

### **Key Features**

- Diameter x Length 150 x 400 mm
- Max. Load Capacity radial 650 N
- Speed up to 20,000 rpm
- Fixture for Tool Holder HSK 50-C
- Water-Cooled Direct Drive



# High Precision Air-Bearing Spindle EZ-9570

#### **Concept and Design**

The EZ-9570 air-bearing spindle is designed for high-precision grinding applications and reaches speeds of up to 20,000 rpm.

Due to the sealing air exiting via a labyrinth, it is also suitable for wet/lubricated production environments.

The synchronous motor is available in two versions: with a speed of max. 20,000 rpm at a torque of 2.6 Nm and with a speed of 12,000 rpm at a maximum torque of 3.2 Nm. Housing and rotor are water-cooled.

The standard version of the spindle is supplied either with flange mounting and centering collar or with an HSK 50-C clamping system. Other flange shapes and clamping systems are available on request.

#### **Applications**

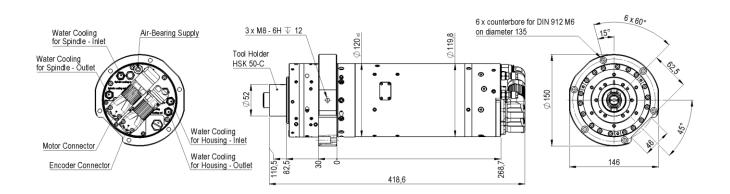
Precision and fine machining, turning of optical glasses and technical optics, glass milling, grinding/polishing of optical lenses and displays for cell phones and tablets, micro-machining of optical and medical products.

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

#### **Drive Control**

We offer the EZ-9570 spindle with the following controller:

Kollmorgen AKD





## Specifications

Туре	Unit	HSK 50-C	Flange + Centering	
Turning Range	0	> 360 (unlimited)		
Max. Speed	rpm	20,000	12,000	
Error Motion axial	μm	0.1		
Error Motion radial	μm	0.2		
Mechanical Data	Unit	HSK 50-C	Flange + Centering	
Diameter x Length	mm	150 x 400		
Weight	kg	28		
Max. Load Capacity axial push/pull	N	1,000		
Max. Load Capacity radial at spindle nose	N	650		
Stiffness axial	N/µm	110		
Max. Moment of Tilt	Nm	100		
Material Housing		1.4305 stainless steel		
Material Rotor		1.7131 case-hardened steel		
Drive	Unit	HSK 50-C	Flange + Centering	
Туре		synchronous motor		
Nominal Torque	Nm	2.6	3.2	
Nominal Current	Α	13.5	33	
Voltage Intermediate Circuit	$V_{DC}$	560	120	
Cooling for Motor/Air-bearing		water cooling		
Thermal Protection		1*PTC 130 °C		
Interfaces and Environment	Unit	HSK 50-C	Flange + Centering	
Air Consumption	SI/min	approx. 90		
Supply Pressure	bar	5		
Drive Control		HSK 50-C	Flange + Centering	
Standard		Kollmorgen AKD		

Subject to technical modifications and typographical errors.