

Micro Pusher | MP-21S/MP-21L

www.micronixusa.com | info@micronixusa.com | phone: +1 (949) 480 0538 | fax: +1 (949) 480 0538

The MP-21 linear actuator is designed for applications with very limited space conditions. Typical applications include actuation of manual drive stages and mirror mounts. It utilizes a 2-phase stepper motor and a mechanical limit switch for homing. Versions capable of operation in vacuum (10^{-6} mbar) are available. The MP-21 is compatible with the MMC-200 controller.

KEY FEATURES

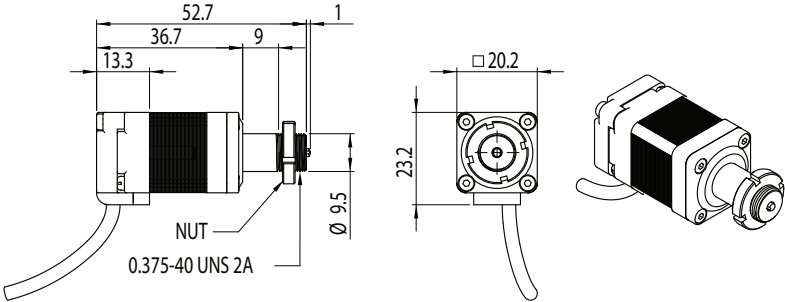
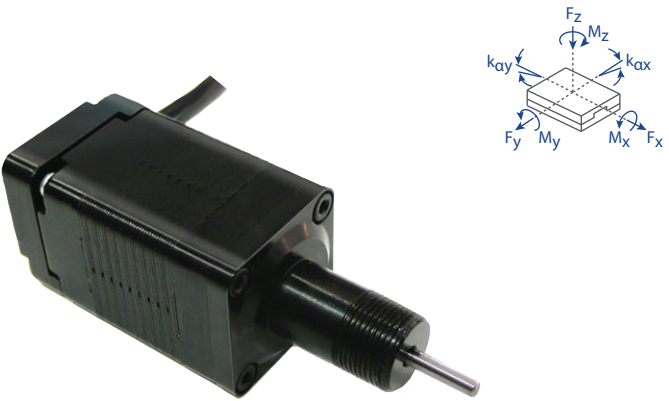
- Travel range of 12 and 25 mm
- 0.1 μm open loop resolution
- Maximum force of 20 N
- Ball spline with low backlash, non-rotating tip
- Integrated mechanical limit switch
- Vacuum versions available
- Optional encoder available

TECHNICAL DATA	MP-21S	MP-21L
Travel range [mm]	12	25
Straightness / Flatness [μm]	-	-
Pitch [μrad]	-	-
Yaw [μrad]	-	-
Weight [g]	140	170
Motor option	2-Phase Stepper Motor	
Speed, max [mm/s]	5	
Encoder option	None (open loop)	
Resolution, typical [μm]	0.1	
Repeatability, bi-directional [μm]	± 0.5	
Repeatability, uni-directional [μm]	0.4	
Materials	aluminum body, stainless steel ball spline (other materials i.e. stainless steel, titanium, etc. available upon request)	

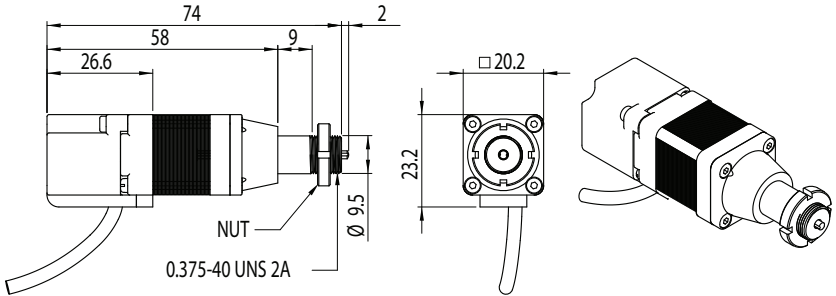
ORDERING INFORMATION

	MP-21-	1		0	1	
DRIVE	Stepper Motor, SM-001	1				
TRAVEL	12 mm	1				
	25 mm	2				
ENCODER	Optional	0				
LIMIT SWITCH	Mechanical	1				
ENVIRONMENT	Atmospheric	0				
	High Vacuum, 10^{-6} mbar	6				

Load, max	F_x [N]	F_y [N]	F_z [N]	M_x [N-m]	M_y [N-m]	M_z [N-m]	k_{ax} [$\mu\text{rad/N-m}$]	k_{ay} [$\mu\text{rad/N-m}$]
SM-001	20	0	0	-	-	-	-	-



* 12 mm travel version shown above
* 25 mm travel versions shown below
* all dimensions are in millimeters



Specifications are subject to change without notice.