

APPLICATIONS

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

KEY FEATURES

- > Compact size
- > Strain Gauges (SG) positioning sensor
- > Built-in SG conditioner
- > Large optical deflection angle > 1.2°
- > Low capacitance per axis
- > High control bandwidth
- > Short settling time
- > Operating temperature range
-55°C..+70°C

RELATED PRODUCTS

- > [CCBu20](#)
- > [CCBu40](#)

AVAILABLE OPTIONS

- > Glass mirror size under request
- > Specific control loop calibration

ANNOTATIONS

Guaranteed 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) Full voltage range @ 1Hz

(2) Peak to peak stroke in open & closed loop within the voltage range at ambient

Piezo actuators are free of friction and their resolution is only limited by the SNR of the voltage amplifier and the measuring equipment resolution

(3) In closed loop with SG sensor. Piezo actuators are free of friction and their resolution is only limited by the SNR of the voltage amplifier and the measuring equipment resolution.

(4) Analog value of resolution due to SNR of linear electronic amplifier. The digital value of resolution is 1 urad due to AD converter resolution

(5) Unloaded, simulated value

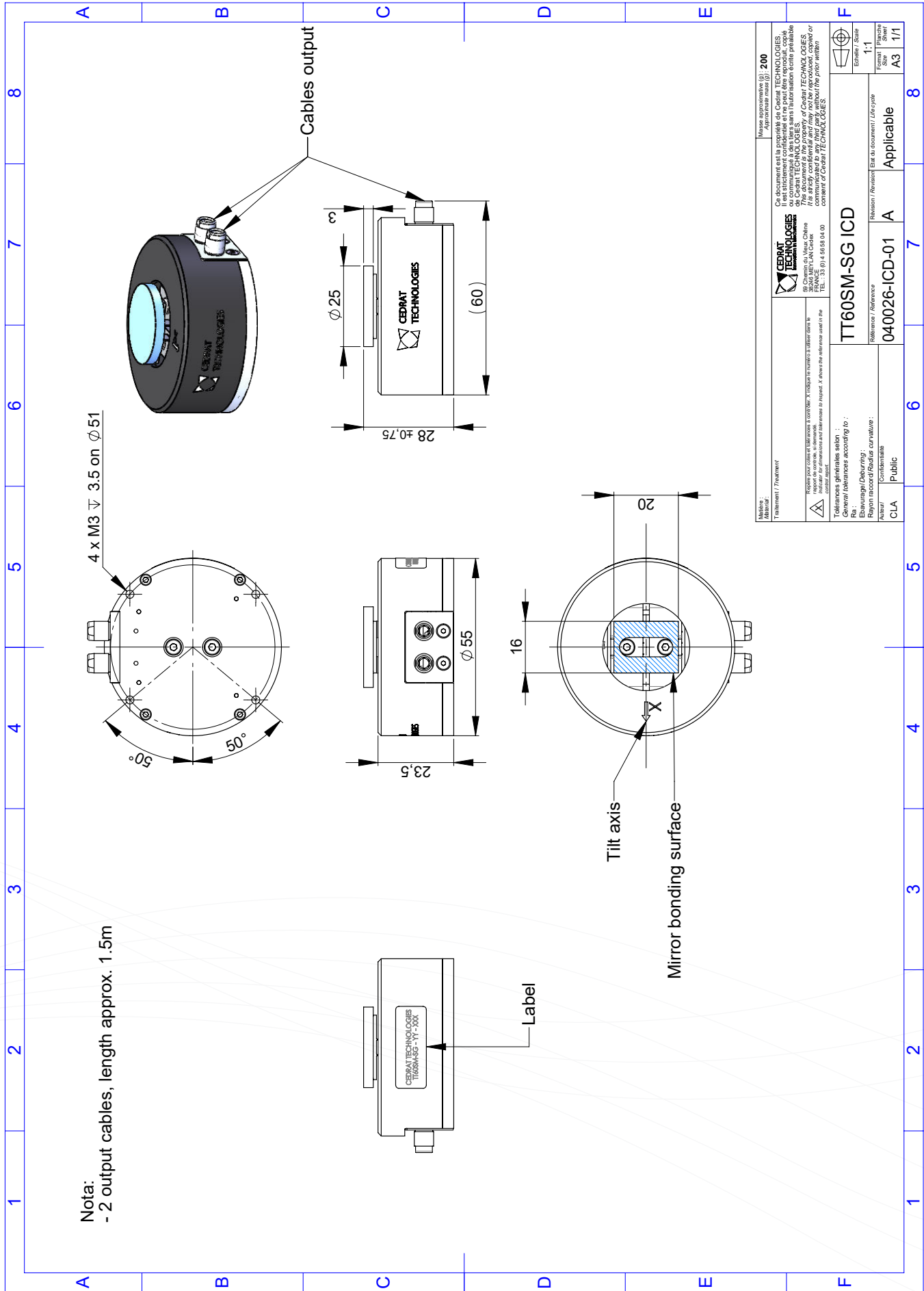
(6) Loaded with Ø25x3mm glass mirror

(7) Tested with CCBu40 & Loaded with Ø25x3mm glass mirror

(8) Unloaded, excluding wires



PARAMETER	TYPICAL VALUE	UNIT
> Quasistatic performances ⁽¹⁾		
Angular stroke ⁽²⁾	20	mrad
Resolution ⁽³⁾	0.1	µrad
Linearity ⁽⁴⁾	0.2	%
> Dynamic performances		
Unloaded resonance frequency ⁽⁵⁾	2 180	Hz
Loaded resonance frequency ⁽⁶⁾	1 270	Hz
1 mrad Settling time @ 5% ⁽⁷⁾	1.75	ms
> Driving		
Voltage range	-1	V
Capacitance per axis	3.2	µF
> Dimensions & interfaces ⁽⁸⁾		
Height	25	mm
Diameter	55	mm
Approximate mass	200	g
> Mechanical interfaces	See ICD	
> Optical interface	See ICD	
> Electrical interfaces	See ICD	



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Échelle / Scale : 1:1 Format / Page(s) : A3 / 1/1	Révision / Revision : Etat du document / Life cycle : Applicable		