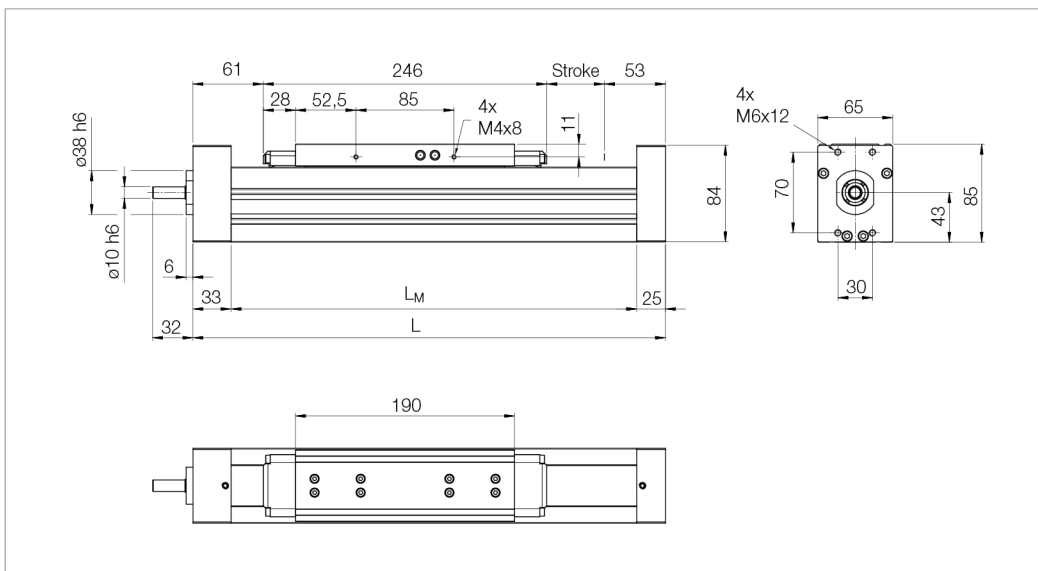


Linear module LM3...BR...N... with ball screw drive



Nominal size	Dimensions				
Designation	L	L _M	Length ball screw	Length steel strip	Weight
	[mm]	[mm]	[mm]	[mm]	[kg]
LM3...BR...N	Stroke + 360	L – 58	L + 22	L – 22	4.60 kg + 0.65 kg/100 mm stroke

LM Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a _{max} [m/s ²]	Axial play		Idle torque [Nm]
		C ₀ [N]	C _{dyn} [N]				Type	Axial play [mm]	
LM3...R...	16 x 5	4551	4327	52/300	< 0.03 ¹⁾ < 0.01 ¹⁾	10.0	R	< 0.02	0.030
							V	—	0.100
	16 x 10	4551	4327	52/300	< 0.03 ¹⁾ < 0.01 ¹⁾	10.0	R	< 0.02	0.060
							V	—	0.200
	16 x 16	4551	4327	52/300	< 0.03 ¹⁾ < 0.01 ¹⁾	10.0	R	< 0.02	0.120
							V	—	0.320

d x p = screw diameter x thread pitch

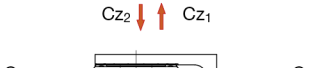
¹⁾ backlash not factored in

R = reduced axial play

V = preloaded

LM Type	Movement speed		Moments of inertia		Hub max. [mm]	Steel strip	Feed and friction force F _V [N]	Moved mass m _b [kg]
	Guide v _{max} [m/s]	Drive v _{max} [m/s]	I _y [cm ⁴]	I _z [cm ⁴]				
LM3...R...N	5.0	2)	64.5	81.7	2000	without	20.00	1.410
						with	30.00	

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

Load ratings				Torques						
										
Linear modul Type	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
	static $C_{y0,1,2}$	$C_{z0,1,2}$	dynamic $C_{y1,2}$	$C_{z1,2}$	static M_{x0}	M_{y0}	M_{z0}	dynamic M_x	M_y	M_z
LM3...R...N	35.0	35.0	18.0	18.0	286	1353	1353	160	1030	880

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)

Download data sheet (PDF)

Download catalogue (PDF)