd/Chuk
ShkAbs
FJ
FK
SpdContr
Ending

Dimensions

● Without scraper or manual release

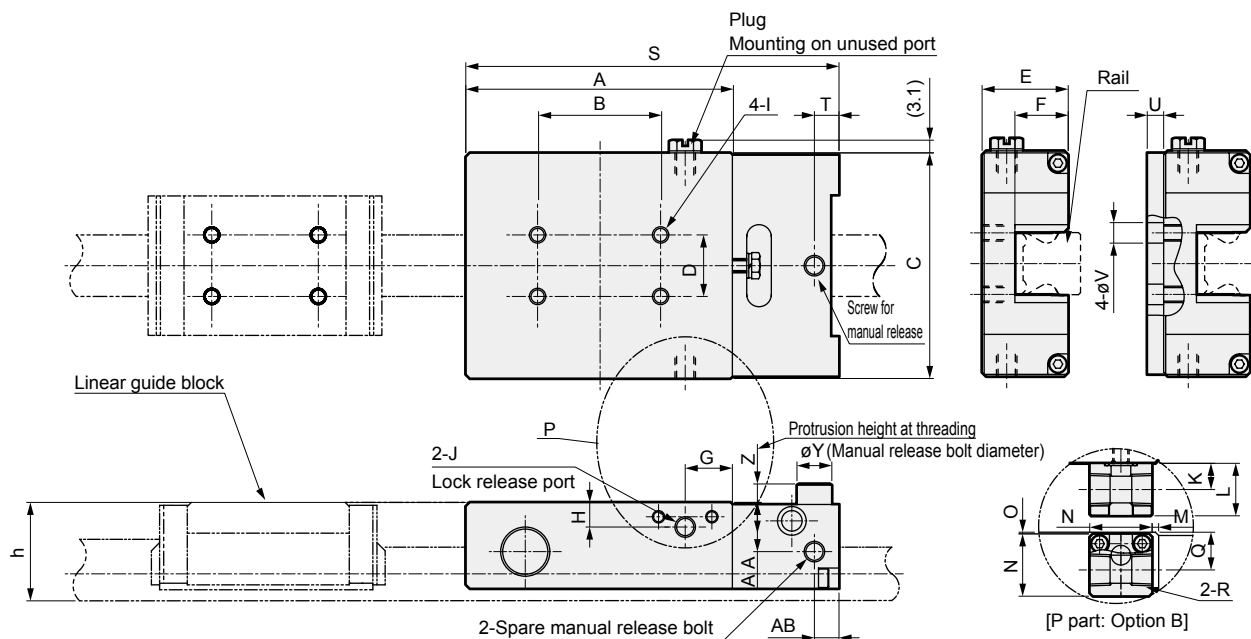


Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	R	U	V
LML*-15	65	30	55	15	21	13	11.5	6	M4 depth 5	M5	8	16	2	19	0.5	11.5	Rc1/8	4	5
LML*-20	70	30	66	20	24.5	13.5	12	6	M5 depth 6	M5	8	16	2.5	19	0.5	11.5	Rc1/8	-	-
LML*-25	75	30	75	20	29	16	10	6	M6 depth 7	M5	8	16	0.5	19	0.5	11.5	Rc1/8	4	7
LML*-30	82	30	88	25	35.5	20.5	12	6.5	M6 depth 9	M5	8	16	2.5	19	1	12	Rc1/8	3	7
LML*-35	90	40	102	30	40	22	12	7	M8 depth 9	M5	8	16	2.5	19	1.5	12.5	Rc1/8	7	9

*1: h dimensions differ depending on the guide used. Refer to the corresponding catalog.

*2: Dimensions for U and V are only for HSR/SHS-R/LR (manufactured by THK Co., Ltd.) or MHD(G)/LWHD(G) (manufactured by Nippon Thompson Co., Ltd.).

● Without scraper, with manual release



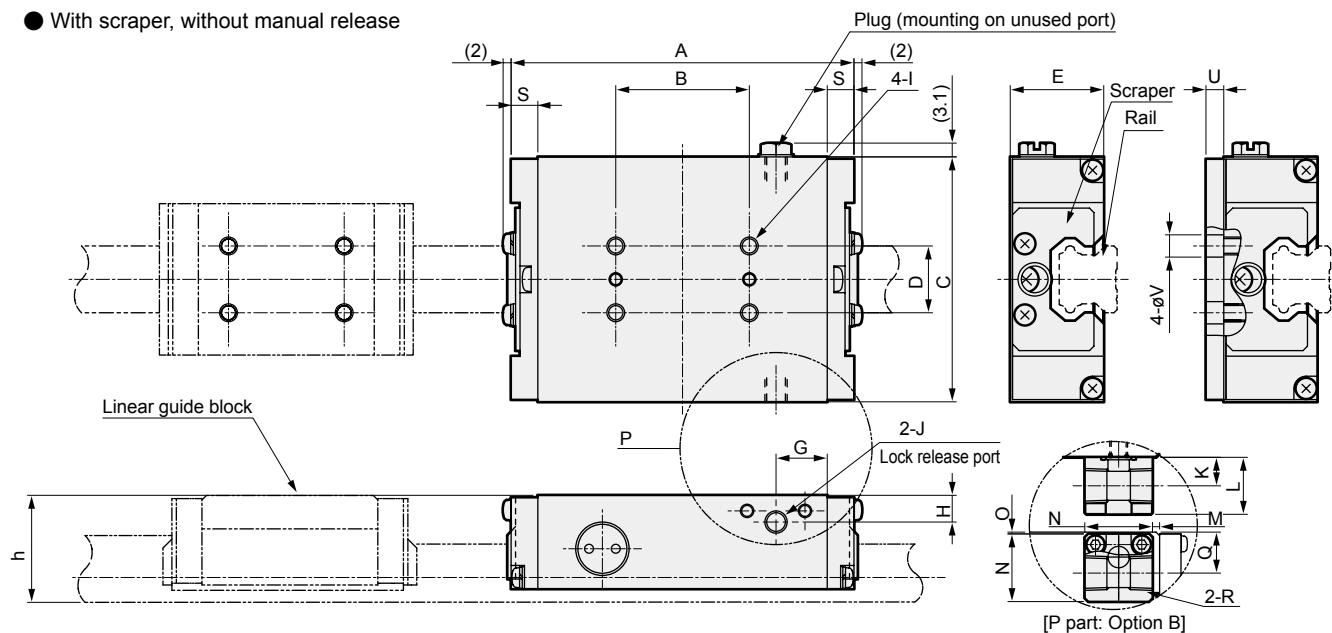
Model No.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	Q	R	S	T	U	V	Y	Z	AA	AB
LML*-15*-H	65	30	55	15	21	13	11.5	6	M4 depth 5	M5	8	16	2	19	0.5	11.5	Rc1/8	91	6	4	5	8.5	4.5	12	6
LML*-20*-H	70	30	66	20	24.5	13.5	12	6	M5 depth 6	M5	8	16	2.5	19	0.5	11.5	Rc1/8	98	6.5	-	-	8.5	4.5	15.5	6
LML*-25*-H	75	30	75	20	29	16	10	6	M6 depth 7	M5	8	16	0.5	19	0.5	11.5	Rc1/8	105	6.5	4	7	10	5.5	19	7
LML*-30*-H	82	30	88	25	35.5	20.5	12	6.5	M6 depth 9	M5	8	16	2.5	19	1	12	Rc1/8	117	8.5	3	7	10	5.5	25.5	9
LML*-35*-H	90	40	102	30	40	22	12	7	M8 depth 9	M5	8	16	2.5	19	1.5	12.5	Rc1/8	130	9.5	7	9	13	7.5	30	10

*1: h dimensions differ depending on the guide used. Refer to the corresponding catalog.

*2: Dimensions for U and V are only for HSR/SHS-R/LR (manufactured by THK Co., Ltd.) or MHD(G)/LWHD(G) (manufactured by Nippon Thompson Co., Ltd.).

Dimensions

● With scraper, without manual release

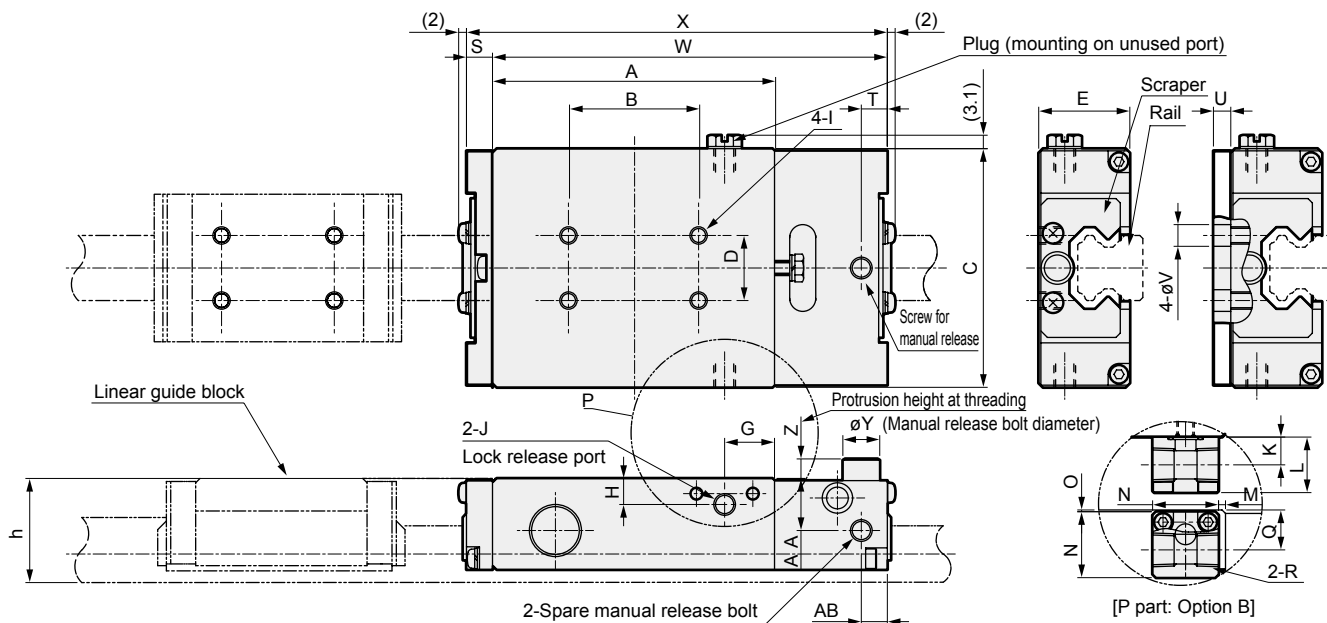


Model No.	A	B	C	D	E	G	H	I	J	K	L	M	N	O	Q	R	S	U	V
LML-G*-15	77	30	55	15	21	11.5	6	M4 depth 5	M5	8	16	2	19	0.5	11.5	Rc1/8	6	4	5
LML-G*-20	82	30	66	20	24.5	12	6	M5 depth 6	M5	8	16	2.5	19	0.5	11.5	Rc1/8	6	-	-
LML-G*-25	87	30	75	20	29	10	6	M6 depth 7	M5	8	16	0.5	19	0.5	11.5	Rc1/8	6	4	7
LML-G*-30	100	30	88	25	35.5	12	6.5	M6 depth 9	M5	8	16	2.5	19	1	12	Rc1/8	9	3	7
LML-G*-35	108	40	102	30	40	12	7	M8 depth 9	M5	8	16	2.5	19	1.5	12.5	Rc1/8	9	7	9

*1: h dimensions differ depending on the guide used. Refer to the corresponding catalog.

*2: Dimensions for U and V are only for HSR/SHS-R/LR (manufactured by THK Co., Ltd.) or MHD(G)/LWHD(G) (manufactured by Nippon Thompson Co., Ltd.).

● With scraper and manual release



Model No.	A	B	C	D	E	G	H	I	J	K	L	M	N	O	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
LML-G*-15*-H	65	30	55	15	21	11.5	6	M4 depth 5	M5	8	16	2	19	0.5	11.5	Rc1/8	6	6	4	5	91	97	8.5	4.5	12	6
LML-G*-20*-H	70	30	66	20	24.5	12	6	M5 depth 6	M5	8	16	2.5	19	0.5	11.5	Rc1/8	6	6.5	-	-	98	104	8.5	4.5	15.5	6
LML-G*-25*-H	75	30	75	20	29	10	6	M6 depth 7	M5	8	16	0.5	19	0.5	11.5	Rc1/8	6	6.5	4	7	105	111	10	5.5	19	7
LML-G*-30*-H	82	30	88	25	35.5	12	6.5	M6 depth 9	M5	8	16	2.5	19	1	12	Rc1/8	9	8.5	3	7	117	126	10	5.5	25.5	9
LML-G*-35*-H	90	40	102	30	40	12	7	M8 depth 9	M5	8	16	2.5	19	1.5	12.5	Rc1/8	9	9.5	7	9	130	139	13	7.5	30	10

*1: h dimensions differ depending on the guide used. Refer to the corresponding catalog.

*2: Dimensions for U and V are only for HSR/SHS-R/LR (manufactured by THK Co., Ltd.) or MHD(G)/LWHD(G) (manufactured by Nippon Thompson Co., Ltd.).