

Precision Rotation Stage

Compact, for Multi-Axis Combinations with M-110



M-116

- Compact Design
- Unlimited travel range
- Clear aperture for transmitted-light applications
- Backlash-compensated worm drive
- Compact multi-axis combinations with M-110
- Noncontact reference switch

Application fields

Automated test and production processes, microscopy, transmitted-light applications.

Specifications

	M-116.DG	M-116.DGH	Unit	Tolerance
Active axes	Rotation	Rotation		
Motion and positioning				
Rotation range	>360	>360	°	
Integrated sensor	Rotary encoder	Rotary encoder		
Sensor resolution	2,048	2,048	Cts./rev.	
Design resolution	2.45 (0.00013)	3.16 (0.00018)	μrad (°)	
Minimum incremental motion	50	25	μrad	
Backlash	1,000	500	μrad	
Unidirectional repeatability	12	10	μrad	
Velocity	20	20	°/s	Max.
Mechanical properties				
Worm gear ratio	44:1	44:1		
Gear ratio	28.444:1	22.0335:1		
Load capacity / axial force	±15	±15	N	
Max. torque (θ_x , θ_y)	±1.5	±1.5	Nm	Max.
Max. torque clockwise (θ_z)	0.4	0.4	Nm	Max.
Max. torque counterclockwise (θ_z)	0.8	0.8	Nm	Max.
Drive properties				
Motor type	DC gear motor	DC gear motor		
Operating voltage	0 to ±12	0 to ±12	V	
Motor power	1.75	1.75	W	
Reference switch	Optical	Optical		
Miscellaneous				
Operating temperature range	-20 to 65	-20 to 65	°C	
Material	Aluminum	Aluminum		
Mass	0.4	0.4	kg	
Recommended controllers / drivers	C-863 C-884	C-863 C-884		

Connecting cables are not in the scope of delivery and must be ordered separately.
Ask about customized versions.

