

### 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 > 16 °
- > Eddy Current Positioning Sensor
- > Operating temperature range -55 °C..+70 °C
- > Vacuum Compatible

### RELATED PRODUCTS

- > MCLA18
- > ECS45

### AVAILABLE OPTIONS

- > Specific control loop calibration
- > Embedded position sensor

### 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 @ 0.05 Hz

(4) In lab. configuration

(5) Loaded with 31 mm diameter SiC mirror

(6) Standard marked

(7) Measured at 633 nm at mirror manufacturing

(8) See mirror ICD



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

Max Angular stroke without position sensors	140	mrad
Angular stroke with position sensors <sup>(2)</sup>	120	mrad
Gain <sup>(3)</sup>	60	mrad/A
Linearity <sup>(4)</sup>	<0.2	%

#### > Dynamic performances

Loaded resonance frequency <sup>(5)</sup>	100	Hz
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#### > Mirror substrates and coatings options

Substrates Options	SiC and SiO2
<b>Substrate size / clear aperture</b>	
SiC substrate <sup>(6)</sup>	∅ 31mm / CA > 25mm
SiO2 substrate	∅ 15mm / CA > 13mm
<b>Coating options</b>	
	Silver <sup>(5)</sup> and Gold
SiC substrate	Dielectric for High Power Laser
SiO2 substrate	UV Enhanced Aluminum Protected Silver
<b>Wavefront quality <sup>(7)</sup></b>	λ/10 at 633 nm

#### > Driving

Max driving voltage range	+/- 30	V
Max driving current range	+/- 1	A
Resistance @ 20 °C per axis	16	Ohm
Inductance @ 20 °C per axis	24	mH

#### > Dimensions & interfaces <sup>(8)</sup>

Height	60	mm
Diameter	62	mm
Mass	>500	g

#### > Mechanical interfaces

see icd

#### > Optical interface <sup>(8)</sup>

see icd

#### > Electrical interfaces

see icd