

Linear Guideways

WE series

1.4.10 Dimensions of the WE rail

1.4.10.1 Dimensions WER_R

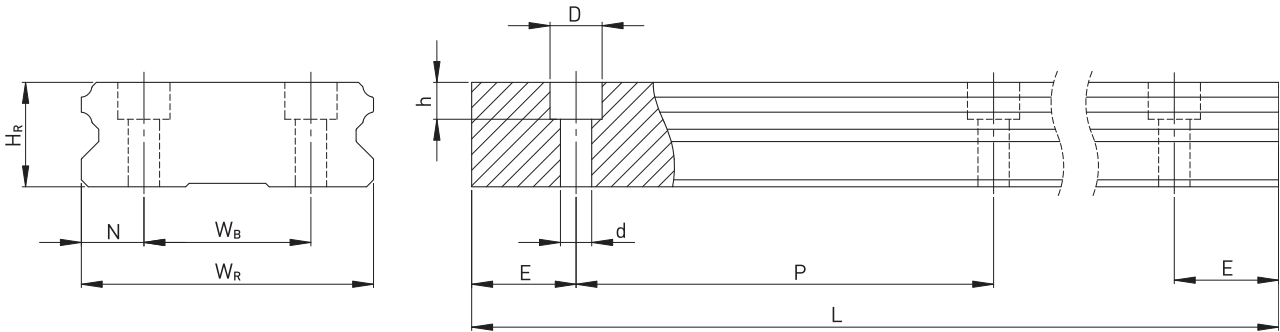


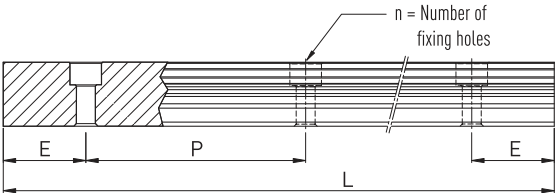
Table 1.49 Dimensions of the rail WER_R

Series Size	Screws for rail [mm]	Dimensions of the rail [mm]							Max. length [mm]	$E_{1/2}$ min [mm]	$E_{1/2}$ max [mm]	Mass [kg/m]
		W_R	W_B	H_R	D	h	d	P				
WER17R	M4 × 12	33	18	9,3	7,5	5,3	4,5	40,0	4000	6	34	2,20
WER21R	M4 × 12	37	22	11,0	7,5	5,3	4,5	50,0	4000	6	44	3,00
WER27R	M4 × 16	42	24	15,0	7,5	5,3	4,5	60,0	4000	6	54	4,70
WER35R	M6 × 20	69	40	19,0	11,0	9,0	7,0	80,0	4000	8	72	9,70

- Note:
1. The tolerance for E is +0,5 to -1 mm for standard, for joint connections 0 to -0.3 mm
 2. If no information is provided on the $E_{1/2}$ dimensions, the maximum number of fixing holes is determined taking into account $E_{1/2}$ min
 3. The rails are shortened to the desired length. If no information on the $E_{1/2}$ dimensions is provided, then the rails are manufactured symmetrically.

1.4.10.2 Calculation of the length of rails

HIWIN offers customer-specific lengths. To ensure that the ends of the rails for non-standard lengths are stable, value E must not exceed half the distance between the fixing holes (P). In addition, value $E_{1/2}$ must not be less than $E_{1/2}$ min and must not exceed $E_{1/2}$ max to prevent breakage of the fixing hole.



- L: Total rail length [mm]
 n: Number of fixing holes
 P: Distance between two fixing holes [mm]
 E: Distance from the center of the last fixing hole to the end of the rail [mm]

1.4.10.3 Tightening torques for fixing screws

Insufficient tightening of the fixing screws will highly detract from the accuracy of the linear guideway. The following tightening torques are recommended for the respective screw sizes.

Table 1.51 Tightening torques for fixing screws to ISO 4762-12.9

Series/Size	Screw size	Torque [Nm]	Series/Size	Screw size	Torque [Nm]
WE_17	M4	4	WE_27	M4	4
WE_21	M4	4	WE_35	M6	13

1.4.10.4 Cover cap for rail fixing holes

The cover caps are used to keep the fixing holes free from chips and dirt. The standard plastic bolt caps are enclosed to each rail. Optional caps have to be ordered extra.

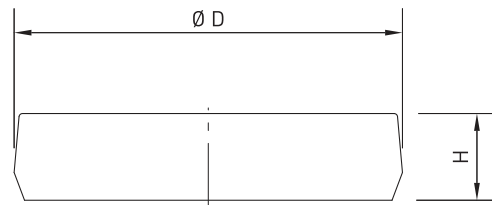


Table 1.52 Cover cap for rail fixing holes

Rail	Screw	Article number			Ø D [mm]	Height H [mm]
		Plastic	Brass	Steel		
WER17R	M4	C4	C4-M	—	7,5	1,1
WER21R	M4	C4	C4-M	—	7,5	1,1
WER27R	M4	C4	C4-M	—	7,5	1,1
WER35R	M6	C6	C6-M	C6-ST	11,0	2,5