

NH-AL (High-load type/standard, square low-profile type)

NH-BL (Super-high-load type/long, square low-profile type)

(1) Reference number for assembly

| | | | | | | | | |
|--------------------|-------------|-------------------------|--|--|---------------------------------------|--|---|--|
| NH | 30 | 1200 | AL | C | 2 | | P5 | 3 |
| SERIES NAME | SIZE | RAIL LENGTH (MM) | BALL SLIDE SHAPE CODE (refer to Fig 2 on page 4) | MATERIAL/SURFACE TREATMENT CODE (refer to Table 16 on page 8) C: Special high carbon steel (NSK standard) S: Stainless steel | NUMBER OF BALL SLIDES PER RAIL | DESIGN SERIAL NUMBER (Added to the reference number) | ACCURACY CODE (refer to page 5 and 6) | PRELOAD CODE (refer to page 6) 0: Z0 1: Z1 3: Z3 T: ZT Z: ZZ H: ZH |

(2) Reference number for interchangeable type

Ball slide

| | | | | | |
|--|-------------|--|---|--|--|
| NAH | 30 | AL | S | Z | -K |
| INTERCHANGEABLE BALL SLIDE SERIES CODE NAH: NH Series Interchangeable Ball Slide | SIZE | BALL SLIDE SHAPE CODE (refer to Fig 2 on page 4) | MATERIAL CODE No code: Special high carbon steel (NSK standard) S: Stainless steel | PRELOAD CODE No code: Fine clearance Z: Slight preload H: Medium preload | OPTION CODE -K: Equipped with NSK K1™ -K2: Two K1™ Lubrication Units -D: Double Seals -P: Protector Plate |

Rail

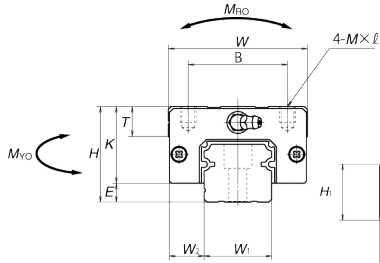
| | | | | |
|--|-------------|-------------------------|---|--|
| N1H | 30 | 1200 | S | Z |
| INTERCHANGEABLE RAIL SERIES CODE N1H: NH Series Interchangeable Rail | SIZE | RAIL LENGTH (MM) | MATERIAL CODE No code: Special high carbon steel (NSK standard) S: Stainless steel | PRELOAD CODE Z: Slight preload |

| Model No. | Assembly | | | Ball slide | | | | | | | | | | | Width W ₁ | Height H ₁ |
|------------------|-------------|-----|----------------|------------|---------------|---------------|----------|-------------|----------------|------|----|----------------|----------------|----|-------------------------|--------------------------|
| | Height H | E | W ₂ | Width W | Length L | Mounting hole | | | L ₁ | K | T | Grease fitting | | | | |
| | | | | | | B | J | M×Pitch×ℓ | | | | Hole size | T ₁ | N | | |
| NH25AL NH25BL | 36 | 7 | 12.5 | 48 | 79 107 | 35 | 35 50 | M6×1×6 | 58 86 | 29 | 12 | M6×0.75 | 6 | 11 | 23 | 22 |
| NH30AL NH30BL | 42 | 9 | 16 | 60 | 85.6 124.6 | 40 | 40 60 | M8×1.25×8 | 59 98 | 33 | 14 | M6×0.75 | 7 | 11 | 28 | 26 |
| NH35AL NH35BL | 48 | 9.5 | 18 | 70 | 109 143 | 50 | 50 72 | M8×1.25×8 | 80 114 | 38.5 | 15 | M6×0.75 | 8 | 11 | 34 | 29 |
| NH45AL NH45BL | 60 | 14 | 20.5 | 86 | 139 171 | 60 | 60 80 | M10×1.5×10 | 105 137 | 46 | 17 | Rc1/8 | 10 | 13 | 45 | 38 |
| NH55AL NH55BL | 70 | 15 | 23.5 | 100 | 163 201 | 75 | 75 95 | M12×1.75×13 | 126 164 | 55 | 15 | Rc1/8 | 11 | 13 | 53 | 44 |

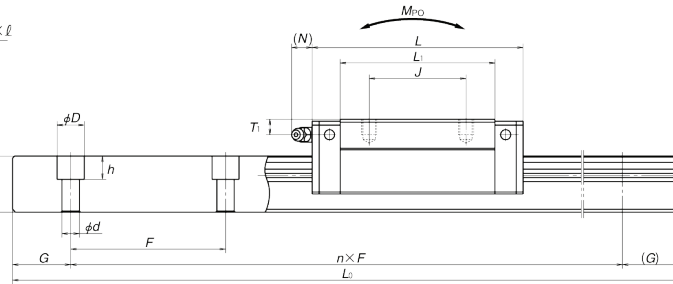
Notes: 1) External appearance of stainless steel ball slides differs from those of carbon steel ball slides.

Assembly (Preloaded assembly, interchangeable type)

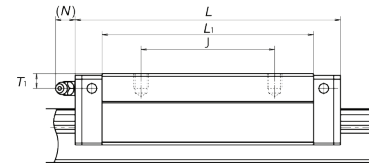
Front view of AL and BL types



Side view of AL type

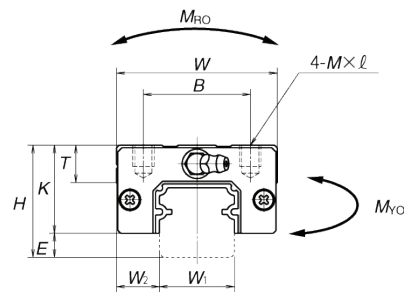


Side view of BL type

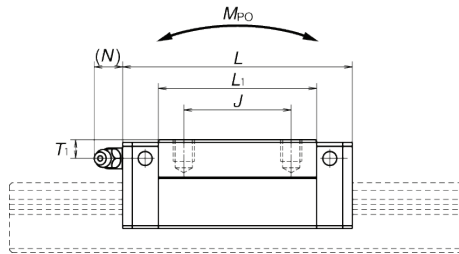


Ball slide of interchangeable type

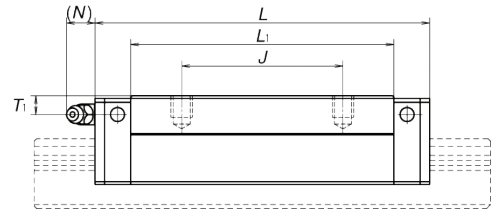
AL and BL types



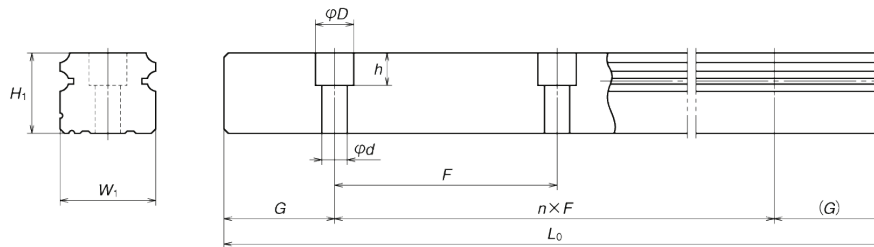
AL type



BL type



Rail of interchangeable type



Unit: mm

| Rail | | | | Basic load rating | | | | | | | | Weight | |
|------------|--------------------------------|------------------|---|-------------------------------|---------------------------------|---------------------------------|-----------------|---------------------|--------------|-----------------|--------|--------------------|----------------|
| Pitch F | Mounting bolt hole d×D×h | G (reference) | Max. length L _{0max} () for stainless | 2) Dynamic | | Static C ₀ (N) | M _{RO} | Static moment (N·m) | | | | Ball slide (kg) | Rail (kg/m) |
| | | | | [50km] C ₅₀ (N) | [100km] C ₁₀₀ (N) | | | M _{PO} | | M _{YO} | | | |
| | | | | | | (One slide) | (Two slides) | (One slide) | (Two slides) | | | | |
| 60 | 7×11×9 | 20 | 3 960 (3 500) | 33 500 | 26 800 | 46 000 | 360 | 320 | 1 840 | 267 | 1 540 | 0.46 | 3.6 |
| | | | | 45 500 | 36 500 | 71 000 | 555 | 725 | 3 700 | 610 | 3 100 | 0.69 | |
| 80 | 9×14×12 | 20 | 4 000 (3 500) | 62 500 | 49 500 | 80 500 | 950 | 755 | 4 500 | 630 | 3 800 | 1.2 | 7.2 |
| | | | | 81 000 | 64 500 | 117 000 | 1 380 | 1 530 | 8 350 | 1 280 | 7 000 | 1.7 | |
| 105 | 14×20×17 | 22.5 | 3 990 | 107 000 | 84 500 | 140 000 | 2 140 | 1 740 | 9 750 | 1 460 | 8 150 | 2.2 | 12.3 |
| | | | | 131 000 | 104 000 | 187 000 | 2 860 | 3 000 | 15 600 | 2 520 | 13 100 | 2.9 | |
| 120 | 16×23×20 | 30 | 3 960 | 158 000 | 125 000 | 198 000 | 3 600 | 3 000 | 16 300 | 2 510 | 13 700 | 3.7 | 16.9 |
| | | | | 193 000 | 153 000 | 264 000 | 4 850 | 5 150 | 26 300 | 4 350 | 22 100 | 4.7 | |

2) The basic load rating comply with the ISO standard. (ISO14728-1 and ISO14728-2)
C₅₀: the basic dynamic load rating for 50 km rating fatigue life, C₁₀₀: the basic dynamic load rating for 100 km rating fatigue life