

Optical Mounts

VL-Electric Mirror Mount

Intelligent Beam Alignment Solution

- High-res stepper + precision screw: $<0.002^\circ$ angular resolution for accurate optimal light capture.
- Vibration-free; ideal for remote operation in enclosed, vacuum or hazardous optical environments.



One Platform Many Possibilities

Contact Us sales@venuslabtech.com

Get a Quote



Get Expert Advice
+65 8099 5547



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www.venuslabtech.com

Overview

Precision Beam Steering at Your Command

The Venus Apex™ series endows optical frames with a "smart brain". Based on the classic kinematic structure, it integrates precision electric actuators, enabling extremely delicate independent control of θ_x (pitch) and θ_y (yaw). From 1-inch standard lenses to 4-inch large-aperture components, Apex™ can provide smooth, backlash-free automated angle control, making it an ideal upgrade option for building modern automated laboratories.

Applications

- Precise alignment and mode optimization of laser resonators.
- Constructing an automatic beam stabilization system with PSD/quadrant detectors.
- Optical path adjustment in closed chassis, vacuum chambers, or radiation environments.
- Beam scanning and switching in automated optical inspection equipment.

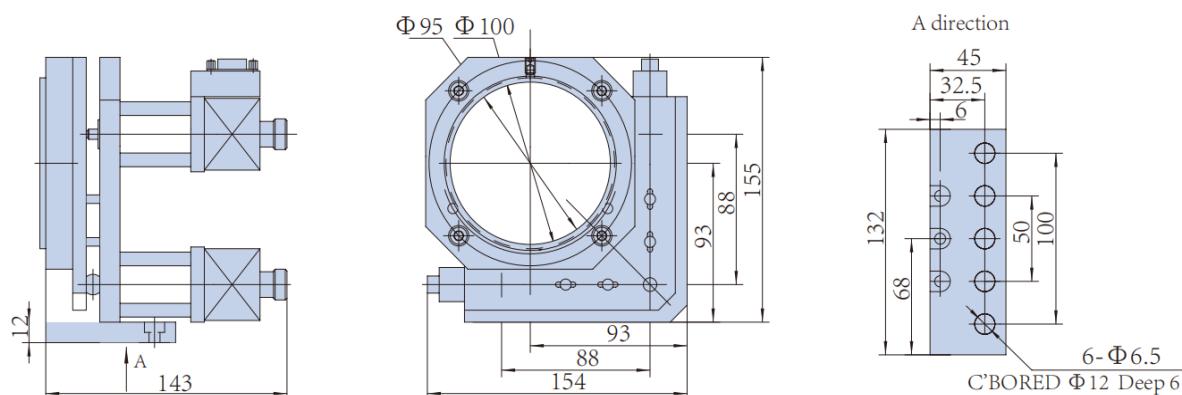
Selection Chart

Venus Apex™ Motorized Mirror Mounts

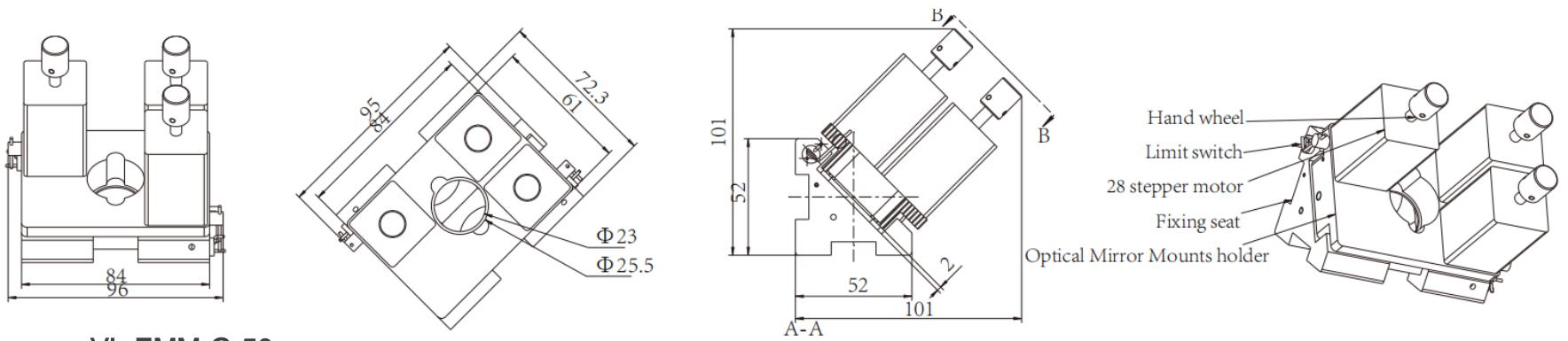
VenusLab SKU	Optic Size	Axis	Tilt Range	Resolution	Feature
VL-EMM-G-25	25.4 mm	x, y	$\pm 2^\circ$	0.002°	High Precision, Compact
VL-EMM-G-50	50 mm	x, y	$\pm 2^\circ$	0.002°	Standard Mid-Size
VL-EMM-G-100-A	100 mm	x, y	$\pm 3^\circ$	0.001°	Large Format, High Load
VL-EMM-G-100-B	100 mm	x, y	$\pm 3^\circ$	0.001°	Structure Variant
VL-EMM-K-20	20 mm	x, y	$\pm 4^\circ$	0.002°	Multi-Size Series
VL-EMM-K-25	25.4 mm	x, y	$\pm 4^\circ$	0.002°	Hero Model, Industry Std
VL-EMM-K-30	30 mm	x, y	$\pm 4^\circ$	0.002°	Multi-Size Series
VL-EMM-K-38	38.1 mm	x, y	$\pm 4^\circ$	0.002°	Multi-Size Series
VL-EMM-K-40	40 mm	x, y	$\pm 4^\circ$	0.002°	Multi-Size Series
VL-EMM-K-50	50.8 mm	x, y	$\pm 4^\circ$	0.002°	Large Aperture

Structural Diagram

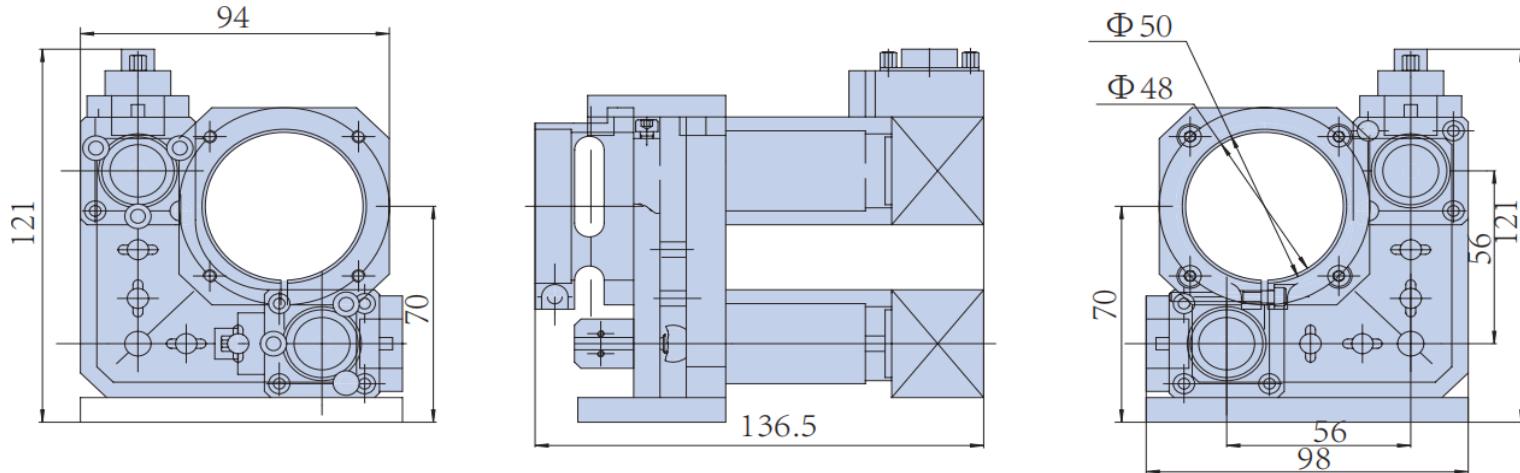
VL-EMM-G-100-A



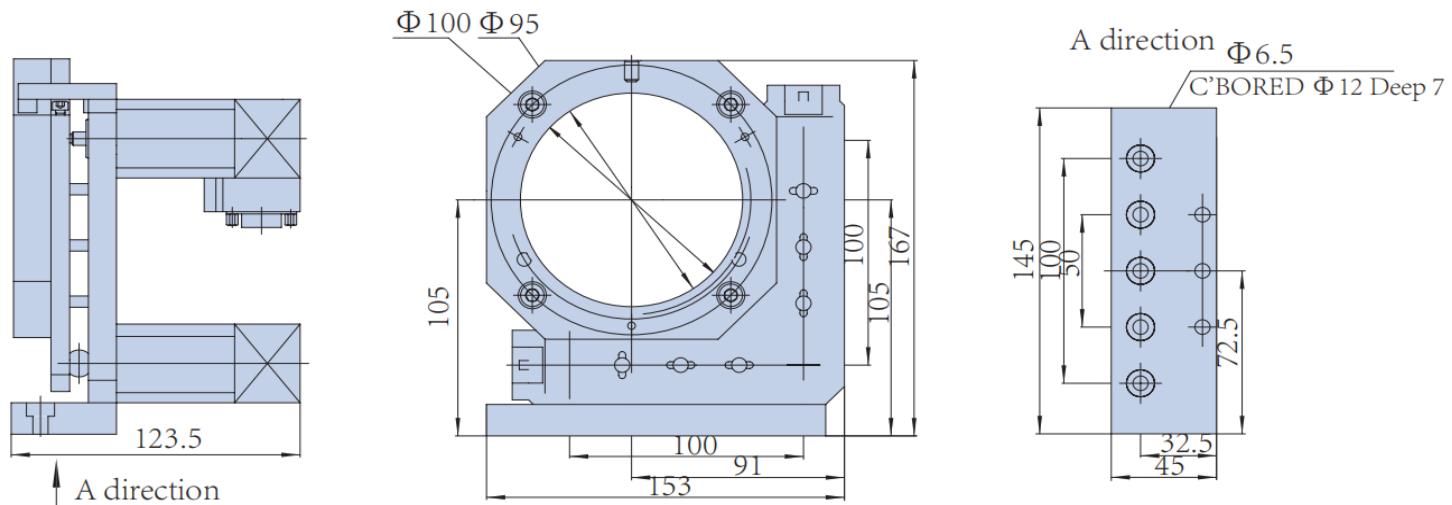
VL-EMM-G-25



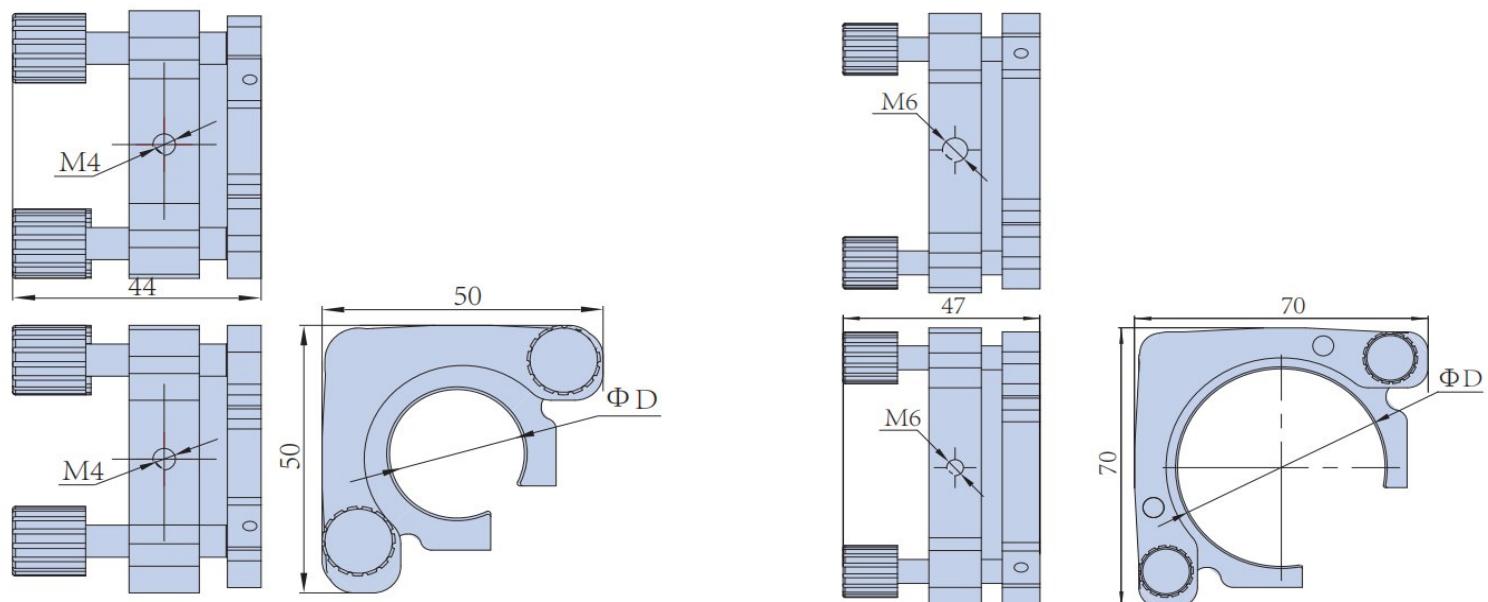
VL-EMM-G-50



VL-EMM-G-100-B



VL-Electric Mirror Mount K (VL-EMM-K-20, VL-EMM-K-25, VL-EMM-K-30, VL-EMM-K-38, VL-EMM-K-40, VL-EMM-K-50)



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/Tilt Range	Tilt Range	Mechanism	Resolution	Optic Size
VL-EMM-G-25	± 2°	Precision Screw	0.002°	Ø 25.4 mm (1")
VL-EMM-G-100-A	±3°	Heavy Duty Drive	0.001°	Ø 100 mm (4")
VL-EMM-K-25	±4°	Kinematic Screw	0.002°	Ø 25.4 mm (1")

 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.

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