



- 100 or 200 mm travel per axis (custom lengths available)
- Low profile – 70 mm overall height

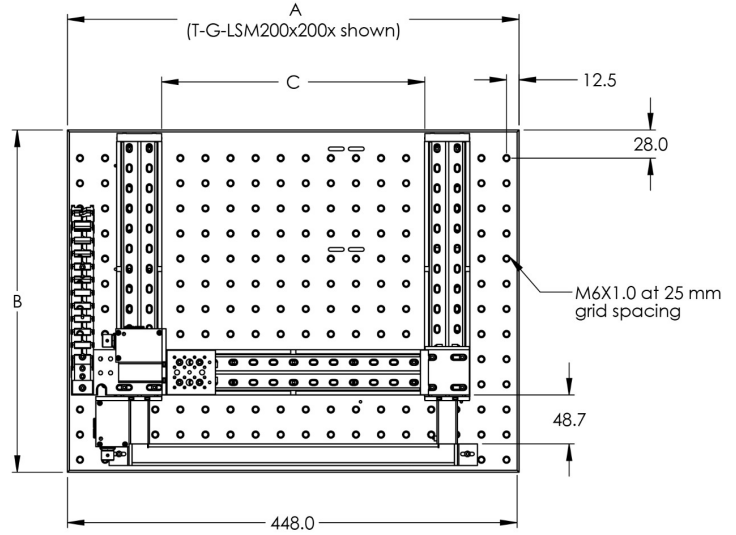
Product Description

Zaber's Gantries are designed for multi-axis applications where load and travel requirements exceed the rated cantilever load specs of Zaber's simpler XY or XYZ systems. In addition, Zaber's Gantries are designed for use where access is required to the entire area under the system. A synchronized pair of lead screws provide very low backlash and high stiffness. Gantry systems include a baseplate with a full M6 on 25 mm grid of mounting holes, integrated high flex cable and cable management system.

Dimension Drawings

Model Number*	A	B	C
T-G-LSM100x100x	350.0	250.0	160.2
T-G-LSM100x200x	450.0	250.0	261.8
T-G-LSM200x100x	350.0	340.5	160.2
T-G-LSM200x200x	450.0	340.5	261.8

*See product page for complete list of available models at www.zaber.com



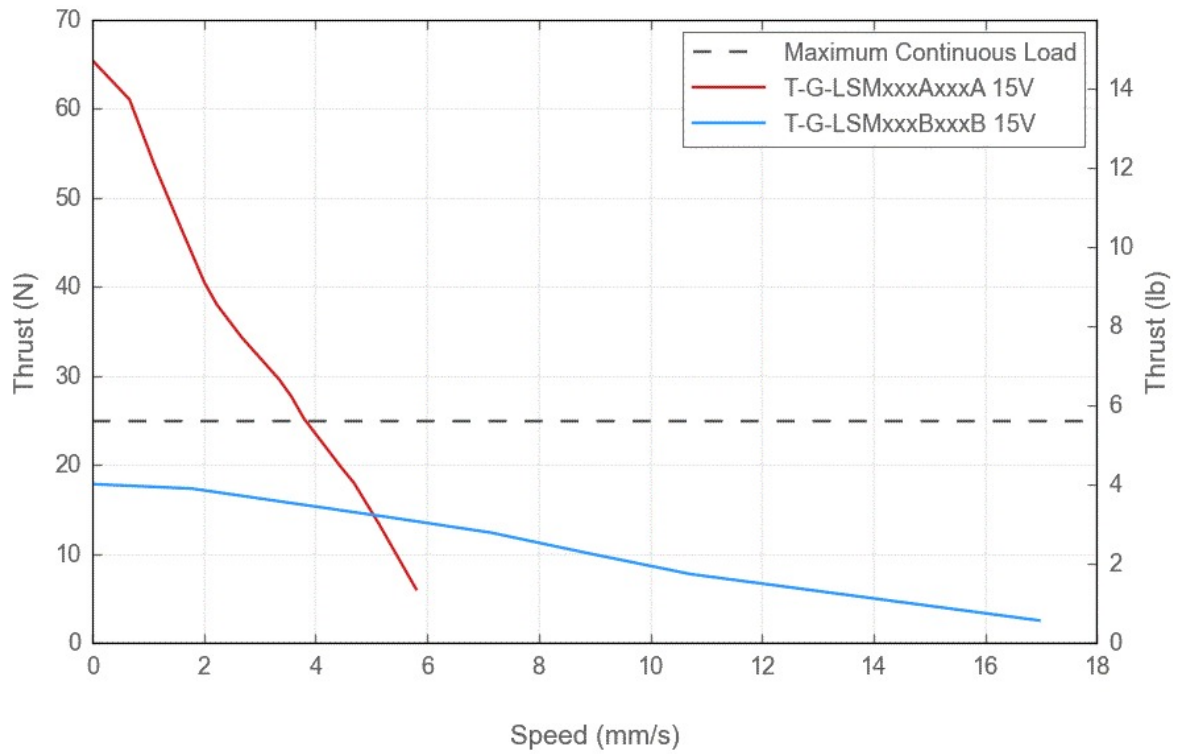
Product Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.047625 μm	
Built-in Controller	Yes	
Travel Range	101.6 x 101.6 mm	
Accuracy (unidirectional)	30 μm	0.001181 "
Repeatability	< 2 μm	< 0.000079 "
Backlash	< 4 μm	< 0.000157 "
Maximum Speed	4 mm/s	0.157 "/s
Minimum Speed	0.00022 mm/s	0.000009 "/s
Speed Resolution	0.00022 mm/s	0.000009 "/s
Encoder Type	None	
Peak Thrust	40 N	9.0 lb
Maximum Continuous Thrust	25 N	5.6 lb
Communication Interface	RS-232	
Communication Protocol	Zaber Binary	
Maximum Centered Load	100 N	22.4 lb
Maximum Cantilever Load	300 N"Å c m	424.8 oz"Å i n
Guide Type	Roller Bearing	
Vertical Runout	< 8 μm	< 0.000315 "
Horizontal Runout	< 12 μm	< 0.000472 "
Maximum Current Draw	1000 mA	
Power Supply	12-16 VDC	
Power Plug	2.1	
Linear Motion Per Motor Rev	0.6096 mm	0.024 "
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	Minidin 6 pin M/F	
Mechanical Drive System	Precision lead screw	
Limit or Home Sensing	Magnetic hall sensor	
Manual Control	Yes	
Axes of Motion	2	

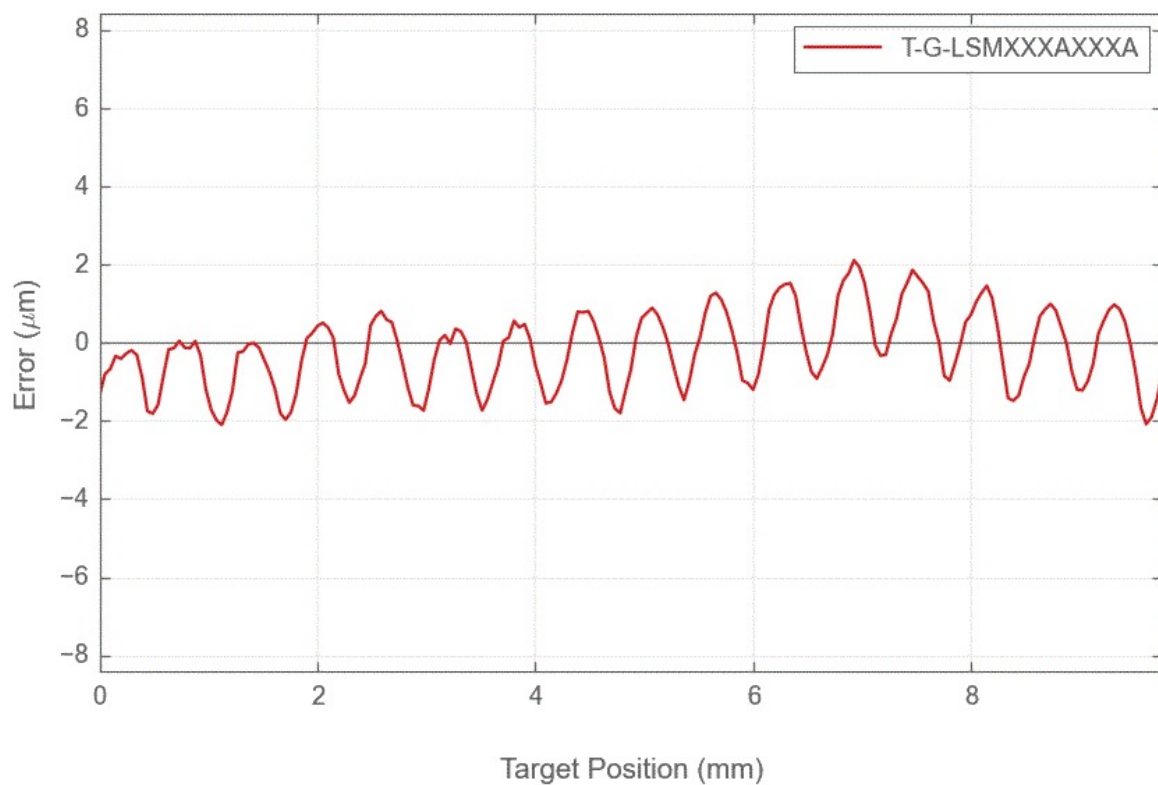
Specification	Value	Alternate Unit
LED Indicators	Yes, Bi-Colour	
Mounting Interface	M3 threaded holes (stage) & M6 (base plate)	
Vacuum Compatible	No	
Operating Temperature Range	0 to 50 degrees °C	
Stage Parallelism	< 25 µm	< 0.000984 "
RoHS Compliant	Yes	
CE Compliant	Yes	
Weight	4.40 kg	9.700 lb

Specification Charts

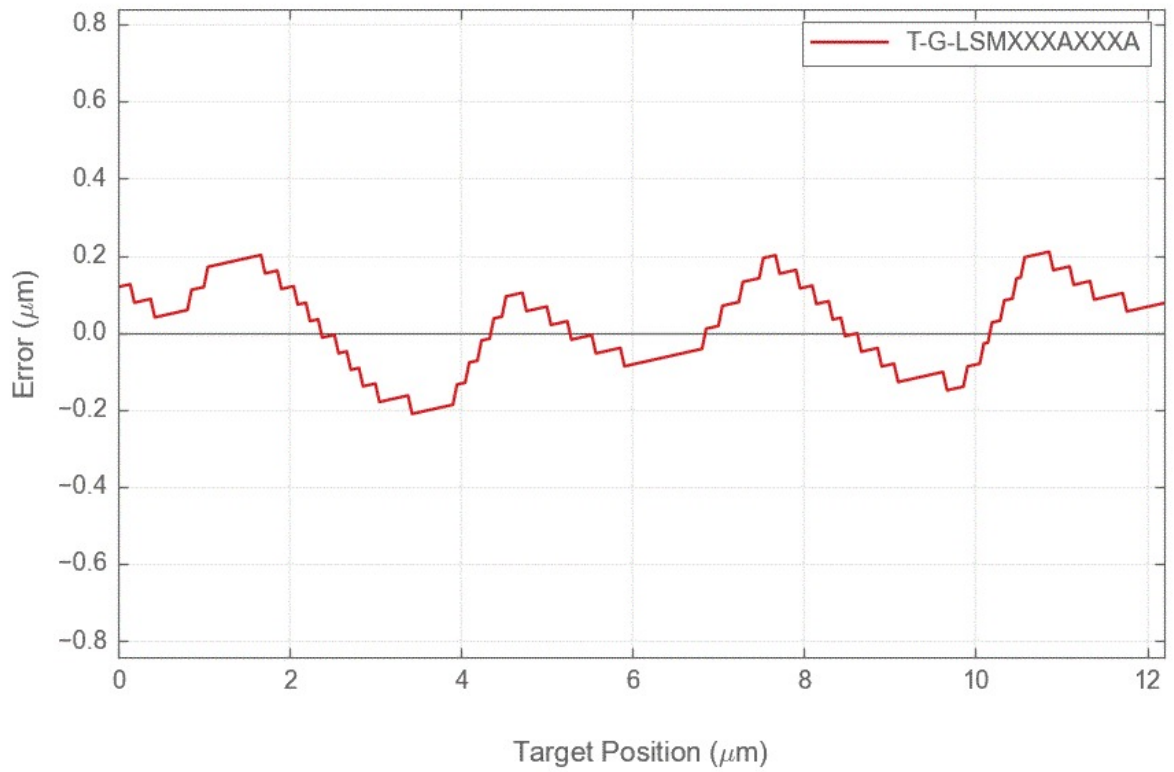
Thrust Speed Performance



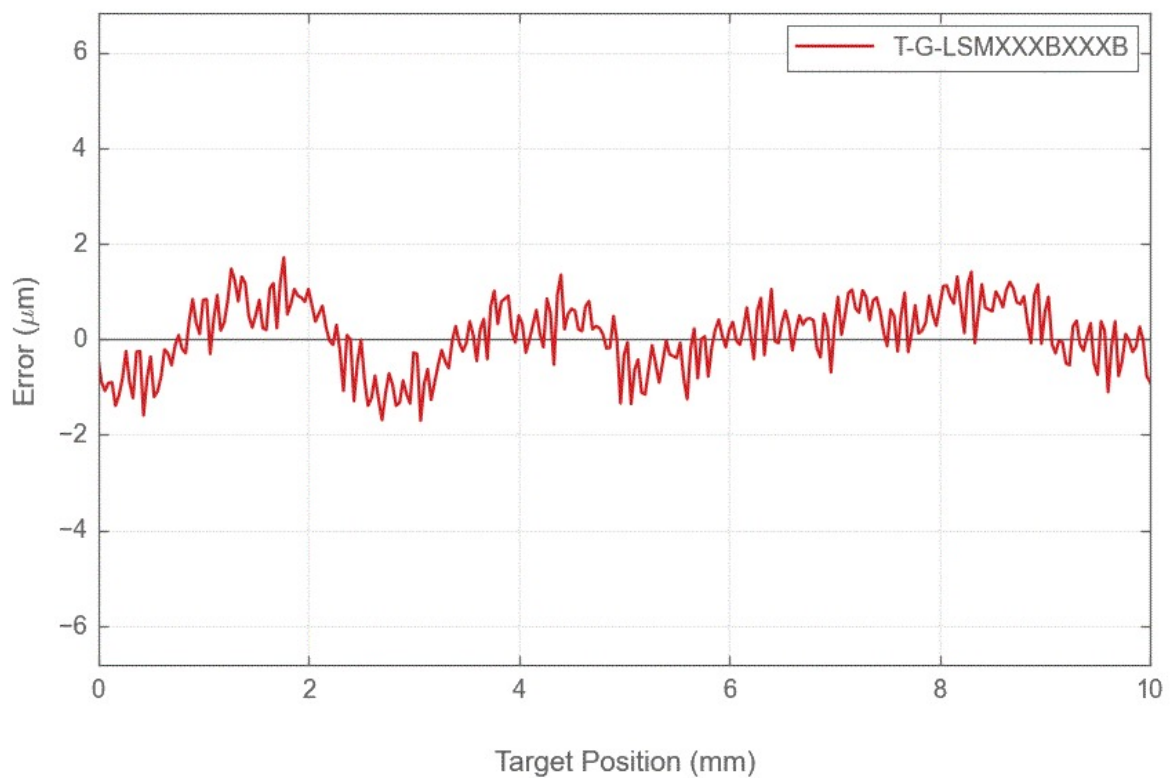
Typical Accuracy



Typical Microstepping Accuracy



Typical Accuracy



Typical Microstepping Accuracy

