

1 Axis Magnetic DC MIRROR

OVERVIEW

The **sercalo** magnetic mirrors are used for optical beam steering and scanning. The mirrors provide a large reflective surface up to a diameter of 14.2 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 up to 250 Hz.

FEATURES

- Large mirror
- $\pm 5^\circ$ static
- Linear control
- Up to 250 Hz

APPLICATIONS

- Static and dynamic Optical Beam Steering
- Optical Scanner Device

ORDERING INFORMATION

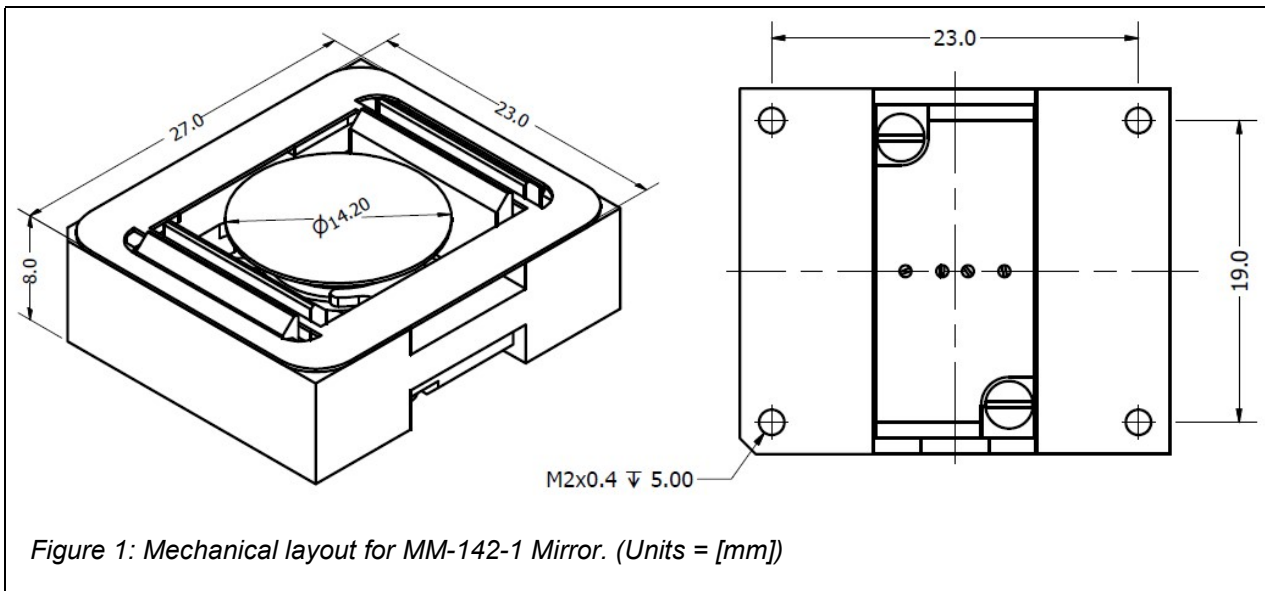
MM142-1-AU	<i>Ø14.2mm; Gold surface finish</i>
MM142-1-AL	<i>Ø14.2mm; Aluminum surface finish</i>
MM142100-1-AU	<i>Ø14.2x10.0mm; Gold surface finish</i>
MM142100-1-AL	<i>Ø14.2x10.0mm; Aluminum surface finish</i>

Contact:

Sercalo microtechnology ltd
Landstrasse 151, 9494 Schaan
Principality of Liechtenstein
Tel. +423 237 57 97
Fax. +423 237 57 48
www.sercalo.com
e-mail: info@sercalo.com

TECHNICAL SPECIFICATIONS MM142-1

	Unit	Min	Typ	Max
Max actuation Current	<i>mA</i>			200
Max actuation Power	<i>mW</i>			300
Coil Resistance	<i>Ohm</i>		6.3	
Surface finish	-		AU/AL	
Reflectivity (800-2000 nm)	%	95		
Mirror Size (<i>round</i>)	<i>mm</i>		14.2	
Mirror Flatness (ROC)	<i>m</i>	10		
Tilt Angle DC (mechanical)	°	± 4		± 5
Resonance Frequency	<i>Hz</i>	160	190	
Field of View	°	90		
Operating Temperature	°C	-5		60
Storage Temperature	°C	-40		80



TECHNICAL SPECIFICATIONS MM142100-1

	Unit	Min	Typ	Max
Max actuation Current	<i>mA</i>			200
Max actuation Power	<i>mW</i>			300
Coil Resistance	<i>Ohm</i>		5.8	
Surface finish	-		AU/AL	
Reflectivity (800-2000 nm)	%	95		
Mirror Size (<i>elliptical</i>)	<i>mm</i>		14.2x10.0	
Mirror Flatness (ROC)	<i>m</i>	10		
Tilt Angle DC (mechanical)	°	± 4		± 5
Resonance Frequency	<i>Hz</i>	200	240	
Field of View	°	90		
Operating Temperature	°C	-5		60
Storage Temperature	°C	-40		80

