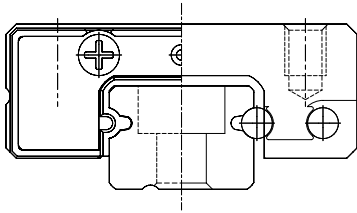
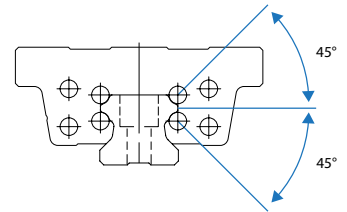




# WON Linear Bearings and Rails

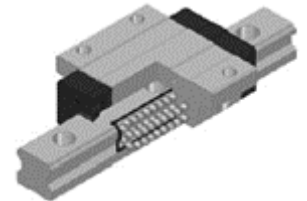
## Product Overview

H-Series has 4 rows of ball bearings continuously circulating and making 45° contact with an arc-groove feature in the rail. This unique configuration provides 4-direction equal load sharing in any direction. This translates into lower friction resistance, smooth motion, and long life.



M & MB-Series have 2 rows of ball bearings continuously circulating and making 4 point 45° contact with an gothic-arc-groove feature in the Rail. This unique configuration provides 4-direction equal load sharing in any direction, in a very compact assembly. This translates into lower friction resistance, smooth motion, and long life.

End Seals are included with all products offered to protect against dust and foreign materials which induce premature wear and shorter life. Optional Inside Seals are offered, on the H-Series for additional protection.





# WON Linear Bearings and Rails

## H-Series Bearings and Rail Features

- Bearing Preload: Moderate
- Precision Classification: Moderate (no symbol)
- Radial Clearance Classification: Common Clearance
- Material: Carbon Steel
- Rail Hardness: HRC58-64
- End Seals included with all bearings
- Grease fitting included

### H-Series Linear Bearing Ratings

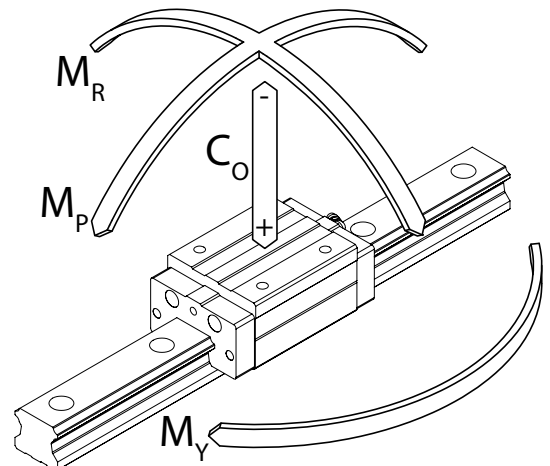
| Part Number              | Price    | Bearing Form Factor | Inside Seal | Series Size | Load Ratings |             |                                |                  |                              |                  |                               | Drawing Links       |
|--------------------------|----------|---------------------|-------------|-------------|--------------|-------------|--------------------------------|------------------|------------------------------|------------------|-------------------------------|---------------------|
|                          |          |                     |             |             | Static (Co)  | Dynamic (C) | Pitch Moment (M <sub>P</sub> ) |                  | Yaw Moment (M <sub>Y</sub> ) |                  | Roll Moment (M <sub>R</sub> ) |                     |
|                          |          |                     |             |             |              |             | 1 Linear Bearing               | 2 Linear Bearing | 1 Linear Bearing             | 2 Linear Bearing |                               |                     |
| <a href="#">H15FSSG0</a> | \$72.00  | flanged             | yes         | H15         | 16200 N      | 9900 N      | 115 N·m                        | 552 N·m          | 115 N·m                      | 552 N·m          | 129 N·m                       | <a href="#">PDF</a> |
| <a href="#">H15FUUG0</a> | \$64.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H15RSSG0</a> | \$69.00  | rectangular         | yes         |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H15RUUG0</a> | \$62.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H20FSSG0</a> | \$77.00  | flanged             | yes         | H20         | 23900 N      | 14900 N     | 221 N·m                        | 1049 N·m         | 221 N·m                      | 1049 N·m         | 251 N·m                       | <a href="#">PDF</a> |
| <a href="#">H20FUUG0</a> | \$70.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H20RSSG0</a> | \$73.00  | rectangular         | yes         |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H20RUUG0</a> | \$66.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H25FSSG0</a> | \$96.00  | flanged             | yes         | H25         | 33100 N      | 22100 N     | 337 N·m                        | 1636 N·m         | 337 N·m                      | 1636 N·m         | 398 N·m                       | <a href="#">PDF</a> |
| <a href="#">H25FUUG0</a> | \$89.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H25RSSG0</a> | \$93.00  | rectangular         | yes         |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H25RUUG0</a> | \$85.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H30FSSG0</a> | \$108.00 | flanged             | yes         | H30         | 57100 N      | 38400 N     | 711 N·m                        | 3384 N·m         | 711 N·m                      | 3384 N·m         | 828 N·m                       | <a href="#">PDF</a> |
| <a href="#">H30FUUG0</a> | \$101.00 |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H30RSSG0</a> | \$104.00 | rectangular         | yes         |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H30RUUG0</a> | \$97.00  |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H35FSSG0</a> | \$153.00 | flanged             | yes         | H35         | 74600 N      | 51100 N     | 1062 N·m                       | 5012 N·m         | 1062 N·m                     | 5012 N·m         | 1298 N·m                      | <a href="#">PDF</a> |
| <a href="#">H35FUUG0</a> | \$146.00 |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H35RSSG0</a> | \$147.00 | rectangular         | yes         |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |
| <a href="#">H35RUUG0</a> | \$142.00 |                     | no          |             |              |             |                                |                  |                              |                  |                               | <a href="#">PDF</a> |



With Inside Seal



Without Inside Seal





# WON Linear Bearings and Rails

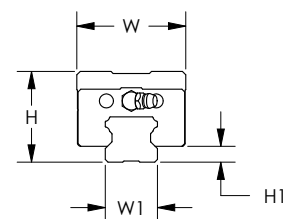
| H-Series Linear Rails     |          |             |         |             |             |                     |
|---------------------------|----------|-------------|---------|-------------|-------------|---------------------|
| Part Number               | Price    | Series Size | Length  | Parallelism | Mass/Length | Drawing Links       |
| <a href="#">H15-400L</a>  | \$72.00  | H15         | 400 mm  | 8 $\mu$ m   | 1300 g/m    | <a href="#">PDF</a> |
| <a href="#">H15-580L</a>  | \$104.00 |             | 580 mm  | 11 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H15-760L</a>  | \$137.00 |             | 760 mm  | 12 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H15-1000L</a> | \$179.00 |             | 1000 mm | 13 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H20-400L</a>  | \$74.00  | H20         | 400 mm  | 8 $\mu$ m   | 2200 g/m    | <a href="#">PDF</a> |
| <a href="#">H20-580L</a>  | \$106.00 |             | 580 mm  | 11 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H20-760L</a>  | \$141.00 |             | 760 mm  | 12 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H20-1000L</a> | \$185.00 |             | 1000 mm | 13 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H25-400L</a>  | \$82.00  | H25         | 400 mm  | 8 $\mu$ m   | 3000 g/m    | <a href="#">PDF</a> |
| <a href="#">H25-580L</a>  | \$120.00 |             | 580 mm  | 11 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H25-760L</a>  | \$158.00 |             | 760 mm  | 12 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H25-1000L</a> | \$208.00 |             | 1000 mm | 13 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H30-360L</a>  | \$80.00  | H30         | 360 mm  | 8 $\mu$ m   | 4850 g/m    | <a href="#">PDF</a> |
| <a href="#">H30-520L</a>  | \$114.00 |             | 520 mm  | 11 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H30-760L</a>  | \$167.00 |             | 760 mm  | 12 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H30-1000L</a> | \$222.00 |             | 1000 mm | 13 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H35-360L</a>  | \$108.00 | H35         | 360 mm  | 8 $\mu$ m   | 6580 g/m    | <a href="#">PDF</a> |
| <a href="#">H35-520L</a>  | \$156.00 |             | 520 mm  | 11 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H35-760L</a>  | \$227.00 |             | 760 mm  | 12 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">H35-1000L</a> | \$300.00 |             | 1000 mm | 13 $\mu$ m  |             | <a href="#">PDF</a> |



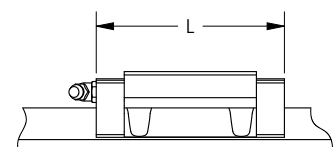
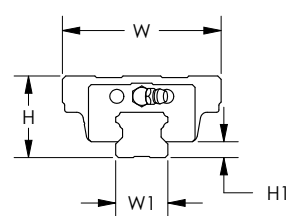
Rails cannot be butted together end-to-end to create longer runs. The lengths offered here have a chamfer feature on both ends.

| H-Series Dimensions      |                     |                |               |                |                    |                     |
|--------------------------|---------------------|----------------|---------------|----------------|--------------------|---------------------|
| Bearing with Rail        | Bearing Form Factor | Height, H (mm) | Width, W (mm) | Length, L (mm) | Clearance, H1 (mm) | Rail Width, W1 (mm) |
| <a href="#">H15Rxxxx</a> | rectangular         | 28             | 34            | 57             | 4.7                | 15                  |
| <a href="#">H15Fxxxx</a> | flanged             | 24             | 47            |                |                    |                     |
| <a href="#">H20Rxxxx</a> | rectangular         | 30             | 44            | 72.7           | 6                  | 20                  |
| <a href="#">H20Fxxxx</a> | flanged             | 30             | 63            |                |                    |                     |
| <a href="#">H25Rxxxx</a> | rectangular         | 40             | 48            | 83             | 7                  | 23                  |
| <a href="#">H25Fxxxx</a> | flanged             | 36             | 70            |                |                    |                     |
| <a href="#">H30Rxxxx</a> | rectangular         | 45             | 60            | 97.8           | 7.5                | 28                  |
| <a href="#">H30Fxxxx</a> | flanged             | 42             | 90            |                |                    |                     |
| <a href="#">H35Rxxxx</a> | rectangular         | 55             | 70            | 110            | 9                  | 34                  |
| <a href="#">H35Fxxxx</a> | flanged             | 48             | 100           |                |                    |                     |

Rectangular



Flanged





# WON Linear Bearings and Rails

## M-Series Bearings and Rail Features

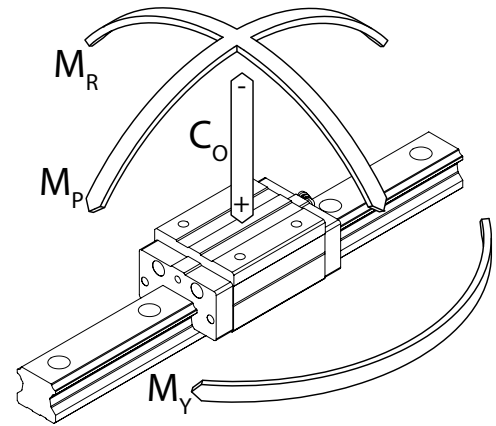
- Low Profile
- Bearing Preload: Moderate
- Precision Classification: Moderate (no symbol)
- Radial Clearance Classification: Common Clearance
- Bearing Block Housing Material: Stainless Steel
- Rail Material: Stainless Steel
- Bearing Material: SUJ2 Bearing Steel
- Rail Hardness: HRC58-64
- End Seals included with all bearings

### M-Series Linear Bearing Ratings

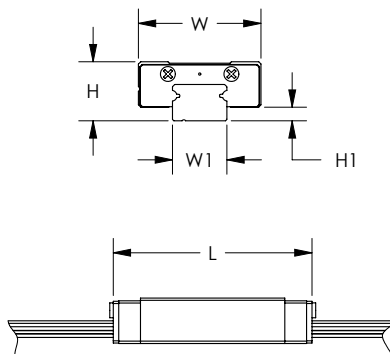
| Part Number              | Price   | Bearing Form Factor | Series Size | Load Ratings |             |                   |                  |                  |                  |                  | Drawing Links       |
|--------------------------|---------|---------------------|-------------|--------------|-------------|-------------------|------------------|------------------|------------------|------------------|---------------------|
|                          |         |                     |             | Static (Co)  | Dynamic (C) | Pitch Moment (MP) |                  | Yaw Moment (My)  |                  | Roll Moment (MR) |                     |
|                          |         |                     |             |              |             | 1 Linear Bearing  | 2 Linear Bearing | 1 Linear Bearing | 2 Linear Bearing |                  |                     |
| <a href="#">M7LUUG0</a>  | \$51.00 | rectangular long    | M7          | 2650 N       | 1631 N      | 10.1 N·m          | 50 N·m           | 10.1 N·m         | 50 N·m           | 9.67 N·m         | <a href="#">PDF</a> |
| <a href="#">M7NUUG0</a>  | \$45.00 | rectangular         |             | 1703 N       | 1197 N      | 4.2 N·m           | 23.1 N·m         | 4.2 N·m          | 23.1 N·m         | 6.22 N·m         | <a href="#">PDF</a> |
| <a href="#">M9LUUG0</a>  | \$56.00 | rectangular long    | M9          | 4030 N       | 2375 N      | 21.9 N·m          | 102.8 N·m        | 21.9 N·m         | 102.8 N·m        | 18.74 N·m        | <a href="#">PDF</a> |
| <a href="#">M9NUUG0</a>  | \$48.00 | rectangular         |             | 2545 N       | 1721 N      | 9.3 N·m           | 46.6 N·m         | 9.3 N·m          | 46.6 N·m         | 11.84 N·m        | <a href="#">PDF</a> |
| <a href="#">M12LUUG0</a> | \$61.00 | rectangular long    | M12         | 6200 N       | 4246 N      | 34.8 N·m          | 169.1 N·m        | 34.8 N·m         | 169.1 N·m        | 38.44 N·m        | <a href="#">PDF</a> |
| <a href="#">M12NUUG0</a> | \$53.00 | rectangular         |             | 3816 N       | 3023 N      | 14.4 N·m          | 75.8 N·m         | 14.4 N·m         | 75.8 N·m         | 23.66 N·m        | <a href="#">PDF</a> |

### M-Series Linear Rails

| Part Number              | Price    | Series Size | Length | Parallelism | Mass/Length | Drawing Links       |
|--------------------------|----------|-------------|--------|-------------|-------------|---------------------|
| <a href="#">M7-85L</a>   | \$15.50  | M7          | 85 mm  | 11 µm       | 253 g/m     | <a href="#">PDF</a> |
| <a href="#">M7-190L</a>  | \$35.00  |             | 190 mm | 14 µm       |             | <a href="#">PDF</a> |
| <a href="#">M7-370L</a>  | \$67.00  |             | 370 mm | 18 µm       |             | <a href="#">PDF</a> |
| <a href="#">M7-610L</a>  | \$110.00 |             | 610 mm | 22 µm       |             | <a href="#">PDF</a> |
| <a href="#">M9-95L</a>   | \$15.00  | M9          | 95 mm  | 11 µm       | 391 g/m     | <a href="#">PDF</a> |
| <a href="#">M9-175L</a>  | \$27.50  |             | 175 mm | 14 µm       |             | <a href="#">PDF</a> |
| <a href="#">M9-495L</a>  | \$77.00  |             | 495 mm | 21 µm       |             | <a href="#">PDF</a> |
| <a href="#">M9-695L</a>  | \$108.00 |             | 695 mm | 23 µm       |             | <a href="#">PDF</a> |
| <a href="#">M12-195L</a> | \$35.50  | M12         | 195 mm | 15 µm       | 679 g/m     | <a href="#">PDF</a> |
| <a href="#">M12-320L</a> | \$57.00  |             | 320 mm | 18 µm       |             | <a href="#">PDF</a> |
| <a href="#">M12-470L</a> | \$85.00  |             | 470 mm | 21 µm       |             | <a href="#">PDF</a> |
| <a href="#">M12-695L</a> | \$127.00 |             | 695 mm | 23 µm       |             | <a href="#">PDF</a> |



Rails cannot be butted together end-to-end to create longer runs. The lengths offered here have a chamfer feature on both ends.



### M-Series Dimensions

| Bearing with Rail        | Height, H (mm) | Width, W (mm) | Length, L (mm) | Clearance, H1 (mm) | Rail Width, W1 (mm) |
|--------------------------|----------------|---------------|----------------|--------------------|---------------------|
| <a href="#">M7LUUG0</a>  | 8              | 17            | 31.8           | 1.5                | 7                   |
| <a href="#">M7NUUG0</a>  |                |               | 24.3           |                    |                     |
| <a href="#">M9LUUG0</a>  | 10             | 20            | 41.4           | 2                  | 9                   |
| <a href="#">M9NUUG0</a>  |                |               | 31.3           |                    |                     |
| <a href="#">M12LUUG0</a> | 13             | 27            | 45.4           | 3                  | 12                  |
| <a href="#">M12NUUG0</a> |                |               | 34.9           |                    |                     |



# WON Linear Bearings and Rails

## MB-Series Bearings and Rail Features

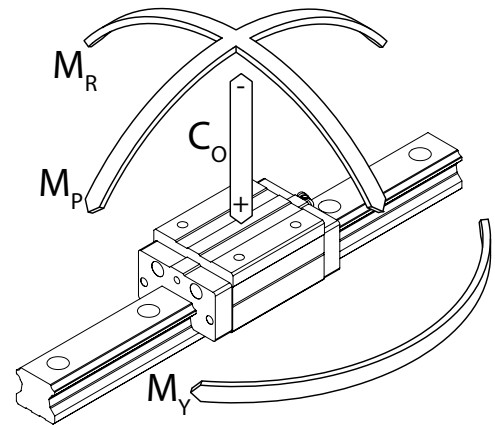
- Wide, Low Profile
- Bearing Preload: Moderate
- Precision Classification: Moderate (no symbol)
- Radial Clearance Classification: Common Clearance
- Bearing Block Housing Material: Stainless Steel
- Rail Material: Stainless Steel
- Bearing Material: SUJ2 Bearing Steel
- Rail Hardness: HRC58-64
- End Seals included with all bearings

### MB-Series Linear Bearing Ratings

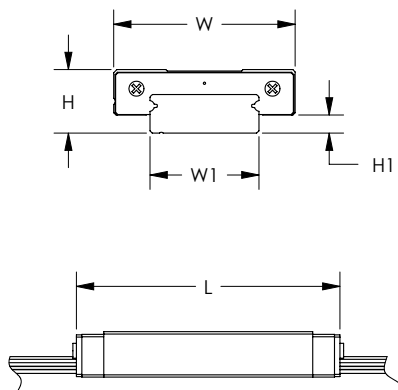
| Part Number               | Price   | Bearing Form Factor | Series Size | Load Ratings |             |                   |                  |                  |                  |                  | Drawing Links       |
|---------------------------|---------|---------------------|-------------|--------------|-------------|-------------------|------------------|------------------|------------------|------------------|---------------------|
|                           |         |                     |             | Static (Co)  | Dynamic (C) | Pitch Moment (MP) |                  | Yaw Moment (My)  |                  | Roll Moment (MR) |                     |
|                           |         |                     |             |              |             | 1 Linear Bearing  | 2 Linear Bearing | 1 Linear Bearing | 2 Linear Bearing |                  |                     |
| <a href="#">MB7LUUG0</a>  | \$63.00 | rectangular long    | MB7         | 3975 N       | 2166 N      | 22.5 N-m          | 106.1 N-m        | 22.5 N-m         | 106.1 N-m        | 28.42 N-m        | <a href="#">PDF</a> |
| <a href="#">MB7NUUG0</a>  | \$57.00 | rectangular         |             | 2650 N       | 1631 N      | 10.1 N-m          | 51.1 N-m         | 10.1 N-m         | 51.1 N-m         | 18.95 N-m        | <a href="#">PDF</a> |
| <a href="#">MB9LUUG0</a>  | \$71.00 | rectangular long    | MB9         | 5303 N       | 2878 N      | 37.8 N-m          | 172.9 N-m        | 37.8 N-m         | 172.9 N-m        | 48.52 N-m        | <a href="#">PDF</a> |
| <a href="#">MB9NUUG0</a>  | \$64.00 | rectangular         |             | 3606 N       | 2197 N      | 18.2 N-m          | 87.6 N-m         | 18.2 N-m         | 87.6 N-m         | 33 N-m           | <a href="#">PDF</a> |
| <a href="#">MB12LUUG0</a> | \$74.00 | rectangular long    | MB12        | 9062 N       | 5539 N      | 73.8 N-m          | 338.7 N-m        | 73.8 N-m         | 338.7 N-m        | 110.56 N-m       | <a href="#">PDF</a> |
| <a href="#">MB12NUUG0</a> | \$67.00 | rectangular         |             | 5723 N       | 4015 N      | 31.2 N-m          | 152.2 N-m        | 31.2 N-m         | 152.2 N-m        | 69.83 N-m        | <a href="#">PDF</a> |

### MB-Series Linear Rails

| Part Number               | Price    | Series Size | Length | Parallelism | Mass/Length | Drawing Links       |
|---------------------------|----------|-------------|--------|-------------|-------------|---------------------|
| <a href="#">MB7-80L</a>   | \$28.50  | MB7         | 80 mm  | 11 $\mu$ m  | 560 g/m     | <a href="#">PDF</a> |
| <a href="#">MB7-200L</a>  | \$72.00  |             | 200 mm | 15 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB7-410L</a>  | \$150.00 |             | 410 mm | 20 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB7-690L</a>  | \$225.00 |             | 690 mm | 23 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB9-80L</a>   | \$37.00  | MB9         | 80 mm  | 11 $\mu$ m  | 912 g/m     | <a href="#">PDF</a> |
| <a href="#">MB9-200L</a>  | \$94.00  |             | 200 mm | 15 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB9-410L</a>  | \$191.00 |             | 410 mm | 20 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB9-690L</a>  | \$287.00 |             | 690 mm | 23 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB12-110L</a> | \$62.00  | MB12        | 110 mm | 12 $\mu$ m  | 1369 g/m    | <a href="#">PDF</a> |
| <a href="#">MB12-270L</a> | \$154.00 |             | 270 mm | 17 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB12-430L</a> | \$246.00 |             | 430 mm | 20 $\mu$ m  |             | <a href="#">PDF</a> |
| <a href="#">MB12-750L</a> | \$424.00 |             | 750 mm | 23 $\mu$ m  |             | <a href="#">PDF</a> |



Rails cannot be butted together end-to-end to create longer runs. The lengths offered here have a chamfer feature on both ends.



### MB-Series Dimensions

| Bearing with Rail         | Height, H (mm) | Width, W (mm) | Length, L (mm) | Clearance, H1 (mm) | Rail Width, W1 (mm) |
|---------------------------|----------------|---------------|----------------|--------------------|---------------------|
| <a href="#">MB7LUUG0</a>  | 9              | 25            | 43.5           | 2                  | 14                  |
| <a href="#">MB7NUUG0</a>  |                |               | 33             |                    |                     |
| <a href="#">MB9LUUG0</a>  | 12             | 30            | 52             | 3                  | 18                  |
| <a href="#">MB9NUUG0</a>  |                |               | 40.2           |                    |                     |
| <a href="#">MB12LUUG0</a> | 14             | 40            | 59.7           | 4                  | 24                  |
| <a href="#">MB12NUUG0</a> |                |               | 44.5           |                    |                     |