

## TSB-V Series: Low vacuum translation stages



- Low vacuum compatible to  $10^{-3}$  torr
- 28 and 60 mm travel
- 10 kg load capacity
- Requires a T-NA-SV1 actuator to drive it

### Product Description

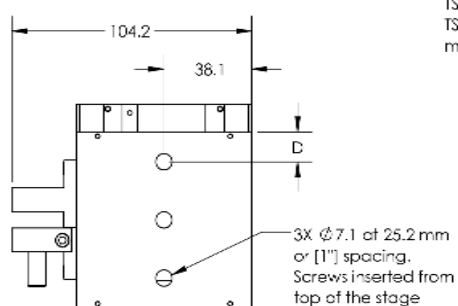
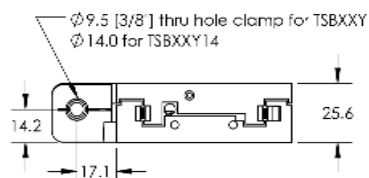
Zaber's TSB-V Series of translation stages are ball bearing linear stages with 28mm or 60mm of travel. They are compatible with our low vacuum T-NA-SV1 series miniature linear actuators and can be used in x-y stage configuration.

These vacuum compatible translation stages use vacuum compatible greases and epoxies and non-anodized components. These translation stages have been used successfully in vacuum applications down to  $10^{-6}$  Torr.

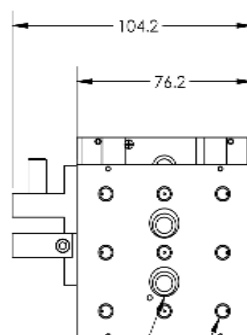
## Dimension Drawings

Model Number*	Travel	A	B	C	D
TSB28	28.0	95.0	88.0	76.2	12.9
TSB60	60.0	139.7	126.7	101.6	26.0

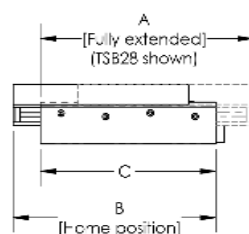
\*See product page for complete list of available models at [www.zaber.com](http://www.zaber.com)



TSB28: 2X  $\phi 12.7$   
 TSB60: 3X  $\phi 12.7$   
 mounting screw access holes



TSB28: 9X M6X1.0 or [1/4"-20]  
 TSB60: 12X M6X1.0 or [1/4"-20]  
 at 25 mm or [1"] grid spacing



## Product Specifications

Specification	Value	Alternate Unit
Maximum Centered Load	100 N	22.4 lb
Maximum Cantilever Load	125 N-cm	177.0 oz-in
Guide Type	Ball bearing	
Motor Type	None	
Axes of Motion	1	
Vacuum Compatible	Yes	
Compatible Products	T-NA, T-LA	
Operating Temperature Range	0 to 75 degrees C	
Stage Parallelism	< 100 µm	< 0.003937 "
RoHS Compliant	Yes	
CE Compliant	Yes	

Part Number	Travel Range	Mounting Interface	Weight
TSB28E-V	28 mm (1.102 ")	1/4-20 threaded holes	0.47 kg
TSB28M-V	28 mm (1.102 ")	M6 threaded holes	0.47 kg
TSB60E-V	60 mm (2.362 ")	1/4-20 threaded holes	0.56 kg
TSB60M-V	60 mm (2.362 ")	M6 threaded holes	0.56 kg