

Rexroth Ball Rail Systems

Standard Runner Blocks, Steel Version

Runner Block 1665-

Standard Width, short

Versions:

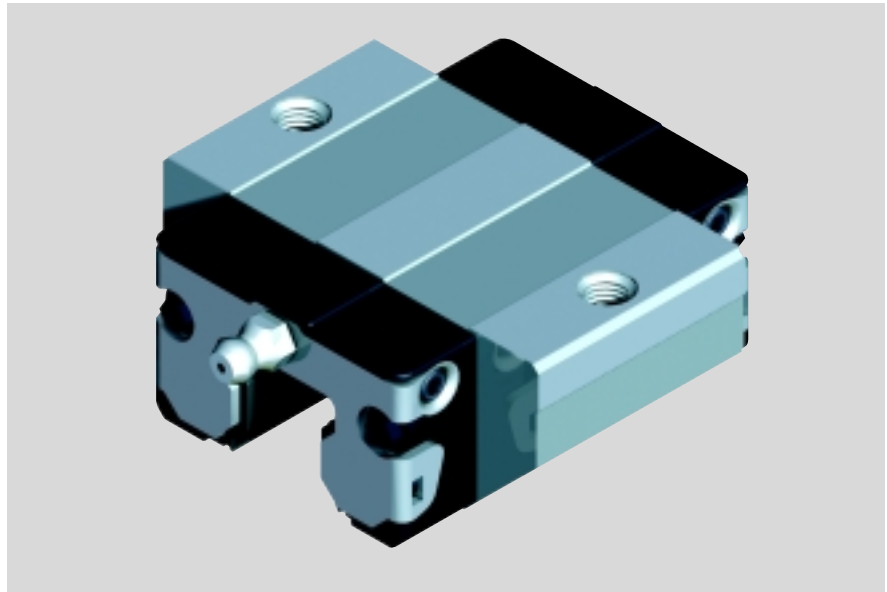
- Runner block without ball chain:
for part numbers, see table
- Runner block with ball chain:
part numbers 1665-...-22

Dynamic characteristics

Speed $v_{\max} = 5 \text{ m/s}$

Acceleration $a_{\max} = 500 \text{ m/s}^2$

Other technical data, see chapter "General Technical Data and Calculations".



Part numbers

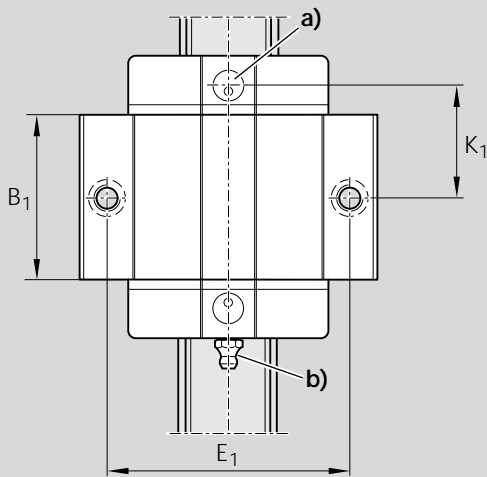
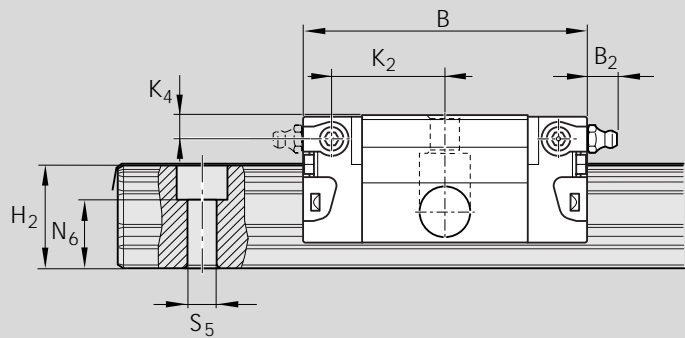
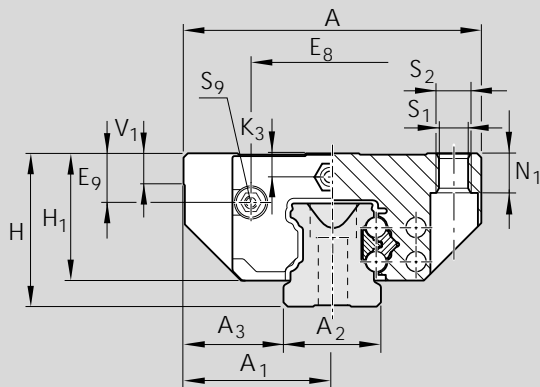
Size	Accuracy class	Part numbers for runner blocks for preload class	
		up to approx. 10 μm clearance	Preload 0.02 C
15	H	1665-193-20	1665-113-20
	N	1665-194-20	1665-114-20
20	H	1665-893-20	1665-813-20
	N	1665-894-20	1665-814-20
25	H	1665-293-20	1665-213-20
	N	1665-294-20	1665-214-20
30	H	1665-793-20	1665-713-20
	N	1665-794-20	1665-714-20
35	H	1665-393-20	1665-313-20
	N	1665-394-20	1665-314-20

Note on dynamic load capacities and moments (see table)

Determination of dynamic load capacities and moments is based on a travel life of 100 000 m.

However, frequently this is determined on the basis of only 50 000 m.

In this case for comparison:
multiply values **C**, **M_t** and **M_l** by 1.26
in accordance with Rexroth table.



- a) For O-ring
 Size 15: dia. 4 · 1.0 (mm)
 Size 20-35: dia. 5 · 1.0 (mm)
 Open lube bore as required.
 See Accessories:
 Mounting lubrication adapter.
- b) Lube nipple sizes 15 and 20:
 funnel-type nipple
 Type A – M3 x 5, DIN 3405
 B₂ = 1.6 mm. If other lubrication connections are used: observe the screw-in depth of 8 mm!
- Size 25 to 35: M6 x 8, DIN 71412
 B₂ = 9.5 mm. If other lubrication connections are used: observe the screw-in depth of 8 mm!
- Connection possible at all sides.

Size	Dimensions (mm)												E ₈	E ₉	K ₁	K ₂	K ₃	K ₄
	A	A ₁	A ₂	A ₃	B	B ₁	H	H ₁	H ₂ ¹⁾	H ₂ ²⁾	V ₁	E ₁						
15	47	23.5	15	16.0	44.7	25.7	24	19.90	16.30	16.20	5.0	38	24.55	6.70	16.25	17.85	3.20	3.20
20	63	31.5	20	21.5	57.3	31.9	30	25.35	20.75	20.55	6.0	53	32.50	7.30	22.95	22.95	3.35	3.35
25	70	35.0	23	23.5	67.0	38.6	36	29.90	24.45	24.25	7.5	57	38.30	11.50	25.35	26.50	5.50	5.50
30	90	45.0	28	31.0	75.3	45.0	42	35.35	28.55	28.35	7.0	72	48.40	14.60	28.80	30.50	6.05	6.05
35	100	50.0	34	33.0	84.9	51.4	48	40.40	32.15	31.85	8.0	82	58.00	17.35	32.70	34.20	6.90	6.90

¹⁾ Dimension H₂ with rail seal cover strip

²⁾ Dimension H₂ without rail seal cover strip

Size	Dimensions (mm)							Mass (kg)	Load capacities (N) ³⁾		Moments (Nm)			
	N ₁	N ₆ ^{±0.5}	S ₁	S ₂	S ₅	S ₉	C dyn.		C ₀ stat.	M _t dyn.	M _{t0} stat.	M _L dyn.	M _{L0} stat.	
15	5.2	10.3	4.3	M5	4.4	M2.5-3.5 deep	0.15	6 800	8 100	52	80	19	28	
20	7.7	13.2	5.3	M6	6.0	M3-5 deep	0.30	12 400	13 600	150	170	52	58	
25	9.3	15.2	6.7	M8	7.0	M3-5 deep	0.50	15 800	18 200	230	260	82	94	
30	11.0	17.0	8.5	M10	9.0	M3-5 deep	0.80	22 100	24 800	380	430	133	150	
35	12.0	20.5	8.5	M10	9.0	M3-5 deep	1.20	29 300	32 400	640	700	200	220	

³⁾ Load capacities for version without ball chain. Load capacities for version without ball chain, see Product Overview with Load Capacities.