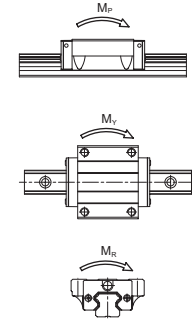
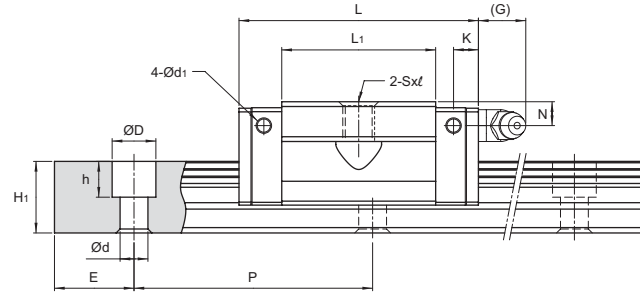
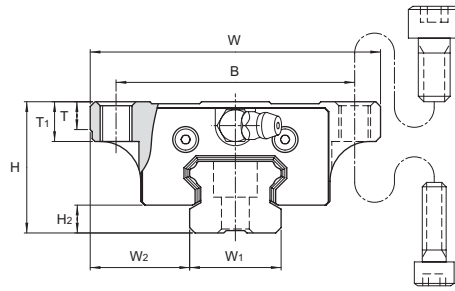


# Dimension Comparison of MSB-TE

Carriage type: Flange  
Medium load

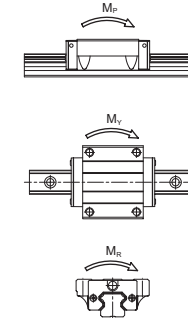
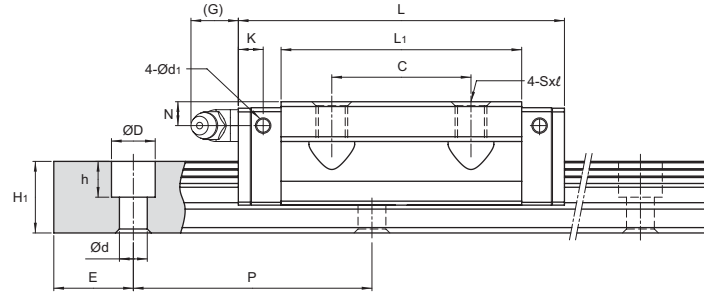
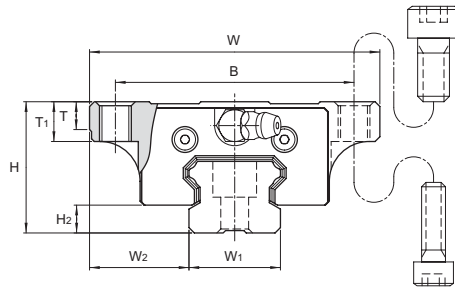


Unit: mm

| Size    | Maker    | Model No. | External dimension |         |          |                |                | Carriage dimension |     |        |                |      |                |      |           | Rail dimension |                |                      |                       |         | Basic load rating |                     | Static moment rating |          |                   | Weight            |                     | Note  | Model No. |                     |                     |             |           |      |             |          |         |
|---------|----------|-----------|--------------------|---------|----------|----------------|----------------|--------------------|-----|--------|----------------|------|----------------|------|-----------|----------------|----------------|----------------------|-----------------------|---------|-------------------|---------------------|----------------------|----------|-------------------|-------------------|---------------------|-------|-----------|---------------------|---------------------|-------------|-----------|------|-------------|----------|---------|
|         |          |           | Height H           | Width W | Length L | W <sub>2</sub> | H <sub>2</sub> | B                  | C   | S×I    | L <sub>1</sub> | T    | T <sub>1</sub> | N    | G         | K              | d <sub>1</sub> | Width W <sub>1</sub> | Height H <sub>1</sub> | Pitch P | E std.            | L <sub>0</sub> max. | D×h×d                | Bolt     | C <sub>D</sub> kN | C <sub>S</sub> kN | M <sub>p</sub> kN-m |       |           | M <sub>y</sub> kN-m | M <sub>R</sub> kN-m | Carriage kg | Rail kg/m |      |             |          |         |
| 15      | AMT      | MSB15TE   | 24                 | 52      | 40       | 18.5           | 4.6            | 41                 | -   | M5×7   | 23.5           | 5    | 7              | 5.5  | 5.5       | 5.1            | 3.3            | 15                   | 12.5                  | 60      | 20                | 2000                | 6×4.5×3.5            | M3       | 4.80              | 7.80              | 0.03                | 0.03  | 0.06      | 0.09                | 1.2                 |             | MSB15TE   |      |             |          |         |
|         | THK      | SR15SB    |                    |         | 41       |                |                |                    |     | 4.5    | φ4.5           | 22.9 | 7              | 7    | 6         | 5.5            | -              |                      |                       |         |                   | -                   | 12.5                 |          | 2500              | 6×4.5×3.5         | 5.39                | 11.10 | 0.02      | 0.02                | 0.04                | 0.15        | 1.2       |      | SR15SB      |          |         |
|         | Hiwin    | AGW15SA   |                    |         | 41       |                |                |                    |     | 5      | M5×7           | 22.8 | 7              | 7    | 5.5       | 5.7            | -              |                      |                       |         |                   | -                   | -                    |          | 13.5              | 2000              | 6×4.5×3.5           | 4.32  | 5.79      | 0.02                | 0.02                | 0.05        | 0.15      | 1.4  | 2 ball rows | AGW15SA  | AGW15SB |
|         |          | AGW15SB   |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NSK      | LS15JL    |                    |         | 40.4     |                |                |                    |     | 4.6    | M5×8           | 23.6 | 8              | 8    | 6         | 3              | -              |                      |                       |         |                   | -                   | -                    |          | 12.5              | 2000              | 6×4.5×3.5           | 4.55  | 8.30      | 0.02                | 0.02                | 0.04        | 0.17      | 1.40 |             | LS15JL   | LS15KL  |
|         |          | LS15KL    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | IKO      | LWETC15   |                    |         | 41       |                |                |                    |     | 5.8    | M5×7           | 22.4 | 7              | 7    | 4.5       | 4              | -              |                      |                       |         |                   | -                   | -                    |          | 14.5              | 2980              | 6.5×4.5×3.6         | 4.33  | 5.68      | 0.02                | 0.02                | 0.05        | 0.11      | 1.57 | 2 ball rows | LWETC15  | LWEC15  |
|         |          | LWEC15    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| NB      | SGL15E   | 40.7      | 4.5                | φ4.5×7  | 22.7     | 7              | 7              | 5                  | 6   | -      | -              | -    | 13.5           | 2000 | 6×4.5×3.5 | 5.00           | 8.23           | 0.03                 | 0.03                  | 0.06    | 0.10              | 1.3                 |                      | SGL15E   |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| INA     | KUVE15EC | 38.9      | 4.3                | φ4.5×7  | 23.1     | 4.5            | 6.1            | 4.05               | 1.5 | -      | -              | -    | 15.1           | 1200 | -         | 4.90           | 8.30           | 0.04                 | 0.04                  | 0.09    | 0.17              | 1.50                |                      | KUVE15EC |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| 20      | AMT      | MSB20TE   | 28                 | 59      | 48       | 19.5           | 6              | 49                 | -   | M6×9   | 29             | 5    | 9              | 5.5  | 12        | 5.9            | 3.3            | 20                   | 15                    | 60      | 20                | 3000                | 9.5×8.5×6            | M4       | 7.00              | 11.50             | 0.06                | 0.06  | 0.12      | 0.20                | 2.00                |             | MSB20TE   |      |             |          |         |
|         | THK      | SR20SB    |                    |         | 48       |                |                |                    |     | 6      | φ5.5           | 27.8 | 9              | 9    | 6         | 12             | -              |                      |                       |         |                   | -                   | 15.5                 |          | 3000              | 9.5×8.5×6         | 7.16                | 14.40 | 0.03      | 0.02                | 0.07                | 0.30        | 2.10      |      | SR20SB      |          |         |
|         | Hiwin    | AGW20SA   |                    |         | 48       |                |                |                    |     | 6      | M6×9           | 26.2 | 9              | 9    | 6         | 12             | -              |                      |                       |         |                   | -                   | -                    |          | 15.5              | 3000              | 9.5×8.5×6           | 6.38  | 9.03      | 0.04                | 0.04                | 0.10        | 0.24      | 2.2  | 2 ball rows | AGW20SA  | AGW20SB |
|         |          | AGW20SB   |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NSK      | LS20JL    |                    |         | 47.2     |                |                |                    |     | 6      | M6×10          | 30   | 10             | 10   | 5.5       | 11             | -              |                      |                       |         |                   | -                   | -                    |          | 15.5              | 3960              | 9.5×8.5×6           | 6.55  | 12.20     | 0.04                | 0.04                | 0.09        | 0.24      | 2.30 |             | LS20JL   | LS20KL  |
|         |          | LS20KL    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | IKO      | LWETC20   |                    |         | 47       |                |                |                    |     | 6      | M6×9           | 24.5 | 9              | 9    | 5.5       | 12             | -              |                      |                       |         |                   | -                   | -                    |          | 16                | 2980              | 9.5×8.5×6           | 6.25  | 7.61      | 0.03                | 0.03                | 0.08        | 0.18      | 2.28 | 2 ball rows | LWETC20  | LWEC20  |
|         |          | LWEC20    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NB       | SGL20E    |                    |         | 47.9     |                |                |                    |     | 6      | φ5.5×9         | 29.5 | 9              | 9    | 6         | 14             | -              |                      |                       |         |                   | -                   | -                    |          | 16                | 3000              | 9.5×8.5×6           | 7.35  | 12.30     | 0.06                | 0.06                | 0.14        | 0.20      | 2.1  |             | SGL20E   |         |
|         | ABBA     | BRS20AS   |                    |         | 57       |                |                |                    |     | 5      | M6×7           | 28   | -              | 7    | 5         | 6.5            | -              |                      |                       |         |                   | -                   | -                    |          | 18                | 4000              | 9.5×8.5×6           | 8.14  | 14.42     | 0.10                | 0.10                | 0.12        | 0.17      | 2.6  |             | BRS20AS  | BRS20CS |
| BRS20CS |          |           |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| INA     | KUVE20EC | 48.8      | 4.6                | φ5.5×9  | 29.4     | 5              | 8.8            | 6                  | 19  | -      | -              | -    | 17             | 1980 | -         | 8.90           | 15.40          | 0.09                 | 0.09                  | 0.19    | 0.28              | 2.20                |                      | KUVE20EC |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| STAR    | 1663-8XX | 55        | 5                  | M6×7.7  | 31.9     | 6              | -              | 3.6                | 8   | -      | -              | -    | 20.55          | 6000 | 9.4×7.5×6 | 9.60           | 13.60          | 0.06                 | 0.06                  | 0.17    | 0.25              | 2.40                |                      | 1663-8XX |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| 25      | AMT      | MSB25TE   | 33                 | 73      | 60.2     | 25             | 7              | 60                 | -   | M8×10  | 38.7           | 7    | 10             | 6    | 12        | 6.3            | 3.3            | 23                   | 18                    | 60      | 20                | 4000                | 11×9×7               | M6       | 11.20             | 18.00             | 0.11                | 0.11  | 0.21      | 0.39                | 3.00                |             | MSB25TE   |      |             |          |         |
|         | THK      | SR25TS    |                    |         | 60       |                |                |                    |     | 7      | φ7             | 35.2 | 10             | 10   | 7         | 12             | -              |                      |                       |         |                   | -                   | 18                   |          | 3000              | 11×9×7            | 11.70               | 22.50 | 0.05      | 0.04                | 0.12                | 0.40        | 2.70      |      | SR25TS      |          |         |
|         | Hiwin    | AGW25SA   |                    |         | 58.7     |                |                |                    |     | 7      | M8×10          | 34.5 | 10             | 10   | 7         | 12             | -              |                      |                       |         |                   | -                   | -                    |          | 18.5              | 4000              | 11×9×7              | 10.59 | 13.05     | 0.08                | 0.08                | 0.16        | 0.44      | 3.0  | 2 ball rows | AGW25SA  | AGW25SB |
|         |          | AGW25SB   |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NSK      | LS25JL    |                    |         | 59.6     |                |                |                    |     | 7      | M8×12          | 38   | 11             | 11   | 7         | 11             | -              |                      |                       |         |                   | -                   | -                    |          | 18                | 3960              | 11×9×7              | 10.60 | 18.60     | 0.07                | 0.07                | 0.14        | 0.44      | 3.10 |             | LS25JL   | LS25KL  |
|         |          | LS25KL    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | IKO      | LWETC25   |                    |         | 59       |                |                |                    |     | 7      | M8×10          | 32   | 10             | 10   | 6.5       | 12             | -              |                      |                       |         |                   | -                   | -                    |          | 19                | 4000              | 11×9×7              | 10.10 | 12.80     | 0.07                | 0.07                | 0.16        | 0.33      | 3.09 | 2 ball rows | LWETC25  | LWEC25  |
|         |          | LWEC25    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NB       | SGL25E    |                    |         | 58.7     |                |                |                    |     | 7      | φ7×10          | 37.7 | 10             | 10   | 6.5       | 14             | -              |                      |                       |         |                   | -                   | -                    |          | 20                | 3000              | 11×9×7              | 11.70 | 19.60     | 0.11                | 0.11                | 0.23        | 0.40      | 3.0  |             | SGL25E   |         |
|         | ABBA     | BRS25AS   |                    |         | 62.5     |                |                |                    |     | 7      | M8×9           | 31.5 | -              | 9    | 4.8       | 6.5            | -              |                      |                       |         |                   | -                   | -                    |          | 22                | 4000              | 11×9×7              | 11.67 | 21.88     | 0.17                | 0.17                | 0.20        | 0.33      | 3.6  |             | BRS25AS  | BRS25CS |
| BRS25CS |          |           |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| INA     | KUVE25EC | 57        | 5.2                | φ7×10   | 36       | 5              | 7.85           | 8                  | 19  | -      | -              | -    | 18.7           | 1980 | -         | 12.50          | 22.20          | 0.16                 | 0.16                  | 0.31    | 0.47              | 2.70                |                      | KUVE25EC |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| STAR    | 1663-2XX | 62        | 6.5                | M8×9.3  | 38.6     | 7.5            | -              | 4.1                | 8   | -      | -              | -    | 24.25          | 6000 | 11×9.2×7  | 15.90          | 18.20          | 0.09                 | 0.09                  | 0.26    | 0.45              | 3.20                |                      | 1663-2XX |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
| 30      | AMT      | MSB30TE   | 42                 | 90      | 68       | 31             | 9.5            | 72                 | -   | M10×10 | 43.3           | 7    | 10             | 8    | 12        | 6.3            | 3.3            | 28                   | 23                    | 80      | 20                | 4000                | 11×9×7               | M6       | 16.40             | 25.90             | 0.19                | 0.19  | 0.36      | 0.65                | 4.40                |             | MSB30TE   |      |             |          |         |
|         | THK      | SR30SB    |                    |         | 68       |                |                |                    |     | 9.5    | φ9             | 40.4 | 10             | 10   | 8         | 12             | -              |                      |                       |         |                   | -                   | 23                   |          | 3000              | 11×9×7            | 17.20               | 32.50 | 0.09      | 0.08                | 0.21                | 0.80        | 4.30      |      | SR30SB      |          |         |
|         | Hiwin    | AGW30SA   |                    |         | 66.4     |                |                |                    |     | 10     | M10×10         | 36.6 | 10             | 10   | 8         | 12             | -              |                      |                       |         |                   | -                   | -                    |          | 24                | 4000              | 11×9×7              | 15.21 | 19.91     | 0.14                | 0.14                | 0.30        | 0.72      | 4.8  | 2 ball rows | AGW30SA  | AGW30SB |
|         |          | AGW30SB   |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NSK      | LS30JL    |                    |         | 67.4     |                |                |                    |     | 9      | M10×18         | 42   | 11             | 11   | 8         | 11             | -              |                      |                       |         |                   | -                   | -                    |          | 23                | 4000              | 11×9×7              | 15.90 | 26.50     | 0.11                | 0.11                | 0.25        | 0.76      | 4.80 |             | LS30JL   | LS30KL  |
|         |          | LS30KL    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | IKO      | LWETC30   |                    |         | 68       |                |                |                    |     | 10     | M10×10         | 36   | 10             | 10   | 8         | 10             | -              |                      |                       |         |                   | -                   | -                    |          | 25                | 3960              | 11×9×7              | 16.80 | 19.50     | 0.13                | 0.13                | 0.30        | 0.58      | 5.09 | 2 ball rows | LWETC30  | LWEC30  |
|         |          | LWEC30    |                    |         |          |                |                |                    |     |        |                |      |                |      |           |                |                |                      |                       |         |                   |                     |                      |          |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | NB       | SGL30E    |                    |         | 68       |                |                |                    |     | 9.5    | φ9×10          | 40   | 10             | 10   | 9         | 14             | -              |                      |                       |         |                   | -                   | -                    |          | 24                | 3000              | 11×9×7              | 13.70 | 22.50     | 0.12                | 0.12                | 0.32        | 0.60      | 4.6  |             | SGL30E   |         |
|         | INA      | KUVE30EC  |                    |         | 67.6     |                |                |                    |     | 6      | φ9×12          | 42   | 6              | 13.8 | 11.25     | 19             | -              |                      |                       |         |                   | -                   | -                    |          | 23.5              | 2000              | -                   | 18.70 | 31.50     | 0.25                | 0.25                | 0.55        | 0.90      | 4.30 |             | KUVE30EC |         |
| STAR    | 1661-7XX | 71.5      | 7                  | M10×11  | 45       | 7              | -              | 6                  | 16  | -      | -              | -    | 28.35          | 6000 | 15×11.5×9 | 15.80          | -              | -                    | -                     | 0.11    | 0.90              | 5.00                |                      | 1661-7XX |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |
|         | 1665-7XX | 75.3      | 6.65               |         |          |                |                | 6.05               | 9.5 | -      | -              | -    |                |      |           | 22.10          | 24.80          | 0.15                 | 0.15                  | 0.43    | 0.80              | 5.00                |                      | 1665-7XX |                   |                   |                     |       |           |                     |                     |             |           |      |             |          |         |

# Dimension Comparison of MSB-E

Carriage type: Flange  
Heavy load

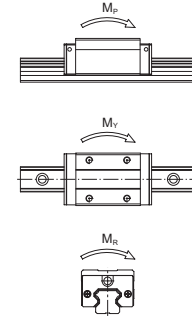
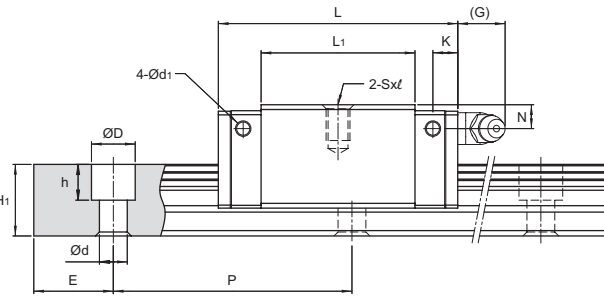
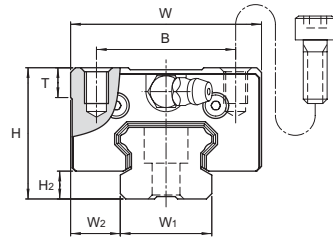


Unit: mm

| Size | Maker    | Model No. | External dimension |         |          |                | Carriage dimension |      |     |        |                |       |                |           |       |       | Rail dimension |                      |                       |         | Basic load rating |                     | Static moment rating |      |              |                          | Weight              |                     | Note  | Model No. |                     |             |           |      |               |          |
|------|----------|-----------|--------------------|---------|----------|----------------|--------------------|------|-----|--------|----------------|-------|----------------|-----------|-------|-------|----------------|----------------------|-----------------------|---------|-------------------|---------------------|----------------------|------|--------------|--------------------------|---------------------|---------------------|-------|-----------|---------------------|-------------|-----------|------|---------------|----------|
|      |          |           | Height H           | Width W | Length L | W <sub>2</sub> | H <sub>2</sub>     | B    | C   | S×I    | L <sub>1</sub> | T     | T <sub>1</sub> | N         | G     | K     | d <sub>1</sub> | Width W <sub>1</sub> | Height H <sub>1</sub> | Pitch P | E std.            | L <sub>3</sub> max. | D×h×d                | Bolt | Dynamic C kN | Static C <sub>0</sub> kN | M <sub>P</sub> kN-m | M <sub>Y</sub> kN-m |       |           | M <sub>R</sub> kN-m | Carriage kg | Rail kg/m |      |               |          |
| 15   | AMT      | MSB15E    | 24                 | 52      | 57       | 18.5           | 4.5                | 41   | 26  | M5×7   | 40.5           | 5     | 7              | 5.5       | 5.5   | 5.1   | 3.3            | 15                   | 12.5                  | 60      | 20                | 2000                | 6×4.5×3.5            | M3   | 7.20         | 13.70                    | 0.08                | 0.08                | 0.10  | 0.21      | 1.20                |             | MSB15E    |      |               |          |
|      | THK      | SR15TB    |                    |         | 57       |                |                    |      |     | 4.5    | ψ4.5           | 39.5  | 7              | 7         | 6     | 5.5   | -              |                      |                       |         |                   |                     | -                    |      | 12.5         | 2500                     | 6×4.5×3.5           | 9.51                | 19.30 | 0.05      | 0.04                | 0.07        | 0.20      | 1.20 |               | SR15TB   |
|      |          | SSR15XTB  |                    |         | 4        |                |                    |      |     | 4      | 4.5            | 39.9  | 7              | 7         | 6     | 5.5   | -              |                      |                       |         |                   |                     | -                    |      | 12.5         | 2500                     | 7.5×5.3×4.5         | 14.70               | 16.50 | 0.05      | 0.04                | 0.07        | 0.19      | 1.20 | Retainer type | SSR15XTB |
|      | Hiwin    | AGW15CA   |                    |         | 56.9     |                |                    |      |     | 5      | M5×7           | 38.7  | 7              | 7         | 5.5   | 5.7   | -              |                      |                       |         |                   |                     | -                    |      | 13.5         | 2000                     | 6×4.5×3.5           | 6.28                | 9.91  | 0.06      | 0.06                | 0.08        | 0.23      | 1.4  | 2 ball rows   | AGW15CA  |
|      |          | AGW15CB   |                    |         | 56.8     |                |                    |      |     | 4.6    | ψ4.5×7         | 40    | 8              | 8         | 6     | 3     | -              |                      |                       |         |                   |                     | -                    |      | 12.5         | 2000                     | 6×4.5×3.5           | 6.70                | 12.50 | 0.05      | 0.05                | 0.07        | 0.26      | 1.40 |               | AGW15CB  |
|      | NSK      | LS15EL    |                    |         | 56.8     |                |                    |      |     | 4.6    | ψ4.5×7         | 40    | 8              | 8         | 6     | 3     | -              |                      |                       |         |                   |                     | -                    |      | 12.5         | 2000                     | 6×4.5×3.5           | 6.70                | 12.50 | 0.05      | 0.05                | 0.07        | 0.26      | 1.40 |               | LS15EL   |
|      |          | LS15FL    |                    |         | 56.8     |                |                    |      |     | 4.6    | ψ4.5×7         | 40    | 8              | 8         | 6     | 3     | -              |                      |                       |         |                   |                     | -                    |      | 12.5         | 2000                     | 6×4.5×3.5           | 6.70                | 12.50 | 0.05      | 0.05                | 0.07        | 0.26      | 1.40 |               | LS15FL   |
|      | IKO      | LWET15    |                    |         | 57       |                |                    |      |     | 5.8    | ψ4.5×7         | 38.4  | 7              | 7         | 4.5   | 4     | -              |                      |                       |         |                   |                     | -                    |      | 14.5         | 2980                     | 6.5×4.5×3.6         | 6.20                | 9.74  | 0.06      | 0.06                | 0.08        | 0.18      | 1.57 | 2 ball rows   | LWET15   |
|      |          | LWE15     |                    |         | 57       |                |                    |      |     | 5.8    | ψ4.5×7         | 38.4  | 7              | 7         | 4.5   | 4     | -              |                      |                       |         |                   |                     | -                    |      | 14.5         | 2980                     | 6.5×4.5×3.6         | 6.20                | 9.74  | 0.06      | 0.06                | 0.08        | 0.18      | 1.57 | 2 ball rows   | LWE15    |
|      | NB       | SGL15TE   |                    |         | 56.5     |                |                    |      |     | 4.5    | ψ4.5×7         | 38.5  | 7              | 7         | 5     | 6     | -              |                      |                       |         |                   |                     | -                    |      | 13.5         | 2000                     | 6×4.5×3.5           | 8.60                | 14.20 | 0.07      | 0.07                | 0.10        | 0.20      | 1.3  |               | SGL15TE  |
| INA  | KUVE15E  | 55.6      | 4.3                | ψ4.5×7  | 39.8     | 4.5            | 6.1                | 4.05 | 1.5 | -      | -              | 15.1  | 1200           | -         | 7.20  | 14.50 | 0.10           | 0.10                 | 0.15                  | 0.26    | 1.50              |                     | KUVE15E              |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| 20   | AMT      | MSB20E    | 28                 | 59      | 67       | 19.5           | 6                  | 49   | 32  | M6×9   | 48             | 5     | 9              | 5.5       | 12    | 5.9   | 3.3            | 20                   | 15.5                  | 60      | 20                | 3000                | 9.5×8.5×6            | M5   | 10.00        | 19.20                    | 0.14                | 0.14                | 0.19  | 0.34      | 2.00                |             | MSB20E    |      |               |          |
|      | THK      | SR20TB    |                    |         | 66.5     |                |                    |      |     | 6      | ψ5.5           | 46.7  | 9              | 9         | 6     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3000                     | 9.5×8.5×6           | 12.50               | 25.20 | 0.07      | 0.06                | 0.12        | 0.40      | 2.10 | Retainer type | SR20TB   |
|      |          | SSR20XTB  |                    |         | 66.5     |                |                    |      |     | 6      | 46.6           | 9     | 9              | 5.5       | 12    | 4.8   | 3              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3000                     | 9.5×8.5×6           | 19.60               | 23.40 | 0.07      | 0.06                | 0.12        | 0.31      | 2.10 | Retainer type | SSR20XTB |
|      | Hiwin    | AGW20CA   |                    |         | 65.9     |                |                    |      |     | 6      | M6×9           | 44.1  | 9              | 9         | 6     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3000                     | 9.5×8.5×6           | 9.52                | 14.22 | 0.10      | 0.10                | 0.16        | 0.36      | 2.2  | 2 ball rows   | AGW20CA  |
|      |          | AGW20CB   |                    |         | 65.9     |                |                    |      |     | 6      | ψ5.5×9         | 44.1  | 9              | 9         | 6     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3000                     | 9.5×8.5×6           | 9.52                | 14.22 | 0.10      | 0.10                | 0.16        | 0.36      | 2.2  | 2 ball rows   | AGW20CB  |
|      | NSK      | LS20EL    |                    |         | 65.2     |                |                    |      |     | 6      | M6×10          | 48    | 10             | 10        | 5.5   | 11    | -              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3960                     | 9.5×8.5×6           | 8.90                | 17.50 | 0.09      | 0.09                | 0.13        | 0.35      | 2.30 |               | LS20EL   |
|      |          | LS20FL    |                    |         | 65.2     |                |                    |      |     | 6      | ψ5.5×9         | 48    | 10             | 10        | 5.5   | 11    | -              |                      |                       |         |                   |                     | -                    |      | 15.5         | 3960                     | 9.5×8.5×6           | 8.90                | 17.50 | 0.09      | 0.09                | 0.13        | 0.35      | 2.30 |               | LS20FL   |
|      | IKO      | LWET20    |                    |         | 66.5     |                |                    |      |     | 6      | M6×9           | 44    | 9              | 9         | 5.5   | 12    | -              |                      |                       |         |                   |                     | -                    |      | 16           | 2980                     | 9.5×8.5×6           | 9.36                | 13.90 | 0.10      | 0.10                | 0.15        | 0.30      | 2.28 | 2 ball rows   | LWET20   |
|      |          | LWE20     |                    |         | 66.5     |                |                    |      |     | 6      | ψ5.5×9         | 44    | 9              | 9         | 5.5   | 12    | -              |                      |                       |         |                   |                     | -                    |      | 16           | 2980                     | 9.5×8.5×6           | 9.36                | 13.90 | 0.10      | 0.10                | 0.15        | 0.30      | 2.28 | 2 ball rows   | LWE20    |
|      | NB       | SGL20TE   |                    |         | 65.8     |                |                    |      |     | 6      | ψ5.5×9         | 47.4  | 9              | 9         | 6     | 14    | -              |                      |                       |         |                   |                     | -                    |      | 16           | 3000                     | 9.5×8.5×6           | 12.70               | 21.60 | 0.16      | 0.16                | 0.24        | 0.30      | 2.1  |               | SGL20TE  |
| INA  | KUVE20E  | 69.8      | 4.6                | ψ5.5×9  | 50.4     | 5              | 8.8                | 6    | 19  | -      | -              | 17    | 1980           | -         | 13.10 | 27.00 | 0.24           | 0.24                 | 0.33                  | 0.43    | 2.20              |                     | KUVE20E              |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| STAR | 1693-8XX | 72.5      | 5                  | M6×7.7  | 49.6     | 6              | -                  | 3.6  | 8   | -      | -              | 20.55 | 6000           | 9.4×7.5×6 | 14.50 | 24.40 | 0.17           | 0.17                 | 0.31                  | 0.40    | 2.40              |                     | 1693-8XX             |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| 25   | AMT      | MSB25E    | 33                 | 73      | 82       | 25             | 7                  | 60   | 35  | M8×10  | 60.5           | 7     | 10             | 6         | 12    | 6.3   | 3.3            | 23                   | 18                    | 60      | 20                | 4000                | 11×9×7               | M6   | 16.00        | 30.00                    | 0.28                | 0.28                | 0.35  | 0.60      | 3.00                |             | MSB25E    |      |               |          |
|      | THK      | SR25TB    |                    |         | 83       |                |                    |      |     | 7      | ψ7             | 59    | 10             | 10        | 7     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 18           | 3000                     | 11×9×7              | 20.30               | 39.50 | 0.15      | 0.12                | 0.21        | 0.60      | 2.70 | Retainer type | SR25TB   |
|      |          | SSR25XTB  |                    |         | 83       |                |                    |      |     | 6.8    | 59.8           | 10    | 10             | 6         | 12    | 4.6   | 3              |                      |                       |         |                   |                     | -                    |      | 18           | 3000                     | 11×9×7              | 31.50               | 36.40 | 0.15      | 0.12                | 0.21        | 0.53      | 2.70 | Retainer type | SSR25XTB |
|      | Hiwin    | AGW25CA   |                    |         | 82.5     |                |                    |      |     | 7      | M8×10          | 58.3  | 10             | 10        | 7     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 18.5         | 4000                     | 11×9×7              | 15.21               | 22.46 | 0.21      | 0.21                | 0.28        | 0.68      | 3.0  | 2 ball rows   | AGW25CA  |
|      |          | AGW25CB   |                    |         | 82.5     |                |                    |      |     | 7      | ψ7×10          | 60    | 11             | 11        | 7     | 11    | -              |                      |                       |         |                   |                     | -                    |      | 18           | 3960                     | 11×9×7              | 14.40               | 29.10 | 0.21      | 0.20                | 0.25        | 0.66      | 3.10 |               | AGW25CB  |
|      | NSK      | LS25EL    |                    |         | 81.6     |                |                    |      |     | 7      | M8×12          | 60    | 11             | 11        | 7     | 11    | -              |                      |                       |         |                   |                     | -                    |      | 18           | 3960                     | 11×9×7              | 14.40               | 29.10 | 0.21      | 0.20                | 0.25        | 0.66      | 3.10 |               | LS25EL   |
|      |          | LS25FL    |                    |         | 81.6     |                |                    |      |     | 7      | ψ7×10          | 60    | 11             | 11        | 7     | 11    | -              |                      |                       |         |                   |                     | -                    |      | 18           | 3960                     | 11×9×7              | 14.40               | 29.10 | 0.21      | 0.20                | 0.25        | 0.66      | 3.10 |               | LS25FL   |
|      | IKO      | LWET25    |                    |         | 83       |                |                    |      |     | 7      | M8×10          | 56    | 10             | 10        | 6.5   | 12    | -              |                      |                       |         |                   |                     | -                    |      | 19           | 4000                     | 11×9×7              | 14.50               | 21.90 | 0.20      | 0.20                | 0.27        | 0.55      | 3.09 | 2 ball rows   | LWET25   |
|      |          | LWE25     |                    |         | 83       |                |                    |      |     | 7      | ψ7×10          | 56    | 10             | 10        | 6.5   | 12    | -              |                      |                       |         |                   |                     | -                    |      | 19           | 4000                     | 11×9×7              | 14.50               | 21.90 | 0.20      | 0.20                | 0.27        | 0.55      | 3.09 | 2 ball rows   | LWE25    |
|      | NB       | SGL25TE   |                    |         | 80.2     |                |                    |      |     | 7      | ψ7×10          | 59    | 10             | 10        | 6.5   | 14    | -              |                      |                       |         |                   |                     | -                    |      | 20           | 3000                     | 11×9×7              | 20.10               | 34.30 | 0.27      | 0.27                | 0.39        | 0.60      | 3.0  |               | SGL25TE  |
| ABBA | BRS25A   | 88        | 7                  | M8×9    | 57       | -              | 9                  | 4.8  | 6.5 | -      | -              | 22    | 4000           | 11×9×7    | 20.99 | 39.24 | 0.31           | 0.30                 | 0.35                  | 0.50    | 3.6               |                     | BRS25A               |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
|      | BRS25C   | 88        | 7                  | ψ7×9    | 57       | -              | 9                  | 4.8  | 6.5 | -      | -              | 22    | 4000           | 11×9×7    | 20.99 | 39.24 | 0.31           | 0.30                 | 0.35                  | 0.50    | 3.6               |                     | BRS25C               |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| INA  | KUVE25E  | 81.7      | 5.2                | ψ7×10   | 60.7     | 5              | 7.85               | 8    | 19  | -      | -              | 18.7  | 1980           | -         | 17.90 | 37.00 | 0.40           | 0.40                 | 0.51                  | 0.75    | 2.70              |                     | KUVE25E              |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| STAR | 1693-2XX | 81        | 6.5                | M8×9.3  | 57.8     | 7.5            | -                  | 4.1  | 8   | -      | -              | 24.25 | 6000           | 11×9.2×7  | 22.80 | 30.40 | 0.24           | 0.24                 | 0.43                  | 0.60    | 3.20              |                     | 1693-2XX             |      |              |                          |                     |                     |       |           |                     |             |           |      |               |          |
| 30   | AMT      | MSB30E    | 42                 | 90      | 96.7     | 31             | 9                  | 72   | 40  | M10×10 | 72             | 7     | 10             | 8         | 12    | 6.3   | 3.3            | 28                   | 23                    | 80      | 20                | 4000                | 11×9×7               | M6   | 23.40        | 43.10                    | 0.49                | 0.49                | 0.60  | 1.08      | 4.40                |             | MSB30E    |      |               |          |
|      | THK      | SR30TB    |                    |         | 97       |                |                    |      |     | 9.5    | ψ9             | 69.3  | 10             | 10        | 8     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 23           | 3000                     | 11×9×7              | 30.00               | 56.80 | 0.25      | 0.21                | 0.36        | 1.10      | 4.30 |               | SR30TB   |
|      | Hiwin    | AGW30CA   |                    |         | 95       |                |                    |      |     | 10     | M10×10         | 65.2  | 10             | 10        | 8     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 24           | 4000                     | 11×9×7              | 24.23               | 33.26 | 0.35      | 0.35                | 0.50        | 1.16      | 4.8  | 2 ball rows   | AGW30CA  |
|      |          | AGW30CB   |                    |         | 95       |                |                    |      |     | 10     | ψ9×10          | 65.2  | 10             | 10        | 8     | 12    | -              |                      |                       |         |                   |                     | -                    |      | 24           | 4000                     | 11×9×7              | 24.23               | 33.26 | 0.35      | 0.35                | 0.50        | 1.16      | 4.8  | 2 ball rows   | AGW30CB  |
|      | NSK      | LS30EL    |                    |         | 96.4     |                |                    |      |     | 9      | M10×18         | 71    | 11             | 11        | 8     | 11    | -              |                      |                       |         |                   |                     | -                    |      | 23           | 4000                     | 11×9×7              | 23.40               | 43.00 | 0.36      | 0.36                | 0.47        | 1.20      | 4.80 |               | LS30EL   |
|      |          | LS30FL    |                    |         | 96.4     |                |                    |      |     | 9      | ψ9×12          | 71    | 11             | 11        | 8     | 11    | -              |                      |                       |         |                   |                     | -                    |      | 23           | 4000                     | 11×9×7              | 23.40               | 43.00 | 0.36      | 0.36                | 0.47        | 1.20      | 4.80 |               | LS30FL   |
|      | IKO      | LWET30    |                    |         | 97       |                |                    |      |     | 10     | M10×10         | 64.8  | 10             | 10        | 8     | 10    | -              |                      |                       |         |                   |                     | -                    |      | 25           | 3960                     | 11×9×7              | 23.60               | 32.50 | 0.34      | 0.34                | 0.50        | 0.99      | 5.09 | 2 ball rows   | LWET30   |
|      |          | LWE30     |                    |         | 97       |                |                    |      |     | 10     | ψ9×10          | 64.8  | 10             | 10        | 8     | 10    | -              |                      |                       |         |                   |                     | -                    |      | 25           | 3960                     | 11×9×7              | 23.60               | 32.50 | 0.34      | 0.34                | 0.50        | 0.99      | 5.09 | 2 ball rows   | LWE30    |
|      | NB       | SGL30TE   |                    |         | 95.7     |                |                    |      |     | 9.5    | ψ9×10          | 67.7  | 10             | 10        | 9     | 14    | -              |                      |                       |         |                   |                     | -                    |      | 24           | 3000                     | 11×9×7              | 23.50               | 39.70 | 0.31      | 0.31                | 0.55        | 1.00      | 4.6  |               | SGL30TE  |
|      | INA      | KUVE30E   |                    |         | 97.6     |                |                    |      |     | 6      | ψ9×12          | 72    | 6              | 13.8      | 11.25 | 19    | -              |                      |                       |         |                   |                     | -                    |      | 23.5         | 2000                     | -                   | 27.50               | 55.00 | 0.70      | 0.70                | 0.97        | 1.45      | 4.3  |               | KUVE30E  |

# Dimension Comparison of MSB-TS

Carriage type: Square  
Medium load



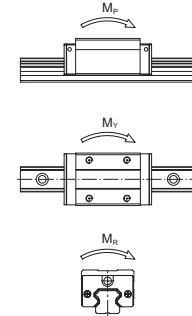
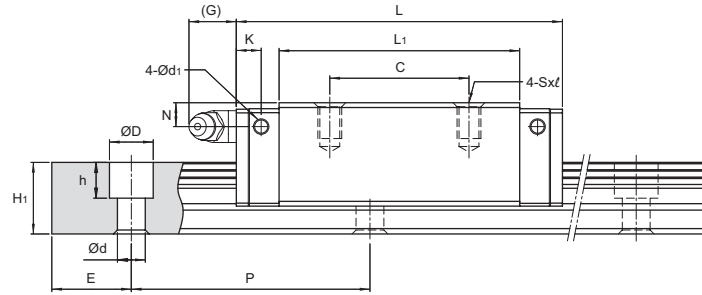
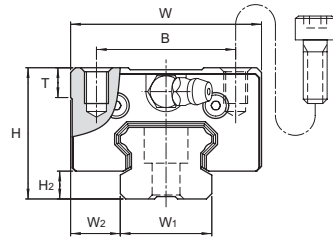
Unit: mm

| Size    | Maker    | Model No. | External dimension |         |          |                |                | Carriage dimension |       |         |                |      |       |     | Rail dimension |                |                      |                       | Basic load rating |        | Static moment rating |       |          | Weight       |                          | Note        | Model No. |                     |                     |                     |             |           |      |        |               |           |
|---------|----------|-----------|--------------------|---------|----------|----------------|----------------|--------------------|-------|---------|----------------|------|-------|-----|----------------|----------------|----------------------|-----------------------|-------------------|--------|----------------------|-------|----------|--------------|--------------------------|-------------|-----------|---------------------|---------------------|---------------------|-------------|-----------|------|--------|---------------|-----------|
|         |          |           | Height H           | Width W | Length L | W <sub>2</sub> | H <sub>2</sub> | B                  | C     | S×L     | L <sub>1</sub> | T    | N     | G   | K              | d <sub>1</sub> | Width W <sub>1</sub> | Height H <sub>1</sub> | Pitch P           | E std. | L <sub>0</sub> max.  | D×h×d | Bolt     | Dynamic C kN | Static C <sub>0</sub> kN |             |           | M <sub>P</sub> kN-m | M <sub>Y</sub> kN-m | M <sub>R</sub> kN-m | Carriage kg | Rail kg/m |      |        |               |           |
| 15      | AMT      | MSB15TS   | 24                 | 34      | 40       | 9.5            | 26             | -                  | M4×6  | 23.5    | 6              | 5.5  | 5.5   | 5.1 | 3.3            | 15             | 12.5                 | 60                    | 20                | 2000   | 6×4.5×3.5            | M3    | 4.80     | 7.80         | 0.03                     | 0.03        | 0.06      | 0.09                | 1.2                 |                     | MSB15TS     |           |      |        |               |           |
|         | THK      | SR15V     |                    |         | 41       |                |                |                    | 4.5   | M4×7    | 22.9           | 6    | 6     | 5.5 | -              |                |                      |                       |                   |        |                      |       | -        | 12.5         | 2500                     | 6×4.5×3.5   | M4        | 5.39                | 11.10               | 0.02                | 0.02        | 0.04      | 0.12 | 1.2    | Retainer type | SR15V     |
|         |          | SSR15XV   |                    |         | 41       |                |                |                    | 5     | M4×7    | 23.3           | 7    | 4.5   | -   | 4              |                |                      |                       |                   |        |                      |       | 3        | 12.5         | 2980                     | 7.5×5.3×4.5 | M3        | 9.10                | 9.70                | 0.02                | 0.02        | 0.04      | 0.08 | 1.2    | 2 ball rows   | SSR15XV   |
|         | Hiwin    | AGH15SA   |                    |         | 41       |                |                |                    | 5     | M4×7    | 22.8           | 6    | 5.5   | 5.7 | -              |                |                      |                       |                   |        |                      |       | -        | 13.5         | 2000                     | 6×4.5×3.5   | M4        | 4.32                | 5.79                | 0.02                | 0.02        | 0.05      | 0.12 | 1.4    | 2 ball rows   | AGH15SA   |
|         | NSK      | LS15CL    |                    |         | 40.4     |                |                |                    | 4.6   | M4×6    | 23.6           | 10   | 6     | 3   | -              |                |                      |                       |                   |        |                      |       | -        | 12.5         | 2000                     | 6×4.5×3.5   | M3        | 4.55                | 8.30                | 0.02                | 0.02        | 0.04      | 0.14 | 1.4    | 2 ball rows   | LS15CL    |
|         | IKO      | LWESC15   |                    |         | 41       |                |                |                    | 5.8   | M4×7    | 22.4           | -    | 4.5   | 4   | -              |                |                      |                       |                   |        |                      |       | -        | 14.5         | 2980                     | 6×4.5×3.6   | M3        | 4.33                | 5.68                | 0.02                | 0.02        | 0.05      | 0.09 | 1.6    | 2 ball rows   | LWESC15   |
|         | NB       | SGL15F    |                    |         | 40.7     |                |                |                    | 4.5   | M4×7    | 22.7           | 6    | 5     | 6   | -              |                |                      |                       |                   |        |                      |       | -        | 13.5         | 2000                     | 6×4.5×3.5   | M4        | 5.00                | 8.23                | 0.03                | 0.03        | 0.06      | 0.10 | 1.3    |               | SGL15F    |
|         | TSUBAKI  | U15SER    |                    |         | 46       |                |                |                    | 4.6   | M4×5    | 25             | 6    | 3.5   | 0   | -              |                |                      |                       |                   |        |                      |       | -        | 17           | 1500                     | 6×9×3.5     | M3        | 5.37                | 6.67                | 0.02                | 0.02        | 0.07      | 0.11 | 1.7    |               | U15SER    |
|         | ABBA     | BRS15BS   |                    |         | 47.6     |                |                |                    | 4.6   | M4×5.6  | 21.6           | -    | 4.3   | 5   | -              |                |                      |                       |                   |        |                      |       | -        | 14           | 4000                     | 7.5×5.3×4.5 | M4        | 5.00                | 9.32                | 0.05                | 0.05        | 0.06      | 0.10 | 1.4    |               | BRS15BS   |
|         | SBC      | SBS15SV   |                    |         | 42.9     |                |                |                    | 2.65  | M4×5    | 22.9           | 6    | 4     | 5   | -              |                |                      |                       |                   |        |                      |       | -        | 15           | 3000                     | 7.5×5.3×4.5 | M4        | 4.49                | 7.24                | 0.03                | 0.03        | 0.04      | 0.11 | 1.5    |               | SBS15SV   |
|         | INA      | KUVE15ESC |                    |         | 38.9     |                |                |                    | 4.3   | M4×6    | 23.1           | 4.5  | 4.05  | 1.5 | -              |                |                      |                       |                   |        |                      |       | -        | 15.1         | 1200                     | -           | M4        | 4.90                | 8.30                | 0.04                | 0.04        | 0.09      | 0.13 | 1.5    |               | KUVE15ESC |
|         | STAR     | 1666-1XX  |                    |         | 44.7     |                |                |                    | 4.1   | M4×6    | 25.7           | 5    | 3.2   | 1.6 | -              |                |                      |                       |                   |        |                      |       | -        | 16.2         | 4000                     | 7.4×6×4.4   | M4        | 6.80                | 8.10                | 0.03                | 0.03        | 0.08      | 0.10 | 1.4    |               | 1666-1XX  |
|         | 1662-1XX | 40.5      | 4.2                | M4×6    | 25.7     | 5              | 4              | 8                  | -     | -       | 16.2           | 3900 | -     | M4  | 7.16           | -              | -                    | -                     | 0.02              | 0.12   | 1.4                  |       | 1662-1XX |              |                          |             |           |                     |                     |                     |             |           |      |        |               |           |
| 20      | AMT      | MSB20TS   | 28                 | 42      | 48       | 11             | 32             | -                  | M5×7  | 29      | 6              | 5.5  | 12    | 5.9 | 3.3            | 20             | 15                   | 60                    | 20                | 3000   | 9.5×8.5×6            | M5    | 7.00     | 11.50        | 0.06                     | 0.06        | 0.12      | 0.16                | 2.0                 |                     | MSB20TS     |           |      |        |               |           |
|         | THK      | SR20V     |                    |         | 48       |                |                |                    | 6     | M5×8    | 27.8           | 7.5  | 6     | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 15.5         | 3000                     | 9.5×8.5×6   | M5        | 7.16                | 14.40               | 0.03                | 0.02        | 0.07      | 0.20 | 2.1    | Retainer type | SR20V     |
|         |          | SSR20XV   |                    |         | 47.7     |                |                |                    | 6     | M5×8    | 28.5           | 5.5  | 5     | 4.8 | 3              |                |                      |                       |                   |        |                      |       | -        | 15.5         | 3000                     | 9.5×8.5×6   | M5        | 13.4                | -                   | -                   | -           | 0.14      | 0.20 | 2.1    | 2 ball rows   | SSR20XV   |
|         | Hiwin    | AGH20SA   |                    |         | 48       |                |                |                    | 6     | M5×8    | 26.2           | 7.5  | 6     | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 15.5         | 3000                     | 9.5×8.5×6   | M5        | 6.38                | 9.03                | 0.04                | 0.04        | 0.10      | 0.20 | 2.2    | 2 ball rows   | AGH20SA   |
|         | NSK      | LS20CL    |                    |         | 47.2     |                |                |                    | 6     | M5×7    | 30             | 12   | 5.5   | 11  | -              |                |                      |                       |                   |        |                      |       | -        | 15.5         | 3960                     | 9.5×8.5×6   | M5        | 6.55                | 12.20               | 0.04                | 0.04        | 0.09      | 0.19 | 2.3    |               | LS20CL    |
|         | IKO      | LWESC20   |                    |         | 47       |                |                |                    | 6     | M5×8    | 24.5           | -    | 5.5   | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 16           | 2980                     | 9.5×8.5×6   | M5        | 6.25                | 7.61                | 0.03                | 0.03        | 0.08      | 0.15 | 2.3    | 2 ball rows   | LWESC20   |
|         | NB       | SGL20F    |                    |         | 47.9     |                |                |                    | 6     | M5×8    | 29.5           | 7.5  | 6     | 14  | -              |                |                      |                       |                   |        |                      |       | -        | 16           | 3000                     | 9.5×8.5×6   | M5        | 7.35                | 12.30               | 0.06                | 0.06        | 0.14      | 0.20 | 2.1    |               | SGL20F    |
|         | TSUBAKI  | U20SER    |                    |         | 53       |                |                |                    | 4     | M5×7    | 30             | 7.5  | 4     | 0   | -              |                |                      |                       |                   |        |                      |       | -        | 19.5         | 3000                     | 9.5×12×6    | M6        | 8.63                | 10.42               | 0.04                | 0.04        | 0.14      | 0.18 | 2.5    |               | U20SER    |
|         | ABBA     | BRS20BS   |                    |         | 57       |                |                |                    | 5     | M5×7    | 28             | -    | 5     | 6.5 | -              |                |                      |                       |                   |        |                      |       | -        | 18           | 4000                     | 9.5×8.5×6   | M5        | 8.14                | 14.42               | 0.10                | 0.10        | 0.12      | 0.17 | 2.6    |               | BRS20BS   |
|         | INA      | KUVE20ESC |                    |         | 48.8     |                |                |                    | 4.6   | M5×7.5  | 29.4           | 5    | 6     | 19  | -              |                |                      |                       |                   |        |                      |       | -        | 17           | 1980                     | -           | M5        | 8.90                | 15.40               | 0.09                | 0.09        | 0.19      | 0.22 | 2.2    |               | KUVE20ESC |
|         | STAR     | 1664-8XX  |                    |         | 55       |                |                |                    | 5     | M5×6.3  | 31.9           | 6    | 3.6   | 8   | -              |                |                      |                       |                   |        |                      |       | -        | 20.55        | 6000                     | 9.4×7.5×6   | M5        | 9.60                | 13.60               | 0.06                | 0.06        | 0.17      | 0.20 | 2.4    |               | 1664-8XX  |
|         | 25       | AMT       |                    |         | MSB25TS  |                |                |                    | 33    | 48      | 60.2           | 12.5 | 35    | -   | M6×9           |                |                      |                       |                   |        |                      |       | 38.7     | 8            | 6                        | 12          | 6.3       | 3.3                 | 23                  | 18                  | 60          | 20        | 4000 | 11×9×7 | M6            | 11.20     |
| THK     |          | SR25V     | 60                 | 7       | M6×9     | 35.2           | 8              | 7                  |       |         | 12             |      |       |     | -              | -              | 18                   | 3000                  | 11×9×7            | M6     | 11.70                | 22.50 | 0.05     | 0.04         | 0.12                     | 0.3         | 2.7       | Retainer type       |                     |                     |             |           |      |        |               | SR25V     |
|         |          | SSR25XV   | 60                 | 6.8     | M6×9     | 36.8           | 9              | 6                  |       |         | 12             |      |       |     | 4.6            | 3              | 18                   | 21.70                 | -                 | M6     | 21.70                | -     | -        | -            | 0.23                     | 0.27        | 2.7       | 2 ball rows         |                     |                     |             |           |      |        |               | SSR25XV   |
| Hiwin   |          | AGH25SA   | 58.7               | 7       | M6×9     | 34.5           | 8              | 7                  |       |         | 12             |      |       |     | -              | -              | 18.5                 | 4000                  | 11×9×7            | M6     | 10.59                | 13.05 | 0.08     | 0.08         | 0.16                     | 0.34        | 3.0       |                     |                     |                     |             |           |      |        |               | AGH25SA   |
| NSK     |          | LS25CL    | 59.6               | 7       | M6×9     | 38             | 12             | 7                  |       |         | 11             |      |       |     | -              | -              | 18                   | 3960                  | 11×9×7            | M6     | 10.60                | 18.60 | 0.07     | 0.07         | 0.14                     | 0.34        | 3.1       | 2 ball rows         |                     |                     |             |           |      |        |               | LS25CL    |
| IKO     |          | LWESC25   | 59                 | 7       | M6×9     | 32             | -              | 6.5                |       |         | 12             |      |       |     | -              | -              | 19                   | 4000                  | 11×9×7            | M6     | 10.10                | 12.80 | 0.07     | 0.07         | 0.16                     | 0.26        | 3.1       |                     |                     |                     |             |           |      |        |               | LWESC25   |
| NB      |          | SGL25F    | 58.7               | 7       | M6×9     | 37.7           | 8              | 6.5                |       |         | 14             |      |       |     | -              | -              | 20                   | 3000                  | 11×9×7            | M6     | 11.70                | 19.60 | 0.11     | 0.11         | 0.23                     | 0.30        | 3.0       |                     |                     |                     |             |           |      |        |               | SGL25F    |
| TSUBAKI |          | U25SER    | 61                 | 4       | M6×8     | 36             | 8              | 5.5                |       |         | 12             |      |       |     | -              | -              | 21.5                 | 3000                  | 11×12.5×7         | M6     | 12.74                | 15.01 | 0.08     | 0.08         | 0.24                     | 0.29        | 3.2       |                     |                     |                     |             |           |      |        |               | U25SER    |
| ABBA    |          | BRS25BS   | 62.5               | 7       | M6×8.4   | 31.5           | -              | 4.8                |       |         | 6.5            |      |       |     | -              | -              | 22                   | 4000                  | 11×9×7            | M6     | 11.67                | 21.88 | 0.17     | 0.17         | 0.20                     | 0.21        | 3.6       |                     |                     |                     |             |           |      |        |               | BRS25BS   |
| SBC     |          | SBS25SV   | 62.6               | 5       | M6×8     | 35.2           | 8              | 5.2                |       |         | 9.8            |      |       |     | -              | -              | 21.8                 | 4000                  | 11×9×7            | M6     | 11.30                | 21.13 | 0.17     | 0.17         | 0.19                     | 0.32        | 0.3       |                     |                     |                     |             |           |      |        |               | SBS25SV   |
| INA     |          | KUVE25ESC | 57                 | 5.2     | M6×10    | 36             | 5              | 8                  |       |         | 19             |      |       |     | -              | -              | 18.7                 | 1980                  | -                 | M6     | 12.50                | 22.20 | 0.16     | 0.16         | 0.31                     | 0.35        | 2.7       |                     |                     |                     |             |           |      |        |               | KUVE25ESC |
| STAR    |          | 1664-2XX  | 62                 | 6.5     | M6×7     | 38.6           | 7.5            | 4.1                |       |         | 8              |      |       |     | -              | -              | 24.25                | 6000                  | 11×9.2×7          | M6     | 15.90                | 18.20 | 0.09     | 0.09         | 0.26                     | 0.30        | 3.2       |                     |                     |                     |             |           |      |        |               | 1664-2XX  |
| 30      | AMT      | MSB30TS   | 42                 | 60      | 68       | 16             | 40             | -                  | M8×12 | 43.3    | 8              | 8    | 12    | 6.3 | 3.3            | 28             | 23                   | 80                    | 20                | 4000   | 11×9×7               | M6    | 16.40    | 25.90        | 0.19                     | 0.19        | 0.36      | 0.52                | 4.4                 |                     | MSB30TS     |           |      |        |               |           |
|         | THK      | SR30V     |                    |         | 68       |                |                |                    | 9.5   | M8×12   | 40.4           | 9    | 8     | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 23           | 3000                     | 11×9×7      | M6        | 17.20               | 32.50               | 0.09                | 0.08        | 0.21      | 0.50 | 4.3    |               | SR30V     |
|         | Hiwin    | AGH30SA   |                    |         | 66.4     |                |                |                    | 10    | M8×12   | 36.6           | 9    | 8     | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 24           | 4000                     | 11×9×7      | M6        | 15.21               | 19.91               | 0.14                | 0.14        | 0.30      | 0.57 | 4.8    | 2 ball rows   | AGH30SA   |
|         | NSK      | LS30CL    |                    |         | 67.4     |                |                |                    | 9     | M8×12   | 42             | 13   | 8     | 11  | -              |                |                      |                       |                   |        |                      |       | -        | 23           | 4000                     | 11×9×7      | M6        | 15.90               | 26.50               | 0.11                | 0.11        | 0.25      | 0.58 | 4.8    |               | LS30CL    |
|         | IKO      | LWESC30   |                    |         | 68       |                |                |                    | 10    | M8×12   | 36             | -    | 8     | 10  | -              |                |                      |                       |                   |        |                      |       | -        | 25           | 3960                     | 11×9×7      | M6        | 16.80               | 19.50               | 0.13                | 0.13        | 0.30      | 0.46 | 5.1    | 2 ball rows   | LWESC30   |
|         | NB       | SGL30F    |                    |         | 68       |                |                |                    | 9.5   | M8×12   | 40             | 9    | 9     | 14  | -              |                |                      |                       |                   |        |                      |       | -        | 24           | 3000                     | 11×9×7      | M6        | 13.70               | 22.50               | 0.12                | 0.12        | 0.32      | 0.50 | 4.6    |               | SGL30F    |
|         | TSUBAKI  | U30SER    |                    |         | 73       |                |                |                    | 7     | M8×10   | 44             | 8    | 5.5   | 12  | -              |                |                      |                       |                   |        |                      |       | -        | 28           | 3000                     | 11×14×7     | M8        | 17.72               | 20.42               | 0.12                | 0.12        | 0.39      | 0.53 | 5.2    |               | U30SER    |
|         | ABBA     | BRS30BS   |                    |         | 75.6     |                |                |                    | 9     | M8×11.2 | 38.6           | -    | 7     | 6.5 | -              |                |                      |                       |                   |        |                      |       | -        | 26           | 4000                     | 14×12×9     | M8        | 15.65               | 28.84               | 0.26                | 0.26        | 0.31      | 0.48 | 5.2    |               | BRS30BS   |
|         | INA      | KUVE30ESC |                    |         | 67.6     |                |                |                    | 6     | M8×13.5 | 42             | 6    | 11.25 | 19  | -              |                |                      |                       |                   |        |                      |       | -        | 23.5         | 2000                     | -           | M8        | 18.70               | 31.50               | 0.25                | 0.25        | 0.55      | 0.67 | 4.3    |               | KUVE30ESC |
|         | STAR     | 1666-7XX  |                    |         | 75.3     |                |                |                    | 6.65  | M8×12   | 45.0           | 7    | 6.05  | 9.5 | -              |                |                      |                       |                   |        |                      |       | -        | 28.35        | 6000                     | 15×11.5×9   | M8        | 22.10               | 24.80               | 0.15                | 0.15        | 0.43      | 0.60 | 5.0    |               | 1666-7XX  |
|         |          | 1662-7XX  |                    |         | 71.5     |                |                |                    | 7     | M8×12   | 45.0           | 7    | 6     | 16  | -              |                |                      |                       |                   |        |                      |       | -        | 28.35        | 15.80                    | -           | M8        | 15.80               | -                   | -                   | -           | 0.11      | 0.65 | 5.0    |               | 1662-7XX  |



# Dimension Comparison of MSB-S

Carriage type: Square  
Heavy load



Unit: mm

| Size | Maker        | Model No. | External dimension |         |          |                |                | Carriage dimension |    |         |                |     |       |      | Rail dimension |                |                      |                       | Basic load rating |        | Static moment rating |        |      | Weight    |                   | Note  | Model No. |                     |                     |                     |             |               |             |             |
|------|--------------|-----------|--------------------|---------|----------|----------------|----------------|--------------------|----|---------|----------------|-----|-------|------|----------------|----------------|----------------------|-----------------------|-------------------|--------|----------------------|--------|------|-----------|-------------------|-------|-----------|---------------------|---------------------|---------------------|-------------|---------------|-------------|-------------|
|      |              |           | Height H           | Width W | Length L | W <sub>2</sub> | H <sub>2</sub> | B                  | C  | S×L     | L <sub>1</sub> | T   | N     | G    | K              | d <sub>1</sub> | Width W <sub>1</sub> | Height H <sub>1</sub> | Pitch P           | E std. | L <sub>0</sub> max.  | D×h×d  | Bolt | C kN      | C <sub>0</sub> kN |       |           | M <sub>p</sub> kN-m | M <sub>y</sub> kN-m | M <sub>R</sub> kN-m | Carriage kg | Rail kg/m     |             |             |
| 30   | AMT          | MSB30S    | 42                 | 60      | 96.7     | 16             | 9.5            | 40                 | 40 | M8×12   | 72             | 8   | 8     | 12   | 6.3            | 3.3            | 28                   | 23                    | 80                | 20     | 4000                 | 11×9×7 | M6   | 23.40     | 43.10             | 0.49  | 0.49      | 0.60                | 0.86                | 4.4                 |             | MSB30S        |             |             |
|      | THK          | SR30W     |                    |         | 97       |                | 9.5            |                    |    | M8×12   | 69.3           | 9   | 8     | -    | -              | 23             |                      |                       |                   |        | 3000                 | 11×9×7 |      | M6        | 30.00             | 56.80 | 0.25      | 0.21                | 0.36                | 0.80                | 4.3         | Retainer type | SSR30XW     |             |
|      |              | SSR30XW   |                    |         | 106      |                | 7              |                    |    | M8×8    | 80             | 8.5 | 8     | 12   | 5.6            |                |                      |                       |                   |        |                      |        |      |           | 4                 | 46.50 | 52.70     | 0.68                | 0.68                | 0.93                | 0.94        |               | 4.5         | SHS30V      |
|      |              | SHS30V    |                    |         | 95       |                | 10             |                    |    | M8×12   | 65.2           | 9   | 8     | 12   | -              |                |                      |                       |                   |        |                      |        |      |           | -                 | 24.23 | 33.26     | 0.35                | 0.35                | 0.50                | 0.88        |               | 4.8         | 2 ball rows |
|      | Hiwin        | AGH30CA   |                    |         | 95       |                | 10             |                    |    | M8×12   | 65.2           | 9   | 8     | 12   | -              | -              |                      |                       |                   |        | 24                   | 4000   |      | 11×9×7    | M6                | 23.40 | 43.00     | 0.36                | 0.36                | 0.47                | 0.85        | 4.8           | 2 ball rows | LS30AL      |
|      | NSK          | LS30AL    |                    |         | 96.4     |                | 9              |                    |    | M8×12   | 71             | 13  | 8     | 11   | -              | -              |                      |                       |                   |        | 23                   | 4000   |      | 11×9×7    |                   | 23.60 | 32.50     | 0.34                | 0.34                | 0.50                | 0.78        | 5.1           |             | LWES30      |
|      | IKO          | LWES30    |                    |         | 97       |                | 10             |                    |    | M8×12   | 64.8           | -   | 8     | 10   | -              | -              |                      |                       |                   |        | 25                   | 3960   |      | 11×9×7    | M8                | 28.10 | 42.20     | 0.56                | 0.56                | 0.65                | 1.00        | 4.8           | 2 ball rows | LWHS30      |
|      |              | LWHS30    |                    |         | 113      |                | 7              |                    |    | M8×16   | 80.6           | -   | 8     | 11   | -              | -              |                      |                       |                   |        | 25                   | 4000   |      | 14×12×9   |                   | 23.50 | 39.70     | 0.31                | 0.31                | 0.55                | 0.80        | 4.6           |             | SGL30TF     |
|      | NB           | SGL30TF   |                    |         | 95.7     |                | 9.5            |                    |    | M8×12   | 67.7           | 9   | 9     | 14   | -              | -              |                      |                       |                   |        | 24                   | 3000   |      | 11×9×7    | M6                | 26.93 | 37.44     | 0.37                | 0.37                | 0.72                | 0.78        | 5.2           | U30ER       |             |
|      | TSUBAKI      | U30ER     |                    |         | 97       |                | 7              |                    |    | M8×10   | 68             | 8   | 5.5   | 12   | -              | -              |                      |                       |                   |        | 28                   | 3000   |      | 11×14×7   |                   | 29.23 | 53.86     | 0.49                | 0.48                | 0.59                | 0.98        | 4.5           | SBS30SL     |             |
|      | ABBA         | BRS30B    |                    |         | 109      |                | 9              |                    |    | M8×11.2 | 72             | -   | 7     | 6.5  | -              | -              |                      |                       |                   |        | 26                   | 4000   |      | 14×12×9   | M8                | 29.20 | 63.70     | 0.83                | 0.83                | 1.08                | 0.9         | 4.3           | BMF30       |             |
|      | SBC          | SBS30SL   |                    |         | 98       |                | 6.5            |                    |    | M8×10   | 70.4           | 12  | 8.5   | 10.7 | -              | -              |                      |                       |                   |        | 25                   | 4000   |      | 14×12×9   |                   | 27.50 | 55.00     | 0.70                | 0.70                | 0.97                | 1.00        | 4.3           | KUVE30ES    |             |
|      | Schneeberger | BMF30     |                    |         | 103      |                | 6.1            |                    |    | M8×11   | 75             | -   | 7     | -    | -              | -              |                      |                       |                   |        | 26                   | 4000   |      | 15×14.5×9 | M8                | 31.70 | 41.30     | 0.38                | 0.38                | 0.72                | 0.85        | 5.0           | 1622-7XX    |             |
|      | INA          | KUVE30ES  |                    |         | 97.6     |                | 6              |                    |    | M8×13.5 | 72             | 6   | 11.25 | 19   | -              | -              |                      |                       |                   |        | 23.5                 | 2000   |      | -         |                   | 27.50 | 55.00     | 0.70                | 0.70                | 0.97                | 1.00        | 4.3           | KUVE30ES    |             |
|      | STAR         | 1622-7XX  |                    |         | 97.7     |                | 6.65           |                    |    | M8×12   | 67.4           | 7   | 6.05  | 9.5  | -              | -              |                      |                       |                   |        | 28.35                | 6000   |      | 15×11.5×9 | 31.70             | 41.30 | 0.38      | 0.38                | 0.72                | 0.85                | 5.0         | 1622-7XX      |             |             |