Key Features

- Dimension (LxWxH) 397x130x120 mm
- Max. Load Capacity radial 425 N
- Max. Speed 3,600 rpm
- Integrated Pneumatic Release Unit
- Water-Cooled Synchronous Motor
- Torque 3 Nm



Air-bearing Turning-Grinding Spindle

The robust air-bearing spindle EZ-0227 has proven to be particularly reliable for precision and fine machining. Due to the sealing air exiting via a labyrinth, it is also suitable for wet/lubricated production environments.

The friction-free air bearing enables excellent axial and radial concentricity. The integrated Tonic FS measuring head from Renishaw is certified for functional reliability. The spindle is driven by a powerful water-cooled synchronous motor with 3 Nm torque. With radial and axial load capacities of 425 N and 700 N, respectively, the spindle is ideal for high-precision turning, drilling and grinding processes.

In the standard version, the spindle is equipped with a Schaublin W20 collet chuck or a Schaublin SRS W20 runout control system; other flange shapes and clamping systems are available on request.

Applications

Precision and fine machining, turning of optical glasses and technical optics, glass milling, grinding/polishing of optical lenses and displays for cell phones and tablets, micro-machining of optical and medical products.

In general: For applications with high demands on dynamics and precision.

Drive Control

We offer the EZ-0227 spindle with the following drive controller:

Kollmorgen AKD



EZ-0227



Specifications		
Туре	Unit	Value
Turning Range	0	> 360 (unlimited)
Error Motion axial	μm	± 0.05
Error Motion radial	μm	± 0.1
Runout radial at mounting flange	μm	2.5
Runout axial at spindle nose	μm	1.5
Max. Speed for 1 Vpp	rpm	3,600
Max. Speed for TTL	rpm	290
Mechanical Data	Unit	Value
Dimension LxWxH	mm	397 x 130 x 120
Diameter Collet Chuck	mm	0.3 to 12
Weight	kg	16.75
Max. Load axial push/pull	Ν	700
Max. Load radial at spindle nose	Ν	425
Stiffness axial	N/µm	120
Max. Moment of Tilt	Nm	90
Material Housing		aluminium
Material Rotor		1.4104 stainless steel
Drive	Unit	Value
Туре		synchronous, water-cooled
Max. Speed	rpm	4,500
Nominal Torque	Nm	3
Clamping System		
Schaublin SRS Runout Control System W20		
Schaublin Collet Chuck W20		
Interfaces and Environment	Unit	Value
Supply Pressure	bar	5
Air Consumption	Sl/min	ca. 35
Feedthrough for Vacuum/Compressed Air	number of outputs	2
Drive Control		Value
Standard		Kollmorgen AKD

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