

- Vacuum compatible to 10<sup>-6</sup> Torr
- 25 and 50 mm travel
- Up to 8 mm/s speed and up to 46 N thrust
- Our most compact, precise and robust actuator
- Built-in controller; daisy chains with other T-series devices inside vacuum chamber
- Designed to replace standard micrometer heads on manual translation stages
- Hardened ball-tip (removable so you can use the built-in threaded tip or a flat tip)

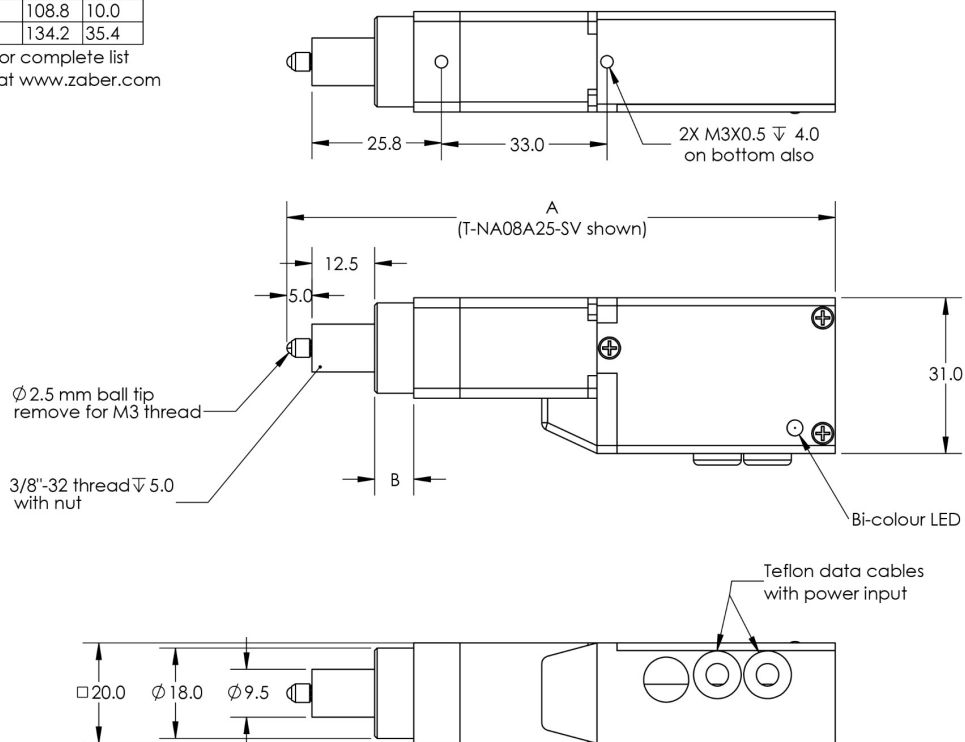
## Product Description

For more information about the basics of a vacuum system and considerations to keep in mind when gathering requirements for your application, read our technical article, "Motion Device Design Considerations for Vacuum Applications".

## Dimension Drawings

Model Number*	Travel	A	B
T-NA08A25-SV	25.4	108.8	10.0
T-NA08A50-SV	50.8	134.2	35.4

\*See product page for complete list of available models at [www.zaber.com](http://www.zaber.com)



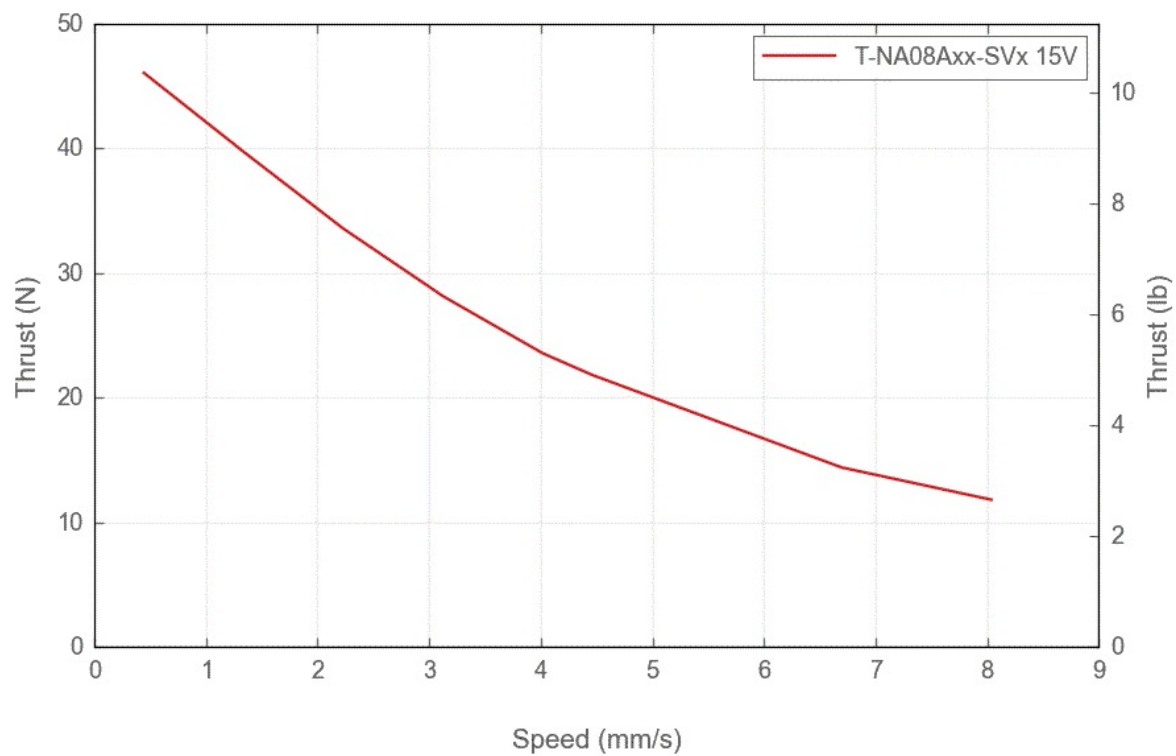
## Product Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.047625 $\mu$ m	
Built-in Controller	Yes	
Travel Range	25.4 mm	1.000 "
Accuracy (unidirectional)	15 $\mu$ m	0.000591 "
Repeatability	< 1 $\mu$ m	< 0.000039 "
Backlash	< 4 $\mu$ m	< 0.000157 "
Maximum Speed	8 mm/s	0.315 "/s
Minimum Speed	0.00022 mm/s	0.000009 "/s
Speed Resolution	0.00022 mm/s	0.000009 "/s
Encoder Type	None	
Peak Thrust	46 N	10.3 lb
Maximum Continuous Thrust	46 N	10.3 lb
Communication Interface	RS-232	
Communication Protocol	Zaber Binary	
Maximum Current Draw	350 mA	
Power Supply	12-16 VDC	
Power Plug	None, use T-DSUB9-P	
Motor Steps Per Rev	200	
Motor Type	Stepper (2 phase)	
Inductance	1.5 mH/phase	
Default Resolution	1/64 of a step	
Data Cable Connection	Teflon flying leads with Minidin 6 pin M/F	
Mechanical Drive System	Precision lead screw	
Limit or Home Sensing	Magnetic hall sensor	
Manual Control	No	
Axes of Motion	1	
LED Indicators	Yes, Bi-colour	
Mounting Interface	3/8-32 nut, 3/8" shank, or M3 screws	
Vacuum Compatible	High vacuum (10 <sup>-6</sup> Torr)	
Operating Temperature Range	0 to 50 °C	
RoHS Compliant	Yes	
CE Compliant	Yes	

Specification	Value	Alternate Unit
Weight	0.13 kg	0.287 lb

## Specification Charts

### Thrust Speed Performance



### T-NA08 Microstepping Error

