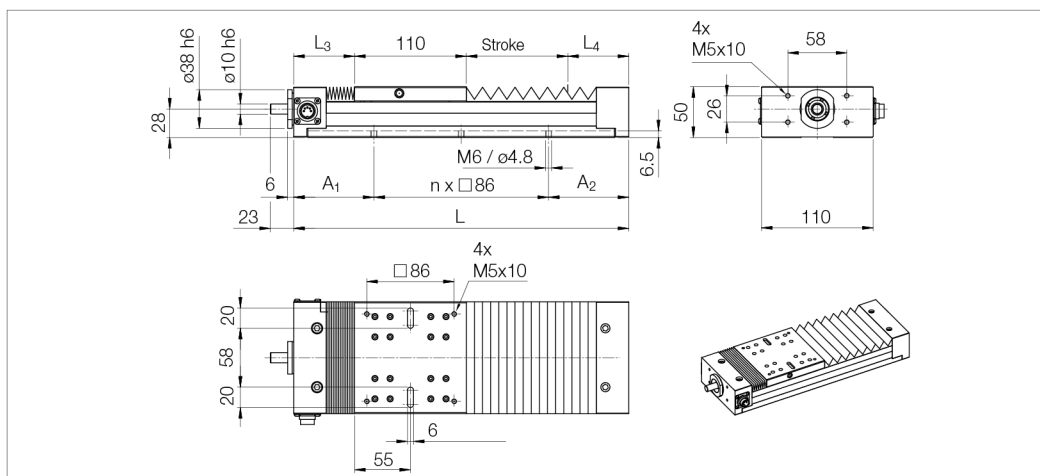


Positioning unit PE1...R... with ball screw drive



Nominal size		Dimensions							
Designation	Stroke [mm]	L [mm]	L ₃	L ₄	n	A ₁	A ₂	Ball screw length	Weight [kg]
PE1.4...FR...	50	255	47.5	47.5	2	41.5	41.5	225	3.0
with expansion bellows	1500	2365	377.5	377.5	26	64.5	64.5	2071	17.2
PE1.4...NR...	50	255	47.5	47.5	2	41.5	41.5	225	3.0
without protective covering	2160	2365	47.5	47.5	26	64.5	64.5	2373	17.2

* 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]	
PE1...R...	16 x 5						V	—	0.100
	16 x 10	4551	4327	52/300 ²⁾	< 0.01 ¹⁾	10.0	V	—	0.200
	16 x 16						V	—	0.320

d x p = screw diameter x thread pitch

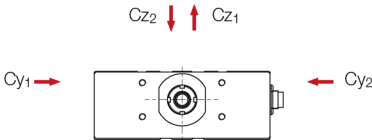
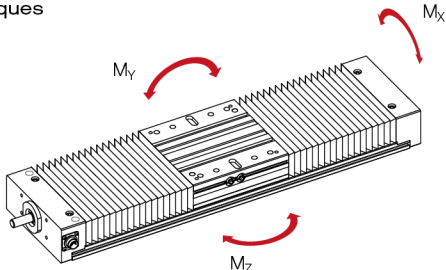
¹⁾ backlash not factored in

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]				
PE1.4...R...	1.6	²⁾	8.9	178.2	2160	without	10.00	1.100
					1500	with	10.00	

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

Load ratings					Torques						
											
Positioning unit Type	Maximum permissible force [kN]					Maximum permissible torque [Nm]					
	static			dynamic		static			dynamic		
	Cy0,2	Cz0,1	Cz0,2	Cy1,2	Cz1,2	Mx0	My0	Mz0	Mx	My	Mz
PE1.4...R...	13.8	13.8	13.8	9.2	9.2	422	380	380	281	253	253