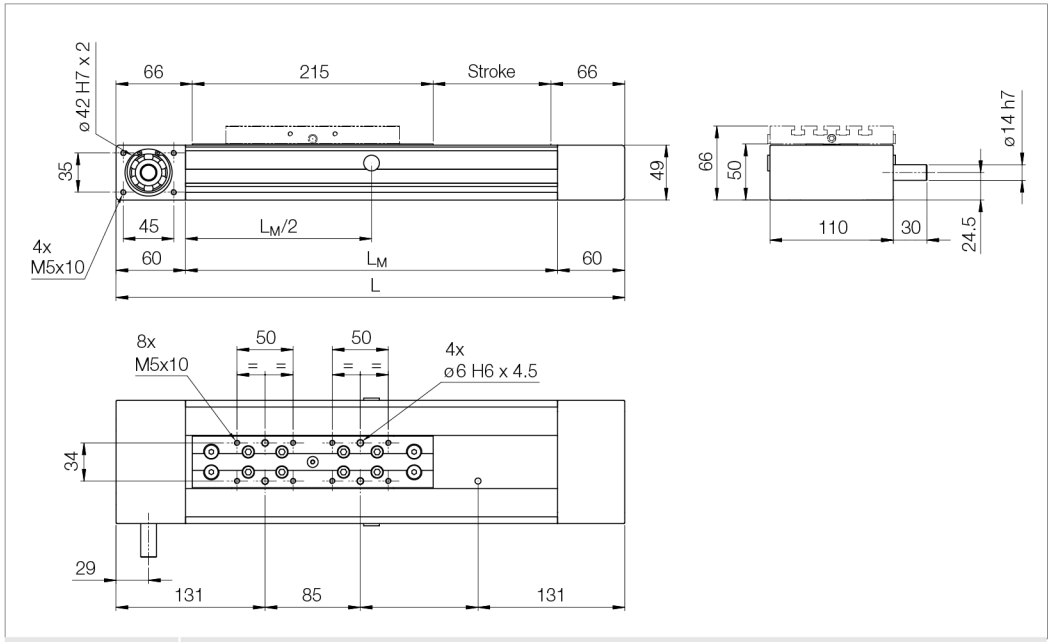
Compact unit KE2.4...Z... with 4 runner blocks (long carriage) and toothed belt drive

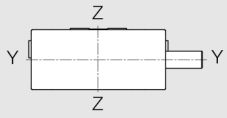


Nominal size	Dimensions			
Designation	L [mm]	L_M [mm]	Belt length [mm]	Weight [kg]
KE2.4...Z...	Stroke + 347	L – 120	2 x Stroke + 535	5.22 kg + 0.720 kg/100 mm Stroke

KE...Z...	Toothed belt drive				Axial load rating	Positioning accuracy	Repeating accuracy	Acceler-ation
Size	Type/Pitch	Toothed pinion $d_3 \times l_R$ [mm]	Stroke/R [mm]	Elongation [2] [mm/m]	F [N]	[µ/mm]	.../1000 mm [mm]	a_{max} [m/s²]
KE2...Z...	HTD5M	38.2 x 54	120	0.084	[1]	200/1000 [2]	< 0.20 [2]	50.0 [1]

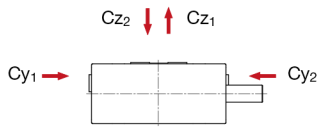
$d_3 \times l_R$ = Pinion diameter x Pinion width
[1] Depends on speed and load
[2] Belt elongation/metre [mm/m] per 100 N tensile force

KE...Z...	Travel speed		Area moment of inertia		Stroke [4] max.	Feed and friction force	Mass transported
Type	Guide v_{max} [m/min]	Drive v_{max} [m/min]	I_Y [cm⁴]	I_Z [cm⁴]	[mm]	F_V [N]	m_b [kg]
KE2.4...Z...	300	[3]	32.7	282.9	5700	40	2.24

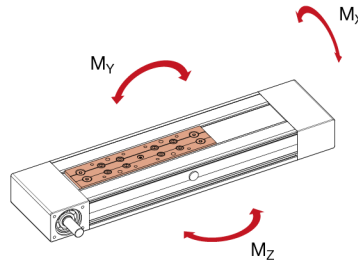


[3] Depends on load, rotation speed, and permissible travel speed of the guides
[4] Longer strokes on request

Load ratings



Torques



Compact unit	Maximum permissible forces [kN]				Maximum permissible torques [Nm]					
Type	static		dynamic		static			dynamic		
	$C_{y_{0\,1,2}}$	$C_{z_{0\,1,2}}$	$C_{y_{1,2}}$	$C_{z_{1,2}}$	M_{x_0}	M_{y_0}	M_{z_0}	M_x	M_y	M_z
KE2.4...Z...	70	70	36	36	2120	1926	1820	1180	1542	1542

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)