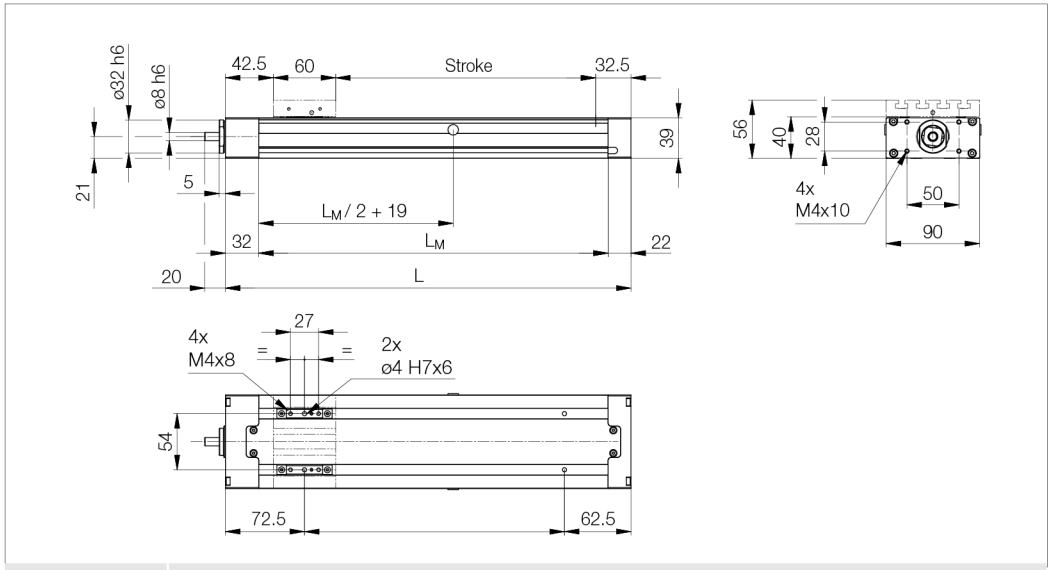
Compact unit KE1.2...R... with 1 carriage and ball screw drive



Nominal size	Dimensions				
Designation	L [mm]	L_M [mm]	Length ball screw [mm]	Length protective ribbon [mm]	Weight [kg]
KE1.2...R...	Stroke + 135	L – 54	L + 12	2 x Stroke + 220	1.77 kg + 0.410 kg/100 mm Stroke

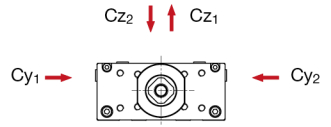
KE	BSD	Axial load rates		Positioning accuracy	Repeating accuracy	Acceleration	Axial play		Idle torque
Size	d x p [mm]	C_0 [N]	C_{dyn} [N]	[µm/mm]	[mm]	a_{max} [m/s²]	Type	Axial play [mm]	[Nm]
KE1...R...	12 x 5	3333	3099	52/300	< 0.03 [1]	10.0	R	< 0.02	0.020
					< 0.01 [1]		V	—	0.090
	12 x 10	3333	3099	52/300	< 0.03 [1]	10.0	R	< 0.02	0.045
					< 0.01 [1]		V	—	0.180

d x p = screw diameter x thread pitch
[1] backlash not factored in
[2] also available with 23 µm / 300 mm
V = preloaded

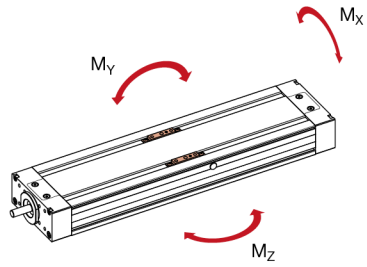
KE...R...	Movement speed		Moments of inertia		Stroke max.	Protective ribbons	Feed and friction force	Moved mass
	Guide	Drive	Z / Y / Y / Z					
Type	v_{max} [m/s]	v_{max} [m/s]	I_Y [cm⁴]	I_Z [cm⁴]	[mm]		F_V [N]	m_b [kg]
KE1.2...R...	3.0	[2]	11.5	95.5	1315	without	8.00	0.370
						with	12.00	

[2] for ball screw drive, dependent on rotational speed characteristics, spindle length and relevant critical rotational speed.

Load ratings



Torques



Compact unit	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
	static		dynamic		static			dynamic		
Type	$C_{y0\,1,2}$	$C_{z0\,1,2}$	$C_{y\,1,2}$	$C_{z\,1,2}$	M_{x0}	M_{y0}	M_{z0}	M_x	M_y	M_z
KE1.2...R...	11.2	11.2	6.5	6.5	275	60	60	158	35	35

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)