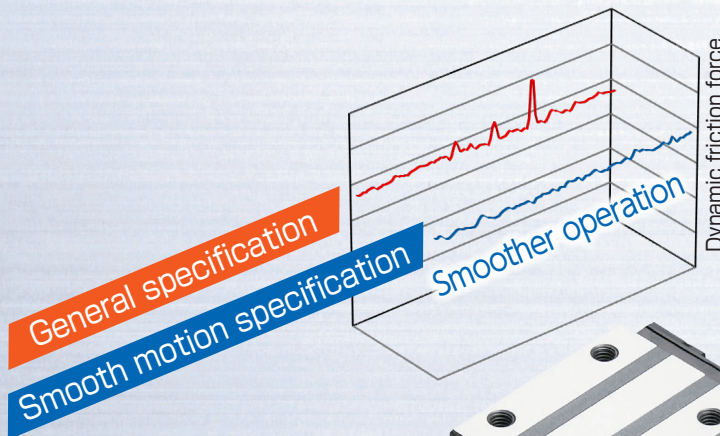


NSK Linear Guides™

Smooth Motion Specification for NH/NS Models

New!

An option for even smoother movement realized by reduced frictional variation



Features

1. Smooth movement characteristics

Provides smooth motion ideal for equipment that requires high performance by reducing conflict between balls in the slide.

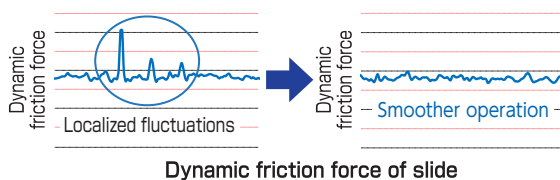
2. Identical dimensions to standard NH/NS models

Available for a variety of models (NH15-25 and NS15-30), with fully compatible dimensions for easy replacement.

NSK Linear Guides™

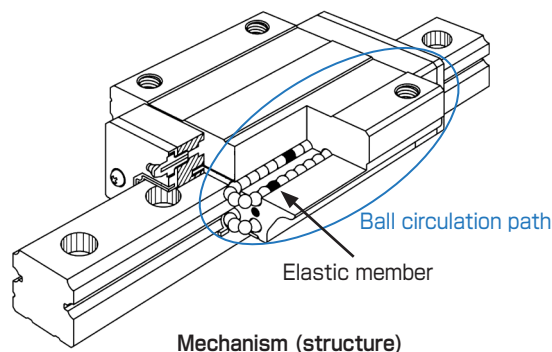
Smooth motion specification for NH/NS models

Achieve higher performance with the smooth motion specification for standard NH/NS linear guides. This optional specification greatly suppresses fluctuations in friction, supporting equipment that requires particularly smooth operation such as measuring instruments. It also delivers in applications where operating characteristics often deteriorate, such as vertical installations (Refer to right figure).



Mechanism for smooth motion

As shown in the right figure, linear guides contain numerous steel balls packed inside a circuit called the circulation path. Curved sections cause the balls to become crowded as they travel, impacting operating characteristics. Elastic members added between the balls help to relieve this conflict and realize smoother motion.



Supported models/sizes

7 models supported : **NH15, NH20, NH25, NS15, NS20, NS25, and NS30.**
Can be combined with various options, including NSK K1-L lubrication units, stainless steel specifications, surface treatments, interchangeable models, etc.

Reference Number (Designation)

Model NH : NH Model NS : NS Model	NH 25 1200 ANC 2 -** S5 3	
Size NH : 15 to 25 NS : 15 to 30		Preload code
Rail length (mm)		Accuracy code
Ball slide shape code NH : AN, BN, AL, BL, EM, GM NS : AL, CL, EM, JM		Design serial number
Material/surface treatment code C : Special high-carbon steel D : Special high-carbon steel + surface treatment		Ball slides per rail

Please contact NSK for the reference numbers of interchangeable rails/slides.

Accuracy code

	Preloaded assembly					Interchangeable	
	Ultra precision	Super precision	High precision	Precision grade	Normal grade	High precision	Normal grade
Without NSK K1-L	S3	S4	S5	S6	SN	SH	SC
With NSK K1-L	T3	T4	T5	T6	TN	TH	TC

Preload code

Preloaded assembly			Interchangeable		
Fine clearance Z0	Slight preload Z1	Medium preload Z3	Fine clearance ZT	Slight preload ZZ	Medium preload ZH
0	1	3	T	Z	H

Basic Dynamic Load Ratings (With smooth motion spec.)

Unit : N

Model	Rating/Shape Code	Size	15		20		25		30	
			C ₅₀	C ₀	C ₅₀	C ₀	C ₅₀	C ₀	C ₅₀	C ₀
NH	High load	AN/AL/EM	13 400	18 800	22 300	29 600	31 500	41 500		
	Ultra-high load	BN/BL/GM	17 400	30 000	29 000	47 500	44 000	66 500		
NS	High load	AL/EM	10 600	15 600	14 900	21 800	24 800	33 500	36 000	50 500
	Medium load	CL/JM	6 550	7 800	9 700	11 800	16 200	18 100	22 300	25 400

C₅₀ : Basic dynamic load rating for 50 km rated fatigue life C₀ : Basic static load rating

- Mounting dimensions such as linear guide assembly height, assembly width, and mounting hole screw diameter pitch are identical to standard NH/NS models.
- For details on dimensions, please refer to the NH/NS model catalog.
- When the smooth motion specification is applied, the maximum operating speed is 100 m/min regardless of model.
- When removing the slide from the rail, be sure to use a temporary rail (a specialized jig for transferring slides to/from rails).
- This product has improved smooth motion characteristics. Accuracy and ball passage vibration are the same as general specifications.

For more information about NSK products, please contact: www.nsk.com

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