

Accuracy Standard for Each Model

- Accuracies of models XSHS, SSR, SNR/SNS, SHW, HSR, SR, NR/NRS, HRW, NSR-TBC, HSR-M1, SR-M1 HSR-M2, SRG and SRN are categorized into Ct7 grade (Ct7), Ct5 grade (Ct5), Normal grade (no symbol), High accuracy grade (H), Precision grade (P), Super precision grade (SP) and Ultra precision grade (UP) by model numbers, as indicated in Table16 on A-119.

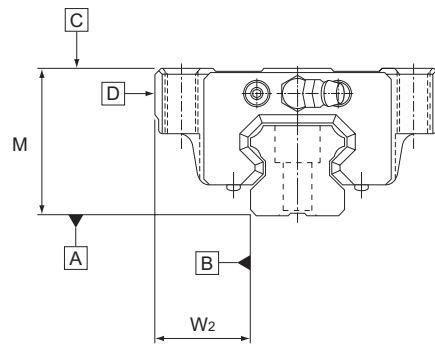


Fig.18

Table15 LM Rail Length and Running Parallelism by Accuracy Standard

Unit: μm

LM rail length (mm)		Running Parallelism Values						
Above	Or less	Grade Ct7	Grade Ct5	Normal grade	High-accuracy grade	Precision grade	Super precision grade	Ultra precision grade
—	50	6	6	5	3	2	1.5	1
50	80	6	6	5	3	2	1.5	1
80	125	6	6	5	3	2	1.5	1
125	200	7	6	5	3.5	2	1.5	1
200	250	9.5	6.5	6	4	2.5	1.5	1
250	315	11	7.5	7	4.5	3	1.5	1
315	400	13	8.5	8	5	3.5	2	1.5
400	500	16	11	9	6	4.5	2.5	1.5
500	630	18	13	11	7	5	3	2
630	800	20	15	12	8.5	6	3.5	2
800	1000	23	16	13	9	6.5	4	2.5
1000	1250	26	18	15	11	7.5	4.5	3
1250	1600	28	20	16	12	8	5	4
1600	2000	31	23	18	13	8.5	5.5	4.5
2000	2500	34	25	20	14	9.5	6	5
2500	3150	36	27	21	16	11	6.5	5.5
3150	4000	40	29	23	17	12	7.5	6
4000	5000	41	30	24	18	13	8.5	6.5

Note) Ct7 and Ct5 class are only applicable for model HSR.

Point of Selection
Determining the Accuracy

Table16 Accuracy Standards for Models SHS, SSR, SNR/SNS, SHW, HSR, SR, NR/NRS, HRW, NSR-TBC, HSR-M1, SR-M1, HSR-M2, SRG, and SRN.

Unit: mm

Model No.	Accuracy standards	Grade Ct7	Grade Ct5	Normal grade	High-accuracy grade	Precision grade	Super precision grade	Ultra precision grade
	Item	Ct7	Ct5	No Symbol	H	P	SP	UP
8 10 12 14	Dimensional tolerance in height M	—	—	±0.07	±0.03	±0.015	±0.007	—
	Difference in height M	—	—	0.015	0.007	0.005	0.003	—
	Dimensional tolerance in width W ₂	—	—	±0.04	±0.02	±0.01	±0.007	—
	Difference in width W ₂	—	—	0.02	0.01	0.006	0.004	—
	Running parallelism of surface C against surface A	ΔC (as shown in A-118 Table15)						
	Running parallelism of surface D against surface B	ΔD (as shown in A-118 Table15)						
15 17 20 21	Dimensional tolerance in height M	±0.12	±0.12	±0.07	±0.03	0 -0.03	0 -0.015	0 -0.008
	Difference in height M	0.025	0.025	0.02	0.01	0.006	0.004	0.003
	Dimensional tolerance in width W ₂	±0.12	±0.12	±0.06	±0.03	0 -0.02	0 -0.015	0 -0.008
	Difference in width W ₂	0.025	0.025	0.02	0.01	0.006	0.004	0.003
	Running parallelism of surface C against surface A	ΔC (as shown in A-118 Table15)						
	Running parallelism of surface D against surface B	ΔD (as shown in A-118 Table15)						
25 27 30 35	Dimensional tolerance in height M	±0.12	±0.12	±0.08	±0.04	0 -0.04	0 -0.02	0 -0.01
	Difference in height M	0.025	0.025	0.02	0.015	0.007	0.005	0.003
	Dimensional tolerance in width W ₂	±0.12	±0.12	±0.07	±0.03	0 -0.03	0 -0.015	0 -0.01
	Difference in width W ₂	0.035	0.035	0.025	0.015	0.007	0.005	0.003
	Running parallelism of surface C against surface A	ΔC (as shown in A-118 Table15)						
	Running parallelism of surface D against surface B	ΔD (as shown in A-118 Table15)						
40 45 50 55 60	Dimensional tolerance in height M	—	—	±0.08	±0.04	0 -0.05	0 -0.03	0 -0.015
	Difference in height M	—	—	0.025	0.015	0.007	0.005	0.003
	Dimensional tolerance in width W ₂	—	—	±0.07	±0.04	0 -0.04	0 -0.025	0 -0.015
	Difference in width W ₂	—	—	0.03	0.015	0.007	0.005	0.003
	Running parallelism of surface C against surface A	ΔC (as shown in A-118 Table15)						
	Running parallelism of surface D against surface B	ΔD (as shown in A-118 Table15)						
65 70 75 85 100 120 150	Dimensional tolerance in height M	—	—	±0.08	±0.04	0 -0.05	0 -0.04	0 -0.03
	Difference in height M	—	—	0.03	0.02	0.01	0.007	0.005
	Dimensional tolerance in width W ₂	—	—	±0.08	±0.04	0 -0.05	0 -0.04	0 -0.03
	Difference in width W ₂	—	—	0.03	0.02	0.01	0.007	0.005
	Running parallelism of surface C against surface A	ΔC (as shown in A-118 Fig.18)						
	Running parallelism of surface D against surface B	ΔD (as shown in A-118 Fig.18)						

Note) XFor models SRG and SRN, only precision or higher grades apply. (Ct7 grade, Ct5 grade, normal grade and high accuracy grade are not available.)

Note) Ct7 and Ct5 class are only applicable for model HSR.

LM Guide