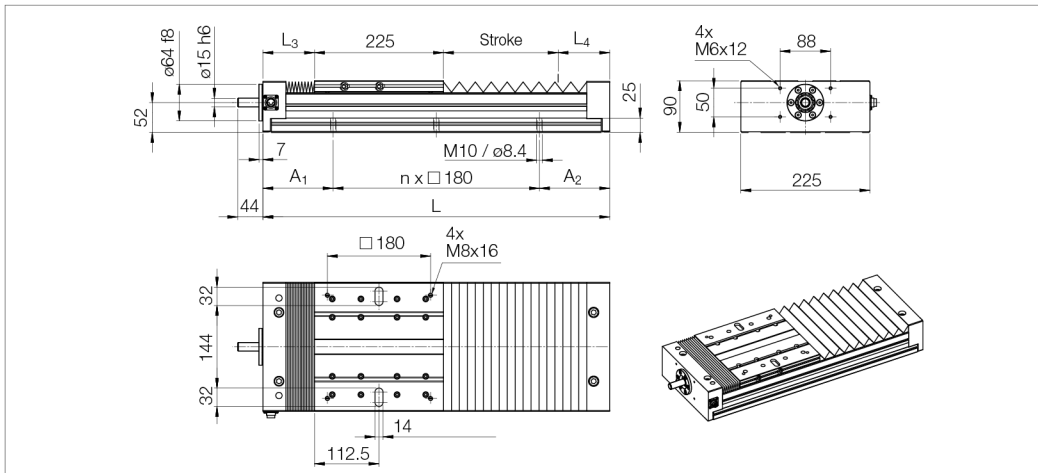


Positioning unit PE3...R... with ball screw drive



Nominal size		Dimensions							
Designation	Stroke [mm]	L [mm]	L ₃	L ₄	n	A ₁	A ₂	Ball screw length	Weight [kg]
PE3.4...FR...	50	405	65	65	1	112.5	112.5	429	17.5
with expansion bellows	3000	4420	597.5	597.5	23	140	140	3926	111.5
PE3.4...NR...	40	405	70	70	1	112.5	112.5	429	17.5
without protective covering	4055	4420	70	70	23	140	140	4444	111.5

* 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]	
	25 x 5						V	—	0.150
PE3...R...	25 x 10	7308	6140	52/300 ²⁾	< 0.01 ¹⁾	10.0	V	—	0.300
	25 x 25						V	—	0.500

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]				
PE3.4...R...	1.6	²⁾	202.8	3940.0	4055	without	15.00
					3000	with	15.00

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

Positioning unit Type	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
PE3.4...R...	59.2	70.5	94.0	41.4	46.8	4757	4617	3877	3157	3065	2691

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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