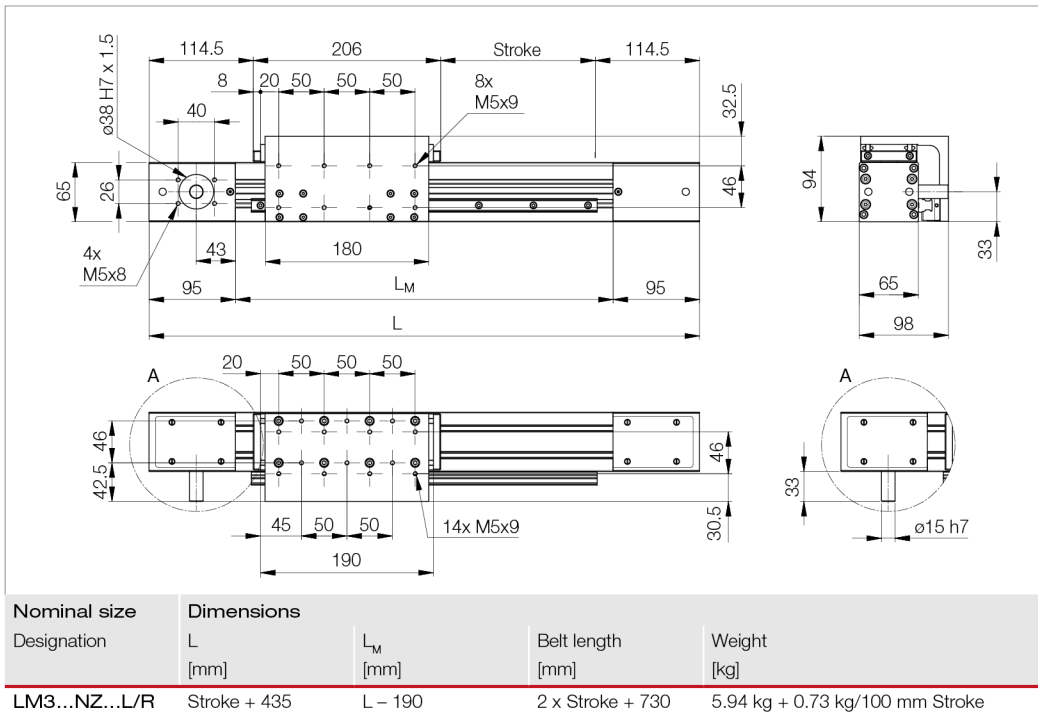


≡ Linear module LM3...NZ...L/R XL with toothed belt drive and lateral support rail left/right



Variants/dimensions with protective strip (LM3...BZ...L/R) see catalogue

XL Please contact LINE TECH for Consulting & Engineering →

Enquiry (technical/quote)

LM	Toothed belt drive				Axial load F [N]	Positioning accuracy [μm/mm]	Repeating accuracy .../1000 mm [mm]	Acceleration a _{max} [m/s ²]
	Type/division	Pinion d ₃ x l _p [mm]	Stroke/rev [mm]	Tension ³⁾ [mm/m]				
LM3...Z...	HTD5M	49.34 x 31	155	0.245	... ¹⁾	200/1000 ²⁾	< 0.20 ²⁾	50.0 ¹⁾

d₃ x l_p = 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. [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...Z...L/R	5.0	4)	67.2	82.6	XL: 15350	without	40.00	2.205
						with	50.00	2.215

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]					
	static C _{y0,1,2}	static C _{z0,1,2}	dynamic C _{y1,2}	dynamic C _{z1,2}	static M _{x0}	static M _{y0}	static M _{z0}	dynamic M _x	dynamic M _y	dynamic M _z
LM3...Z...L/R	70.0	70.0	36.0	36.0	1457	2610	2610	808	1998	1998

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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