

### APPLICATIONS

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

### KEY FEATURES

- > Compact & High Dynamic
- > Low capacitance & low power consumption
- > Symetric push pull mechanical and electrical design
- > Strain Gages sensor (SG)
- > Integrated SG conditioner
- > High resonance frequency
- > EE Prom with recorded performances data
- > Operating Temperature -50 °C to +65 °C
- > Rugged to vibrations and shocks

### RELATED PRODUCTS

- > CCBμ20
- > CCBμ40

### AVAILABLE OPTIONS

- > Open loop
- > Customisation vs environmental specifications
- > Look up table

### AVAILABLE INTERFACES

- > Specific mirror interface

### ANNOTATIONS

*Guaranted in labs environment. A misused can lead to temporary or definitive alterations of properties. Contact CEDRAT TECHNOLOGIES prior using actuators under non standard technical conditions*

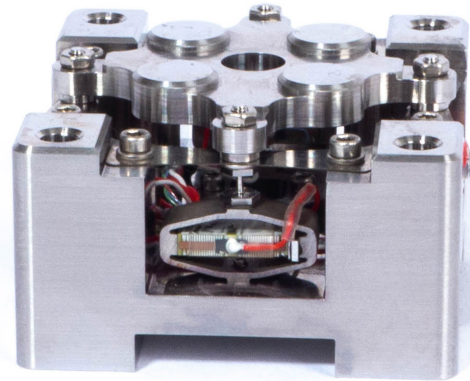
(1) AC voltage, full range @ 1Hz at Ambient Temperature

(2) With low noise amplifier SNR=100dB

(3) Blocked-free: The actuator is fixed to a mechanical support assumed infinitely stiff

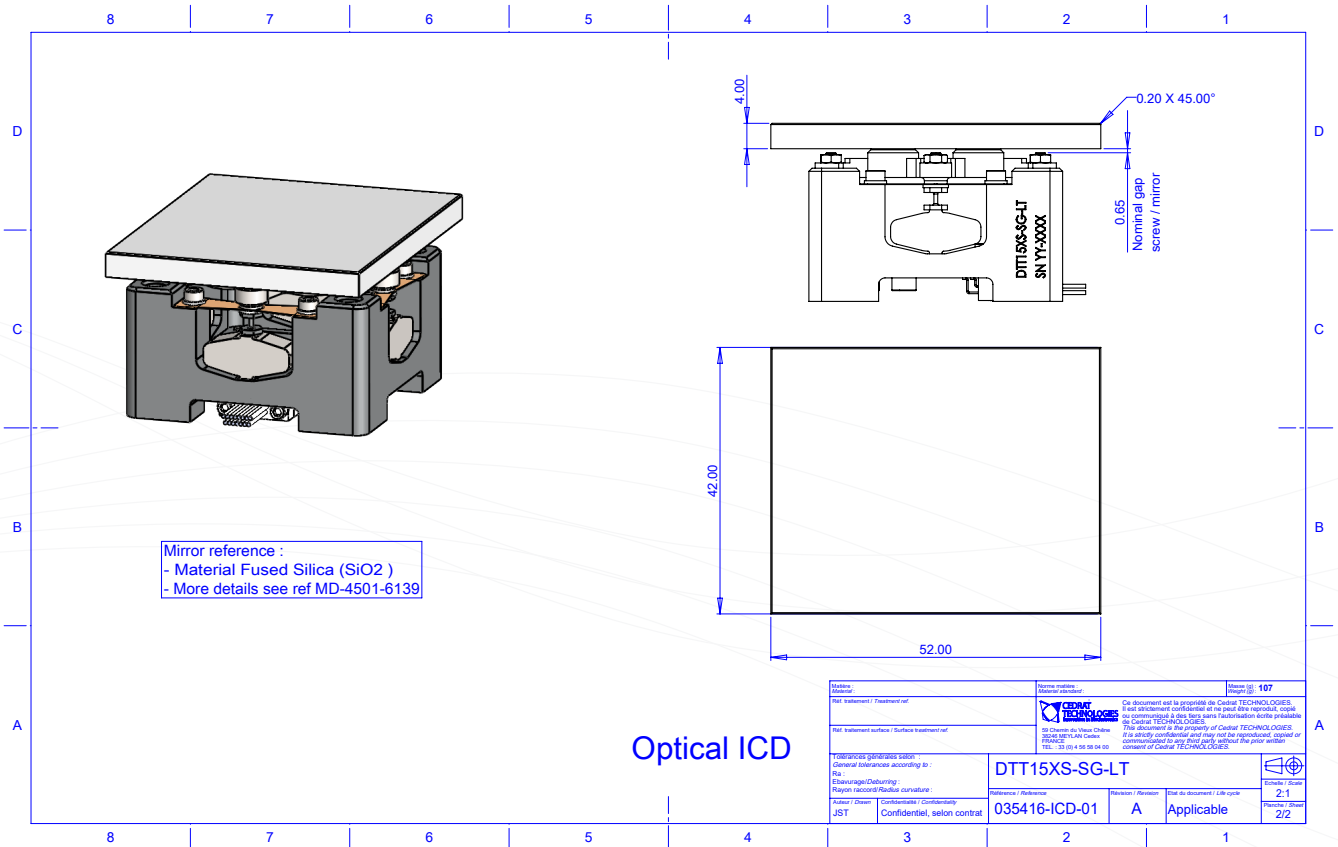
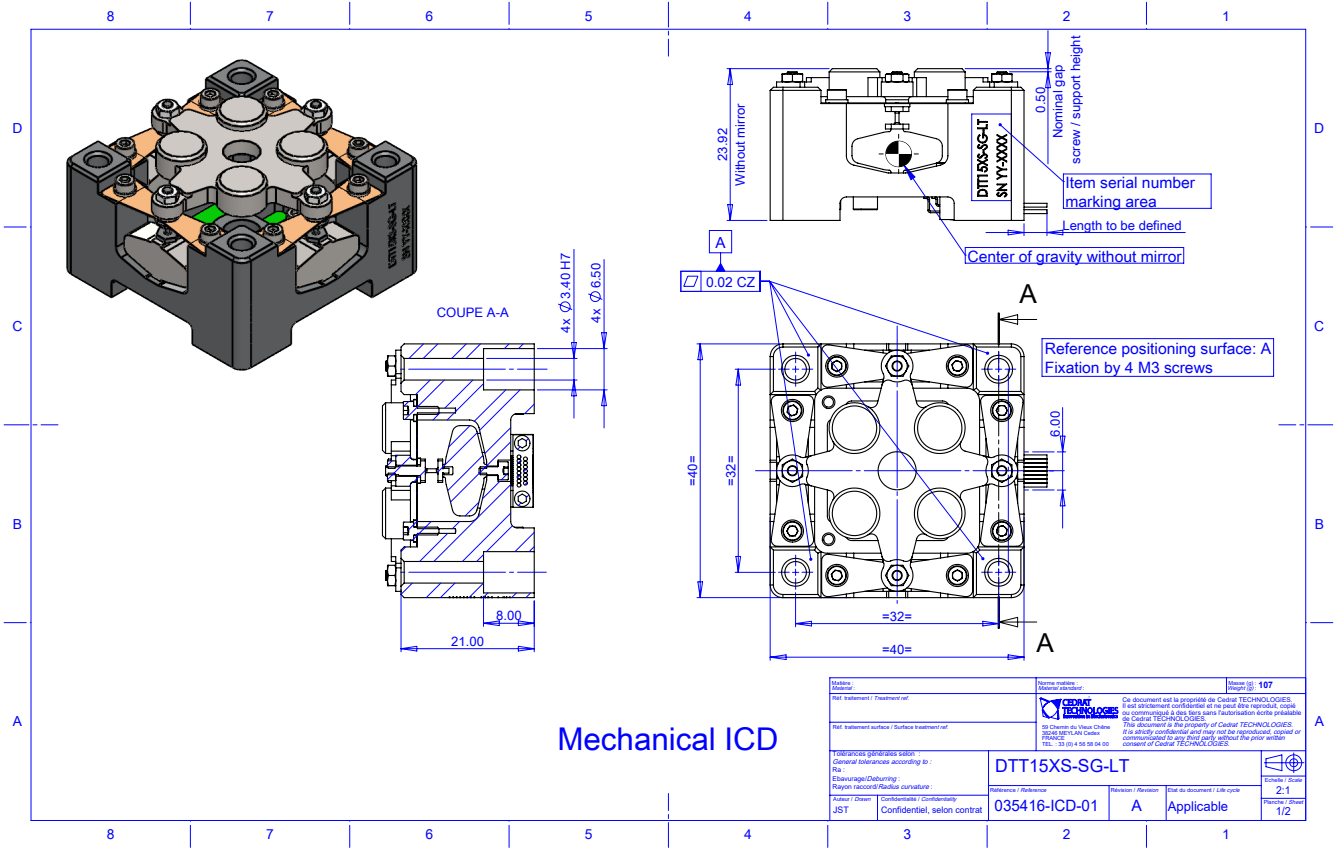
(4) Per axis, quasistatic excitation, free-free, on the admittance curve

(5) unloaded, excluding wires, without mirror






NON CONTRACTUAL PICTURE

PARAMETER	TYPICAL VALUE	UNIT
<b>&gt; Quasistatic performances <sup>(1)</sup></b>		
Nominal stroke	2	mrad
Minimal stroke	> 1.4	mrad
Resolution <sup>(2)</sup>	< 1	μrad
<b>&gt; Dynamic performances</b>		
Unloaded Blocked - free resonance frequency <sup>(3)</sup>	> 3.000	Hz
loaded Blocked - free resonance frequency with rectangular glass mirror 52*42*4 mm <sup>(3)</sup>	> 1.700	Hz
<b>&gt; Driving</b>		
Voltage range	-20 to +150	V
Capacitance <sup>(4)</sup>	<0.6	μF
<b>&gt; Dimensions &amp; interfaces</b>		
Height <sup>(5)</sup>	<24	mm
Cross section <sup>(5)</sup>	<40x40	mm
Mass <sup>(5)</sup>	<110	g
<b>&gt; Mechanical interfaces</b>	See ICD	
<b>&gt; Optical interface</b>	See ICD	
<b>&gt; Electrical interfaces</b>	See ICD	



<h1>DTT15XS-SG-LT</h1>	<h1>EICD</h1>	Ref. : <b>035416-SPE-02</b>
		Version <b>A</b>
		Date <b>15/06/2020</b>

	NAME	Fonction	Date and signature
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Version	Date	AutHor	Modifications
A	15/06/2020	J. STENTZ	Creation

<b>DTT15XS-SG-LT</b>		<b>LIST OF CONNECTORS</b>	
Ref. :		035416-SPE-02	
Version		A	
Date		15/06/2020	

sheet #	Connectors #	Name	Description	Product reference
INTER01	J1	Mechanism	Sub-D 15 Female - Horizontal SMT	OMNETTICS / AS29100-015

<b>DTT15XS-SG-LT</b>		<b>EQUIPMENT INTERCONNECTION DATA SHEET</b>	
Ref. :		035416-SPE-02	
Version		A	
Date:		15/06/2020	

Connector Name :	Mechanism
Connector # :	J1

Pin	Signal name (Customer)	Signal name (CTEC)	Signal description	Signal type	I/O	CURRENT		VOLTAGE RANGE		Comment
						Max (A)	Min (V)	Max (V)	Min (V)	
1		VY	Y axis power	Power	Input					
2		1-WIRE		Digital	Bidirectional					DS2431 EEPROM Memory
3		TxC		Analog	Output					PT100
4		PGND		Ground						Reference for Vx, Vy, +130V
5		+15V		Power	Input					
6		-15V		Power	Input					
7		AGND		Ground						Reference for 1-wire, T°C, SGX, SGY, Y.ref, +15V, -15V
8		SGX		Analog	Output					
9		+130V	Continuous power supply	Power	Input					
10		VX	X axis power	Power	Input					
11		PGND		Ground						Reference for Vx, Vy, +130V
12		PGND		Ground						Reference for Vx, Vy, +130V
13		PGND		Ground						Reference for Vx, Vy, +130V
14		VREF		Analog	Input					Reference for Vx, Vy, +130V
15		SGY		Analog	Output					5V nominal