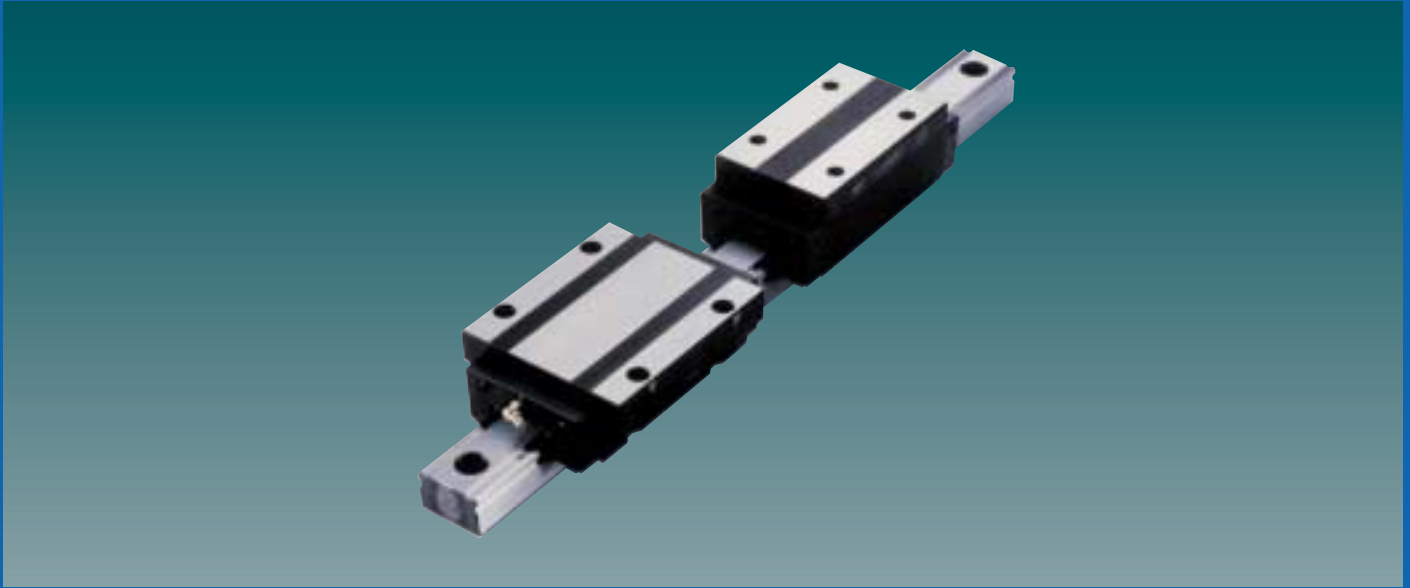


NEW

Type SNR/SNS-H Low Center of Gravity, High Rigidity LM Guide with Caged Ball

THK LM Guide Global Standard Type: Type SHS/HSR (Four-directional equal load type)



Features of the SNR/SNS-H Series

■ Installation Compatibility with Global Standard Types

The Types SNR/SNS-H are ultra-heavy-duty, high-rigidity types of LM guides, and offer installation compatibility with global standard types of linear motion guides.

■ High Rigidity

Since the Types SNR/SHS-H are compact versions based on the Model NR LM guide featuring enhanced block rigidity, they feature improved radial, reverse radial, and lateral rigidity, giving them the highest rigidity among our caged Ball series of LM guides. In addition, two types are available consisting of the model SNR-H radial type and model SNS-H four-directional equal load type, and have the same dimensions, making it possible to select the type according to the specifications.

■ Improved Dumping Effect

During rapid operation when the balls are moving at high speed, a high degree of positional accuracy is realized that eliminates differential slip for smooth movement. In addition, during heavy cutting when operating at low speed, a suitable level of differential slip occurs corresponding to difficulty in cutting, causing an increase in frictional resistance and improvement of dumping effect (attenuation).

■ Ultra-Heavy Loads

As a result of approximating the curvature of the rolling surface with ball diameter and increasing the contact surface area during a load equal to or greater than the contact surface area of the balls, load capacity for

accommodating ultra-heavy loads is obtained that is superior to roller types. There is also no occurrence of the locking phenomena caused by roller skewing that frequently occurs in roller types.

■ Low Noise Levels and High Sound Quality

Since the balls are forced to move in an aligned arrangement by the ball cage, the metal sound produced by collisions among balls is eliminated resulting in low noise levels and good sound quality.

■ Long-Term, Maintenance-Free Operation

The elimination of mutual friction between balls by the ball retainer eliminates ball friction and improves grease retention realizing long-term, maintenance-free operation.

■ Outstanding High-Speed Operation and Long Service Life

Since mutual friction between balls is eliminated by the ball retainer, the relative frictional speed is reduced to 1/2 resulting in low bearing pressure and less generation of heat, enabling outstanding high-speed operation over a long service life.

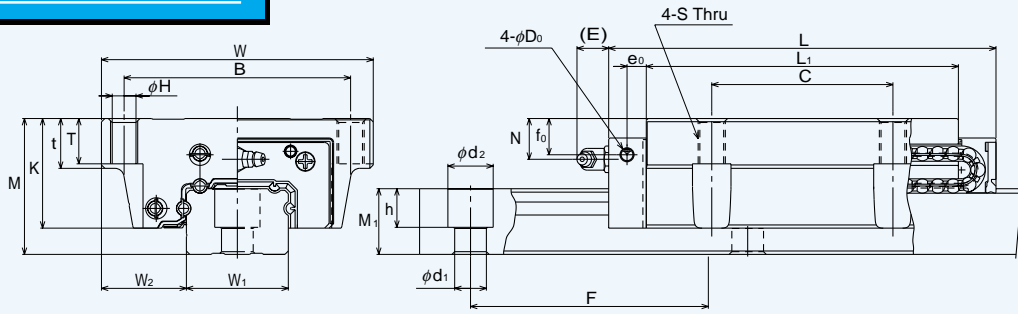
■ Excellent Lubricating Properties

The elimination of mutual friction between balls eliminates noise caused by collisions between the balls, and since the balls circulate while uniformly arranged, there are no variations in rolling resistance, allowing the obtaining of smooth movement.

Ultra-Heavy Load + Installation Compatibility with Global Standard Types + Effects of Caged Ball Technology

These ultra-heavy load LM guides employ caged balls to realize low noise levels, long-term, maintenance-free operation and outstanding high-speed operation while also featuring installation compatibility with global standard types of linear motion guides.

Table of Dimensions of Type SNR/SNS-CH SNR/SNS-LCH

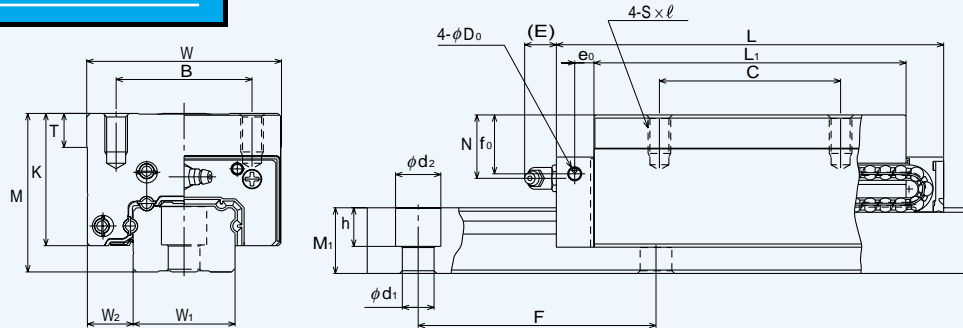


Unit : mm

Model number	Outline dimensions			LM block dimensions (mm)													
	Height M	Width W	Length L	B	C	S	H	L ₁	T	t	K	N	f ₀	e ₀	D ₀	E	
SNR-SNS35CH SNR-SNS35LCH	48	100	109.5 135	82	62	M10	8.5	79 104.5	16	20	39	12	12	6	5.2	9	
SNR-SNS45CH SNR-SNS45LCH	60	120	138.2 171	100	80	M12	10.5	105 137.8	20	22	48.4	18	16	8.5	5.2	14	
SNR-SNS55CH SNR-SNS55LCH	70	140	163.3 200.5	116	95	M14	12.5	123.6 160.8	22	24	56	18	17	10	5.2	13	

Model number	Grease nipple	LM rail dimensions (mm)					Pitch d ₁ ×d ₂ ×h	Basic load rating				Mass	
		Width 0 W ₁ -0.05	W ₂	Height M ₁	F	SNR-H C kN		SNS- H C kN	SNR-H C ₀ kN	SNS-H C ₀ kN	LM block kg	LM rail kg/m	
SNR-SNS35CH SNR-SNS35LCH	B-M6F	34	33	24.5	80	9×14×12	90 108	69 83	144 188	110 144	1.7 2.2	6.2	
SNR-SNS45CH SNR-SNS45LCH	B-PT1/8	45	37.5	29	105	14×20×17	132 161	101 123	216 288	167 222	3.0 4.2	9.8	
SNR-SNS55CH SNR-SNS55LCH	B-PT1/8	53	43.5	36.5	120	16×23×20	177 214	136 164	292 383	225 295	4.4 6.5	14.5	

Table of Dimensions of Type SNR/SNS-RH SNR/SNS-LRH



Unit : mm

Model number	Outline dimensions			LM block dimensions (mm)											
	Height M	Width W	Length L	B	C	S×l	L ₁	T	K	N	f ₀	e ₀	D ₀	E	
SNR-SNS35RH SNR-SNS35LRH	55	70	109.5 135	50	50 72	M8×12	79 104.5	12	46	19	19	6	5.2	9	
SNR-SNS45RH SNR-SNS45LRH	70	86	138.2 171	60	60 80	M10×17	105 137.8	15	58.4	28	26	8.5	5.2	14	
SNR-SNS55RH SNR-SNS55LRH	80	100	163.3 200.5	75	75 95	M12×18	123.6 160.8	18	66	28	27	10	5.2	13	

Model number	Grease nipple	LM rail dimensions (mm)					Pitch d ₁ ×d ₂ ×h	Basic load rating				Mass	
		Width 0 W ₁ -0.05	W ₂	Height M ₁	F	SNR-H C kN		SNS- H C kN	SNR-H C ₀ kN	SNS-H C ₀ kN	LM block kg	LM rail kg/m	
SNR-SNS35RH SNR-SNS35LRH	B-M6F	34	18	24.5	80	9×14×12	90 108	69 83	144 188	110 144	1.5 2	6.2	
SNR-SNS45RH SNR-SNS45LRH	B-PT1/8	45	20.5	29	105	14×20×17	132 161	101 123	216 288	167 222	3.2 4.1	9.8	
SNR-SNS55RH SNR-SNS55LRH	B-PT1/8	53	23.5	36.5	120	16×23×20	177 214	136 164	292 383	225 295	4.7 6.2	14.5	