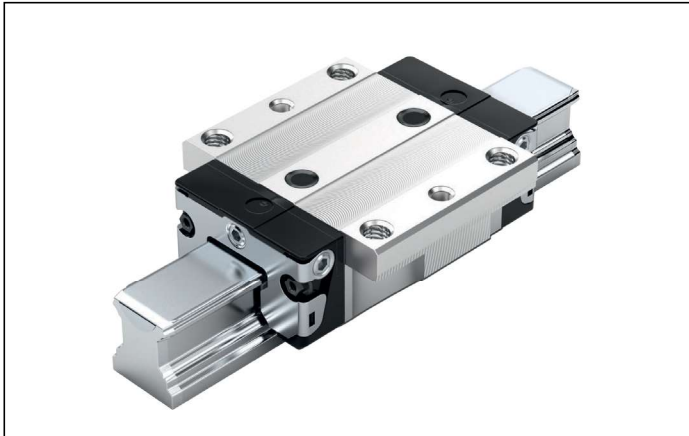


FNS – Flange normal standard height, R1631 ... 2.



R1631 ... 2.

Dynamic characteristics

Travel speed: $v_{\max} = 5 \text{ m/s}$
 Acceleration: $a_{\max} = 500 \text{ m/s}^2$
 (If $F_{\text{comb}} > 2.8 \cdot F_{\text{pr}}$: $a_{\max} = 50 \text{ m/s}^2$)

Note on lubrication

► Pre-lubricated

Note


Can be used on all ball guide rails SNS.

Options/material numbers/technical data

Size	Ball runner block with size	Preload class		Accuracy class		Seal with ball runner blocks			
		C0	C1	N	H	without ball chain		with ball chain	
						SS	LS	SS	LS
15	R1631 1	9	1	4	3	20	21	22	23
20	R1631 8	9	1	4	3	20	21	22	23
25	R1631 2	9	1	4	3	20	21	22	23
30	R1631 7	9	1	4	3	20	21	22	23
35	R1631 3	9	1	4	3	20	21	22	23
e.g.	R1631 7		1		3	20			

Size	Load capacities ¹⁾ (N)	Permissible load (N)	Load moments ¹⁾ (Nm)			
	C		F_{\max}	M_t	$M_{t \max}$	M_L
15	9 860	3 000	95	29	68	16
20	23 400	7 200	300	92	200	50
25	28 600	8 800	410	125	290	70
30	36 500	12 200	630	210	440	110
35	51 800	16 200	1 110	345	720	170

1) Load capacities and load moments for ball runner blocks **without** ball chain.

Load capacities and load moments for ball runner blocks **with** ball chain  13

Determination of the dynamic load capacities and load moments is based on a 100,000 m travel life according to DIN ISO14728-1. Often only 50,000 m are actually stipulated. For comparison: Multiply values **C**, **M_t** and **M_L** by 1.26 according to the table.

Order example

Options:

- FNS ball runner block
- Size 30
- Preload class C1
- Accuracy class H
- With standard seal, without ball chain

Part number:

R1631 713 20

Preload classes

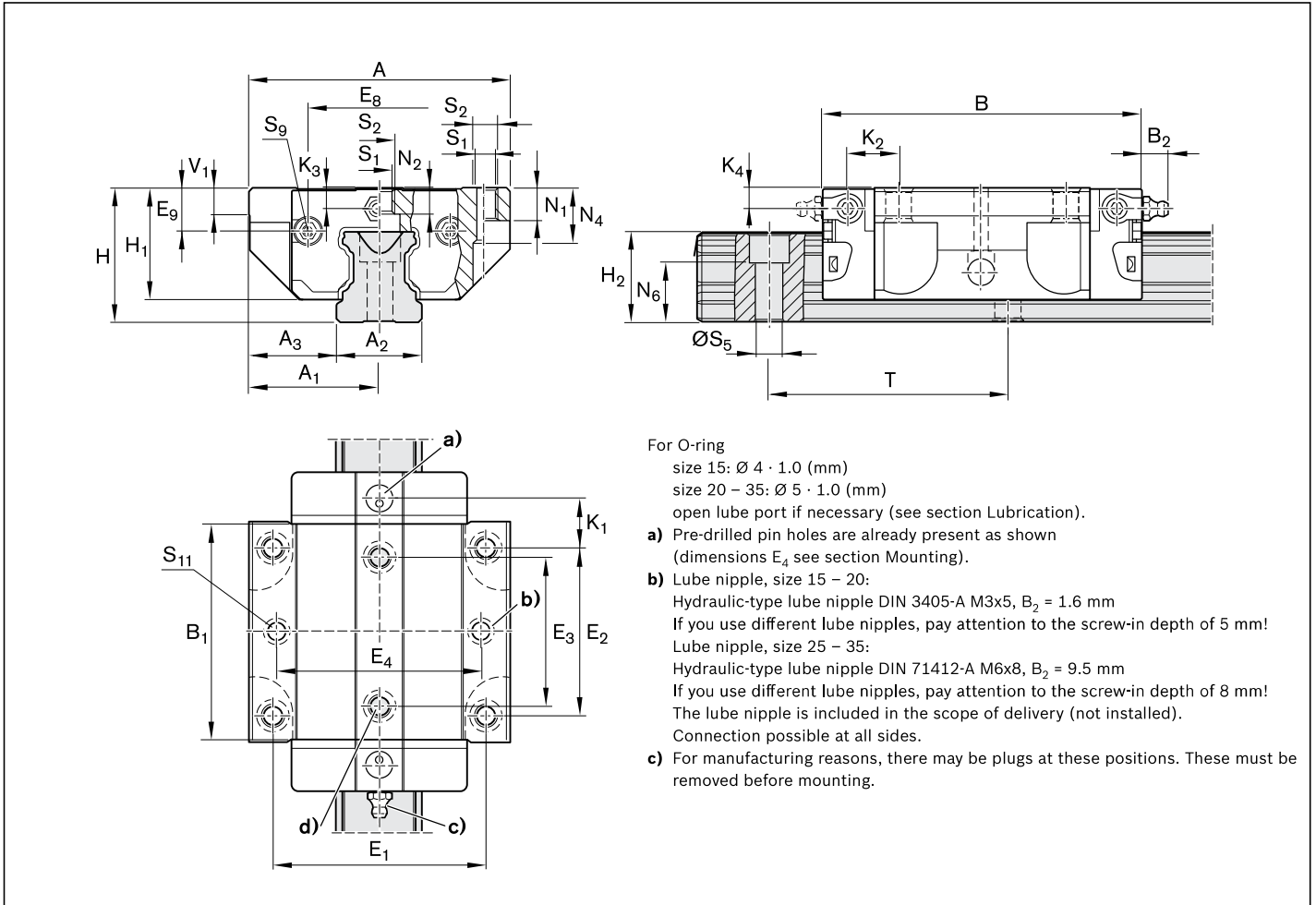
C0 = Without preload (clearance)
 C1 = Moderate preload

Seals

SS = standard seal
 LS = low-friction seal

Key

Gray digits
 = No preferred variant/combination
 (Some delivery times may be longer)



- For O-ring
 size 15: $\varnothing 4 \cdot 1.0$ (mm)
 size 20 – 35: $\varnothing 5 \cdot 1.0$ (mm)
 open lube port if necessary (see section Lubrication).
- a) Pre-drilled pin holes are already present as shown (dimensions E_4 see section Mounting).
 - b) Lube nipple, size 15 – 20:
 Hydraulic-type lube nipple DIN 3405-A M3x5, $B_2 = 1.6$ mm
 If you use different lube nipples, pay attention to the screw-in depth of 5 mm!
 Lube nipple, size 25 – 35:
 Hydraulic-type lube nipple DIN 71412-A M6x8, $B_2 = 9.5$ mm
 If you use different lube nipples, pay attention to the screw-in depth of 8 mm!
 The lube nipple is included in the scope of delivery (not installed).
 Connection possible at all sides.
 - c) For manufacturing reasons, there may be plugs at these positions. These must be removed before mounting.

Size	Dimensions (mm)																			
	A	A ₁	A ₂	A ₃	B ^{+0.5}	B ₁	E ₁	E ₂	E ₃	E ₈	E ₉	H	H ₁	H ₂ ¹⁾	H ₂ ²⁾	K ₁	K ₂	K ₃	K ₄	
15	47	23.5	15	16.0	58.2	39.2	38	30	26	24.55	6.70	24	19.90	16.30	16.20	8.00	9.6	3.20	3.20	
20	63	31.5	20	21.5	75.0	49.6	53	40	35	32.50	7.30	30	25.35	20.75	20.55	11.80	11.8	3.35	3.35	
25	70	35.0	23	23.5	86.2	57.8	57	45	40	38.30	11.50	36	29.90	24.45	24.25	12.45	13.6	5.50	5.50	
30	90	45.0	28	31.0	97.7	67.4	72	52	44	48.40	14.60	42	35.35	28.55	28.35	14.00	15.7	6.05	6.05	
35	100	50.0	34	33.0	110.5	77.0	82	62	52	58.00	17.35	48	40.40	32.15	31.85	14.50	16.0	6.90	6.90	

Size	Dimensions (mm)											Weight (kg)
	N ₁	N ₂	N ₄	N ₆ ^{±0.5}	S ₁	S ₂	S ₅	S ₉	S ₁₁	T	V ₁	
15	5.2	4.40	10.3	10.3	4.3	M5	4.5	M2.5x3.5	3.7	60	5.0	0.10
20	7.7	5.20	13.5	13.2	5.3	M6	6.0	M3x5	4.7	60	6.0	0.24
25	9.3	7.00	17.8	15.2	6.7	M8	7.0	M3x5	5.7	60	7.5	0.30
30	11.0	7.90	20.5	17.0	8.5	M10	9.0	M3x5	7.7	80	7.0	0.55
35	12.0	10.15	24.0	20.5	8.5	M10	9.0	M3x5	7.7	80	8.0	0.75

- 1) Dimension H₂ with cover strip
- 2) Dimension H₂ without cover strip