

# NSK Linear Guides™

## Long-Life Series: DH/DS Models

**New!**

NSK's special heat treatment technology doubles the life of conventional products, delivering long-term equipment reliability. Interchangeable types are now supported, making it even easier to use.

Patent pending



### ■ Features

#### 1. Double the life of standard linear guides

NSK's exclusive TF (Tough) technology heat treatment of DH/DS models achieves double the life of standard NH/NS models, improving machine reliability.

#### 2. Fully dimensionally interchangeable with standard NH/NS models

Replacement is easy and doesn't require redesigning of equipment.

Interchangeable types, which allow rails and ball slides to be freely combined, are also newly available.

#### 3. Support for a wide range of options

The same options as NH/NS models, such as NSK K1-L lubrication unit, highly dust-resistant end seals (DV model), etc., are available.



## Long-Life Series DH/DS NSK Linear Guides™

DH/DS models are based on our proven, highly reliable standard NH/NS models that feature an optimized groove shape. Applying our special TF heat treatment achieves even longer life, expanding design possibilities for more compact and longer-lasting machines.

### What is TF (Tough) Technology?

NSK's TF technology is an exclusive heat treatment developed and cultivated over years of experience with rolling bearings and materials. TF technology helps suppress surface flaking on the raceway. Deploying this technology in linear guides achieves double the life of our conventional models.

### Advantages of the Long-Life Series

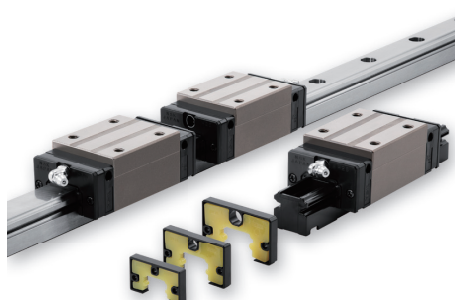
The use of DH/DS models enables a significant increase in service life for the same size selection. The life can be extended with the current size to meet the demand for higher reliability due to increased machine tact time and continuous operation. Additionally, it is possible to select a size that is one rank smaller with the same life expectancy, enabling a reduction in equipment size.

### Lineup Features

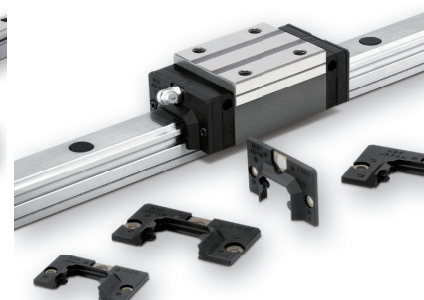
Long-life DH models offer higher load ratings with large ball diameters, while DS models offer a compact, low-profile shape. Available sizes and ball slide shapes are identical to those for standard NH/NS models, allowing for easy replacement. Interchangeable types, which allow rails and ball slides to be freely combined, are also newly available.

### Options

DH/DS models support a wide variety of options, including the newly developed NSK K1-L lubrication unit, double seals, protectors, and surface treatments. Highly dust-resistant end seals with a multi-lip structure are also available as DV models (DV15~55).



Lubrication unit NSK K1-L™



DV model

### Basic Dynamic Load Ratings $C_{50}$

Model	Size		15	20	25	30	35	45	55	65
	Ball Slide Shape									
DH	High load	AN/AL/EM	17 800	29 800	42 500	51 500 EM : 59 000	78 500	135 000	199 000	300 000
	Ultra-high load	BN/BL/GM	22 800	38 000	57 500	77 000	102 000	164 000	243 000	390 000
DS	Medium load	CL/ JM	9 150	13 400	22 300	31 000	43 000			
	High load	AL/EM	14 100	19 700	33 000	48 000	66 500			

Notes: For dimensions and other specifications, refer to Long-Life Series DH/DS Models Catalog No. E3336.

The ball slide shapes AL/BL of DH models are applicable to sizes 25 to 55. Not available for stainless steel.

Please contact NSK for other details.

For more information about NSK products, please contact:

[www.nsk.com](http://www.nsk.com)

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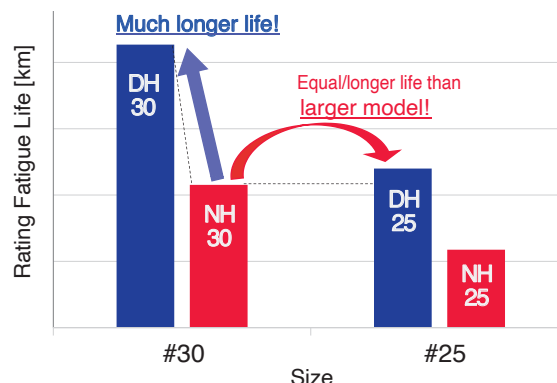
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Long-Life DH/DS models  
(With TF Technology)

Standard NH/NS models  
(Optimized Ball Groove  
Design)

Longer Life

NSK Linear Guides™



Advantages of the Long-Life Series



NSK used environmentally friendly printing methods for this publication.