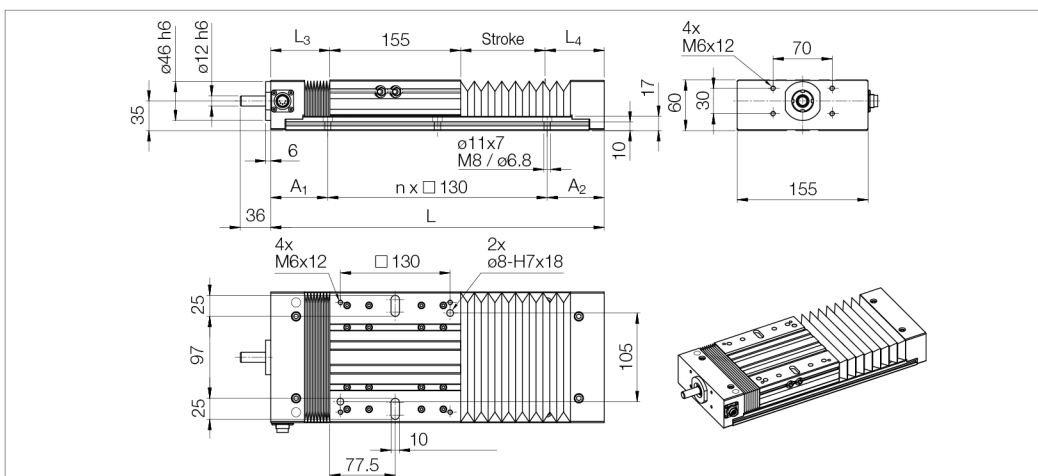


Positioning unit PE2...R... with ball screw drive



Nominal size		Dimensions							Weight [kg]
Designation	Stroke [mm]	L [mm]	L ₃	L ₄	n	A ₁	A ₂	Ball screw length	
PE2.4...FR...	50	330	62.5	62.5	1	100	100	343	9.8
with expansion bellows	2000	2850	347.5	347.5	21	60	60	2588	30.0
PE2.4...NR...	50	330	62.5	62.5	1	100	100	343	9.8
without protec- tive covering	2570	2850	62.5	62.5	21	60	60	2863	30.0

* For intermediate dimensions, see catalogue

PE Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Accelera- tion a _{max} [m/s ²]	Axial play		Idle torque [Nm]
		C ₀ [N]	C _{dyn} [N]				Type	Axial play [mm]	
PE2...R...	20 x 5	5705	4912	52/300 ²⁾	< 0.01 ¹⁾	10.0	V	—	0.120
	20 x 20						V	—	0.400

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 bellow	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]				
PE2.4...R...	1.6	²⁾	9.7	513.7	2570	without	12.00	2.700
					2000	with	12.00	

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]

static

$C_{y0,1,2}$

$C_{z0,1}$

$C_{z0,2}$

dynamic

$C_{y1,2}$

$C_{z1,2}$

Maximum permissible torque [Nm]

static

M_{x0}

M_{y0}

M_{z0}

dynamic

M_x

M_y

M_z

PE2.4...R...

42.5

50.7

67.8

29.3

33.4

2457

2230

1872

1618

1469

1290

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)