

Preload Grade

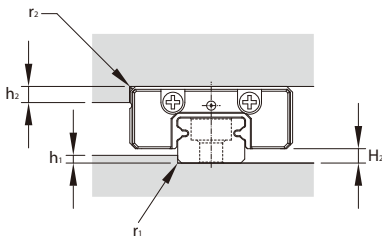
| Series | Preload grade | | |
|--------|------------------------|---------------------------|---------------------|
| | Clearance (FZ) | Light preload (FC) | Medium preload (F0) |
| MSC7 | Clearance 4~10 μ m | Clearance 2 μ m~0.01C | 0.01~0.02C |
| MSC9 | | | |
| MSC12 | | | |
| MSC15 | | | |
| MSC7L | Clearance 4~10 μ m | Clearance 2 μ m~0.01C | 0.01~0.02C |
| MSC9L | | | |
| MSC12L | | | |
| MSC15L | | | |
| MSD7 | Clearance 4~10 μ m | Clearance 2 μ m~0.01C | 0.01~0.02C |
| MSD9 | | | |
| MSD12 | | | |
| MSD15 | | | |
| MSD7L | Clearance 4~10 μ m | Clearance 2 μ m~0.01C | 0.01~0.02C |
| MSD9L | | | |
| MSD12L | | | |
| MSD15L | | | |

Note: C is basic dynamic load rating in above table. Refer to the specification of products, please.

The Shoulder Height and Corner Radius for Installation

MSC series

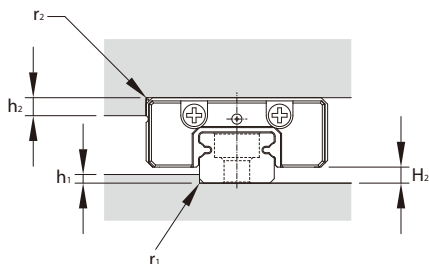
Unit: mm



| Model No. | r ₁ (max.) | r ₂ (max.) | h ₁ | h ₂ | H ₂ |
|-----------|-----------------------|-----------------------|----------------|----------------|----------------|
| 7 | 0.2 | 0.2 | 1.0 | 3 | 1.5 |
| 9 | 0.2 | 0.3 | 1.7 | 3 | 2.2 |
| 12 | 0.3 | 0.4 | 2.5 | 4 | 3 |
| 15 | 0.5 | 0.5 | 3.5 | 5 | 4 |

MSD series

Unit: mm

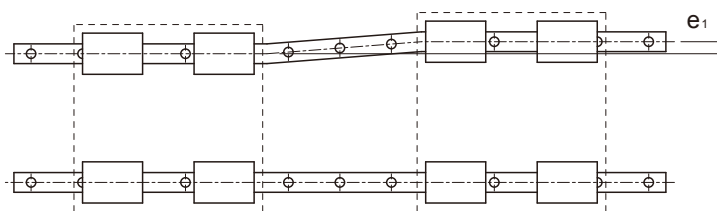


| Model No. | r_1 (max.) | r_2 (max.) | h_1 | h_2 | H_2 |
|-----------|--------------|--------------|-------|-------|-------|
| 7 | 0.2 | 0.2 | 1.5 | 3 | 2 |
| 9 | 0.2 | 0.3 | 3.2 | 3 | 3.7 |
| 12 | 0.3 | 0.4 | 3.5 | 4 | 4 |
| 15 | 0.5 | 0.5 | 3.5 | 5 | 4 |

Dimensional Tolerance of Mounting Surface

The tolerances of parallelism between two axes are shown as below.

The parallel deviation between two axes (e_1)



Unit: μm

| Model No. | Preload Grade | | |
|--------------|---------------|----|----|
| | FZ | FC | F0 |
| MSC 7 MSD7 | 12 | 3 | 3 |
| MSC 9 MSD9 | 15 | 4 | 3 |
| MSC 12 MSD12 | 20 | 9 | 5 |
| MSC 15 MSD15 | 25 | 10 | 6 |