

## T-MM-V Series Datasheet



- Two-axis kinematic mount with  $\pm 5^\circ$  range
- Repeatability down to  $0.0005^\circ$
- Holds 2" (50 mm) optics; adaptors available for C-Mount, 1" (25mm), and 1/2" (12.5mm) optics
- Built-in controller; daisy chains with other T-series products inside the vacuum chamber
- Low vacuum compatible to  $10^{-3}$  Torr

## Overview

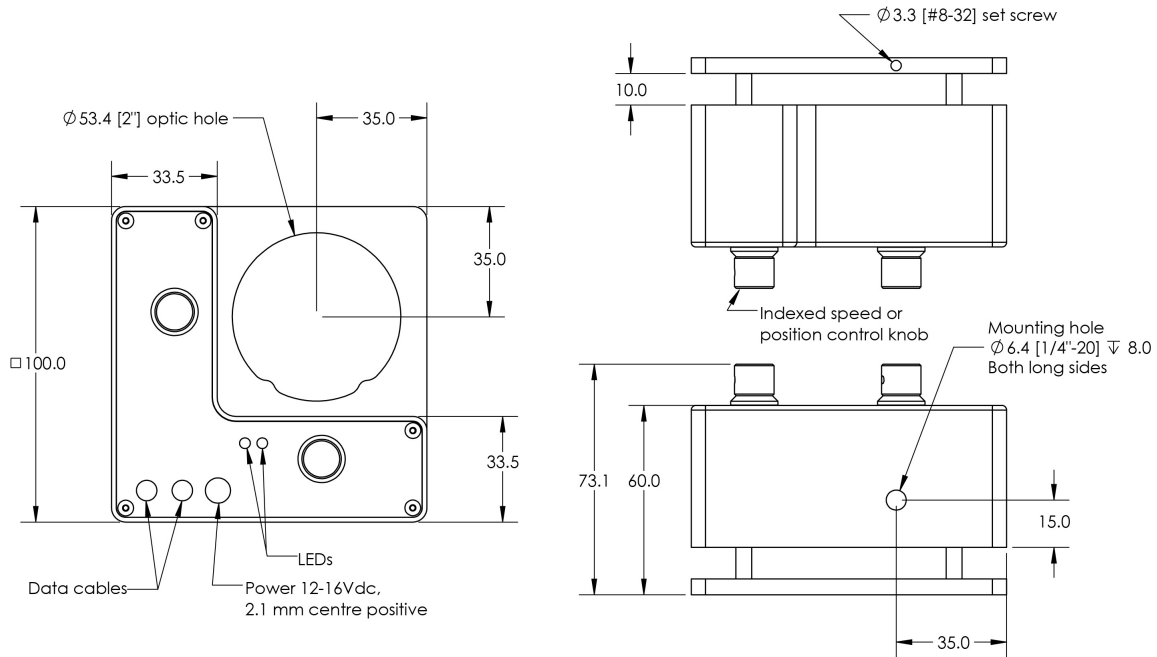
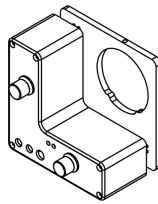
For more information about the basics of a vacuum system and considerations to keep in mind when gathering requirements for your application, read our technical article, "Motion Device Design Considerations for Vacuum Applications".

The T-MM-V Series are low vacuum motorized two axis mirror mounts. They can be controlled using the RS-232 serial interface.

## Drawings

# ZABER

T-MM Motorized Mirror Mount  
dimensions in mm



DWG 1115.k01

## Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.000086 °	1.501 µrad
Built-in Controller	Yes	
Range	-5.27 to +5.27 °	
Accuracy (unidirectional)	0.06 °	1.047000 mrad
Repeatability	< 0.015 °	< 0.262 mrad
Backlash	< 0.03 °	< 0.523 mrad
Maximum Speed	3.44 °/s	0.6 rpm
Minimum Speed	0.000806 °/s	14.067 µrad/s
Speed Resolution	0.000806 °/s	
Encoder Type	None	
Communication Interface	RS-232	
Communication Protocol	Zaber Binary	
Maximum Centered Load	15 N	3.4 lb
Maximum Current Draw	530 mA	
Power Supply	12-16 VDC	
Power Plug	2.1 mm center positive	
Angular Motion Per Motor Rev	0.264 °	
Motor Steps Per Rev	48	
Motor Type	Stepper (2 phase)	
Inductance	55 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 home sensors	
Manual Control	No	
Axes of Motion	2	
LED Indicators	Yes	
Mounting Interface	1/4-20 threaded adapter	
Optic Mounting Interface	2" diameter optics	
Vacuum Compatible	Yes	

<b>Specification</b>	<b>Value</b>	<b>Alternate Unit</b>
Operating Temperature Range	0 to 50 °C	
RoHS Compliant	Yes	
Weight	0.55 kg	1.213 lb