CTTPS1 – CRYO TIP/TILT/PISTON STAGE 1



Features

- Driven by Cryo Linear Actuators
- Play free
- Self locking; no power dissipation when "off"
- Materials: stainless steel, titanium
- 20 mK to 375 K, vacuum compatible
- Sub-nanometer stability
- 1" mounting hole (25,4 mm)
- Optics side-clamped with a spring-loaded screw
- Membrane eliminates erratic lateral motion

Description / Applications

The CTTPS1 accepts 1" or 25,4 mm optical elements and can be operated in a cryo-vacuum environment. It is actuated with JPE's Cryo Linear Actuators (CLA). Play of the tip / tilt / piston functionality is eliminated by built-in preload springs. The optics are clamped from the side with a single spring-loaded screw.

Specifications

General info	
Type of motion	Tip / tilt / piston
Dimensions	See drawings below
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	170 g
Stepping motion	
Tip / tilt range	-5,6 deg to 5,6 deg
Piston range	-1,5 mm to 1,5 mm
Actuator	CLA2201
Minimal step size	µrad
Drive voltage	-30 V to 120 V
Forces and load capacity	
Mounting hole diameter	1" or 25,4 mm
Free aperture diameter	21 mm
Load capacity	100 g
Materials	
Main body	Titanium, stainless steel 316L
CLA2201	Stainless steel 316L, ceramic, piezo actuator*
*Piezo actuator	Low voltage multilayer, ceramic insulated
Model specific information	
-V, -HV or -UHV	Level of vacuum compatibility, see the glossary on the homepage for details
Electronics CPSC	
Controller Base Cabinet	CAB
Driver for stepping and scanning	CADM

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Ordering Information

Available Models

CTTPS1-V	Cryo Tip/Tilt/Piston Stage 1”

Available Options

-HV	Upgrade to High Vacuum compatibility
-UHV	Upgrade to Ultra High Vacuum compatibility

Accessories

AKM1	Accessory Kit Mechanical 1
AKE1	Accessory Kit Electrical 1

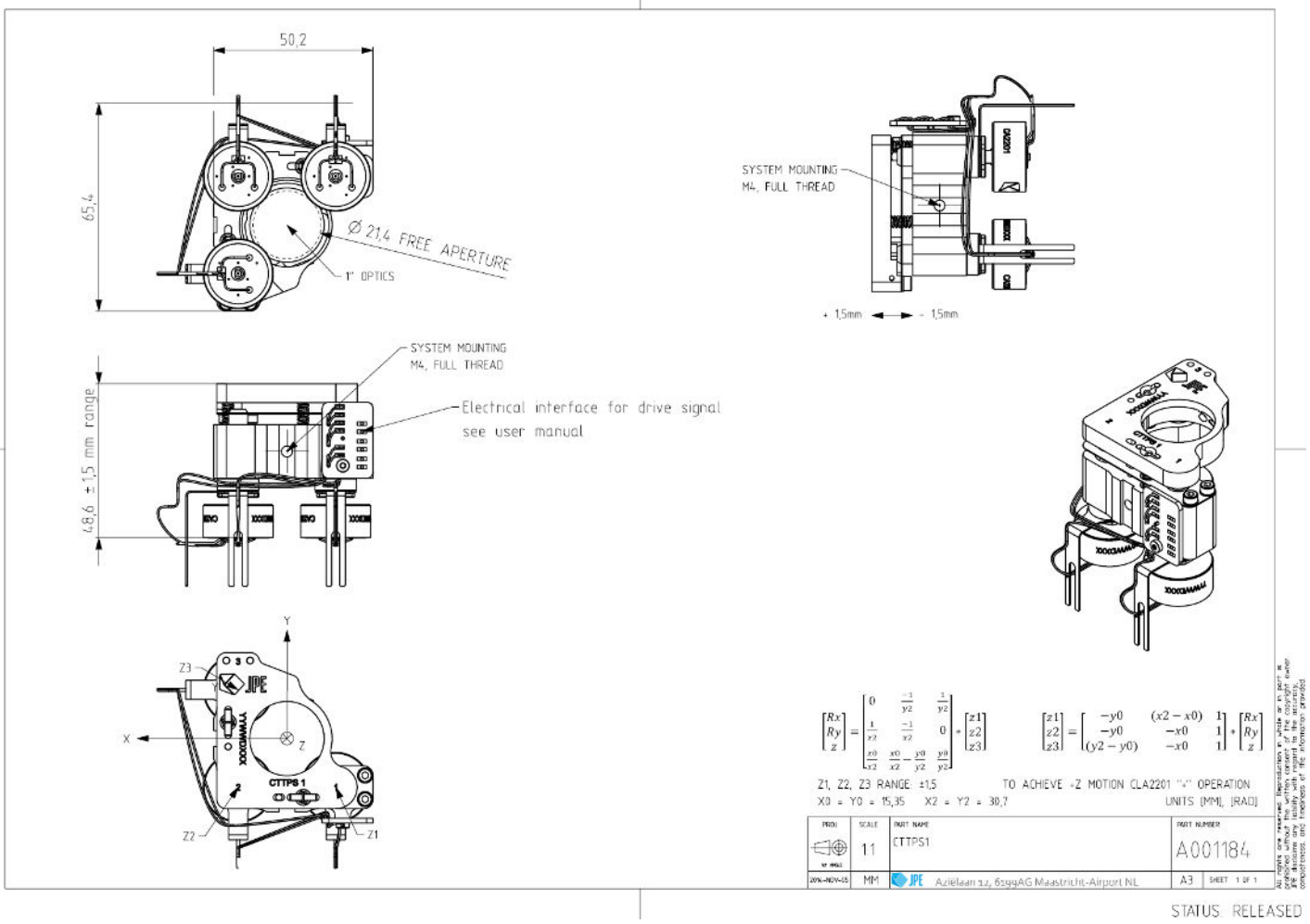
Mechanical and electrical information

Download 3D step files and manuals from:
https://www.jpe-innovations.com/cryo-nano-products/

Contact

For quotations, specials, or engineering services, please contact us at:
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Drawings



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