

NS-CL (Medium-load type/short, square low-profile type) NS-AL (High-load type/standard, square low-profile type)

(1) Reference number for assembly

NS	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

NAS	30	AL	S	Z	-K
INTERCHANGEABLE BALL SLIDE SERIES CODE NAS: NS 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

N1S	30	1200	L	S	Z
INTERCHANGEABLE RAIL SERIES CODE N1S: NS Series Interchangeable Rail	SIZE	RAIL LENGTH (MM)	RAIL SHAPE CODE L: Standard T: The rail mounting bolt hole M4 for NS15	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		
NS15CL NS15AL	24	4.6	9.5	34	40.4 56.8	26	— 26	M4×0.7×6	23.6 40	19.4	10	∅3	6	3	15	12.5
NS20CL NS20AL	28	6	11	42	47.2 65.2	32	— 32	M5×0.8×7	30 48	22	12	M6×0.75	5.5	11	20	15.5
NS25CL NS25AL	33	7	12.5	48	59.6 81.6	35	— 35	M6×1×9	38 60	26	12	M6×0.75	7	11	23	18
NS30CL NS30AL	42	9	16	60	67.4 96.4	40	— 40	M8×1.25×12	42 71	33	13	M6×0.75	8	11	28	23
NS35CL NS35AL	48	10.5	18	70	77 108	50	— 50	M8×1.25×12	49 80	37.5	14	M6×0.75	8.5	11	34	27.5

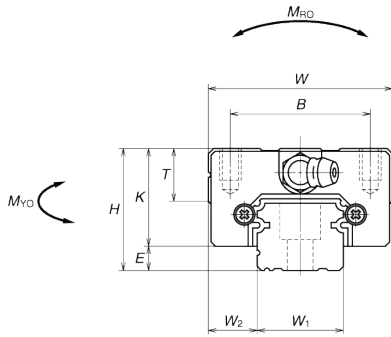
Notes: 1) External appearance of stainless steel ball slides differs from those of carbon steel ball slides.

2) The basic load rating comply with the ISO standard. (ISO14728-1 and ISO14728-2)

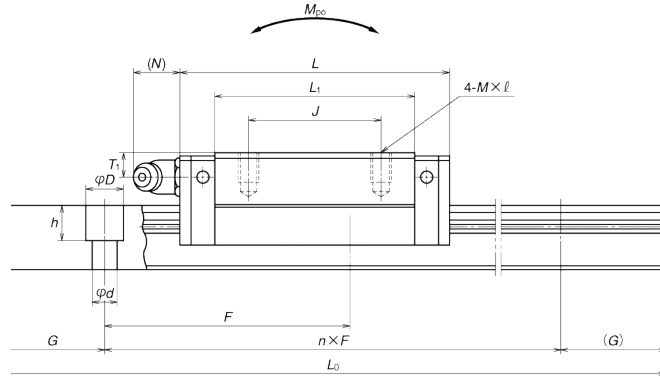
C₅₀: the basic dynamic load rating for 50 km rating fatigue life, C₁₀₀: the basic dynamic load rating for 100 km rating fatigue life

Assembly (Preloaded assembly, interchangeable type)

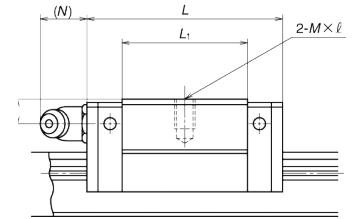
Front view of AL and CL types



Side view of AL type

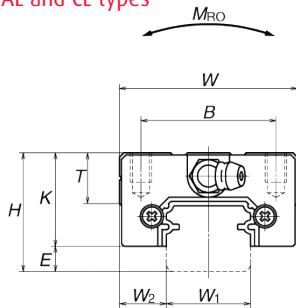


Side view of CL type

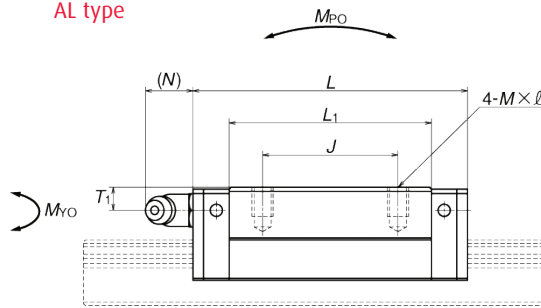


Ball slide of interchangeable type

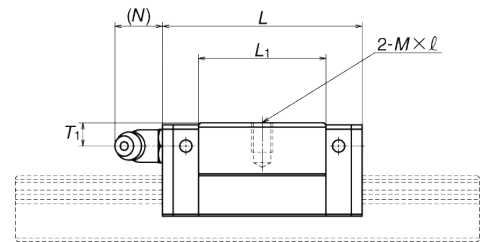
AL and CL types



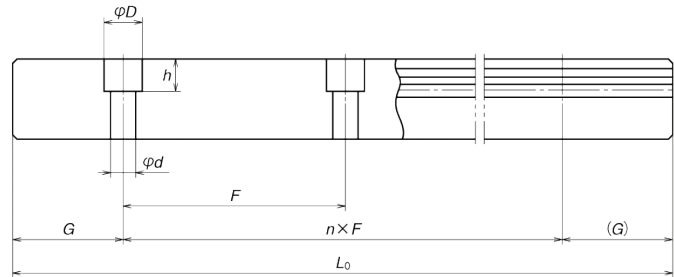
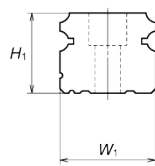
AL type



CL type



Rail of interchangeable type



Unit: mm

Rail		G	Max. length L _{0max} () for stainless	Basic load rating						Weight			
Pitch F	Mounting bolt hole d×D×h			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} (One slide) (Two slides)	M _{VO} (One slide) (Two slides)				
60	*3.5×6×4.5	20	2 920 (1 700)	7 250	5 750	9 100	45.5	24.5	196	20.5	165	0.14	1.4
	4.5×7.5×5.3			11 200	8 850	16 900	84.5	77	470	64.5	395		
60	6×9.5×8.5	20	3 960 (3 500)	10 600	8 400	13 400	91.5	46.5	330	39	279	0.19	2.3
				15 600	12 400	23 500	160	133	755	111	630		
60	7×11×9	20	3 960 (3 500)	17 700	14 000	20 800	164	91	655	76	550	0.34	3.1
				26 100	20 700	36 500	286	258	1 470	217	1 230	0.51	
80	7×11×9	20	4 000 (3 500)	24 700	19 600	29 600	282	139	1 080	116	905	0.58	4.8
				38 000	30 000	55 000	520	435	2 650	365	2 220	0.85	
80	9×14×12	20	4 000 (3 500)	34 500	27 300	40 000	465	220	1 670	185	1 400	0.86	7.0
				52 500	42 000	74 500	865	695	4 000	580	3 350		

*) Standard rail mounting bolt hole for NS15 is specified as hole for M3 (3.5 x 6 x 4.5).
Please contact NSK to request a different hole for M4 (4.5 x 7.5 x 5.3).