

Micro Pusher | Micromike-30S & L

The Micromike-30 linear actuator is designed for applications with very limited space conditions and high load requirements. Typical applications include actuation of manual drive stage and mirror mounts. It utilizes a 2-phase stepper motor and a optical limit switches for homing (custom options include an integrated encoder). Versions are capable of operation in vacuum (10^{-6} mbar) are available. The Micromike-30 is compatible with the MMC-200 and NanoDrive controllers.

KEY FEATURES

- Travel range of 12 and 25 mm
- 0.1 μm open loop resolution
- Maximum force of 70N at 3mm/s
- Ball spline with zero backlash, non-rotating tip
- Integrated optical limit switch
- Vacuum versions available
- Optional encoder available

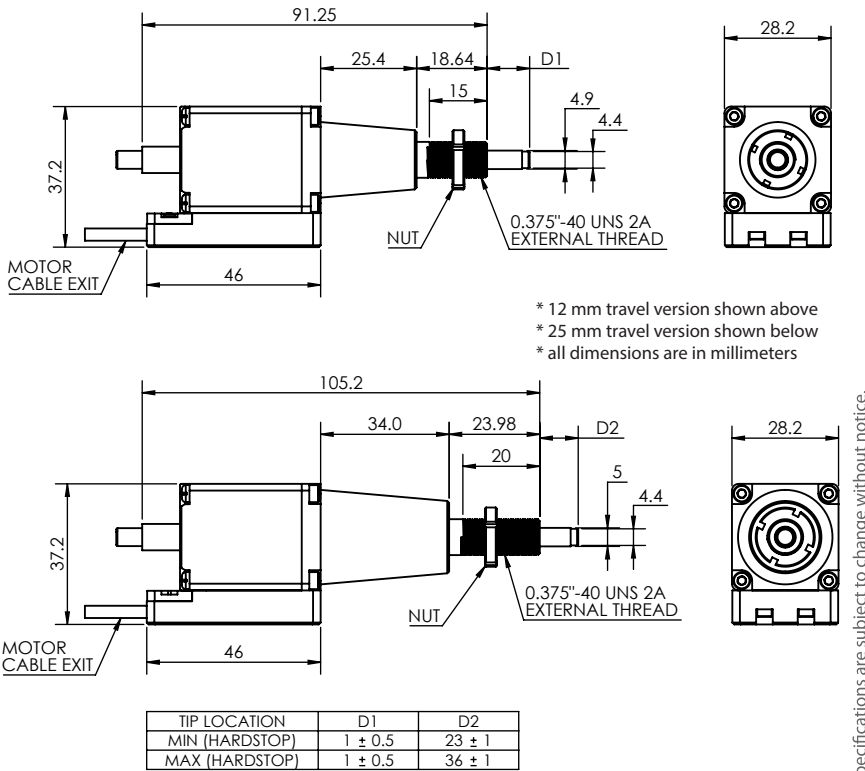
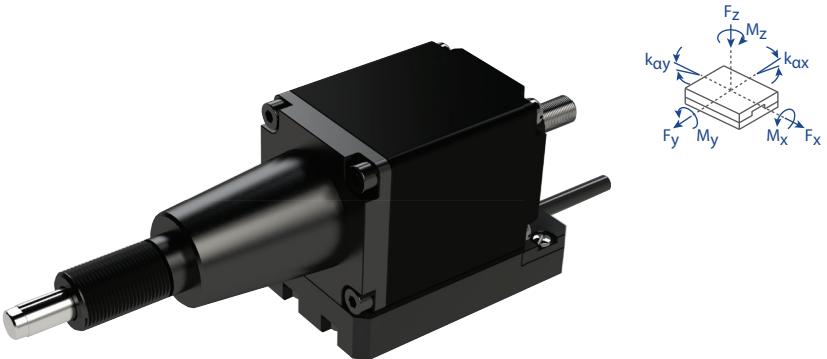
TECHNICAL DATA

Travel range [mm]	12	25
Straightness / Flatness [μm]	-	-
Pitch [μrad]	-	-
Yaw [μrad]	-	-
Weight [g]	160	170
Motor option	2-Phase Stepper Motor	
Speed, max [mm/s]	10mm/s	
Encoder option	None (open loop)	
Resolution, typical [μm]	0.1	
Repeatability, bi-directional [μm]	± 0.5	
Repeatability, uni-directional [μm]	0.5	
Materials	aluminum body, stainless steel ball spline (other materials i.e. stainless steel, titanium, etc. available upon request)	

ORDERING INFORMATION

Micromike-30-	2		0	1	0
DRIVE	Stepper Motor, SM-010	2			
TRAVEL	12 mm	1			
	25 mm	2			
ENCODER	Optional	0			
LIMIT SWITCH	Optical	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} [$\mu\text{rad}/\text{N-m}$]	k_{ay} [$\mu\text{rad}/\text{N-m}$]
SM-001	70	0	0	-	-	-	-	-



Specifications are subject to change without notice.