SKR Series Stainless Steel Manual Rotation Stages, 360° Coarse, 10° Fine

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Stainless steel manual rotation stages with full 360° coarse rotation and micrometer-driven 10° fine adjustment.

SKR series rotation stages pair full 360° coarse rotation with a 10° fine adjustment driven by a micrometer, giving sensitive manual control of angle. The body is SUS304 stainless steel with a sandblasted finish for high rigidity. Four models cover Φ45, Φ60 and Φ90 mm stage surfaces with central loads up to 3 kg.



Key features

- 360° coarse rotation plus 10° fine adjustment by micrometer
- Sensitivity from 1.21 arcmin down to 0.68 arcmin (SKR10A-90)
- Crossed-roller ring bearing on Φ60 and Φ90 models; angular contact ball bearing on the Φ45 model
- Rigid SUS304 stainless steel body with sandblasted surface
- Vernier scale with 0.1° minimum reading
- Axial run-out ≤30 μm and radial run-out ≤50 μm on Φ60 and Φ90 models
- Central load capacity from 1.5 kg to 3 kg depending on size

Specifications

Coarse Travel	360°
Fine Travel	10°
Stage Surface Size	Φ45, Φ60 or Φ90 mm
Guide Mechanism	Crossed-roller ring (Φ60, Φ90); angular contact ball bearing (Φ45)
Drive Type	Micrometer
Body Material and Finish	SUS304 stainless steel, sandblasted
Vernier Minimum Reading	0.1°
Sensitivity	0.68–1.21 arcmin (model dependent)
Angle per Micrometer Turn	≈0.55° to ≈1.01° (model dependent)
Static Parallelism	≤0.05 mm
Axial Run-Out	≤30 μm (≤40 μm for SKR10A-45)
Radial Run-Out	≤50 μm (not specified for SKR10A-45)
Central Load Capacity	≤1.5 kg to ≤3 kg (model dependent)
Weight	0.33–1.38 kg

Model overview

Model	Stage Size (mm)	Guide	Sensitivity (arcmin)	Axial Run-Out (μm)	Radial Run-Out (μm)	Angle per Turn (°)	Load (kg)	Weight (kg)
SKR10A-45	Φ45	Angular contact ball bearing	1.21	≤40	—	≈1.01	≤1.5	0.33
SKR10A-60	Φ60	Crossed-roller ring	0.95	≤30	≤50	≈0.74	≤2	0.71
SKR10A-60R	Φ60	Crossed-roller ring	0.95	≤30	≤50	≈0.74	≤2	0.71
SKR10A-90	Φ90	Crossed-roller ring	0.68	≤30	≤50	≈0.55	≤3	1.38

Typical applications

- Angular alignment of mirrors, prisms and gratings

- Orientation of polarizers and waveplates
- Sample rotation for angle-dependent measurements
- Multi-axis manual positioning assemblies