



## EZ0675 XY 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 [ $\mu\text{m}$ ]:	0.1 (+/- 1 $\mu\text{m}$ with XY combination)
Run out error radial [ $\mu\text{m}$ ]:	0.1 (+/- 1 $\mu\text{m}$ with XY combination)
Stiffness axial [N/ $\mu\text{m}$ ]:	20
Stiffness radial [N/ $\mu\text{m}$ ]:	7
Inclination max. load [Nm]:	10
Resistance against tilt [Nm/ $\mu\text{rad}$ ]:	0.033
Inclination compliance [ $\mu\text{rad}/\text{Nm}$ ]:	30
Inertial moment [kg m <sup>2</sup> ]:	0.001
Weight [kg]:	2.5
Air supply pressure [bar]:	5
Air consumption [l/min]:	12
Material (housing):	Aluminum anodized
Material (rotor):	Aluminum hard coated

### Motor specifications:

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

### Measurement system:

Signal periods per revolution:	10.000 / TTL up to 4.000.000
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Signal output:

1Vss / alternative RS 422

Control system:

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Servo motor controllers are available on request.

