

Rexroth Ball Rail Systems

Runner Blocks, Aluminum Version

Runner Block 1631-

Standard Width

Versions:

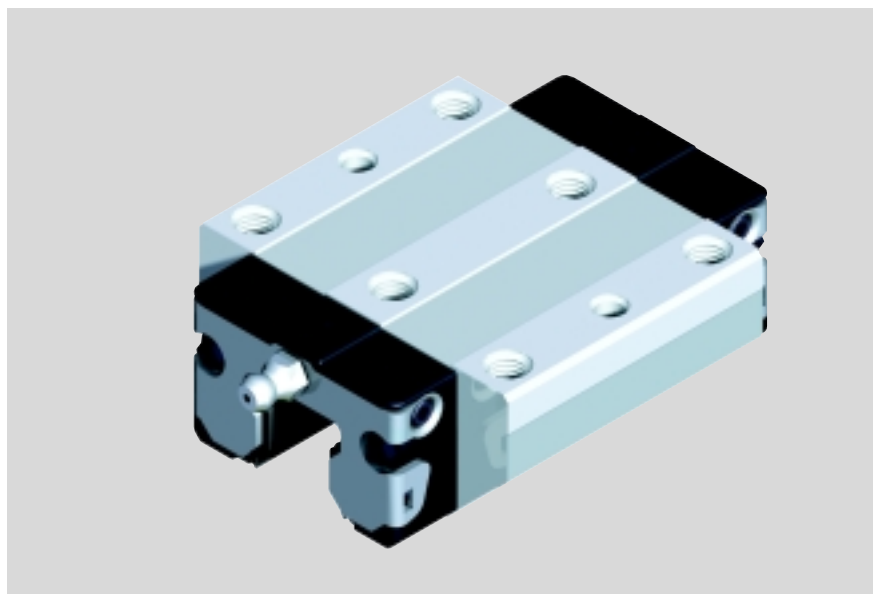
- Runner block without ball chain: for part numbers, see table
- Runner block with ball chain: part numbers 1631-...-22

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	1631-193-20	1631-113-20
	N	1631-194-20	1631-114-20
25*	H	1631-293-20	1631-213-20
	N	1631-294-20	1631-214-20
30*	H	1631-793-20	1631-713-20
	N	1631-794-20	1631-714-20
35*	H	1631-393-20	1631-313-20
	N	1631-394-20	1631-314-20

* Under preparation

Permissible load

When calculating the service life, use the maximum load capacity figure. The permissible load is limited only for reasons of statics (see table).

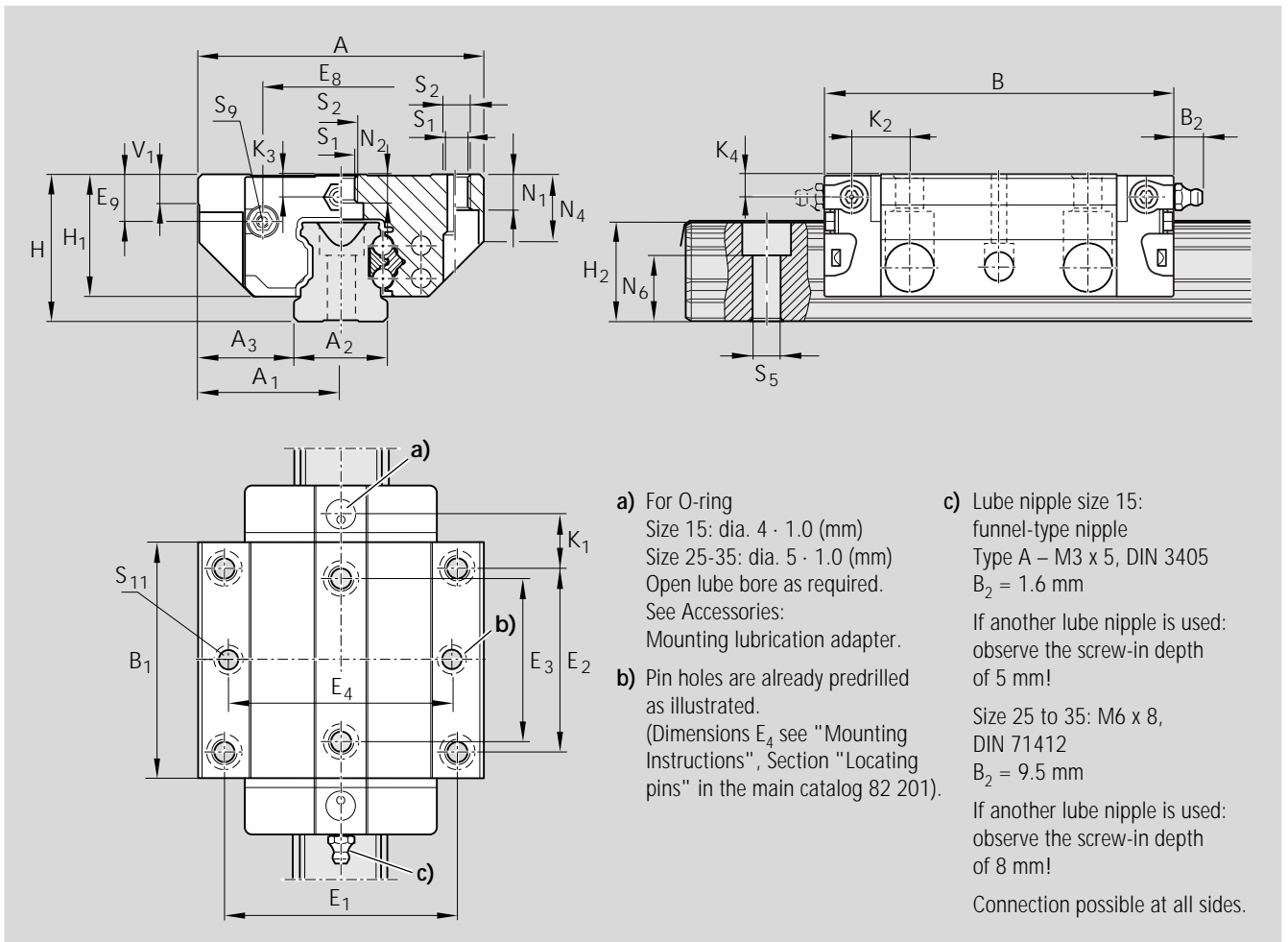
Note on dynamic load capacities and moments (see table)

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.

Size	Load capacities (N) C dyn.	Permissible load (N) F_{\max}	Moments (Nm)			
			 M_t dyn.	 M_t max.	 M_L dyn.	 M_L max.
15	7 800	3 000	74	29	40	16
25	22 800	8 800	320	125	180	70
30	31 700	12 200	540	210	290	110
35	41 900	16 200	890	345	440	170



Dimensions (mm)																				
Size	A	A ₁	A ₂	A ₃	B	B ₁	H	H ₁	H ₂ ¹⁾	H ₂ ²⁾	V ₁	E ₁	E ₂	E ₃	E ₈	E ₉	K ₁	K ₂	K ₃	K ₄
15	47	23.5	15	16.0	58.2	39.2	24	19.90	16.30	16.20	5.0	38	30	26	24.55	6.70	8.00	9.6	3.20	3.20
25	70	35.0	23	23.5	86.2	57.8	36	29.90	24.45	24.25	7.5	57	45	40	38.30	11.50	12.45	13.6	5.50	5.50
30	90	45.0	28	31.0	97.7	67.4	42	35.35	28.55	28.35	7.0	72	52	44	48.40	14.60	14.00	15.7	6.05	6.05
35	100	50.0	34	33.0	110.5	77.0	48	40.40	32.15	31.85	8.0	82	62	52	58.00	17.35	14.50	16.0	6.90	6.90

¹⁾ Dimension H₂ with rail seal cover strip

²⁾ Dimension H₂ without rail seal cover strip

Dimension (mm)											Mass
Size	N ₁	N ₂	N ₄	N ₆ ^{±0.5}	S ₁	S ₂	S ₁₁	S ₅	S ₉		(kg)
15	5.2	4.4	10.3	10.65	4.3	M5	3.7	4.4	M2.5-3.5 deep		0.10
25	9.3	7.0	17.8	15.55	6.7	M8	5.7	7.0	M3-5 deep		0.30
30	11.0	7.9	20.5	17.35	8.5	M10	7.7	9.0	M3-5 deep		0.55
35	12.0	10.2	24.0	20.85	8.5	M10	7.7	9.0	M3-5 deep		0.75