

## Rexroth Ball Rail Systems

### Super Runner Blocks $\mathcal{S}$ Steel Version

Super Runner Block  $\mathcal{S}$   
 with self-aligning feature 1661-  
 Standard Width, short

Special versions:

Runner blocks in accuracy class N  
 (clearance and preload 0.02 C) are also  
 available:

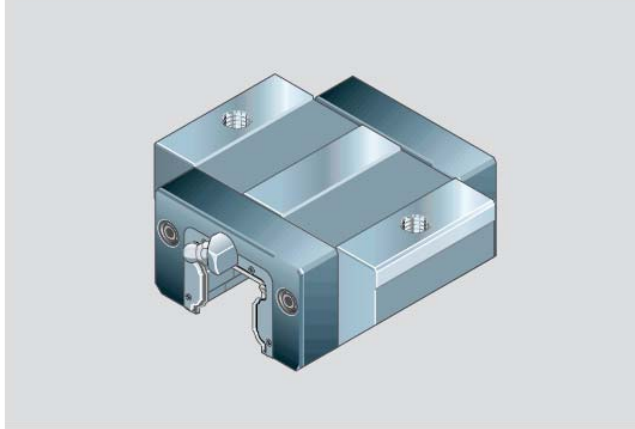
- with low friction seals  
 (part numbers 16...4-11).

Dynamic characteristics

Speed  $v_{\max} = 3 \text{ m/s}$

Acceleration  $a_{\max} = 250 \text{ m/s}^2$

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



Part numbers

Size	Accuracy class	Part numbers for runner block for preload class	
		up to approx. 10 $\mu\text{m}$ clearance	Preload 0.02 C
15	H	1661-193-10	1661-113-10
	N	1661-194-10	1661-114-10
20	H	1661-893-10	1661-813-10
	N	1661-894-10	1661-814-10
25	H	1661-293-10	1661-213-10
	N	1661-294-10	1661-214-10
30	H	1661-793-10	1661-713-10
	N	1661-794-10	1661-714-10
35	H	1661-393-10	1661-313-10
	N	1661-394-10	1661-314-10

Permissible load

When calculating the service life, use the  
 maximum load capacity figure.

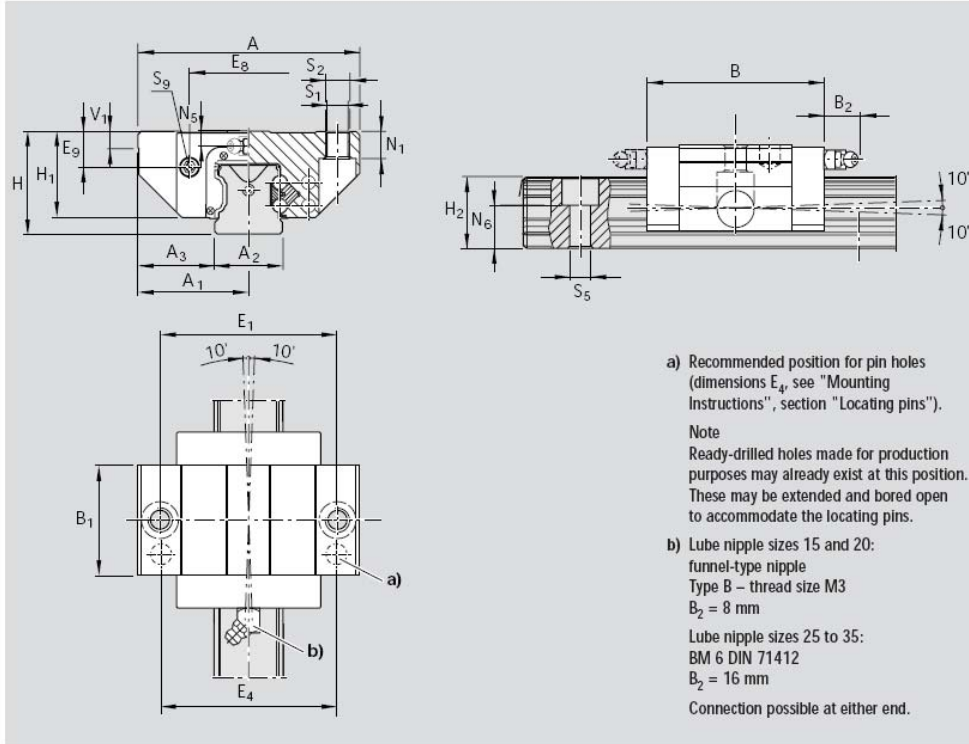
The permissible load is only limited for  
 statistical purposes (see table).

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 and  $M_t$  by 1.26 in  
 accordance with Rexroth table.



Size	Dimensions (mm)														
	A	A <sub>1</sub>	A <sub>2</sub>	A <sub>3</sub>	B	B <sub>1</sub>	H	H <sub>1</sub>	H <sub>2</sub> <sup>1)</sup>	H <sub>2</sub> <sup>2)</sup>	V <sub>1</sub>	E <sub>1</sub>	E <sub>8</sub>	E <sub>9</sub>	N <sub>1</sub>
15	47	23.5	15	16.0	40.5	25.7	24	19.8	16.3	16.20	5.0	38	24.55	6.7	5.0
20	63	31.5	20	21.5	52.5	31.9	30	25.4	20.7	20.55	6.0	53	32.4	7.3	7.5
25	70	35.0	23	23.5	61.5	38.6	36	29.5	24.4	24.25	7.5	57	38.3	11.5	9.0
30	90	45.0	28	31.0	71.5	45.0	42	35.0	28.5	28.35	7.0	72	48.4	14.6	11.0
35	100	50.0	34	33.0	79.0	51.4	48	40.0	32.15	31.85	8.0	82	58.0	17.5	12.0

1) Dimension  $H_2$  with rail seal cover strip

2) Dimension  $H_2$  without rail seal cover strip

Size	Dimensions (mm)							Weight (kg)	Load capacities (N) C dyn.	Permissible load (N) $F_{max}$	Moments (Nm)	
	N <sub>5</sub>	N <sub>6</sub> <sup>±0.5</sup>	S <sub>1</sub>	S <sub>2</sub>	S <sub>5</sub>	S <sub>0</sub>	M <sub>t</sub> dyn.				M <sub>t</sub> max.	
15	4.0	10.3	4.4	M5	4.4	M2.5-3.5 deep	0.19	3 900	1 500	39	15	
20	4.7	13.2	5.4	M6	6.0	M3-5 deep	0.30	10 100	3 900	130	50	
25	5.5	15.2	6.8	M8	7.0	M3-5 deep	0.50	11 400	4 400	170	65	
30	6.0	17.0	8.6	M10	9.0	M3-5 deep	0.90	15 800	6 100	270	105	
35	7.0	20.5	8.6	M10	9.0	M3-5 deep	1.35	21 100	8 100	450	175	