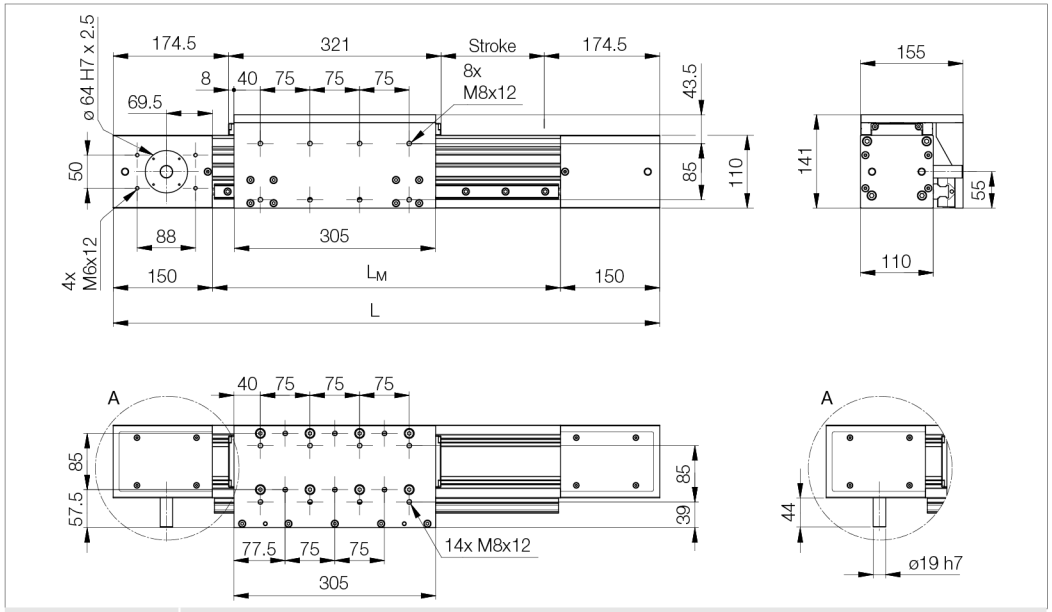
Linear module LM5...NZ...L/R **XL** with toothed belt drive and lateral support rail left/right



Nominal size	Dimensions			
Designation	L [mm]	L_M [mm]	Belt length [mm]	Weight [kg]
LM5...NZ...L/R	Stroke + 670	L – 300	2 x Stroke + 1144	23.31 kg + 1.79 kg/100 mm Stroke

Variants/dimensions with protective strip (LM5...BZ...L/R) see catalogue

XL Please contact LINE TECH for Consulting & Engineering →

Enquiry (technical/quote)

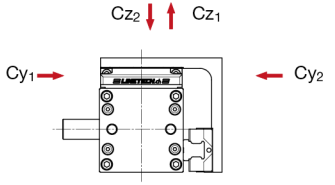
LM	Toothed belt drive				Axial load	Positioning accuracy	Repeating accuracy	Acceler-ation
Size	Type/division	Pinion d_3 x l_R [mm]	Stroke/rev [mm]	Tension [3] [mm/m]	F [N]	[µ/mm]	.../1000 mm [mm]	a_{max} [m/s²]
LM5...Z...	STD8M	94.22 x 60	296	0.059	... [1]	200/1000 [2]	< 0.20 [2]	50.0 [1]

d_3 x l_R = pinion diameter x pinion width
[1] depending on speed and load
[2] backlash not factored in
[3] belt tension/metre [mm/m] per 100 N tensile force

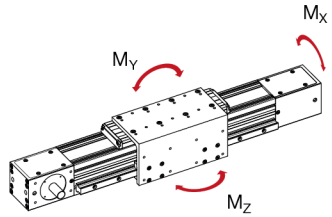
LM	Movement speed		Moments of inertia		Stroke max.	Steel strip	Feed and friction force	Moved mass
	Guide	Drive	Z / Y					
Type	v_{max} [m/s]	v_{max} [m/s]	I_Y [cm⁴]	I_Z [cm⁴]	[mm]		F_V [N]	m_b [kg]
LM5...Z...L/R	5.0	[4]	453.8	625.2	XL: 15280	without	60.00	7.590
						with	70.00	7.630

[4] for toothed belt drive, dependent on load and speed and permissible movement speed of the linear guide

Load ratings



Torques



Linear modul	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
Type	static		dynamic		static			dynamic		
	$C_{y0\,1,2}$	$C_{z0\,1,2}$	$C_{y\,1,2}$	$C_{z\,1,2}$	M_{x0}	M_{y0}	M_{z0}	M_x	M_y	M_z
LM5...Z...L/R	170.0	170.0	99.2	99.2	3356	12513	12513	2136	10541	10541

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.

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Download catalogue (PDF)