

11. Dimensions

NH-AN (High-load type/standard, square type)
NH-BN (Super-high-load type/long, square type)

(1) Reference number for assembly

NH 30 1200 ANC 2 -** P5 3

Series name

Size

Rail length (mm)

Ball slide shape code (refer to Fig. 2 on page 3)

Material/surface treatment code (refer to Table 16 on page 7)
C: Special high carbon steel (NSK standard); K: Stainless steel

Preload code (refer to Table 9 on page 5)
0 : Z0, 1 : Z1, 3 : Z3, T : ZT, Z : ZZ, H : ZH

Accuracy code (refer to Table 9 on page 5)

Design serial number
Added to the reference number

Number of ball slides per rail

(2) Reference number for random-matching type

Ball slide

NAH 30 ANSZ -K

Random-matching ball slide series code
NAH: NH Series random-matching ball slide

Size

Ball slide shape code (refer to Fig. 2 on page 3)

-K: Equipped with NSK K1
-F: Fluoride low temperature chrome plating + AS2 grease
-F50: Fluoride low temperature chrome plating + LG2 grease

Preload code
No code: Fine clearance, Z: Slight preload, H: Medium preload

Material code
No code: Special high carbon steel (NSK standard), S: Stainless steel

Rail

N1H 30 1200 LCN -** PC Z

Random-matching rail series code
N1H: NH Series random-matching rail

Size

Rail length (mm)

Rail shape code: L
L: Standard

Material/surface treatment code (refer to Table 16 on page 7)

T: Fine clearance,
Z: Slight preload (common rail for slight or medium preload) (refer to Table 9 on page 5)

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.

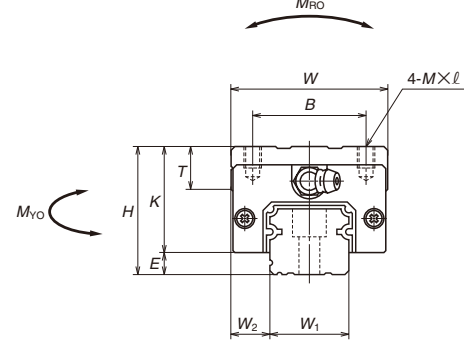
Click!Speedy™ NSK Linear Guide Quick Delivery System uses a new numbering system.
For details, please refer to the Click!Speedy general catalog CAT. No. E3191.

Model No.	Assembly			Ball slide												
	Height			Width	Length	Mounting hole						Grease fitting				
												Hole size				
	H	E	W_2	W	L	B	J	$M \times \text{Pitch} \times \ell$	L_1	K	T				W_1	H_1
NH15AN NH15BN	28	4.6	9.5	34	55 74	26	26	M4×0.7×6	39 58	23.4	8	φ3	8.5	3.3	15	15
NH20AN NH20BN	30	5	12	44	69.8 91.8	32	36 50	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 50	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 60	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 72	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 80	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 95	M12×1.75×18	126 164	65	18	Rc1/8	21	13	53	44
NH65AN NH65BN	90	16	31.5	126	193 253	76	70 120	M16×2×20	147 207	74	23	Rc1/8	19	13	63	53

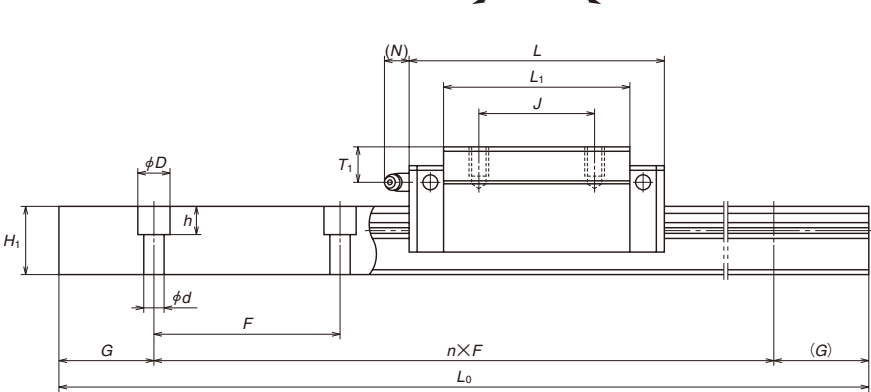
Notes: 1) External appearance of stainless steel ball slides differs from those of carbon steel ball slides.

Assembly (Preloaded assembly, random-matching type)

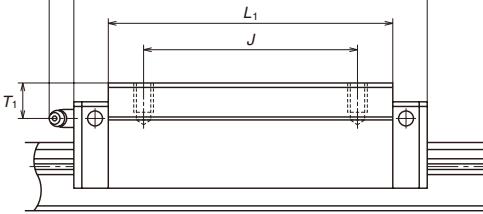
Front view of AN and BN types



Side view of AN type

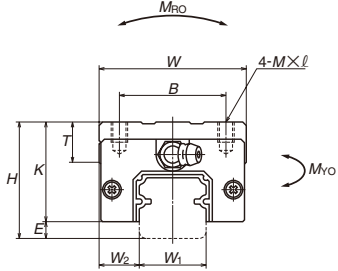


Side view of BN type

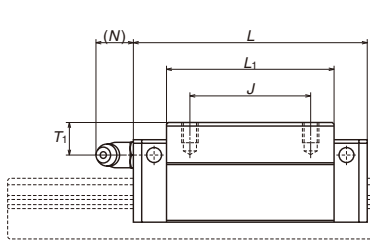


Ball slide of random-matching type

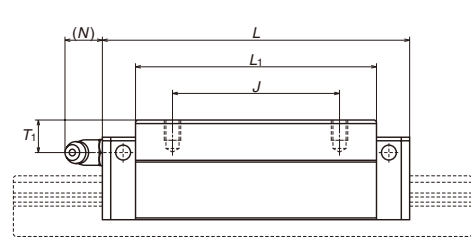
AN and BN types



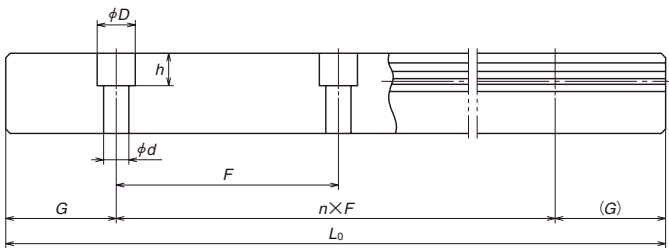
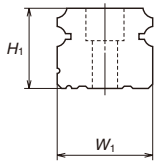
AN type



BN type



Rail of random-matching type



Rail				Basic load rating								Weight	
Pitch	Mounting bolt hole $d \times D \times h$	G	Max. length L_{0max} () for stainless	2) Dynamic		Static C_0 (N)	M_{RO}	Static moment (N·m)				Ball slide (kg)	Rail (kg/m)
F				[50km] $C_{50}(N)$	[100km] $C_{100}(N)$			M_{PO}		M_{YO}			
								(One slide)	(Two slides)	(One slide)	(Two slides)		
60	4.5×7.5×5.3	20	2 980 (1 800)	14 200 18 100	11 300 14 400	20 700 32 000	108 166	94.5 216	575 1 150	79.5 181	480 965	0.18 0.26	1.6
60	6×9.5×8.5	20	3 960 (3 500)	23 700 30 000	18 800 24 000	32 500 50 500	219 340	185 420	1 140 2 230	155 355	955 1 870	0.33 0.48	2.6
60	7×11×9	20	3 960 (3 500)	33 500 45 500	26 800 36 500	46 000 71 000	360 555	320 725	1 840 3 700	267 610	1 540 3 100	0.55 0.82	3.6
80	9×14×12	20	4 000 (3 500)	41 000 61 000	32 500 48 500	51 500 91 500	490 870	350 1 030	2 290 5 600	292 865	1 920 4 700	0.77 1.3	5.2
80	9×14×12	20	4 000	62 500 81 000	49 500 64 500	80 500 117 000	950 1 380	755 1 530	4 500 8 350	630 1 280	3 800 7 000	1.5 2.1	7.2
105	14×20×17	22.5	3 990	107 000 131 000	84 500 104 000	140 000 187 000	2 140 2 860	1 740 3 000	9 750 15 600	1 460 2 520	8 150 13 100	3.0 3.9	12.3
120	16×23×20	30	3 960	158 000 193 000	125 000 153 000	198 000 264 000	3 600 4 850	3 000 5 150	16 300 26 300	2 510 4 350	13 700 22 100	4.7 6.1	16.9
150	18×26×22	35	3 900	239 000 310 000	190 000 246 000	281 000 410 000	6 150 8 950	4 950 10 100	27 900 51 500	4 150 8 450	23 400 43 500	7.7 10.8	24.3

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