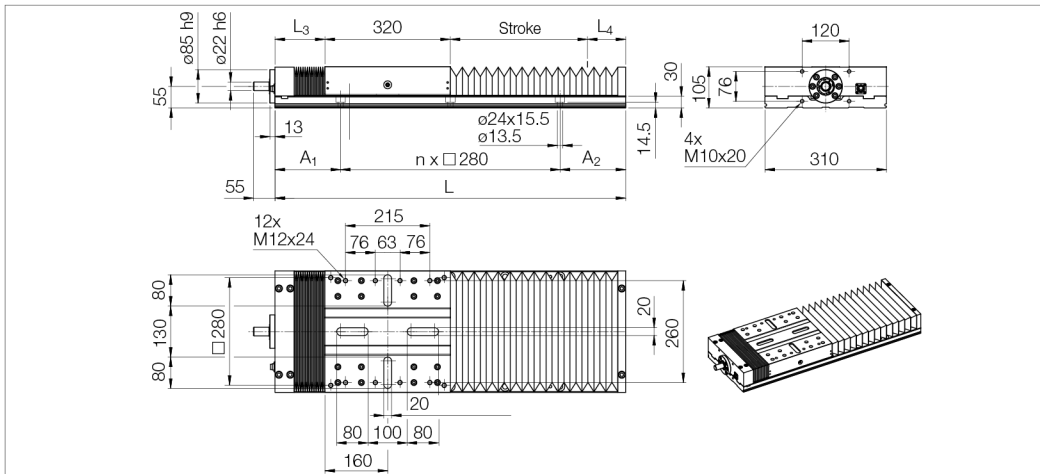


Positioning unit PE4...R... with ball screw drive



Nominal size		Dimensions							
Designation	Stroke [mm]	L [mm]	L ₃ [mm]	L ₄ [mm]	n	A ₁	A ₂	Ball screw length	Weight [kg]
PE4.4...FR...	50	510	85	55	1	115	115	350	45
with expansion bellows	3000	4225	467.5	437.5	13	292.5	292.5	4276	211
PE4.4...NR...	70	510	75	45	1	115	115	350	45
without protective covering	3785	4225	75	45	13	292.5	292.5	4276	211

* For intermediate dimensions, see catalogue

PE Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a _{max} [m/s ²]	Axial play		Idle torque [Nm]
		C ₀ [N]	C _{dyn} [N]				Type	Axial play [mm]	
	32 x 5						V	—	0.200
PE4...R...	32 x 10	11538	8947	52/300 ²⁾	< 0.01 ¹⁾	10.0	V	—	0.400
	32 x 32						V	—	1.200

d x p = screw diameter x thread pitch

¹⁾ backlash not factored in

²⁾ also available with 23 μm / 300 mm

V = preloaded

PE Type	Movement speed		Moments of inertia		Stroke max. [mm]	Expansion bellows	Feed and friction force F _V [N]	Moved mass m _b [kg]
	Guide v _{max} [m/s]	Drive v _{max} [m/s]	I _y [cm ⁴]	I _z [cm ⁴]				
PE4.4...R...	1.6	²⁾	125.1	8560.0	3785 3000	without with	25.00 25.00	16.600

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

Positioning unit Type	Load ratings					Torques					
	Maximum permissible force [kN]					Maximum permissible torque [Nm]					
	static		dynamic			static		dynamic			
	C _{y0,1,2}	C _{Z0,1}	C _{Z0,2}	C _{y1,2}	C _{Z1,2}	M _{X0}	M _{Y0}	M _{Z0}	M _X	M _Y	M _Z
PE4.4...R...	230.5	274.5	366.0	161.9	184.0	30195	26625	22365	20240	17547	15708

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)

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