

Key Features

- Air Bearing Rotary Table with Direct Drive
- Load Capacity axial 3,000 N
- Runout < 0.1 µm
- Velocity 500 U/min
- Water-Cooled Motor



Rotary Table EZ-0779

Concept and Design

The EZ-0779 rotary table with high axial load capacity and axial/radial error motion below 100 nm was originally developed for use in wafer processing; it is suitable for a wide range of applications. The direct-drive rotary table is equipped with a powerful water-cooled torque motor.

Optionally, a rotary feedthrough with up to 6 air/vacuum channels can be integrated.

The measuring system (Numerik Jena RIK4) with 18,000 lines can be used with an interpolation factor of 5, 10, 50 or 100. Low interpolation values allow higher speeds, higher interpolation values increase the repeatability. There are no restrictions regarding the installation position.

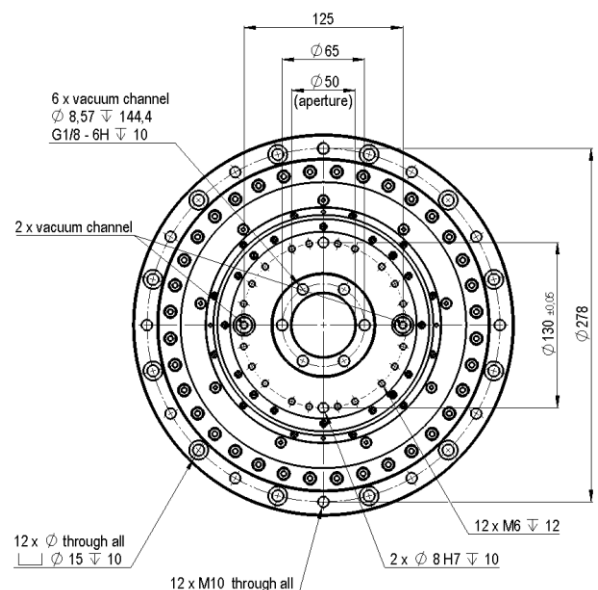
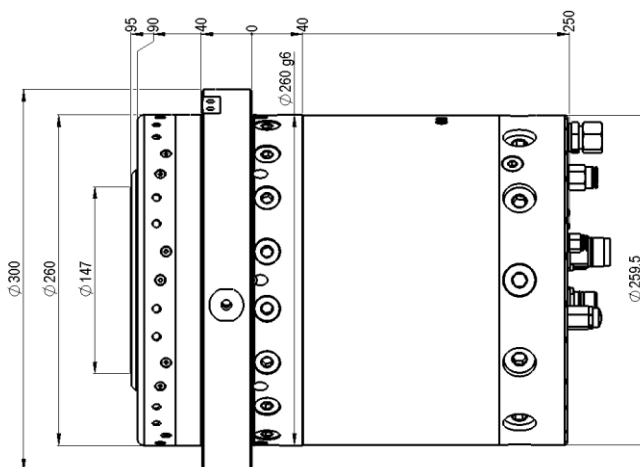
Applications

Wafer grinding, wafer thinning, test systems, applications with high requirements on synchronization and/or positioning accuracy

Drive Control

We offer the rotary table EZ-0570 with the following drive controllers:

- Kollmorgen AKD P00606
- Kollmorgen Servostar S300 / S700
- ACS Controller



Specifications

Type	Unit	Value
Turning Range	°	> 360 (unlimited)
Error Motion axial (in the center)	µm	< 0.1
Error Motion radial (at 20 mm height)	µm	< 0.1
Axial Runout	µm	< 1
Max. Speed ¹⁾	rpm	500
Mechanical Data		
	Unit	Value
Mounting Position		unrestricted
Diameter x Height	mm	300 x 345
Aperture	mm	50
Moving Mass (rotor)	kg	31
Total Mass	kg	70
Max. Load Capacity axial	N	2,700
Nominal Load Capacity axial push/pull	N	2,200
Max. Load Capacity radial	N	1,600
Nominal Load Capacity radial	N	1,300
Stiffness axial	N/µm	450
Stiffness radial	N/µm	130
Resistance Against Tilt	Nm/µrad	4
Max. Moment of Tilt	Nm	60
Inertial Moment	kg*m ²	0.12
Material		aluminium anodized / stainless steel
Encoder		
		Value
Type		incremental
Lines per Revolution		18,000
Output Signal		1Vpp
Interpolation Options		5-, 10-, 50-, 100-fold
Drive		
	Unit	Value
Type		synchronous, iron-core
Intermediate Circuit Voltage	V _{DC}	max. 400
Nominal/Peak Torque	Nm	60 / 218
Nominal/Peak Current	A _{rms}	6.7 / 32.9
Interfaces and Environment		
	Unit	Value
Supply Pressure	bar	5
Air Consumption	Sl/min	ca. 50
Clean Room Suitability		applicable
Drive Control		
		Value
Standard		Kollmorgen AKD P00606 / Servostar S300
High End		ACS Controller

1) depending on interpolation value

Subject to technical modifications and typographical errors.