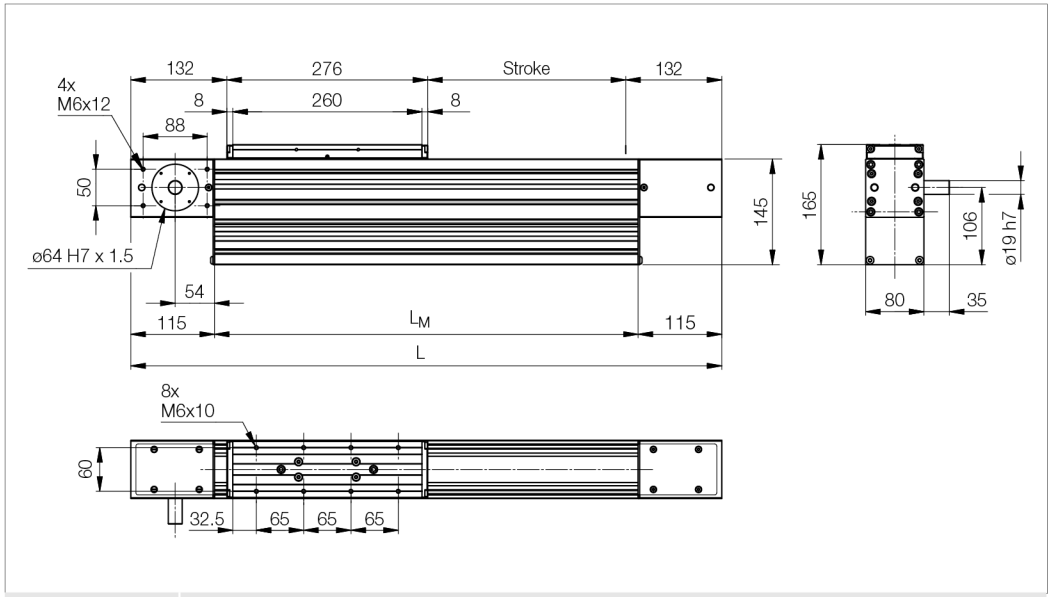
Bridge module BM4...NZ...N XL with toothed belt drive



Nominal size	Dimensions			
Designation	L [mm]	L_M [mm]	Belt length [mm]	Weight [kg]
BM4...NZ...N	Stroke + 540	L – 230	2 x Stroke + 900	9.70 kg + 1.36 kg/100 mm Stroke

Variants/dimensions with protective strip (BM4...BZ...N) see catalogue

XL Please contact LINE TECH for Consulting & Engineering →

Enquiry (technical/quote)

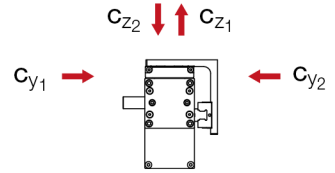
BM	Toothed belt drive				Axial load	Positioning accuracy	Repeating accuracy	Acceler-ation
Size	Type/division	Pinion $d_3 \times l_R$ [mm]	Stroke/rev [mm]	Tension 3) [mm/m]	F [N]	[µ/mm]	.../1000 mm [mm]	a_{max} [m/s²]
BM4...Z...	HTD5M	65.25 x 45	205	0.105	... 1)	200/1000 2)	< 0.20 2)	50.0 1)

$d_3 \times l_R$ = 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

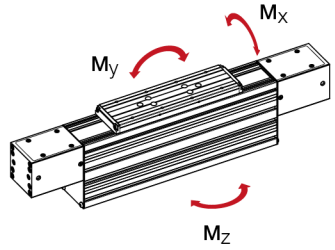
BM	Movement speed		Moments of inertia		Stroke max.	Steel strip	Feed and friction force	Moved mass
Type	Guide v_{max} [m/s]	Drive v_{max} [m/s]	I_Y [cm⁴]	I_Z [cm⁴]	[mm]		F_V [N]	m_b [kg]
BM4...Z...N	5.0	4)	708	332	XL: 12 480	without	25.00	2.150
						with	35.00	2.170

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

Load ratings



Torques



Bridge module	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
BM4...Z...N	59.9	59.9	34.2	34.2	646	1573	1573	400	1446	1446

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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