

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

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

## Table

| B<br>Operating<br>rail width | A<br>Operating rail |   |    |    |    |    |     |     |     |    |     |   |   |   |     |    |    |    |    |    |    |   |    |   |    |   |    |
|------------------------------|---------------------|---|----|----|----|----|-----|-----|-----|----|-----|---|---|---|-----|----|----|----|----|----|----|---|----|---|----|---|----|
|                              | SR                  |   |    |    |    |    | SSR |     | HSR |    |     |   |   |   | SHS |    |    |    |    |    |    |   |    |   |    |   |    |
| 15                           | ●                   |   | -  |    |    |    | ●   | ●   | ●   |    | -   |   |   |   | ●   |    | ●  |    |    |    |    |   |    |   |    |   |    |
| 20                           | ●                   |   | -  |    |    |    | ●   | ●   | ●   |    | ●   |   |   |   | ●   |    | -  | -  |    |    |    |   |    |   |    |   |    |
| 25                           | -                   |   | ●  |    |    |    | ●   | ●   | ●   |    | ●   |   |   |   | ●   |    | ●  | ●  |    |    |    |   |    |   |    |   |    |
| 30                           | ●                   |   | -  |    |    |    | ●   | -   | ●   |    | ●   |   |   |   | ●   |    | ●  | ●  |    |    |    |   |    |   |    |   |    |
| 35                           | ●                   |   | -  |    |    |    | ●   | -   | ●   |    | ●   |   |   |   | ●   |    | ●  | ●  |    |    |    |   |    |   |    |   |    |
| C<br>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<br>Operating<br>rail width | A<br>Operating rail |    |   |    |     |    |   |    |     |    |   |    |     |    |   |    |   |    |   |    |
|------------------------------|---------------------|----|---|----|-----|----|---|----|-----|----|---|----|-----|----|---|----|---|----|---|----|
|                              | NR                  |    |   |    | NRS |    |   |    | SNR |    |   |    | SNS |    |   |    |   |    |   |    |
| 15                           | -                   |    |   |    | -   |    |   |    | -   |    |   |    | -   |    |   |    |   |    |   |    |
| 20                           | -                   |    |   |    | -   |    |   |    | -   |    |   |    | -   |    |   |    |   |    |   |    |
| 25                           | -                   |    |   |    | -   |    |   |    | -   |    |   |    | -   |    |   |    |   |    |   |    |
| 30                           | ●                   |    |   |    | ●   |    |   |    | ●   |    |   |    | ●   |    |   |    |   |    |   |    |
| 35                           | ●                   |    |   |    | ●   |    |   |    | ●   |    |   |    | ●   |    |   |    |   |    |   |    |
| C<br>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

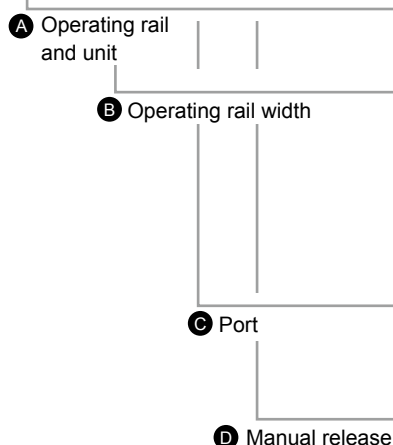
Compatible guide: IKO

● Without scraper

LML - ME 20 - B H

● With scraper

LML-G - ME 20 - B H



| Code                                | Description                                                                           |
|-------------------------------------|---------------------------------------------------------------------------------------|
| <b>A Operating rail and unit</b>    |                                                                                       |
| Refer to the table below for codes. |                                                                                       |
| <b>B Operating rail width</b>       |                                                                                       |
| 15                                  | Refer to the table below for combinations of operating rail and operating rail width. |
| 20                                  |                                                                                       |
| 25                                  |                                                                                       |
| 30                                  |                                                                                       |
| 35                                  |                                                                                       |
| <b>C Port</b>                       |                                                                                       |
| Blank                               | Lock release port M5                                                                  |
| B                                   | Lock release port Rc1/8                                                               |
| <b>D Manual release</b>             |                                                                                       |
| 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                     | ●                         | ●    | -    | ●    | ●  | ●   | -   |     | ●     |     |      | -    |      | ●    | ●    | ●     |

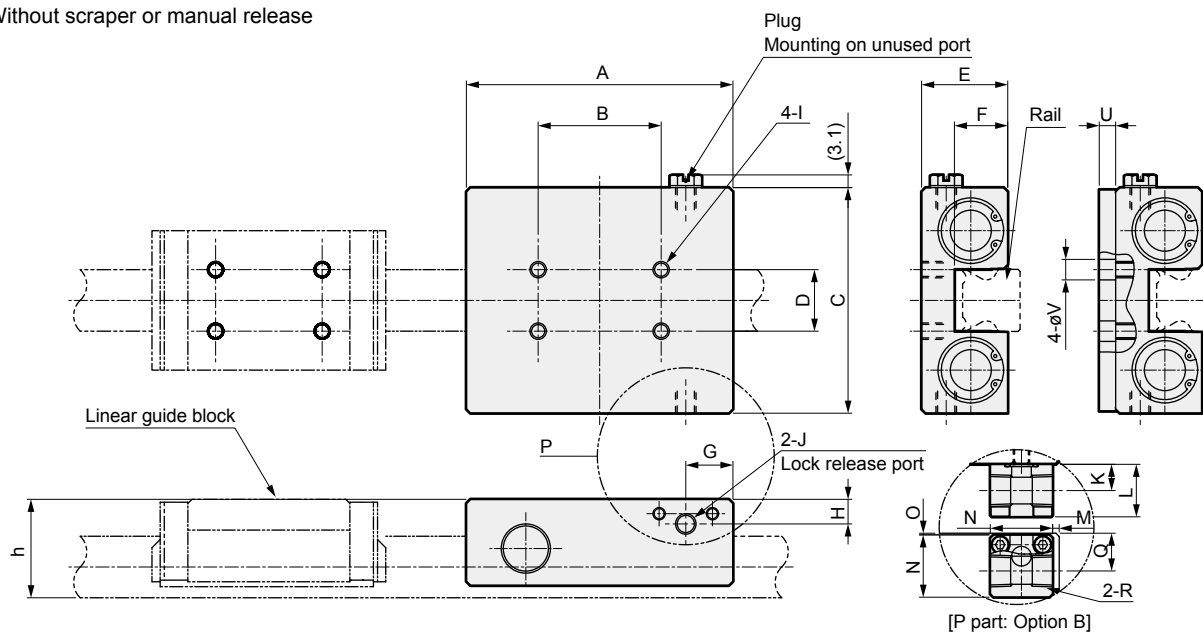
### ⚠ Safety precautions

- 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

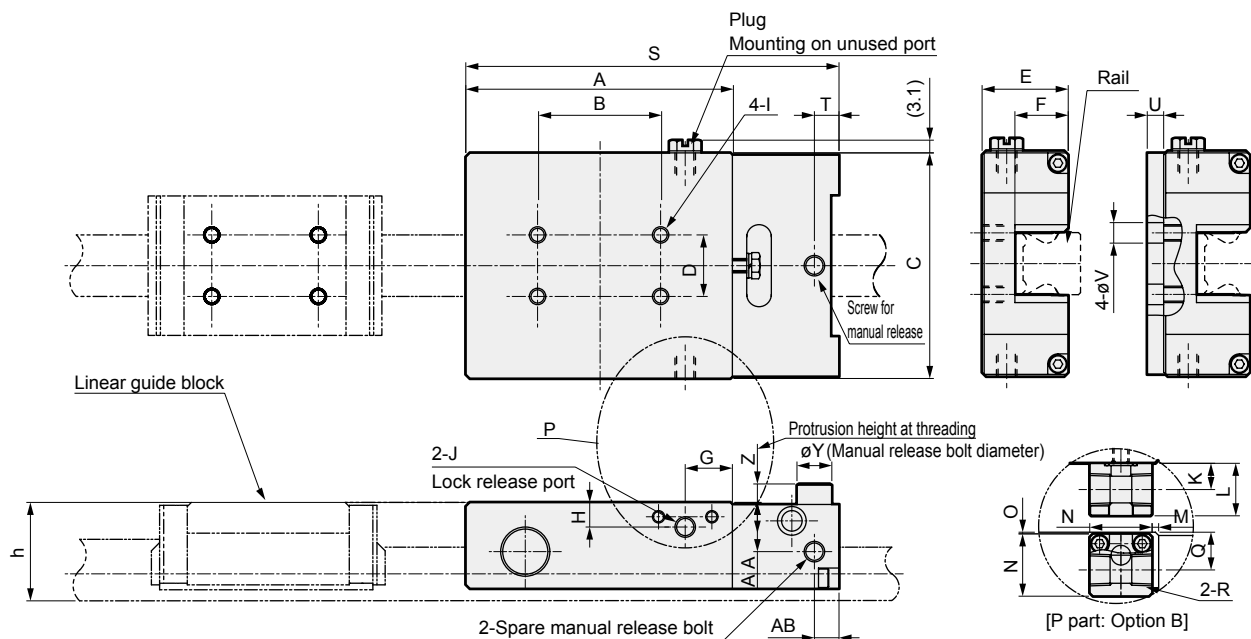


| Model No. | A  | B  | C   | D  | E    | F    | G    | H   | I          | J  | K | L  | M   | N  | O   | Q    | R     | U | V |
|-----------|----|----|-----|----|------|------|------|-----|------------|----|---|----|-----|----|-----|------|-------|---|---|
| LML*-15   | 65 | 30 | 55  | 15 | 21   | 13   | 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



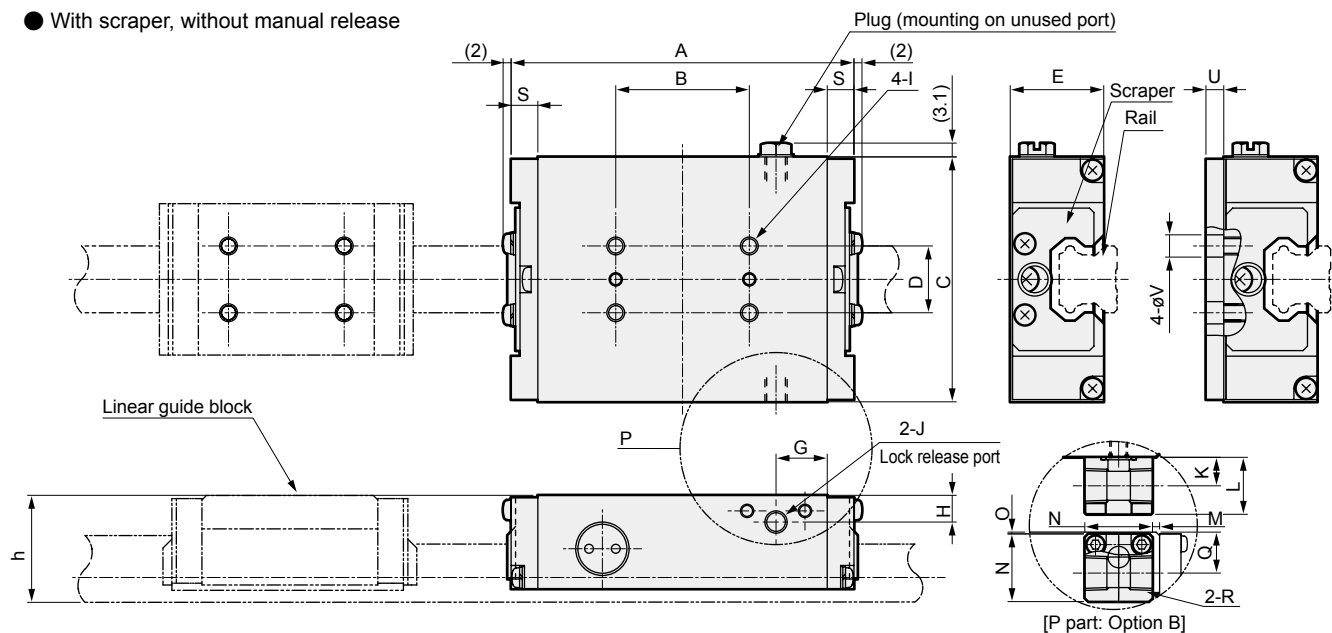
| Model No.  | A  | B  | C   | D  | E    | F    | G    | H   | I          | J  | K | L  | M   | N  | O   | Q    | R     | S   | T   | U | V | Y   | Z   | AA   | AB |
|------------|----|----|-----|----|------|------|------|-----|------------|----|---|----|-----|----|-----|------|-------|-----|-----|---|---|-----|-----|------|----|
| 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

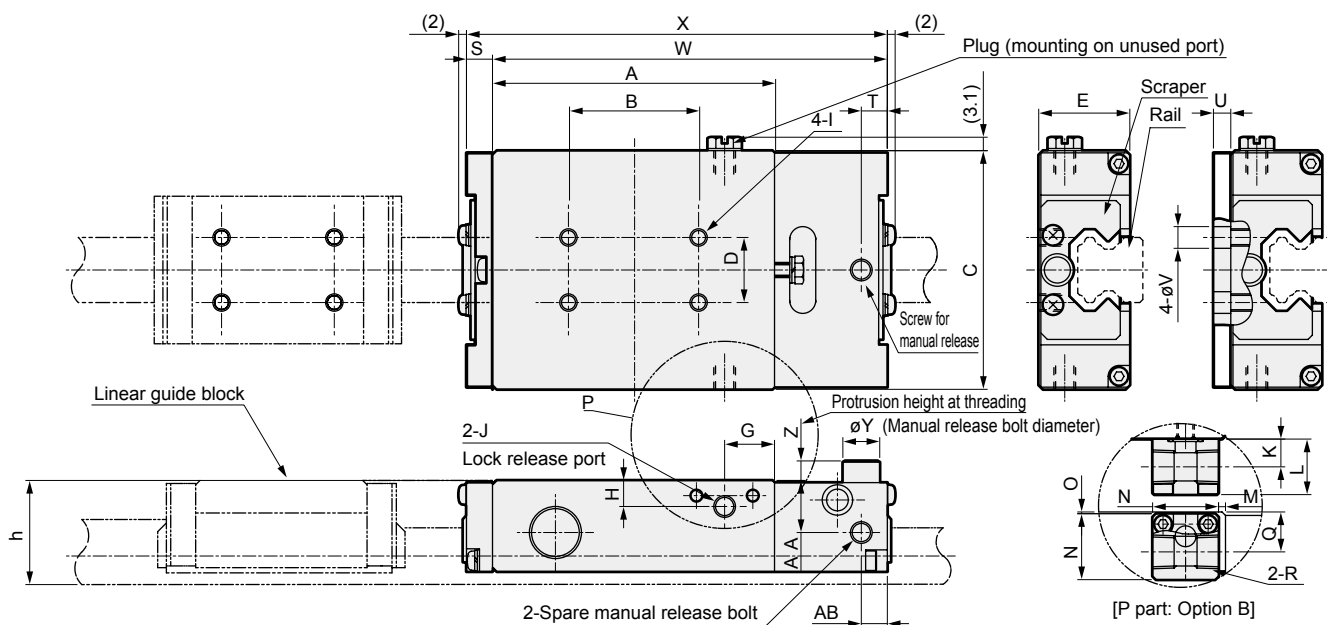


| Model No. | A   | B  | C   | D  | E    | G    | H   | I          | J  | K | L  | M   | N  | O   | Q    | R     | S | U | V |
|-----------|-----|----|-----|----|------|------|-----|------------|----|---|----|-----|----|-----|------|-------|---|---|---|
| LML-G*-15 | 77  | 30 | 55  | 15 | 21   | 11.5 | 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.).