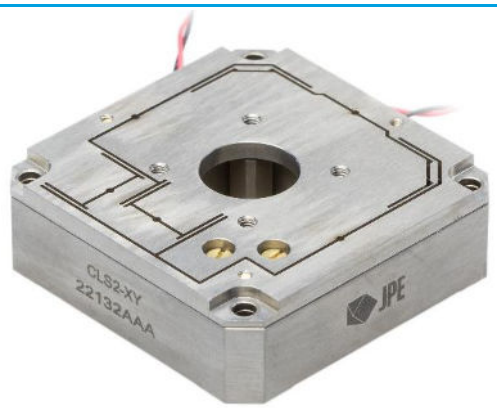
CLS2 – CRYO LINEAR SCANNER 2



Features

- xy model
- Non-magnetic
- Flexure mechanism
- Robust: easy handling and high load capacity
- High driving stiffness
- Open aperture through the scanner body
- 20 mK to 375K, vacuum compatible
- Bipolar driving voltage in cryo to increase stroke
- Dynamic operation

Description / Applications

The CLS2 is the larger model in the CLS series. Not only does this allow placement of larger items, but it also offers an increased scan range, making this a non-magnetic linear scanner for all-round fine positioning applications in a cryo-vacuum. Special attention is given to realize a robust and rigid mechanism that can tolerate significant handling and payload forces. The central open aperture allows the transfer of fibers, wires, or light through the scanner body.

Specifications

General info	
Type of motion	Scanning, xy
Dimensions	See drawings below
Operational environmental conditions	20 mK to 375 K, ambient to UHV
Weight	63 g
Scanning motion	
Scanning range @ 300 K	135 x 135 micron
Scanning range @ 4 K	50 x 50 micron
Minimal step size	Sub-nm
Drive voltage @ 300 K	-30 V to 120 V
Drive voltage @ 4 K	-150 V to 150 V
No load resonance frequency	550 Hz
Forces and load capacity	
Load capacity	5 N all directions
Materials	
Main body	Titanium
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 or PSM

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Ordering Information

Available Models

CLS2-XY-V	Cryo Linear Scanner 2-XY

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:
https://www.jpe-innovations.com/contact/

Drawings