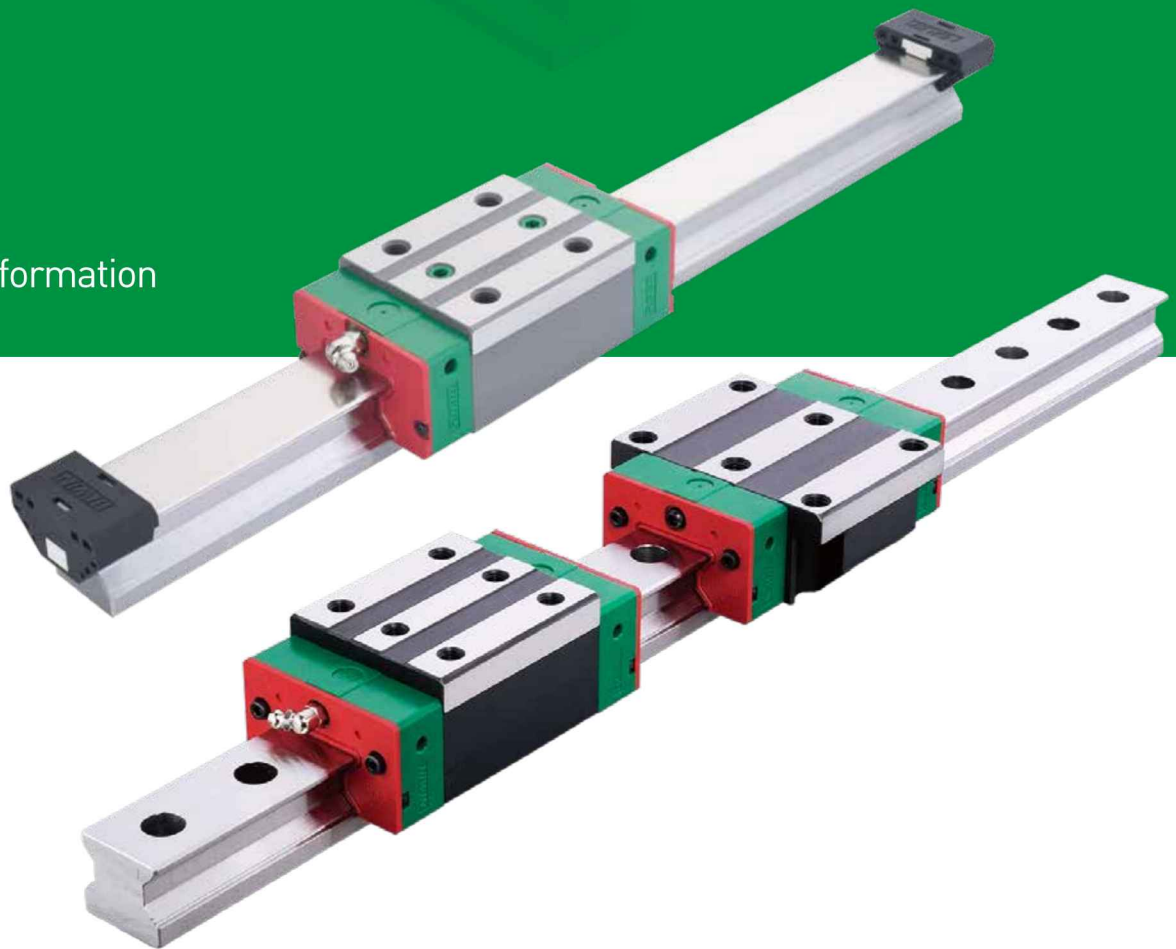


# Linear Guideway

Technical Information



HIWIN Support



About HIWIN

## HG Series

### Heavy Load Ball Type

#### ○ Bolt caps for rail mounting holes

Caps are used to cover the mounting holes to prevent chips or other foreign objects from collecting in the holes. The caps will be enclosed in each rail package.

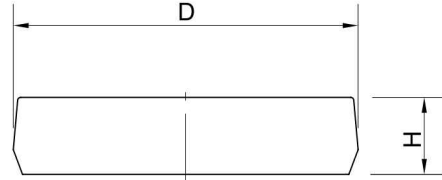


Table 2-1-19 Dimensions of Bolt Caps for Rail Mounting Holes

Rail size	Bolt size	Diameter(D) (mm)	Thickness(H) (mm)	Rail size	Bolt size	Diameter(D) (mm)	Thickness(H) (mm)
HGR15	M4	7.65	1.1	HGR35	M8	14.20	3.5
HGR20	M5	9.65	2.5	HGR45	M12	20.25	4.5
HGR25	M6	11.15	2.5	HGR55	M14	23.25	5.0
HGR30	M8	14.20	3.5	HGR65	M16	26.35	5.0

(5) Dimensions of block equipped with the parts

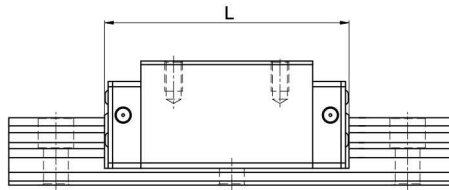


Table 2-1-20 Overall block length

unit: mm

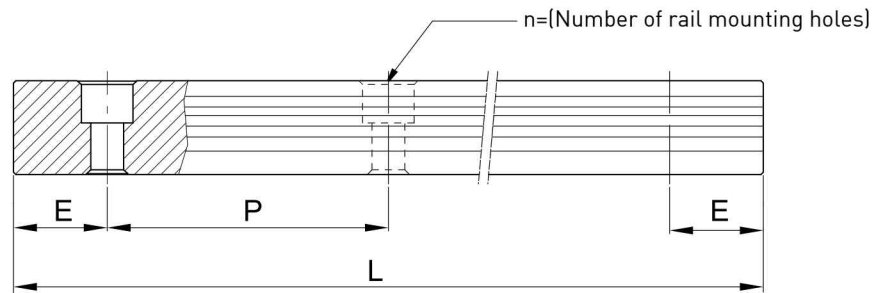
Size	Overall block length (L)					
	SS/SH	ZZ/ZH	DD/DH	KK/KH	SW	ZW
HG15C	61.4 (61.8)	69.0 (69.0)	68.0 (68.4)	75.6 (75.6)	63.2 (63.2)	71.0 (71.0)
*HG20C	77.5 (79.3)	82.5 (84.5)	82.5 (84.3)	87.5 (89.5)	78.5 (78.5)	86.3 (87.7)
*HG20H	92.2 (94.0)	97.2 (99.2)	97.5 (99.0)	102.2 (104.2)	93.2 (93.2)	101.0 (102.4)
*HG25C	84.0 (85.0)	89.0 (91.0)	89.0 (90.0)	94.0 (96.0)	85.0 (85.0)	92.8 (94.8)
*HG25H	104.6 (105.6)	109.6 (111.6)	109.6 (110.6)	114.6 (116.6)	105.6 (105.6)	113.4 (115.4)
*HG30C	97.4 (99.4)	105.4 (107.4)	104.8 (106.8)	112.8 (114.8)	99.0 (100.4)	107.2 (109.2)
*HG30H	120.4 (122.4)	128.4 (130.4)	127.8 (129.8)	135.8 (137.8)	122.0 (123.4)	130.2 (132.2)
*HG35C	112.4 (114.4)	120.4 (122.4)	119.8 (121.8)	127.8 (129.8)	115.2 (116.0)	123.4 (125.4)
*HG35H	138.2 (140.2)	146.2 (148.2)	145.6 (147.6)	153.6 (155.6)	141.0 (141.8)	149.2 (151.2)
*HG45C	139.4 (139.4)	150.0 (150.0)	149.4 (149.4)	160.0 (160.0)	140.0 (140.0)	148.8 (150.2)
HG45H	171.2 (171.2)	181.8 (181.8)	181.2 (181.2)	191.8 (191.8)	171.8 (171.8)	180.6 (182.0)
HG55C	166.7 (166.7)	177.1 (177.1)	177.1 (177.1)	187.5 (187.5)	-	-
HG55H	204.8 (204.8)	215.2 (215.2)	215.2 (215.2)	225.6 (225.6)	-	-
HG65C	200.2 (200.2)	208.2 (208.2)	209.2 (209.2)	217.2 (217.2)	-	-
HG65H	259.6 (259.6)	267.6 (267.6)	268.6 (268.6)	276.6 (276.6)	-	-

Note : 1. For the marking of "\*", it means this specification is available for SH/ZH/DH/KH dust proof accessories.

2. The marking of "[ ]" denotes the maximum block length with screws, lips of end seals, etc.

## 2-1-12 Standard and Maximum Lengths of Rail

HIWIN offers standard rail lengths for customer needs. For non-standard E-values, the recommended dimension should no greater than 1/2 of the pitch (P) dimension. This will prevent an unstable rail end.



$$L = (n - 1) \times P + 2 \times E \quad \text{Eq.2.1}$$

L : Total length of rail (mm)

n : Number of mounting holes

P : Distance between any two holes (mm)

E : Distance from the center of the last hole to the edge (mm)

Table 2-1-26 Rail Standard Length and Max. Length

unit: mm

Item	HG15	HG20	HG25	HG30	HG35	HG45	HG55	HG65
Standard Length L(n)	160 (3)	220 (4)	220 (4)	280 (4)	280 (4)	570 (6)	780 (7)	1,270 (9)
	220 (4)	280 (5)	280 (5)	440 (6)	440 (6)	885 (9)	1,020 (9)	1,570 (11)
	280 (5)	340 (6)	340 (6)	600 (8)	600 (8)	1,200 (12)	1,260 (11)	2,020 (14)
	340 (6)	460 (8)	460 (8)	760 (10)	760 (10)	1,620 (16)	1,500 (13)	2,620 (18)
	460 (8)	640 (11)	640 (11)	1,000 (13)	1,000 (13)	2,040 (20)	1,980 (17)	
	640 (11)	820 (14)	820 (14)	1,640 (21)	1,640 (21)	2,460 (24)	2,580 (22)	
	820 (14)	1,000 (17)	1,000 (17)	2,040 (26)	2,040 (26)	2,985 (29)	2,940 (25)	
		1,240 (21)	1,240 (21)	2,520 (32)	2,520 (32)			
Pitch (P)	60	60	60	80	80	105	120	150
Distance to End (E <sub>s</sub> )	20	20	20	20	20	22.5	30	35
Max. Standard Length	4,000(67)	4,000 (67)	4,000 (67)	3,960 (50)	3,960 (50)	3,930 (38)	3,900 (33)	3,970 (27)
Max. Length	4,000	4,000	4,000	4,000	4,000	4,000	4,000	4,000

Note : 1. Tolerance of E value for standard rail is 0.5~-0.5 mm. Tolerance of E value for jointed rail is 0~-0.3 mm.

2. Maximum standard length means the max. rail length with standard E value on both sides.

3. If different E value is needed, please contact HIWIN.

4. HGR15/HGR20/HGR25 of stainless steel is supplied with the maximum length of 2000mm.