MGON Series Manual Goniometers, ±4° to ±7° Travel, Arc-V Ball Guide

Model MGON Series · waveqvanta.com/products/mgon-series-manual-goniometers

Micrometer-driven aluminum goniometers with arc-V ball guides for smooth tilt adjustment about a raised rotation center.



MGON series goniometers tilt the stage about a rotation center located above the stage surface, using an arc-V ball guide and a micrometer drive for smooth, sensitive angle adjustment. The body is black anodized aluminum alloy. Four sizes offer ±7° or ±4° travel with 40–75 mm design center heights, each available with the micrometer on the left (SL) or right (SR).

Key features

- Arc-V ball guide for smooth tilting motion
- Micrometer drive with 0.1° vernier minimum reading
- Run-out of rotation center ≤15 µm
- Travel ±7° (40 × 40 mm stage) or ±4° (60 × 60 mm stage)
- Design center heights of 40, 50, 57 and 75 mm above the stage surface
- Micrometer on the left (SL) or right (SR) side
- Central load capacity 3 kg or 5 kg; weight from 0.12 kg

Specifications

Travel Range	±7° (40 × 40 mm models); ±4° (60 × 60 mm models)
Design Center Height	40, 50, 57 or 75 mm (to stage surface)
Stage Surface Size	40 × 40 mm or 60 × 60 mm
Thickness	17 mm or 25 mm
Guide Mechanism	Arc-V ball guide
Drive Type	Micrometer
Drive Location	Left (SL) or right (SR)
Body Material and Finish	Black anodized aluminum alloy
Run-Out of Rotation Center	≤15 µm
Vernier Minimum Reading	0.1°
Central Load Capacity	3 kg or 5 kg
Weight	0.12–0.32 kg

Model overview

Model	Travel (°)	Center Height (mm)	Stage Size (mm)	Thickness (mm)	Load (kg)	Weight (kg)
MGON40-40SL/SR	±7	40	40 × 40	17	3	0.12
MGON57-40SL/SR	±7	57	40 × 40	17	3	0.12
MGON50-60SL/SR	±4	50	60 × 60	25	5	0.32
MGON75-60SL/SR	±4	75	60 × 60	25	5	0.32

Typical applications

- Tip/tilt adjustment of optics and samples
- Angular alignment about a fixed pivot point
- Detector and fiber angle alignment
- Multi-axis manual positioning assemblies