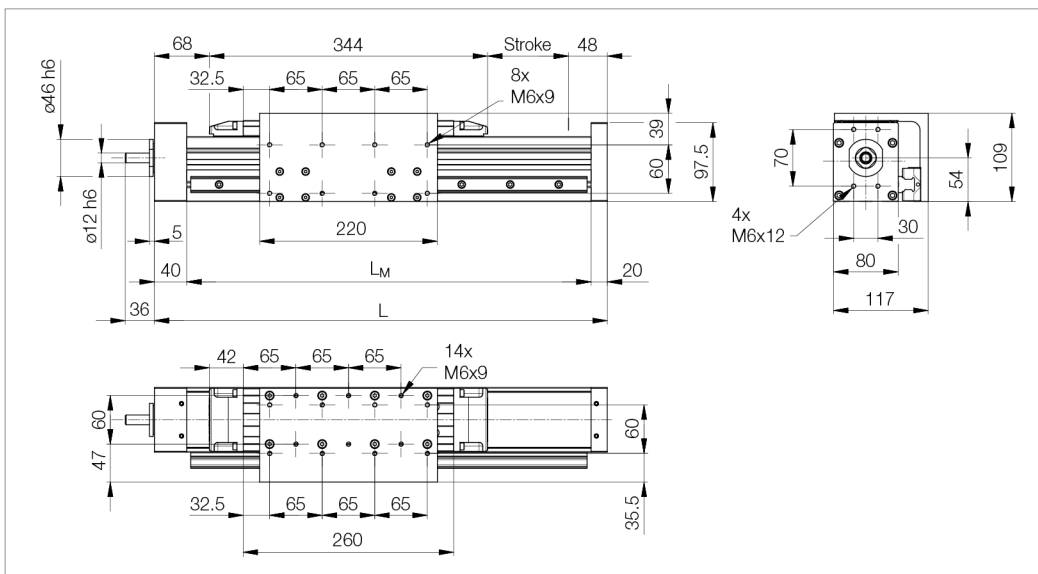


Linear module LM4...BR...L/R... with ball screw drive and lateral support rail left/right



Nominal size	Dimensions				
Designation	L	L _M	Length ball screw	Length steel strip	Weight
	[mm]	[mm]	[mm]	[mm]	[kg]

LM4...BR...L/R	Stroke + 460	L – 60	L + 30	L – 22	10.46 kg + 1.18 kg/100 mm stroke
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LM	BSD	Axial load rates		Positioning accuracy	Repeating accuracy	Acceleration	Axial play		Idle torque
Size	d x p [mm]	C ₀ [N]	C _{dyn} [N]	[μm/mm]	[mm]	a _{max} [m/s ²]	Type	Axial play [mm]	[Nm]
LM4...R...	20 x 5	5705	4912	52/300	< 0.03 ¹⁾	10.0	R	< 0.02	0.050
					< 0.01 ¹⁾		V	—	0.120
	20 x 20	5705	4912	52/300	< 0.03 ¹⁾	10.0	R	< 0.02	0.200
					< 0.01 ¹⁾		V	—	0.400

d x p = screw diameter x thread pitch

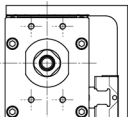
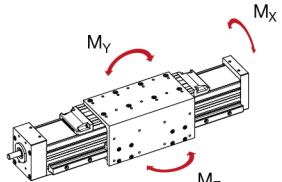
¹⁾ backlash not factored in

R = reduced axial play

V = preloaded

LM	Movement speed		Moments of inertia		Hub max.	Steel strip	Feed and friction force	Moved mass
Type	Guide v _{max} [m/s]	Drive v _{max} [m/s]	I _y [cm ⁴]	I _z [cm ⁴]	[mm]		F _V [N]	m _b [kg]
LM4...R...L/R	5.0	2)	107.6	153.4	3000	ohne	50.00	4.225
						mit	60.00	

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

Load ratings		C_{Z2}  C_{Z1}		Torques						
C_{Y1} 				 C_{Y2}						
Linear modul	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
Type	static		dynamic		static	dynamic				
	$C_{Y0,1,2}$	$C_{Z0,1,2}$	$C_{Y1,2}$	$C_{Z1,2}$	M_{X0}	M_{Y0}	M_{Z0}	M_X	M_Y	M_Z
LM4...R...L/R	119.9	119.9	68.4	68.4	3030	3860	3860	1868	3432	3432

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_x, M_y, M_z 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)

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