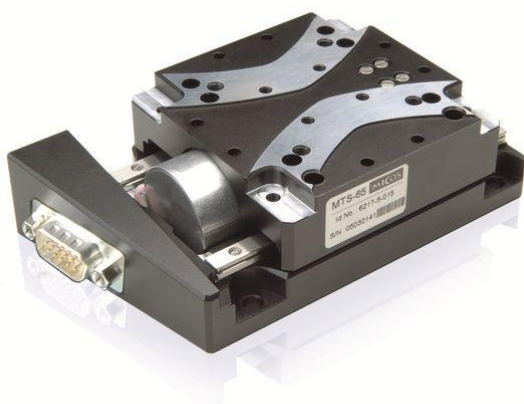


Micro Stage



MTS-65

- + Travel range up to 52 mm (2")
- + Uni- directional repeatability down to 0.1 μm
- + Maximum speed 8 mm/ sec
- + Load capacity up to 2 kg
- + Integrated limit switches
- + Optionally: linear scale
- + Vacuum Datasheet

The micro stage MTS-65 was developed for industrial application with limited space conditions and is typically used for the positioning of laser diodes and optical parts. Driven by a 2- phase stepper motor using learn more high- resolution micro- stepping, the gear- less stages utilize re- circulating ball bearings and a ground re- circulating ball screw. As a result, maximum of stiffness, accuracy and smoothness of motion is guaranteed. The micro stage is equipped with two optical or hall limit switches. For higher positioning accuracy and repeatability 0.1 μm , the micro stages MTS-65 are offered with a linear scale. Using a special mounting kit, MTS-65 stages can be assembled to XY or XYZ- modules.

Specifications

MTS-65								
Load Characteristics	Fx (N)	Fy (N)	Fz (N)	Mx (Nm)	My (Nm)	Mz (Nm)	kax ($\mu\text{rad/ Nm}$)	kay ($\mu\text{rad/ Nm}$)
2Phase-020	10	3	20	0.4	0.6	0.4	80	30
Travel range (mm)			13			26		
Straightness / Flatness (μm)			± 1			± 2		
Pitch (μrad)			± 40			± 60		
Yaw (μrad)			± 40			± 40		
Weight (kg)			0.4			0.6		

Specifications

Motor (Pitch 1 mm)	2Phase-020	
Linear scale		LS-050
Speed max. (mm/ sec)	8	
Resolution calculated (μm)	5 (FS)	0.05
Resolution typical (μm)	0.1	0.05
Bi- directional Repeatability (μm)	± 5	± 0.2
Uni- directional Repeatability (μm)	0.2	0.1
Nominal Current (A)	1.2	0.1
Voltage Range (V)	< 100	
Accuracy	on request	on request
Velocity Range (mm/ sec)	0.001 ... 8	0.001 ... 8
Material	Aluminium, black anodized	Aluminium, black anodized

Order Information

621792103

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 13 mm (1/2"), Optical Limit Switches-010

621792113

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 13 mm (1/2"), Linear Steel Scale-050, Optical Limit Switches-010

621792203

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 26 mm (1"), Optical Limit Switches-010

621792213

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 26 mm (1"), Linear Steel Scale-050, Optical Limit Switches-010

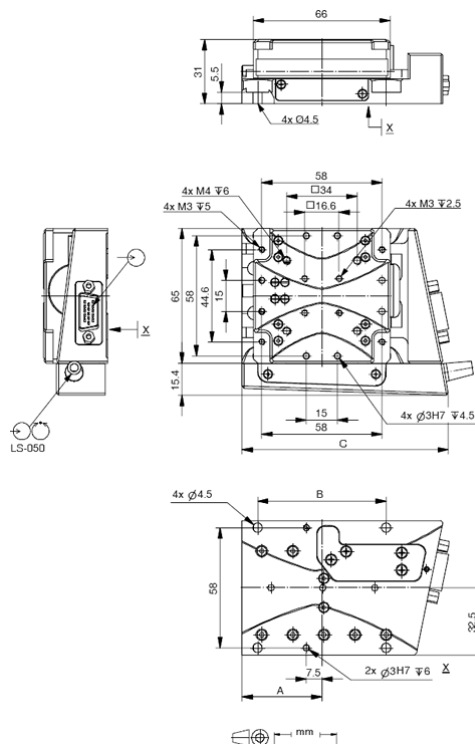
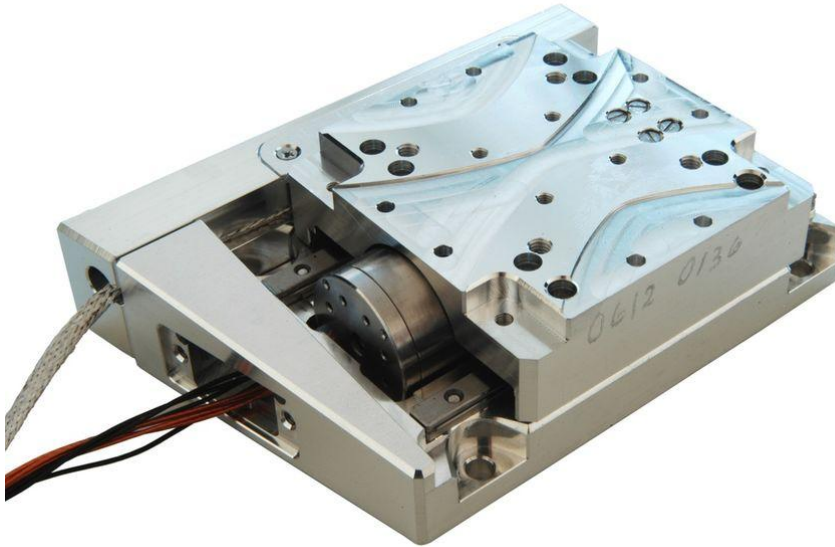
621792303

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 52 mm (2"), Optical Limit Switches-010

621792313

MTS-65 Micro Stage, 2- Phase Stepper Motor-020, 52 mm (2"), Linear Steel Scale-050, Optical Limit Switches-010

Drawings / Images



Travel range (mm):
 13 / 26 / 52
 A (mm): 38.5 / 45 / 62
 B (mm): 62 / 75 / 105
 C (mm): 99.5 / 112.5 /
 147.5

