

NH-EM (High-load type/standard, flange type)
NH-GM (Super-high-load type/long, flange type)

(1) Reference number for assembly

NH 30 1200 EMC 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 EMS Z -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.

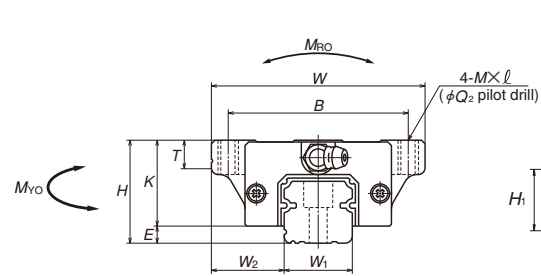
Click!Speedy™ NSK Linear Guide Quick Delivery System uses a new numbering system.
For details, please refer to the Click!Speedy general catalog CAT. No. E3191.

Model No.	Assembly			Ball slide											Width	Height		
	Height			Width	Length	Mounting hole								Grease fitting				
														Hole size				
	<i>H</i>	<i>E</i>	<i>W</i> ₂	<i>W</i>	<i>L</i>	<i>B</i>	<i>J</i>	<i>M</i> × <i>Pitch</i> × <i>ℓ</i>	<i>Q</i> ₂	<i>L</i> ₁	<i>K</i>	<i>T</i>		<i>T</i> ₁	<i>N</i>	<i>W</i> ₁	<i>H</i> ₁	
NH15EM NH15GM	24	4.6	16	47	55 74	38	30	M5×0.8×7	4.4	39 58	19.4	8	∅3	4.5	3.3	15	15	
NH20EM NH20GM	30	5	21.5	63	69.8 91.8	53	40	M6×1×9.5	5.3	50 72	25	10	M6×0.75	5	11	20	18	
NH25EM NH25GM	36	7	23.5	70	79 107	57	45	M8×1.25×10 (M8×1.25×11.5)	6.8	58 86	29	11 (12)	M6×0.75	6	11	23	22	
NH30EM NH30GM	42	9	31	90	98.6 124.6	72	52	M10×1.5×12 (M10×1.5×14.5)	8.6	72 98	33	11 (15)	M6×0.75	7	11	28	26	
NH35EM NH35GM	48	9.5	33	100	109 143	82	62	M10×1.5×13	8.6	80 114	38.5	12	M6×0.75	8	11	34	29	
NH45EM NH45GM	60	14	37.5	120	139 171	100	80	M12×1.75×15	10.5	105 137	46	13	Rc1/8	10	13	45	38	
NH55EM NH55GM	70	15	43.5	140	163 201	116	95	M14×2×18	12.5	126 164	55	15	Rc1/8	11	13	53	44	
NH65EM NH65GM	90	16	53.5	170	193 253	142	110	M16×2×24	14.6	147 207	74	23	Rc1/8	19	13	63	53	

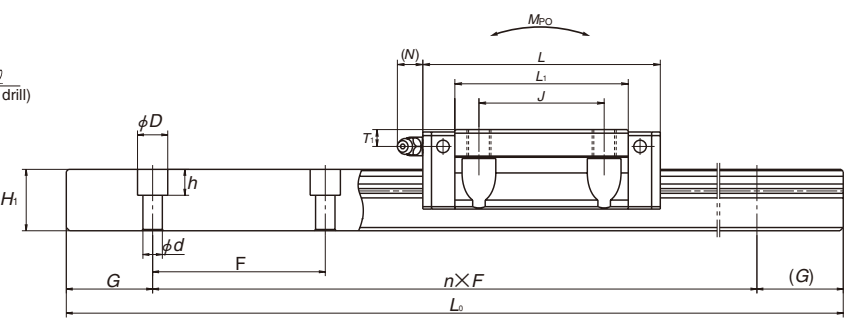
Notes: 1) Parenthesized dimensions are for items made of stainless steel.
2) External appearance of stainless steel ball slides differs from those of carbon steel ball slides.

Assembly (Preloaded assembly, random-matching type)

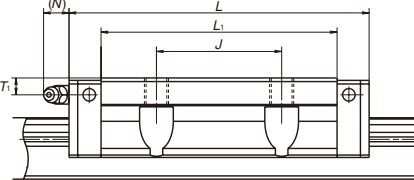
Front view of EM and GM types



Side view of EM type

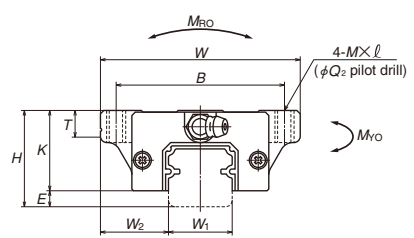


Side view of GM type

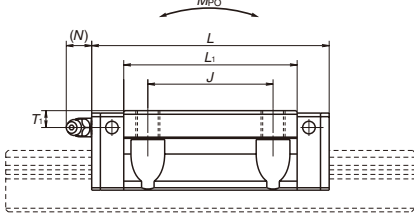


Ball slide of random-matching type

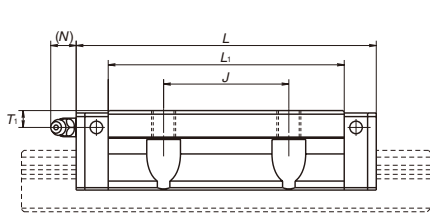
EM and GM types



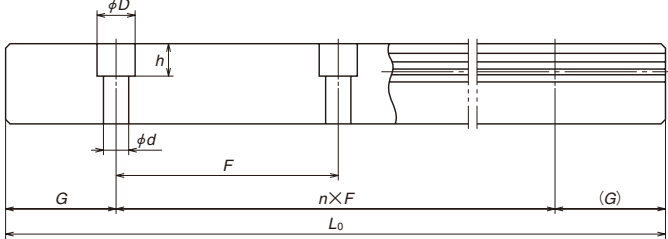
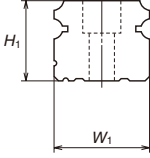
EM type



GM type



Rail of random-matching type



Unit: mm

Rail				Basic load rating								Weight	
Pitch	Mounting bolt hole d×D×h	G	Max. length L _{0max} (reference) () for stainless	³⁾ Dynamic [50km] C ₅₀ (N)	[100km] C ₁₀₀ (N)	Static C ₀ (N)	M _{RO}	Static moment (N·m)				Ball slide (kg)	Rail (kg/m)
F								M _{PO} (One slide)	(Two slides)	M _{YO} (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	0.17 0.25	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	0.45 0.65	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	0.63 0.93	3.6
80	9×14×12	20	4 000 (3 500)	47 000 61 000	37 500 48 500	63 000 91 500	600 870	505 1 030	3 150 5 600	425 865	2 650 4 700	1.2 1.6	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	1.7 2.4	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 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	5 6.5	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	10 14.1	24.3

3) 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