

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

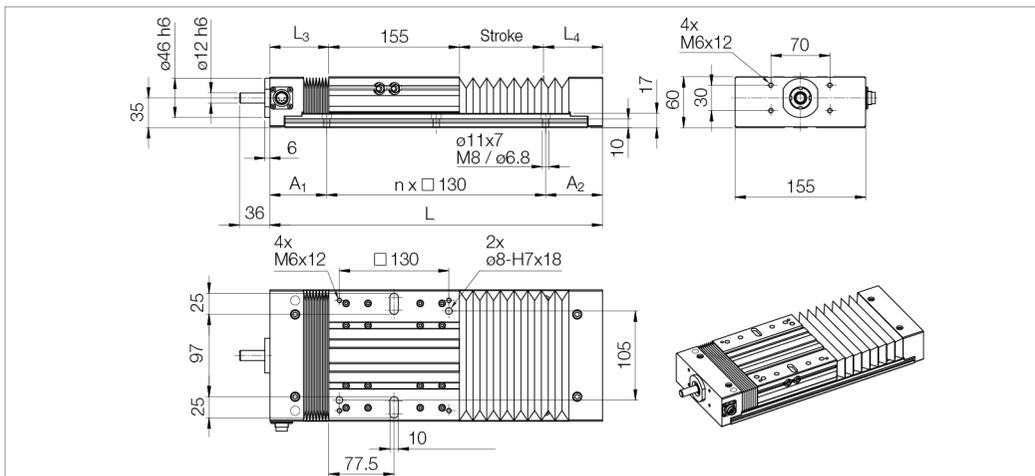
PE Size	BSD d x p [mm]	Axial load rates		Positioning accuracy [μm/mm]	Repeating accuracy [mm]	Acceleration a <sub>max</sub> [m/s <sup>2</sup> ]	Axial play		Idle torque [Nm]
		C <sub>0</sub> [N]	C <sub>dyn</sub> [N]				Type	Axial play [mm]	
PE2...R...	20 x 5	5705	4912	52/300 <sup>2)</sup>	< 0.01 <sup>1)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

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		Dimensions							
Designation	Stroke [mm]	L [mm]	L <sub>3</sub>	L <sub>4</sub>	n	A <sub>1</sub>	A <sub>2</sub>	Ball screw length	Weight [kg]
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 Type	Movement speed	Moments of inertia		Stroke max. [mm]	Expansion bellow	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> ]
PE2.4...R...	1.6	2)	9.7	513.7	2570	without	12.00	2.700
					2000	with	12.00	

<sup>2)</sup> 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 <sub>y0,1,2</sub>	C <sub>Z0,1</sub>	C <sub>Z0,2</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>
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<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.

CAD data

Enquiry (technical/quote)

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