VENUSLAB
OPTOELECTRONICS

Cylindrical Lens
VenusLab CM756 Monocular Zoom Lens

Modular professional inspection microscope with high adaptability

- Multiple lighting solutions, suitable for complex samples
- Excellent zoom performance and outstanding optical parameters
- Compact and stable, suitable for industrial scenarios

One Platform Many Possibilities

Contact Us sales@venuslabtech.com

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Get Expert Advice
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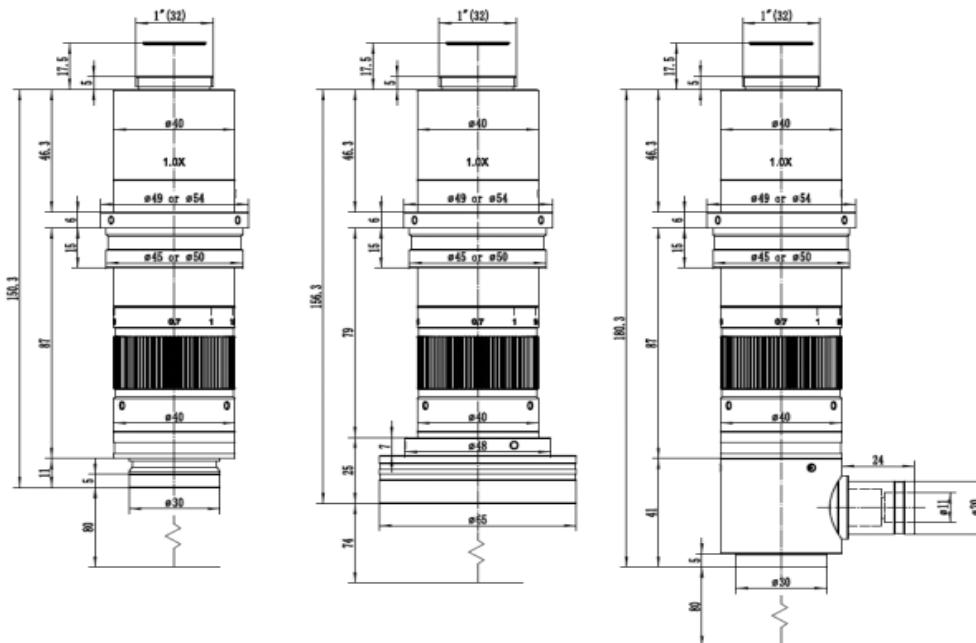
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Overview

Product introduction VenusLab CM756 Monocular Zoom Lens

VenusLab CM756 Monocular Zoom Lens (monocular continuous zoom lens) adheres to the design concept of double-ended parallel optical path modularization. It lays a superior imaging foundation with a high light transmittance optical system and achieves flexible customization by being equipped with a variety of optional modules (auxiliary objectives, adapter lenses, multi-type lighting components, etc.). It is mainly oriented towards machine vision inspection, industrial quality control, scientific research experiment observation, and educational training scenarios. With its compact structure and precise adaptability, it can not only meet the efficient inspection needs of industrial production lines but also adapt to the diverse observation demands in scientific research and teaching, providing professional and flexible optical solutions for different fields.

Features of the VenusLab CM756 Monocular Zoom Lens
• Zoom: 0.7X-5.6X, zoom ratio 8X, parfocal
• Optics: NA 0.018-0.092, resolution 18.6-3.65μm, field of view 0.99-34.28mm, compatible with 2/3 inch sensor
• Structure: Size 150×40mm, working distance 37.5-160mm, compatible with infinite objective lens
• Expansion: Auxiliary objective lens, TV lens with multiple magnification options, various LED light sources and bracket adapters available

Dimensions of VenusLab CM756 Monocular Zoom Lens:

Technical specifications

Product Model	VL ModuZoom 756
Series	MZL-0756
Zoom Range	0.7X-5.6X
Numerical Aperture (NA)	0.018-0.092
Resolution	18.6μm-3.65μm
Working Distance	37.5-160mm (varies with auxiliary objectives)
Imaging Parameters	
Maximum Sensor Size	2/3"
Output Interface	C-Mount mon
Parfocal Characteristic	Fully parfocal during zooming
Compatible Accessories	
Auxiliary Objectives	W050, W075, W100, W150, W200
TV Lenses	TV050, TV075, TV100, TV150, TV200
Light Source Modules	DRL, DRPL, CL, SL, TL

Configuration combination

Recommended configuration combination for VL ModuZoom 756

Configuration Combination	Total Magnification	Field of View Range	Working Distance	NA Value	Resolution	Sensor
VL ModuZoom 756-W050-TV100	0.35X-2.8X	18.2mm-2.3mm	160mm	0.018-0.064	18.6μm-5.2μm	2/3"
VL ModuZoom 756-W075-TV100	0.53X-4.2X	12.1mm-1.5mm	105mm	0.028-0.081	12.1μm-4.4μm	2/3"
VL ModuZoom 756-W100-TV100	0.7X-5.6X	9.1mm-1.1mm	80mm	0.034-0.092	9.1μm-3.65μm	2/3"
VL ModuZoom 756-W150-TV100	1.05X-8.4X	6.1mm-0.76mm	51.5mm	0.051-0.14	6.8μm-2.7μm	2/3"
VL ModuZoom 756-W200-TV100	1.4X-11.2X	4.6mm-0.57mm	37.5mm	0.067-0.18	5.2μm-2.2μm	2/3"

Accessory selection

Selection of auxiliary objective lenses

Product Model	Magnification	Working Distance	Application Suggestion
W050	0.5X	160mm	Large Field of View Observation
W075	0.75X	105mm	Standard Observation
W100	1.0X	80mm	Standard Observation
W150	1.5X	51.5mm	High-magnification Detail Observation
W200	2.0X	37.5mm	High-magnification Detail Observation

TV mirror selection

Product Model	Magnification	Maximum Sensor	Recommended Use
TV050	0.5X	1/3"	Small Sensors
TV075	0.75X	1/1.8"	Large Sensors
TV100	1.0X	2/3"	Standard Sensors
TV150	1.5X	1"	Large Sensors
TV200	2.0X	4/3"	Large Sensors

Light source module

Module	Description
DRL	LED Ring Light
DRPL	LED Polarized Ring Light
CL	Coaxial Illuminator
SL	Point Light Source
TL	Transmitted Illumination Module

Packaging List

The packing information of the VL ModuZoom 756 series MZO is as follows:

The VL ModuZoom 756 Main Body, including Auxiliary Lens Module, Middle Zoom Module, TV Lens, Camera Adapter Tube and Bracket Adapter

The packing information of VL ModuZoom 756DRL is as follows:

Figure 22 VL ModuZoom 756DRL-65/85, including LED Direct Ring Light and Power Adapter

The packing information of VL ModuZoom 756DRPL-65 is as follows:

Figure 23 VL ModuZoom 756DRPL-65, including LED Direct Ring Polarization Light and Power Adapter

The packing information of Coaxial Light Module is as follows:

VL ModuZoom 756 Coaxial Light Module, includingVL ModuZoom 756CL (Coaxial Light Adapter), VL ModuZoom 756SL (LED Spot Light) and Power Adapter

Applications

Electronic Manufacturing

Visual inspection of precision electronic components such as PCB board inspection, chip packaging

inspection, and solder joint quality analysis **Biomedicine**
Applications in life science research such as cell observation, tissue section analysis, and pathological diagnosis

Precision Manufacturing
Dimensional measurement of precision parts, surface defect detection, assembly quality control

Materials Science
Metallographic structure analysis, observation of material surface morphology, coating quality inspection

Serivce & 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	Interface type	Zoom range	Largest sensor	Working distance
VL ModuZoom 756	C-Mount mon	0.7X-5.6X	2/3"	37.5-160mm (depending on the auxiliary objective lens)

📧 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 moves cience forward—faster ands marter.