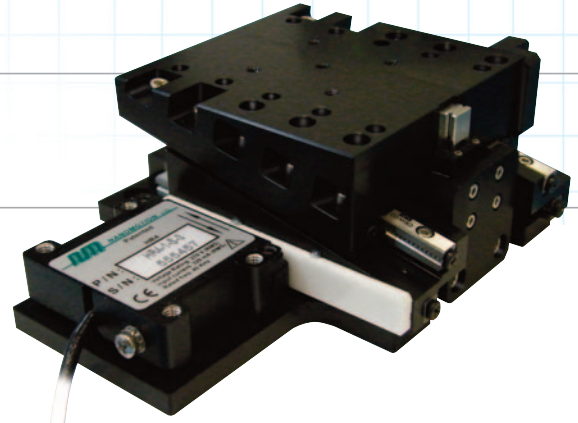


FZS0850100

Z Wedge Stage



Mechanical Design Characteristics

MODEL	FZS085010
Stage Plate Material	Aluminum — Black Anodized
Motor	HR8 Piezo, ultrasonic standing wave
Bearing Type	Precision crossed rollers with anti-migration device
Encoder	Linear optical encoder with gold tape scale
Cable Lengths (m)	3m
MTBF (hours)	30,000
Stage Mass (g)	1300g
Carriage Moving Mass (g)	310g
RoSH	Compliant
Vacuum Compatible Options	High Vacuum (to 10^{-7} Torr) / UHV (to 10^{-10} Torr) available

Performance Specifications

MODEL	FZS085010	
Travel Range (mm)	10mm	
Encoder Resolution	Standard	10nm
Bi-directional Repeatability	Standard	0.1 μ m
Accuracy	Standard	3 μ m
Minimum Incremental	AC Mode	100nm
Move Convergence	UHR Mode	5nm
(encoder & control dependant)	DC Mode	<1nm
Maximum Velocity (vertical)		50mm/sec
Straightness & Flatness		$\pm 2\mu$ m
Pitch & Yaw		$\pm 30\mu$ rad
Load Capacity		5kg
Dynamic Stall Force (N)		160N
Motor Stiffness (N/ μ)		57N/ μ m
Holding Force without Power		150N

