

### APPLICATIONS

- > Fast steering mirror
- > Point ahead mechanism
- > Line of sight stabilisation
- > Microscanning
- > Tracking
- > Fine Pointing

### KEY FEATURES

- > Compact size
- > High control bandwidth
- > Low power consumption
- > Large optical deflection angle > 5 °
- > Eddy Current Positioning Sensor
- > Operating temperature range -10 °C..+60 °C
- > Vacuum Compatible
- > Withstand vibration & shocks

### RELATED PRODUCTS

- > MCLA18
- > ECS45

### AVAILABLE OPTIONS

- > Specific control loop calibration



PARAMETER	TYPICAL VALUE	UNIT
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#### > Quasistatic performances <sup>(1)</sup>

Max Angular stroke <sup>(2)</sup>	50	mrad
Resolution	2	μrad
Linearity error in closed loop	<±0.2	%
Gain <sup>(3)</sup>	25	mrad/A

#### > Dynamic performances

Loaded resonance frequency <sup>(4)</sup>	100	Hz
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#### Mirror substrates and coatings options

Substrates Options	SiC and SiO2
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#### Substrate size / clear aperture

SiC substrate <sup>(5)</sup>	∅ 17mm / CA > 15mm
SiO2 substrate	∅ 15mm / CA > 13mm

#### Coating options

SiC substrate	Silver <sup>(5)</sup> and Gold Dielectric for High Power Laser
SiO2 substrate	UV Enhanced Aluminum Protected Silver
Wavefront quality <sup>(6)</sup>	λ/10 at 633 nm

#### > Driving

Max driving voltage range	+/- 32	V
Max driving current range	+/- 1	A
Resistance @ 20 °C per axis	8	Ohm
Inductance @ 20 °C per axis	17 @50Hz	mH

#### > Dimensions & interfaces <sup>(7)</sup>

Height	40	mm
Diameter	45	mm
Mass	<200	g

#### > Mechanical interfaces

see icd

#### > Optical interface <sup>(7)</sup>

see icd

#### > Electrical interfaces

see icd

### ANNOTATIONS

Performances measured in labs environment with +/- 10% tolerance. A misused can lead to temporary or definitive alterations of properties. Contact CEDRAT TECHNOLOGIES prior using actuators under non standard technical conditions

(1) low frequency < 10 Hz

(2) Peak to peak stroke in open & closed loop at ambient

(3) Gain value measured in quasistatic condition @ 0.05Hz

(4) Loaded with 17 mm diameter SiC mirror of 4.5gm and controlled with MCLA18

(5) Standard marked

(6) Measured at 633 nm at mirror manufacturing

(7) See mirror ICD

