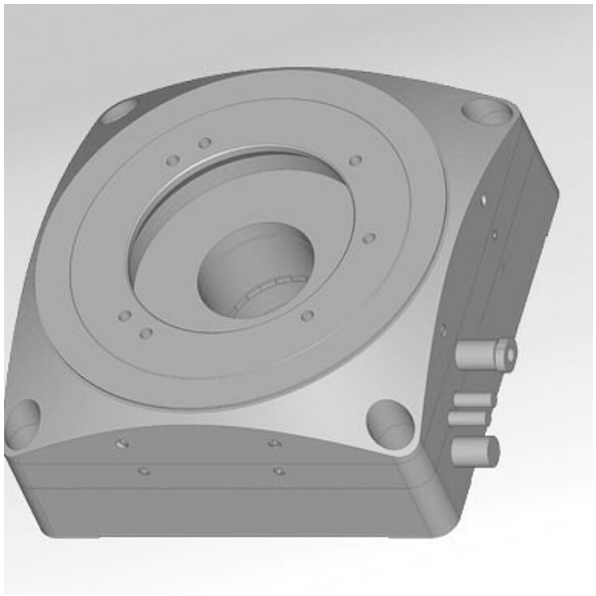

EZ0675 Air Bearing Stage

Air bearing rotary table with direct drive for high accuracy applications.

Typically this stage is combined with a XY stage (5102.05) and slip rings. The use in an Eulerian cradle 512 is also possible.

Equipped with a direct drive motor and a high accuracy rotary encoder for position controlled applications.

Rotor can be clamped by turning off air.

Mechanical specifications:

Length x width x height [mm]:	115 x 115 x 49
Carrying capacity axial [N]:	200
Carrying capacity radial [N]:	60
Run out error axial [µm]:	0.1
Run out error radial [µm]:	0.1
Stiffness axial [N/µm]:	20
Stiffness radial [N/µm]:	7
Inclination max. load [Nm]:	10
Resistance against tilt [Nm/µrad]:	0.033
Inclination complience [µrad/Nm]:	30
Inertial moment [kg m²]:	0.001
Weight [kg]:	1.6
Air supply pressure [bar]:	5
Air consumption [Nl/min]:	12
Material (housing):	Aluminum anodized
Material (rotor):	Aluminum hard coated

Motor specifications:

Revolutions per minute [rpm/min]:	1000
Continiuous/peak torque [Nm]:	0.5 / 5
Intermediate circuit voltage [V]:	60
With hall sensor:	on request

Measurement system:

Signal periods per revolution:	10.000 / TTL up to 4.000.000

Signal output:	1Vss / alternative RS 422

Control system:

Servo motor controllers are available on request.