

Miniature Linear Guides (Short Blocks)

Light Preload / Slight Clearance

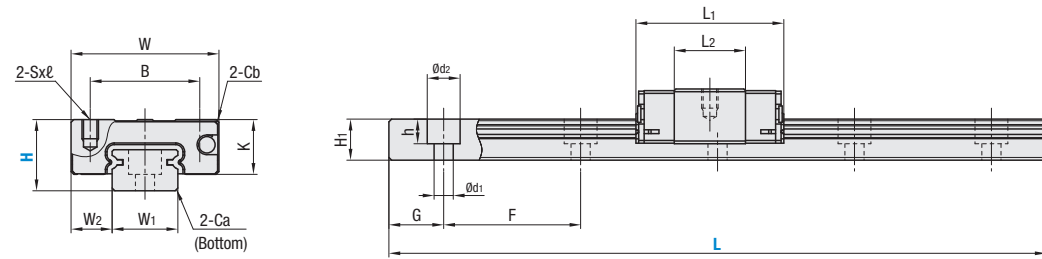
Miniature Linear Guides (Short Blocks) – Light Preload, Slight Clearance



Blocks and rails are not sold as separate items. Light Preload Type has guaranteed radial clearances and accuracies as sets of blocks and rails.

RoHS10

Features: Short block type of industry-standard spec. 20% more compact than standard blocks.



| Material Hardness | Type | | MX (Lubrication Unit) | L Dimension | Number of Blocks |
|--------------------------------|---------------|------------------|------------------------------|-------------|------------------|
| | Light Preload | Slight Clearance | | | |
| | High Grade | Standard Grade | | | |
| Stainless Steel 56 HRC min. | SSEBS | SSEBSZ | Blank: None -MX: Provided | Selectable | 1 |
| | SSE2BS | SSE2BSZ | | 2 | |
| | SSEBSL | SSEBSLZ | | 1 | |
| | SSE2BSL | SSE2BSLZ | | 2 | |

Heat Resistant Temperature: -20~80°C

For L Configurable, G dimensions differ from those shown in the table below. For details, P.608.

Precautions for Use

- Blocks are equipped with retainers (wire) to prevent balls from falling out. For proper block handling, refer to P.602.
- Radial clearances and accuracies are not guaranteed if the blocks and rails are interchanged from the original set combinations.
- Straight grooves are provided on datum planes. Be sure to match the datum lines when using.
- Rails cannot be connected end to end.
- The accuracy of Linear Guides is guaranteed after mounting the rail (after fastening screws on the rail and pushing it onto the datum plane). Minor bending of the rail will be adjusted after being mounted and will not affect the performance.

Accessories

- H8 comes with cap screws (M2x6).

Others

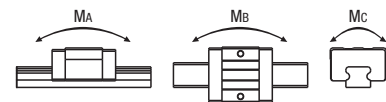
- Filled with Lithium soap based grease (Multemp Grease PS2 by Kyodo Yushi Co., Ltd.).
- For operating life calculations, please refer to P.604, or by using our free software at, http://www.misumiusa.com/lg-bs_software/

| Part Number | | | Block Dimensions | | | | | | | | Guide Rail Dimensions | | | | | | | |
|--------------------------------------|--|------------------------------|------------------|-----------------|----------------|------|-------|----------------|------|-----|-----------------------|----------------|----------------|-----|---|-----------------|----|-----|
| Type | MX | H | L | W | L ₁ | B | S x ℓ | L ₂ | K | Cb | W ₁ | W ₂ | H ₁ | Ca | Counterbored Holes d ₁ x d ₂ x h | F | G | |
| SSEBS SSE2BS SSEBSL SSE2BSL | SSEBSZ SSE2BSZ SSEBSLZ SSE2BSLZ | Blank: None -MX: Provided | 8 | 40-130 (55) | 17 | 19.6 | 12 | M2 x 2.5 | 9.6 | 6.5 | 0.3 | 7 | 5 | 4.7 | 0.3 | 2.4 x 4.2 x 2.3 | 15 | 5 |
| | | | 10 | 35-275 (75) | 20 | 22.9 | 15 | M3 x 3 | 11.9 | 7.8 | 0.3 | 9 | 5.5 | 5.5 | 0.3 | 3.5 x 6 x 3.5 | 20 | 7.5 |
| | | | 13 | 45-470 (95) | 27 | 27 | 20 | M3 x 3.5 | 13 | 10 | 0.5 | 12 | 7.5 | 7.5 | 0.5 | 3.5 x 6 x 4.5 | 25 | 10 |
| | | | 16 | 70-670 (110) | 32 | 32.7 | 25 | M3 x 4 | 17.7 | 12 | 0.5 | 15 | 8.5 | 9.5 | 0.5 | 3.5 x 6 x 4.5 | 40 | 15 |

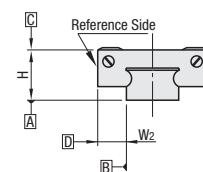
L Dimension: Dimensions in () are for the minimum rail length of the 2-Block Type

kgf=Nx0.101972

| H | Basic Load Rating | | Allowable Static Moment | | | Mass | |
|----|-------------------|-------------------|-------------------------|-----------------------|-----------------------|--------------|---------------------|
| | C (Dynamic) kN | Co (Static) kN | M _a N·m | M _b N·m | M _c N·m | Blocks kg | Guide Rails kg/m |
| 8 | 0.79 | 1.27 | 1.9 | 1.6 | 4.6 | 0.008 | 0.19 |
| 10 | 1.16 | 1.68 | 3.1 | 2.6 | 7.9 | 0.015 | 0.31 |
| 13 | 1.63 | 2.38 | 5.2 | 4.4 | 14.8 | 0.025 | 0.61 |
| 16 | 3.08 | 4.23 | 12.3 | 10.3 | 32.6 | 0.05 | 1.02 |



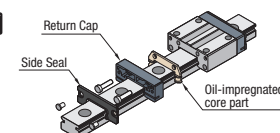
Preload & Accuracy Standards



| Specifications | Light Preload High Grade | Slight Clearance Standard Grade |
|--|--------------------------|---------------------------------|
| Radial Clearance | -3-0 | 0-15 |
| Height H Tolerance | ±20 | ±20 |
| Height H Pair Variation | 15 | 40 |
| Width W ₂ Tolerance | ±25 | ±25 |
| Width W ₂ Pair Variation | 20 | 40 |
| Running Parallelism of surf. C against surf. A | Refer to P.602 | |
| Running Parallelism of surf. D against surf. B | Refer to P.602 | |

Slight Clearance Type has clearance (Gap) between rails and blocks. If precision / rigidity is required, select Light Preload Type.

Lubrication Unit MX



Miniature Linear Guides (Short Blocks)

Light Preload / Slight Clearance, continued

Part Number Example

Part Number - L

SSE2BS10 - 275
 SSE2BS10L - 175 L Type Greased
 SSE2BS10G - 175 G Type Greased

Alternative grease types available.

Part Number Alterations

Part Number - L - (MC / RLC / LLC)

SSE2BSL16 - 450 - MC

| Alterations | Code | Spec. | | | | | | | | | | | | |
|------------------------|---------------------------------------|---|---|-------|---|----|-----|----|----|----|----|----|----|---|
| Tapped Holes | MC | Changes the rail mounting hole from counterbored holes to tapped holes. <table border="1"> <tr><th>H</th><th>MC</th></tr> <tr><td>8</td><td>M3</td></tr> <tr><td>10</td><td>M4</td></tr> <tr><td>13</td><td>M5</td></tr> <tr><td>16</td><td>M5</td></tr> </table> | H | MC | 8 | M3 | 10 | M4 | 13 | M5 | 16 | M5 | | |
| H | MC | | | | | | | | | | | | | |
| 8 | M3 | | | | | | | | | | | | | |
| 10 | M4 | | | | | | | | | | | | | |
| 13 | M5 | | | | | | | | | | | | | |
| 16 | M5 | | | | | | | | | | | | | |
| Rail Ends Cut | Left End Cut LLC Right End Cut RLC | Cuts rail ends. Ordering Code: LLC <table border="1"> <tr><th>H</th><th>L Cut</th><th>N</th></tr> <tr><td>10</td><td>2.5</td><td>5</td></tr> <tr><td>13</td><td>5</td><td>5</td></tr> <tr><td>16</td><td>10</td><td>5</td></tr> </table> <ul style="list-style-type: none"> Applicable to Selectable Type only. Overall length will be shorter by cutting. Not applicable to H8. Not applicable to L35 of H10 and L45 of H13. | H | L Cut | N | 10 | 2.5 | 5 | 13 | 5 | 5 | 16 | 10 | 5 |
| H | L Cut | N | | | | | | | | | | | | |
| 10 | 2.5 | 5 | | | | | | | | | | | | |
| 13 | 5 | 5 | | | | | | | | | | | | |
| 16 | 10 | 5 | | | | | | | | | | | | |
| 3-Block Specifications | B3 | Adds 2-blocks to the 1-block product. There are restrictions for the L dimension length. See "Selectable Shortest Rail Length" for details. Selection Example: SSEBS10-120-B3 | | | | | | | | | | | | |
| 4-Block Specifications | B4 | Adds 3-blocks to the 1-block product. There are restrictions for the L dimension length. See "Selectable Shortest Rail Length" for details. Selection Example: SSEBS16-190-B4 | | | | | | | | | | | | |

Selectable Shortest Rail Length for B3/B4

| H | B3 (3-block) | B4 (4-block) |
|----|--------------|--------------|
| 8 | 85 | 100 |
| 10 | 95 | 135 |
| 13 | 120 | 145 |
| 16 | 150 | 190 |

Options for Linear Guide

| Positioning Retaining Parts | Block / Rail Fixing Parts |
|---|------------------------------------|
| | Rail Push Plates |
| Rail Height Adjusting Blocks | Linear Lock |
| Stopper Bolts | Linear Guide Lock Units |

Application Example

