



CNC HIWIN LINEAR GUIDE SLIDER HGH20CA

HG Series

Heavy Load Ball Type Linear Guideway

HG series linear guideways are designed with load capacity and rigidity higher than other similar products with circular-arc groove and structure optimization. It features equal load ratings in the radial, reverse radial and lateral directions, and self-aligning to absorb installation-error. Thus, HIWIN HG series linear guideways can achieve a long life with high speed, high accuracy and smooth linear motion.

Features of HG Series

(1) Self-aligning capability

By design, the circular-arc groove has contact points at 45 degrees. HG series can absorb most installation errors due to surface irregularities and provide smooth linear motion through the elastic deformation of rolling elements and the shift of contact points. Self-aligning capability, high accuracy and smooth operation can be obtained with an easy installation.

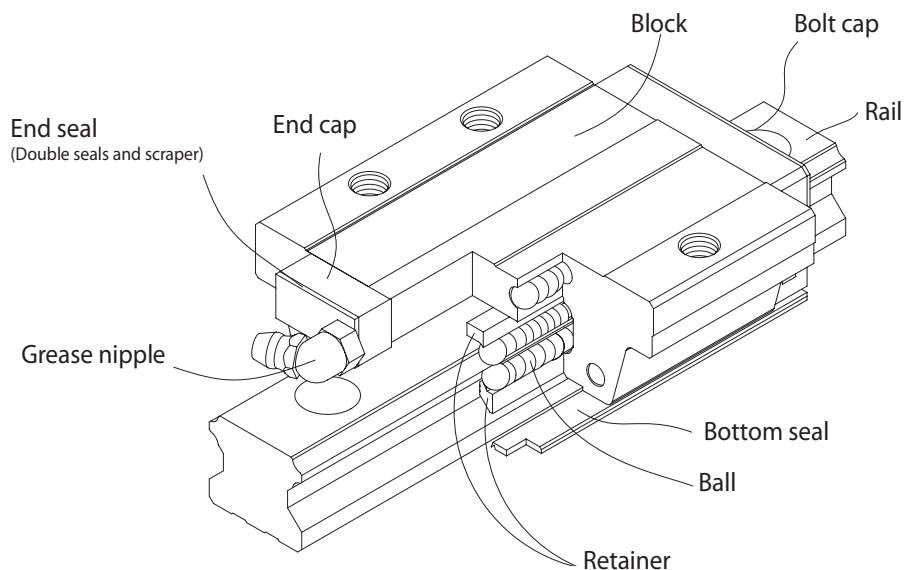
(2) Interchangeability

Because of precision dimensional control, the dimensional tolerance of HG series can be kept in a reasonable range, which means that any blocks and any rails in a specific series can be used together while maintaining dimensional tolerance. And a retainer is added to prevent the balls from falling out when the blocks are removed from the rail.

(3) High rigidity in all four directions

Because of the four-row design, the HG series linear guideway has equal load ratings in the radial, reverse radial and lateral directions. Furthermore, the circular-arc groove provides a wide-contact width between the balls and the groove raceway allowing large permissible loads and high rigidity.

Construction of HG Series



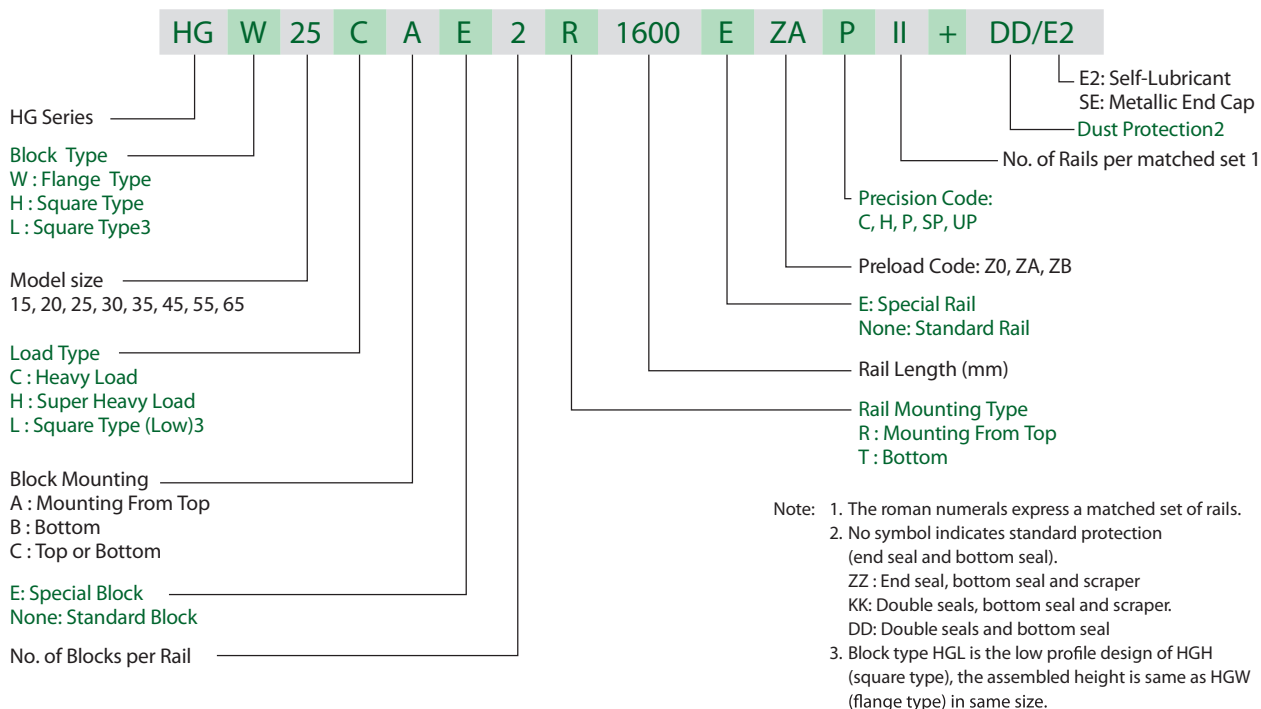
- Rolling circulation system: Block, Rail, End Cap and Retainer
- Lubrication system: Grease Nipple and Piping Joint
- Dust protection system: End seal, Bottom Seal, Bolt Cap, Double Seals and Scraper



HIWIN®

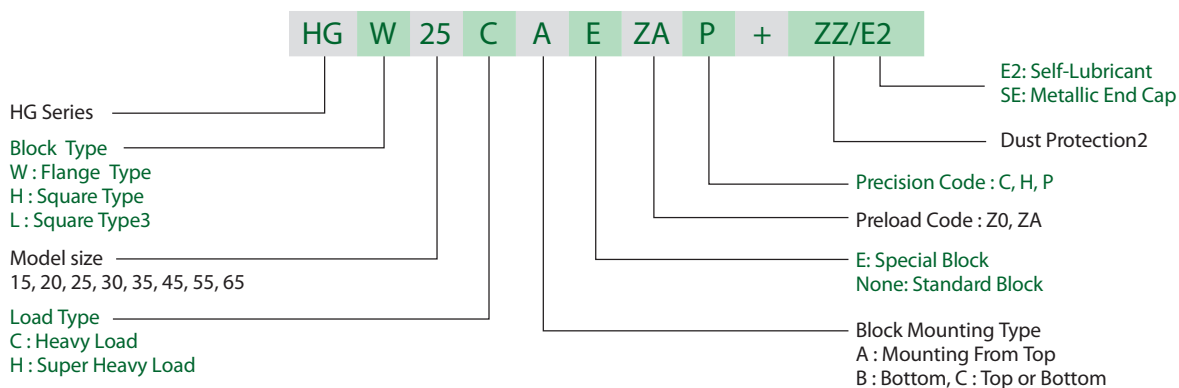
Linear Motion

(1) Non-interchangeable type

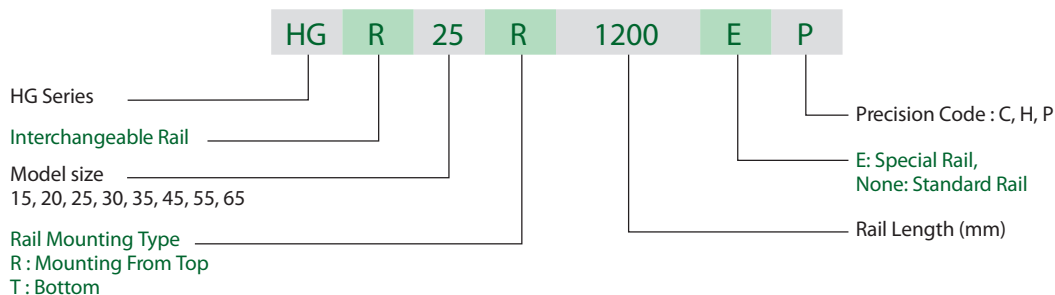


(2) Interchangeable type

Model Number of HG Block



Model Number of HG Rail





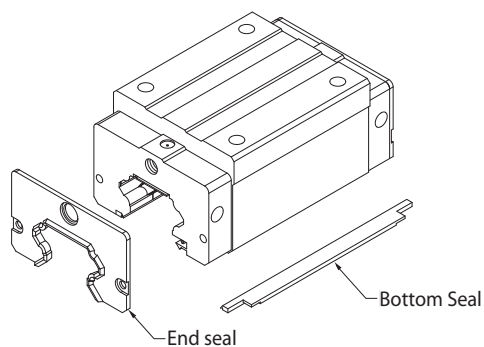
HG Series

Dust Proof

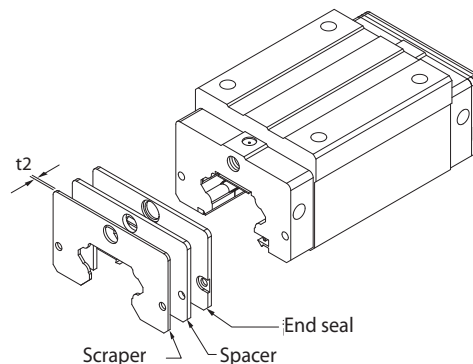
Accessories

(1) Codes of accessories

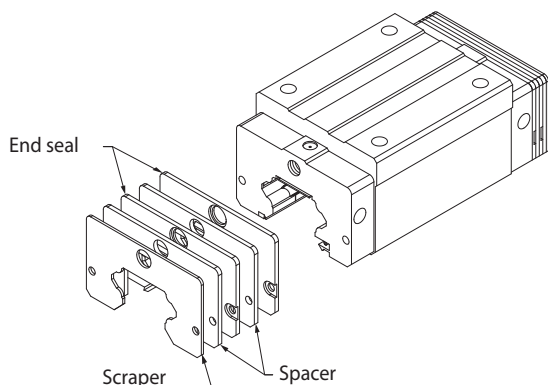
If the following accessories are needed, please add the code followed by the model number.



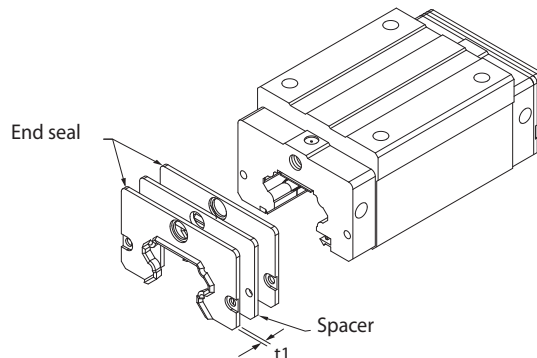
No symbol: Standard Protection (End seal + Bottom Seal)



ZZ (End seal + Bottom Seal + Scraper)



KK (Double seals + Bottom Seal + Scraper)



DD (Double seals + Bottom Seal)

(2) End seal and bottom seal

To prevent life reduction caused by iron chips or dust entering the block.

(3) Double seals

Enhances the wiping effect, foreign matter can be completely wiped off.

Table 3.1.1 Dimensions of end seal

Size	Thickness (t1) (mm)	Size	Thickness (t1) (mm)
HG 15 ES	3	HG 35 ES	3.2
HG 20 ES	3.5	HG 45 ES	4.5
HG 25 ES	3.5	HG 55 ES	4.5
HG 30 ES	3.2	HG 65 ES	6

(4) Scraper

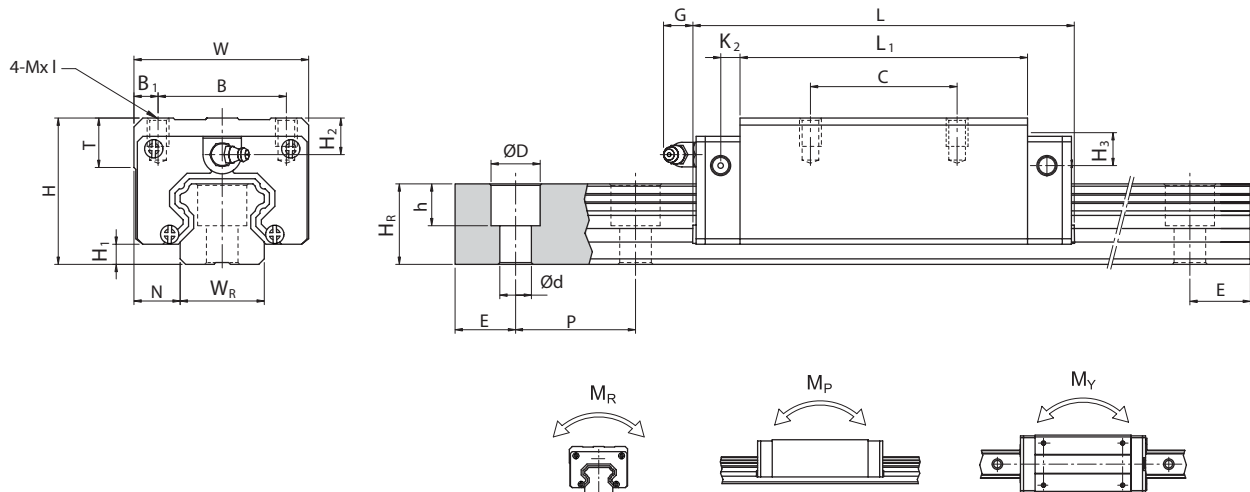
The scraper removes high-temperature iron chips and larger foreign objects.

Table 3.1.2 Dimensions of scraper

Size	Thickness (t2) (mm)	Size	Thickness (t2) (mm)
HG 15 SC	1.5	HG 35 SC	1.5
HG 20 SC	1.5	HG 45 SC	1.5
HG 25 SC	1.5	HG 55 SC	1.5
HG 30 SC	1.5	HG 65 SC	1.5



Dimensions



Model No.	Dimensions of Assembly (mm)			Dimensions of Block (mm)														Dimensions of Rail (mm)							Mounting Bolt for Rail	Basic Dynamic Load Rating	Basic Static Load Rating	Static Rated Moment			Weight	
																												M _R	M _P	M _Y	Block	Rail
	H	H ₁	N	W	B	B ₁	C	L ₁	L	K ₁	K ₂	G	MxI	T	H ₂	H ₃	W _R	H _R	D	h	d	P	E	(mm)	C (kN)	C ₀ (kN)	kN-m	kN-m	kN-m	kg	kg/m	
HGH 20CA	30	4.6	12	44	32	6	36	50.5	77.5	12.5	6	12	M5x6	8	6	6	20	17.5	9.5	8.5	6	60	20	M5x16	27.1	36.68	0.27	0.20	0.20	0.30	2.21	

Note : 1 kgf = 9.81 N



Made in Taiwan