

# FINE POINTING DUAL AXES MAGNETIC MIRRORS

## OVERVIEW

The **Sercalo** dual axes magnetic mirrors are used for optical beam steering and scanning. The 2-D 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

<b>MM-160110-2-15-AU</b>	<i>Gold surface finish</i>
<b>MM-160110-2-15-AL</b>	<i>Aluminum surface finish</i>
<b>MM-160110-2-15-AU</b>	<i>Gold surface finish with Feedback sensor</i>
<b>MM-160110-2-15-AL</b>	<i>Aluminum surface finish with Feedback sensor</i>

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### Ordering Information:

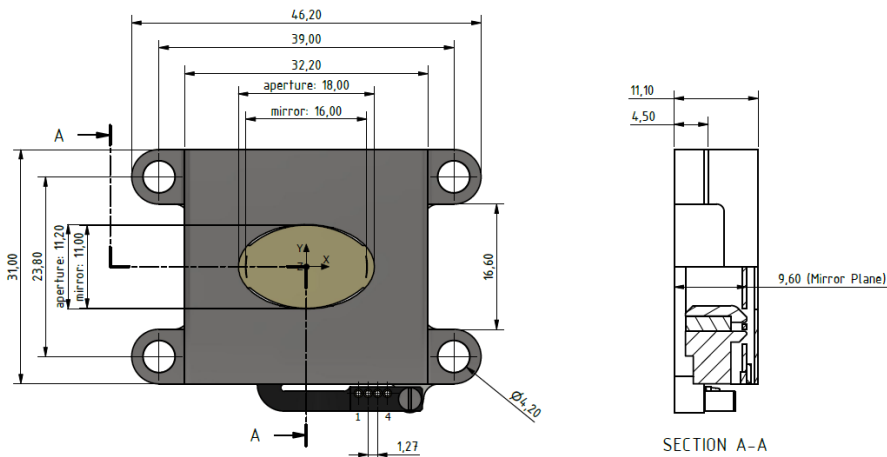


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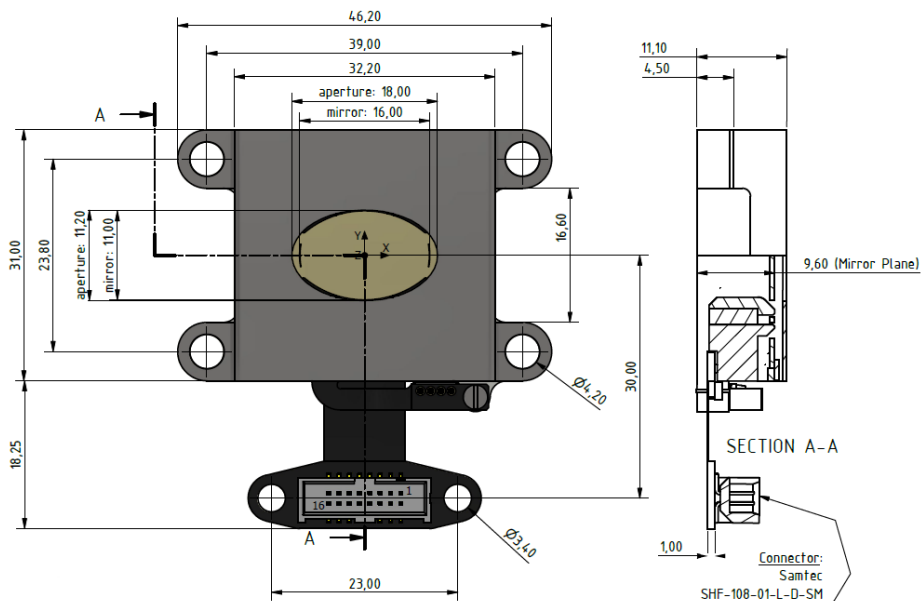
Email orders to: [sales@xsoptix.com](mailto:sales@xsoptix.com)  
Fax orders to: 800-878-7282

## 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 <sup>2</sup>		16.0 x 11.0	
Wavefront Error (1550nm)	nm			100
Tilt Angle DC (mechanical)	deg			± 1.5°
Resonance Frequency X	Hz	315	330	
Resonance Frequency Y	Hz	170	180	
Angle of Incidence	deg			45
Operating Temperature	°C	-5		85
Storage Temperature	°C	-40		85
Mass	g			80



**Figure 1:** Mechanical layout for MM162100-2-15 Deflection Unit. (Units = mm)



**Figure 2:** Mechanical layout for MM162100-2-15-FB Deflection Unit with feedback sensor. (Units = mm)