

## Key Features

- Passive Air-Bearing Rotary Table
- Error Motion axial/radial < 0.03/0.05 μm
- High Load Capacity and Stiffness
- Various Sizes available



## Passive Rotary Table EZ-RP201

### Design and Construction

With an axial error motion of < 30 nm and a radial error motion of < 50 nm, the EZ-RP201 rotary table series meets the highest requirements.

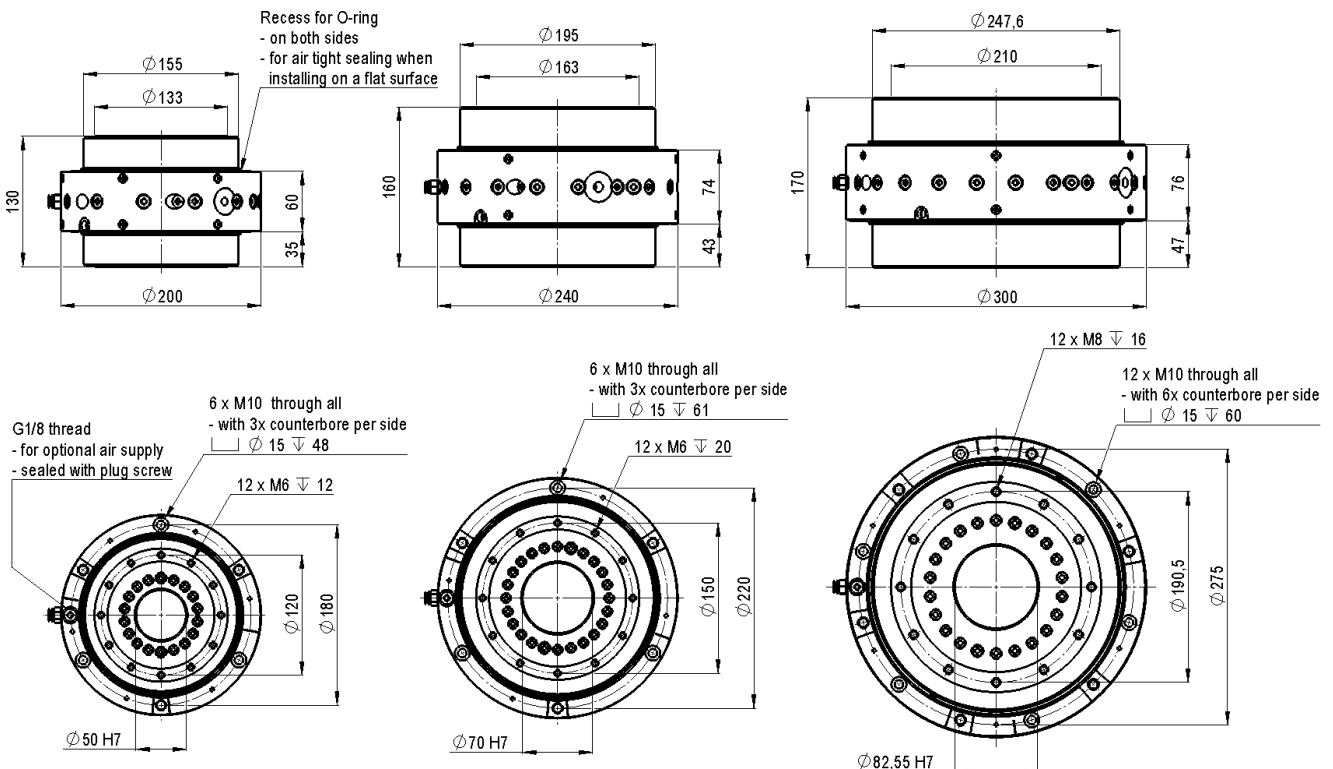
Due to the specific H-design and optimized bearing layout, these rotary tables demonstrate exceptional stiffness and axial load capacity.

The stainless-steel rotary tables can be driven by either an externally mounted motor or a belt pulley.

Compressed air can be supplied to the bearing in multiple ways: either through the planar mounting surface or via a valve.

### Applications

Used as a drive/bearing system in high precision turning, polishing, grinding, and wafer grinding processes, for applications with high demands on concentricity.



## Specifications

Type	Unit	EZ-RP201-150	EZ-RP201-200	EZ-RP201-250
Turning Range	°	> 360 (unlimited)	> 360 (unlimited)	> 360 (unlimited)
Error Motion axial (in the center)	µm	< 0.03	< 0.03	< 0.03
Error Motion radial (at 20 mm height)	µm	< 0.05	< 0.05	< 0.05
Axial Runout (measured on surface a/b) <sup>1)</sup>	µm	< 1	< 1	< 1
Radial Runout (measured on surface c/d) <sup>1)</sup>	µm	< 2	< 2	< 2
Max. Speed	rpm	2,500	2,000	1,200

Mechanical Data	Unit	EZ-RP201-150	EZ-RP201-200	EZ-RP201-250
Mounting Position		unrestricted	unrestricted	unrestricted
Diameter x Height	mm	200 x 130	240 x 160	300 x 170
Diameter Rotor	mm	155	195	247.6
Moving Mass (rotor)	kg	9.7	19.4	36.4
Total Mass	kg	21	38	66
Max. Load axial push/pull @ 5bar	N	1,800	2,500	5,000
Nominal Load axial	N	1,400	2,000	3,500
Max. Load radial @ 5bar	N	800	1,600	2,000
Nominal Load radial	N	640	1,280	1,500
Stiffness axial	N/µm	650	800	1,500
Stiffness radial	N/µm	270	400	550
Max. Moment of Tilt	Nm	> 50	> 110	> 200
Inertial Moment	kg*m <sup>2</sup>	0.03	0.1	0.28

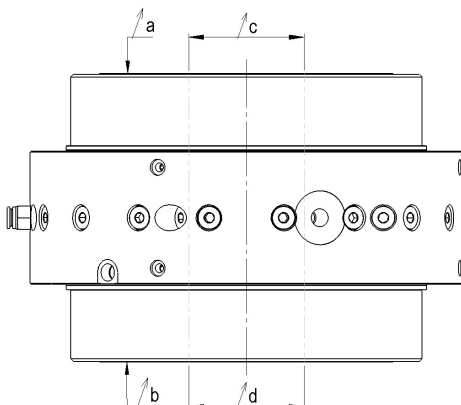
Interfaces and Environment	Unit	EZ-RP201-150	EZ-RP201-200	EZ-RP201-250
Supply Pressure	bar	5	5	5
Air Consumption	Sl/min	< 30	< 35	< 45
Clean Room Suitability		applicable	applicable	applicable

1) see figure below left

Subject to technical modifications and typographical errors.

Datasheet version 4.0

### Measuring Surfaces:



### Mounting Options:

- with M10 screws using the M10 threads,
- with M8 screws using the M10 countersunk bores.

