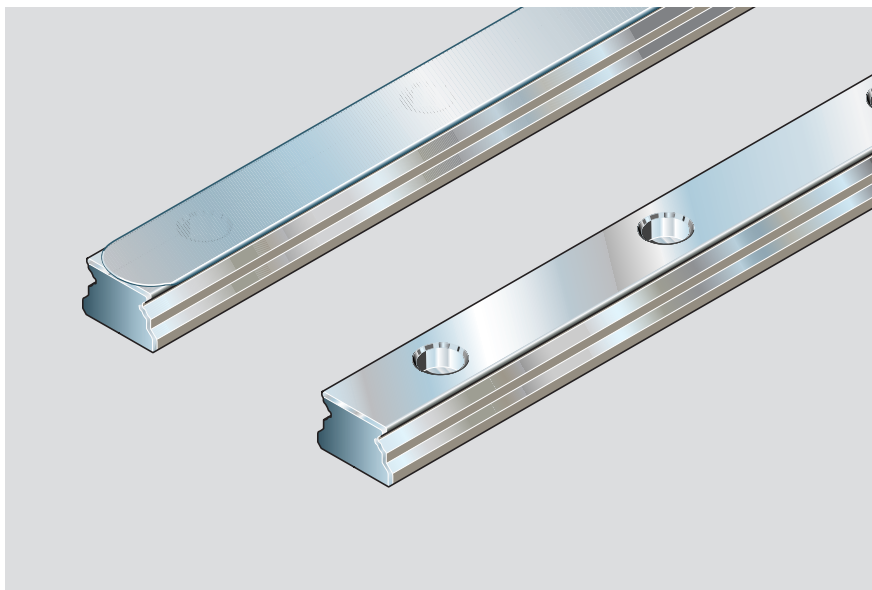


# Miniature Ball Rail Systems

## Standard Guide Rails R0445

for runner blocks R0442 and R0444.  
 Guide rails are made of rust and acid resistant material similar to ISO 683-17 / EN 10088.



### Part numbers for guide rails

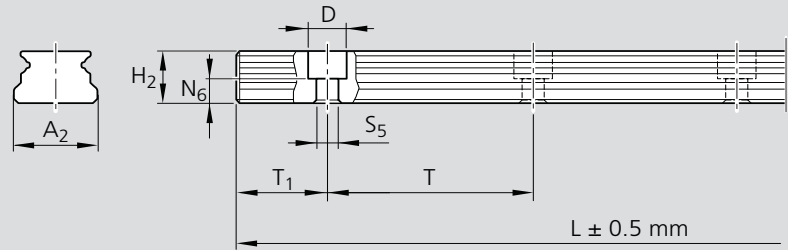
Size	Accuracy class	Part numbers for guide rails Part number, Length L [mm]	
		without cover strip	with cover strip
7	P	R0445 702 31,....	–
	H	R0445 703 31,....	–
	N	R0445 704 31,....	–
9/M3	P	R0445 802 31,....	R0445 862 31,....
	H	R0445 803 31,....	R0445 863 31,....
	N	R0445 804 31,....	R0445 864 31,....
9/M2	P	R0445 902 31,....	R0445 962 31,....
	H	R0445 903 31,....	R0445 963 31,....
	N	R0445 904 31,....	R0445 964 31,....
12	P	R0445 202 31,....	R0445 262 31,....
	H	R0445 203 31,....	R0445 263 31,....
	N	R0445 204 31,....	R0445 264 31,....
15	P	R0445 502 31,....	R0445 562 31,....
	H	R0445 503 31,....	R0445 563 31,....
	N	R0445 504 31,....	R0445 564 31,....
20	P	R0445 002 31,....	R0445 062 31,....
	H	R0445 003 31,....	R0445 063 31,....
	N	R0445 004 31,....	R0445 064 31,....

### Recommended rail lengths

$$L = n_B \cdot T - 4$$

L = rail length [mm]  
 T = hole spacing [mm]  
 $n_B$  = no. of holes

## Dimensions and weights



### Guide rail:

Position tolerance of the mounting holes for

- rail length up to 500 mm

$\oplus \ominus \varnothing 0.3$

- rail length up to 1000 mm

$\oplus \ominus \varnothing$  up to 0.6 increasing in linear proportion

Size	Dimensions [mm]									Weight g/100 mm
	$A_2$	$H_2^{1)}$	$N_6$	$D$	$S_5$	$T_{1min}$	$T_{1max}$	$T$	$L_{max}^{2)3)}$	
<b>7</b>	7	4,7	2,2	4,3	2,5	5,0	11,5	15	1000	22
<b>9/M3</b>	9	5,5	2,2	6,0	3,5	6,0	15,5	20	1000	33
<b>9/M2</b>	9	5,5	2,5	4,5	2,5	6,0	16,5	20	1000	33
<b>12</b>	12	7,8	3,0	6,0	3,5	6,0	20,5	25	1000	61
<b>15</b>	15	9,5	4,7	6,0	3,5	6,0	35,5	40	1000	97
<b>20</b>	20	15,0	6,5	9,5	6,0	6,5	53,5	60	1000	211

1) Dimensions without cover strip

2) For rail lengths longer than  $L_{max}$  factory-made mating sections are joined end-to-end.

3) For special cases one-piece guide rails up to 2000 mm length possible (please check back).

## Ordering examples

If no  $T_1$  is specified by the customer, both ends of the guide rail will be identical.

The rail lengths were calculated using the formula for recommended rail lengths.

### Example 1 (up to $L_{max}$ ):

Guide rail size 12, accuracy class P, recommended rail length 771 mm ( $30 \cdot T$ , number of holes  $n_B = 31$ ,  $T_1$  is identical at both ends of the guide rail)

Ordering data: R0445 202 31,771 mm

### Example 2 (up to $L_{max}$ with cover strip):

Guide rail size 12 with cover strip, accuracy class P, recommended rail length 771 mm ( $30 \cdot T$ , number of holes  $n_B = 31$ ,  $T_1$  at one end of guide rail = 4.5 mm)

Ordering data:

R0445 262 31,771 mm,  $T_1 = 4.5$  mm

(At the other end of the guide rail  $T_1 = 16.5$  mm for production reasons.)

### Example 3 (over $L_{max}$ ):

Guide rail size 12, accuracy class N, recommended rail length 1271 mm, 2 sections ( $50 \cdot T$ , number of holes  $n_B = 51$ ,  $T_1$  is identical at both ends of the composite guide rail)

Ordering data: R0445 204 32,1271 mm

Number of sections

### Example 4 (one-piece over $L_{max}$ ):

Guide rail size 12, accuracy class P, recommended rail length 771 mm ( $70 \cdot T$ , number of holes  $n_B = 71$ ,  $T_1$  is identical at both ends of the guide rail)

Ordering data: R0445 202 31,1771 mm