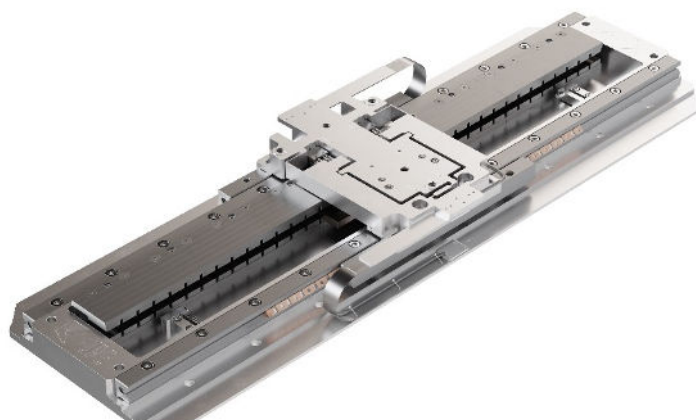


VLS – VACUUM LINEAR STAGE



Features

- 350 mm stroke
- High vacuum compatible
- Consistent high repeatability throughout its lifetime (no play)
- Minimum dissipation
- Integrated end stops
- Optional absolute encoder

Description / Applications

The Vacuum Linear Stage (VLS) is a long stroke linear stage with a 350 mm stroke in a compact robust package. The implementation of a compliant carriage in combination with a defined pretension offers numerous benefits such as consistent high repeatability throughout its lifetime, minimized drive friction and high resolution. The VLS is equipped with a direct drive motor and encoder feedback to reach the desired position with high accuracy in vacuum environments.

Specifications

General info	
Type of motion	Linear
Dimensions	See drawings below
Operational environmental conditions	280K to 325 K, ambient to UHV
Weight	9 kg
Straightness	+/- 3 μm (higher accuracies on demand)
Motion	
Travel range	350 mm
Repeatability	+/- 0,1 μm
Resolution	0,05 μm
Max speed	350 mm/s
Max acceleration	5 m/s ²
Forces and load capacity	
Driving force continuous (F_x)	15 N
Max drive force peak (F_x)	135 N
Max load (F_y)	150 N
Max load (F_z)	500 N
Max moment (M_x)	50 Nm
Max moment (M_y)	25 Nm
Max moment (M_z)	50 Nm
Materials	
Main body	Aluminum
Linear guides	Stainless steel
Model specific information	
-V	Lubricated steel rollers
-HV	Dry ceramic rollers

Ordering Information

Available models

VLS2-350-V	VLS2 with 350 mm stroke
VLS2-350-HV <small>VLS</small>	VLS2 with 350 mm stroke

Available Options

-INC	Incremental encoder
-ABS	Absolute encoder

Accessories

None

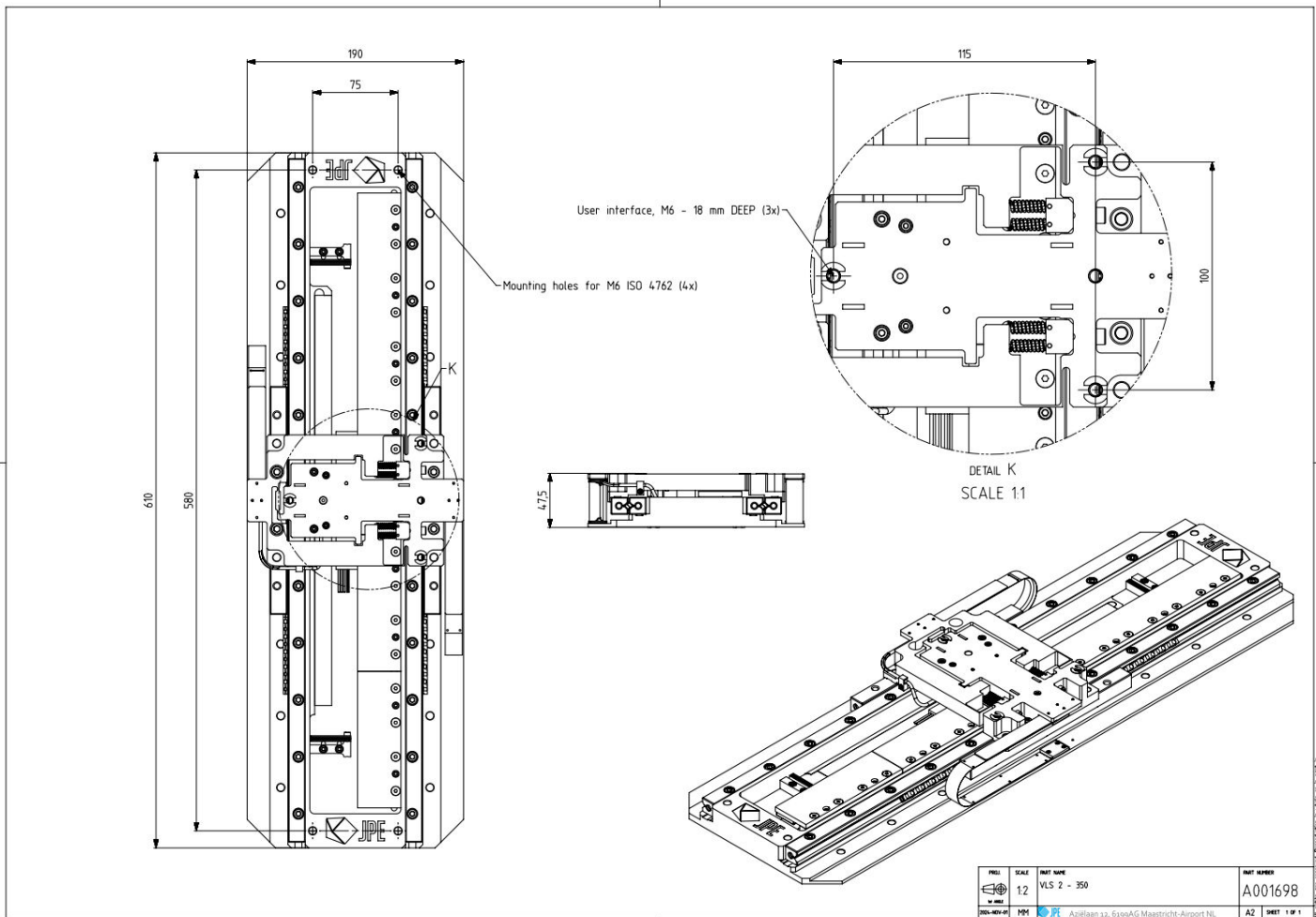
Mechanical and electrical information

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



STATUS: PROTO