



DUAL AXES MAGNETIC MIRRORS

OVERVIEW

The **sercalo** magnetic deflection units are used for optical beam steering and scanning. The 2-D mirror has a reflective surface of 2.5 x 3.6 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
- $\pm 4^\circ$ (up to 5°)
- Linear control

APPLICATIONS

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

ORDERING INFORMATION

- | | |
|---------------------|--|
| MM-2536-2-AU | <i>2.5x3.6mm Gold surface finish</i> |
| MM-2536-2-AL | <i>2.5x3.6mm Aluminum surface finish</i> |

CONTACT

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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 Aluminium	
Reflectivity (800-2000 nm)	%	95		
Mirror Size (A x B)	<i>mm²</i>		2.5 x 3.6	
Mirror Flatness (ROC)	<i>m</i>	10		
Tilt Angle DC (mechanical)	<i>deg</i>	$\pm 4^\circ$		(up to 5°)
Resonance Frequency X	<i>Hz</i>	350	390	
Resonance Frequency Y	<i>Hz</i>	200	240	
Angle of Incidence	<i>deg</i>			45
Operating Temperature	$^\circ\text{C}$	-5		85
Storage Temperature	$^\circ\text{C}$	-40		85

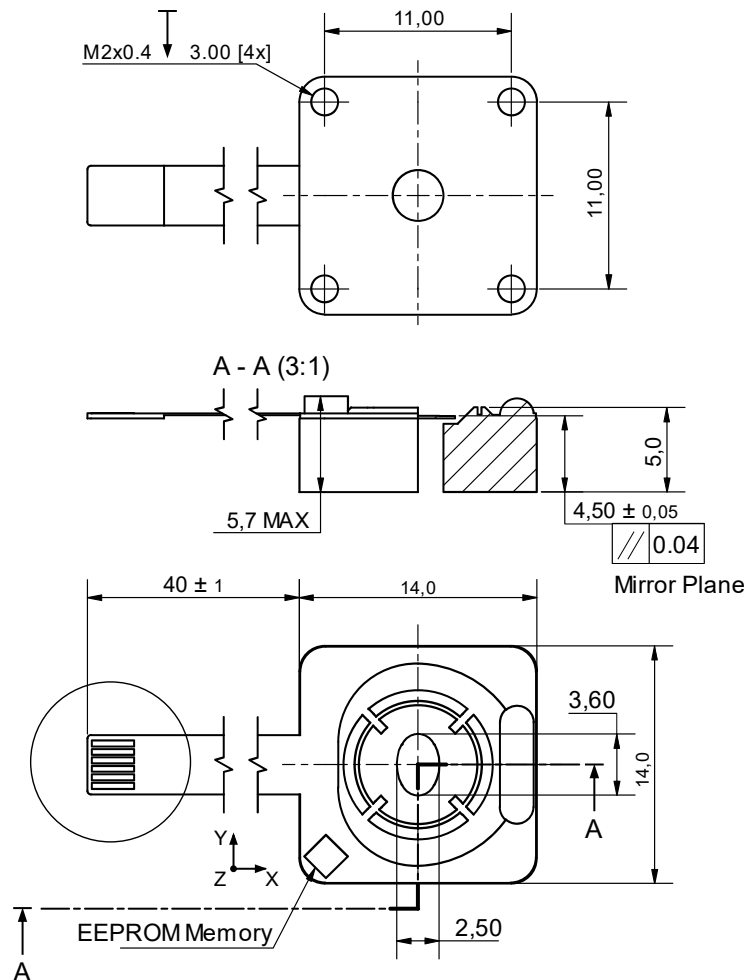


Figure 1: Mechanical layout for MM2536-2 Deflection Unit (units = mm)



FINE STEERING MIRROR

OVERVIEW

The **sercalo** dual axes magnetic fine steering mirrors are used for optical beam steering and scanning. The 2D mirror has a large reflective surface of 16x11mm.

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

As an option, the device could include an internal optical feedback sensor for closed loop actuation.

FEATURES

- 2 actuation Axes
- $\pm 1.5^\circ$
- Linear control
- Fine Pointing

APPLICATIONS

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

ORDERING INFORMATION

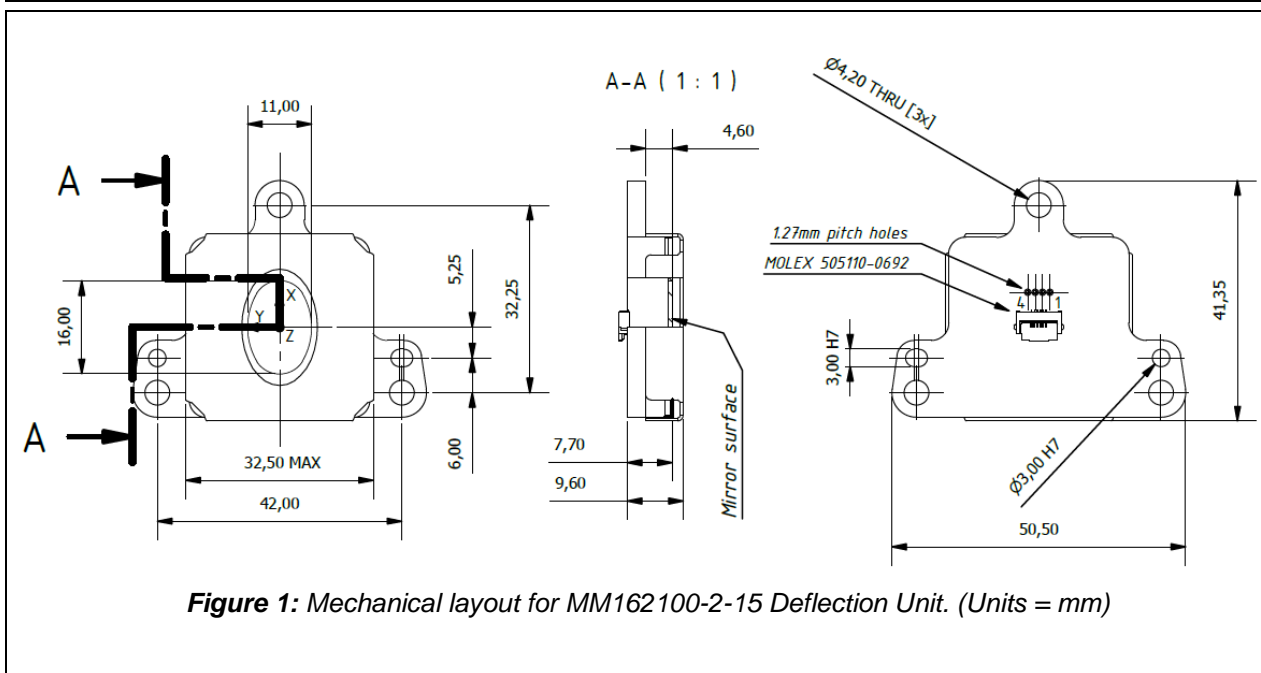
MM160110-2-15-AU	<i>Gold surface finish</i>
MM160110-2-15-AL	<i>Aluminum surface finish</i>

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TECHNICAL SPECIFICATIONS

	Unit	Min	Typ	Max
Max actuation Current	mA			60
Max actuation Power	W			0.5
Surface finish	-		Gold or Aluminium	
Reflectivity (800-2000 nm)	%	98		
Mirror Size	mm ²		16.0 x 11.0	
Wavefront Error (1550nm)	nm			up to 50
Tilt Angle DC (mechanical)	deg			± 1.5°
Resonance Frequency X	Hz	290	315	
Resonance Frequency Y	Hz	167	175	
Angle of Incidence	deg			45
Operating Temperature	°C	-5		85
Storage Temperature	°C	-40		85
Mass	g			50



お問い合わせ先



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