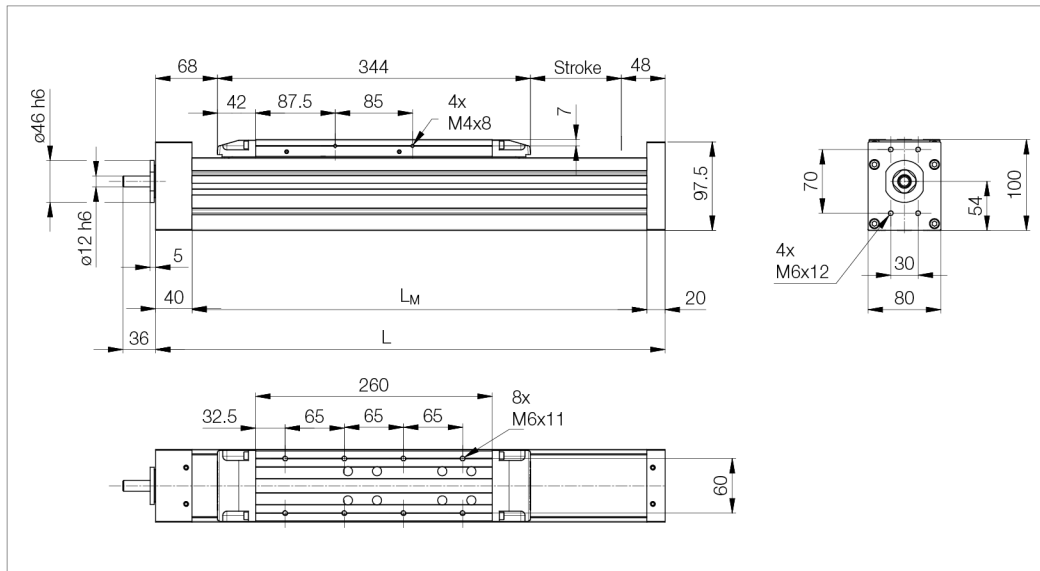


# Linear module LM4...BR...N... with ball screw drive



Nominal size	Dimensions				
Designation	L [mm]	L <sub>M</sub> [mm]	Length ball screw [mm]	Length steel strip [mm]	Weight [kg]
LM4...BR...N	Stroke + 460	L - 60	L + 30	L - 22	7.8 kg + 0.95 kg/100 mm stroke

LM Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a <sub>max</sub> [m/s <sup>2</sup> ]	Axial play		Idle torque [Nm]
		C <sub>0</sub> [N]	C <sub>dyn</sub> [N]				Type	Axial play [mm]	
LM4...R...	20 x 5	5705	4912	52/300	< 0.03 <sup>1)</sup>	10.0	R	< 0.02	0.050
							V	—	0.120
	20 x 20	5705	4912	52/300	< 0.03 <sup>1)</sup>	10.0	R	< 0.02	0.200
							V	—	0.400

d x p = screw diameter x thread pitch  
<sup>1)</sup> backlash not factored in

R = reduced axial play  
 V = preloaded

LM Type	Movement speed		Moments of inertia		Hub max. [mm]	Steel strip	Feed and friction force	Moved mass
	Guide v <sub>max</sub> [m/s]	Drive v <sub>max</sub> [m/s]	I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>z</sub> [cm <sup>4</sup> ]				
LM4...R...N	5.0	<sup>2)</sup>	106.5	152.7	3000	ohne mit	25.00 35.00	2.500

<sup>2)</sup> for ball screw drive, dependent on rotational speed characteristics, spindle length and relevant critical rotational speed.

Linear modul Type	Load ratings				Torques					
	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
	static	dynamic			static	dynamic				
LM4...R...N	C <sub>y0,1,2</sub>	C <sub>Z0,1,2</sub>	C <sub>y1,2</sub>	C <sub>Z1,2</sub>	M <sub>X0</sub>	M <sub>Y0</sub>	M <sub>Z0</sub>	M <sub>X</sub>	M <sub>Y</sub>	M <sub>Z</sub>
	59.9	59.9	34.2	34.2	646	1573	1573	400	1446	1446

The determination of dynamic load ratings and torques is based on a 50,000 m stroke. If comparative values must be calculated for a 100,000 m stroke, the values for M<sub>x</sub>, M<sub>y</sub>, M<sub>z</sub> and C must be divided by the factor 1.26.

With a view to serviceable life, loads of less than 20% of the dynamic load ratings have generally proved to be expedient.

CAD data

Enquiry (technical/quote)

Download data sheet (PDF)

Download catalogue (PDF)