

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

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

$d_3 \times l_p$  = Pinion diameter x Pinion width

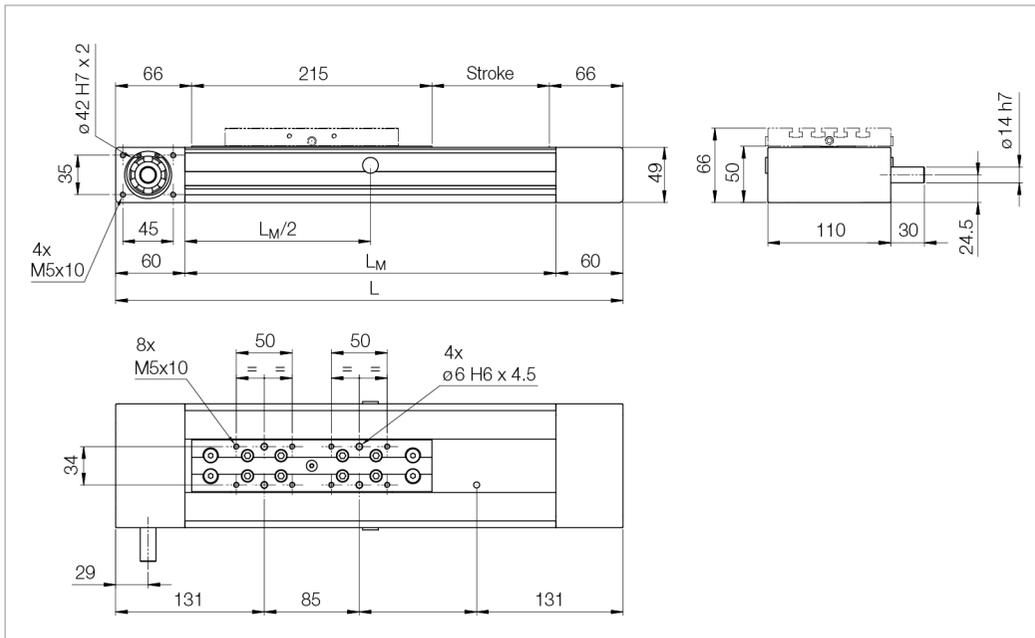
1) Depends on speed and load

2) Belt elongation/metre [mm/m] per 100 N tensile force

KE...Z...	Travel speed		Area moment of inertia		Stroke <sup>4)</sup> max. [mm]	Feed and friction force $F_V$ [N]	Mass transported $m_b$ [kg]
	Guide $V_{max}$ [m/min]	Drive $V_{max}$ [m/min]	$I_Y$ [cm <sup>4</sup> ]	$I_Z$ [cm <sup>4</sup> ]			
KE2.4...Z...	300	<sup>3)</sup>	32.7	282.9	<b>XL: 12 500</b>	40	2.24

<sup>3)</sup> Depends on load, rotation speed, and permissible travel speed of the guides

<sup>4)</sup> Longer strokes on request



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

Compact unit Type	Maximum permissible forces [kN]				Maximum permissible torques [Nm]					
	static		dynamic		static			dynamic		
	$C_{y0,1,2}$	$C_{z0,1,2}$	$C_{y1,2}$	$C_{z1,2}$	$M_{x0}$	$M_{y0}$	$M_{z0}$	$M_x$	$M_y$	$M_z$
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.