



EZ0570 XY Air Bearing Stage

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

The rotor can be clamped by turning off the air.

In this example the air bearing stage is combined with a XY stage and slip rings.

Mechanical specifications:

Length x width x height [mm]:	200 x 200 x 140
Turning range [°]:	360
Carrying capacity axial [N]:	2500
Carrying capacity radial [N]:	2500
Run out error axial [μm]:	1
Run out error radial [μm]:	1
Stiffness axial [$\text{N}/\mu\text{m}$]:	350
Stiffness radial [$\text{N}/\mu\text{m}$]:	125
Resistance against tilt [$\text{Nm}/\mu\text{rad}$]:	0.58
Inclination compliance [$\mu\text{rad}/\text{Nm}$]:	1.7
Inclination max. load [Nm]:	70
Inertial moment [kg m^2]:	0.019
Weight [kg]:	15.43
Air supply pressure [bar]:	5
Air consumption [Nl/min]:	18
Material (housing):	Aluminum anodized grey
Material (rotor):	Aluminum hard coated black

Motor specifications:

HIWIN TMR 32	
Continuous/peak torque [Nm]:	8 / 22
Continuous/peak current [A eff]:	3 / 8

Measurement system:

Numerik Jena RIK4	
Signals per rotation:	9000 / 18000

Signal output:	RS 422 / 1Vpp
Reference signal:	TTL active high

Control system:

Servo motor controllers are available on request.

