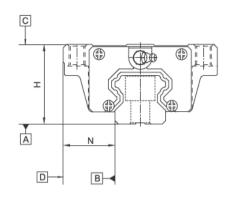
2-1-5 Accuracy Classes

The accuracy of HG series can be classified into normal (C), high (H), precision (P), super precision (SP), ultra precision (UP), five classes. Please choose the class by referring the accuracy of applied equipment.



Accuracy of interchangeable guideways

Table 2-1-7 Accuracy Standards

Item	HG - 15, 20			
Accuracy Classes	Normal (C)	High (н)	Precision (P)	
Dimensional tolerance of height H	± 0.1	± 0.03	± 0.015	
Dimensional tolerance of width N	± 0.1	± 0.03 ± 0.015		
Variation of height H	0.02	0.01	0.006	
Variation of width N	0.02	0.01	0.006	
Running parallelism of block surface C to surface A $$	See Table 2-1-11			
Running parallelism of block surface D to surface B $$	See Table 2-1-11			
Table 2-1-8 Accuracy Standards			Unit: m	
indicate the fitter of the fit				
Item	HG - 25, 30, 35			
·	HG - 25, 30, 35 Normal (C)	High (H)	Precision (P)	
Item	Normal	•	Precision	
Item Accuracy Classes	Normal	(H)	Precision (P)	
Accuracy Classes Dimensional tolerance of height H	Normal (c) ± 0.1	(H) ± 0.04	Precision (P) ± 0.02	
Accuracy Classes Dimensional tolerance of height H Dimensional tolerance of width N	Normal (c) ± 0.1 ± 0.1	(H) ± 0.04 ± 0.04	Precision (P) ± 0.02 ± 0.02	
Accuracy Classes Dimensional tolerance of height H Dimensional tolerance of width N Variation of height H	Normal (c) ± 0.1 ± 0.1	(H) ± 0.04 ± 0.04 0.015	Precision (P) ± 0.02 ± 0.02 0.007	

Item	HG - 45, 55		
Accuracy Classes	Normal (C)	High (H)	Precision (P)
Dimensional tolerance of height H	± 0.1	± 0.05	± 0.025
Dimensional tolerance of width N	± 0.1	± 0.05	± 0.025
Variation of height H	0.03	0.015	0.007
Variation of width N	0.03	0.02	0.01
Running parallelism of block surface C to surface A $$	See Table 2-1-11		
Running parallelism of block surface D to surface B $$	See Table 2-1-11		

Table 2-1-10 Accuracy Standards

Unit: mm

Item	HG - 65		
Accuracy Classes	Normal (C)	High (H)	Precision (P)
Dimensional tolerance of height H	± 0.1	± 0.07	± 0.035
Dimensional tolerance of width N	± 0.1	± 0.07	± 0.035
Variation of height H	0.03	0.02	0.01
Variation of width N	0.03	0.025	0.015
Running parallelism of block surface C to surface A $$	See Table 2-1-11		
Running parallelism of block surface D to surface B	See Table 2-1-11		

Accuracy of running parallelism

Table 2-1-11 Accuracy of Running Parallelism

Rail Length (mm)	Accuracy (µm)				
,	C	Н	P	SP	UP
~ 100	12	7	3	2	2
100 ~ 200	14	9	4	2	2
200 ~ 300	15	10	5	3	2
300 ~ 500	17	12	6	3	2
500 ~ 700	20	13	7	4	2
700 ~ 900	22	15	8	5	3
900 ~ 1,100	24	16	9	6	3
1,100 ~ 1,500	26	18	11	7	4
1,500 ~ 1,900	28	20	13	8	4
1,900 ~ 2,500	31	22	15	10	5
2,500 ~ 3,100	33	25	18	11	6
3,100 ~ 3,600	36	27	20	14	7
3,600 ~ 4,000	37	28	21	15	7