

# LabStandardCOMPACT

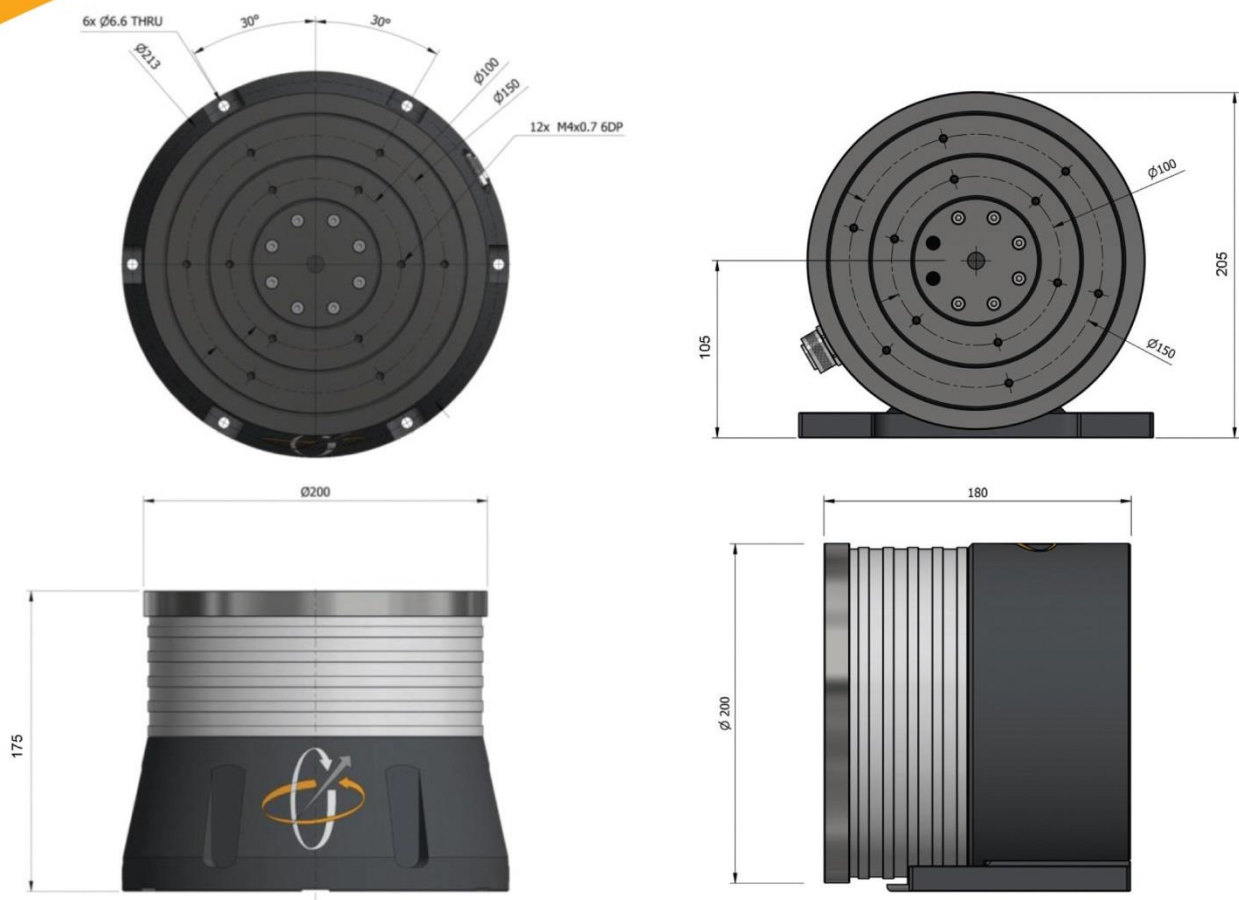
## HIGH PRECISION ANGULAR POSITIONING, CALIBRATION AND GEOMETRY INSPECTION

Ultra precise rotary tables intended for fine inspection, metrology and test applications.

Designed for horizontal or vertical applications with self-locking worm gearing and a high accuracy angular encoder ensures sensitivity and fine positioning for metrology and precision testing.

### Measurement Capacity:

- Size Ø200mm
- Vertical or Horizontal axis
- Load capacities up to 100kgs or 20Nm
- Rotation speed 10 rpm
- Zero backlash drive
- Angular accuracy 10 or 2 arc seconds
- Angular repeatability 0.5 arc seconds



### LabStandardCOMPACT

Technical Data	QD	Units	LabStandardCOMPACT			
			Vertical Axis		Horizontal Axis	
Load Capacity		kgs	100			
Maximum Tilt Moment		Nm	20			
Maximum Acceleration @ Min Inertia		Rad/s <sup>2</sup>	10			
Maximum Acceleration @ Max Inertia			5			
Maximum Polar Inertia		kgm <sup>2</sup>	0.5			
Angular Positioning Accuracy	12-09	Arc seconds	2	10	2	10
Coning of Table Axis	12-35		+/-0.5			
Angular Resolution (Options Available)	12-56		0.18 (x400)			
Angular Repeatability	12-57		0.5	1	0.5	1
Drive Ratio			160:1			
Maximum rpm		rpm	10			
Rotation Error of Table Top	12-06	mm	0.005			
Flatness of Table Top	12-07					
Parallelism of Table Top To Base	12-08		0.008	N/A		
Radial Runout of Table Axis	12-10		0.001			
Axial Runout of Table Axis	12-11					
Squareness	12-37		N/A	0.008		



# LabStandard

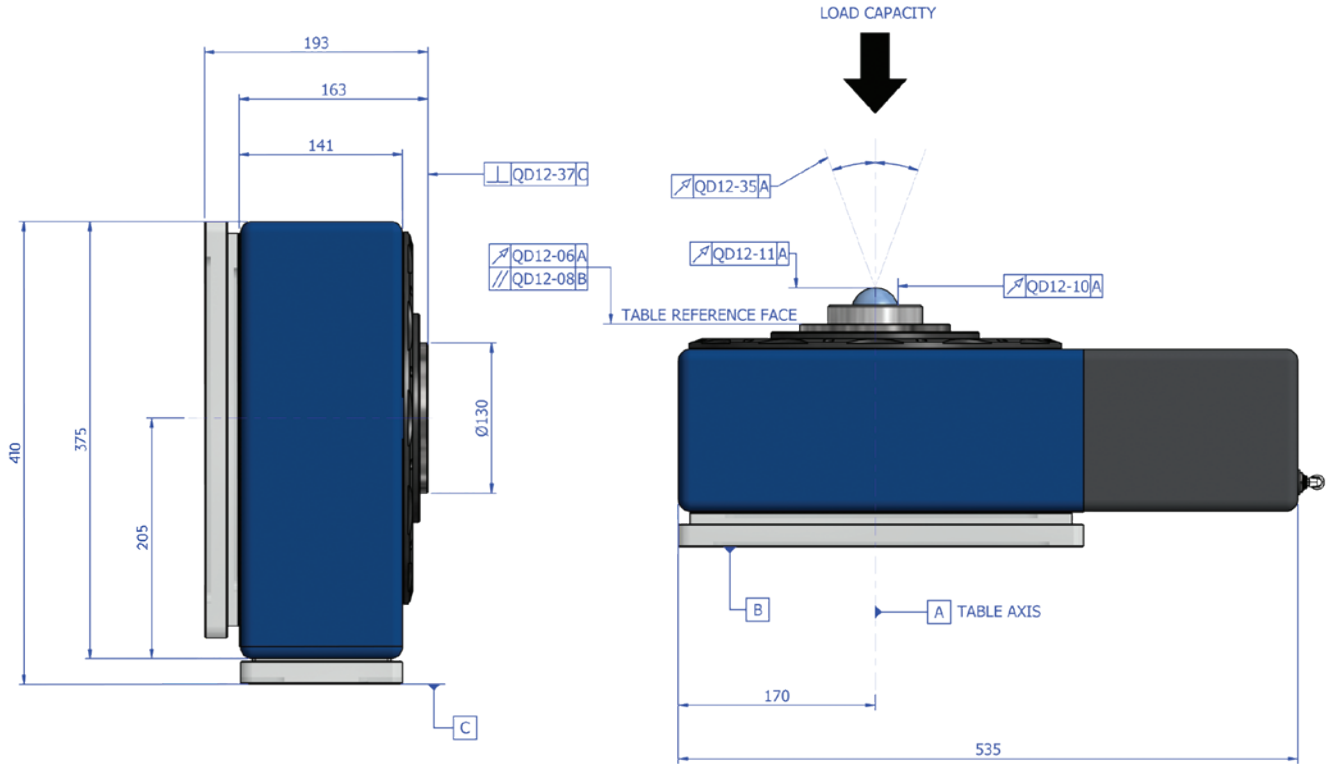
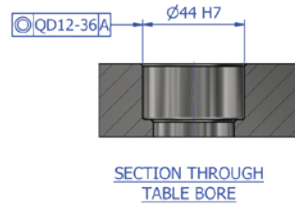
## High Precision Angular Positioning, Calibration and Geometry Inspection

Ultra precise rotary tables intended for fine inspection, metrology and test applications.

Designed for horizontal and vertical applications with self-locking worm gearing and a high accuracy angular encoder ensures sensitivity and fine positioning for metrology and precision testing.

### Measurement Capacity:

- Horizontal or vertical applications
- Sizes Ø250mm, Ø300mm, and Ø400mm
- Overall height 225mm (axis vertical)
- Centreline height 240mm (axis horizontal)
- Load capacities up to 1,000kgs
- Load moment up to 500Nm
- Powerful pneumatic clamp (optional)
- Angular accuracy 2 arc seconds
- Angular repeatability 0.5 arc seconds



## LabStandard

Technical Data	QD	Units	LabStandard10	LabStandard5	LabStandard2	LabStandard+
Centre Line Height		mm			240	
Load Capacity		kgs			1000	
Maximum Polar Inertia		Kgm2			40	
Maximum Tilt Moment		Nm			500	
Maximum rpm		rpm			4	
Spindle Rotation Error	12-06	mm			0.005	
Parallelism*	12-08	mm			0.006	
Angular Positioning Accuracy	12-09	Arc seconds	10	5	2	1
Angular Repeatability			+/-0.5		+/-0.2	
Resolution	12-56		0.2			
Clamp Shift (If Fitted as option)			2			
Radial Runout of Table Axis	12-10	mm	0.0005			
Axial Runout of Table Axis	12-11	mm	0.0003			
Coning of Table Axis	12-35	Arc seconds	+/-1		+/-0.5	
Concentricity of Centre Bore	12-36	mm	0.005		0.0025	
Squareness of Spindle Face*	12-37	mm	0.006		0.004	
Table Weight (Without Table top and Clamping Plate)		kgs	84			
Table Top Options		mm	Ø250, 300, 400			

\*Requires Optional Clamping Plates



# LabStandardAIR

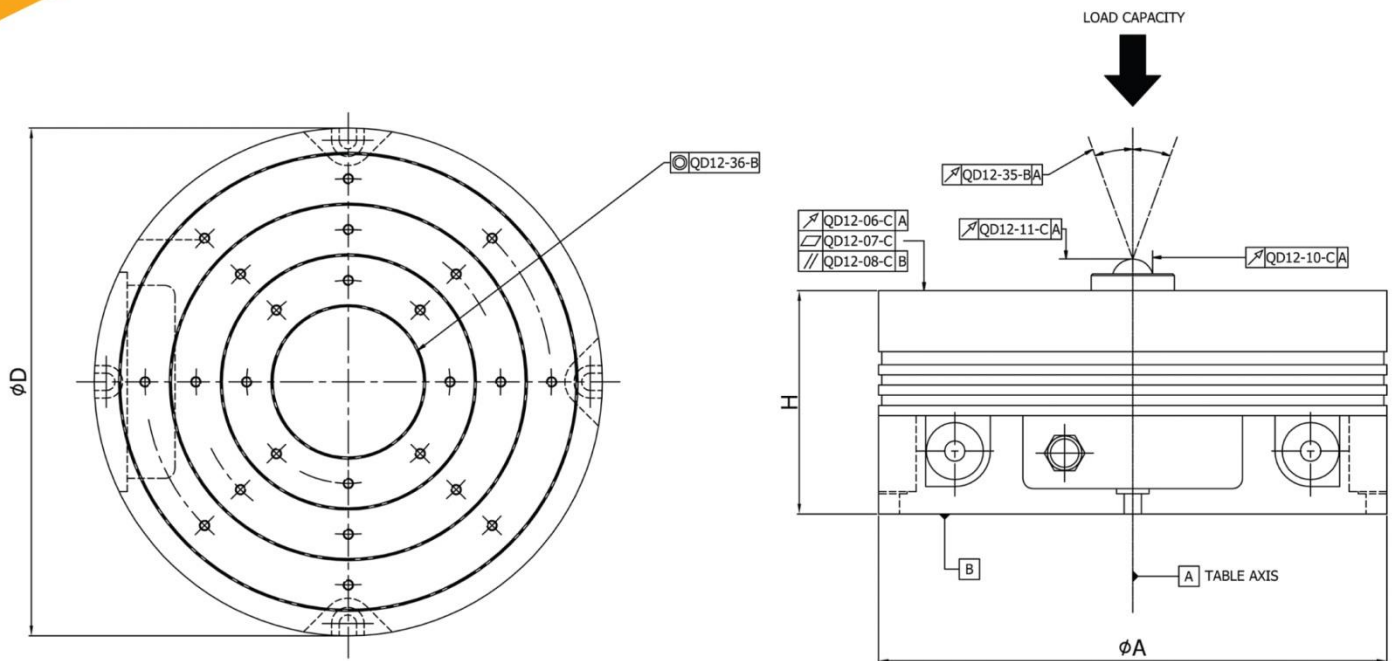
## High Precision Angular Positioning, Calibration and Geometry Inspection

Ultra precise rotary tables intended for fine inspection, metrology and test applications.

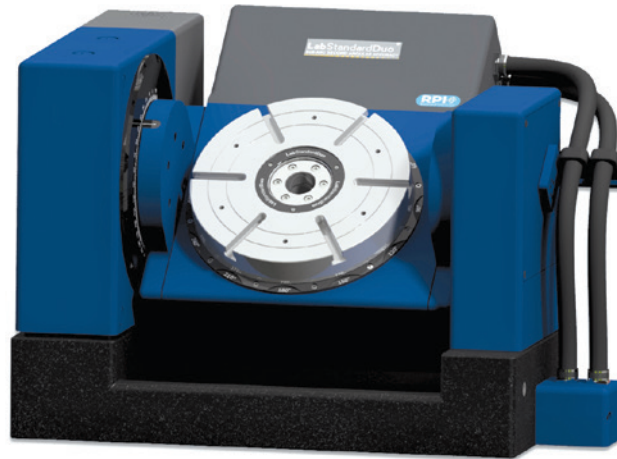
The LabStandardAIR has been designed as a "Contact Free" system and eliminates features, which may detract from achieving the optimum rotational performance. The rotating elements are supported on super high precision, air lubricated, hydrostatic bearings and are not subject to disturbances associated with gear drives.

### Measurement Capacity:

- Axia power driven axis
- Sizes Ø300mm and Ø500mm
- Load capacities up to 500kgs
- Zero backlash drive
- Angular accuracy 2 arc seconds
- Angular repeatability 0.5 arc seconds



LabStandardAIR							
Technical Data	QD	Unit	Ø300	Ø500	Ø600	Ø800	Ø1000
Load Capacity		kg	470	450		600	
Angular Positioning Accuracy		Arc seconds	2 (optional 1, 5, 10)				
Angular Resolution (Options Available)	12-56	Arc seconds	0.09				
Angular Repeatability	12-57	Arc seconds	0.5				
Rotation Error of Table Top	12-06	mm	0.005		0.008		
Flatness of Table Top	12-07		0.010		0.015		
Parallelism of Table Top To Base	12-08		0.010		0.015		
Radial Runout of Table Axis	12-10	mm	0.0001				
Axial Runout of Table Axis	12-11		0.0001				
Coning of Table Axis	12-35	Arc Seconds	+/-0.25"				
	Dimensions				Weight		
	H	ØA	ØD				
Units		mm			kgs		
Ø300	165	320	300		175		
Ø500	220	500	500		215		
Ø600			600		315		
Ø800	250	800	800		385		
Ø1000			1000		450		
Flexible Tooling Interface	HSK, Lang, Gewefa (other options available on request)						



# LabStandardDUO

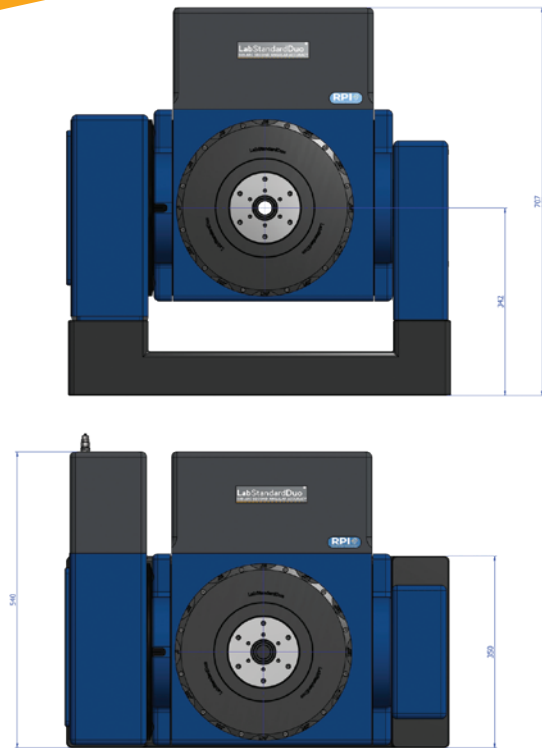
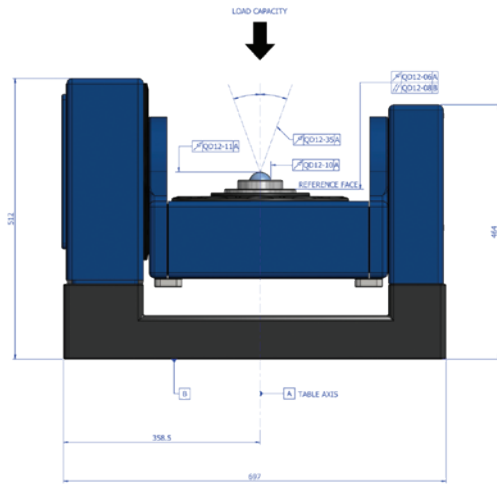
## High Precision Angular Positioning, Calibration and Geometry Inspection

Ultra precise rotary tables intended for fine inspection, metrology and test applications.

2 axis design for rotary tilting applications with self-locking worm gearing and a high accuracy angular encoder ensures sensitivity and fine positioning for metrology and precision testing.

### Measurement Capacity:

- 360° Rotary and -10° to +180° tilting axis
- Sizes Ø250mm, Ø300mm, and Ø400mm
- Overall height 225mm (axis vertical)
- Centreline height 342mm (axis horizontal)
- Load capacities up to 175kgs
- Load moment up to 300Nm
- Powerful pneumatic clamps (optional)
- Angular accuracy 2 arc seconds
- Angular repeatability 0.5 arc seconds



## LabStandardDUO

Technical Data	QD	Unit	LabStandardDUO10	LabStandardDUO5	LabStandardDUO2	LabStandardDUO+
Centre Line Height		mm			342	
Load Capacity		kgs			175	
Load Moment		Nm			300	
Tilting Capacity		Degrees			-10 / 180	
Maximum Polar Inertia (Rotary)		kgm <sup>2</sup>			40	
Maximum rpm (Rotary)		rpm			4	
Maximum rpm (Tilt)		rpm			1	
Spindle Rotation Error	12-06	mm			0.005	
Parallelism	12-08	mm			0.006	
Angular Positioning Accuracy (Rotary)	12-09	Arc seconds	10	5	2	1
Angular Repeatability (Rotary)			+/-0.5		+/-0.2	
Angular Positioning Accuracy (Tilt)	12-09		10	5	3	
Angular Repeatability (Tilt)			+/-0.5		+/-0.2	
Resolution	12-56		0.1			
Clamp Shift (If Fitted as option both axis)		<2				
Radial Runout of Table Axis	12-10	mm			0.0005	
Axial Runout of Table Axis	12-11	mm			0.0003	
Coning of Table Axis	12-35	Arc seconds	+/-1		+/-0.5	
Concentricity of Centre Bore	12-36	mm	0.005		0.0025	
Table Weight (Without Table Top option)		kgs	280			
Table Top Options		mm	Ø250, 300, 400			
Flexible Tooling Interface			HSK, Lang, Schunk, Gewefa (other options available on request)			