DDM Direct Drive Motorized Microscope Stage

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Features

- : : Low Profile (40 mm Height)
- : : Backlash Free Direct Drive Motor
- : : Integral linear encoders with resolutions to 5nm possible
- : : No moving cables for optimal reliability and improved cleanliness
- : : Backlash Free Direct Drive Motor
- : : Single point exit for all stage electrical connections reduces footprint
- : : Aperture accepts microtiter plates
- : : Integral anti-creep linear guideways

Description

The Dover Motion DDM Direct Drive Motorized Microscope Stage combines the performance and reliability of direct drive technology with the compact footprint of a microscope stage. Ideal for transmissive and reflective imaging applications as well as processes which require access from above and below the sample.

The DDM includes direct drive, ironless linear motors, anti-creep crossed linear guideways, and optical linear encoders for position feedback.

The DDM microscope stage has been designed to minimize height in order to fit on both upright and inverted microscopes and to provide a minimal CG and moving mass for high throughput applications. The DDM is designed to provide imaging throughput of up to 30 images/sec with outstanding stability during image capture.

Dover Motion also offers fully integrated motion controllers to complement the DDM which support manual operation or fully automated control for use in production or diagnostic laboratory environments.

Single Axis Microscope Stage Specifications

Axis	**X**	**Y**
Travel (mm)	120	80
Aperture Dimensions (mm)	119	71
Overall Dimensions (mm)	273 x 200 x 40	
Positional Accuracy (± µm)[1]	1	1
Bi-directional Repeatability (± µm)[1]	0.25	
Load Capacity (kg)[2]	1	
Pitch (± arc-seconds)	15	
Yaw (± arc-seconds)	15	
Flatness (± µm)	4	
Straightness (± µm)	4	
Maximum Acceleration (m/s^2)[3]	10	
Maximum Velocity (mm/s)[3]	750	
System Mass (kg)	4.25	

[1] 0.1 um resolution encoder and compensation
[2] Please contact our Applications Engineers for loads exceeding 1 kg.
[3] The maximum acceleration and velocity is encoder and load dependent. Maximum Acceleration assumes 1 kg load.

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