LLTHR rails

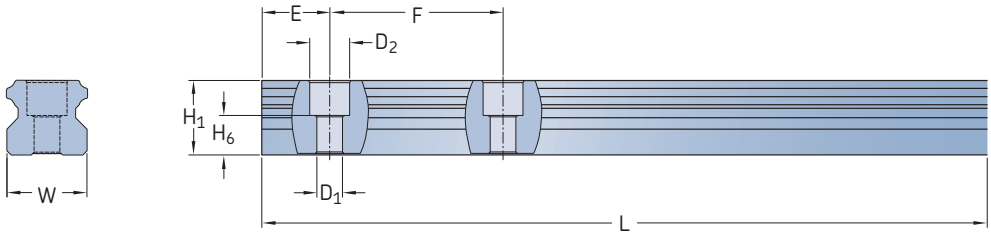
Rails are supplied with protective plastic caps for mounting from above. For designation, refer to *Ordering key rails* (→ **page 31**).

Note: If a rail length is required that exceeds the maximum length available, jointed rails can be ordered. These rails are manufactured so they match seamlessly to each other.



Standard rail size	Accuracy class	Designation [1] One-piece rail	Multi–piece rail	Pitch F
–	–	–		mm
15	P5	**LLTHR 15 - ... P5**	**LLTHR 15 - ... P5 A**	60
	P3	**LLTHR 15 - ... P3**	**LLTHR 15 - ... P3 A**	
	P1	**LLTHR 15 - ... P1**	**LLTHR 15 - ... P1 A**	
20	P5	**LLTHR 20 - ... P5**	**LLTHR 20 - ... P5 A**	60
	P3	**LLTHR 20 - ... P3**	**LLTHR 20 - ... P3 A**	
	P1	**LLTHR 20 - ... P1**	**LLTHR 20 - ... P1 A**	
25	P5	**LLTHR 25 - ... P5**	**LLTHR 25 - ... P5 A**	60
	P3	**LLTHR 25 - ... P3**	**LLTHR 25 - ... P3 A**	
	P1	**LLTHR 25 - ... P1**	**LLTHR 25 - ... P1 A**	
30	P5	**LLTHR 30 - ... P5**	**LLTHR 30 - ... P5 A**	80
	P3	**LLTHR 30 - ... P3**	**LLTHR 30 - ... P3 A**	
	P1	**LLTHR 30 - ... P1**	**LLTHR 30 - ... P1 A**	
35	P5	**LLTHR 35 - ... P5**	**LLTHR 35 - ... P5 A**	80
	P3	**LLTHR 35 - ... P3**	**LLTHR 35 - ... P3 A**	
	P1	**LLTHR 35 - ... P1**	**LLTHR 35 - ... P1 A**	
45	P5	**LLTHR 45 - ... P5**	**LLTHR 45 - ... P5 A**	105
	P3	**LLTHR 45 - ... P3**	**LLTHR 45 - ... P3 A**	
	P1	**LLTHR 45 - ... P1**	**LLTHR 45 - ... P1 A**	

[1] ■ **Preferred range**,
■ **Only available as system.**
replace "..." by rail length in mm, e. g. LLTHR 15 - 1000 P5



Size	Dimensions									Weight
	W	H_1	H_6	D_1	D_2	E_{min} –0,75	E_{max} –0,75	F	L_{max} –1,5	
–	mm									kg/m
15	15	14	8,5	4,5	7,5	10	50	60	3 920	1,4
20	20	18	9,3	6	9,5	10	50	60	3 920	2,3
25	23	22	12,3	7	11	10	50	60	3 920	3,3
30	28	26	13,8	9	14	12	70	80	3 944	4,8
35	34	29	17	9	14	12	70	80	3 944	6,6
45	45	38	20,8	14	20	16	90	105	3 917	11,3

The “E” dimension designates the distance from the rail end to centre of the first attachment hole. If no specific “E” dimension is provided by the customer with the order, the rails are produced according to the following formulae:

Calculation of number of attachment holes in rail guide

(1) $n_{real} = \frac{L}{F}$

(2) Round down of n_{real} to n

(3) $n + 1 = z$

F = Distance of attachment holes
L = Rail length
n_{real} = Real calculation value for number of hole distances
z = Number of attachment holes in rail

Determination of E dimension based on z

(4) $E_{real} = \frac{L - F\,(z - 1)}{2}$

E_{real} = Real calculation value for E-dimension
E_{min} = Minimum E-dimension according to catalogue

Comparison with catalogue value of E_{min}

(4.1) If $E_{real} \geq E_{min}$
→ Usage of E_{real} from **formula 4**

(4.2) If $E_{real} < E_{min}$
→ Calculation of E_{real} according to **formula 5**

(5) $E_{real} = \frac{L - F\,(z - 2)}{2}$