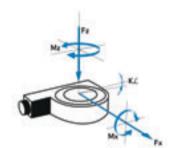
### 5.134 Rotation Stage DT-80 Vacuum

TACIS							
Load characteristics	Fx(N)	Fz(N)	Mx <sub>(Nm)</sub>	Mz <sub>(Nm)</sub>	<sup>kax</sup> (µrad/Nm)		
FV	10	20	5	0.1	150		
10-6	10	20	5	0.1	150		
HV	10	20	5	0.1	150		
UHVG	10	20	5	0.1	150		



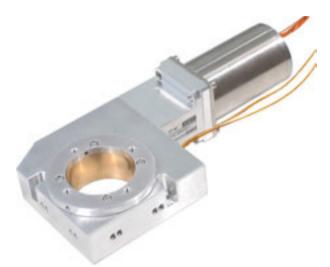
## ) — V

The DT-80 Vacuum rotation stages are a low cost alternative to the PI miCos DT-65 N Vacuum and PRS-110 Vacuum high precision rotation stages. 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 area. The worm screw and worm gear combination is preloaded to produce a near "zero-backlash" and smooth motion. Rotation stages of the DT-80 Vacuum series is driven by a special 2-phase stepper vacuum motor and are equipped with a reference switch.

#### TECHNICAL DATA

Travel range (°)	360						
Flatness (Bearings) (µm)	± 30						
Eccentricity (Bearings) (µm)	± 30 ± 100						
Wobble (Bearings) (µrad)							
Weight (kg)	0.8						
Vacuum type	FV	10-6	HV	UHVG			
Speed max. (°/sec)	10	3.7	3.7	1.6			
Resolution calculated (°)	0.01 (FS)	0.01 (FS)	0.01 (FS)	0.01 (FS)			
Resolution typical (°)	0.004	0.004	0.004	0.004			
Bi-directional Repeatability (°)	± 0.2	± 0.2	± 0.2	± 0.2			
Uni-directional Repeatability (°)	0.01	0.01	0.01	0.01			
Nominal Current (A)	1.2	1.2	1.2	1.2			
Accuracy	on request						
Velocity range (mm/sec)	0.001 10						
Material	Aluminum, stainless steel, red brass						

More info: Detailed information concerning motors and encoders, see appendix.



#### **KEY FEATURES**

- Vacuum up to 10-9 hPa
- Uni-directional repeatability down to 0.01 °
- Maximum speed 10 °/sec
- Load capacity up to 2 kg
- Integrated mechanical reference switch
- Clear aperture 40 mm

# **PI**mı(os

## Vacuum Rotation Stage DT-80 5.135

