

# Compact unit KE1.4...R... with 2 carriages and ball screw drive

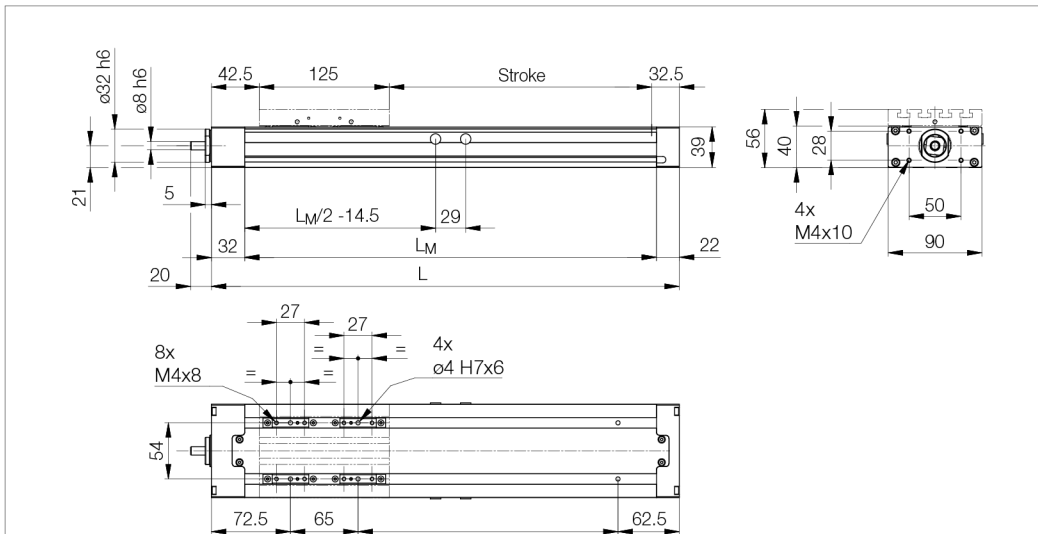
KE Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a <sub>max</sub> [m/s <sup>2</sup> ]	Axial play		Idle torque [Nm]
		C <sub>0</sub> [N]	C <sub>dyn</sub> [N]				Type	Axial play [mm]	
KE1...R...	12 x 5	3333	3099	52/300	< 0.03 <sup>1)</sup>	10.0	R	< 0.02	0.020
							V	—	0.090
	12 x 10	3333	3099	52/300	< 0.03 <sup>1)</sup>	10.0	R	< 0.02	0.045
							V	—	0.180

d x p = screw diameter x thread pitch

<sup>1)</sup> backlash not factored in

<sup>2)</sup> also available with 23 μm / 300 mm

V = preloaded



Nominal size Designation	Dimensions				Weight [kg]
	L [mm]	L <sub>M</sub> [mm]	Length ball screw [mm]	Length protective ribbon [mm]	
KE1.4...R...	Stroke + 200	L - 54	L + 12	2 x Stroke + 285	2.35 kg + 0.410 kg/100 mm Stroke

KE...R... Type	Movement speed		Moments of inertia		Stroke max. [mm]	Protective ribbons	Feed and friction force F <sub>V</sub> [N]	Moved mass m <sub>b</sub> [kg]
	Guide V <sub>max</sub> [m/s]	Drive V <sub>max</sub> [m/s]	I <sub>y</sub> [cm <sup>4</sup> ]	I <sub>z</sub> [cm <sup>4</sup> ]				
KE1.4...R...	3.0	<sup>2)</sup>	11.5	95.5	1250	without with	12.00 16.00	0.680

<sup>2)</sup> for ball screw drive, dependent on rotational speed characteristics, spindle length and relevant critical rotational speed.

### Load ratings

### Torques

Compact unit Type	Maximum permissible load [kN]				Maximum permissible torque [Nm]					
	static		dynamic		static		dynamic			
	C <sub>y0,1,2</sub>	C <sub>z0,1,2</sub>	C <sub>y1,2</sub>	C <sub>z1,2</sub>	M <sub>x0</sub>	M <sub>y0</sub>	M <sub>z0</sub>	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>
KE1.4...R...	22.5	22.5	13.0	13.0	550	330	330	316	210	210

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<sub>x</sub>, M<sub>y</sub>, M<sub>z</sub> 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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