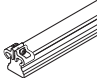
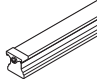
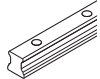
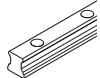
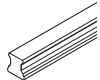
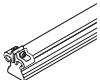
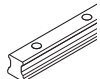
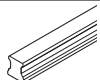
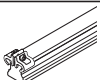
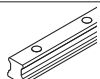
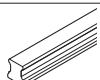

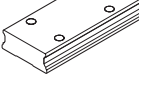


Product overview Ball guide rails with rail lengths

Ball guide rails can be cut to length as desired by the customer. The maximum lengths for a one-piece rail section can be found in the following table and in the "Ball guide rails" chapter. If longer rails are required, Bosch Rexroth will supply them as multi-piece ball guide rails.

Ball guide rails		Page	Size							
			15	20	25	30	35	45	55	65
			Rail length (mm)							
Standard ball guide rails made of steel 	SNS / SNO R1605 .3. .. / R1605 .B. .. For bolting from above with cover strip and strip clamps	110	3836	5816	5816	5836	5836	5771	3836	3746
	 SNS / SNO R1605 .6. .. / R1605 .D. .. For bolting from above with cover strip and protective caps	112	3836	5816	5816	5836	5836	5771	3836	3746
	 SNS / SNO R1605 .0. .. / R1605 .C. .. For bolting from above with plastic caps	114	3836	5816	5816	5836	5836	5771	3836	3746
	 SNS R1606 .5. .. For bolting from above, for caps made of steel	116	-	-	5816	5836	5836	5771	3836	3746
	 SNS R1607 .0. .. For bolting from below	118	3836	5816	5816	5836	5836	5771	3836	3746
Standard ball guide rails Resist NR II¹⁾ 	SNS R2045 .3. .. For bolting from above with cover strip and strip clamps	120	1856	3836	3836	3836	3836	-	-	-
	 SNS R2045 .0. .. For bolting from above with plastic caps	121	1856	3836	3836	3836	3836	-	-	-
	 SNS R2047 .0. .. For bolting from below	121	1856	3836	3836	3836	3836	-	-	-
Standard ball guide rails Resist CR²⁾ 	SNS R1645 .3. .. For bolting from above with cover strip and strip clamps	122	3836	3836	3836	3836	3836	3776	3836	3746
	 SNS R1645 .0. .. For bolting from above with plastic caps	123	3836	3836	3836	3836	3836	3776	3836	3746
	 SNS R1647 .0. .. For bolting from below	123	3836	3836	3836	3836	3836	3776	3836	3746

Format and version

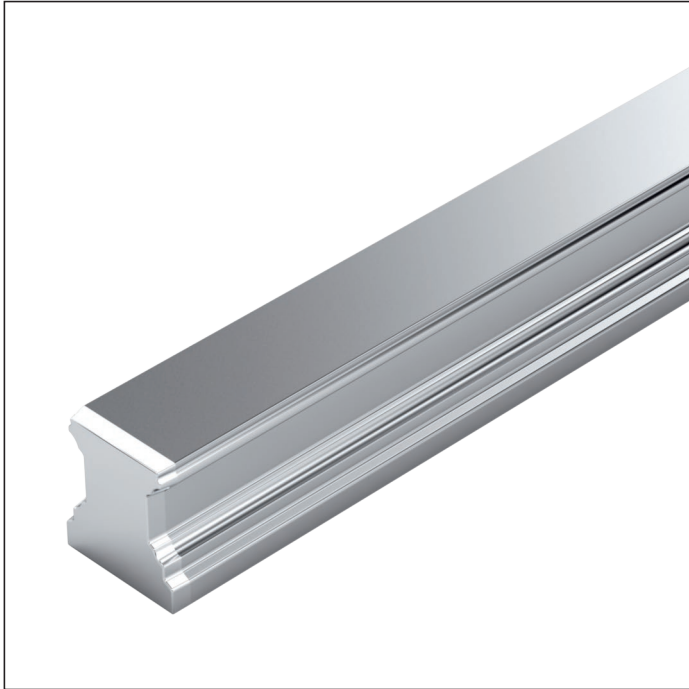
Ball guide rails	Application area	Fastening type	Special feature	
Standard ball guide rails made of steel 	SNS / SNO R1605 .3. .. R1605 .B. .. R1645 .3. ..²⁾ R2045 .3. ..¹⁾	Standard version, very harsh environments, robust strip clamp	For bolting from above With cover strip and strip clamp. A single cover for all bores. No end-face bore required for strip clamp.	
	SNS / SNO R1605 .6. .. R1605 .D. ..	Harsh environments compact strip clamp	For bolting from above	With cover strip and protective cap. A single cover for all bores.
	SNS / SNO R1605 .0. .. R1605 .C. .. R1645 .0. ..²⁾ R2045 .0. ..¹⁾	Inexpensive	For bolting from above	With plastic caps. No extra space required at the end face.
	SNS R1606 .5. ..	More resistant to mechanical influences (e.g. shocks) Very harsh environments	For bolting from above	With steel caps. No extra space required at the end face.
	SNS R1607 .0. .. R1647 .0. ..²⁾ R2047 .0. ..¹⁾	Easy access to the mounting base underside, best sealing action of end seals	For bolting from below	Use of larger screws than for bolting from above. Greater side loads permitted. No extra space required at the end face.
Wide ball guide rails made of steel 	BNS R1675 .0. .. R1673 .0. ..²⁾	High moment rigidity	For bolting from above With plastic caps. No extra space required at the end face.	
	BNS R1676 .5. ..	High moment rigidity, more resistant to mechanical influences (e.g. shocks) Very harsh environments	For bolting from above	With steel caps. No extra space required at the end face.
	BNS R1677 .0. ..	High moment rigidity, best sealing action of end seals	For bolting from below	Use of larger screws than for bolting from above. Larger side loads are permitted than for the single-row series. No extra space required at the end face.

1) Resist NR II

2) Resist CR

For short product names of the types, see the product description

SNS for bolting from below



R1607 .0. ..

For bolting from below

Notes

- ▶ Observe the instruction for mounting!
Please request the "Mounting instructions for ball rail systems."
- ▶ Composite ball guide rail also available.

Further ball guide rails SNS and accessories

- ▶ Corrosion-resistant ball guide rails Resist NR, Resist CR

Options and material numbers

Size	Ball guide rail with size	Accuracy class					Number of partial sections, rail length L (mm), ...		Spacing T (mm)	Recommended rail length in accordance with formula $L = n_B \cdot T - 4 \text{ mm}$	
		N	H	P	SP	UP	One-piece	Composite		Maximum number of holes n_B	
15	R1607 10	4	3	2	1	9	31,	3.,	60	64	
20	R1607 80	4	3	2	1	9	31,	3.,	60	64	
25	R1607 20	4	3	2	1	9	31,	3.,	60	64	
30	R1607 70	4	3	2	1	9	31,	3.,	80	48	
35	R1607 30	4	3	2	1	9	31,	3.,	80	48	
45	R1607 40	4	3	2	1	9	31,	3.,	105	36	
55	R1607 50	4	3	2	1	9	31,	3.,	120	32	
65	R1607 60	4	3	2	1	9	31,	3.,	150	25	
E.g.:	R1607 70	3					31, 1676				

Ordering example 1 (to L_{max})

Options:

- ▶ Ball guide rail SNS
- ▶ Size 30
- ▶ Accuracy class H
- ▶ One-piece
- ▶ Rail length L = 1676 mm

Material number:

R1607 703 31, 1676 mm

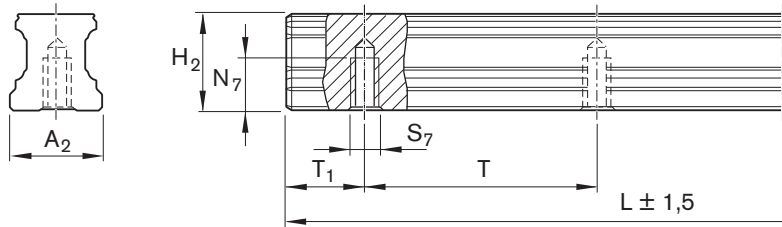
Ordering example 2 (above L_{max})

Options:

- ▶ Ball guide rail SNS
- ▶ Size 30
- ▶ Accuracy class H
- ▶ **2 partial sections**
- ▶ Rail length L = 5116 mm

Material number:

R1607 703 32, 5116 mm



Size	Dimensions (mm)									Mass m (kg/m)
	A_2	H_2 ¹⁾	L_{max} ²⁾	N_7	S_7	T	T_{1min}	T_{1S} ³⁾	T_{1max}	
15	15	16.20	3836	7.5	M5	60	10	28.0	50	1.4
20	20	20.55	3836	9.0	M6	60	10	28.0	50	2.4
25	23	24.25	3836	12.0	M6	60	10	28.0	50	3.2
30	28	28.35	3836	15.0	M8	80	12	38.0	68	5.0
35	34	31.85	3836	15.0	M8	80	12	38.0	68	6.8
45	45	39.85	3776	19.0	M12	105	16	50.5	89	10.5
55	53	47.85	3836	22.0	M14	120	18	58.0	102	16.2
65	63	59.85	3746	25.0	M16	150	20	73.0	130	22.4

- 1) Dimension H_2 without cover strip
- 2) For size 20 - 45 in accuracy class N, H and P one-pieceball guide rail lengths are available for
 Size 20 - 25 to 5816 mm available on request.
 Size 30 - 35 to 5836 mm available on request.
 Size 45 to 5771 mm available on request.
- 3) Preferred dimension T_{1S} with tolerances ± 0.75 recommended.