

# Miniature Linear Guides

## Long Blocks, Light Preload

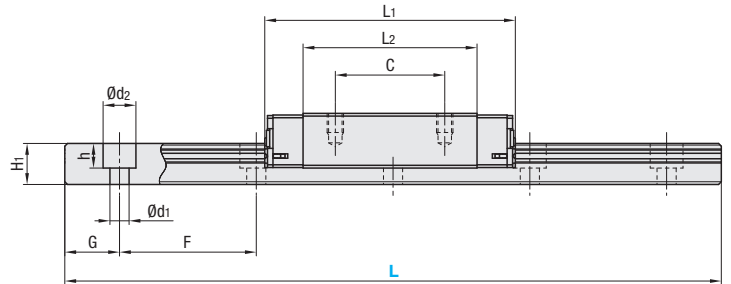
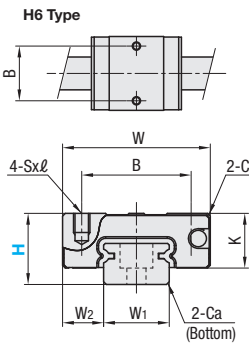
= For customers using industry standard products =  
 frame-surrounded products (Stainless Steel, Light Preload, High Grade Type) are compliant with the industry standard specifications.

Industry Standard



| Material<br>Hardness  | Type           |                  |                 | L Dimension  | Number of Blocks |
|---|----------------|------------------|-----------------|--------------|------------------|
|   | Light Preload  | Slight Clearance | Standard Grade  |              |                  |
| Stainless Steel<br>(440C Stainless Steel Materials)<br>56HRC~ | <b>SSELB</b>   | <b>SSELBV</b>    | <b>SSELBZ</b>   | Selectable   | 1                |
|   | <b>SSEL2B</b>  | <b>SSEL2BV</b>   | <b>SSEL2BZ</b>  | Configurable | 2                |
|   | <b>SSELBL</b>  | <b>SSELBLV</b>   | <b>SSELBLZ</b>  | Selectable   | 1                |
|   | <b>SSEL2BL</b> | <b>SSEL2BLV</b>  | <b>SSEL2BLZ</b> | Configurable | 2                |
| Carbon Steel<br>58HRC~  | <b>SELB</b>    | <b>SELBV</b>     | <b>SELBZ</b>    | Selectable   | 1                |
|   | <b>SEL2B</b>   | <b>SEL2BV</b>    | <b>SEL2BZ</b>   | Configurable | 2                |
|   | <b>SELBL</b>   | <b>SELBLV</b>    | <b>SELBLZ</b>   | Selectable   | 1                |
|   | <b>SEL2BL</b>  | <b>SEL2BLV</b>   | <b>SEL2BLZ</b>  | Configurable | 2                |

☛ This Type has the same fitting dimensions as the other company products, and thus, can be substituted for them.  
 ☛ Blocks and rails are not sold as separate items. This Type has guaranteed radial clearances and accuracies as sets of blocks and rails.



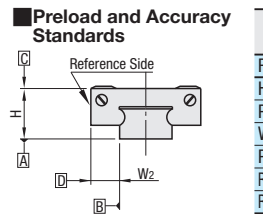
☛ For L Dimension Configurable Type, G dimensions differ from those shown in the table below. For details, see P.475

- Precautions for Use**
- Blocks are equipped with retainers (wire) to prevent balls from derailing. For blocks, refer to P.469
  - 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.
  - Running parallelism is the value measured after the rail is mounted. (it is not the value measured before the rails are fastened with screws.)
- Accessories**
- H6 comes with Number 0, Class 1 Phillips button head screws (M2x6).
  - H8 comes with cap screws (M2x6).
- Others**
- Filled with Lithium soap based grease (Multemp Grease PS2 by Kyodo Yushi Co., Ltd.). For Operating Life Calculation see P.471

| Part Number   |          | H             | L  | Block Dimension |    |      |    |     |        | Guide Rail Dimension |     |     |    |     |     |                           |             |    |     |
|---|----------|---------------|----|-----------------|----|------|----|-----|--------|----------------------|-----|-----|----|-----|-----|---------------------------|-------------|----|-----|
| Type  | Material |               |    | W               | L1 | B    | C  | Sxℓ | L2     | K                    | Cb  | W1  | W2 | H1  | Ca  | Counterbored Hole d1xd2xh | F           | G  |     |
| Stainless Steel<br>SSELB, SSEL2B, SSELBL, SSEL2BL, SSELBV, SSEL2BV, SSELBLV, SSEL2BLV, SSELBZ, SSEL2BZ, SSELBLZ, SSEL2BLZ | 6        | 40~100 (70)   | 6  | 40~100 (70)     | 12 | 21   | 8  | -   | M2x1.5 | 13.3                 | 4.5 | 0.3 | 5  | 3.5 | 4   | 0.3                       | 2.4x3.5x1   | 15 | 5   |
|   | 8        | 40~130 (85)   | 8  | 40~130 (85)     | 17 | 32   | 12 | 13  | M2x2.5 | 22                   | 6.5 | 0.3 | 7  | 5   | 4.7 | 0.3                       | 2.4x4.2x2.3 | 15 | 5   |
|   | 10       | 65~275 (95)   | 10 | 65~275 (95)     | 20 | 40   | 15 | 16  | M3x3   | 29                   | 7.8 | 0.3 | 9  | 5.5 | 5.5 | 0.3                       | 3.5x6x3.5   | 20 | 7.5 |
|   | 13       | 70~470 (120)  | 13 | 70~470 (120)    | 27 | 45.8 | 20 | 20  | M3x3.5 | 31.8                 | 10  | 0.5 | 12 | 7.5 | 7.5 | 0.5                       | 3.5x6x4.5   | 25 | 10  |
| Carbon Steel<br>SELB, SEL2B, SELBL, SEL2BL, SELBV, SEL2BV, SELBLV, SEL2BLV, SELBZ, SEL2BZ, SELBLZ, SEL2BLZ                | 16       | 110~670 (150) | 16 | 110~670 (150)   | 32 | 58.3 | 25 | 25  | M3x4   | 43.3                 | 12  | 0.5 | 15 | 8.5 | 9.5 | 0.5                       | 3.5x6x4.5   | 40 | 15  |
|   | 20       | 160~700 (220) | 20 | 160~700 (220)   | 40 | 67.7 | 30 | 30  | M4x6   | 52.3                 | 15  | 0.5 | 20 | 10  | 11  | 0.5                       | 6x9.5x5.5   | 60 | 20  |

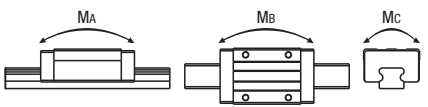
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| H  | Basic Load Rating |                | Allowable Static Moment |        |        | Mass     |                 |
|----|-------------------|----------------|-------------------------|--------|--------|----------|-----------------|
|    | C (Dynamic) kN    | Co (Static) kN | MA N-m                  | MB N-m | MC N-m | Block kg | Guide Rail kg/m |
| 6  | 0.6               | 1.0            | 1.8                     | 1.8    | 2.3    | 0.005    | 0.13            |
| 8  | 1.6               | 2.4            | 7.5                     | 7.5    | 9.0    | 0.016    | 0.19            |
| 10 | 2.2               | 3.7            | 12.3                    | 12.3   | 13.0   | 0.03     | 0.31            |
| 13 | 3.5               | 5.3            | 24.5                    | 26.4   | 32.3   | 0.06     | 0.61            |
| 16 | 5.8               | 8.7            | 57.8                    | 62.6   | 67.6   | 0.10     | 1.02            |
| 20 | 7.2               | 13.5           | 80.7                    | 80.7   | 138.2  | 0.18     | 1.65            |



| Specifications                                 | Light Preload / High Grade | Light Preload, Precision Grade | Slight Clearance Standard Grade |
|--|----------------------------|--------------------------------|---------------------------------|
| Radial Clearance                               | -3~0                       | 0~+15                          | 0~+15                           |
| Height H Tolerance                             | ±20                        | ±10                            | ±20                             |
| Pair Variation of Height H                     | 15                         | 7                              | 40                              |
| Width W2 Tolerance                             | ±25                        | ±15                            | ±25                             |
| Pair Variation of Width W2                     | 20                         | 10                             | 40                              |
| Running Parallelism of Plane C against Plane A | See P.469                  |                                |                                 |
| Running Parallelism of Plane D against Plane A | See P.469                  |                                |                                 |

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



Price **Configure Online**

| H  | L    | Unit Price      |        |        |         |              |       |       |        |
|----|------|-----------------|--------|--------|---------|--------------|-------|-------|--------|
|    |      | Stainless Steel |        |        |         | Carbon Steel |       |       |        |
| 6  | 40   | SSELB           | SSEL2B | SSELBZ | SSEL2BZ | SELB         | SEL2B | SELBZ | SEL2BZ |
|    | 55   |                 |        |        |         |              |       |       |        |
|    | 70   |                 |        |        |         |              |       |       |        |
|    | 85   |                 |        |        |         |              |       |       |        |
|    | 100  |                 |        |        |         |              |       |       |        |
|    | 115  |                 |        |        |         |              |       |       |        |
|    | 130  |                 |        |        |         |              |       |       |        |
|    | 145  |                 |        |        |         |              |       |       |        |
| 8  | 55   |                 |        |        |         |              |       |       |        |
|    | 70   |                 |        |        |         |              |       |       |        |
|    | 85   |                 |        |        |         |              |       |       |        |
|    | 95   |                 |        |        |         |              |       |       |        |
|    | 115  |                 |        |        |         |              |       |       |        |
|    | 135  |                 |        |        |         |              |       |       |        |
|    | 155  |                 |        |        |         |              |       |       |        |
|    | 175  |                 |        |        |         |              |       |       |        |
| 10 | 195  |                 |        |        |         |              |       |       |        |
|    | 215  |                 |        |        |         |              |       |       |        |
|    | 235  |                 |        |        |         |              |       |       |        |
|    | 255  |                 |        |        |         |              |       |       |        |
|    | 275  |                 |        |        |         |              |       |       |        |
|    | 295  |                 |        |        |         |              |       |       |        |
|    | 320  |                 |        |        |         |              |       |       |        |
|    | 345  |                 |        |        |         |              |       |       |        |
| 13 | 370  |                 |        |        |         |              |       |       |        |
|    | 395  |                 |        |        |         |              |       |       |        |
|    | 420  |                 |        |        |         |              |       |       |        |
|    | 445  |                 |        |        |         |              |       |       |        |
|    | 470  |                 |        |        |         |              |       |       |        |
|    | 495  |                 |        |        |         |              |       |       |        |
|    | 520  |                 |        |        |         |              |       |       |        |
|    | 550  |                 |        |        |         |              |       |       |        |
| 16 | 590  |                 |        |        |         |              |       |       |        |
|    | 630  |                 |        |        |         |              |       |       |        |
|    | 670  |                 |        |        |         |              |       |       |        |
|    | 700  |                 |        |        |         |              |       |       |        |
|    | 730  |                 |        |        |         |              |       |       |        |
|    | 760  |                 |        |        |         |              |       |       |        |
|    | 790  |                 |        |        |         |              |       |       |        |
|    | 820  |                 |        |        |         |              |       |       |        |
| 20 | 850  |                 |        |        |         |              |       |       |        |
|    | 890  |                 |        |        |         |              |       |       |        |
|    | 930  |                 |        |        |         |              |       |       |        |
|    | 970  |                 |        |        |         |              |       |       |        |
|    | 1010 |                 |        |        |         |              |       |       |        |
|    | 1050 |                 |        |        |         |              |       |       |        |
|    | 1090 |                 |        |        |         |              |       |       |        |
|    | 1130 |                 |        |        |         |              |       |       |        |

Ordering Example

Part Number - L

SSELB10 - 275 (Low Temperature Black Chrome Plating)  
 RSELB10 - 75 (L Type Greased)  
 SSELB10L - 75 (G Type Greased)  
 SSELB10G - 75

Low Temperature Black Chrome Plating and various Grease types available as alternative.  
 For Days to Ship, Price and Performance see P.475

Days to Ship **Configure Online**

Alterations Part Number - L - (MC, RLC, LLC, WC)  
 SSEL2BL16 - 450 - MC

| Alterations             | Code     | Spec.  | Price Adder |
|-------------------------|----------|--|-------------|
| Tapped Hole             | MC       | Changes the rail mounting holes from counterbored holes to tapped holes.                   |             |
| Rail End Cut            | LLC, RLC | Cuts rail ends. Ordering Code LLC  |             |
| Parallel Use of 2 Rails | WC       | Pair variation of Height H between 2 rails is set within 15µm. Rails are shipped in pairs. |             |

### Options for Linear Guide

**Linear Guide Clamps** P537

**Block / Rail Fixing Parts**

- ☛ Rail Push Plates P542
- ☛ Linear Locks P543
- ☛ Linear Guide Lock Units P544
- ☛ Block Derailment Prevention Parts
- ☛ Stopper Bolts P542

☛ L Dimension Configurable Type (1mm Increment)

| H | Unit Price      |          |              |         |
|---|-----------------|----------|--------------|---------|
|   | Stainless Steel |          | Carbon Steel |         |
| 6 | SSELBL          | SSEL2BL  | SELBL        | SEL2BL  |
| 8 | SSELBLZ         | SSEL2BLZ | SELBLZ       | SEL2BLZ |