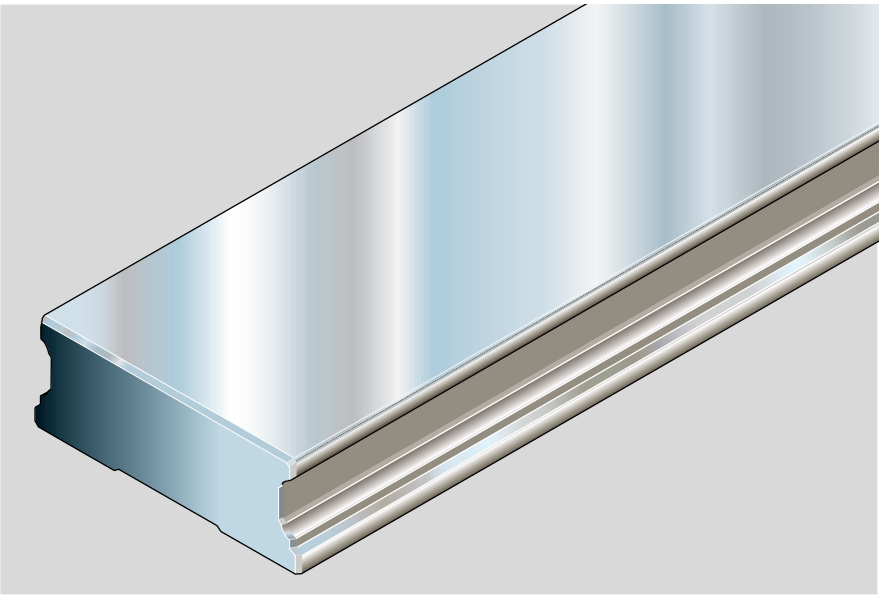
Rexroth Ball Rail Systems
Wide Guide Rails

Guide rail 1677-

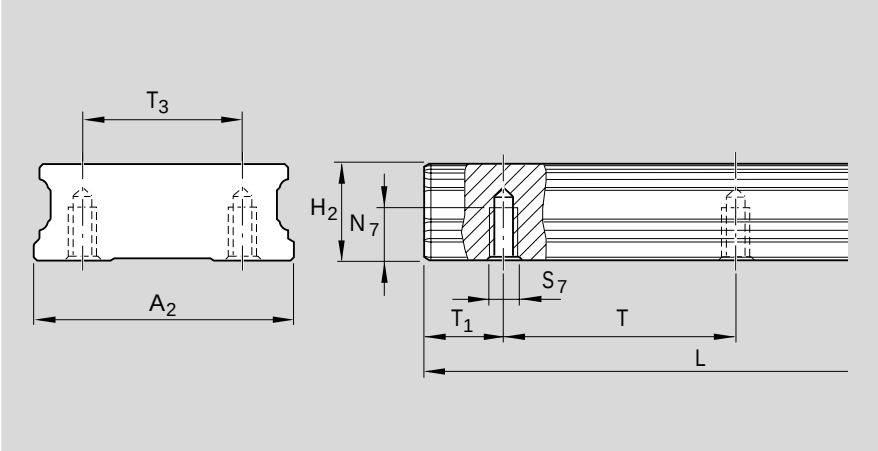
Wide, for mounting from below



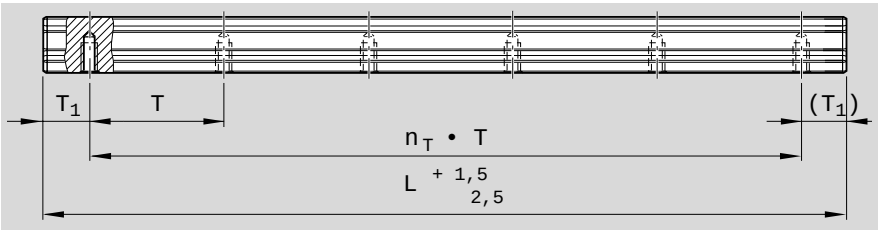
Part numbers and rail lengths

Size	Accuracy class	Guide Rail One-piece Part number, Rail length L (mm)	Guide Rail Composite Part number, Number of sections Rail length L (mm)	Spacing T (mm)	Recommended rail length Number of holes n_B / Rail length L (mm) per row				
20/40	P	1677-802-31,....	1677-802-3.,....	60	2 / 116 3 / 176 4 / 236 5 / 296 6 / 356	7 / 416 8 / 476 9 / 536 10 / 596 11 / 656	12 / 716 13 / 776 14 / 836 16 / 956 18 / 1076	20 / 1196 22 / 1316 25 / 1496 30 / 1796 35 / 2096	40 / 2396 50 / 2996 60 / 3596 66 / 3956
	H	1677-803-31,....	1677-803-3.,....						
	N	1677-804-31,....	1677-804-3.,....						
25/70	P	1677-202-31,....	1677-202-3.,....	80	2 / 156 3 / 236 4 / 316 5 / 396 6 / 476	7 / 556 8 / 636 9 / 716 10 / 796 11 / 876	12 / 956 13 / 1036 14 / 1116 16 / 1276 18 / 1436	20 / 1596 22 / 1756 25 / 1996 30 / 2396 35 / 2796	40 / 3196 50 / 3996
	H	1677-203-31,....	1677-203-3.,....						
	N	1677-204-31,....	1677-204-3.,....						
35/90	P	1677-302-31,....	1677-302-3.,....						
	H	1677-303-31,....	1677-303-3.,....						
	N	1677-304-31,....	1677-304-3.,....						

Dimensions and masses



Size	Dimension (mm)									Mass (kg/m)
	A_2	H_2	N_7	S_7	T_{1S} $^{+0.5}_{-1.0}$	T_{1min}	T	T_3	L_{max}	
20/40	42	19.05	7.5	M5	28	10	60	24	4 000	5.3
25/70	69	23.40	12.0	M6	38	10	80	40	4 000	11.6
35/90	90	32.00	15.0	M8	38	12	80	60	4 000	21.0



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

or

$$L = n_T \cdot T + 2 \cdot T_{1S}$$

L	= rail length	(mm)
T	= hole spacing*)	(mm)
T_{1S}	= preferred dimension*)	(mm)
n_B	= number of holes per row	
n_T	= number of spaces	

*) see tables for values

Ordering a guide rail

- Wherever possible, the recommended rail lengths as per table should be used.

Ordering example 1:

Guide rail size 35/90, accuracy class H, rail length 1756 mm,
(21 · T, number of holes n_B = 22 means 44 holes in 2 rows)
Ordering information: **1677-303-31, 1756 mm**

Intermediate lengths

Calculation of rail length L and ordering examples:

- The preferred dimension is T_{1S}
- If T_{1S} cannot be used, then
  - Select an end space T_1 between T_{1S} and $T_{1\,min}$
  - Do not go below the minimum spacing $T_{1\,min}$!

Note

- T_1, $T_{1\,min}$, T_{1S} are the same at either end of the guide rail

Ordering example 2 (up to L_{max}):

Guide rail size 35/90,

accuracy class P,
rail length 1676 mm,
(20 · T, preferred dimension T_{1S} = 38 mm; number of holes n_B = 21 giving 42 holes in 2 rows)

Ordering data:

Part number, length (mm)
T_{1S} / n_T · T / T_{1S} (mm)

1677-302-31, 1676 mm
38 / 20 · 80 / 38 mm

Rail lengths above L_{max} are made up of fitted rail sections mounted end to end.

Ordering example 3 (over L_{max}):

Guide rail size 35/90,

accuracy class P,
rail length 5036 mm, 2 sections

(62 · T, preferred dimension T_{1S} = 38 mm; number of holes n_B = 63
giving 126 holes in 2 rows)

Ordering data:

Part number and number of sections, length (mm)
T_{1S} / n_T · T / T_{1S} (mm)

1677-302-32, 5036 mm
38 / 62 · 80 / 38 mm