



## **Dual Axis Deflection Unit**

### **OVERVIEW**

The **sercalo** magnetic deflection units are used for optical beam steering and scanning. The 2-D mirror has a reflective surface up to 3.2 x 4.2 mm.

Using magnetic actuation, the deflection angle is set linearly with the driving current. The mirror is designed for DC operation as well as scanning.

### **FEATURES**

- 2 actuation Axes
- Up to  $\pm 5^\circ$
- Linear control

### **APPLICATIONS**

- 2D Static and dynamic Optical Beam Steering
- 2D Optical Scanner Device

#### **ORDERING INFORMATION**

MM-2536-2-AU	2.5x3.6mm Gold surface finish
MM-2536-2-AL	2.5x3.6mm Aluminum surface finish
MM-3242-2-AU	3.2x4.2mm Gold surface finish
MM-3242-2-AL	3.2x4.2mm Aluminum surface finish

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## TECHNICAL SPECIFICATIONS

	Unit	Min	Typ	Max
Max actuation Current	<i>mA</i>			200
Max actuation Power	<i>W</i>			1
Surface finish	-		Gold or Aluminum	
Reflectivity (800-2000 nm)	%	95		
Mirror Size (A x B)	<i>mm</i> <sup>2</sup>		2.5 x 3.6 (3.2 x 4.2)	<i>on request</i>
Mirror Flatness (ROC)	<i>m</i>	10		
Tilt Angle DC (mechanical)	<i>deg</i>	± 4		
Resonance Frequency X	<i>Hz</i>	200	240	
Resonance Frequency Y	<i>Hz</i>	350	390	
Angle of Incidence	<i>deg</i>			45
Operating Temperature	°C	-5		85
Storage Temperature	°C	-40		85

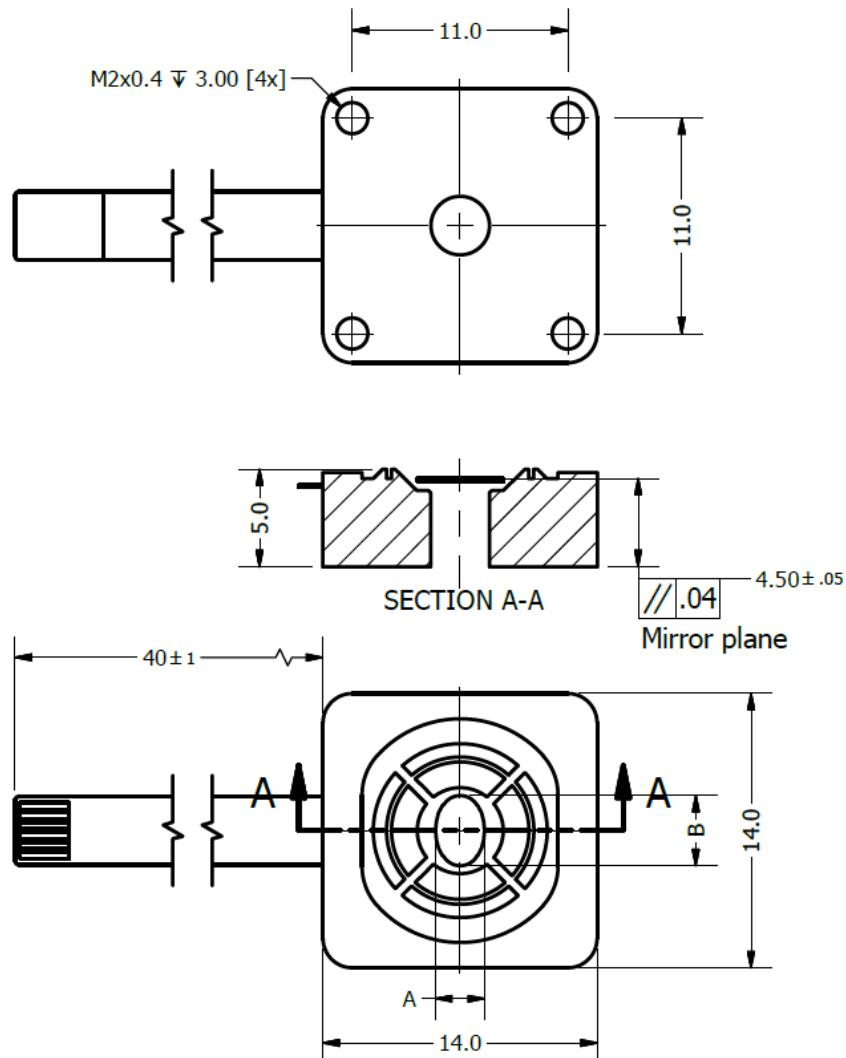


Figure 1: Mechanical layout for MM2536 Deflection Unit. (Units = [mm])