

Rotation Stage



DT-80

- + Uni- directional repeatability down to 0.01 °
- + Maximum speed 40 °/ sec
- + Load capacity up to 2 kg
- + Integrated reference switch
- + Clear aperture 40 mm
- + Rotation range 360°, endless

The rotation stages DT-80 are a low cost alternative to the PI miCos high precision rotation stages DT-65 N and PRS-110. They are mainly developed for simple positioning in the laboratory. The large aperture of 40 mm diameter is suitable for many applications in the microscopy field. The worm screw and worm gear combination is preloaded to produce a near "zero- backlash" and smooth motion. Rotation stages of the series DT-80 can be driven by a DC or 2- phase stepper motor and are equipped with a mechanical reference switch. Additionally the DT-80 can be ordered with our smc pollux motor- controller module.

Specifications

DT-80					
Load Characteristics	Fx (N)	Fz (N)	Mx (Nm)	Mz (Nm)	kax (µrad/ Nm)
DC- B-029	10	20	5	0.1	150
2Phase-041	10	20	5	0.1	150
2Phase-042	10	20	5	0.1	150

Specifications

Travel range (°)	360, endless		
Flatness (Bearings) (µm)	± 30		
Eccentricity (Bearings) (µm)	± 30		
Wobble (Bearings) (µrad)	± 100		
Weight (kg)	0.8		
Motor	DC- B-029	2Phase-041	2Phase-042
Speed max. (°/ sec.)	40	30	26
Resolution calculated (°)	0.001 (RE)	0.01 (FS)	0.01 (FS)
Resolution typical (°)	0.004	0.004	0.004
Bi- directional Repeatability (°)	± 0.2	± 0.5	± 0.5
Uni- directional Repeatability (°)	0.01	0.01	0.01
Nominal Current (A)	1.17	1.7	0.5
Voltage Range (V)	24		
Worm gear reduction	180:1	180:1	180:1
Accuracy	on request	on request	on request
Velocity Range (°/ sec.)	0.002 ... 40	0.002 ... 40	0.002 ... 40
Material	Aluminum, black anodized	Aluminum, black anodized	Aluminum, black anodized

Order Information

64439100

DT-80 Rotation Stage, DC Motor- B-029

64439200

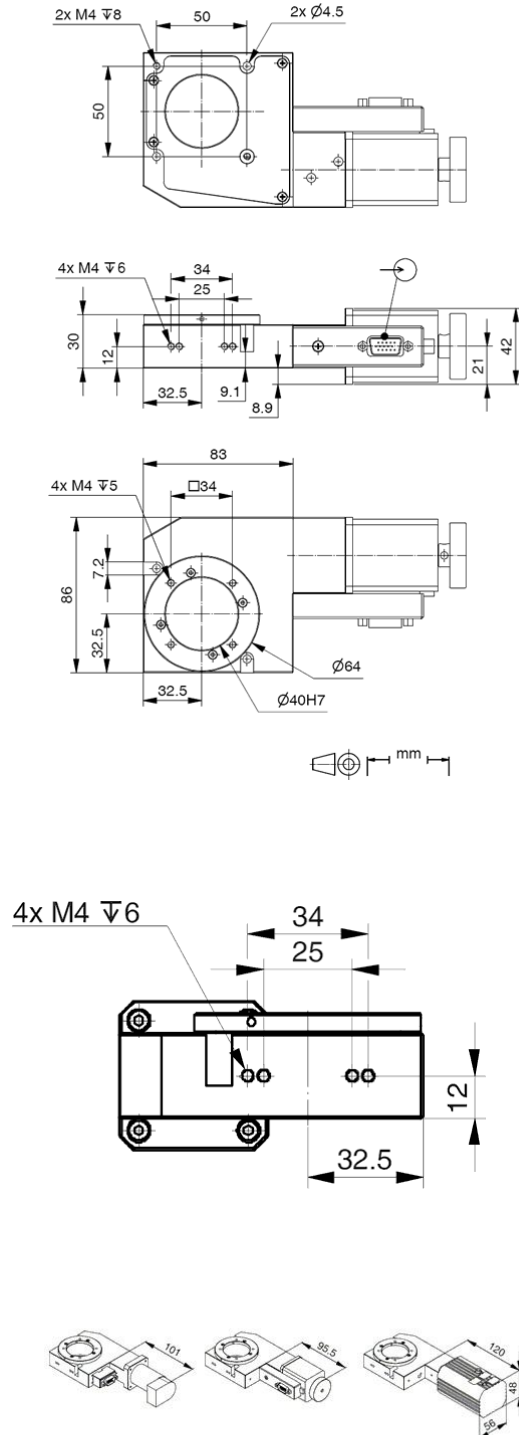
DT-80 Rotation Stage, 2- Phase Stepper Motor-041

64439400

DT-80 Rotation Stage, 2- Phase Stepper Motor-042

Drawings / Images

Travel range: 360°,
endless



DC- B-029,
2Phase-041,
2Phase-042

