

Piezo Stages

VenusLab Piezo Z-axis

High-Load Vertical Nanopositioning Systems

- Compact wedge drive, 10kg load, high stiffness.
- Self locking piezo, zero drift, nanometer hold.



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
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Visit Us
www.venuslabtech.com

Overview

Precision Elevation in Low Profile

VenusLab Piezo Z-axis stages deliver smooth, high-resolution vertical motion using advanced ultrasonic piezo drives. Engineered for stability, they provide a rigid platform for heavy optical assemblies or samples, maintaining sub-micron precision even in dynamic scanning or vacuum environments.

Applications

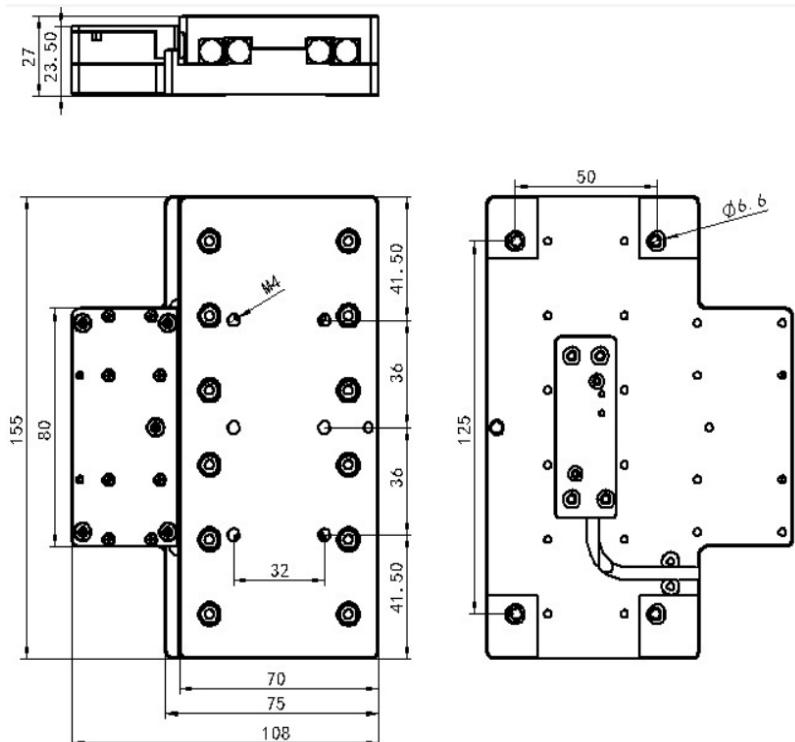
- Microscope Focus Control
- 3D Surface Profiling
- Wafer Z-Height Inspection
- Laser Lithography

Technical Specifications

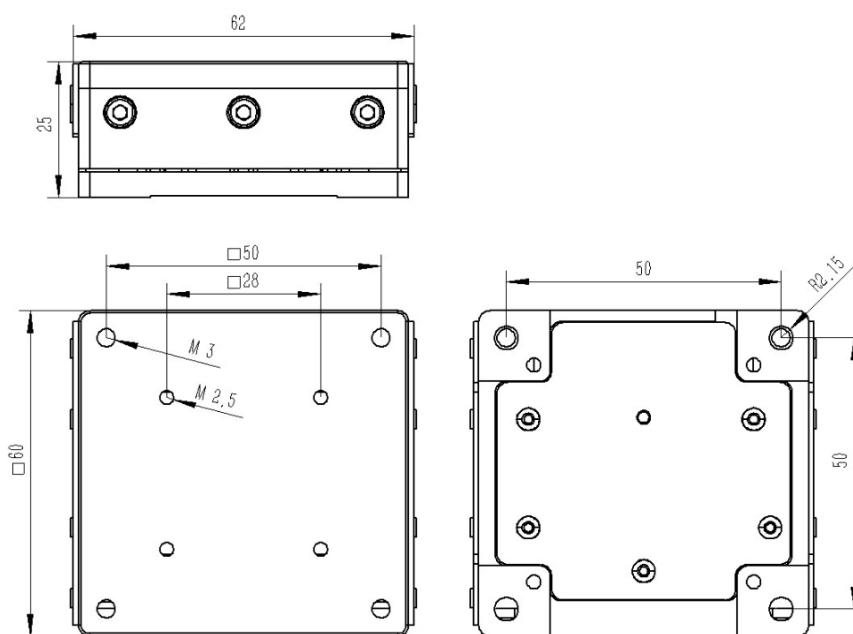
Model Name	Travel (mm)	Max Load (kg)	Max Speed (mm/s)	Min Step (nm)	Repeatability	Environment / Vacuum	Material	Sensor
VL-PZ-70VAC	70	10.0	100	150	+/- 500 nm	10 ⁻⁵ Pa (Vacuum)	Stainless Steel	Grating
VL-PZ-18NM	18	1.0	100	300	+/- 500 nm	Non-Magnetic	Aluminum Alloy	Grating

Mechanical Dimensions

VL-PZ-70VAC



VL-PZ-18NM



Service & Support

We are dedicated to delivering exceptional optoelectronic solutions to every client. From precision manufacturing and secure delivery to full-lifecycle technical support, we are here to ensure a seamless and reliable experience at every step.

1. Warranty Policy

Quality First, Worry-Free Operation

- **Warranty Period:** We offer a **two-year** warranty service for all of our core optoelectronic products, effective from the date of shipment.
- **Coverage:** We provide free repair or replacement services for malfunctions caused by material defects or workmanship errors under normal operating conditions.
- **Rapid Response:** Upon receiving a warranty claim, we guarantee to initiate the assessment process within **24 hours** to minimize your equipment downtime.

2. Technical Support

Expert Team, Full-Process Guidance

- **Technical Consultation:** Our team of senior optical engineers provides **24/7 online support** to assist with installation, commissioning, optical path alignment, and parameter optimization.
- **Scheduled Maintenance:** We offer full-lifecycle maintenance recommendations, including firmware upgrades, optical component cleaning guidelines, and precision calibration services.
- **Training Services:** We provide customized remote or on-site operational and safety training to ensure your team can operate the equipment efficiently and safely.

3. Logistics & Delivery

Precision Packaging, Global Reach

- **Professional Packaging:** Given the fragile nature of optical instruments, we utilize industrial-grade shockproof, anti-static, and moisture-proof vacuum packaging to ensure zero damage during transit.
- **Logistics Partners:** We partner with top-tier global logistics providers (**DHL / FedEx / UPS / SF Express**) to offer reliable shipping with real-time tracking.
- **Shipping Insurance:** All shipments are fully insured to eliminate logistics risks.

4. Compliance & Certification

Strict Standards, Total Compliance

Quality Certification: Our manufacturing process is **ISO 9001 certified**, and our products comply with international standards such as **CE and RoHS**.

Export Compliance: "Committed to environmental responsibility, all our products comply with **RoHS 2.0 and REACH** standards, ensuring safety and global compliance."

Explore Series

Model	Repeatability	Max Load (kg)	Travel (mm)	Max Speed (mm/s)
VL-PZ-70VAC	+/- 500 nm	10.0	70	100
VL-PZ-18NM	+/- 500 nm	1.0	18	100

 Get in touch with our team to explore configurations, request a quote, or learn more about customized solutions tailored to your needs.

Let us help you move science forward—faster and smarter.

[Get a Quote](#)



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