

Key Features

- Slide 900 x 385 mm (L x B)
- Stroke 2000 mm
- Payload up to 250 kg
- Incremental Measuring System
- Dynamic Linear Motor
- High Repeatability
- Granite Rail



Air-Bearing Linear Axis on Granite Base

Concept and Design

The EZ-2310 linear axis is equipped with a 900 mm long slide, which is magnetically preloaded and runs on a stable granite base.

The linear axis is designed to operate precisely even under high loads and offers plenty of space for customer-specific setups and sensor systems.

A powerful linear motor from Tecnotion (UX12) ensures dynamic slide movement.

In the standard version, the axis is equipped with an incremental measuring system (RSF).

Deviating strokes can be realized on request.

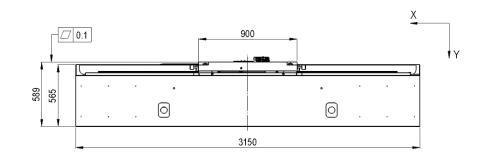
Applications

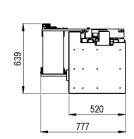
Inspection technology, sensor and camera positioning for inspection, electronics and PCB manufacturing, AOI (automatic optical inspection), automation processes. In general: applications with high demands on dynamics, precision, repeatability, smooth scan movements.

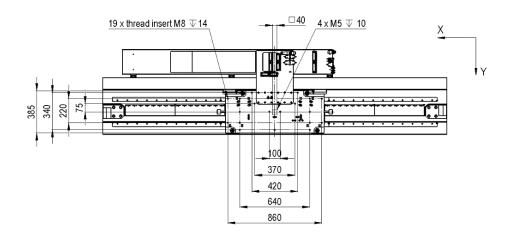
Drive Control

We offer the linear axis EZ-2310-2000 with the following drive controllers:

- Kollmorgen Servostar AKD / S300 / S700
- ACS Controller
- Triamec TSD350







EZ-2310-2000



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Туре	Unit	Value	
Stroke	mm	2,000	
Position Accuracy uncompensated (XTX)	μm	< 15	
Repeatability (bidirectional) 1)	μm	< 1	
Position Stability 1)	nm	50 - 100	
Vertical/Horiz. Straightness (XTZ/XTY)	μm	7	
Pitch (XRY)	μrad	25	
Yaw (XRZ)	μrad	25	
Max. Speed unloaded	m/s	2	
Max. Acceleration unloaded	m/s²	10	
Mechanical Data	Unit	Value	
Dimension LxWxH	mm	3,150 x 777 x 639	

Mechanical Data	Unit	Value
Dimension LxWxH	mm	3,150 x 777 x 639
Max. Load ²⁾	kg	250
Load Capacity vertical (Z)	N	3,000
Load Capacity lateral (Y)	N	280
Moment of Tilt around X	Nm	25
Moment of Tilt around Y	Nm	20
Moment of Tilt around Z	Nm	70
Moving Mass (slide)	kg	85
Total Mass (incl. slide)	kg	2,600

Encoder	Value
Туре	incremental, RSF
Sensor Signal	1Vpp

Drive	Unit	Value
Туре		3-phase, synchronous, ironless
Max. Voltage ph-ph	V_{AC}	230 (300 V _{DC})
Continuous Force	N	384
Peak Force	N	1,960
Continous Current	A_{rms}	3.6
Peak Current	A_{rms}	18.4

Interfaces and Environment	Unit	Value	
Air Consumption	SI/min	18	
Supply Pressure	bar	5	
MTBF	h	> 20,000	
Limit Switch		included (5 V)	
Clean Room Suitability		applicable	

Drive Control	Value
Standard	Kollmorgen Servostar AKD / S300 / S700
High end	ACS Controller, Triamec

¹⁾ depending on drive control

Subject to technical modifications and typographical errors.

²⁾ large mass moments of inertia must be taken into account