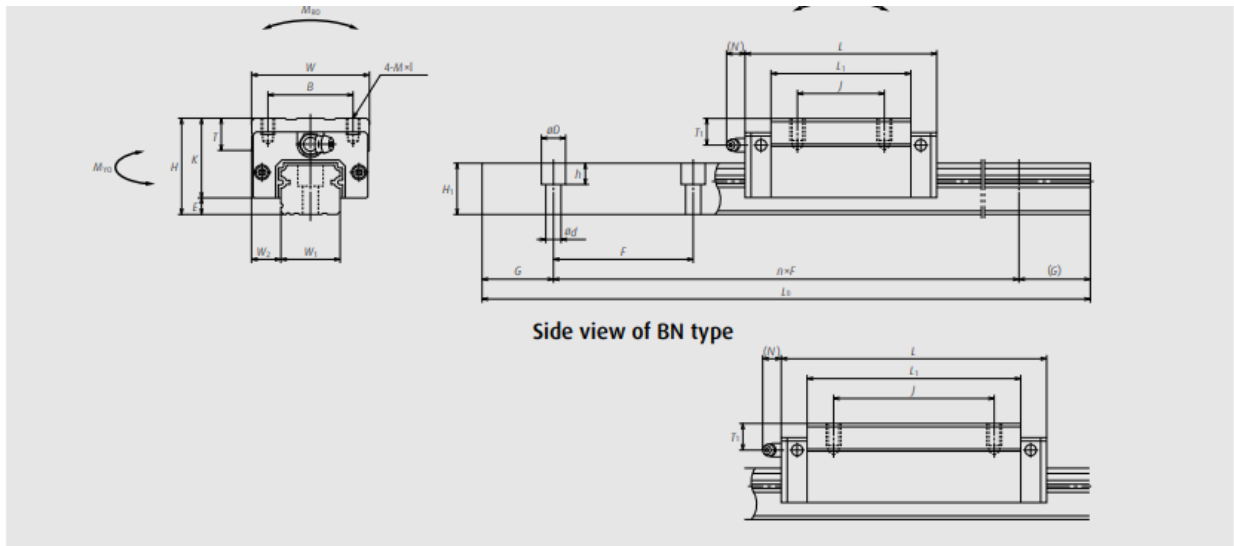


| | | | | | |
|--|---------|------------------------------------|------------------|----------------------|--------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN MILLIMETERS | | DEBURR AND BREAK SHARP EDGES | | DO NOT SCALE DRAWING | |
| X | ± 0.25 | | | | |
| .X | ± 0.1 | | | | |
| .XX | ± 0.05 | | | | |
| .XXX | ± 0.010 | | | | |
| | NAME | DATE | | | |
| DRAWN | | | | | |
| CHK'D | | | | | |
| APPV'D | | | | | |
| MFG | | | | | |
| Q.A | | | MATERIAL: | DWG NO. | CALC |
| | | | | | A3 |
| | | | WEIGHT (grams) : | SCALE:1:5 | SHEET 1 OF 1 |



Side view of BN type

| 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×I | | | | | | | Hole size | T ₁ | N |
| NH15AN NH15BN | 28 | 4.6 | 9.5 | 34 | 55 74 | 26 | 26 | M4×0.7×6 | 39 58 | 23.4 | 8 | ø3 | 8.5 | 3.3 | 15 | 15 | |
| NH20AN NH20BN | 30 | 5 | 12 | 44 | 69.8 91.8 | 32 | 36 | M5×0.8×6 | 50 72 | 25 | 12 | M6×0.75 | 5 | 11 | 20 | 18 | |
| NH25AN NH25BN | 40 | 7 | 12.5 | 48 | 79 107 | 35 | 35 | M6×1×9 | 58 86 | 33 | 12 | M6×0.75 | 10 | 11 | 23 | 22 | |
| NH30AN NH30BN | 45 | 9 | 16 | 60 | 85.6 124.6 | 40 | 40 | M8×1.25×10 | 59 98 | 36 | 14 | M6×0.75 | 10 | 11 | 28 | 26 | |
| NH35AN NH35BN | 55 | 9.5 | 18 | 70 | 109 143 | 50 | 50 | M8×1.25×12 | 80 114 | 45.5 | 15 | M6×0.75 | 15 | 11 | 34 | 29 | |
| NH45AN NH45BN | 70 | 14 | 20.5 | 86 | 139 171 | 60 | 60 | M10×1.5×17 | 105 137 | 56 | 17 | Rc1/8 | 20 | 13 | 45 | 38 | |
| NH55AN NH55BN | 80 | 15 | 23.5 | 100 | 163 201 | 75 | 75 | M12×1.75×18 | 126 164 | 65 | 18 | Rc1/8 | 21 | 13 | 53 | 44 | |
| NH65AN NH65BN | 90 | 16 | 31.5 | 126 | 193 253 | 76 | 70 | M16×2×20 | 147 207 | 74 | 23 | Rc1/8 | 19 | 13 | 63 | 53 | |

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

Random-matching rail series code
 NH: NH Series random-matching rail

Size

Rail length (mm)

Rail shape code: L

L: Standard

Material/surface treatment code (refer to Table 12 on page 12)

Preload code

(refer to Table 9 on page 10)

T: Fine clearance,

Z: Slight preload

(common rail for slight or medium preload)

Accuracy code

PH: High precision grade random-matching type

PC: Normal grade random-matching type

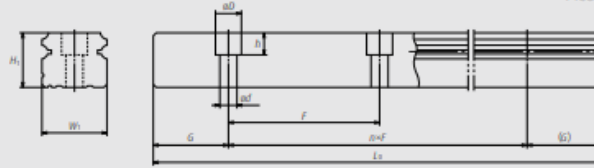
Design serial number

Added to the reference number

Butting rail specification*

N: Non-butting; L: Butting specification

*Please consult with NSK for butting rail specification.



Unit: mm

| Rail | | | | Basic load rating | | | | | | | | | Weight | |
|------------|--------------------------------|------------------|--|-------------------------------|---------------------------------|------------------------------|---------------------|---|--------|--|--------|-----------------------|----------------|--|
| Pitch F | Mounting bolt hole d×D×h | G (reference) | Max. length L _{max} (\varnothing) for stainless | 2) Dynamic | | Static C ₀ (N) | Static moment (N-m) | | | | | Ball slide (kg) | Rail (kg/m) | |
| | | | | [50km] C ₅₀ (N) | [100km] C ₁₀₀ (N) | | M ₈₀ | M ₉₀ (One slide) (Two slides) | | M ₁₀₀ (One slide) (Two slides) | | | | |
| 60 | 4.5×7.5×5.3 | 20 | 2,980 | 14,200 | 11,300 | 20,700 | 108 | 94.5 | 575 | 79.5 | 480 | 0.18 | 1.6 | |
| | | | (1,800) | 18,100 | 14,400 | 32,000 | 166 | 216 | 1,150 | 181 | 965 | 0.26 | | |
| 60 | 6×9.5×8.5 | 20 | 3,960 | 23,700 | 18,800 | 32,500 | 219 | 185 | 1,140 | 155 | 955 | 0.33 | 2.6 | |
| | | | (3,500) | 30,000 | 24,000 | 50,500 | 340 | 420 | 2,230 | 355 | 1,870 | 0.48 | | |
| 60 | 7×11×9 | 20 | 3,960 | 33,500 | 26,800 | 46,000 | 360 | 320 | 1,840 | 267 | 1,540 | 0.55 | 3.6 | |
| | | | (3,500) | 45,500 | 36,500 | 71,000 | 555 | 725 | 3,700 | 610 | 3,100 | 0.82 | | |
| 80 | 9×14×12 | 20 | 4,000 | 41,000 | 32,500 | 51,500 | 490 | 350 | 2,290 | 292 | 1,920 | 0.77 | 5.2 | |
| | | | (3,500) | 61,000 | 48,500 | 91,500 | 870 | 1,030 | 5,600 | 865 | 4,700 | 1.3 | | |
| 80 | 9×14×12 | 20 | 4,000 | 62,500 | 49,500 | 80,500 | 950 | 755 | 4,500 | 630 | 3,800 | 1.5 | 7.2 | |
| | | | | 81,000 | 64,500 | 117,000 | 1,380 | 1,530 | 8,350 | 1,280 | 7,000 | 2.1 | | |
| 105 | 14×20×17 | 22.5 | 3,990 | 107,000 | 84,500 | 140,000 | 2,140 | 1,740 | 9,750 | 1,460 | 8,150 | 3.0 | 12.3 | |
| | | | | 131,000 | 104,000 | 187,000 | 2,860 | 3,000 | 15,600 | 2,520 | 13,100 | 3.9 | | |
| 120 | 16×23×20 | 30 | 3,960 | 158,000 | 125,000 | 198,000 | 3,600 | 3,000 | 16,300 | 2,510 | 13,700 | 4.7 | 16.9 | |
| | | | | 193,000 | 153,000 | 264,000 | 4,850 | 5,150 | 26,300 | 4,350 | 22,100 | 6.1 | | |
| 150 | 18×26×22 | 35 | 3,900 | 239,000 | 190,000 | 281,000 | 6,150 | 4,950 | 27,900 | 4,150 | 23,400 | 7.7 | 24.3 | |
| | | | | 310,000 | 246,000 | 410,000 | 8,950 | 10,100 | 51,500 | 8,450 | 43,500 | 10.8 | | |

2) The basic load rating complies with 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.