

# Miniature Linear Guides (Standard Blocks with Dowel Holes)

Light Preload / Slight Clearance

## Similar Products Comparison Points

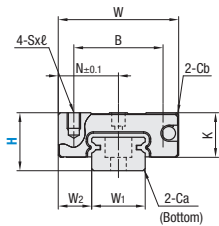
MISUMI original specifications with dowel holes. Requires less time for assembly and has better repeatability.

Miniature Linear Guides (Standard Blocks with Dowel Holes) – Light Preload, Interchangeable, Slight Clearance



RoHS10

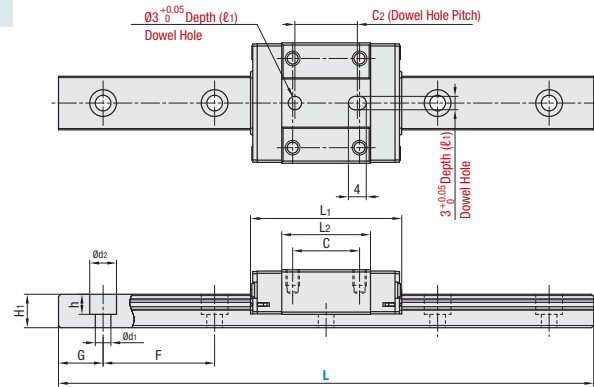
Features: MISUMI original specifications with dowel holes.



Material Hardness	Type		MX (Lubrication Unit)	L Dimension	Number of Blocks
	Light Preload High Grade	Slight Clearance Standard Grade			
Stainless Steel 56 HRC min.	SSEBN	SSEBNZ	Blank: None -MX: Provided	Selectable	1
	SSE2BN	SSE2BNZ			2
	SSEBNL	SSEBNLZ		Configurable	1
	SSE2BNL	SSE2BNLZ			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. When using, be sure to match the datum lines.
- Ⓢ Rails cannot be connected end to end.
- Ⓢ The accuracy of Linear Guides is guaranteed after mounting the rail (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 (Mulptemp 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/](http://www.misumiusa.com/lg-bs_software/)

Part Number		MX	H	L	Block Dimensions							Dowel Hole Dimensions		Guide Rail Dimensions									
Type					W	L <sub>1</sub>	B	C	S x ℓ	L <sub>2</sub>	K	Cb	N	C <sub>2</sub>	(ℓ <sub>1</sub> )	W <sub>1</sub>	W <sub>2</sub>	H <sub>1</sub>	Ca	Counterbored Holes d <sub>1</sub> x d <sub>2</sub> x h		F	G
SSEBN SSE2BN SSEBNL SSE2BNL	SSEBNZ SSE2BNZ SSEBNLZ SSE2BNLZ	Blank: None -MX: Provided	8	40-130 (70)	17	23.6	12	8	M2 x 2.5	13.6	6.5	0.3	8.5	8	2	7	5	4.7	0.3	2.4 x 4.2 x 2.3	15	5	
			10	35-275 (95)	20	30	15	10	M3 x 3	19	7.8	0.3	10	10	2.5	9	5.5	5.5	0.3	3.5 x 6 x 3.5	20	7.5	
			13	45-470 (120)	27	33.9	20	15	M3 x 3.5	19.9	10	0.5	13.5	14	3	12	7.5	7.5	0.5	3.5 x 6 x 4.5	25	10	
			16	70-670 (150)	32	42.4	25	20	M3 x 4	27.4	12	0.5	16	20	4	15	8.5	9.5	0.5	3.5 x 6 x 4.5	40	15	
			20	100-700 (160)	40	50	30	25	M4 x 6	34.6	15	0.5	20	25	4	20	10	11	0.5	6 x 9.5 x 5.5	60	20	

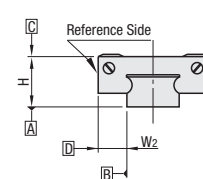
Ⓢ L Dimension: Dimensions in ( ) are for the minimum rail length of the 2-Block Type

kgf=Nx0.101972

H	Basic Load Rating		Allowable Static Moment			Mass	
	C (Dynamic) kN	Co (Static) kN	M <sub>A</sub> N·m	M <sub>B</sub> N·m	M <sub>C</sub> N·m	Blocks kg	Guide Rails kg/m
8	0.9	1.5	4.1	4.1	5.2	0.01	0.19
10	1.5	2.5	5.1	5.1	10.2	0.02	0.31
13	2.2	3.3	8.8	9.5	16.1	0.04	0.61
16	3.6	5.4	21.6	23.4	39.6	0.06	1.02
20	5.2	8.5	48.4	48.4	86.4	0.12	1.65



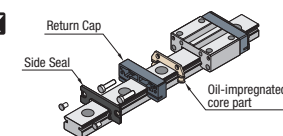
## Preload & Accuracy Standards



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 <sub>2</sub> Tolerance	±25	±25
Width W <sub>2</sub> Pair Variation	20	40
Running Parallelism of surf. C against surf. A	Refer to P.602	
Running Parallelism of surf. D against surf. B		

Ⓢ 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 (Standard Blocks with Dowel Holes)

Light Preload / Slight Clearance, continued

## Part Number Example

Part Number	L
SSEBN10	- 275
SSE2BNL10L	- 100 L Type Greased
SSE2BNL10G	- 100 G Type Greased

Alternative grease types available.

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

## Part Number Alterations

Part Number	L	(MC / RLC / LLC)
SSEBN16	- 430 -	MC

Alterations	Code	Spec.												
Tapped Holes 	MC	Changes rail mounting holes from counterbored holes to tapped holes. <table border="1"> <thead> <tr> <th>H</th> <th>MC</th> </tr> </thead> <tbody> <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> <tr><td>20</td><td>M6</td></tr> </tbody> </table>	H	MC	8	M3	10	M4	13	M5	16	M5	20	M6
H	MC													
8	M3													
10	M4													
13	M5													
16	M5													
20	M6													
Rail Ends Cut LLC 	Left End Cut LLC	Rail ends cut. Ordering Code: LLC <table border="1"> <thead> <tr> <th>H</th> <th>L Cut</th> <th>N</th> </tr> </thead> <tbody> <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> </tbody> </table>	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												
Rail is cut with the product ID facing out (datum on other side). RLC 	Right End Cut RLC	Ⓢ Applicable to Selectable Type only. Ⓢ Cutting will shorten overall length. Ⓢ Not applicable to H8, 20. Ⓢ Not applicable to L35 of H10 and L45 of H13.												
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: SSEBNL10-200-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: SSEBNL16-600-B4												

## Selectable Shortest Rail Length for B3/B4

H	B3 (3-block)	B4 (4-block)
8	85	115
10	115	155
13	145	170
16	190	230
20	220	280

## Options for Linear Guide

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

## Application Example

