Y200RA Series
User Manual

Motorized Rotary Positioning Tables | 40-400 mm

Product Overview

The Y200RA Series includes six rotary positioning table models with tabletop diameters from 40 mm to 400 mm. Each model uses worm gear transmission and provides a full 360-degree rotation range.

Features

- **Six table sizes**
  40, 60, 100, 200, 300 and 400 mm diameters.
- **360-degree rotation**
  Full-range rotary positioning.
- **Worm gear transmission**
  Ratios of 45:1, 64:1, 90:1, 180:1 and 288:1.
- **Multiple load ratings**
  Central load capacities of 4-70 kg by model.
- **Metal construction**
  Aluminum alloy and bearing components; model-specific finishes.
- **Mounting options**
  Model-specific table sizes and mounting hole patterns.

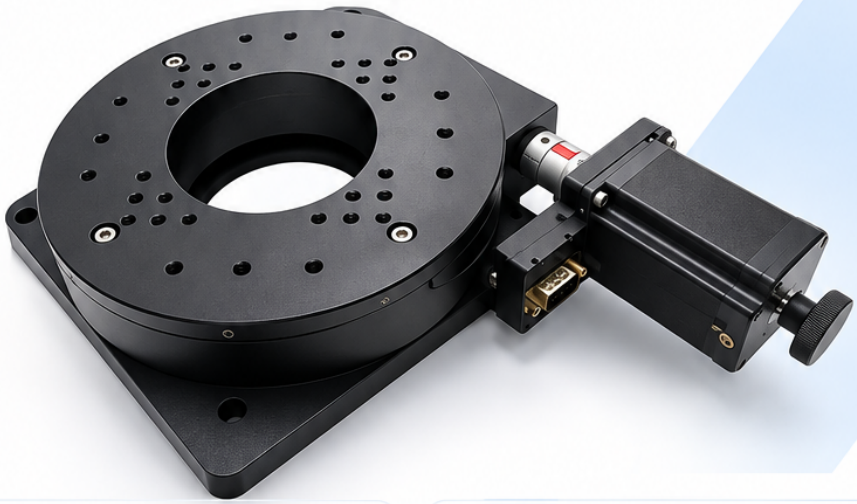
Specifications

Model	Table Size	Gear Ratio	Load	Repeat Accuracy
Y200RA40	40 mm	64:1	4 kg	0.02 deg
Y200RA60	60 mm	90:1	30 kg	+/-0.005 deg
Y200RA100	100 mm	45:1 / 90:1 / 180:1	15 kg	0.005 deg
Y200RA200	200 mm	45:1 / 90:1 / 180:1	30 kg	0.005 deg
Y200RA300	300 mm	288:1	50 kg	0.0035 deg
Y200RA400	400 mm	288:1	70 kg	0.0035 deg

Design Details

DESIGN DETAILS

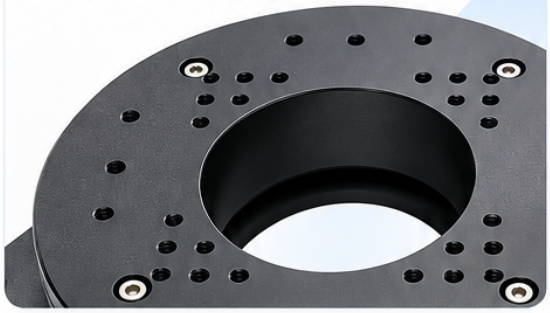
Hollow Rotary Table



01

Through-Hole Design

Central opening for cable or component routing



02

Worm Gear Drive

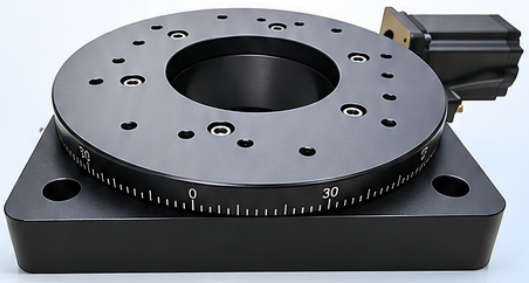
Mechanical rotary transmission



03

Graduated Scale

Marked ring for angle reference



04

Mounting Options

Multiple installation orientations



Y200RA40

Y200RA40 | Technical Overview

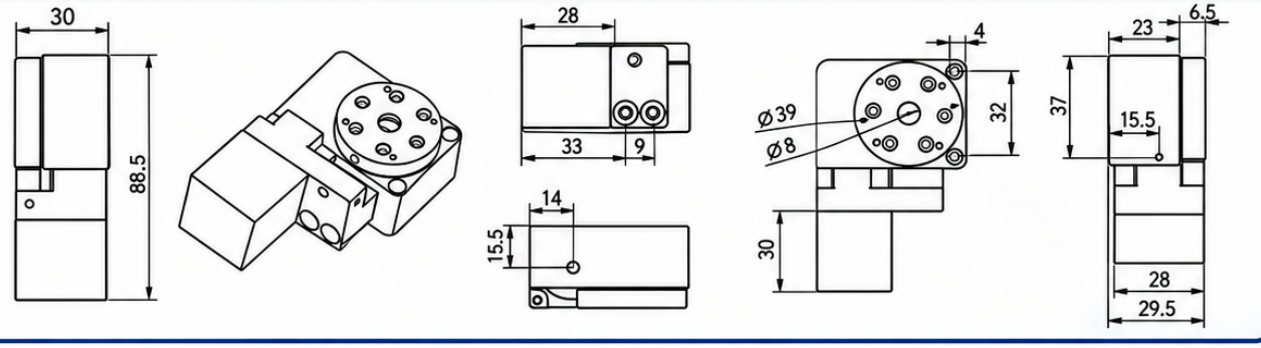
Optional configurations: limit/home switch, compatible motor, encoder or controller options; confirm specifications before ordering.



Ø40 mm Rotary Table

64:1 Gear Ratio

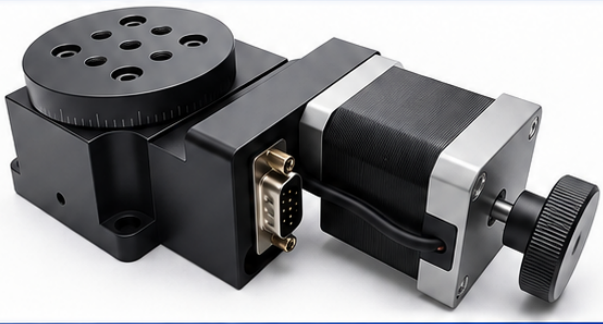
Angle Range	360°
Tabletop Diameter	Ø40 mm
Gear Ratio	64:1
Transmission	Worm and Worm Gear
Guide Rail Material	Bearing Steel
Repeat Positioning Accuracy	0.02°
Main Materials	Duralumin and Bearing Steel
Surface Treatment	Black Oxide
Central Load Capacity	4 kg
Eccentricity	15 μm
Face Runout	5 μm
Product Weight	450 g
Speed	Stepper: 40°/s · Servo: 120°/s



Y200RA60

Y200RA60 | Technical Overview

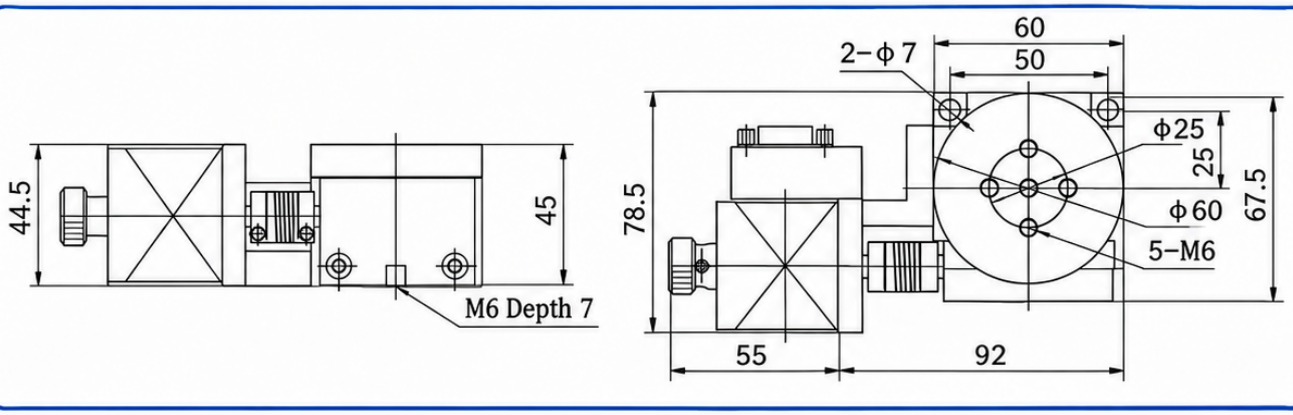
Optional motor, limit/home switch and controller configurations; confirm compatibility before ordering.



Ø60 mm Rotary Table

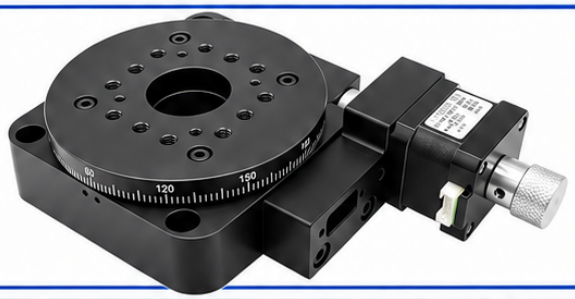
90:1 Worm Gear

Travel	360°
Table Size	Ø60 mm
Drive Type	Worm Gear (90:1)
Guide Rail	Bearing
Material	Black-Anodized Aluminum
Self Weight	1.2 kg
Resolution/Pulse	0.02° (standard) / 0.001° (20x microstepping)
Maximum Speed	50°/s
Repeat Positioning Accuracy	±0.005°
Load Capacity	30 kg
Eccentricity	5 μm
Standard Motor	NEMA 42 Stepper, 1.8° Step Angle



Y200RA100

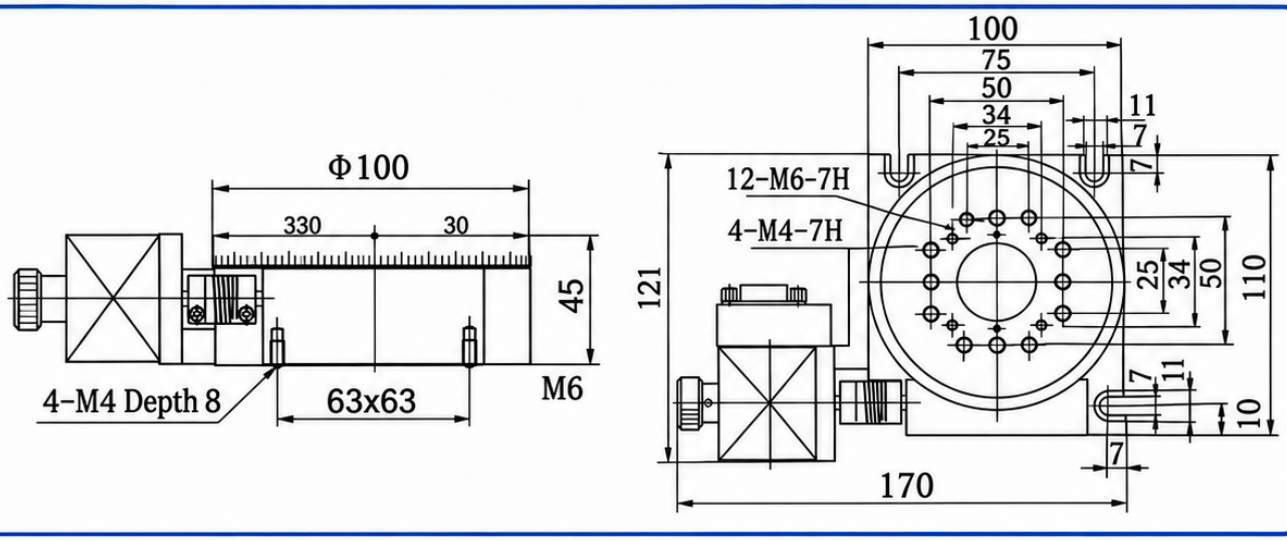
Y200RA100 | Technical Overview



Ø100 mm Rotary Table

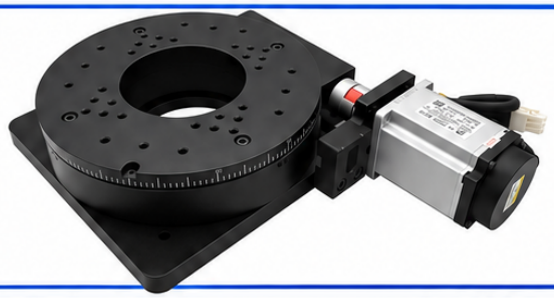
45:1 / 90:1 / 180:1 Ratios

Angle Range	360°
Tabletop Diameter	Ø100 mm
Gear Ratios	45:1 / 90:1 / 180:1
Transmission	Worm and Worm Gear
Motor Options	42 Stepper / 40 Servo (verify fit)
Guide Rail	Bearing
Repeat Positioning Accuracy	0.005°
Main Materials	Duralumin and Bearing Steel
Surface Treatment	Black Oxide
Central Load Capacity	15 kg
Eccentricity	15 μm
Face Runout	10 μm
Product Weight	1700 g
Speed	Stepper: 12°/s · Servo: 50°/s



Y200RA200

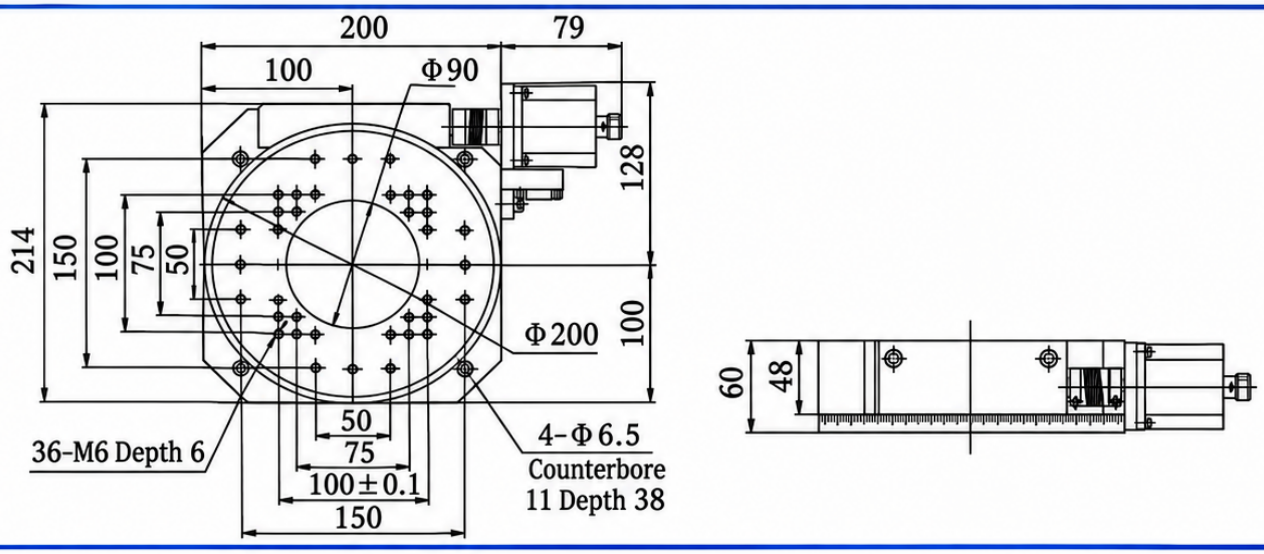
Y200RA200 | Technical Overview



Ø200 mm Rotary Table

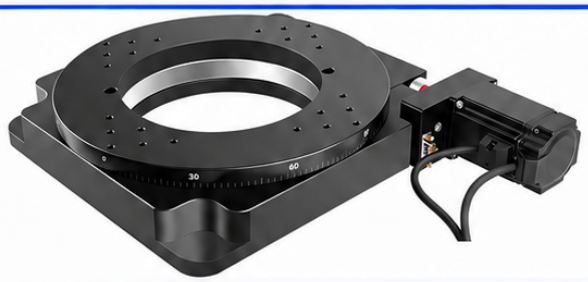
45:1 / 90:1 / 180:1 Ratios

Angle Range	360°
Tabletop Diameter	Ø200 mm
Gear Ratios	45:1 / 90:1 / 180:1
Transmission	Worm and Worm Gear
Motor Options	57 Stepper / 60 Servo (verify fit)
Guide Rail	Bearing
Repeat Positioning Accuracy	0.005°
Main Materials	Duralumin and Bearing Steel
Surface Treatment	Black Oxide
Central Load Capacity	30 kg
Eccentricity	15 μm
Face Runout	20 μm
Product Weight	7900 g
Speed	Stepper: 12°/s · Servo: 50°/s



Y200RA300

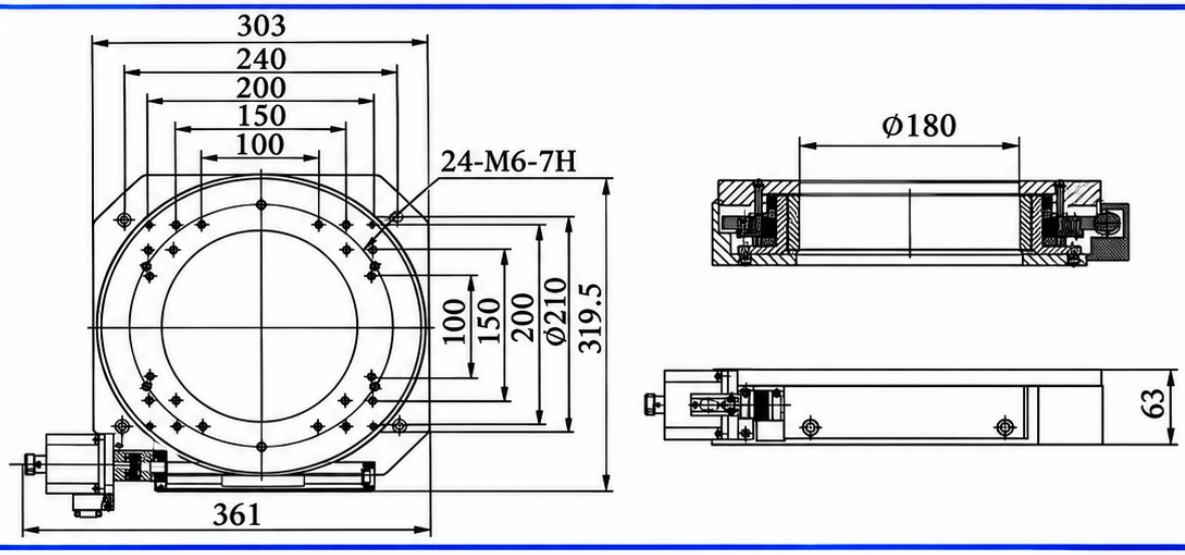
Y200RA300 | Technical Overview



Ø300 mm Rotary Table

288:1 Gear Ratio

Angle Range	360°
Tabletop Diameter	Ø300 mm
Gear Ratio	288:1
Transmission	Worm and Worm Gear
Motor Options	57 Stepper / 60 Servo (verify fit)
Guide Rail	Bearing
Repeat Positioning Accuracy	0.0035°
Main Materials	Duralumin and Bearing Steel
Surface Treatment	Black Oxide
Central Load Capacity	50 kg
Eccentricity	20 μm
Face Runout	20 μm
Product Weight	14000 g
Speed	Stepper: 6°/s · Servo: 30°/s



Y200RA400

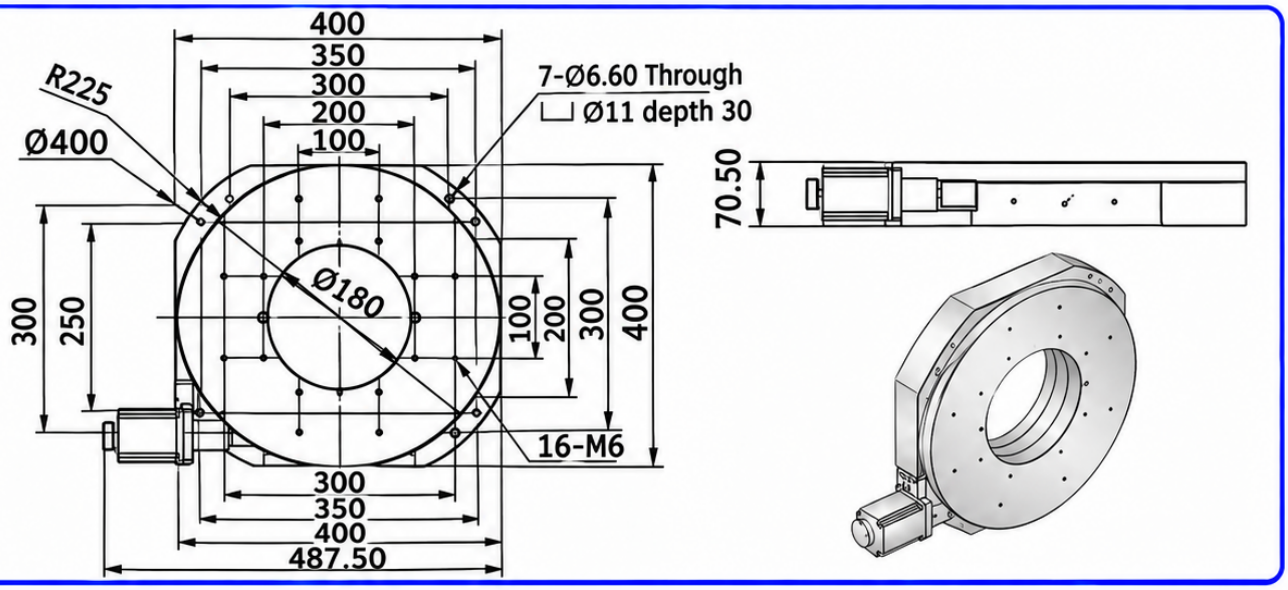
Y200RA400 | Technical Overview



Ø400 mm Rotary Table

288:1 Gear Ratio

Angle Range	360°
Tabletop Diameter	Ø400 mm
Gear Ratio	288:1
Transmission	Worm and Worm Gear
Motor Options	57 Stepper / 60 Servo (verify fit)
Guide Rail	Bearing
Repeat Positioning Accuracy	0.0035°
Main Materials	Duralumin and Bearing Steel
Surface Treatment	Black Oxide
Central Load Capacity	70 kg
Eccentricity	20 μm
Face Runout	30 μm
Product Weight	22000 g
Speed	Stepper: 6°/s · Servo: 30°/s



Applications

Potential Application Areas



Industrial Robots



Renewable Energy



Construction Machinery



Printing Machinery



Medical Devices



Textile Machinery



Packaging Machinery



Laser Cutting Equipment



Automotive Manufacturing

Application suitability depends on system requirements

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