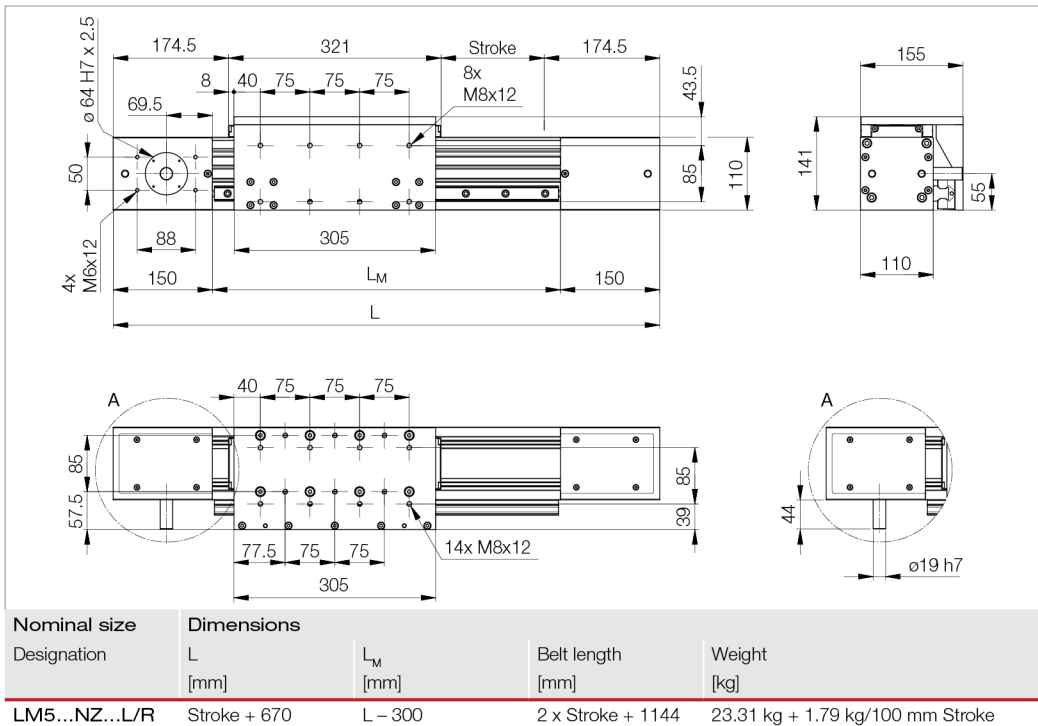


≡ Linear module LM5...NZ...L/R XL with toothed belt drive and lateral support rail left/right



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 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]				
LM5...Z...	STD8M	94.22 x 60	296	0.059	... 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]				
Type								
LM5...Z...L/R	5.0	⁴⁾	453.8	625.2	XL: 15 280	without with	60.00 70.00	7.590 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 Type

Maximum permissible load [kN]

static

dynamic

$C_{y0,1,2}$

$C_{z0,1,2}$

$C_{y1,2}$

$C_{z1,2}$

Maximum permissible torque [Nm]

static

dynamic

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.

Download data sheet (PDF)

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