

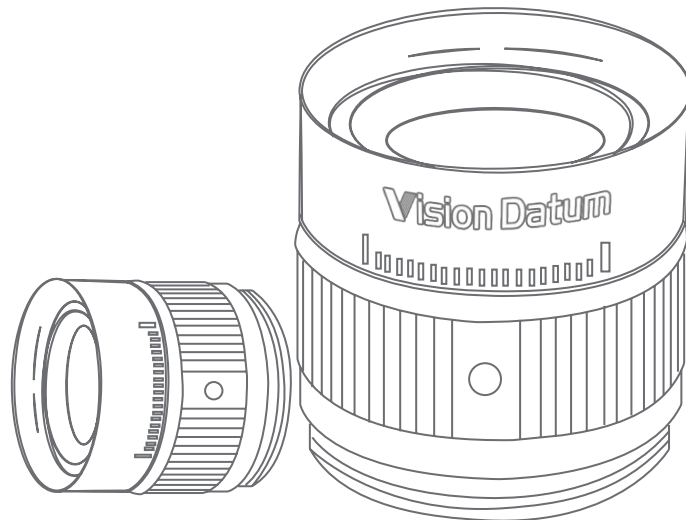


# MACHINE VISION LENSES

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Lenses have the basic function of switching or adjusting the light beam. In machine vision system, lenses are used to shoot the target image on CCD surface. Therefore lens quality will directly affect the overall performance of the visual system. The correct selection and assembly of lenses is essential when designing machine vision system.

Vision Datum lenses products include high-resolution Fixed-focus Lenses, Large-format Industrial Lenses, Line Scan Lenses, UV/SWIR Lenses, Marco Lenses and 360° View Lenses. All these products are greatly used in the fields of intelligent inspection, automotive industry, robotics and printing, logistics management and military.



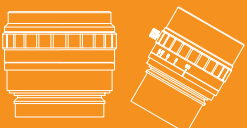
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For more information, please contact our sales representatives.*

# ABOUT US

Hangzhou Vision Datum Technology Co., Ltd. was established in 2008, dedicated to professional machine vision and image technology. As leading manufacturer and provider of machine vision products in China, the major products include industrial camera, scientific standard camera, high definition frame grabber card, industrial FA lens, telecentric lens, machine vision lights and image processing software. All products comply with international quality standards and we have more than 20 years industry experience in the fields of machine vision image acquisition and processing, optical imaging and thousands of automation practice projects.

With advanced technology and creative power of image acquisition and processing, Vision Datum products have been exported to almost 100 countries and regions, and in thousands of projects have won countless affirmations and reputations. Vision Datum machine vision products are well-known as innovative, flexible, stable and easy to use, enabling reliable inspection in many applications.

This is Vision Datum machine vision lenses catalogue. Vision Datum industrial lens range from megapixels to 150 million pixels, covering various sensor size, camera interfaces, and waveband ranges. The products include fixed focus, zoom, macro, telecentric lenses and 360-degree lenses, and etc. For more requirements, please contact your sales engineer representative or our technical support team.



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FA FIXED FOCAL LENGTH LENSES

HOT

C-  
MOUNT

# 1/1.8"~4/3" C-MOUNT



## C-MOUNT FIXED FA LENSES

These days, C-Mount lenses are still the most common type in industrial image processing, esp. in factory automation. Mostly they are used with digital cameras like USB, GigE and Smart Cameras.

LEM series is an advanced industrial lens product researched and developed by Vision Datum, which catering to the demands of recent market environment.

The quality of our lenses is guaranteed by refined optical glasses, mature coating process and advanced optical structure.

Developed with high cost-performance ratio, the quality and performance are quite competitive with foreign counterparts.

## PRODUCT FEATURES

1. Suitable for 5 mega up to 10 mega pixels sensors.
2. High resolution at whole range of WD and excellent brightness.
3. Robust design, suitable for most machine vision applications.
4. Professional MTF optimization
5. Lockable focus and iris screws prevent movement during vibrations or shocks.
6. High cost-performance ratio

**NOTE**

**HOT!** : Hot Product

**NEW!** : New Product

**ADV.** : Advantage Product

**OOP** : Out of Production

**1/1.8" C-MOUNT FIXED LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter Size	Mega Pixels (MP)	Type
VT-LEM0420 <b>HOT!</b>	4.0	F2.0	0.1	D:94.0° H:82.9° V:66.5°	<0.5%	-	5	Standard
VT-LEM0620	6.0	F2.0	0.1	D:64.5° H:54.1° V:41.9°	<0.1%	M25.5× 0.5	5	Standard
VT-LEM0820	8.0	F2.0	0.1	D:56.0° H:46.8° V:36.0°	<0.1%	M25.5× 0.5	5	Standard
VT-LEM1220	12.0	F2.0	0.1	D:40.7° H:33.0° V:24.3°	<0.3%	M25.5× 0.5	5	Standard
VT-LEM1620	16.0	F2.0	0.1	D:30.3° H:24.7° V:18.2°	<0.1%	M25.5× 0.5	5	Standard
VT-LEM2520	25.0	F2.0	0.1	D:19.0° H:13.6° V:11.3°	<0.1%	M25.5× 0.5	5	Standard
VT-LEM3520	35.0	F2.0	0.2	D:12.24° H:8.8° V:7.0°	<0.1%	M25.5× 0.5	5	Standard
VT-LEM5028	50.0	F2.8	0.3	D:10.2° H:8.2° V:6.1°	<0.05%	M28.5× 0.5	5	Standard
VT-LEM7528 <b>HOT!</b>	75.0	F2.8	0.5	D:5.84° H:5.4° V:4.04°	<0.05%	M30.5× 0.5	5	Standard
VT-LEM0616MP5	6.0	F1.6	0.1	D:71.7° H:60.1° V:46.6°	<0.54%	M34× 0.5	5	Standard
VT-LEM014141-FE	1.4	F1.41	0.1	D:182° H:182° V:182°	<-1%	-	5	Standard

**2/3" C-MOUNT FIXED LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View -D x H x V (deg.)	TV Distortion (%)	Filter Size	Mega Pixels (MP)	Type
VT-LEM0518MP10 <b>ADV.</b>	5.0	F1.8	0.1	95.45°× 66.85° × 82.7°	<5%	M62× 0.75	10	Standard
VT-LEN2028MP10 <b>ADV.</b>	20.0	F2.8	0.2	28.6°× 23.33° × 82.7°	<-0.60%	-	10	Standard
VT-LEM0814CBMP8	8.0	F1.4	0.1	61.7°× 56.3° × 43.7°	<0.1%	M37× 0.5	8	Standard
VT-LEM1216CBMP8	12.0	F1.6	0.15	46.6°× 39° × 30.3°	<0.8%	M30.5× 0.5	8	Standard
VT-LEM1614CBMP8	16.0	F1.4	0.1	37.3°× 30.3° × 23°	<0.1%	M30.5× 0.5	8	Standard
VT-LEM2514CBMP8	25.0	F1.4	0.1	24.6°× 20° × 15°	<0.2%	M30.5× 0.5	8	Standard
VT-LEM3514CBMP8	35.0	F1.4	0.15	17.3°× 13.9° × 10.4°	<0.8%	M37× 0.5	8	Standard
VT-LEM5014CBMP8	50.0	F1.4	0.3	13.04°× 10.46° × 7.86°	<0.8%	M37× 0.5	8	Standard
VT-LEM10028 <b>ADV.</b>	100.0	F2.8	-	5.6°× 7.5°	<0.1%	M37.5× 0.5	2	Standard

**HOT! 1" C-MOUNT FIXED LENSES(5MP)** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter Size	Mega Pixels (MP)	Type
VT-LEM7528MP5	75	F2.8	0.6	11.4°× 9.2° × 4.8°	<0.07%	M34× 0.5	5	Standard
VT-LEM1214CB-H1	12.5	F1.4	0.1	66.3°× 54.5° × 42.0°	<1.8%	M46× 0.75	5	Standard
VT-LEM1614CB-H1	16	F1.4	0.1	42.4°× 32.4° × 51.6°	<0.1%	M46× 0.75	5	Standard
VT-LEM2514CB-H1	25	F1.4	0.1	28.7°× 22.06° × 34.94°	<0.1%	M40.5× 0.5	5	Standard
VT-LEM3514CB-H1	35	F1.4	0.15	19.28°× 9.8° × 7.4°	<0.1%	M46× 0.75	5	Standard
VT-LEM5014CB-H1	50	F1.4	0.3	17.14°× 14.32° × 23.92°	<0.1%	M46× 0.75	5	Standard
VT-LEM7518CB-H1	75	F1.8	0.8	12.2°× 9.8° × 7.4°	<0.1%	M55× 0.75	5	Standard
VT-LEM0814CE-H1 <b>NEW!</b>	8	F1.4	0.2	88°× 70.5° × 53°	<1.5%	-	5	Standard
VT-LEM1216CE-H1	12	F1.6	0.2	68.8°× 57.1° × 44.1°	<1.5%	M52× 0.75	5	Standard
VT-LEM1616CE-H1	16	F1.6	1.0	54.3°× 44.2° × 33.5°	<1.0%	M37× 0.5	5	Standard
VT-LEM2220CE-H1	22	F2.0	0.4	40.0°× 32.0° × 24.0°	<1.0%	-	5	Standard
VT-LEM2516CE-H1	25	F1.6	1.0	36.2°× 29.0° × 21.8°	<1.0%	M39× 0.5	5	Standard
VT-LEM3514CE-H1	35	F1.4	1.0	25.7°× 20.7° × 15.6°	<1.0%	M39× 0.5	5	Standard

**HOT! 1" C-MOUNT FIXED LENSES(8-10MP)** [Click to view details/drawings](#)

VT-LEN0814MP8-H1 <b>OOP</b>	8	F1.4	0.5	96.0°× 84.0° × 68.0°	<-4.65%	-	8	Standard
VT-IRLEM0821MP8-H1	8	F2.1	-	93.9°× 86.9° × 50.9°	<8.1%	-	8	Standard
VT-LEN1214MP8-H1 <b>OOP</b>	12	F1.4	0.3	68.0°× 56.0° × 43.0°	<4.50%	-	8	Standard
VT-LEN1614MP8-H1 <b>OOP</b>	16	F1.4	0.5	54.0°× 43.0° × 33.0°	<5.90%	M39*0.5	8	Standard
VT-LEN2014MP8-H1 <b>OOP</b>	20	F1.4	0.5	44.3°× 35.7° × 26.8°	<-4.90%	M41*0.5	8	Standard
VT-LEN2514MP8-H1 <b>OOP</b>	25	F1.4	1	36.5°× 29.2° × 21.9°	<-2.90%	M40.5*0.5	8	Standard
VT-LEN3514MP8-H1 <b>OOP</b>	35	F1.4	2	26.2°× 20.9° × 15.6°	<-2.60%	-	8	Standard
VT-LEN5014MP8-H1 <b>OOP</b>	50	F1.4	1.5	18.2°× 14.6° × 10.9°	<-2%	-	8	Standard
VT-LEN7018MP8-H1	70	F1.8	3	12.8°× 10.2° × 7.7°	<0.13%	-	8	Standard
VT-LEM7528MP10-H1	75	F2.8	0.6	10.4° × 7.9° × 13.0°	<0.1%	M37.5*0.5	10	Standard
VT-LEN17044MP10-H1	170	F4.4	5	5.4° × 4.32° × 3.25°	0.27% in Max Circle 16.6 mm	-	10	Standard
VT-IRLEM1214MP12-H1	12	F1.4	0.5m	68.2°× 61.7° × 34.4°	-3.65% (MAX)	-	12	Standard
VT-IRLEM1614MP12-H1	16	F1.4	0.3m	55.6°× 45.3° × 34.3°	-3.95%	-	12	Standard

**1.1" C-MOUNT FIXED LENSES(12MP)** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	Filter Size	TV Distortion (%)	Mega Pixels (MP)	Design Wavelength (nm)	Type
VT-LEN1214MP12-H1.1 <i>OOP</i>	12	F1.4	0.3	74.0°×62.8°×45.1°	M48*0.5	<4.50%	12	420-650	Standard
VT-LEN1228MP12-H1.1	12	F2.8	0.1	66.7°×57°×45°	-	1.50%	12	400-1000	Standard
VT-LEN1614MP12-H1.1 <i>OOP</i>	16	F1.4	0.5	59.2°×49.16°×33.6°	M39*0.5	<5.90%	12	420-650	Standard
VT-LEN1628MP12-H1.1	16	F2.8	0.1	55.6°× 45.8°× 35.3°	M43*0.75	0.15%	12	400-1000	Standard
VT-LEN2014MP12-H1.1 <i>OOP</i>	20	F1.4	0.5	49.06°×42.4°×27.96°	M41*0.5	<-4.90%	12	420-650	Standard
VT-LEN2514MP12-H1.1 <i>OOP</i>	25	F1.4	1	40.03°×33°×22.87°	M40.5*0.5	<-2.90%	12	420-650	Standard
VT-LEN2528MP12-H1.1	25	F2.8	0.1	37.6°×30.4°×23°	M35.5*0.5	0.10%	12	400-1000	Standard
VT-IRLEN2514MP12-H1.1	25	F1.4	1.5	40.8° ×33.4° ×22.7°	-	<-6.2%	12	420-850	Standard
VT-LEN3514MP12-H1.1 <i>OOP</i>	35	F1.4	2	28.9°×23.65°×16.3°	-	<-2.60%	12	420-650	Standard
VT-LEN3528MP12-H1.1	35	F2.8	0.2	28.3°×22.6°×17°	M35.5*0.5	0.02%	12	400-1000	Standard
VT-IRLEM3514MP12-H1.1	35	F1.4	3	29.5°x 23.7°x 17.3°	-	-	12	-	Standard
VT-LEN5014MP12-H1.1 <i>OOP</i>	50	F1.4	1.5	20.5°×16.5°×11.8°	-	<-2.35%	12	420-650	Standard
VT-LEN5028MP12-H1.1	50	F2.8	0.3	19.9°×15.9°×11.9°	M35.5*0.5	0.04%	12	400-1000	Standard
VT-IRLEN5015MP12-H1.1	50	F1.5	1	19.1° ×13.6° ×13.3°	-	<-2.13%	12	420-850	Standard
VT-IR-LEN2514MP12-H1.1	25	F1.4	1.5	40.8°×33.4°×22.7°	-	<-6.2%	12	420-850	Standard
VT-IR-LEN5014MP12-H1.1	50	F1.4	1	19.1°×13.6°×13.3°	-	<-2.13%	12	420-850	Standard
VT-LEM7526MP12-H1.1	75	F2.6	0.3	7.53°×6.05°×4.65°	M34*0.5	<-0.35%	12	400-700	Standard

**1.1" C-MOUNT FIXED LENSES(20-25MP)** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	Filter Size	TV Distortion (%)	Mega Pixels (MP)	Design Wavelength (nm)	Type
VT-LEM0618MP20-H1.1 <i>HOT!</i>	6	F1.8	0.1	118.2°× 104.91°× 86.2°	-	2.3%	20	400-1000	Standard
VT-LEM0814MP20-H1.1 <i>HOT!</i>	8	F1.4	0.1	98.4°× 84.8°× 68°	M58*0.75	5.3%	20	400-1000	Standard
VT-LEN1228MP20-H1.1	12	F2.8	0.1	66.9°×56°×43.3°	M44.5*0.75	<-1.05%	20	420-850	Standard
VT-LEM1228CBMP20-H1.1	12	F2.8	0.1	57°×45°×66.7°	-	<1.50%	20	420-1150	Standard
VT-LEN1628MP20-H1.1	16	F2.8	0.15	56.3°×47.7°×33.7°	-	>-1%	20	420-850	Standard
VT-LEM1628CBMP20-H1.1	16	F2.8	0.1	46.3°×36°× 55.4°	M35.5*0.5	<0.50%	20	420-1150	Standard
VT-LEN2528MP20-H1.1	25	F2.8	0.1	32.7°×26.4°×19.9°	M37*0.5	<0.50%	20	420-850	Standard
VT-LEM2528CBMP20-H1.1	25	F2.8	0.1	30.4°×23°×37.6°	M35.5*0.5	<0.10%	20	420-1150	Standard
VT-LEN3528MP20-H1.1	35	F2.8	0.2	23.33°×19.33°×13.32°	-	<0.30%	20	420-850	Standard
VT-LEM3528CBMP20-H1.1	35	F2.8	0.2	22.6°×17°×28.3°	M35.5*0.5	<0.02%	20	420-1150	Standard
VT-LEN5028MP20-H1.1	50	F2.8	0.25	18.6°×15°×11.2°	M37*0.5	<0.05%	20	420-850	Standard
VT-LEM5028CBMP20-H1.1	50	F2.8	0.3	15.9°×11.9°×19.9°	M35.5*0.5	<0.04%	20	420-1150	Standard
VT-LEN0828MP25-H1.1 <i>HOT!</i>	8	F2.8	0.1	82.8°×65.8°	-	<3.0%	25	-	Standard

**NEW! 1.2" C-MOUNT FIXED LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	Filter Size	TV Distortion (%)	Mega Pixels (MP)	Design Wavelength (nm)	Type
VT-LEN1224MP25-H1.2	12	2.4	0.1	76.12°× 62.33°× 55.33°	-	0.39%	25	380-780	Standard
VT-LEN1624MP25-H1.2	16	2.4	0.1	61.36°× 48.83°× 42.86°	M40.5*0.5	0.07%	25	380-780	Standard
VT-LEN2524MP25-H1.2	25	2.4	0.15	41.19°× 31.42°× 27.32°	M37*0.5	-0.04%	25	380-780	Standard
VT-LEN3524MP25-H1.2	35	2.4	0.15	29.33°× 22.51°× 19.53°	M40.5*0.5	0.02%	25	380-780	Standard
VT-LEN5024MP25-H1.2	50	2.4	0.25	20.5°× 15.66°× 13.57°	M40.5*0.5	0.01%	25	380-780	Standard

**NEW! 1.4" C-MOUNT FIXED LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View -H x D x V (deg.)	Filter Size	TV Distortion (%)	Mega Pixels (MP)	Iris	Type
VT-LEN1228MP45-H1.4	12	2.8~16	0.1	76.1° × 86.8° × 55.7°	-	<-0.5%	45	Manual	Standard
VT-LEN1628MP45-H1.4	16	2.8~16	0.15	61.4° ×71.27° ×43.83°	M46*0.75	<0.70%	45	Manual	Standard
VT-LEN2528MP45-H1.4	25	2.8~16	0.15	41.6° × 49.2° × 28.9°	M43*0.5	<0.05%	45	Manual	Standard
VT-LEN3528MP45-H1.4	35	2.8~16	0.15	30.4° ×36.3° × 20.8°	M34*0.5	<-0.01%	45	Manual	Standard
VT-LEN5028MP45-H1.4	50	2.8~16	0.25	21.5° × 25.8° × 14.7°	M35.5*0.5	<-0.03%	45	Manual	Standard

## NOTE

**HOT!** : Hot Product

**NEW!** : New Product

**ADV.** : Advantage Product

### HOT! 4/3" C-MOUNT FIXED LENSES

[Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	Filter Size	Mega Pixels (MP)	Weight (g)	Design Wavelength (nm)	Type
VT-LEM0828CE-H2 <b>NEW!</b>	8	2.8	0.2	108° x96° x80.4°	M86x 1	12	-	420-1100	
VT-LEM08528CD-H2 <b>ADV!</b>	8.5	2.8	0.5	107.38°x 94.89°x 77.93°	M77x 0.5	12	-	420-1100	Standard
VT-LEM1220CD-H2	12	2.0	0.15	89.02°x 75.46°x 61.08°	M77x 0.75	10	447	420-1100	Standard
VT-LEM1620CD-H2	16	2.0	0.1	72.92°x 60.92°x 47.28°	M58X0.75	10	338	420-1100	Standard
VT-LEM2520CD-H2	25	2.0	0.15	49.7°x 40.6°x 31°	M46x 0.75	10	251	420-1100	Standard
VT-LEM3520CD-H2	35	2.0	0.2	36.6°x 29.6°x 22.4°	M40.5x 0.5	10	173	420-1100	Standard
VT-LEM5020CD-H2	50	2.0	0.3	25.9°x 20.9°x 15.7°	M40.5x 0.5	10	170	420-1100	Standard
VT-LEM8520CD-H2 <b>ADV!</b>	85	2.0	1.2	15.4°x 12.1°x 9.3°	M77x 0.75	10	-	420-1100	Standard

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F/T/M72/M58 Mount Lenses

**F/T/M72  
/M58  
MOUNT**



## LARGE FORMAT LENSES

Developed for large format area cameras and line-scan cameras, from 29MP to 150MP, covering variety of interfaces including F mount, T mount, M58 mount and M72 mount.

Vision Datum's large format lenses highlight among its peers, winning customers' favor and praise in tens of thousands projects with good performance.

## APPLICATION

1. Phone screen and glass cover inspections
2. Inspections on LED, LCD and OLED
3. Inspections on AOI, SPI and printing Solar panel inspection

**NOTE**

LSC! : For Line Scan Camera

**5MP Large Format Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Resolution (lp/mm)	WD (mm)	Format (mm)	Aperture (F/#)	Distortion (%)	M.O.D. (m)	Angle of View(D) (deg)	Filter Size	Mount
VT-LHF2428MP5 <b>LSC!</b>	24	30lp/mm	500~∞	43	F2.8~F22	<-4%	0.15m	84°	M52 × 0.75	F
VT-LHT2428MP5 <b>LSC!</b>	24	30lp/mm	500~∞	43	F2.8~F22	<-4%	0.15m	84°	M52 × 0.75	M42× 1(T)
VT-LHF2828MP5 <b>LSC!</b>	28	30lp/mm	300~∞	43	F2.8~F22	<-3%	0.3m	74°	M52 × 0.75	F
VT-LHT2828MP5 <b>LSC!</b>	28	30lp/mm	300~∞	43	F2.8~F22	<-3%	0.3m	74°	M52 × 0.75	M42× 1(T)
VT-LHF3525MP5 <b>LSC!</b>	35	30lp/mm	300~∞	43	F2.5~F22	<-3%	0.3m	52.3°	M52 × 0.75	F
VT-LHT3525MP5 <b>LSC!</b>	35	30lp/mm	300~∞	43	F2.5~F22	<-3%	0.3m	52.3°	M52 × 0.75	M42× 1(T)
VT-LHF5018MP5 <b>LSC!</b>	50	30lp/mm	400~∞	43	F1.8~F22	<-1%	0.4m	45°	M52 × 0.75	F
VT-LHT5018MP5 <b>LSC!</b>	50	30lp/mm	400~∞	43	F1.8~F22	<-1%	0.4m	45°	M52 × 0.75	M42× 1(T)

**29MP Large Format Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Format (mm)	Aperture (F/#)	Mag. Range	Standard Mag.(x)	WD (mm)	TV Distortion (%)	FFL (mm)	Filter Size	Mount
VT-LEMF3528MP29-0.1X	35	Ø45	2.8-16	0.05x-0.25x	0.1x	350.9	< 0.4%	46.5	M58×P0.75	F
VT-LEMF3528MP29-0.03X	35	Ø45.3	2.8-16	0.01x-0.1x	0.03x	1158.7	< 0.5%	46.5	M67×P0.75	F
VT-LEMF3528MP29-0.057X	35	Ø45	2.8-16	0x-0.0435x	0.057x	1200	< 0.4%	46.5	M58×P0.75	F
VT-LEMF4028MP29-0.1X	40	Ø43.2	2.8-22	0.01x-0.25x	0.1x	409	< 0.2%	46.5	M62×P0.75	F
VT-LEMF5028MP29-0.1X	50	Ø43	2.8-22	0.02x-0.23x	0.1x	524.4	0.2%	46.5	M62×P0.75	F
VT-LEMF5028MP29-0.06X	50	Ø43	2.8-22	0.02x-0.1x	0.06x	862.1	0.2%	46.5	M62×P0.75	F
VT-LEMF5028MP29-0.062X	50	Ø44	2.8-22	0.014x-0.24x	0.062x	833.4	< 0.3%	46.5	M62×P0.75	F
VT-LEMF6040MP29-0.167X	60	Ø64	4.0-32	0.04x-0.33x	0.167x	384.9	0.19%	46.5	M65×P0.75	F
VT-LEMF8056MP29-0.3X	80	Ø58	5.6-32	0.2x-0.4x	0.3x	306.2	< 0.01%	46.5	M52×P0.75	F
VT-LEMF9040MP29-0.05X	90	Ø43.2	4.0-16	0.01x-0.1x	0.05x	1985	< 0.01%	46.5	M62×P0.75	F

**65MP Large Format Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Format (mm)	Mag. (x)	WD (mm)	FFL (mm)		Aperture (F/#)	TV Distortion (%)	FOV (D) (deg)	ENP Diameter (mm)	Mount
					V.A	V.B					
VT-LEN58-2540MP65 <b>LSC!</b>	25±5%	Ø46	0-0.2x	100-∞	12	11.48	F4-22	<0.2%	83.8°	Ø47.2	M58 × P0.75
VT-LEN72-2540MP65 <b>LSC!</b>	25±5%	Ø46	0-0.2x	100-∞	12		F4-22	<0.2%	83.8°	Ø47.2	M72 × P0.75
VT-LEN58-3540MP65 <b>LSC!</b>	35±5%	Ø42	0-0.2x	150-∞	12	11.48	F4-22	<0.7%	59°	Ø40	M58 × P0.75
VT-LEN72-3540MP65 <b>LSC!</b>	35±5%	Ø42	0-0.2x	150-∞	12		F4-22	<0.7%	59°	Ø40	M72 × P0.75
VT-LEN58-5036MP65	50±5%	Ø46	0.02-0.5x	80-2500	12	11.48	F3.6-22	<0.2%	43.4°	Ø47.2	M58 × P0.75
VT-LEN72-5036MP65	50±5%	Ø46	0.02-0.5x	80-2500	12		F3.6-22	<0.2%	43.4°	Ø47.2	M72 × P0.75
VT-LEN58-8036MP65	80±5%	Ø46	0.041-0.39x	235-2000	12	11.48	F3.6-22	<0.2%	26.8°	Ø47.2	M58 × P0.75
VT-LEN72-8036MP65	80±5%	Ø46	0.041-0.39x	235-2000	12		F3.6-22	<0.2%	26.8°	Ø47.2	M72 × P0.75

**100MP Large Format Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	F/#	M.O.D. (m)	Format (mm)	WD (mm)	Angle of View (deg.)	Filter Size	TV Distortion (%)	Mega Pixels (MP)	Mount
VT-LEMF3528MP100	35	2.8	0.12	Ø46	-	41.96°× 35.44°× 24.05°	M58×0.75	0.40%	100	F
VT-LEN72-4056MP100	40			Ø67	144 ~ 1043	-	M40.5×0.75	0.55%	100	M72
VT-LEMF5040MP100 <b>LSC!</b>	50	4.0	-	Ø56	150-∞	-	M52×0.75	0.41%	100	F
VT-LEN72-6040MP100	60	4.0	-	Ø60	300 ~ 550	-	M39×0.75	0.14%	100	M72
VT-LEMF8040MP100 <b>LSC!</b>	80	4.0	-	Ø56	235-∞	-	M52×0.75	0.12%	100	F

**150MP Large Format Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	F/#	Mag.	Format (mm)	WD (mm)	Filter Size	Distortion (%)	Mega Pixels (MP)	Mount
VT-LEN72-5545MP150 <b>LSC!</b>	55	4.5	0.01x-0.5x	Ø67	98 ~ ∞	-	0.05%	150	M72
VT-LEN72-8528MP150 <b>LSC!</b>	85	2.8	0.001x-0.2x	Ø62	460 ~ ∞	M77 × P0.75	0.04%	150	M72
VT-LEN72-9040MP150	90	4.0	0.08x-0.14x	Ø67	722 ~ 1229	M58 × P0.75	0.01%	150	M72
VT-LEN72-11635MP150	116	3.5	0.93x-1.07x	Ø66	176 ~ 192	-	0.0005%	150	M72

# LINE SCAN LENSES



## LINE SCAN LENSES

Targeted at the line scan camera in the market, Vision Datum has developed lenses for 8K, 12K and 16K sensors. More than 30 models in this series with magnification varying from 0.0358X-3X, which could be applied in a variety of high resolution applications.

Vision Datum's line scan lenses stand out in their class with low price and good performance.

## APPLICATION

- 1.FPD/ PCB inspection
- 2.Textile Industry Inspection
- 3.Railway Track Inspection, and more automatic optical Inspection and Microdefect Detection

**Compact Line Scan Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Mag. (x)	WD (mm)	Format (mm)	Aperture (F/#)	Distortion (%)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTL-2045-0.03X	20	0.0358x	557.4	Ø30	F4.5	0.20%	M42	619.1	12	4K7µ
VTL-2840-0.1X	29	0.1x	299.7	Ø30	F4.0	0.10%	V (Ø42.5)	368	26	4K7µ
VTL-3545-0.08X	35	0.08x	508.49	Ø30	F4.5	<0.05%	V (Ø38)	574.5	37.42	4K7µ
VTL-4028-0.1X	40	0.1x	429.9	Ø43	F2.8	<0.62%	V (Ø38)	468.67	39.62	4K7µ
VTL-4040-0.05X	40	0.05x	818.8	Ø60	F4.0	<0.2%	M72	943.08	12	4K7µ
VTL-8028-0.177X	80	0.177x	500	Ø30	F2.8	<0.2%	M42	620	12	4K7µ

**5.5K5µ Line Scan Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Mag. (x)	Format (mm)	Aperture (F/#)	Distortion (%)	Min Working Distance (mm)	Best Working Distance (mm)	Mount	Flange back (mm)	Resolution
VTL-5.5K-0.1X-A	50	0.0946x	Ø30	F2.8	-0.61%	574	600-700	M42	12	5.5K5µ
VTL-5.5K-0.1X-B	50	0.0946x	Ø30	F2.8	-0.61%	574	600-700	M42	5.9	5.5K5µ
VTL-5.5K-0.09X-A	50	0.094x	Ø30	F4.0	-0.61%	574	600-700	M42	12	5.5K5µ
VTL-5.5K-0.09X-B	50	0.094x	Ø30	F4.0	-0.61%	574	600-700	M42	5.9	5.5K5µ

**8K7µ Line Scan Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Mag. (x)	WD (mm)	Format (mm)	Aperture (F/#)	Distortion (%)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTL-4040-0.05X	40	0.05x	818.8	Ø60	F4.0	<0.2%	M72	943.08	12	8K7µ
VTL-4540-0.2X	45	0.2x	223.5	Ø62	F4.0-16	<0.5%	M72	355.39	12	8K7µ
VTL-6040-0.167X	60	0.167x	404.4	Ø64	F4.0	0.19%	V (Ø38)	496.32	63.31	8K7µ
VTL-8056-0.146X	80	0.146x	591.1	Ø62	F5.6	0.05%	V (Ø38)	702.5	81.54	8K7µ
VTL-8056-0.21X	80	0.21x	418.85	Ø62	F5.6	0.05%	V (Ø38)	533.67	85.54	8K7µ
VTL-8056-0.3X	80	0.3x	320.26	Ø64	F5.6	<0.01%	V (Ø38)	451.78	102.92	8K7µ
VTL-10045-0.2X	100	0.2x	654.8	Ø66	F4.5	0.005%	V (Ø64)	827.8	123.5	8K7µ

**12K5µ Line Scan Lenses** [Click to view details/drawings](#)

Part name	EFL (mm)	Mag. (x)	WD (mm)	Format (mm)	Aperture (F/#)	Distortion (%)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTL-12K-0.2X	116	0.2x	652.4	Ø62	F4.5	<0.01%	V (Ø56)	824.9	122.8	12K5µ
VTL-12K-0.33X	116	0.33x	415.1	Ø62	F4.5	<0.005%	V (Ø56)	599.7	134.9	12K5µ
VTL-12K-0.5X	116	0.5x	291.7	Ø62	F4.5	<0.01%	V (Ø56)	491	149.6	12K5µ
VTL-12K-0.75X	116	0.75x	209.8	Ø62	F4.5	<0.005%	V (Ø56)	429.85	170.3	12K5µ
VTL-12K-0.8X	116	0.806x	203.8	Ø62	F4.5	<0.005%	V (Ø56)	434.66	181.2	12K5µ
VTL-12K-1.0X	116	1.0x	164.2	Ø62	F4.5	<0.05%	V (Ø56)	400.56	186.7	12K5µ
VTL-12K-1.24X	116	1.24x	149.9	Ø62	F4.5	<0.005%	V (Ø56)	434.66	232.2	12K5µ

**16K3.5μ Line Scan Lenses**
[Click to view details/drawings](#)

Part name	EFL (mm)	Mag. (x)	Image Size (Dia. mm)	Aperture (F/#)	Distortion (%)	Working distance (mm)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTL-9040-0.1X	90	0.1x	Ø64	F4.0	0.01%	992.4	V (Ø64)	1123.5	82.7	16K3.5μ
VTL-9540-0.05X	95	0.05x	Ø62	F4.0	0.005%	1980.85	V (Ø56)	2112.94	81.2	16K3.5μ
VTL-16K-0.26X	114	0.26x	Ø66	F4.2	0.01%	497.5	V (Ø49)	627.16	128.3	16K3.5μ
VTL-16K-0.33X	116	0.33x	Ø66	F4.2	<0.001%	412	V (Ø49)	595	137	16K3.5μ
VTL-16K-0.42X	116	0.42x	Ø66	F3.8	0.007%	339.74	V (Ø49)	530.1	144.5	16K3.5μ
VTL-16K-0.5X	116	0.5x	Ø66	F3.8	0.0008%	296.2	V (Ø49)	496	153.3	16K3.5μ
VTL-16K-0.67X	116	0.67x	Ø66	F3.8	0.10%	237.4	V (Ø49)	453.5	170.2	16K3.5μ
VTL-16K-0.7X	116	0.7x	Ø66	F3.8	0.0001%	229.4	V (Ø49)	447.2	174.4	16K3.5μ
VTL-16K-0.75X	100	0.75x	Ø66	F3.8	0.0008%	220.8	V (Ø49)	444.8	180.5	16K3.5μ
VTL-16K-1.0X	116	1.0x	Ø66	F3.5	0.0005%	184.16	V (Ø49)	439.45	209.47	16K3.5μ

**16K5μ Line Scan Lenses**
[Click to view details/drawings](#)

Part name	EFL (mm)	Mag (x)	Image Size (Dia. mm)	Aperture (F/#)	Distortion (%)	Working distance (mm)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTL-16KP-0.26X	120	0.26x	Ø82	F4.0	0.001%	663.4	V (Ø49)	874.3	160.95	16K5μ
VTL-16KP-0.3X	120	0.3x	Ø82	F4.0	0.005%	534.64	V (Ø56)	757.63	169.37	16K5μ
VTL-16KP-0.5X	120	0.5x	Ø82	F4.0	0.002%	390.66	V (Ø56)	636.99	192.71	16K5μ
VTL-16KP0.625X	116	0.625x	Ø82	F3.8	0.17%	245.9	V (Ø49)	458.9	166.9	16K5μ
VTL-16KP-1.3X	116	1.33x	Ø84	F3.8	0.0003%	156.3	V (Ø49)	444.5	243.7	16K5μ
VTL-16KP-1.5X	116	1.5x	Ø84	F3.8	0.08%	143.9	V (Ø49)	453.7	263.8	16K5μ
VTL-16KP-1.7X	116	1.7x	Ø84	F3.8	0.05%	137.8	V (Ø49)	470	286.1	16K5μ
VTL-16KP-2.0X	120	2.0x	Ø82	F4.0	0.002%	127.2	V (Ø49)	496	332.8	16K5μ
VTL-16KP-3.0X	116	3.0x	Ø84	F4.0	0.001%	111.4	V (Ø49)	591.3	433.9	16K5μ
VTL-16KP-3.0X-L	120	3.0x	Ø82	F4.0	0.001%	143.02	V (Ø56)	757.63	568.28	16K5μ

**Coaxial Illumination Line Scan Lenses**
[Click to view details/drawings](#)

Part name	EFL (mm)	Mag (x)	Format (mm)	Aperture (F/#)	Distortion (%)	Relative illumination (%)	Working distance (mm)	Mount	Conjugate distance (mm)	Flange back (mm)	Resolution
VTCL-16KP-1.0X	116	1.0x	Ø82	F3.8	0.0005%	90%	157.39	V (Ø49)	449.53	212.09	16K5μ
VTCL-16KP-1.3X	116	1.3x	Ø82	F4.3	0.0003%	90%	71.54	V (Ø56)	579.35	327.28	16K5μ
VTCL-16KP-1.5X	145	1.5x	Ø82	F4.3	0.08%	90%	27.3	V (Ø56)	592.1	351.95	16K5μ
VTCL-16KP-1.7X	116	1.7x	Ø82	F4.0	0.05%	90%	48.83	V (Ø56)	611.85	381.66	16K5μ
VTCL-16KP-2.0X	120	2.0x	Ø82	F4.0	0.0005%	90%	135.95	V (Ø56)	641.94	424.66	16K5μ
VTCL-16KP-3.0X	120	3.0x	Ø82	F4.0	0.005%	90%	112.6	V (Ø56)	759.5	565.5	16K5μ

# 360° SERIES LENSES

C-  
MOUNT



## 360 SERIES LENSES

Using fewer cameras to photograph each side of an object has become a common demand in the machine vision market, and this demand has become very common in industries such as beverages, medicines, and automobiles.

In traditional machine vision solutions, to capture information on the outer wall of an object, multiple cameras are required to capture one side of the object separately, and then synthesize the images. Using a 360° lens, only one camera can perfectly present the object in one image. Out-of-the-loop testing, multiple cameras and multiple lenses are not required, which effectively simplifies the layout of the vision system and reduces costs.

## APPLICATION

Inspection of medicine bottles, plastic caps, bottle necks, preforms, screws and mechanical parts cylinders, holes, bottles, threaded objects and mechanical parts

**360° Inner Surface Lenses** [Click to view details/drawings](#)

Part name	Sensor Size	Image Size	WD (mm)	F/NO	Diameter (mm)	Height (mm)	Illumination	Mount
VT-360LEN-IN01	1/3"	Φ3.6	12.5-50	14	25	12.4	Embedded Illumination	C-Mount
					65	36.8		
					100	58.2		
VT-360LEN-IN02	2/3"	Φ6.6	2.7	8	5	5	External Illumination	C-Mount
			35		60	61.4		
			70		120	123		

**360° Outer Surface Lenses** [Click to view details/drawings](#)

Part name	Sensor Size	Image Size	WD (mm)	F/NO	Diameter (mm)	Height (mm)	Mount
VT-360LEN-OUT01	1/3"	Φ3.6	46.2	7.5	4.6	16	C-Mount
			34.5	15	10.9	10	
			19	25	19.54	6	
VT-360LEN-OUT02	1/3"	Φ3.6	48	4.5	3.1	16	C-Mount
			34.7	15	12.8	10	
			9.7	30	25.6	6	
VT-360LEN-OUT03	1/1.8"	Φ5.32	45.4	7.5	5.3	16	C-Mount
			33.8	15	11.86	12	
			9	30	25	8	
VT-360LEN-OUT04	1/1.8"	Φ5.32	50	4.5	2.7	16	C-Mount
			33.8	15	11.86	12	
			9	30	25	8	
VT-360LEN-OUT05	2/3"	Φ6.6	48.2	7.5	4	16	C-Mount
			36.8	15	10.6	12	
			14	30	23.4	8	

## 360° MULTI-ANGLE LENSES

### PRODUCT FEATURES

1. Only one camera is needed to detect the side signs of the object
2. Simultaneous imaging of the outer wall and top of the object
3. Ultra-high resolution, can detect small defects



360° MULTI-ANGLE LENSES		<a href="#">Click to view details/drawings</a>			
Model	VT-360LEN-0825-118	VT-360LEN-0825-230	VT-360LEN-0825-H1.1	VT-360LEN-0816-H1.1	
Max Support CCD Size (Φmm)	2/3" (Optimal)	2/3"	1.1" (Optimal)	1.1" (Optimal)	
Optical Specifications	Wavelength Range	400~680 nm	450~650 nm	400~680 nm	400~680 nm
	Working Distance	3~40 mm	20~40 mm	3~40 mm	5~100 mm
	MTF30	150 lp/mm	150 lp/mm	126 lp/mm	120 lp/mm
	Best Aperture (F/#)	2.8~16	8~16	2.8~25	2.8~25
Mechanical Specifications	Max Diameter	140 mm	140 mm	140 mm	140 mm
	Length	230.9 mm	229.3 mm	229.3 mm	299.5 mm
	Mount	C	C	C	C
Max Object Diam. Detected From Side	Object Height 20mm	30mm	30mm	30mm	5 10 25 45 60 75
	Object Height 5mm	60mm	50mm	72mm	85 72 40 10 15 5
Max Object Diam. Detected From Side + Top	Object Height 10mm	30mm	30mm	30mm	



# MACRO LENSES

## C-MOUNT



### MACRO LENSES

Macro lens is a special lens used for macro photography. It is mainly used to shoot very subtle objects, such as flowers/insects and observe workpieces at close range. In order to accurately focus on subjects at very close distances, macro lenses are usually designed to be stretched longer, so that the optical center is as far away from the photosensitive element as possible. At the same time, the design of the lens group must also pay attention to Control of deformation and chromatic aberration at close range.

### APPLICATION

Animal and plant photography, medical photography, remake, and police detection photography

### FEATURES

1. High performance, high resolution
2. Minimal distortion
3. High contrast, good color reproduction

MACRO LENSES				<a href="#">Click to view details/drawings</a>			
Part name	Focal Length	Sensor Size	Optical Magnification	Working Distance	F/NO	Distortion(TV)	Mount
VT-MC1628	16 mm	1.1"	-0.25X ~ -0.03X	52-546 mm	2.8	<0.33%	C-Mount
VT-MC2528	25 mm	1.1"	-0.4 X ~ -0.1X	65-260.4 mm	2.8	<0.07%	C-Mount
VT-MC3528	35 mm	1.1"	-0.7 X ~ -0.25X	59-150 mm	2.8	<0.05%	C-Mount
VT-MC5028	50 mm	1.1"	-0.8 X ~ -0.5X	95.4-132.4 mm	2.8	<0.05%	C-Mount
VT-MC7538	75 mm	1.1"	-0.38 X ~ -0.18X	257-471 mm	3.8	<0.05%	C-Mount
VT-MC7526	75 mm	1.1"	-2.52X ~ -0.059X	0.3m -∞	2.6	<-0.35%	C-Mount

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# SWIR LENSES

C-  
MOUNT



## SWIR LENSES

### FEATURES

1. High performance, high resolution
2. Safe and non-heat design, C-Mount
3. High reliability and high tightness
4. Special infrared materials and coating design to ensure high transmittance in the infrared band

SWIR LENSES				<a href="#">Click to view details/drawings</a>	
Part name	Focal Length	Iris Type (F/#)	Sensor Size	Field of View	Mount
VT-LEM0814SWIR	8.5 mm	F1.4	2/3"	61° /54.8° /42.8°	C-Mount
VT-LEM1214SWIR	12.5 mm	F1.4	2/3"	46.8° /38.2° /29.2°	C-Mount
VT-LEM1614SWIR	16.3 mm	F1.4	2/3"	36.6° /29.6° /22.4°	C-Mount
VT-LEM2514SWIR	25.9 mm	F1.4	2/3"	23.6° /19° /14.4°	C-Mount
VT-LEM3514SWIR	35 mm	F1.4	2/3"	17.44° /13.99° /10.51°	C-Mount
VT-LEM5020SWIR	50 mm	F2.0	2/3"	12.36° /9.92° /7.45°	C-Mount
VT-LEM0618SWIR-H1	6 mm	F1.8-F22	1"	104.6°/95.1°/78.7°	C-Mount
VT-LEM1214SWIR-H1	12.25 mm	F1.4-22	1"	66.83°/54.58°/44.10°	C-Mount
VT-LEM2514SWIR-H1	25 mm	F1.49	1"	36°/27.8°/21°	C-Mount
VT-LEM2518SWIR-H1	25 mm	F1.8	1"	35.49° /28.5° /21.74°	C-Mount
VT-LEM3514SWIR-H1	35 mm	F1.4	1"	31.2° /25.4° /18.7°	C-Mount
VT-LEM5014SWIR-H1	50 mm	F1.4	1"	18.18° /14.48° /10.97°	C-Mount
VT-LEM7525SWIR-H1	75 mm	F2.5	1"	9.08° /7.26° /5.45°	C-Mount
VT-LEM20040SWIR-H1	200 mm	F4-22	1"	4.57°x3.66°x2.75°	C-Mount
VT-LEM30040SWIR-H1	300 mm	F4-22	1"	3.06°x2.44°x1.83°	C-Mount
VT-LEM40056SWIR-H1	400 mm	F5.6	1"	2.29°X1.83°X1.37°	C-Mount
VT-LEM2520SWIR-H2	25 mm	F2.0	28 mm	48.04°/39.19°/29.8°	C-Mount
VT-LEM3514SWIR-H2	35 mm	F1.4	4/3"	31.2°/25.4°/18.7°	M42
VT-LEM5014SWIR-H2	50 mm	F1.4	28.6 mm	23.18°/18.66°/14.05°	M42 x 1
VT-LEM10021SWIR-H2	100 mm	F2.1	25.6mm	14.33°/11.52°/8.72°	M42/C/F-Mount
VT-LEM1616022SWIR-H1	16 - 160mm	F2.2-Close	1"	4.6 X 3.4°. at 160mm	C-Mount
VT-LEM2036060SWIR	20 - 360mm	F6-10	12.3 mm	1.1X 0.84°. at 360mm	C-Mount
VT-LEM2050036SWIR	20- 500mm	F3.6-Close	1/1.8"	0.84 X 0.63°. at 500mm	C-Mount
VT-LEM2075036SWIR	20- 750mm	F3.6-Close	1/1.8"	0.6 X 0.4°. at 750mm	C-Mount
VT-LEM25120048SWIR	25 - 1200mm	F4.8 - 10	12.3 mm	0.34 X 0.2°. at 1200mm	C-Mount

# UV LENSES

# C-MOUNT



## UV LENSES

### FEATURES

1. High performance, optional focal length
2. Effectively filter out ultraviolet rays
3. Improve the effect of clarity and color reproduction

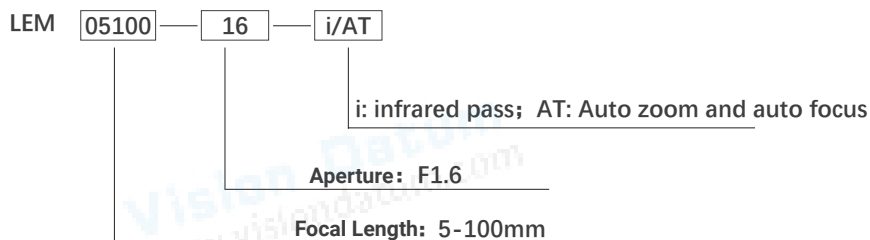
UV LENSES					Click to view details/drawings	
Part name	Focal Length	Iris Type (F/#)	Sensor Size	Back Focus	Mount	Resolution
VT-LEN2528UV	25 mm	2.8	2/3"	12.45 mm	C-Mount	100lp/mm (2MP)
VT-LEN5030UV	50 mm	3.0	2/3"	26.55 mm	C-Mount	100lp/mm (2MP)
VT-LEN7538UV	75 mm	3.8	2/3"	47.32 mm	C-Mount	100lp/mm (2MP)
VT-LENF7838UV-H1	78 mm	3.8	35mm Image Circle	74.6mm	F-Mount	-
VT-LENF8528UV	85 mm	2.8	2/3"	43.34mm	F-Mount	100lp/mm (2MP)

# ZOOM LENSES

# ZOOM LENSES



## NAMING RULES



## 1/3"~2/3" ZOOM LENSES

[Click to view details/drawings](#)

Part name	Sensor Size (inch)	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	Mount	Resolution
VT-LEM0510016i-AI	1/3"	5-100	1.6	0.7	H: 52° ~ 2.8°	CS-Mount	1.3
VT-LEM055016	1/3"	5-50	1.6	0.3	4.2° ~ 53.6°	CS-Mount	-
VT-LEM066016i	1/3"	6-60	1.6	0.5	H: 44° ~ 4.58°	CS-Mount	-
VT-LEM10120016i-AT	1/3"	10-120	1.6	2	H: 27° ~ 2.3°	CS-Mount	1
VT-LEM0281016-AT	1/2.8"	2.8-10	1.6	0.5	D:128° ~ 41°, H:97° ~ 33°, V:70° ~ 24.5°	Ø14	1
VT-LEM0281016i	1/2.8"	2.8-10	1.6	0.1	D:120.6° ~ 40.2°, H:94.2° ~ 32.1°, V:69° ~ 24.4°	CS-Mount	0.3@ 200lp/mm
VT-LEM03310514i	1/2.5"	3.3-10.5	1.4	0.3	H: 90.5° ~ 30.4°	CS-Mount	3
VT-LEM055014i-MP3	1/2.5"	5-50	1.4	0.2	5.36° ~ 51.5°	CS-Mount	3
VT-LEM102221-AT	1/2.5"	10-22	2.1	0.3	D:40 ~ 20°, H:31.2 ~ 16°, V: 23 ~ 12°	Ø14	1
VT-LEM041816-AI	1/1.8"	4-18	1.6	0.3	D:137°, H:110°, V: 82°	C-Mount	3
VT-LEM03818MP12-AT	1/1.7"	3.8-18	1.5	-	W: D:156°, H: 111°, V: 80° T: D:38°, H: 30°, V: 23°	CS-Mount	12
VT-LEM03618MP12	1/1.7"	3.6-18	1.5	-	W: D:156°, H: 111°, V: 80° T: D:38°, H: 30°, V: 23°	CS-Mount	12
VT-LEM0441012-AT	1/1.7"	4.4-10	W:1.2,T:2.9	0.5	D:150 ~ 57.7°, H:104 ~ 45.8°, V: 73.6 ~ 34.2°	Ø19	1
VT-LEM0281216i	1/2"	2.8-12	1.6	0.3	H: 98° ~ 30.5°	C-Mount	3
VT-LEM061216	1/2"	6-12	1.6	0.1	53.9° x 29.6°	C-Mount	-
VT-LEM1060MP2	2/3"	10-60	1.4	-	51° ~ 11°	C-Mount	2
VT-LEM1236MP3-23	2/3"	12-36	2.8	-	W: D: 50.8°, H:41.3°, V:31.2° T: D:17.0°, H: 13.8°, V: 10.4°	C-Mount	3
VT-LEM1236MP10	2/3"	12-36	2.8	-	W: D: 50.8°, H:41.3°, V:31.2° T: D:17.0°, H: 13.8°, V: 10.4°	C-Mount	10
VT-LEM1648MP3	2/3"	16-48	2.0	0.2	W: 30.0° x 22.7°, T:11.2° x 8.4°	C-Mount	3
VT-LEM1632MP5-H1	1"	16-32	1.8	1.5	W: D: 53.26°, H:43.85°, V:33.44° T: D:27.57°, H: 22.43°, V: 17.01°	C-Mount	100@ 1p/mm

## MOTOR FOCUS LENSES



### MOTOR FOCUS LENSES

- 1.Excellent autofocus performance
- 2.Support multiple communication modes:RS232/TTL/pulse
- 3.Autofocus accuracy $\pm 0.001$  degree
- 4.The response time is less than 1ms
- 5.EFL covers 8-50mm

### FEATURES

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- 1.Car exterior blemishes
- 2.Industrial identification recognition

**2/3 " MOTOR FOCUS LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter screw size	Mega Pixels (MP)	Type
VT-LEMAF0814-CBMP10	8	F1.4	0.1	56.3° × 43.7° × 67.1°	<1%	M37×0.5	10	Standard
VT-LEMAF1614-CBMP10	16	F1.4	0.1	30.3° × 23° × 37.3°	<0.1%	M30.5×0.5	10	Standard
VT-LEMAF2514-CBMP10	25	F1.4	0.1	20° × 15° × 24.6°	<0.2%	M30.5×0.5	10	Standard
VT-LEMAF3514-CBMP10	35	F1.4	0.15	13.9° × 10.4° × 17.3°	-0.8%	M35×0.5	10	Standard
VT-LEMAF5014-CBMP10	50	F1.4	0.3	10.46° × 7.86° × 13.04°	-0.8%	M37×0.5	10	Standard

**1.1" MOTOR FOCUS LENSES** [Click to view details/drawings](#)

Part name	Focal Length (mm)	Aperture (F/#)	M.O.D. (m)	Angle of View (deg.)	TV Distortion (%)	Filter screw size	Mega Pixels (MP)	Type
VT-LEMAF1228-MP20-H1.1	12	F2.8	0.1	57° × 45° × 66.7°	<1.5%	-	20	Standard
VT-LEMAF1628-MP20-H1.1	16	F2.8	0.1	46.3° × 36° × 55.4°	<0.5%	M35.5×0.5	20	Standard
VT-LEMAF2528-MP20-H1.1	25	F2.8	0.1	30.4° × 23° × 37.6°	<0.1%	M35.5×0.5	20	Standard
VT-LEMAF3528-MP20-H1.1	35	F2.8	0.2	22.6° × 17° × 28.3°	<0.02%	M35.5×0.5	20	Standard
VT-LEMAF5028-MP20-H1.1	50	F2.8	0.3	15.9° × 11.9° × 19.9°	<0.04%	M35.5×0.5	20	Standard



FIXED LENSES FOR CCTV

# BOARD-LEVEL LENSES



## S-MOUNT BOARD LENSES

With M12X0.5mm thread formally known as S-Mount lenses, it is also called M12 lenses, M12X0.5 lenses, or board camera lenses. It is compact imaging lenses designed for many small cameras. In applications where space is limited, M12 lenses is ideal choice and the best alternative comparing to standard imaging lenses.

Vision Datum M12 S-mount lenses, designed for use in the visible to near-infrared spectra or within harsh environments, are widely used for security, surveillance and industrial inspection. Though compact in size, the multi-element all glass design offers optimum performance and high image quality.

## APPLICATION

Industrial recognition, security monitoring, driving recorder, intelligent AI

# S-Mount Lenses

## FEATURES

1. Megapixel High Resolution Design
2. Optimized for 1/3" and 1/2" Sensors with Small Pixels
3. Multiple f/# Options for Performance
4. High Cost Performance



### S-MOUNT LENSES

Part name	EFL (mm)	Iris Type (F/#)	Angle	Sensor Size	Distortion	Resolution
VT-LEM01920-M12	1.9	2.0	140°	1/3"	10.00%	2
VT-LEM02618-M12-MP5	2.6	1.8	130°	1/2.5"	8.80%	5
VT-LEM02718-M12-MP8	2.7	1.8	120°	1/2.5"	4.00%	8
VT-LEM02825CB-M12-MP16	2.8	2.5	150°	1/2.3"	62.90%	16
VT-LEM02828-M12-MP8	2.8	2.8	110°	1/2.5"	3.00%	8
VT-LEM02924-M12-A	2.9	2.4	106°	1/2.9"	0.50%	2
VT-LEM02924-M12-B	2.9	2.4	105°	1/2.9"	1.00%	2
VT-LEM02924-M12-MP5	2.9	2.4	102°	1/2.5"	1.00%	5
VT-LEM03028-M12	3.0	2.8	95°	1/2.7"	0.50%	3
VT-LEM03026-M12-MP5	3.0	2.6	110°	1/2"	10.00%	5
VT-LEM03124-M12-MP8	3.1	2.4	90°	1/2.5"	1.50%	8
VT-LEM033728i-M12-MP5	3.3	2.8	99°	1/2"	1.00%	5
VT-LEM033728i-M12-MP16	3.3	2.8	99°	1/2.3"	1.00%	16
VT-LEM03630-M12-B	3.6	3	85°	1/2.5"	0.50%	3
VT-LEM03630-M12-A	3.6	3	96°	-	0.35%	-
VT-LEM03620-M12-MP12	3.6	2	90.5°	1/2.7"	1.50%	12
VT-LEM03928-M12	3.9	2.8	75°	1/2.5"	0.50%	3
VT-LEM04218CE-M12-MP3	4.2	1.8	85°	1/2.5"	-	3
VT-LEM04224CE-M12-MP3	4.2	2.4	70°	1/2.7"	0.50%	3
VT-LEM0424-M12	4.2	2.4	77°	1/2.7"	0.10%	-
VT-LEM04218CE-M12	4.2	-	92°	1/3"	10.00%	-
VT-LEM04328-MP8	4.3	2.8	78°	1/2.3"	1.50%	8
VT-LEM0520iM12-MP12	5.0	2	-	1/1.7"	-43.7%(MAX)	12
VT-LEM0535-MP5	5.0	3.5	60°	1/2.5"	0.50%	5
VT-LEM05425i-M12-MP10	5.4	2.5	-	1/2.3"	-2%	10
VT-LEM0628-M12-MP5	6.0	2.8	73.6°	1/1.8"	0.50%	5
VT-LEM0628-M12-MP8	6.0	6	70°	1/1.8"	0.50%	8
VT-LEM07125-M12-MP5	7.1	2.5	50°	1/2.5"	0.50%	5
VT-LEM-07224i-M12-MP10	7.2	2.4	-	1/2.3"	-0.1%	10
VT-LEM0818iM12-MP12	8.0	1.8	-	1/1.7"	-15.68%(MAX)	12
VT-LEM0828-M12	8.0	2.8	45°	1/2.5"	0.50%	3
VT-LEM0828-M12-MP5	8.0	2.8	58.2°	1/1.8"	0.30%	5
VT-LEM0840M12-MP5	8	4	-	2/3"	<-0.57%	5
VT-LEM0823IR850BP-M12	8.16	2.3	-	1/2.5"	<-3.16%	-
VT-LEM1228-M12-MP5	12	2.8	40.5°	1/1.8"	0.20%	5
VT-LEM1220-M12-A	12	2	44°	1/1.8"	5.00%	-
VT-LEM1220-M12-B	12	2	32°	1/3"	5.00%	-
VT-LEM1218-M12-MP5	12	1.8	30°	1/2.5"	1.00%	5
VT-LEM1225M12-MP10	12	2.5	-	2/3"	<-1.20%	10
VT-LEM1256-M12-MP12	12	5.6	-	1/1.7"	-0.514625%	12
VT-LEM1618i-M12	16.3	1.83	17.6°	1/1.8"	<1%	3
VT-LEM1618-M12-MP5	16	1.8	20°	1/2.5"	1.00%	5
VT-LEM1620M12-MP10	16	2	-	2/3"	<-2.0%	10
VT-LEM1628-M12-MP5	16	2.8	31.6°	1/1.8"	0.1%	5
VT-LEM1656-M12-MP12	16	5.6	-	1/1.7"	-0.29%	12
VT-LEM2524-M12-MP5	25	2.4	15°	1/2"	1.00%	5
VT-LEM2528-M12-MP5	25	2.8	19.5°	1/1.8"	0.05%	5
VT-LEM2556-M12-MP12	25	5.6	-	1/1.7"	0.13%	12
VT-LEM3528i-M12-MP3	35	2.8	10°	1/1.7"	<0.1%	1
VT-LEM5028i-M12-MP3	50	2.8	7.6°	1/2"	<-0.02%	1

# M12-Fisheye Lenses

## FEATURES

1. Megapixel High Resolution Design
2. Optimized for 1/3" and 1/2" Sensors with Small Pixels
3. Multiple f/# Options for Performance
4. High Cost Performance
5. Large light flux, high light transmittance



### M12-FISHEYE LENSES

Part name	Focal Length	Iris Type (F/#)	Sensor Size	Image Format	Resolution	With IR or IR Cut
VT-LEM010824FEMP12-M12	1.08mm	2.4	1/3.2"	3.5 μm	12MP	IR Cut
VT-LEM014520FEMP10-i-M12	1.45mm	2	1/2.3"	4.6 μm	10MP	With IR
VT-LEM014520FEMP10-M12	1.45mm	2	1/2.3"	4.6 μm	10MP	IR Cut
VT-LEM01528FEMP10-i-M12	1.5mm	2.8	1/2.3"	4.3 μm	10MP	With IR
VT-LEM015828FEMP10-i-M12	1.58mm	2.8	1/2.5"	4.1 μm	10MP	With IR
VT-LEM019828FEMP10-i-M12	1.98mm	2.8	1/1.8"	5.6 μm	10MP	With IR
VT-LEM011920FE-i-M12	1.19mm	2	1/3.2"	3.2 μm	5MP	With IR
VT-LEM012520FE-i-M12(1/2.8)	1.25mm	2	1/2.8"	3.93 μm	5MP	With IR
VT-LEM012520FE-M12(1/2.8)	1.25mm	2	1/2.8"	3.93 μm	5MP	IR Cut
VT-LEM01423FE-i-M12	1.4mm	2.3	1/4"	4.05 μm	2MP	With IR
VT-LEM01420FE-M12	1.4mm	2	1/2.5"	-	8MP	With IR
VT-LEM015620FE-i-M12	1.56mm	2	1/2.5"	-	-	With IR
VT-LEM01720FE-i-M12	1.7mm	2	1/2.5"	-	5MP	With IR
VT-LEM019622FE-i-M12	1.96mm	2.2	1/2.9"	5.6μm	4MP	With IR
VT-LEM02122FE-i-M12	2.1mm	2.2	1/3"	4.8μm	3MP	With IR
VT-LEM0220FE-i-M12	2mm	2	2/3"	6.6μm	1MP	With IR
VT-LEM0223FE-i-M12	2mm	2.3	2/3"	6.6μm	5MP	With IR
VT-LEM02223FE-i-M12	2.2mm	2.3	1/2.9"	6.2μm	4MP	With IR
VT-LEM02223FE-M12	2.2mm	2.3	1/2.9"	6.2μm	4MP	IR Cut

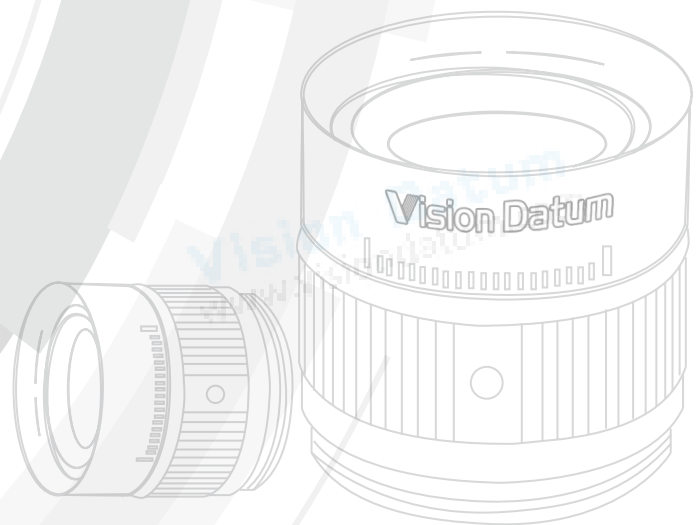
## Adapter

The lenses above can be used with the M12 x 0.5 Adapter for C/CS Mount Cameras

Product Type	Adapter
Material	Aluminum
Height (mm)	5.5
Diameter (mm)	31
Color	Black
Weight	6.4 g



# LENS PARAMETER DIAGRAM



# 1/1.8" C-Mount FIXED LENSES

1. Suitable for 2-3 megapixels sensors
2. Lockable focus and iris screws prevent movement during vibrations or shocks
3. Compact design
4. TV distortion less than 1%



## VT-LEM0420

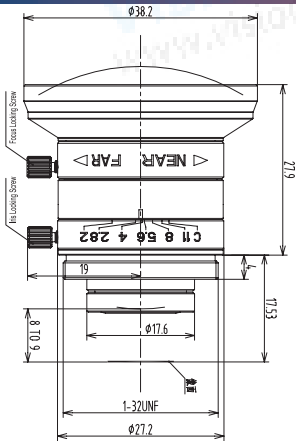


Image Size (inch)	1/1.8"
Focal Length (mm)	4.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	94°×82.9°×66.5°
Distortion(TV)	<0.5%
Flange back	17.526mm
Back focus	8.7mm
Filter screw size	-
Front/Rear Effective Dia.	Front Ø35mm Rear Ø7mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM0620

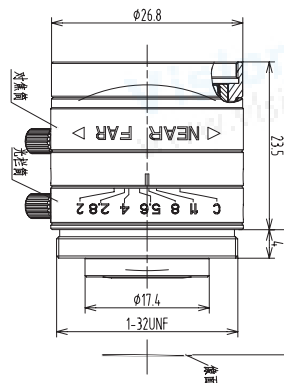


Image Size (inch)	1/1.8"
Focal Length (mm)	6.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	69.8°×59.6°×46°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	11.6mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø18.12mm Rear Ø5.81m
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM0820

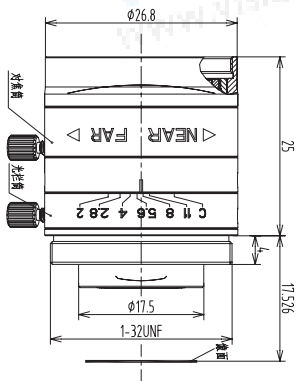


Image Size (inch)	1/1.8"
Focal Length (mm)	8.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	56.0°×46.8°×36.0°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	11.4mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø20.1mm Rear Ø6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM1220

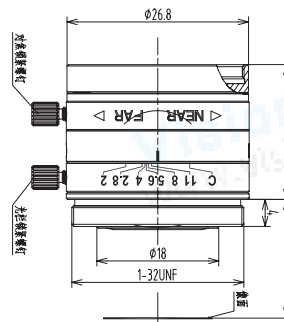


Image Size (inch)	1/1.8"
Focal Length (mm)	12.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	40.7°×33.0°×24.3°
Distortion(TV)	<0.3%
Flange back	17.526mm
Back focus	12.5mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM1620

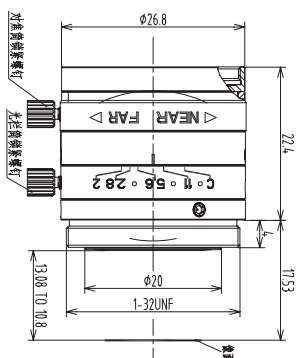


Image Size (inch)	1/1.8"
Focal Length (mm)	16.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	30.3°×24.7°×18.2°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	12.7mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6m
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM2520

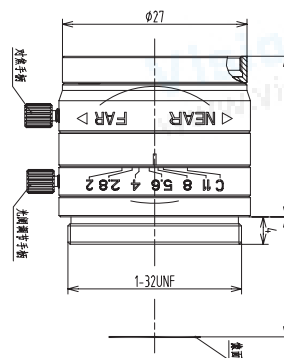


Image Size (inch)	1/1.8"
Focal Length (mm)	25.0
Aperture, F/#	F2~Close
M.O.D.	0.1m
FOV(°)	19.0°×13.6°×11.3°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	13.7mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.2mm Rear Ø6.6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM3520

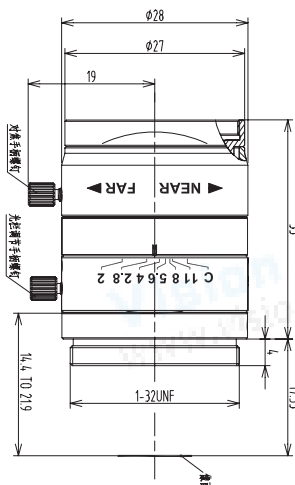


Image Size (inch)	1/1.8"
Focal Length (mm)	35.0
Aperture, F/#	F2~Close
M.O.D.	0.2m
FOV(°)	12.24°×8.8°×7.0°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	19mm
Filter Size	M25.5×P0.5
Front/Rear Effective Dia.	Front Ø15.7mm Rear Ø8.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM5028

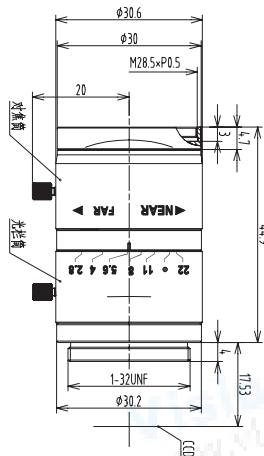


Image Size (inch)	1/1.8"
Focal Length (mm)	50.0
Aperture, F/#	F2.8~Close
M.O.D.	0.3m
FOV(°)	10.2°×8.2°×6.1°
Distortion(TV)	<0.05%
Flange back	17.526mm
Back focus	17.4-27.1mm
Filter Size	M28.5×P0.5
Front/Rear Effective Dia.	Front Ø17.4mm Rear Ø8mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM7528

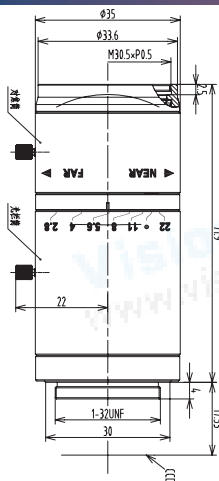


Image Size (inch)	1/1.8"
Focal Length (mm)	75.0
Aperture, F/#	F2.8~Close
M.O.D.	0.5m
FOV(°)	5.84°×5.4°×4.04°
Distortion(TV)	<0.05%
Flange back	17.526mm
Back focus	42.2-55.5mm
Filter Size	M30.5×P0.5
Front/Rear Effective Dia.	Front Ø24mm Rear Ø14.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM0616MP5

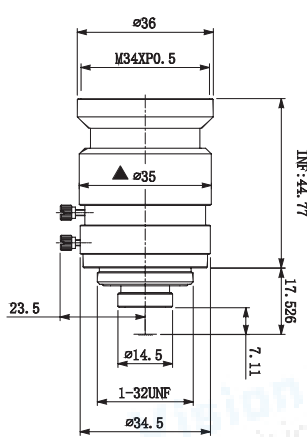


Image Size (inch)	1/1.8"
Focal Length (mm)	6.0
Aperture, F/#	F1.6~Close
M.O.D.	0.1m
FOV(°)	71.7°×60.1°×46.6°
Distortion(TV)	<0.54%
Flange back	17.526mm
Back focus	7.94mm
Filter Size	M34×P0.5
Front/Rear Effective Dia.	Front Ø21.56mm Rear Ø10.1mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM014141-FE

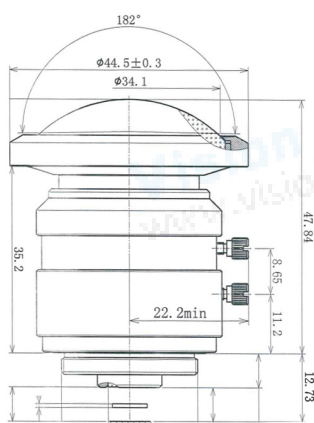


Image Size (inch)	1/2.3"
Focal Length (mm)	1.4
Aperture, F/#	F1.41~Close
M.O.D.	0.1m
FOV(°)	182°×182°×182°
Distortion(TV)	<-1%
Flange back	12.73mm
Back focus	6.43mm
Filter Size	-
Front/Rear Effective Dia.	Front Ø33.8mm Rear Ø6.8mm
Mount	CS-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

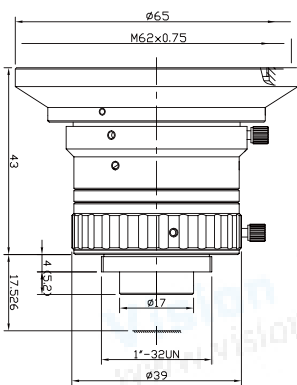
# 2/3" C-Mount FIXED LENSES

**HOT**

1. Mono-focal for best image quality
2. High performance for 8 mega pixels camera
3. Large aperture ratio for low illumination
4. TV Free distortion less than 1%
5. Focus range from 0.1M to Infinity
6. Higher relative illuminate rate at corner

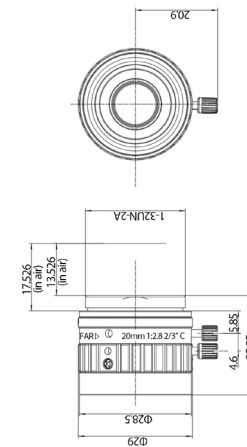


## VT-LEM0518MP10



Resolution	200lp/mm(10MP)
Image Size (inch)	2/3"
Focal Length (mm)	5.0
Aperture, F/#	F1.8~Close
M.O.D.	0.1m
FOV(°)	95.5°×82.7°×66.8°
Distortion(TV)	<5%
Flange back	17.526mm
Back focus	8.54mm
Filter Size	M62 × 0.75
Relative illumination	43%
Mount	C-Mount
Wavelength	400nm~950nm
Weight	150g

## VT-LEN2028MP10



Resolution	10MP
Image Size (inch)	2/3"
Focal Length (mm)	20±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.2m
FOV(°)	28.6°×23.33°×17.35°
Distortion(TV)	<-0.60%
Flange back	17.526mm
Optical back focus	13.45~15.48mm
Mechanical back focus	<13.526mm
Relative illumination	43%
Mount	C-Mount
Wavelength	400nm~950nm
Weight	150g

## VT-LEM0814CBMP8

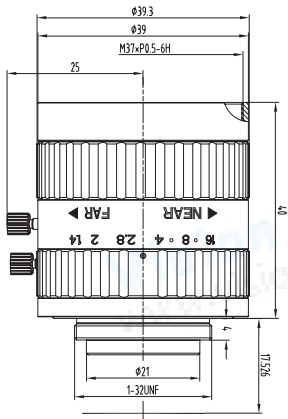


Image Size (inch)	2/3"
Focal Length (mm)	8.0
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	61.7°×56.3°×43.7°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	10.74mm
Filter Size	M37×P0.5
Front/Rear Effective Dia.	Front Ø26.2mm Rear Ø12.7mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM1216CBMP8

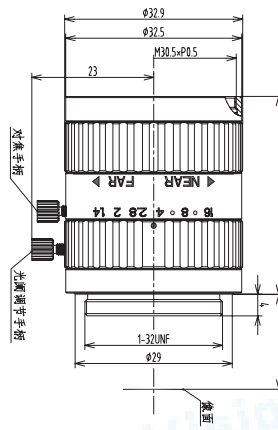


Image Size (inch)	2/3"
Focal Length (mm)	12.0
Aperture, F/#	F1.6~Close
M.O.D.	0.15m
FOV(°)	46.6°×39°×30.3°
Distortion(TV)	<0.8%
Flange back	17.526mm
Back focus	13mm
Filter Size	M30.5×P0.5
Front/Rear Effective Dia.	Front Ø24mm Rear Ø10mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM1614CBMP8

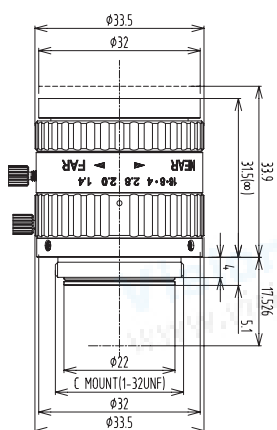


Image Size (inch)	2/3"
Focal Length (mm)	16.0
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	37.3°×30.3°×23°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	12.7mm
Filter Size	M30.5×P0.5
Front/Rear Effective Dia.	Front Ø19mm Rear Ø14.2mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM2514CBMP8

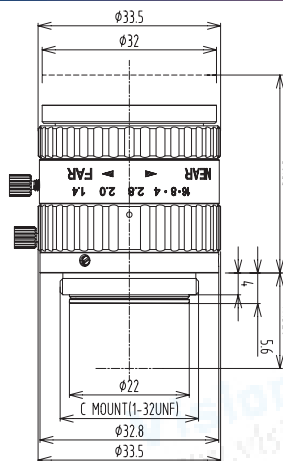


Image Size (inch)	2/3"
Focal Length (mm)	25.0
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	24.6°×20°×15°
Distortion(TV)	<0.2%
Flange back	17.526mm
Back focus	12.25mm
Filter Size	M30.5×P0.5
Front/Rear Effective Dia.	Front Ø22.7mm Rear Ø12.6mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM3514CBMP8

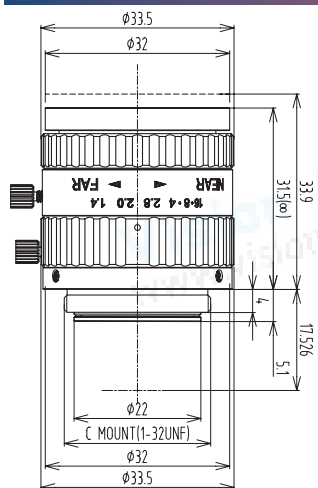


Image Size (inch)	2/3"
Focal Length (mm)	35.0
Aperture, F/#	F1.4~Close
M.O.D.	0.15m
FOV(°)	17.3°×13.9°×10.4°
Distortion(TV)	<0.8%
Flange back	17.526mm
Back focus	12.7mm
Filter Size	M30.5×P0.5
Front/Rear Effective Dia.	Front Ø19mm Rear Ø14.2mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM5014CBMP8

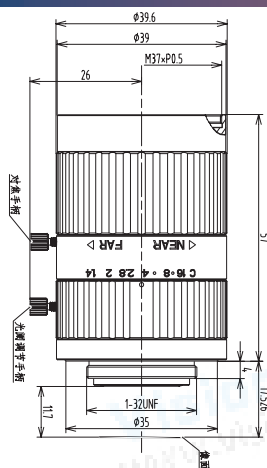


Image Size (inch)	2/3"
Focal Length (mm)	50.0
Aperture, F/#	F1.4~Close
M.O.D.	0.3m
FOV(°)	10.2°×8.2°×6.1°
Distortion(TV)	<0.8%
Flange back	17.526mm
Back focus	12.4mm
Filter Size	M37×P0.5
Front/Rear Effective Dia.	Front Ø24mm Rear Ø11.78mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM10028

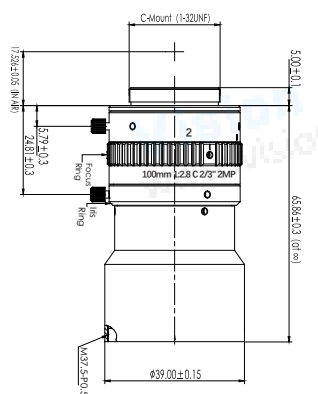


Image Size (inch)	2/3", Support 1"
Focal Length (mm)	100.0
Aperture, F/#	F2.8~16
M.O.D.	-
FOV(°)	5.6°×7.5°
Distortion(TV)	<0.1%
Resolution	2MP
WD	2m ~ ∞
Filter Size	M37.5×0.5
Dimension (mm)	Ø39×65.85
Mount	C-Mount
Iris	M-Iris
Temperature Range	-10~+50°C

Vision Datum  
www.visiondatum.com



# 1" C-Mount FIXED LENSES

1. Multi-layer coating technology to effectively prevent glare, ghosting
2. Suitable for 5MP camera
3. High resolution, high contrast
4. Locking set screws for focus and iris compact design-diameter
5. Low distortion



## VT-LEM7528MP5

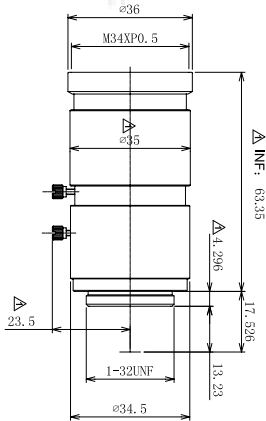


Image Size (inch)	1"
Focal Length (mm)	75.0
Aperture, F/#	F2.8~Close
M.O.D.	0.6m
FOV(°)	11.4°×9.2°×6.9°
Distortion(TV)	0.07%
Flange back	17.526mm
Back focus	17.69mm
Filter Size	M34×0.5
Front/Rear Effective Dia.	Front Ø29.4mm Rear Ø17.0mm
Mount	C-Mount
Relative illumination	>97.6%
TTL	79.38mm

## VT-LEM1214CB-H1

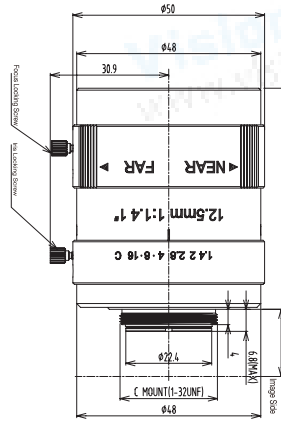


Image Size (inch)	1"
Focal Length (mm)	12.5
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	66.3°×38.5°×42°
Distortion(TV)	1.8%
Flange back	17.526mm
Back focus	15.7mm
Filter Size	M46×0.75
Front/Rear Effective Dia.	Front Ø35mm Rear Ø18.8mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM1614CB-H1

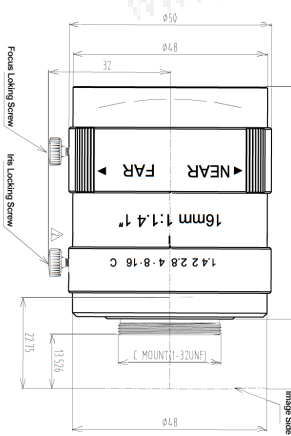


Image Size (inch)	1"
Focal Length (mm)	16
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	42.4°×32.4°×51.6°
Distortion(TV)	0.1%
Flange back	17.526mm
Back focus	22.75mm
Filter Size	M46×0.75
Front/Rear Effective Dia.	Front Ø35.3mm Rear Ø11.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM2514CB-H1

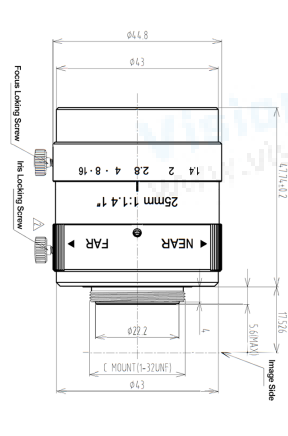


Image Size (inch)	1"
Focal Length (mm)	25
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	28.7°×22.06°×34.94°
Distortion(TV)	0.1%
Flange back	17.526mm
Back focus	19.97mm
Filter Size	M40.5×0.5
Front/Rear Effective Dia.	Front Ø19.8mm Rear Ø13.75mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM3514CB-H1

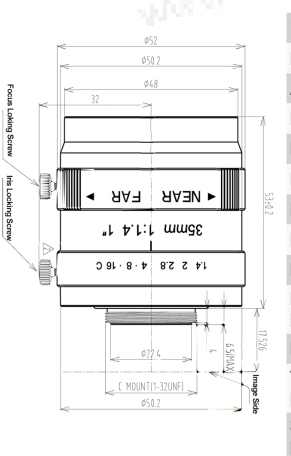


Image Size (inch)	1"
Focal Length (mm)	35
Aperture, F/#	F1.4~Close
M.O.D.	0.1m
FOV(°)	19.28°×14.32°×23.92°
Distortion(TV)	0.1%
Flange back	17.526mm
Back focus	11.2mm
Filter Size	M46×0.75
Front/Rear Effective Dia.	Front Ø27mm Rear Ø17mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

## VT-LEM5014CB-H1

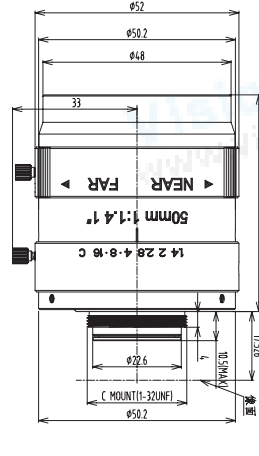


Image Size (inch)	1"
Focal Length (mm)	50.0
Aperture, F/#	F1.4~Close
M.O.D.	0.3m
FOV(°)	17.14°×13.86°×10.4°
Distortion(TV)	0.1%
Flange back	17.526mm
Back focus	10.5mm
Filter Size	M46×0.75
Front/Rear Effective Dia.	Front Ø30.5mm Rear Ø18mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM7518CB-H1

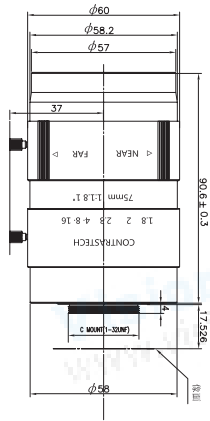


Image Size (inch)	1"
Focal Length (mm)	75.0
Aperture, F/#	F1.8~Close
M.O.D.	0.7m
FOV(°)	12.2°×9.8°×7.4°
Distortion(TV)	0.1%
Flange back	17.526mm
Back focus	16mm
Filter Size	M55×0.75
Front/Rear Effective Dia.	Front Ø34mm Rear Ø16.5mm
Mount	C-Mount
Temperature Range	-10~+50°C
Storage Temperature Range	-20~+60°C

### VT-LEM0814CE-H1

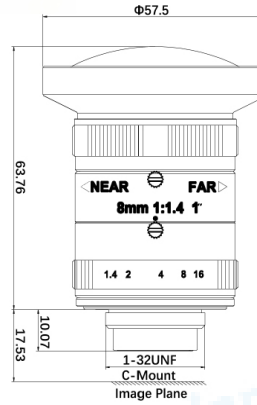


Image Size (inch)	1"
Focal Length (mm)	8.0
Aperture, F/#	F1.4~16
M.O.D.	0.2m
FOV(°)	88°×70.5°×53°
Distortion(TV)	<1.5%
Flange back	-
Back focus	7.79mm
Filter Size	-
Iris	Manual
Mount	C-Mount
Temperature Range	-20°C~+100°C
Weight	220g

### VT-LEM1216CE-H1

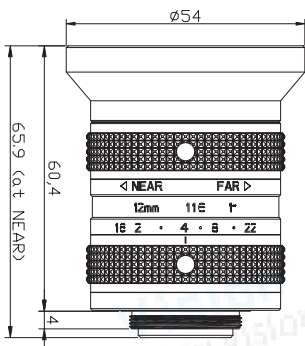


Image Size (inch)	1"
Focal Length (mm)	12.0
Aperture, F/#	F1.6~Close
M.O.D.	1m
FOV(°)	68.8°×57.1°×44.1°
Distortion(TV)	-2.88%@y=8mm
Flange back	17.526mm
Back focus	13.54mm
Filter Size	M52×0.75
Iris	Manual
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	193g

### VT-LEM1616CE-H1

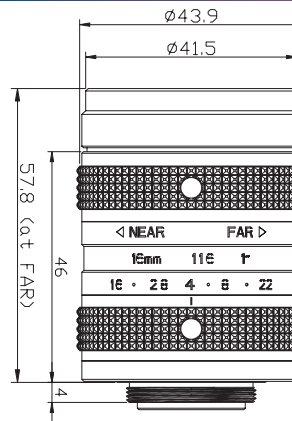


Image Size (inch)	1"
Focal Length (mm)	16.0
Aperture, F/#	F1.6~Close
M.O.D.	1m
FOV(°)	54.3°×44.2°×33.5°
Distortion(TV)	-3.73%@y=8mm
Flange back	17.526mm
Back focus	12.17mm
Filter Size	M37.5×0.5
Iris	Manual
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	202g

### VT-LEM2220CE-H1

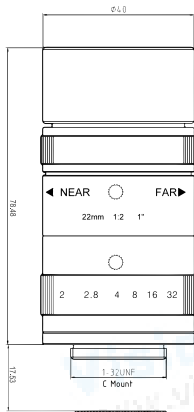


Image Size (inch)	1"
Focal Length (mm)	22.0
Aperture, F/#	F2.0~Close
M.O.D.	0.4m
FOV(°)	40°×32°×24°
Distortion(TV)	<1.0%
Flange back	17.526mm
Back focus	20.3mm
TTL	93.1mm
Iris	Manual
Mount	C-Mount
Temperature Range	-20~+100°C
Weight	220g

### VT-LEM2516CE-H1

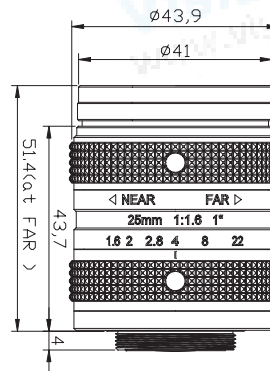


Image Size (inch)	1"
Focal Length (mm)	25.0
Aperture, F/#	F1.6~Close
M.O.D.	1m
FOV(°)	36.2°×29.0°×21.8°
Distortion(TV)	-2.06%@y=8mm
Flange back	17.526mm
Back focus	12.69mm
Filter Size	M39×0.5mm
Iris	Manual
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	157g

### VT-LEM3514CE-H1

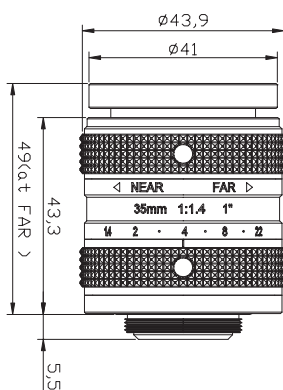


Image Size (inch)	1"
Focal Length (mm)	35.0
Aperture, F/#	F1.4~Close
M.O.D.	1m
FOV(°)	25.7°×20.7°×15.6°
Distortion(TV)	0.27%@y=8.0mm
Flange back	17.526mm
Back focus	12.83mm
Filter Size	M39×0.5mm
Iris	Manual
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	155g

### VT-LEN0814MP8-H1 NEW!

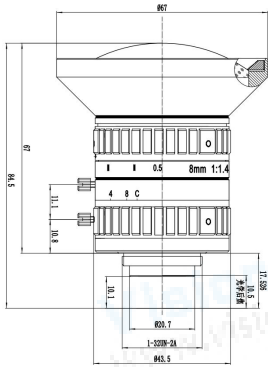


Image Size (inch)	1"
Focal Length (mm)	8±5%
Aperture, F/#	F1.4~Close
M.O.D.	0.5m
FOV(°)	96°×84°×88°
Distortion(TV)	-4.65%(1")
Flange back	17.526mm
BFL	10.5mm
MBF	10.1mm
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C ~ +70°C
Weight	303g

### VT-IRLEM0821MP8-H1

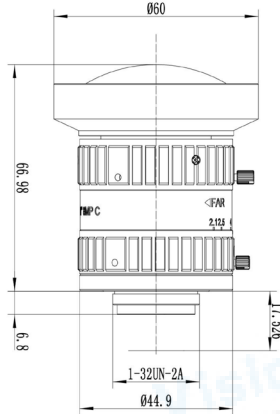


Image Size (inch)	1"
Resolution	8MP
Focal length	8±5%mm
Aperture, F/#	F2.1±10% (IrisManual)
Lens composition	12G
D*H*V	93.9°x 86.9°x 50.9°
Optical Distortion	< -8.1%
CRA	3.26°
Flange BFL	17.526mm (in air)
BFL	11.5mm (in air)
Relative illuminatio	40%@ φ16.1mm
IR Correction	Yes
Mount	C-Mount
Dimension	Φ60×66.98mm
Temperature Range	-30~+70°C

### VT-LEN1214MP8-H1 NEW!

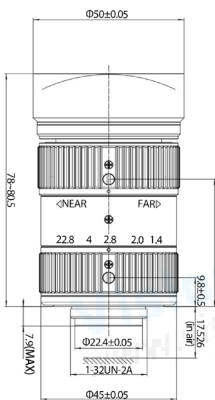


Image Size (inch)	1"
Focal Length (mm)	12±5%
Aperture, F/#	F1.4±10%
M.O.D.	0.3m
FOV(°)	68.0°×56.0°×43.0°
Distortion(TV)	4.50%
Flange back	17.526mm (in air)
BFL	11.56mm (in air)
MBF	9.88mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C ~ +70°C
Weight	318.5g±5g

### VT-LEN1614MP8-H1 NEW!

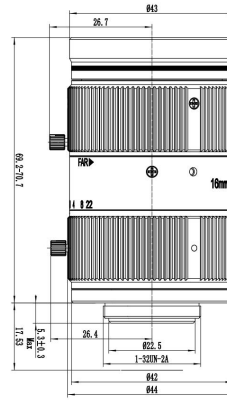


Image Size (inch)	1"
Focal Length (mm)	16±5%
Aperture, F/#	F1.4±10%
M.O.D.	0.5m
FOV(°)	54°×43°×33°
Distortion(TV)	5.9%Φ16mm
Flange back	17.526mm
BFL	13.863mm (in air)
MBF	12.2mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C ~ +70°C
Weight	248±5g

### VT-LEN2014MP8-H1 NEW!

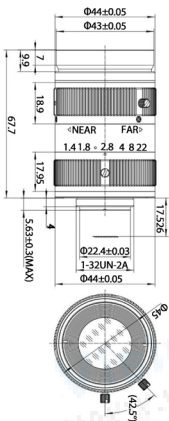


Image Size (inch)	1"
Focal Length (mm)	20±5%
Aperture, F/#	F1.4±5%
M.O.D.	0.5m
FOV(°)	44.3°×35.7°×26.8°
Distortion(TV)	-4.9%Φ16mm
Flange back	17.526mm
BFL	12.474mm (in air)
MBF	13.5mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	212±5g

### VT-LEN2514MP8-H1 NEW!

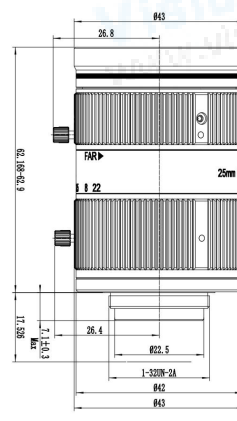


Image Size (inch)	1"
Focal Length (mm)	25±5%
Aperture, F/#	F1.4±10%
M.O.D.	1m
FOV(°)	36.5°×29.2°×21.9°
Distortion(TV)	-2.9%Φ16mm
Flange back	17.526mm
BFL	11.70mm (in air)
MBF	11.10mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	195±5g

### VT-LEN3514MP8-H1 NEW!

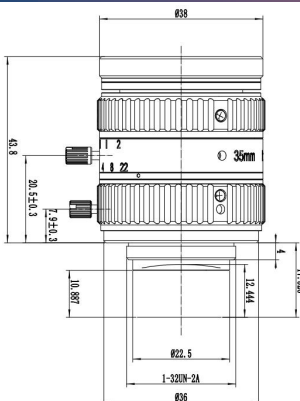


Image Size (inch)	1"
Focal Length (mm)	35±5%
Aperture, F/#	F1.4±10%
M.O.D.	2m
FOV(°)	26.2°×20.9°×15.6°
Distortion(TV)	-2.6%Φ16mm
Flange back	17.526mm
BFL	12.4mm (in air)
MBF	10.89mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	126.5±5g

### VT-LEN5014MP8-H1 NEW!

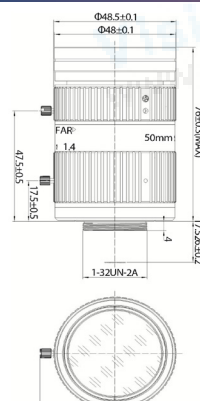


Image Size (inch)	1"
Focal Length (mm)	50±5%
Aperture, F/#	F1.4±10%
M.O.D.	1.5m
FOV(°)	18.2°×14.6°×10.9°
Distortion(TV)	-2% @Φ16mm
Flange back	17.526±0.5mm
BFL	19.6mm (in air)
MBF	13.526mm (in air)
Iris	Manual
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	318.3g±5g



# 1.1" C-Mount FIXED LENSES

**HOT**



1. Mono-focal for best image quality
2. High performance for 10 mega pixels camera
3. Large aperture ratio for low illumination
4. TV Free distortion less than 1%
5. Focus range from 0.1M to Infinity
6. Higher relative illuminate rate at corner

## VT-LEN1214MP12-H1.1 OOP

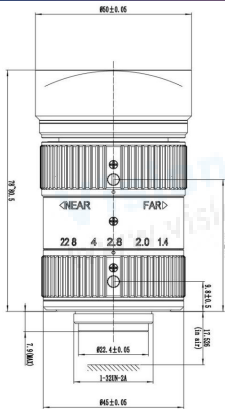


Image Size (inch)	1.1"
Focal Length (mm)	12±5%mm
Aperture, F/#	F1.4±10%
M.O.D.	0.3m
FOV(°)	74.0°×62.8°×45.1°
Distortion(TV)	<4.50%
Flange back	17.526mm(in air)
BFL	11.56mm(in air)
MBF	9.88mm(in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	318.5g±5g

## VT-LEN1228MP12-H1.1

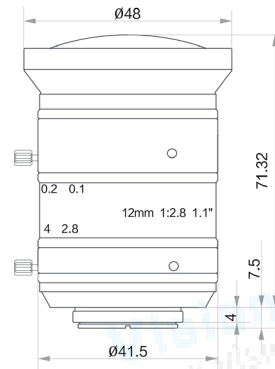


Image Size (inch)	1.1"
Focal Length (mm)	12.0
Aperture, F/#	F2.8-F22
M.O.D.	0.1m
FOV(°)	66.7°×57°×45°
Distortion(TV)	1.50%
Flange back	17.526mm(in air)
Resolution	12MP
Design Wavelength	400-1000nm
Filter Size	-
Dimension	Ø48×71.32 mm
Mount	C-Mount
Weight	245 g
Temperature Range	-10~+50°C

## VT-LEN1614MP12-H1.1 OOP

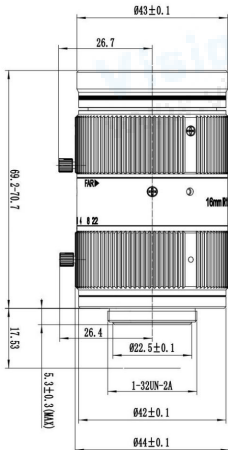


Image Size (inch)	1.1"
Focal Length (mm)	16±5%mm
Aperture, F/#	F1.4±5%
M.O.D.	0.5m
FOV(°)	59.2°×49.16°×33.6°
Distortion(TV)	<5.9%Φ16mm
Flange back	17.526mm(in air)
BFL	13.863mm (in air)
MBF	12.2mm (in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	248±5g

## VT-LEN1628MP12-H1.1

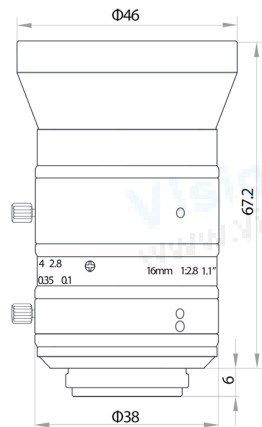


Image Size (inch)	1.1"
Focal Length (mm)	16.0
Aperture, F/#	F2.8-F16
M.O.D.	0.1m
FOV(°)	55.6°×45.8°×35.3°
Distortion(TV)	0.15%
Flange back	17.526mm
Resolution	12MP
Design Wavelength	400-1000nm
Filter Size	M43×0.75
Dimension	Ø45.6×67.2 mm
Mount	C-Mount
Weight	189 g
Temperature Range	-10~+50°C

### VT-LEN2014MP12-H1.1 OOP

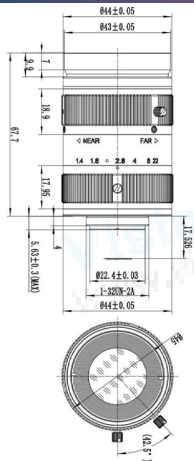


Image Size (inch)	1.1"
Focal Length (mm)	20±5%mm
Aperture, F/#	F1.4±5%
M.O.D.	0.5m
FOV(°)	49.06°×42.4°×27.96°
Distortion(TV)	<4.50%
Flange back	17.526mm (in air)
BFL	12.474mm (in air)
MBF	13.5mm (in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	212±5g

### VT-LEN2514MP12-H1.1 OOP

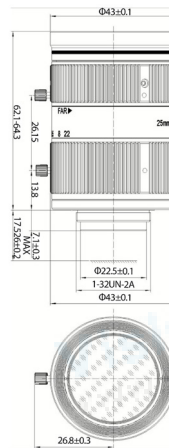


Image Size (inch)	1.1"
Focal Length (mm)	25±5%mm
Aperture, F/#	F1.4±10%
M.O.D.	1m
FOV(°)	40.03°×33°×22.87°
Distortion(TV)	<-2.9%@Φ16mm
Flange back	17.526mm
BFL	11.70mm (in air)
MBF	11.10mm (in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	195±5g

### VT-LEN2528MP12-H1.1

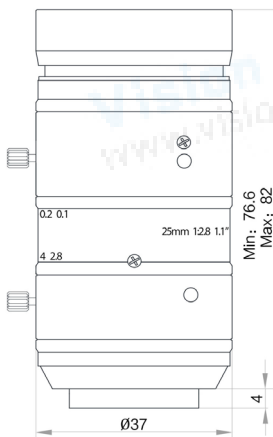


Image Size (inch)	1.1"
Focal Length (mm)	25.0
Aperture, F/#	F2.8-F22
M.O.D.	0.1m
FOV(°)	37.6°×30.4°×23°
Distortion(TV)	0.10%
Flange back	17.526mm
Resolution	12MP
Design Wavelength	400-1000nm
Filter Size	M35.5×0.5
Dimension	Φ37×82 mm
Mount	C-Mount
Weight	180 g
Temperature Range	-10~+50°C

### VT-LEN3514MP12-H1.1 OOP

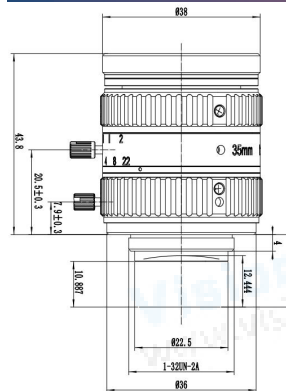


Image Size (inch)	1.1"
Focal Length (mm)	35±5%mm
Aperture, F/#	F1.4±10%
M.O.D.	2m
FOV(°)	28.9°×23.65°×16.3°
Distortion(TV)	<-2.6%@Φ16mm
Flange back	17.526mm
BFL	12.4mm (in air)
MBF	10.89mm (in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	126.5±5g

### VT-LEN3528MP12-H1.1

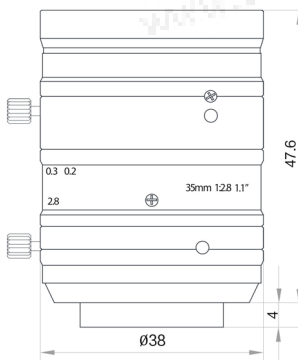


Image Size (inch)	1.1"
Focal Length (mm)	35.0
Aperture, F/#	F2.8-F22
M.O.D.	0.2m
FOV(°)	28.3°×22.6°×17°
Distortion(TV)	0.02%
Flange back	17.526mm
Resolution	12MP
Design Wavelength	400-1000nm
Filter Size	M35.5×0.5
Dimension	Φ38×47.6 mm
Mount	C-Mount
Weight	107 g
Temperature Range	-10~+50°C

### VT-IRLEM3514MP12-H1.1

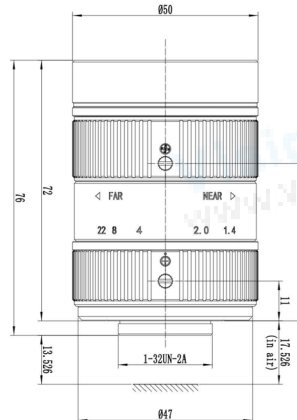


Image Size (inch)	1.1"
Resolution	12MP
Focal length	35±5%mm
Aperture, F/#	F1.4 ±10%(Iris Manual)
D*H*V	29.5°x 23.7°x 17.3°
Optical Distortion	-3.05%
CRA	8.6°
M.O.D.	3m
Flange BFL	17.526mm (in air)
BFL	21.14mm (in air)
MBF	13.526mm (in air)
IR Correction	Yes
Mount	C-Mount
Dimension	Φ50×76mm
Operating temperatur	-30~+70°C

### VT-LEN5014MP12-H1.1 OOP

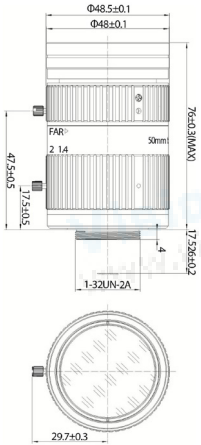


Image Size (inch)	1.1"
Focal Length (mm)	50±5%mm
Aperture, F/#	F1.4±10%
M.O.D.	1.5m
FOV(°)	20.5° × 16.5° × 11.8°
Distortion(TV)	<-2.35% @ $\Phi 17.8$ mm
Flange back	17.526±0.5mm
BFL	19.6mm (in air)
MBF	13.526mm (in air)
Resolution	12 MP
Design Wavelength	420-650nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	318.3g±5g

### VT-LEN5028MP12-H1.1

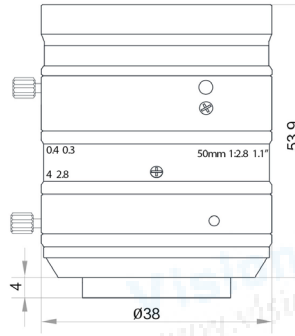


Image Size (inch)	1.1"
Focal Length (mm)	50.0
Aperture, F/#	F2.8-F22
M.O.D.	0.3m
FOV(°)	19.9° × 15.9° × 11.9°
Distortion(TV)	0.04%
Flange back	17.526mm
Resolution	12MP
Design Wavelength	400-1000nm
Filter Size	M35.5×0.5
Dimension	$\Phi 38 \times 53.9$ mm
Mount	C-Mount
Weight	121 g
Temperature Range	-10~+50°C

### VT-IRLEN2514MP12-H1.1

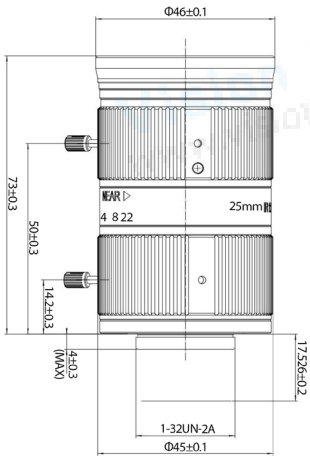


Image Size (inch)	1.1"
Focal Length (mm)	25±5%mm
Aperture, F/#	F1.4±10%
M.O.D.	1.5m
FOV(°)	40.8° × 33.4° × 22.7°
Distortion(TV)	<-6.2% (y=8.8mm)
Flange back	17.526mm (in air)
BFL	18.96mm (in air)
MBF	13.526mm (in air)
Resolution	12 MP
Design Wavelength	420-850nm
IR Correction	YES
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	-

### VT-IRLEN5015MP12-H1.1

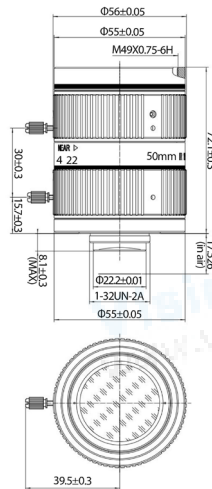


Image Size (inch)	1.1"
Focal Length (mm)	50±5%mm
Aperture, F/#	F1.5±10%
M.O.D.	1m
FOV(°)	19.1° × 13.6° × 13.3°
Distortion(TV)	<-2.13% @ $\phi 17.6$ mm
Flange back	17.526±0.5mm
BFL	11.453mm (in air)
MBF	9.872mm (in air)
Resolution	12 MP
Design Wavelength	420-850nm
IR Correction	YES
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	335±5g

### VT-LEM7526MP12-H1.1

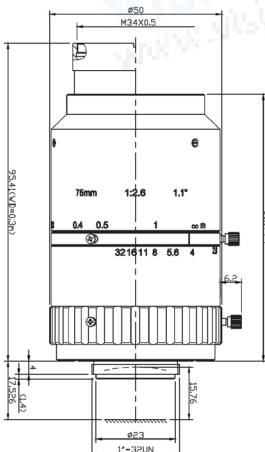


Image Size (inch)	1.1"
Focal Length (mm)	75mm
Aperture, F/#	F2.6~F32
M.O.D.	0.3m
FOV(°)	7.53° × 6.05° × 4.65°
Distortion(TV)	<-0.35%
Back Focus	15.76mm
Design Wavelength	400-700nm
Focus	Manual
Resolution	12 MP
Filter Size	M34 × 0.5
Mount	C-Mount
Temperature Range	-30°C ~ +70°C
Dimension (mm)	$\Phi 50 \times 95.41$ mm
Weight	270g

### VT-LEM0618MP20-H1.1

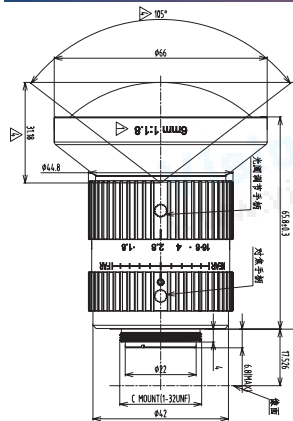


Image Size (inch)	1.1"
Focal Length (mm)	6.0
Aperture, F/#	F1.8~16
M.O.D.	0.1m
FOV(°) H×V×D	104.9° × 86.2° × 118.2°
Distortion(TV)	<2.3%
Flange back	17.526mm
Back focus	13.57mm
Filter Size	-
Front/Rear Effective Dia.	Front $\Phi 58.6$ mm Rear $\Phi 15.05$ mm
Resolution	20MP
Design Wavelength	400-1000nm
Mount	C-Mount
Operating Temperature	-10~+50°C

### VT-LEM0814MP20-H1.1

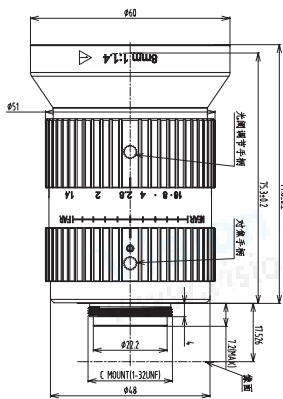


Image Size (inch)	1.1"
Focal Length (mm)	8.0
Aperture, F/#	F1.4~16
M.O.D.	0.1m
FOV(°) H×V×D	84.8°×68°×98.4°
Distortion(TV)	<5.3%
Flange back	17.526mm
Back focus	10.35mm
Filter Size	M58 × P0.75
Front/Rear Effective Dia.	Front Ø40.52mm Rear Ø17.32mm
Resolution	12MP
Design Wavelength	400-1000nm
Mount	C-Mount
Operating Temperature	-10~+50°C

### VT-LEN1228MP20-H1.1

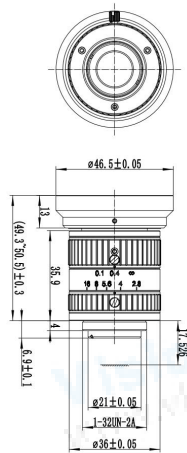


Image Size (inch)	1.1"
Focal Length (mm)	12±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.1m
FOV(°)	66.9°×56°×43.3°
Distortion(TV)	<-1.05%
Flange back	17.526mm
BFL	14.45mm (in air)
MBF	10.63mm (in air)
Resolution	20 MP
Design Wavelength	420-850nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	130±5g

### VT-LEM1228CBMP20-H1.1

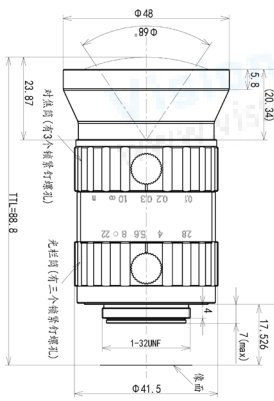


Image Size (inch)	1.1"
Focal Length (mm)	12
Aperture, F/#	F1.8~22
M.O.D.	0.1m
FOV(°) H×V×D	57° × 45° × 66.7°
Distortion(TV)	<1.5%
Flange back	17.526mm
Back focus	10.6mm
Filter Size	-
Front/Rear Effective Dia.	Front Ø42.9mm Rear Ø20.5mm
Resolution	20MP
Design Wavelength	-
Dimension	-
Mount	C-Mount
Temperature Range	-10~+50°C

### VT-LEN1628MP20-H1.1

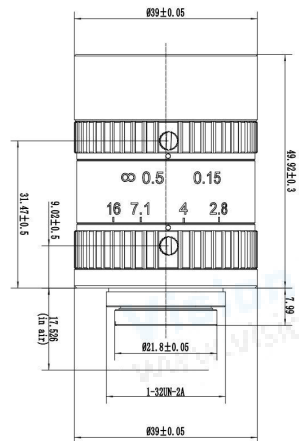


Image Size (inch)	1.1"
Focal Length (mm)	16±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.15m
FOV(°)	56.3°×47.7°×33.7°
Distortion(TV)	>-1% (y=8.8mm)
Flange back	17.526mm (in air)
BFL	9.67mm (in air)
MBF	>9.5mm (in air)
Resolution	20 MP
Design Wavelength	420-850nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	119±5g

### VT-LEM1628CBMP20-H1.1

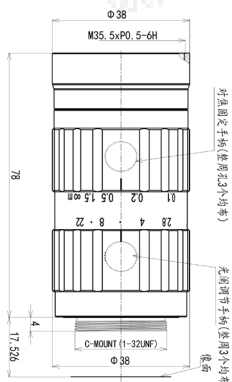


Image Size (inch)	1.1"
Focal Length (mm)	16
Aperture, F/#	F2.8-22
M.O.D.	0.1m
FOV(°) H×V×D	46.3° × 36° × 55.4°
Distortion(TV)	<0.5%
Flange back	17.526mm
Back focus	22.4mm
Filter Size	M35.5×0.5
Front/Rear Effective Dia.	Front Ø26.7mm Rear Ø19.2mm
Resolution	20MP
Design Wavelength	-
Dimension	-
Mount	C-Mount
Temperature Range	-10~+50°C

### VT-LEN2528MP20-H1.1

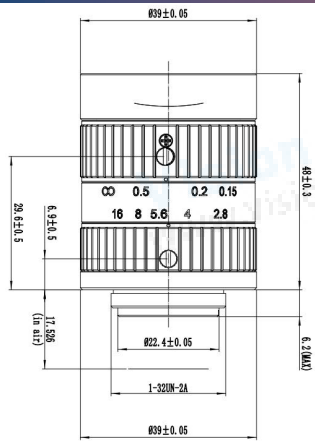


Image Size (inch)	1.1"
Focal Length (mm)	25±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.1m
FOV(°)	32.7°×26.4°×19.9°
Distortion(TV)	<0.50%
Flange back	17.526mm
BFL	12.7mm (in air)
MBF	>11.3mm (in air)
Resolution	20 MP
Design Wavelength	420-850nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	126±5g



### VT-LEM2528CBMP20-H1.1

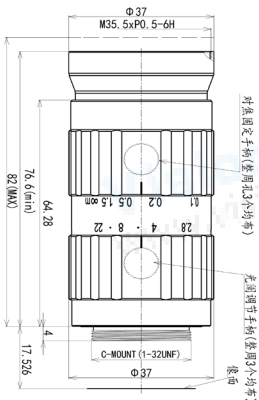


Image Size (inch)	1.1"
Focal Length (mm)	25
Aperture, F/#	F2.8~22
M.O.D.	0.1m
FOV(°) H×V×D	30.4° × 23° × 37.6°
Distortion(TV)	<0.1%
Flange back	17.526mm
Back focus	29.6mm
Filter Size	MP35x0.5
Front/Rear Effective Dia.	Front Ø20mm Rear Ø19.2mm
Resolution	20MP
Design Wavelength	-
Dimension	-
Mount	C-Mount
Temperature Range	-10~+50°C

### VT-LEN3528MP20-H1.1

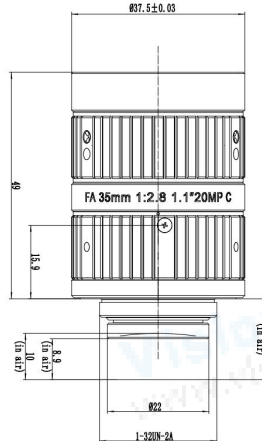


Image Size (inch)	1.1"
Focal Length (mm)	35±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.2m
FOV(°)	23.33°×19.33°×13.32°
Distortion(TV)	<0.30%
Flange back	17.526mm
BFL	10.52mm (in air)
MBF	8.9mm (in air)
Resolution	20 MP
Design Wavelength	420-850nm
Mount	C-Mount
Temperature Range	-30°C~+70°C
Weight	-

### VT-LEM3528CBMP20-H1.1

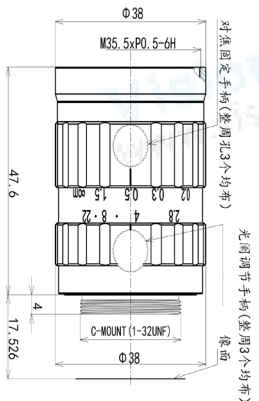


Image Size (inch)	1.1"
Focal Length (mm)	35
Aperture, F/#	F2.8-22
M.O.D.	0.2m
FOV(°) H×V×D	22.6° × 17° × 28.3°
Distortion(TV)	<0.02%
Flange back	17.526mm
Back focus	22.9mm
Filter Size	M35.5×0.5
Front/Rear Effective Dia.	Front Ø23mm Rear Ø19.1mm
Resolution	20MP
Design Wavelength	-
Dimension	-
Mount	C-Mount
Temperature Range	-10~+50°C

### VT-LEN5028MP20-H1.1

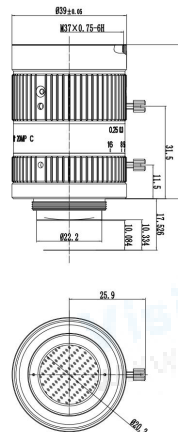


Image Size (inch)	1.1"
Image Size (inch)	50±5%mm
Aperture, F/#	F2.8±10%
M.O.D.	0.25m
FOV(°) H×V×D	18.6°×15°×11.2°
Distortion(TV)	<0.05% @16mm
Flange back	17.526mm
BFL	10.3mm (in air)
MBF	10.08mm (in air)
Resolution	20 MP
Design Wavelength	420-850nm
Mount	C-Mount
Temperature Range	-30°C ~ +70°C
Weight	118±5g

### VT-LEM5028CBMP20-H1.1

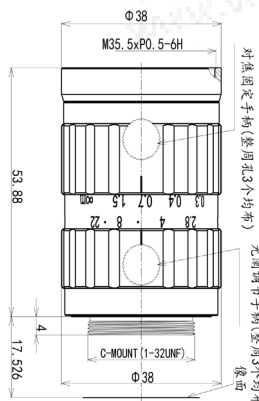


Image Size (inch)	1.1"
Image Size (inch)	50
Aperture, F/#	F2.8-22
M.O.D.	0.3m
FOV(°) H×V×D	15.9° × 11.9° × 19.9°
Distortion(TV)	<0.04%
FOV(°) H×V×D	17.526mm
Back focus	21.1mm
Filter Size	M35.5×0.5
Front/Rear Effective Dia.	Front Ø24mm Rear Ø21.7mm
Resolution	20MP
Design Wavelength	-
Dimension	-
Mount	C-Mount
Temperature Range	-10~+50°C

### VT-LEN0828MP25-H1.1

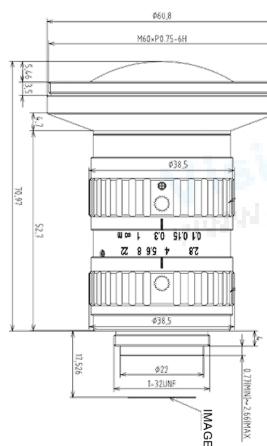


Image Size (inch)	1.1"
Focal Length (mm)	8.0
Aperture, F/#	F2.8~22
M.O.D.	0.1m
Angle FOV	2/3" 55.2° × 47.5° 1" 70.35° × 70.35° 1.1" 82.8° × 65.8°
Distortion(TV)	<3.0%
Flange back	-
Back focus	-
Filter Size	-
Resolution	20MP
Weight	337g
Mount	C-Mount
Temperature Range	-10~+50°C

# 1.2" C-Mount FIXED LENSES **NEW**

1. Ultra-high resolution, high consistency of picture clarity
2. 1.2" large target surface, large aperture, low distortion, high peripheral brightness ratio
3. Achromatic design, better imaging with color camera
4. Excellent high and low temperature stability, suitable for harsh environments
5. Excellent anti-vibration and impact resistance



## VT-LEN1224MP25-H1.2

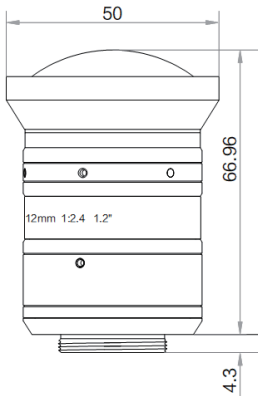


Image Size (inch)	1.2"
Focal Length (mm)	12.0
Aperture, F/#	F2.4-F16
M.O.D.	0.1m
FOV(°)	76.12°×62.33°×55.33°
Distortion(TV)	0.39%
Flange back (mm)	17.526
Resolution	25MP
Design Wavelength	380-780 nm
Filter Size	-
Dimension (mm)	Φ42.5×59.8
Mount	C-Mount
Weight	215 g
Temperature Range	-10~+50°C

## VT-LEN1624MP25-H1.2

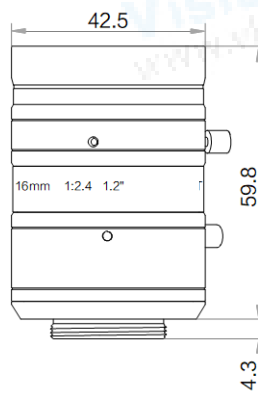


Image Size (inch)	1.2"
Focal Length (mm)	16.0
Aperture, F/#	F2.4-F16
M.O.D.	0.1m
FOV(°)	61.36°×48.83°×42.86°
Distortion(TV)	0.07%
Flange back (mm)	17.526
Resolution	25MP
Design Wavelength	380-780 nm
Filter Size	M40.5×0.5
Dimension (mm)	Φ42.5×59.8
Mount	C-Mount
Weight	186 g
Temperature Range	-10~+50°C

## VT-LEN2524MP25-H1.2

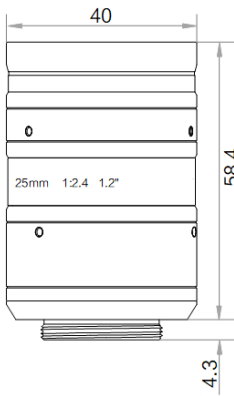


Image Size (inch)	1.2"
Focal Length (mm)	25.0
Aperture, F/#	F2.4-F16
M.O.D.	0.1m
FOV(°)	41.19°×31.42°×27.32°
Distortion(TV)	-0.04%
Flange back (mm)	17.526
Resolution	25MP
Design Wavelength	380-780nm
Filter Size	M37×0.5
Dimension (mm)	Φ40×58.4
Mount	C-Mount
Weight	163 g
Temperature Range	-10~+50°C

## VT-LEN3524MP25-H1.2

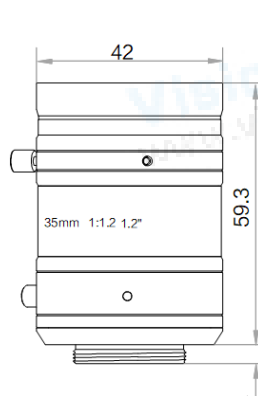


Image Size (inch)	1.2"
Focal Length (mm)	35.0
Aperture, F/#	F2.4-F16
M.O.D.	0.15m
FOV(°)	29.33°×22.51°×19.53°
Distortion(TV)	0.02%
Flange back (mm)	17.526
Resolution	25MP
Design Wavelength	380-780nm
Filter Size	M40.5×0.5
Dimension (mm)	Φ42×59.3
Mount	C-Mount
Weight	174 g
Temperature Range	-10~+50°C

## VT-LEN5024MP25-H1.2

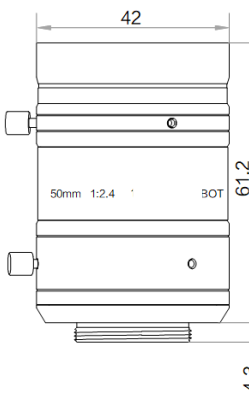


Image Size (inch)	1.2"
Focal Length (mm)	50.0
Aperture, F/#	F2.4-F16
M.O.D.	0.25m
FOV(°)	20.5°×15.66°×13.57°
Distortion(TV)	0.01%
Flange back(mm)	17.526
Resolution	25MP
Design Wavelength	380-780 nm
Filter Size	M40.5×0.5
Dimension (mm)	Φ42×61.2
Mount	C-Mount
Weight	177 g
Temperature Range	-10~+50°C

# 1.4" C-Mount FIXED LENSES

1. Ultra-high resolution, high consistency of picture clarity
2. 1.4" large target surface, large aperture, low distortion, high peripheral brightness ratio
3. Achromatic design, better imaging with color camera
4. Excellent high and low temperature stability, suitable for harsh environments
5. Excellent anti-vibration and impact resistance



## VT-LEN1228MP45-H1.4

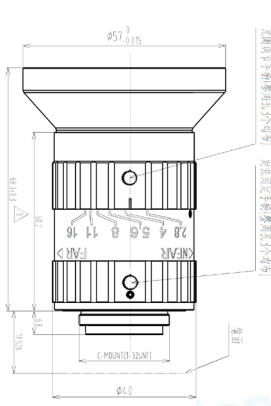


Image Size (inch)	1.4"
Focal Length(mm)	12
Aperture, F/#	2.8~16
M.O.D.	0.1m
FOV(°)	76.1° × 86.8° × 55.7°
Distortion(TV)	<-0.5%
Back Focus	11.7mm
TTL	-
Resolution	45MP
Flange Back	17.526mm(in air)
Mount	C-Mount
Dimension(mm)	Ø42.6×16.2
Lris	Manual
Temperature Range	-20°C ~ +60°C

## VT-LEN1628MP45-H1.4

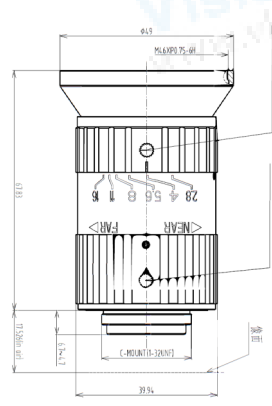


Image Size (inch)	1.4"
Focal Length (mm)	16
Aperture, F/#	2.8~16
M.O.D.	0.15m
FOV(°)	61.4° × 71.27° × 43.83°
Distortion(TV)	<0.70%
Back Focus	11.7mm
TTL	-
Resolution	45MP
Filter Size	M46×0.75
Mount	C-Mount
Dimension(mm)	Ø33×18
Lris	Manual
Temperature Range	-20°C ~ +60°C

## VT-LEN2528MP45-H1.4

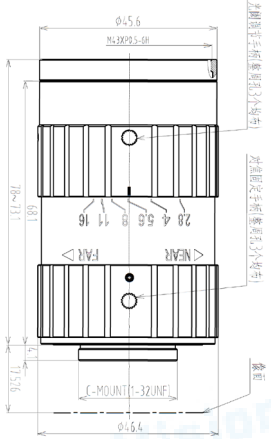


Image Size (inch)	1.4"
Focal Length(mm)	25
Aperture, F/#	2.8~16
M.O.D.	0.15m
FOV(°)	41.6° × 49.2° × 28.9°
Distortion(TV)	<0.05%
Back Focus	17.2mm
TTL	-
Resolution	45MP
Filter Size	M43×0.5
Mount	C-Mount
Dimension(mm)	Ø28.0×16.5
Lris	Manual
Temperature Range	-20°C ~ +60°C

## VT-LEN3528MP45-H1.4

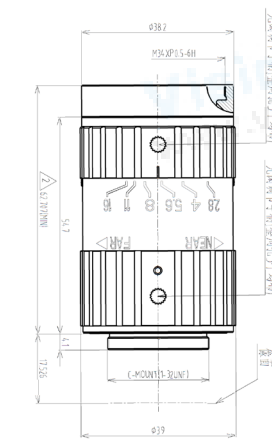


Image Size (inch)	1.4"
Focal Length(mm)	35
Aperture, F/#	2.8~16
M.O.D.	0.15m
FOV(°)	30.4° × 36.3° × 20.8°
Distortion(TV)	<-0.01%
Back Focus	20mm
TTL	-
Resolution	45MP
Filter Size	M34×0.5
Mount	C-Mount
Dimension(mm)	Ø24.2×16.74
Lris	Manual
Temperature Range	-20°C ~ +60°C

## VT-LEN5028MP45-H1.4

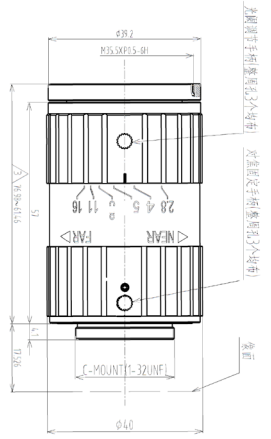


Image Size (inch)	1.4"
Focal Length(mm)	50
Aperture, F/#	2.8~16
M.O.D.	0.25m
FOV(°)	21.5° × 25.8° × 14.7°
Distortion(TV)	<-0.03%
Back Focus	23.5mm
TTL	-
Resolution	45MP
Filter Size	M35.5×0.5
Mount	C-Mount
Dimension(mm)	Ø23.6×19.8
Lris	Manual
Temperature Range	-20°C ~ +60°C

## 4/3" C-Mount FIXED LENSES

1. Adopt professional optical lens module and coating process
2. Provides higher performance for 10-megapixel cameras
3. Large aperture ratio, low illumination
4. TV distortion is less than 1%
5. The whole series reaches 5 million optical points



### VT-LEM0828CE-H2

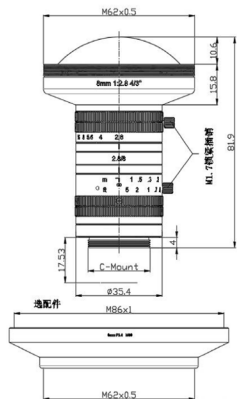


Image Size (inch)	4/3"
Focal Length (mm)	8
Aperture, F/#	F2.8-F16
Focus Range	0.2m-∞
FOV(°)	108°×96°×80.4°
Distortion	-2.2%@y=11.5mm
Flange BFL	17.526
Resolution	12 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Filter Size	M86×1
Lris	Manual
Focus	M-Iris
Temperature Range	-10~+50°C

### VT-LEM08528CD-H2

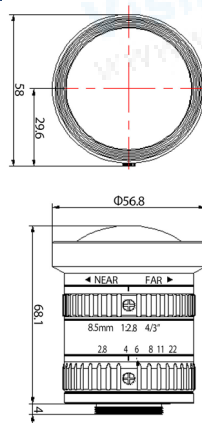


Image Size (inch)	4/3"
Focal Length (mm)	8.5
Aperture, F/#	F2.8-F22
M.O.D.	0.5m-∞
FOV(°)	107.4°×94.9°×77.9°
Distortion(TV)	<-4.54%
Back Focus (mm)	18.87 (in air)
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	-
Dimension (mm)	Φ 58.61 × 72.08

### VT-LEM1220CD-H2

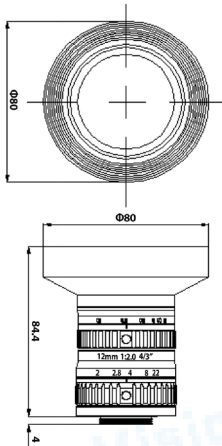


Image Size (inch)	4/3"
Focal Length (mm)	12
Aperture, F/#	F2.0-F22
M.O.D.	0.15m-∞
FOV(°)	89.02°×75.46°×61.08°
Distortion(TV)	<-2.40%
Back Focus (mm)	18.93 (in air)
Resolution	10 MP
Design Wavelength	420-1100nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	447g
Dimension (mm)	Φ 80 × 84.4 mm

### VT-LEM1620CD-H2

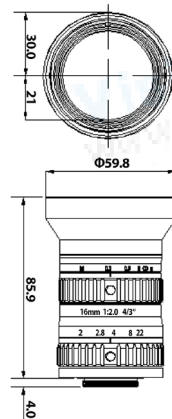


Image Size (inch)	4/3"
Focal Length (mm)	16
Aperture, F/#	F2.0-F22
M.O.D.	0.15m-∞
FOV(°)	73.0°×61.0°×47.2°
Distortion(TV)	<-2.81%
Back Focus (mm)	21.0
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	338 g
Dimension (mm)	Φ60 x 89.9

### VT-LEM2520CD-H2

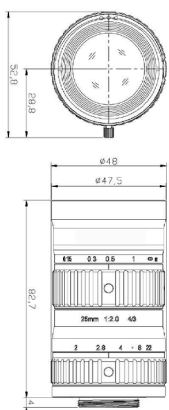


Image Size (inch)	4/3"
Focal Length (mm)	25
Aperture, F/#	F2.0-F22
M.O.D.	0.15m-∞
FOV(°)	49.7°×40.6°×31°
Distortion(TV)	<-0.66%
Back Focus (mm)	22.43
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	251 g
Dimension (mm)	Φ48 x 86.7

### VT-LEM3520CD-H2

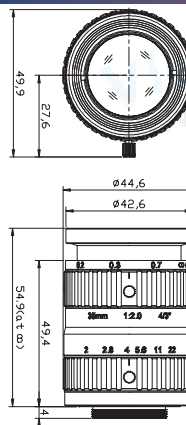


Image Size (inch)	4/3"
Focal Length (mm)	35
Aperture, F/#	F2.0-F22
M.O.D.	0.2m-∞
FOV(°)	36.6°×29.6°×22.4°
Distortion(TV)	<-0.56%
Back Focus (mm)	18.65
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	173 g
Dimension (mm)	Φ44.6 x 58.9

### VT-LEM5020CD-H2

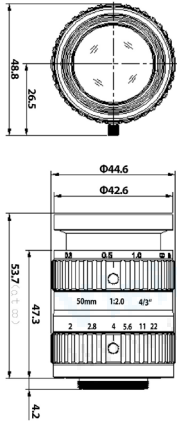


Image Size (inch)	4/3"
Focal Length (mm)	50
Aperture, F/#	F2.0-F22
M.O.D.	0.3m-∞
FOV(°)	25.9°×20.9°×15.7°
Distortion(TV)	<-0.14%
Back Focus (mm)	20.29
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10°C~+50°C
Weight	170 g
Dimension (mm)	Ø44.6 x 57.9

### VT-LEM8520CD-H2

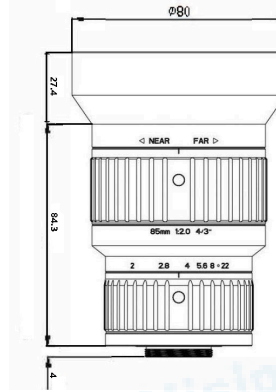


Image Size (inch)	4/3"
Focal Length (mm)	85
Aperture, F/#	F2.0-F22
M.O.D.	1.2m-∞
FOV(°)	15.4°×12.1°×9.3°
Distortion(TV)	0.04%@y=11.5mm
Back Focus (mm)	24.53 (in air)
Resolution	10 MP
Design Wavelength	420-1100 nm
Mount	C-Mount
Temperature Range	-10~+50°C
Filter Size	M77.0 x 0.75
Dimension (mm)	Ø80 x 115.7

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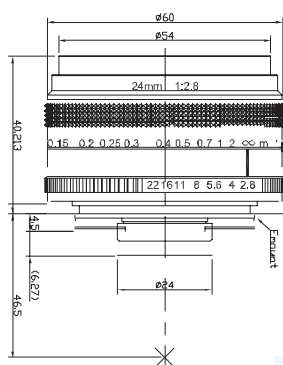
# 5MP Large Format F/T Mount Lenses

## FEATURES

1. Wide wavelength from 400~950nm
2. Full-frame design covering  $\phi 43\text{mm}$
3. Support 4K line scan cameras
4. Low cost

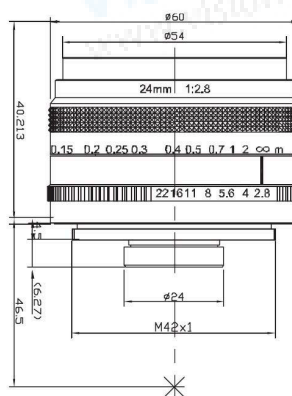


### VT-LHF2428MP5



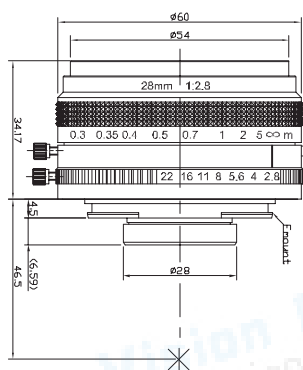
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.5~ ∞
EFL(mm)	24
Aperture(F/#)	F2.8 - 22
Back Focus(mm)	36
Angle FOV(D)	84°
Distortion	<-4%
Focusing Range	∞ - 0.15m
Filter Thread	M52 x 0.75
Design Wavelength	-
Iris	Manual
Mount	F-Mount
Weight (g)	227.5
Dimension (mm)	∅28 x 27.02

### VT-LHT2428MP5



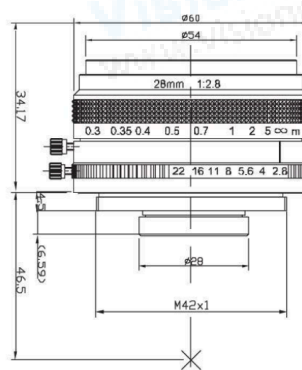
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.5~ ∞
EFL(mm)	24
Aperture(F/#)	F2.8 - 22
Back Focus(mm)	36
Angle FOV(D)	84°
Distortion	<-4%
Focusing Range	∞ - 0.1m
Filter Thread	-
Design Wavelength	400-950
Iris	Manual
Mount	M42
Weight (g)	227.5
Dimension (mm)	∅60 x 40.21

### VT-LHF2828MP5



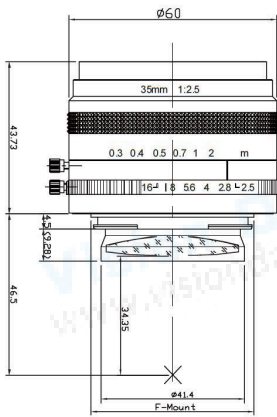
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.3~ ∞
EFL(mm)	28
Aperture(F/#)	F2.8 - 22
Back Focus(mm)	35.7
Angle FOV(D)	74°
Distortion	<-3%
Focusing Range	∞ - 0.3m
Filter Thread	M52 x 0.75
Design Wavelength	-
Iris	Manual
Mount	F-Mount
Weight (g)	199.5
Dimension (mm)	∅60 x 34.17

### VT-LHT2828MP5



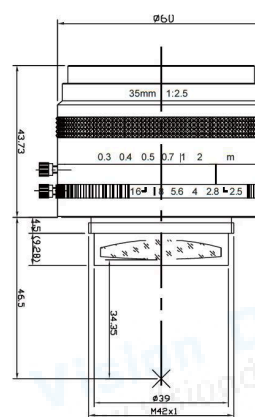
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.3~ ∞
EFL(mm)	28
Aperture(F/#)	F2.8 - 22
Back Focus(mm)	35.7
Angle FOV(D)	74°
Distortion	<-3%
Focusing Range	∞ - 0.3m
Filter Thread	M52 x 0.75
Design Wavelength	400-950
Iris	Manual
Mount	M42
Weight (g)	173.5
Dimension (mm)	∅60 x 34.17

### VT-LHF3525MP5



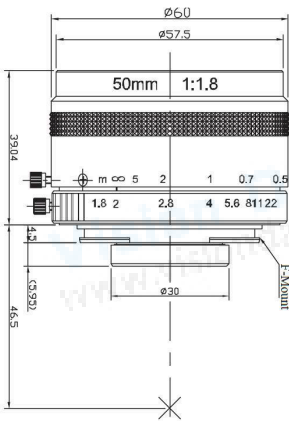
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.3~ ∞
EFL(mm)	35
Aperture(F/#)	F2.5-F22
Back Focus(mm)	34.35
Angle FOV(D)	52.3°
Distortion	-3%
Focusing Range	∞ - 0.3m
Filter Thread	M52 x 0.75
Design Wavelength	-
Iris	Manual
Mount	F-Mount
Weight (g)	273
Dimension (mm)	Ø60 x 43.73

### VT-LHT3525MP5



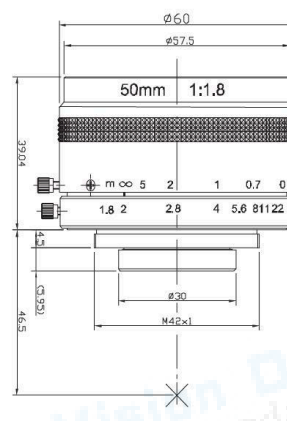
Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.3~ ∞
EFL(mm)	35
Aperture(F/#)	F2.5 - F22
Back Focus(mm)	34.35
Angle FOV(D)	52.3°
Distortion	<-3%
Focusing Range	∞ - 0.3m
Filter Thread	M52 x 0.75
Design Wavelength	400-950
Iris	Manual
Mount	M42
Weight (g)	253
Dimension (mm)	Ø60 x 43.73

### VT-LHF5018MP5



Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.4~ ∞
EFL(mm)	50
Aperture(F/#)	F1.8
Back Focus(mm)	36.33
Angle FOV(D)	45°
Distortion	<1%
Focusing Range	∞ - 0.3m
Filter Thread	M52 x 0.75
Design Wavelength	-
Iris	Manual
Mount	F-Mount
Weight (g)	210
Dimension (mm)	Ø60 x 39.04

### VT-LHT5018MP5



Resolution	30lp/mm(5MP)
Format (mm)	43
WD (m)	0.4~ ∞
EFL(mm)	50
Aperture(F/#)	F1.8 - F22
Back Focus(mm)	36.33
Angle FOV(D)	45°
Distortion	<-1%
Focusing Range	∞ - 0.4m
Filter Thread	M52 x 0.75
Design Wavelength	400-950
Iris	Manual
Mount	M42
Weight (g)	210
Dimension (mm)	Ø60 x 39.04

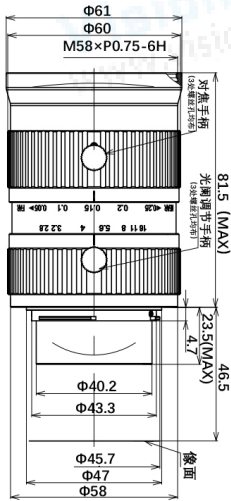
# 29MP Large Format Lenses

## FEATURES

1. Maximum image area of 43mm, supporting 29 million pixel sensor
2. **Compatible with 4K line scan cameras , corresponding to 5μ/ 7μ pixels**
3. Optional focal lengths and magnifications
4. Suitable for printing and packaging inspection

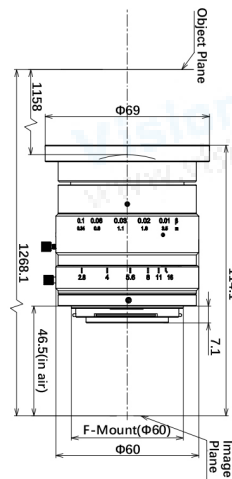


### VT-LEMF3528MP29-0.1X



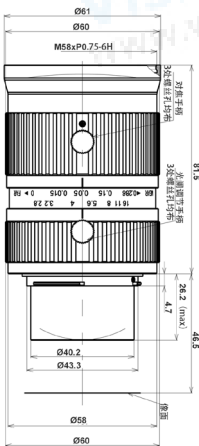
Mag. (x)	0.05x	0.10x	0.20x
WD (mm)	728.7±5	350.9±5	163±5
Conjugate Distance (mm)	850.8±9	474.5±9	289.5±9
FFL (mm)	46.5		
Max Image	Ø45		
Aperture (F/#)	F2.8-16		
EFL (mm)	35 mm		
FOV	60.3°		
Focus Distance (min)	125.5 mm(0.25x)		
TV Distortion	<0.4%		
Filter Size	M58×P0.75		
Mount	F-Mount		
Relative Illumination	-		
Dimensions	-		

### VT-LEMF3528MP29-0.03X



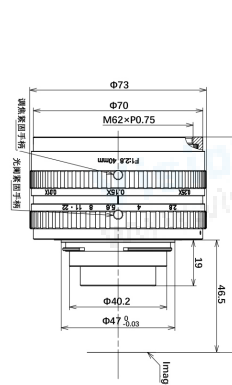
Mag. (x)	0.01x	0.03x	0.1x
WD (mm)	3500	1158.7	340
Conjugate Distance (mm)	1268.1		
FFL (mm)	46.5		
Max Image	Ø45.3		
Aperture (F/#)	F2.8-16		
EFL (mm)	35		
FOV	65°		
ENP Diameter	Ø12.2		
TV Distortion	<0.5%		
Filter Size	M67×P0.75		
Mount	F-Mount		
Relative Illumination	-		
Dimensions	-		

### VT-LEMF3528MP29-0.057X



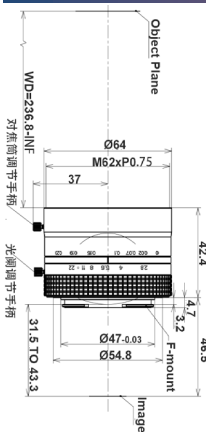
Mag. (x)	0.286x	0.2x	0.1x	0.057x	0.0141x
WD (mm)	100±5	150±5	235±5	589.2±5	2487.9±5
Conjugate Distance (mm)	228±9	278.1±9	363±9	717.2±9	2615.9±9
FFL (mm)	46.5				
Max Image	Ø45				
Aperture (F/#)	F2.8-16				
EFL (mm)	35mm				
FOV	60.3°				
Focus Distance	-				
TV Distortion	<0.4%				
Filter Size	M58×P0.75				
Mount	F-Mount				
Relative Illumination	-				
Dimensions	Ø61X81.5				

### VT-LEMF4028MP29-0.1X



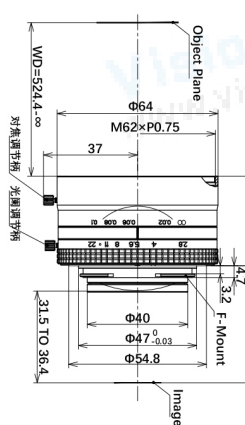
Mag. (x)	0.01x	0.1x	0.238x
WD (mm)	4000±5	436±5	200±5
Conjugate Distance (mm)	4054.8±9	468.68±9	264.15±9
FFL (mm)	46.5		
Max Image	Ø43.2		
Aperture (F/#)	F2.8-22		
EFL (mm)	40 mm		
FOV	1085.3	402.9	130.8
Focus Distance	0.2m - +∞		
TV Distortion	<0.2%		
Filter Size	M62×P0.75		
Mount	F-Mount		
Relative Illumination	40%		
Dimensions	-		

### VT-LEMF5028MP29-0.1X



Mag. (x)	0.23x	0.19x	0.15x	0.1x	0.07x	0.02x
WD (mm)	236.8	283.7	355.0	524.4	741.6	2472.5
FFL (mm)	46.5					
Max Image	Ø43					
Aperture (F/#)	F2.8-22					
EFL (mm)	50mm					
FOV	45.5°					
ENP Diameter	-					
TV Distortion	0.2%					
Filter Size	M62×P0.75					
Mount	F-Mount					
Relative Illumination	-					
Dimensions	Ø64X42.4					

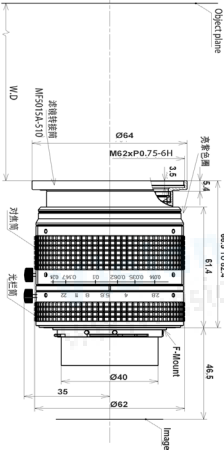
### VT-LEMF5028MP29-0.06X



Mag. (x)	0.10x	0.08x	0.06x	0.02x
WD (mm)	524.4	625	862.1	2472.5
Conjugate Distance (mm)	-	-	942.2	-
FFL (mm)	46.5			
Max Image	Ø43			
Aperture (F/#)	F2.8-22			
EFL (mm)	50±5% mm			
FOV	45.4°±3°			
ENP Diameter	Ø21.1			
TV Distortion	<0.2%			
Filter Size	M62×P0.75			
Mount	F-Mount			
Relative Illumination	-			
Dimensions	Ø56.8×35.6			

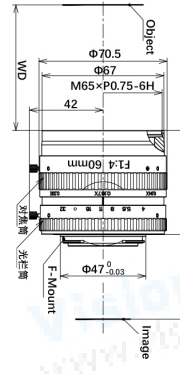


### VT-LEMF5028MP29-0.062X



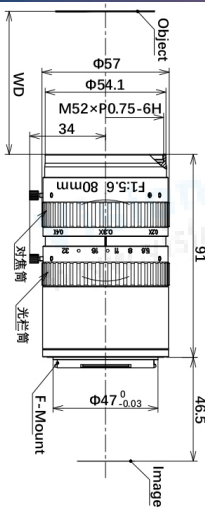
Mag. (x)	0.24x	0.1x	0.062x	0.035x	0.014x
WD (mm)	228	522.6	828	1442.1	3580.5
FFL (mm)	46.5				
Max Image	Ø44				
Aperture (F/#)	F2.8-22				
EFL (mm)	50±5% mm				
FOV	47°				
Focus Distance	Ø18.1				
TV Distortion	<0.3%				
Filter Size	M62×P0.75				
Mount	F-Mount				
Relative Illumination	-				
Dimensions	Ø62×(61.1-77)				

### VT-LEMF6040MP29-0.167X



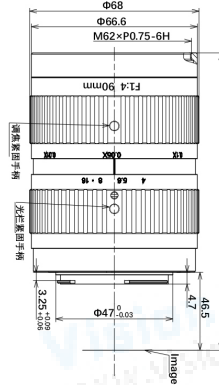
Mag. (x)	0.04x	0.167x	0.33x
WD (mm)	1537.9±5	384.9±5	199.5±5
Image Distance (mm)	40.49±2.5	48.07±2.5	58.24±2.5
Conjugate Distance (mm)	1641.73±9	496.32±9	321.05±9
FFL (mm)	46.5		
Max Image	Ø64		
Aperture (F/#)	F4.0-32		
EFL	60 mm		
FOV	1591.2	386.92	192.5
TV Distortion	0.6%	0.19%	0.12%
Filter Size	M65×P0.75		
Mount	F-Mount		
Relative Illumination	45%		
Dimensions	-		

### VT-LEMF8056MP29-0.3X



Mag. (x)	0.2x	0.3x	0.4x
WD (mm)	439.6±5	314.3±5	255.6±5
Image Distance (mm)	80.67±2.5	88.79±2.5	96.7±2.5
Conjugate Distance (mm)	577.1±9	451.8±9	393.1±9
FFL (mm)	46.5		
Max Image	Ø58		
Aperture (F/#)	F5.6-32		
EFL	80 mm		
FOV	-		
TV Distortion	<0.03%	<0.01%	<0.01%
Filter Size	M52×P0.75		
Mount	F-Mount		
Relative Illumination	68%		
Dimensions	-		

### VT-LEMF9040MP29-0.05X



Mag. (x)	0.01x	0.05x	0.1x
WD (mm)	INF	1985±9	1000±5
Conjugate Distance (mm)	INF	2112±5	1132±9
FFL (mm)	46.5		
Max Image	Ø43.2		
Aperture (F/#)	F4.0-16		
EFL (mm)	90 mm		
FOV	4320mm	864mm	432mm
Focus Distance	1m-∞		
TV Distortion	<0.01%		
Filter Size	M62×P0.75		
Mount	F-Mount		
Relative Illumination	40%		
Dimensions	-		

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# 65MP Large Format Lenses

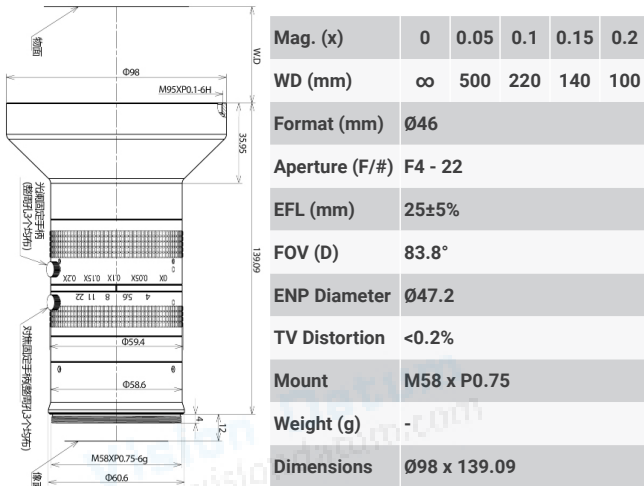
**NEW**



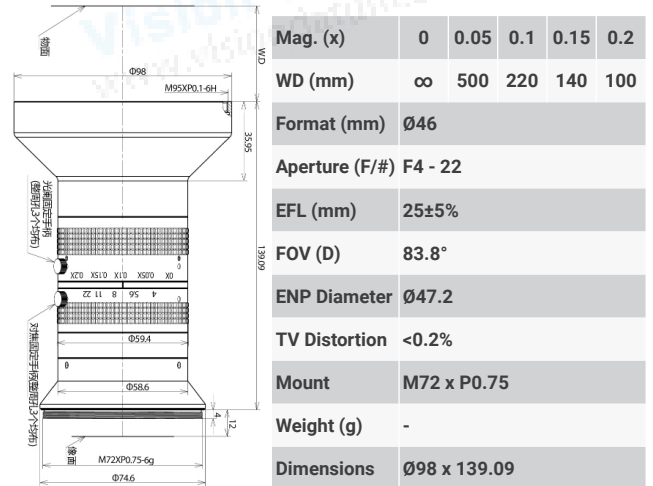
## FEATURES

1. Super high resolution for 3.2μ, Support 65MP sensor
2. Suitable for high-precision detection of large format
3. Optional focal lengths and magnifications
4. **Compatible with 8K5μ line scan cameras**

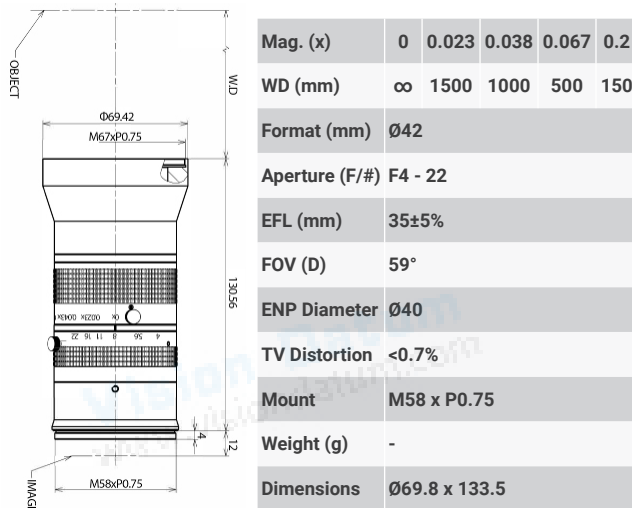
### VT-LEM58-2540MP65



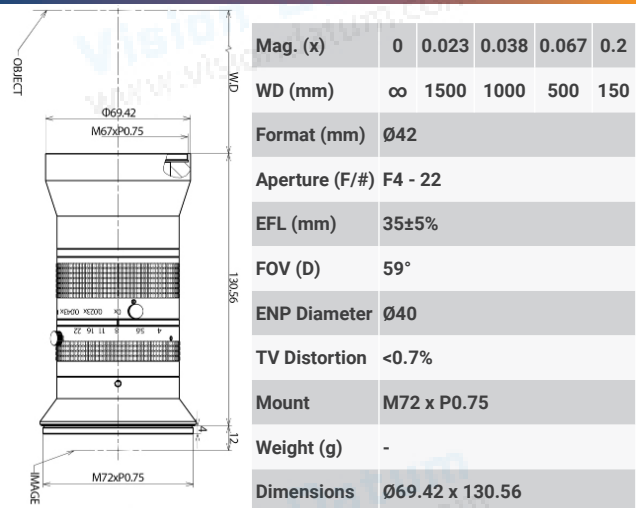
### VT-LEM72-2540MP65



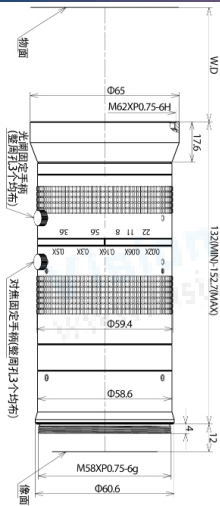
### VT-LEM58-3540MP65



### VT-LEM72-3540MP65

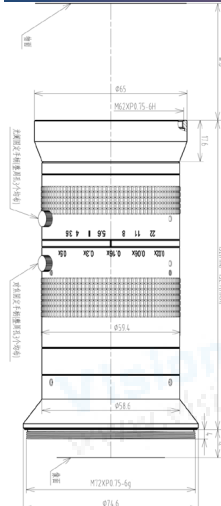


### VT-LEM58-5036MP65



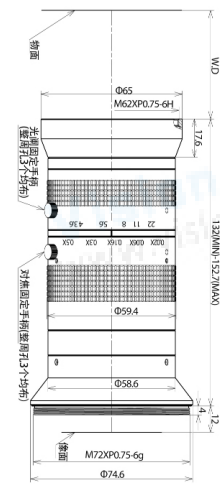
Mag. (x)	0.02	0.06	0.16	0.3	0.5
WD (mm)	2500	800	300	150	80
Format (mm)	Ø46				
Aperture (F/#)	F3.6 ~ 22				
EFL (mm)	50±5%				
FOV (D)	43.4°				
ENP Diameter	Ø47.2				
TV Distortion	<0.2%				
Mount	M58 x P0.75				
Weight (g)	-				
Dimensions	Ø65 x 152.7				

### VT-LEM72-5036MP65



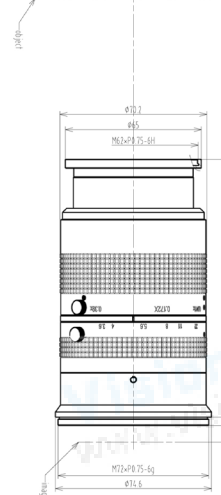
Mag. (x)	0.02	0.06	0.16	0.3	0.5
WD (mm)	2500	800	300	150	80
Format (mm)	Ø46				
Aperture (F/#)	F3.6 ~ 22				
EFL (mm)	50±5%				
FOV (D)	43.4°				
ENP Diameter	Ø47.2				
TV Distortion	<0.2%				
Mount	M72 x P0.75				
Weight (g)	-				
Dimensions	Ø65 x 152.7				

### VT-LEM58-8036MP65



Mag. (x)	0.041	0.172	0.39
WD (mm)	2000	500	235
Format (mm)	Ø46		
Aperture (F/#)	F3.6 ~ 22		
EFL (mm)	80±5%		
FOV (D)	26.8°		
ENP Diameter	Ø47.2		
TV Distortion	<0.2%		
Mount	M58 x P0.75		
Weight (g)	-		
Dimensions	Ø69.8 x 133.5		

### VT-LEM72-8036MP65



Mag. (x)	0.041	0.172	0.39
WD (mm)	2000	500	235
Format (mm)	Ø46		
Aperture (F/#)	F3.6 ~ 22		
EFL (mm)	80±5%		
FOV (D)	26.8°		
ENP Diameter	Ø47.2		
TV Distortion	<0.2%		
Mount	M72 x P0.75		
Weight (g)	-		
Dimensions	Ø69.8 x 133.5		

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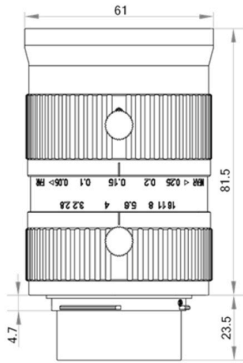
# 100MP Large Format Lenses

## FEATURES

1. 100MP high resolution supporting 3.1μm
2. Support large target area camera and 8K7μ/16K3.5μ line camera
3. Low distortion, high relative illumination
4. Excellent picture definition consistency

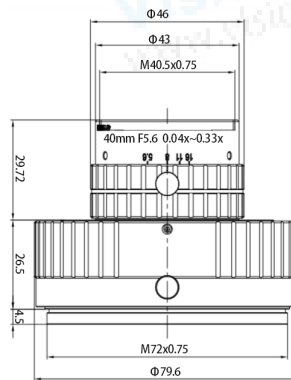


### VT-LEMF3528MP100



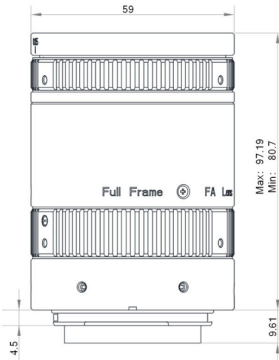
Format (mm)	Ø46
EFL (mm)	35
WD (mm)	-
M.O.D (m)	0.12 m
Aperture (F/#)	F2.8-16
Mag. (x)	0.25x~0.05x
FOV	101.4°×86°×46°
TV Distortion	0.40%
Filter Size	M58×0.75
FBL (mm)	46.5
Mount	F-Mount
Weight(g)	536
Dimensions (mm)	Ø61×81.5

### VT-LEN72-4056MP100



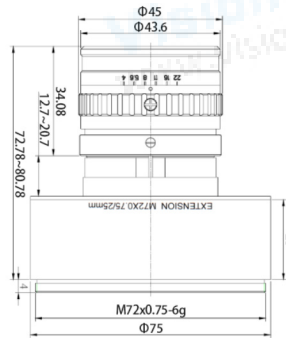
Format (mm)	Ø60
EFL (mm)	40
Aperture (F/#)	F5.6~F16
Distortion	0.55%
Mag. (x)	0.04x-0.33x
WD (mm)	144~1043
Iris	Manual
Focus	Manual
Flange BFL (mm)	12
Mount	M72 × P0.75
Filter Size	M40.5×P0.75
Weight(g)	-
Dimensions (mm)	Ø79.6×56.2-77.2
Operating Temp.	-10 - 50°C

### VT-LEMF5040MP100



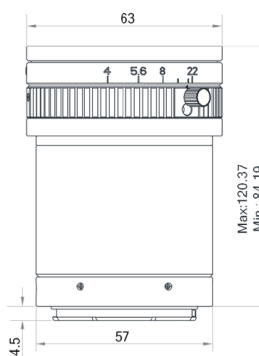
Format (mm)	Ø56
EFL (mm)	50
WD (mm)	150-inf
M.O.D (m)	-
Aperture (F/#)	F4.0-32
Mag. (x)	0.01x~0.33x
FOV	-
TV Distortion	0.41%
Filter Size	M52×0.75
FBL (mm)	46.5
Mount	F-Mount
Weight(g)	601.5
Dimensions (mm)	Ø59×97.19

### VT-LEN72-6040MP100



Format (mm)	Ø62
EFL (mm)	60
Aperture (F/#)	F4.0-F22
Distortion	0.14%
Mag. (x)	0.118x - 0.233x
WD (mm)	300-550
Iris	Manual
Focus	Manual
Flange BFL (mm)	12
Mount	M72 × P0.75
Filter Size	M39 × P0.75
Weight(g)	-
Dimensions (mm)	Ø75 × 72.8-80.8
Operating Temp.	-10 - 50°C

### VT-LEMF8040MP100



Format (mm)	Ø56
EFL (mm)	80
WD (mm)	235 - ∞
M.O.D (m)	-
Aperture (F/#)	F4.0-22
Mag. (x)	0.01x ~ 0.4x
FOV	-
TV Distortion	0.12%
Filter Size	M52×0.75
FBL (mm)	46.5
Mount	F-Mount
Weight(g)	601.0
Dimensions (mm)	Ø63×120.37

# 150MP Large Format Lenses

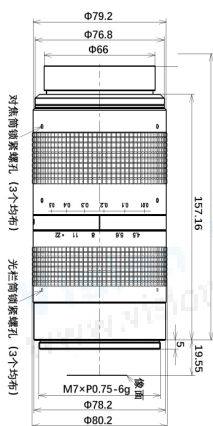
**NEW**

## FEATURES

1. 150Mega Pixel, large format to 66.7mm
2. **Compatible with 8K7μ/16K3.5μ line scan cameras**
3. VT-LEN72-5545MP150
  - Full field uniform imaging
  - Meet the requirement of high-precision pixel (3.76um)
  - Supports 0.01x-0.5x super large magnification range, to meet wide FOV requirements EFL of 55mm
  - At the same magnification, the conjugate distance of is only half of traditional lens
  - **Suitable for OLED screen detection , ranging from electronic watch screen to TV screen**

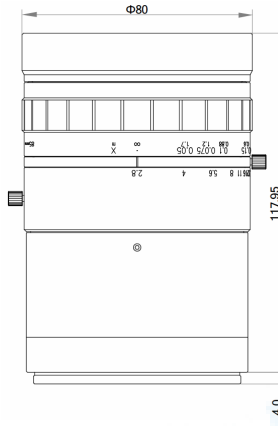


### VT-LEN72-5545MP150



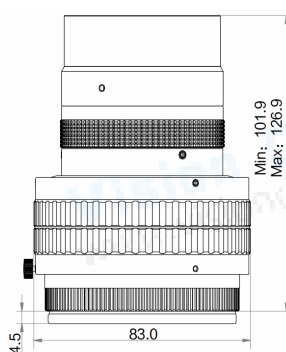
Format (mm)	Ø67
EFL (mm)	55
Aperture (F/#)	F4.5 - F22
Distortion	0.05%
Mag. (x)	0.01x - 0.5x
WD (mm)	98 - ∞
Iris	Manual
Focus	Manual
Flange BFL (mm)	19.55
Mount	M72 × P0.75
Filter Size	-
Weight(g)	1618.6 g
Dimensions (mm)	Ø80.2 × 179.5
Operating Temp.	-10 - 50°C

### VT-LEN72-8528MP150



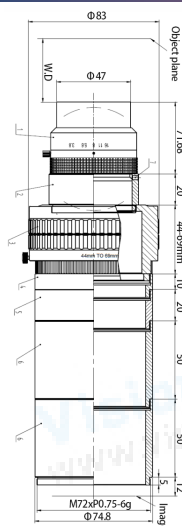
Format (mm)	Ø62
EFL (mm)	85
Aperture (F/#)	F2.8-F32
Distortion	0.04%
Mag. (x)	0.001x - 0.2x
WD (mm)	460 - ∞
Iris	Manual
Focus	Manual
Flange BFL (mm)	19.55
Mount	M72 × P0.75
Filter Size	M77 × P0.75
Weight(g)	690 g
Dimensions (mm)	Ø80 × 117.95
Operating Temp.	-10 - 50°C

### VT-LEN72-9040MP150



Format (mm)	Ø67
EFL (mm)	90
Aperture (F/#)	F4.0-F16
Distortion	0.01%
Mag. (x)	0.08x - 0.14x
WD (mm)	722 - 1229
Object Image Distance (mm)	857 - 1358
Iris	Manual
Focus	Manual
Flange BFL (mm)	19.55
Mount	M72 × P0.75
Filter Size	M58 × P0.75
Weight(g)	653 g
Dimensions (mm)	Ø83 × 126.9
Operating Temp.	-10 - 50°C

### VT-LEN72-11635MP150



Format (mm)	Ø66
EFL (mm)	116
Aperture (F/#)	F3.5~F16
Distortion	0.0005%
Mag. (x)	0.93x - 1.07x
WD (mm)	176 - 192
Object Image Distance (mm)	440
Iris	Manual
Focus	Manual
Flange BFL (mm)	12
Mount	M72 × P0.75
Filter Size	-
Weight(g)	-
Dimensions (mm)	Ø83×266-291
Operating Temp.	-10 - 50°C

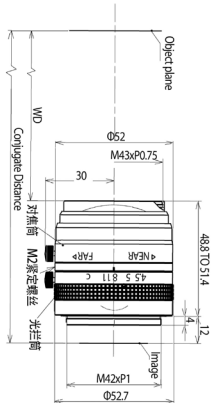
# Compact Line Scan Lenses

## FEATURES

1. Designed for compact line scan cameras
2. **Compatible with 4K7μ line scan cameras**
3. Small magnification for the application of large size inspection
4. Interface could be changed from V-Mount to M42, M58 or F-Mount

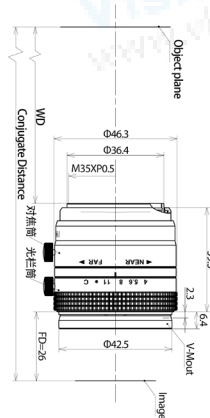


### VTL-2045-0.03X



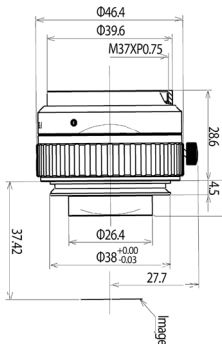
Mag.	0.1x	0.0358x	0.02x
WD (mm)	198.7±5	557.4±5	998.7±5
Image Distance (mm)	14.6±2.5	13.3±2.5	13.0±2.5
Conjugate Distance (mm)	261.7±9	619.1±9	1060.1±9
FFL (mm)	12±0.1		
EFL (mm)	20 mm		
Format	Ø30		
Aperture (F/#)	F4.5		
TV Distortion	0.2%		
Relative Illumination	>50%		
Mount	M42		

### VTL-2840-0.1X



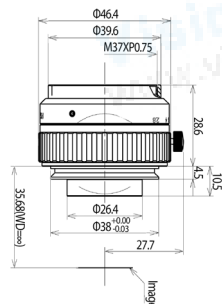
Mag.	0.05x	0.1x	0.3x
WD (mm)	594.7±5	299.7±5	103.0±5
Image Distance (mm)	24.5±2.5	26.0±2.5	31.8±2.5
Conjugate Distance (mm)	661.5±9	368±9	177.2±9
FOV	600	300	100
FFL (mm)	26±0.1		
EFL (mm)	29 mm		
Format	Ø30		
Aperture (F/#)	F4.0		
TV Distortion	0.1%		
Relative Illumination	40%		
Mount	V (Ø42.5)		

### VTL-3545-0.08X



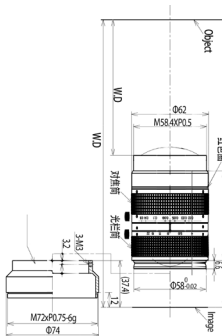
Mag.	0.04x	0.08x	0.1x
WD (mm)	1008.49±5	508.49±5	408.49±5
Image Distance (mm)	25.23±2.5	26.84±2.5	27.64±2.5
Conjugate Distance (mm)	1072.89±9	574.5±9	475.31±9
FFL (mm)	35.81±0.5	37.42±0.5	38.22±0.5
EFL (mm)	35 mm		
Format	Ø30		
Aperture (F/#)	F4.5		
TV Distortion	<0.05%	<0.01%	<0.03%
Relative Illumination	80%		
Mount	V (Ø38)		

### VTL-4028-0.1X



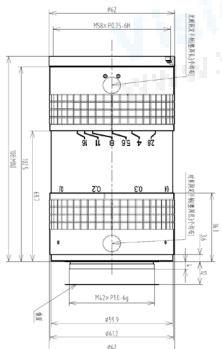
Mag.	0.04x	0.1x	0.33x
WD (mm)	1051.4±5	400±5	140.7±5
Image Distance (mm)	27.65±2.5	30.43±2.5	39.68±2.5
Conjugate Distance (mm)	1117.3±9	468.67±9	218.65±9
FOV	1085.3	402.9	130.8
FFL (mm)	37.31±0.5	40.1±0.5	49.34±0.5
EFL (mm)	40 mm		
Format	Ø43.2		
Aperture (F/#)	F2.8		
TV Distortion	0.39%	0.5%	0.62%
Relative Illumination	40%		
Mount	V (Ø38)		

### VTL-4040-0.05X



Mag.	0.16x	0.05x	0.02x
WD (mm)	256.3±5	818.8±5	1982.1±5
Image Distance (mm)	-		
Conjugate Distance (mm)	385.78±9	943.08±9	2104.87±9
FOV	71°		
FFL (mm)	12±0.5 (37.4)		
EFL (mm)	40 mm		
Format	Ø60		
Aperture (F/#)	F4.0		
TV Distortion	<0.2%		
Relative Illumination	-		
Mount	M72		

### VTL-8028-0.177X



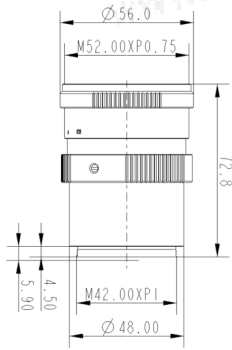
WD	220-5000	WD(mm)	Mag.
Magnification Range	0.46x-0.02x	220	0.46x
Max image	Ø30	250	0.394x
F.No	2.8-16	300	0.317x
FFL (mm)	12	350	0.26x
EFL (mm)	80±5%	500	0.177x
FOV	19.5°	600	0.145x
ENP Diameter	Ø28.5	800	0.106x
Distortion	<0.2%	1000	0.084x
Relative Illumination	>78%	1500	0.055x
Dimensions	Ø62x112	2000	0.04x
Filter Screw Size	M58xP0.75	3000	0.027x
Mount	M42xP1.0	5000	0.02x

# 5.5K5 $\mu$ Line Scan Lenses

## FEATURES

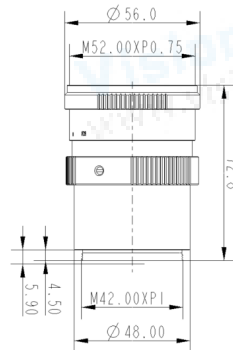
1. Designed for high resolution up to 5.5K5 $\mu$
2. M42 mount as standard, adaptable to various camera mount
3. Large aperture F2.8

### VTL-5.5K-0.1X-A



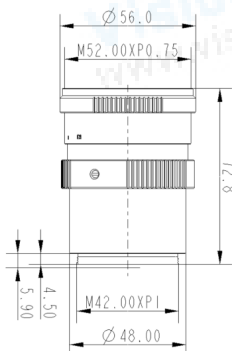
EFL (mm)	50
Mag. (x)	0.0946
Format (mm)	$\phi$ 30
Aperture(F/#)	F2.8
Distortion	-0.61%
Relative Illumination	95.50%
Min WD (mm)	574
Best WD (mm)	600-700
Mount	M42 x 1
FFL (mm)	12
Resolution	5.5K 5 $\mu$

### VTL-5.5K-0.1X-B



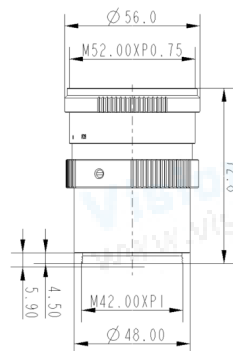
EFL (mm)	50
Mag. (x)	0.0946
Format (mm)	$\phi$ 30
Aperture(F/#)	F2.8
Distortion	-0.61%
Relative Illumination	95.50%
Min WD (mm)	574
Best WD (mm)	600-700
Mount	M42 x 1
FFL (mm)	5.9
Resolution	5.5K 5 $\mu$

### VTL-5.5K-0.09X-A



EFL (mm)	50
Mag. (x)	0.094
Format (mm)	$\phi$ 30
Aperture(F/#)	F4.0
Distortion	-0.61%
Relative Illumination	95.50%
Min WD (mm)	574
Best WD (mm)	600-700
Mount	M42 x 1
FFL (mm)	12
Resolution	5.5K 5 $\mu$

### VTL-5.5K-0.09X-B



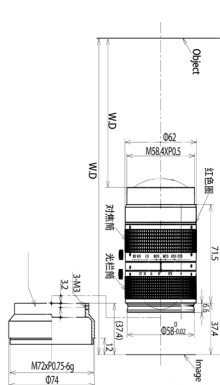
EFL (mm)	50
Mag. (x)	0.094
Format (mm)	$\phi$ 30
Aperture(F/#)	F4.0
Distortion	-0.61%
Relative Illumination	95.50%
Min WD (mm)	574
Best WD (mm)	600-700
Mount	M42 x 1
FFL (mm)	5.9
Resolution	5.5K 5 $\mu$

# 8K7μ Line Scan Lenses

## FEATURES

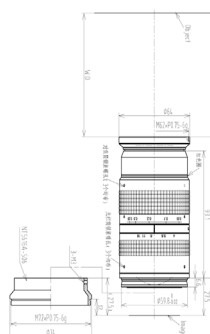
1. Specially designed for 8K7μ line scan camera
2. Optional standard EFL and magnification
3. Magnification from 0.02x-0.4x
4. V-mount as standard , adaptable to various camera mount
5. Applied to big size detection such as lithium battery

### VTL-4040-0.05X



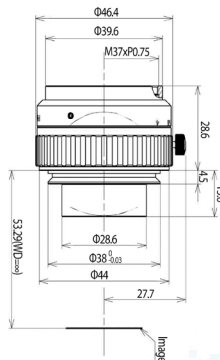
Mag.	0.16x	0.05x	0.02x
WD (mm)	256.3±5	818.8±5	1982.1±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	385.78±9	943.08±9	2104.87±9
FOV	71°		
FFL(mm)	12±0.5(37.4)		
EFL (mm)	40 mm		
Format	Ø60		
Aperture (F/#)	F4.0		
TV Distortion	<0.2%		
Relative Illumination	-		
Mount	M72		

### VTL-4540-0.2X



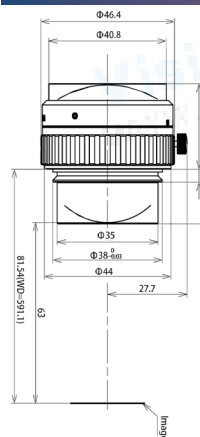
Mag.	0.03x	0.2x	0.35x
WD (mm)	1493.5	223.5	133.5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	-	-	-
FOV	53°-64°		
FFL(mm)	-		
EFL (mm)	45±5%		
Format	Ø62		
Aperture (F/#)	F4-16		
TV Distortion	<0.5%		
Relative Illumination	-		
Mount	M72		

### VTL-6040-0.167X



Mag.	0.04x	0.167x	0.33x
WD (mm)	1557.4±5	404.4±5	218.97±5
Image Distance (mm)	40.49±2.5	48.07±2.5	58.24±2.5
Conjugate Distance (mm)	1641.73±9	496.32±9	321.05±9
FOV	1591.2	386.92	192.5
FFL (mm)	55.73±0.5	63.31±0.5	73.48±0.5
EFL (mm)	60 mm		
Format	Ø64		
Aperture (F/#)	F4.0		
TV Distortion	0.6%	0.19%	0.12%
Relative Illumination	45%		
Mount	V (Ø38)		

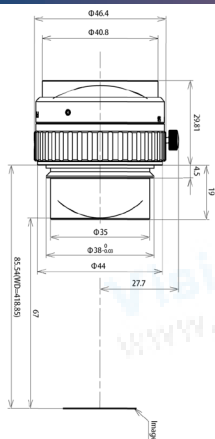
### VTL-8056-0.146X



Mag.	0.13x	0.146x	0.167x
WD (mm)	658.3±5	591.1±5	522.3±5
Image Distance (mm)	61.7±2.5	63±2.5	64.7±2.5
Conjugate Distance (mm)	768.4±9	702.5±9	635.4±9
FOV	-		
FFL (mm)	80.24±0.5	81.54±0.5	83.24±0.5
EFL (mm)	80 mm		
Format	Ø62		
Aperture (F/#)	F5.6		
TV Distortion	0.05%	0.05%	0.05%
Relative Illumination	-		
Mount	V (Ø38)		

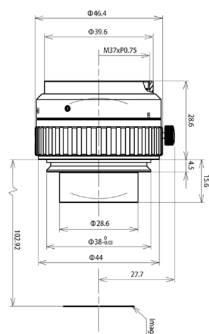


### VTL-8056-0.21X



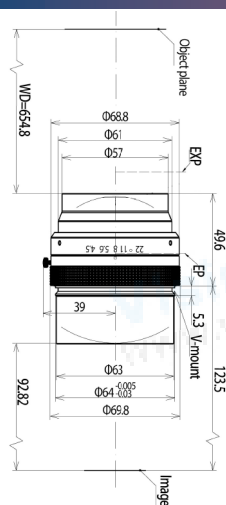
Mag.	0.194x	0.21x	0.233x
WD (mm)	449.8±5	418.85±5	381.8±5
Image Distance (mm)	65.7±2.5	67±2.5	68.8±2.5
Conjugate Distance (mm)	563.32±9	533.67±9	498.42±9
FOV	-		
FFL (mm)	84.24±0.5	85.54±0.5	87.34±0.5
EFL (mm)	80mm		
Format	Ø62		
Aperture (F/#)	F5.6		
TV Distortion	0.05%	0.05%	0.05%
Relative Illumination	-		
Mount	V (Ø38)		

### VTL-8056-0.3X



Mag.	0.2x	0.3x	0.4x
WD (mm)	453.71±5	320.26±5	253.68±5
Image Distance (mm)	80.67±2.5	88.79±2.5	96.7±2.5
Conjugate Distance (mm)	577.11±9	451.78±9	393.11±9
FOV	-		
FFL (mm)	94.8±0.5	102.92±0.5	110.83±0.5
EFL (mm)	80 mm		
Format	Ø64		
Aperture (F/#)	F5.6		
TV Distortion	<0.03%	<0.01%	<0.01%
Relative Illumination	M37xP0.75		
Mount	V (Ø38)		

### VTL-10045-0.2X



Mag.	0.15x	0.2x	0.25x
WD (mm)	860±5	654.8±5	538±5
Image Distance (mm)	86.58±2.5	92.82±2.5	98.81±2.5
Conjugate Distance (mm)	1026.7±9	827.8±9	717.1±9
FFL (mm)	117.0	123.5	129.2
FOV	34.6°		
EFL (mm)	100 mm		
Format	Ø66		
Aperture (F/#)	F4.5		
TV Distortion	0.005%		
Relative Illumination	-		
Mount	V (Ø64)		

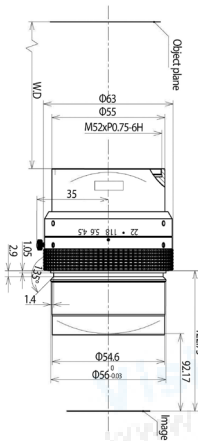
# 12K5 $\mu$ Line Scan Lenses

## FEATURES

1. Max image circle up to  $\Phi 62$ mm
2. Suitable for 8K/12K resolution camera
3. Standard magnification from 0.18x-1.29x
4. Big aperture F4.5
5. Ultra-low optical distortion

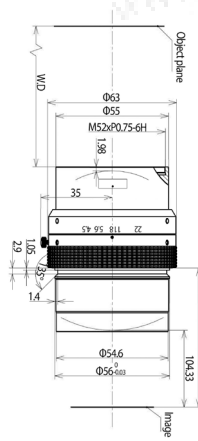


### VTL-12K-0.2X



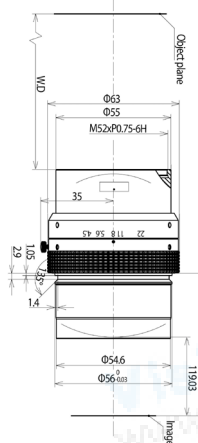
Mag.	0.18x	0.2x	0.24x
WD (mm)	717.3 $\pm$ 5	652.4 $\pm$ 5	550.87 $\pm$ 5
Image Distance (mm)	89.8 $\pm$ 2.5	92.17 $\pm$ 2.5	97.05 $\pm$ 2.5
Conjugate Distance (mm)	887.35 $\pm$ 9	824.9 $\pm$ 9	728.2 $\pm$ 9
FFL (mm)	120.4	122.8	127.6
FOV	28°		
EFL (mm)	116 mm		
Format	$\Phi 62$		
Aperture (F/#)	F4.5		
TV Distortion	<0.01%		
ENP Diam.	23		
Filter Thread	M52 x P0.75		
Mount	V( $\Phi 56$ )		

### VTL-12K-0.33X



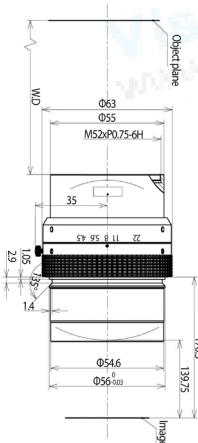
Mag.	0.29x	0.33x	0.4x
WD (mm)	465 $\pm$ 5	415.1 $\pm$ 5	351.2 $\pm$ 5
Image Distance (mm)	99.55 $\pm$ 2.5	104.33 $\pm$ 2.5	112.78 $\pm$ 2.5
Conjugate Distance (mm)	644.85 $\pm$ 9	599.7 $\pm$ 9	544.58 $\pm$ 9
FFL (mm)	130.1	134.9	143.4
FOV	29°		
EFL (mm)	116 mm		
Format	$\Phi 62$		
Aperture (F/#)	F4.5		
TV Distortion	<0.005%		
ENP Diam.	23.37		
Filter Thread	M52 x P0.75		
Mount	V( $\Phi 56$ )		

### VTL-12K-0.5X



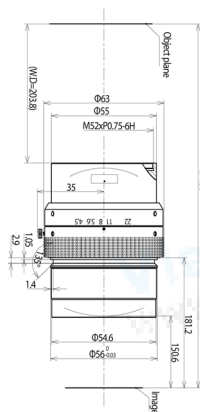
Mag.	0.45x	0.5x	0.6x
WD (mm)	318.2 $\pm$ 5	291.7 $\pm$ 5	251.9 $\pm$ 5
Image Distance (mm)	113.17 $\pm$ 2.5	119.03 $\pm$ 2.5	131.05 $\pm$ 2.5
Conjugate Distance (mm)	511.61 $\pm$ 9	491 $\pm$ 9	463.19 $\pm$ 9
FFL (mm)	143.8	149.6	161.6
FOV	29°		
EFL (mm)	116 mm		
Format	$\Phi 62$		
Aperture (F/#)	F4.5		
TV Distortion	<0.01%		
ENP Diam.	24.1		
Filter Thread	M52 x P0.75		
Mount	V( $\Phi 56$ )		

### VTL-12K-0.75X



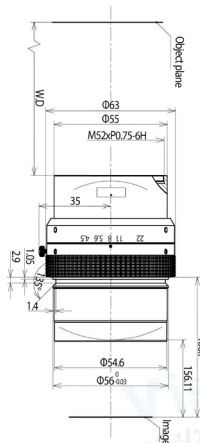
Mag.	0.7x	0.75x	0.85x
WD (mm)	220.9 $\pm$ 5	209.8 $\pm$ 5	191.4 $\pm$ 5
Image Distance (mm)	133.96 $\pm$ 2.5	139.75 $\pm$ 2.5	151.58 $\pm$ 2.5
Conjugate Distance (mm)	435.1 $\pm$ 9	429.85 $\pm$ 9	423.2 $\pm$ 9
FFL (mm)	164.5	170.3	182.2
FOV	29°		
EFL (mm)	116 mm		
Format	$\Phi 62$		
Aperture (F/#)	F4.5		
TV Distortion	<0.005%		
ENP Diam.	25		
Filter Thread	M52 x P0.75		
Mount	V( $\Phi 56$ )		

### VTL-12K-0.8X



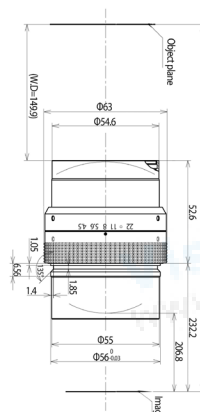
Mag.	0.85x	0.806x	0.75x
WD (mm)	196±5	203.8±5	214.9±5
Image Distance (mm)	155.88±2.5	150.6±2.5	143.82±2.5
Conjugate Distance (mm)	432.2±9	434.66±9	439.9±9
FFL (mm)	186.5	181.2	174.4
FOV	23°		
EFL (mm)	116 mm		
Format	Ø62		
Aperture (F/#)	F4.5		
TV Distortion	<0.005%		
ENP Diam.	26.08		
Filter Thread	M52 x P0.75		
Mount	V(Ø56)		

### VTL-12K-1.0X



Mag.	0.9x	1.0x	1.1x
WD (mm)	176.7±5	164.2±5	153.7±5
Image Distance (mm)	144.8±2.5	156.11±2.5	167.67±2.5
Conjugate Distance (mm)	401.8±9	400.56±9	401.67±9
FFL (mm)	175.4	186.7	198.3
FOV	28°		
EFL (mm)	116 mm		
Format	Ø62		
Aperture (F/#)	F4.5		
TV Distortion	<0.05%		
ENP Diam.	25.6		
Filter Thread	M52 x P0.75		
Mount	V(Ø56)		

### VTL-12K-1.24X



Mag.	1.29x	1.24x	1.19x
WD (mm)	146.2±5	149.9±5	154±5
Image Distance (mm)	212.56±2.5	206.8±2.5	200.62±2.5
Conjugate Distance (mm)	436.67±9	434.66±9	432.54±9
FFL (mm)	237.9	232.2	226
FOV	20.88°		
EFL (mm)	116 mm		
Format	Ø62		
Aperture (F/#)	F4.5		
TV Distortion	<0.005%		
ENP Diam.	29.75		
Filter Thread	M52 x P0.75		
Mount	V(Ø56)		

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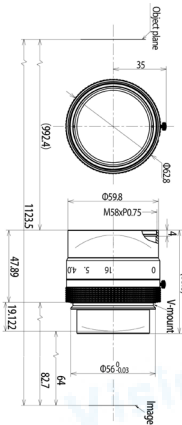
# 16K3.5μ Line Scan Lenses

## FEATURES

1. Resolution of 3.5μ, up to 160lp/mm
2. Max image circle is up to 66mm, **also compatible with 12K5μ camera**
3. Optical distortion <0.005%
4. Big aperture F4.0

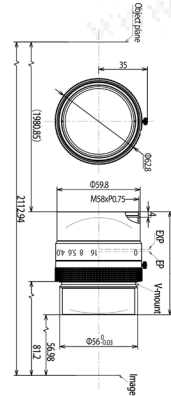


### VTL-9040-0.1X



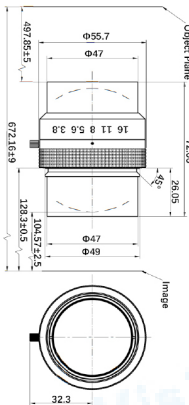
Mag.	0.14x	0.1x	0.08x
WD (mm)	722±5	922.4±5	1229.2±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	856.86±9	1123.5±9	1358.34±9
FOV	-	-	-
FFL (mm)	87±0.5	82.7±0.5	81.3±0.5
EFL (mm)	90 mm		
Format	Ø64		
Aperture (F/#)	F4.0-16		
TV Distortion	0.01%		
Relative Illumination	-		
Mount	V (Ø64)		

### VTL-9540-0.05X



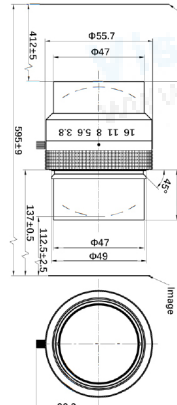
Mag.	0.03x	0.05x	0.08x
WD (mm)	3274.18±5	1980.85±5	1253.35±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	3403.23±9	2112.94±9	1388.36±9
FOV	-	-	-
FFL (mm)	79.26±0.5	81.2±0.5	84.11±0.5
EFL (mm)	95 mm		
Format	Ø62		
Aperture (F/#)	F4.0-16		
TV Distortion	<0.05%		
Relative Illumination	-		
Mount	V (Ø56)		

### VTL-16K-0.26X



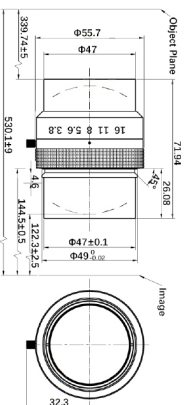
Mag. (x)	0.23x	0.26x	0.28x
WD (mm)	555.5±5	497.85±5	466.6±5
Image Distance (mm)	101.14±2.5	104.57±2.5	106.89±2.5
Conjugate Distance (mm)	726.28±9	672.16±9	643.08±9
FFL (mm)	124.72±0.5	128.3±0.5	130.47±0.5
FOV	28.6°		
EFL (mm)	114 mm		
Format	Ø66		
Aperture(F/#)	F4.2		
Distortion	0.01%		
ENP Diameter	27.12		
Mount	V (Ø49)		

### VTL-16K-0.33X



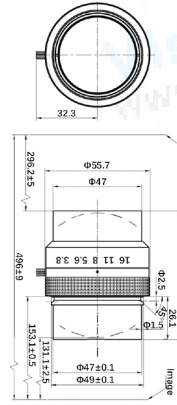
Mag. (x)	0.31x	0.33x	0.36x
WD (mm)	434.7±5	412±5	382.8±5
Image Distance (mm)	110.2±2.5	112.5±2.5	116±2.5
Conjugate Distance (mm)	615.4±9	595±9	569.3±9
FFL (mm)	134.7	137	140.5
FOV	13.83°		
EFL (mm)	116 mm		
Format	Ø66		
Aperture(F/#)	F4.2		
Distortion	0.001%		
ENP Diameter	27.57		
Mount	V (Ø49)		

### VTL-16K-0.42X



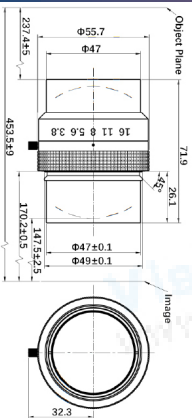
Mag. (x)	0.38x	0.42x	0.45x
WD (mm)	368.69±5	339.74±5	321.15±5
Image Distance (mm)	117.67±2.5	122.3±2.5	125.78±2.5
Conjugate Distance (mm)	554.4±9	530.1±9	514.97±9
FFL (mm)	139.85±0.5	144.5±0.5	147.96±0.5
FOV	28.5°		
EFL (mm)	116 mm		
Format	Ø66		
Aperture(F/#)	F3.8		
Distortion	0.007%		
ENP Diameter	30.46		
Mount	V (Ø49)		

### VTL-16K-0.5X



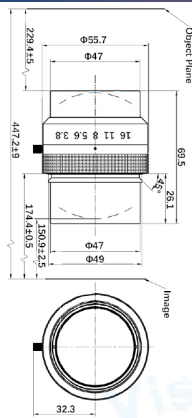
Mag. (x)	0.46x	0.469x	0.5x	0.54x
WD (mm)	315.9±5	311.2±5	296.2±5	278.7±5
Image Distance (mm)	126.6 ±2.5	127.6 ±2.5	131.1 ±2.5	135.8 ±2.5
Conjugate Distance (mm)	511.2±9	507.5±9	496±9	483.2±9
FFL (mm)	148.8	149.8	153.3	158
FOV	21.8°			
EFL (mm)	116 mm			
Format	Ø66			
Aperture(F/#)	F3.8			
Distortion	0.0008%			
ENP Diameter	30.52			
Mount	V (Ø49)			

### VTL-16K-0.67X



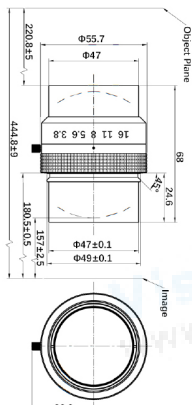
Mag. (x)	0.65x	0.67x	0.7x
WD (mm)	242.7±5	237.4±5	230.1±5
Image Distance (mm)	145.3±2.5	147.5±2.5	151±2.5
Conjugate Distance (mm)	456.4±9	453.5±9	449.5±9
FFL (mm)	167.9±0.5	170.2±0.5	173.6±0.5
FOV	98.5 mm		
EFL (mm)	116 mm		
Format (mm)	Ø66		
Aperture(F/#)	F3.8		
Distortion	0.1%		
ENP Diameter	Ø30.5		
Mount	V (Ø49)		

### VTL-16K-0.7X



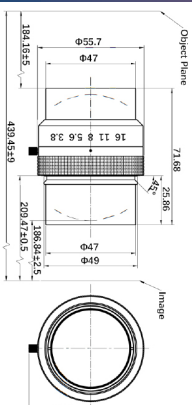
Mag. (x)	0.66x	0.7x	0.75x
WD (mm)	240.1±5	229.4±5	219.3±5
Image Distance (mm)	145.9±2.5	150.9±2.5	156.2±2.5
Conjugate Distance (mm)	452.9±9	447.2±9	442.4±9
FFL (mm)	169.4	174.4	179.7
FOV	14.1°		
EFL (mm)	116 mm		
Format (mm)	Ø66		
Aperture(F/#)	F3.8		
Distortion	0%		
ENP Diameter	30.28		
Mount	V (Ø49)		

### VTL-16K-0.75X



Mag. (x)	0.7x	0.75x	0.8x
WD (mm)	232±5	220.8±5	211±5
Image Distance (mm)	151.2±2.5	157±2.5	162.9±2.5
Conjugate Distance (mm)	450.1±9	444.8±9	440.9±9
FFL (mm)	174.7±0.5	180.5±0.5	186.4±0.5
FOV	18.8°		
EFL (mm)	100 mm		
Format (mm)	Ø66		
Aperture(F/#)	F3.8		
Distortion	0.0008%		
ENP Diameter	30.28		
Mount	V (Ø49)		

### VTL-16K-1.0X



Mag. (x)	0.93x	1.0x	1.07x
WD (mm)	192.48±5	184.16±5	176.28±5
Image Distance (mm)	178.78±2.5	186.84±2.5	194.87±2.5
Conjugate Distance (mm)	439.7±9	439.45±9	439.6±9
FFL (mm)	201.4±0.5	209.47±0.5	217.5±0.5
FOV	16.2°		
EFL (mm)	116 mm		
Format (mm)	Ø66		
Aperture(F/#)	F3.5		
Distortion	0.0005%		
ENP Diameter	33.06		
Mount	V (Ø49)		

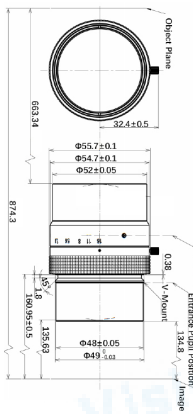
# 16K5μ Line Scan Lenses

## FEATURES

1. Specially designed for 16K5μ super high resolution line scan camera
2. Lens real resolution up to 160lp / mm
3. Provide higher contrast for cameras
4. Max image circle up to 82mm ,also compatible with 12K5μ / 16K3.5μ camera
5. Optical distortion < 1 pixel size
6. Magnification from 0.22x-4.5x

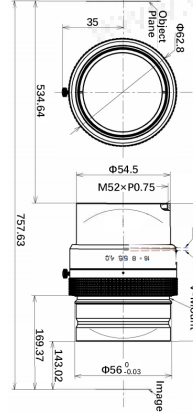


### VTL-16KP-0.26X



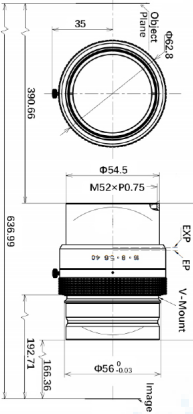
Mag. (x)	0.22x	0.26x	0.3x
WD (mm)	767.64±5	663.34±5	587.64±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	969.75±9	874.3±9	804.5±9
FFL (mm)	155.15	160.95	166.85
FOV	-	-	-
EFL (mm)	116 mm	-	-
Format (mm)	Ø82	-	-
Aperture(F/#)	F3.8-16	-	-
Distortion	0.001%	-	-
ENP Diameter	-	-	-
Mount	V (Ø49)	-	-

### VTL-16KP-0.3X



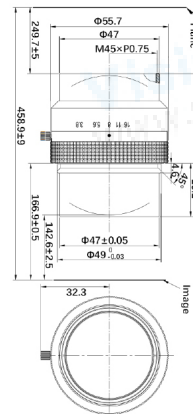
Mag. (x)	0.29x	0.33x	0.38x
WD (mm)	599.5±5	534.64±5	480±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	816.1±9	757.63±9	709.9±9
FFL (mm)	163±0.5	169.37±0.5	176.3±0.5
FOV	-	-	-
EFL (mm)	120 mm	-	-
Format (mm)	Ø82	-	-
Aperture(F/#)	F4.0-16	-	-
Distortion	0.005%	-	-
ENP Diameter	-	-	-
Mount	V (Ø56)	-	-

### VTL-16KP-0.5X



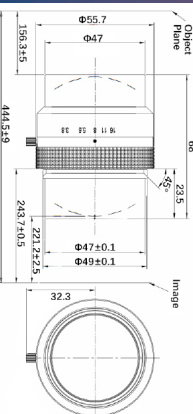
Mag. (x)	0.43x	0.5x	0.57x
WD (mm)	437.5±5	390.66±5	354±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	674±9	636.99±9	611±9
FFL (mm)	181±0.5	192.71±0.5	202±0.5
FOV	-	-	-
EFL (mm)	120 mm	-	-
Format (mm)	Ø82	-	-
Aperture(F/#)	F4.0-16	-	-
Distortion	0.002%	-	-
ENP Diameter	-	-	-
Mount	V (Ø56)	-	-

### VTL-16KP-0.625X



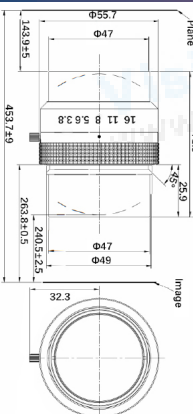
Mag. (x)	0.59x	0.625x	0.67x
WD (mm)	260.5±5	245.9±5	237.5±5
Image Distance (mm)	138.6±2.5	142.6±2.5	147.6±2.5
Conjugate Distance (mm)	465.7±9	458.9±9	451.7±9
FFL (mm)	163±0.5	166.9±0.5	172±0.5
FOV	26.2°	-	-
EFL (mm)	116 mm	-	-
Format (mm)	Ø82	-	-
Aperture(F/#)	F3.8	-	-
Distortion	0.001%	-	-
ENP Diameter	Ø29.8	-	-
Mount	V (Ø49)	-	-

### VTL-16KP-1.3X



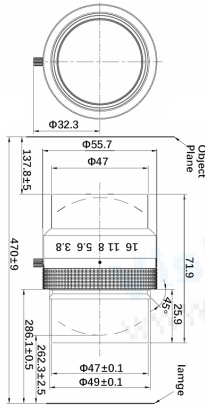
Mag. (x)	1.25x	1.33x	1.47x
WD (mm)	161.9±5	156.36±5	148.1±5
Image Distance (mm)	212±2.5	221.2±2.5	237.3±2.5
Conjugate Distance (mm)	440.8±9	444.5±9	452.4±9
FFL (mm)	234.5	243.7	259.8
FOV	13.9°	-	-
EFL (mm)	116 mm	-	-
Format (mm)	Ø84	-	-
Aperture(F/#)	F3.8	-	-
Distortion	0.0003%	-	-
ENP Diameter	Ø30.28	-	-
Mount	V (Ø49)	-	-

### VTL-16KP-1.5X



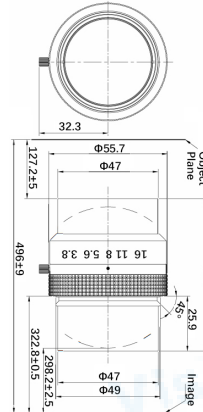
Mag. (x)	1.3x	1.5x	1.6x
WD (mm)	155.7±5	143.9±5	139.1±5
Image Distance (mm)	217.6±2.5	240.5±2.5	252±2.5
Conjugate Distance (mm)	442.6±9	453.7±9	460.4±9
FFL (mm)	240.9±0.5	263.8±0.5	275.3±0.5
FOV	54.7 mm	-	-
EFL (mm)	116 mm	-	-
Format (mm)	Ø84	-	-
Aperture(F/#)	F3.8	-	-
Distortion	0.08%	-	-
ENP Diameter	Ø30.6	-	-
Mount	V (Ø49)	-	-

### VTL-16KP-1.7X



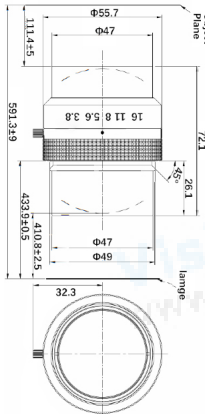
Mag. (x)	1.65x	1.7x	1.73x
WD (mm)	139.9±5	137.8±5	136.7±5
Image Distance (mm)	256.5±2.5	262.3±2.5	265.8±2.5
Conjugate Distance (mm)	466.3±9	470±9	472.3±9
FFL (mm)	280.3	286.1	289.6
FOV	Ø38.8		
EFL (mm)	116 mm		
Format (mm)	Ø84		
Aperture(F/#)	F3.8		
Distortion	0.05%		
ENP Diameter	Ø30.9		
Mount	V (Ø49)		

### VTL-16KP-2.0X



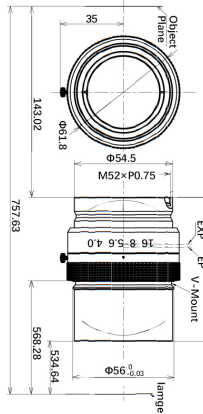
Mag. (x)	1.75x	2x	2.25x
WD (mm)	135.7±5	127.2±5	121±5
Image Distance (mm)	268.4±2.5	298.3±2.5	326.4±2.5
Conjugate Distance (mm)	474.7±9	496±9	517.9±9
FFL (mm)	292.9±0.5	322.8±0.5	350.9±0.5
FOV	11.3°		
EFL (mm)	116 mm		
Format (mm)	Ø84		
Aperture(F/#)	F3.8		
Distortion	0.0008%		
ENP Diameter	Ø30.52		
Mount	V (Ø49)		

### VTL-16KP-3.0X



Mag. (x)	2.5x	3x	4.5x
WD (mm)	119.2±5	111.4±5	98.6±5
Image Distance (mm)	352.8±2.5	410.8±2.5	583.8±2.5
Conjugate Distance (mm)	541.1±9	591.3±9	751.5±9
FFL (mm)	375.9	433.9	606.9
FOV	13.83°		
EFL (mm)	116 mm		
Format (mm)	Ø84		
Aperture(F/#)	F4.2		
Distortion	0.001%		
ENP Diameter	Ø29.52		
Mount	V (Ø49)		

### VTL-16KP-3.0X-L



Mag. (x)	2.5x	3x	4.5x
WD (mm)	155.3±5	143.02±5	128.8±5
Image Distance (mm)	-	-	-
Conjugate Distance (mm)	681±9	757.63±9	864.5±9
FFL (mm)	479.1±0.5	568.28±0.5	585±0.5
FOV	-		
EFL (mm)	120 mm		
Format (mm)	Ø82		
Aperture(F/#)	F4.0-16		
Distortion	0.001%		
ENP Diameter	Ø31.4		
Mount	V (Ø56)		

# Coaxial Illumination Line Scan Lenses

## FEATURES

1. Designed for coaxial lighting system
2. Avoid the resolution deduction caused by using the beam splitter
3. **High resolution and contrast, supporting 16K 5μ line scan cameras**
4. With 30\*80mm beam splitter
5. Ultra-low optical distortion , less than 0.001% or 1 pixel



### VTCL-16KP-1.0X

Mag. (x)	0.9x	1x	1.2x
WD (mm)	170.1±5	157.39±5	138±5
Conjugate Distance (mm)	450.8±9	449.53±9	453.4±9
FFL (mm)	200.6±0.5	212.09±0.5	235.33±0.5
Resolution	16k5μ		
EFL (mm)	116 mm		
Format (mm)	Ø82		
Aperture (F/#)	F3.8-16		
Distortion	0.0005%		
Relative Illumination	90%		
Mount	V (Ø49)		

### VTCL-16KP-1.3X

Mag. (x)	1.2x	1.33x	1.43x
WD (mm)	83.33±5	71.54±5	63.87±5
Conjugate Distance (mm)	572.34±9	579.35±9	586.3±9
FFL (mm)	308.5±0.5	327.28±0.5	341.92±0.5
Resolution	16k5μ		
EFL (mm)	116 mm		
Format (mm)	Ø82		
Aperture (F/#)	F4.3-16		
Distortion	0.001%		
Relative Illumination	90%		
Mount	V (Ø56)		

### VTCL-16KP-1.5X

Mag. (x)	1.4x	1.5x	1.6x
WD (mm)	34.1±5	27.3±5	21.2±5
Conjugate Distance (mm)	584.2±9	592.1±9	600.28±9
FFL (mm)	337.59±0.5	351.95±0.5	366.56±0.5
Resolution	16k5μ		
EFL (mm)	145 mm		
Format (mm)	Ø82		
Aperture (F/#)	F4.3-16		
Distortion	0.001%		
Relative Illumination	90%		
Mount	V (Ø56)		

### VTCL-16KP-1.7X

Mag. (x)	1.45x	1.7x	2x
WD (mm)	67.2±5	48.83±5	35.7±5
Conjugate Distance (mm)	586.5±9	611.85±9	643.1±9
FFL (mm)	337.86±0.5	381.66±0.5	425.6±0.5
Resolution	16k5μ		
EFL (mm)	116 mm		
Format (mm)	Ø82		
Aperture (F/#)	F4.0-16		
Distortion	0.001%		
Relative Illumination	90%		
Mount	V (Ø56)		

### VTCL-16KP-2.0X

Mag. (x)	1.7x	2x	2.4x
WD (mm)	92±5	135.95±5	117±5
Conjugate Distance (mm)	611±9	641.94±9	688±9
FFL (mm)	380.6±0.5	424.66±0.5	482±0.5
Resolution	16k5μ		
EFL (mm)	120 mm		
Format (mm)	Ø82		
Aperture (F/#)	F4.0-16		
Distortion	0.0005%		
Relative Illumination	90%		
Mount	V (Ø56)		

### VTCL-16KP-3.0X

Mag. (x)	2.5x	3x	3.5x
WD (mm)	102.4±5	112.6±5	105.5±5
Conjugate Distance (mm)	696.5±9	759.5±9	825.9±9
FFL (mm)	493±0.5	565.5±0.5	639±0.5
Resolution	16k5μ		
EFL (mm)	120 mm		
Format (mm)	Ø82		
Aperture (F/#)	F4.0-16		
Distortion	0.005%		
Relative Illumination	90%		
Mount	V (Ø56)		



# Focusing Ring and Adapter



	Lens Mount	Camera Mount	Length (mm)
Adapter Ring	M58 × P0.75	C-Mount	10
	M58 × P0.75	F Mount	9
	M58 × P0.75	M42 × P0.75	10
	M58 × P0.75	M42 × P1	10
	M58 × P0.75	M42 × P1	24.3
	M58 × P0.75	M48 × P0.75	10
	M58 × P0.75	M48 × P0.75	29.74
	M58 × P0.75	M72 × P0.75	2
	M58 × P0.75	M72 × P0.75	16.75
	M58 × P0.75	M72 × P0.75	24.3
	M58 × P0.75	M72 × P0.75	25
	M58 × P0.75	M72 × P0.75	50
	M58 × P0.75	M72 × P0.75	100
	M58 × P0.75	M95 × P1	25
	M58 × P0.75	M95 × P1	50
M58 × P0.75	M95 × P1	100	

	Lens Mount	Camera Mount	Length (mm)
Adapter Ring	C-Mount	M42 × P1	5.526
	C-Mount	M42 × P1	12.5
	M42 × P1	M58 × P0.75	4
	M42 × P1	M72 × P0.75	4
	M72 × P0.75	M58 × P0.75	6
	M72 × P0.75	M90 × P1	3
	M72 × P0.75	M90 × P1	50
	M72 × P0.75	M95 × P1	3
	M72 × P0.75	M95 × P1	50
	V (Ø38)	M42 × P0.75	4.5
	V (Ø38)	M42 × P1	4.5
	V (Ø38)	M42 × P1	6.5
	V (Ø42.5)	C-Mount	8.47
	V (Ø42.5)	M42 × P1	14
	V (Ø42.5)	M58 × P0.75	14.52

	Lens Mount	Camera Mount	Focus Range (mm)	Length (mm)
Focus Adjusting Ring	V (Ø38)	V(Ø38)	17.4-29.4	12
	M54 × P0.75	M72 × P0.75	44-69	25
	V (Ø38)	M58 × P0.75	24-45	21
	M60 × P0.75	M72 × P0.75	44-69	25
	F Mount	M58 × P0.75	-	10.2
	M72 × P0.75	M72 × P0.75	43.3-68.3	25
	V (Ø38)	M72 × P0.75	40.7-64.7	24

	Mount 1	Mount 2	Length (mm)
Extension Tube	M58 × P0.75	M58 × P0.75	10
	M58 × P0.75	M58 × P0.75	24
	M58 × P0.75	M58 × P0.75	24.82
	M58 × P0.75	M58 × P0.75	25
	M58 × P0.75	M58 × P0.75	50
	M58 × P0.75	M58 × P0.75	100
	M72 × P0.75	M72 × P0.75	10
	M72 × P0.75	M72 × P0.75	20
	M72 × P0.75	M72 × P0.75	35
	M72 × P0.75	M72 × P0.75	50
	M90 × P1	M90 × P1	20
	M90 × P1	M90 × P1	50
	M95 × P1	M95 × P1	20
	M95 × P1	M95 × P1	50

	Lens Mount	Mount 2	Length (mm)
Lens Holder	V (Ø38)	M42 × P0.75	4.5
	V (Ø38)	M42 × P0.75	6.5
	V (Ø42.5)	M42 × P0.75	14
	V (Ø42.5)	M58 × P0.75	14.52
	V (Ø49)	M49 × P0.75	30
	V (Ø49)	M54 × P0.75	20
	V (Ø56)	M60 × P0.75	10
	V (Ø64)	M72 × P0.75	6

# 360° Inner Surface Lenses

## FEATURES

1. High resolution and compact design
2. Can clearly detect hidden features and defects
3. Highlight the tiny defects of the detected object
4. The lens comes with an integrated LED light source
5. Able to detect tiny defects under a very wide viewing angle
6. Applicable to objects whose internal features can only enter the hole through the internal inspection lens



### VT-360LEN-IN01

Sensor Size	1/3"
Format (mm)	Ø3.6
Aperture (F/#)	F14
WD (mm)	-
Object Diam. (mm)	Ø25-Ø100
Object Height (mm)	12.4-58.2
Wavelength Range	420-1150 nm
FOV (Diam x Height)	Min Ø25 x 12.4 Max Ø100 x 58.2
FOV	62°
Dimensions (mm)	Φ100 x 63.6 mm
Mount	C-Mount

### VT-360LEN-IN02

Sensor Size	2/3"
Format (mm)	Ø6.6
Aperture (F/#)	-
WD (mm)	2.7-70 mm
Object Diam. (mm)	5-120 mm
Object Height (mm)	5-123 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min 5 x 5 Max 120 x 123
Dimensions (mm)	Φ100 x 63.6 mm
Mount	C-Mount

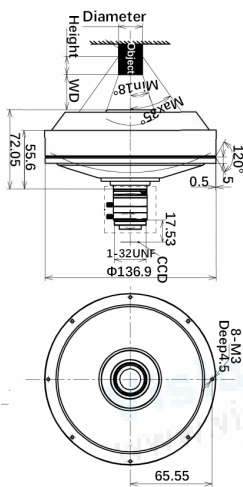
# 360°Outer Surface Lenses

## FEATURES

1. High resolution and compact design
2. Used to achieve 360° side view imaging of small objects
3. The minimum measuring object is 4.5mm (outer surface)
4. Suitable for detecting components such as drug containers, bottlenecks, and other threaded objects

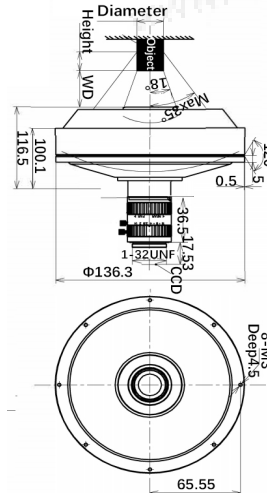


### VT-360LEN-OUT01



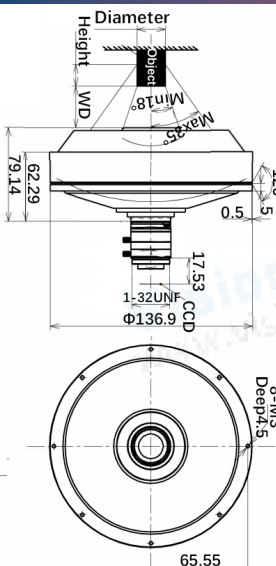
Sensor Size	1/3"
Format (mm)	Ø3.6
Aperture (F/#)	F6-16
WD (mm)	19-46.2 mm
Object Diam. (mm)	7.5-25 mm
Object Height (mm)	4.6-19.54 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min Ø7.5 x 4.9 Typical Ø15 x 10.9 Max Ø25 x 19.54
Dimensions (mm)	-
Mount	C-Mount

### VT-360LEN-OUT02



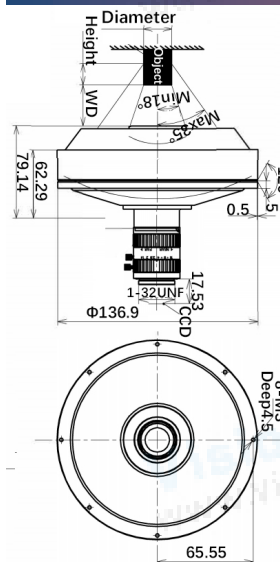
Sensor Size	1/3"
Format (mm)	Ø3.6
Aperture (F/#)	F6-16
WD (mm)	9-48 mm
Object Diam. (mm)	4.5-30 mm
Object Height (mm)	3.1-25.6 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min Ø4.5 x 3.1 Typical Ø15 x 12.8 Max Ø30 x 25.6
Dimensions (mm)	-
Mount	C-Mount

### VT-360LEN-OUT03



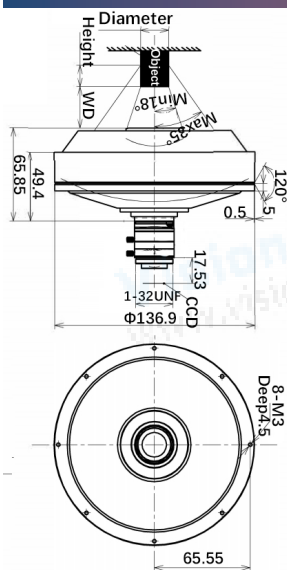
Sensor Size	1/1.8"
Format (mm)	Ø5.32
Aperture (F/#)	F8-16
WD (mm)	9-45.4 mm
Object Diam. (mm)	7.5-30 mm
Object Height (mm)	5.3-25 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min Ø7.5 x 5.3 Typical Ø15 x 11.86 Max Ø30 x 25
Dimensions (mm)	-
Mount	C-Mount

### VT-360LEN-OUT04



Sensor Size	1/1.8"
Format (mm)	Ø5.32
Aperture (F/#)	F8-16
WD (mm)	9-45.4 mm
Object Diam. (mm)	4.5-30 mm
Object Height (mm)	2.7-25 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min Ø4.5 x 2.7 Typical Ø15 x 11.86 Max Ø30 x 25
Dimensions (mm)	-
Mount	C-Mount

### VT-360LEN-OUT05



Sensor Size	2/3"
Format (mm)	Ø6.6
Aperture (F/#)	F8-16
WD (mm)	14-48.2 mm
Object Diam. (mm)	7.5-30 mm
Object Height (mm)	4-23.4 mm
Wavelength Range	450-650 nm
FOV (Diam x Height)	Min Ø7.5 x 4
	Typical Ø15 x 10.6
	Max Ø30 x 23.4
Dimensions (mm)	-
Mount	C-Mount

Vision Datum  
www.visiondatum.com

Vision Datum  
www.visiondatum.com

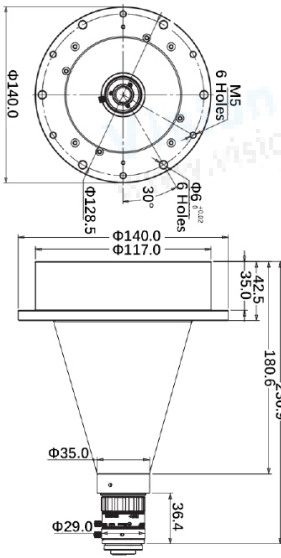
Vision Datum  
www.visiondatum.com

Vision Datum  
www.visiondatum.com

Vision Datum  
www.visiondatum.com

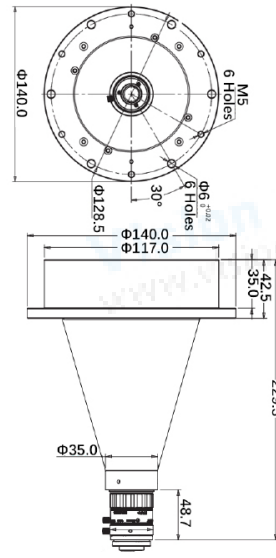
# 360° Multi-Angle Lenses

## VT-360LEN-0825-118



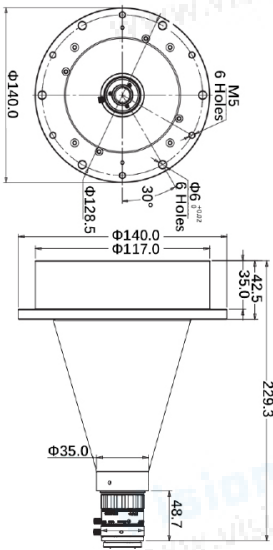
Sensor Size	2/3"
Wavelength Range	400-600 nm
WD	3-40 mm
MTF30	150 lp/mm
Aperture (F/#)	2.8~16
Max Diam.	140
Length	230.9
Max Object Diam. From Side	Object height 30 mm
	Object height 20 mm
Max Object Diam. From Side + Top	Object height 60 mm
	Object height 5 mm
Mount	C-Mount

## VT-360LEN-0825-230



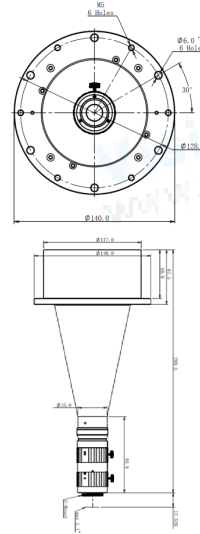
Sensor Size	2/3"
Wavelength Range	450-650 nm
WD	20-40 mm
MTF30	150 lp/mm
Aperture (F/#)	8~16
Max Diam.	140
Length	229.3
Max Object Diam. From Side	Object height 30 mm
	Object height 20 mm
Max Object Diam. From Side + Top	Object height 50 mm
	Object height 5 mm
Mount	C-Mount

## VT-360LEN-0825-H1.1



Sensor Size	1.1 "
Wavelength Range	400-680 nm
WD	3-40 mm
MTF30	126 lp/mm
Aperture (F/#)	2.8~25
Max Diam.	140
Length	229.3
Max Object Diam. From Side	Object height 30 mm
	Object height 20 mm
Max Object Diam. From Side + Top	Object height 72 mm
	Object height 5 mm
Mount	C-Mount

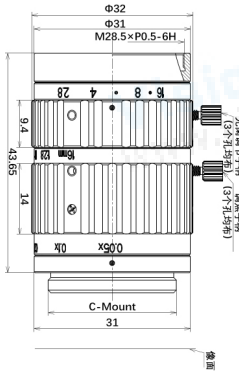
## VT-360LEN-0816-H1.1



Sensor Size	1.1 "						
Wavelength Range	400-680 nm						
WD	5-100 mm						
MTF30	120 lp/mm						
Aperture (F/#)	2.8~25						
Max Diam.	140						
Length	299.5						
Max Object Diam. From Side	Object height 20 mm	5	10	25	45	60	75
	Object height 5 mm	85	72	40	10	15	5
Max Object Diam. From Side + Top	Object height 10 mm						
Mount	C-Mount						

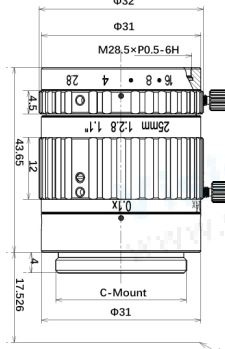
# Macro Lenses

## VT-MC1628



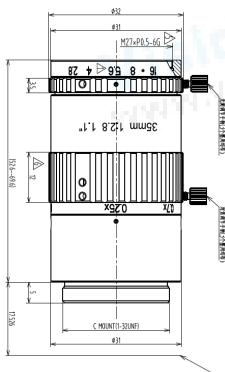
EFL (mm)	16 mm						
F.NO (F/#)	F2.8-16(±10%)						
FFL (mm)	17.526 mm						
O/I	115.5-606.9 mm						
TV Distortion	<0.33%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
52	-0.25	56.6	42	51.2	38.4	35.2	26.4
66	-0.2	66.4	50	62.4	46.8	42.9	32
94	-0.15	92.8	70	84	63	58	43.5
152	-0.10	142	106	144	108	89	66.8
321	-0.05	284	213	260	195	179	134
546	-0.03	474	356	433	325	299	224

## VT-MC2528



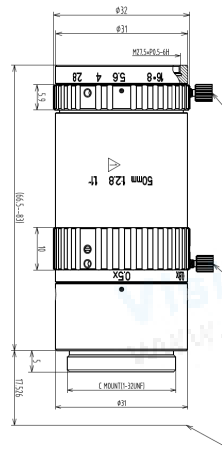
EFL (mm)	25 mm						
F.NO (F/#)	F2.8-16(±10%)						
FFL (mm)	17.526 mm						
O/I	126-314.1 mm						
TV Distortion	<0.07%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
65	-0.4	35	26	32	24	22	16.5
74.4	-0.35	40	30	35.6	27.4	25	18.8
85.4	-0.3	47	35	42.6	32	29	22
103.4	-0.25	56	42	51	38	35	26
125.4	-0.2	70	52.8	64	48	44	33
173.4	-0.15	93	70	85	64	58.6	44
260.4	-0.1	140	105	128	96	88	66

## VT-MC3528



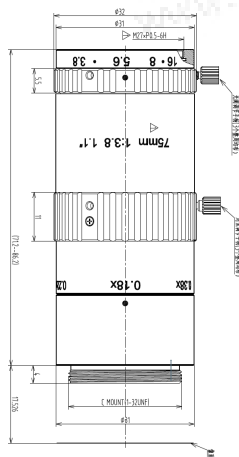
EFL (mm)	35 mm						
F.NO (F/#)	F2.8-16(±10%)						
FFL (mm)	17.526 mm						
O/I	145.3-220.6 mm						
TV Distortion	<0.05%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
59	-0.7	20.1	15	18.2	13.7	12.6	9.5
63	-0.65	21.6	16.2	19.6	14.7	13.6	10.2
67	-0.6	23.4	17.6	21.3	16	14.8	11.1
73	-0.55	25.6	19.2	23.2	17.4	16.1	12.1
78	-0.5	28.1	21.1	25.6	19.2	17.6	13.3
87	-0.45	31.2	23.4	28.4	21.3	19.7	14.8
97	-0.4	35.2	26.4	32	24	22.2	16.6
110	-0.35	40.2	30.1	36.5	27.4	25.3	19
125	-0.3	46.9	35.2	42.6	32	29.6	22.2
150	-0.25	56.3	42.2	55.6	41.7	38.6	28.9

## VT-MC5028



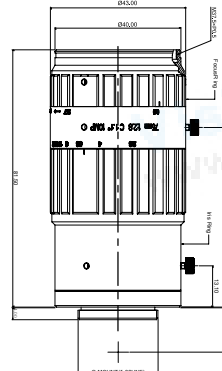
EFL (mm)	50 mm						
F.NO (F/#)	F2.8-16(±10%)						
FFL (mm)	17.526 mm						
O/I	195.6-220.1 mm						
TV Distortion	<0.05%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
95.4	-0.8	17.5	13	15.9	11.9	11	8.2
99.4	-0.75	18.6	14	16.9	12.7	11.7	8.8
103.4	-0.7	20	15	18.2	13.6	12.6	9.4
109.4	-0.65	21.5	16.1	19.6	14.7	13.6	10.2
115.4	-0.6	23.3	17.6	21.2	15.9	14.7	11
123.4	-0.55	25.5	19.1	23.1	17.3	16	12
132.4	-0.5	28	21	25.4	19	17.6	13.2

## VT-MC7538



EFL (mm)	75 mm						
F.NO (F/#)	F3.8-16(±10%)						
FFL (mm)	17.526 mm						
O/I	357-557 mm						
TV Distortion	<0.05%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
257	-0.38	30.75	27.78	33.68	25.26	23.15	17.36
282	-0.337	41.78	31.33	37.98	28.48	26.11	19.58
307	-0.302	46.62	34.96	42.38	31.78	29.13	21.85
332	-0.274	51.38	38.54	46.71	35.03	32.11	24.08
357	-0.25	56.32	42.24	51.2	38.4	35.2	26.4
382	-0.231	60.95	45.71	55.41	41.55	38.09	28.57
407	-0.214	65.79	49.71	59.81	44.85	41.12	30.84
432	-0.2	70.4	52.8	64	48	44	33
457	-0.186	75.69	56.77	68.81	51.61	47.31	35.48
471	-0.18	78.22	58.66	71.11	53.33	48.88	36.66

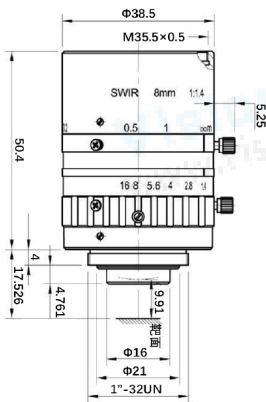
## VT-MC7526



EFL (mm)	75 mm						
F.NO (F/#)	F2.6						
FFL (mm)	15.76 mm						
O/I	357-557 mm						
TV Distortion	<0.05%						
WD (mm)	Mag. (x)	FOV(mm)					
		1.1"(Ø17.6)		1"(Ø16)		2/3"(Ø11)	
		H	V	H	V	H	V
1800	-0.059	238.6	179.0	216.9	162.7	149.2	111.9
1500	-0.071	198.3	148.7	180.3	135.2	123.9	93.0
1200	-0.09	156.4	117.3	142.2	106.7	97.8	73.3
900	-0.122	115.4	86.6	104.9	78.7	72.1	54.1
600	-0.189	74.5	55.9	67.7	50.8	46.6	34.9
300	-0.425	33.1	24.8	30.1	22.6	20.7	15.5
100	-2.520	5.6	4.2	5.1	3.8	3.5	2.6

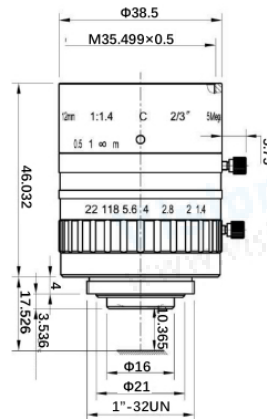
# SWIR Lenses

## VT-LEM0814SWIR



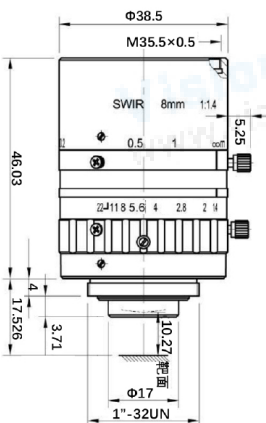
EFL (mm)	8.5
Aperture (F/#)	F1.4
Sensor Size	2/3"
FOV (D/H/V)	61°/54.8°/42.8°
Back Focus (mm)	9.91
TTL (mm)	65
Front/Rear Effective Dia. (mm)	Front : Ø24.9 Rear : Ø8.54
Max. CRA	16.38°
Iris	Manual
Distortion	<-1.2%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x50.4
Mount	C-Mount
Resolution	60lp/mm

## VT-LEM1214SWIR



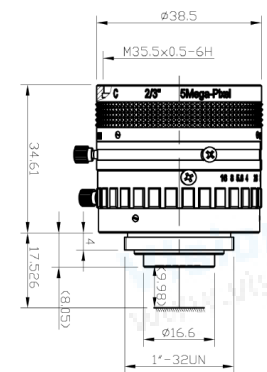
EFL (mm)	12.5 mm
Aperture (F/#)	F1.4
Sensor Size	2/3"
FOV (D/H/V)	46.8°/38.2°/29.2°
Back Focus (mm)	10.4 mm
TTL (mm)	60.5 mm
Front/Rear Effective Dia. (mm)	Front : Ø20.44mm Rear : Ø8.63mm
Max. CRA	16.44°
Iris	Manual
Distortion	<-0.4%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x64.032 mm
Mount	C-Mount
Resolution	40lp/mm

## VT-LEM1614SWIR



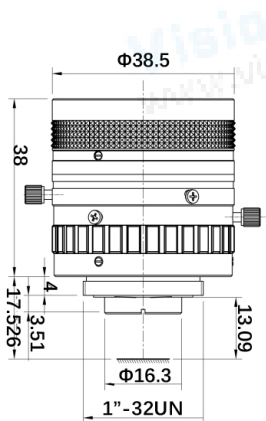
EFL (mm)	16.3 mm
Aperture (F/#)	F1.4
Sensor Size	2/3"
FOV (D/H/V)	36.6° /29.6° /22.4°
Back Focus (mm)	10.27 mm
TTL (mm)	59.2 mm
Front/Rear Effective Dia. (mm)	Front : Ø19.35mm; Rear : Ø9.43mm
Max. CRA	15.59°
Iris	Manual
Distortion	<-0.4%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x46.03 mm
Mount	C-Mount
Resolution	40lp/mm

## VT-LEM2514SWIR



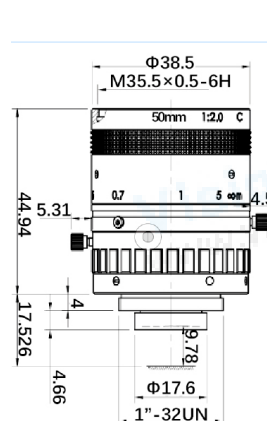
EFL (mm)	25.9 mm
Aperture (F/#)	F1.4
Sensor Size	2/3"
FOV (D/H/V)	23.6°/19°/14.4°
Back Focus (mm)	9.98 mm
TTL (mm)	38.3 mm
Front/Rear Effective Dia. (mm)	Front : Ø18.6mm Rear : Ø9.55mm
Max. CRA	14.32°
Iris	Manual
Distortion	<-0.5%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x34.61 mm
Mount	C-Mount
Resolution	60lp/mm

## VT-LEM3514SWIR



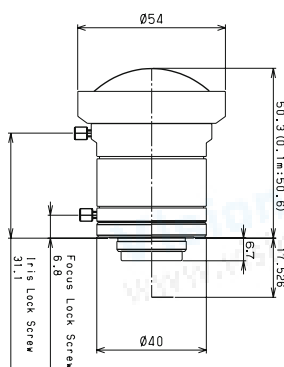
EFL (mm)	35 mm
Aperture (F/#)	F1.4
Sensor Size	2/3"
FOV (D/H/V)	17.44°/13.99°/10.51°
Back Focus (mm)	13.09 mm
TTL (mm)	46.6 mm
Front/Rear Effective Dia. (mm)	Front : Ø22.20mm Rear : Ø11.20mm
Max. CRA	10.85°
Iris	Manual
Distortion	<0.03%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x38 mm
Mount	C-Mount
Resolution	50lp/mm

## VT-LEM5020SWIR



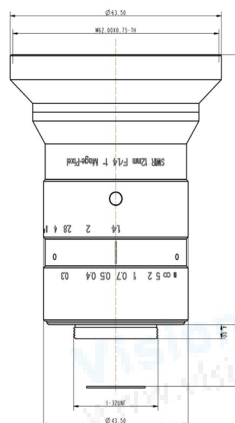
EFL (mm)	50 mm
Aperture (F/#)	F2.0
Sensor Size	2/3"
FOV (D/H/V)	12.36°/9.92°/7.45°
Back Focus (mm)	9.78 mm
TTL (mm)	55.9 mm
Front/Rear Effective Dia. (mm)	Front : Ø24.09mm Rear : Ø12.55mm
Max. CRA	5.42°
Iris	Manual
Distortion	<-0.16%
Filter Screw Size	M35.5xP0.5
Dimension (mm)	Ø38.5x44.94 mm
Mount	C-Mount
Resolution	30lp/mm

### VT-LEM0618SWIR-H1



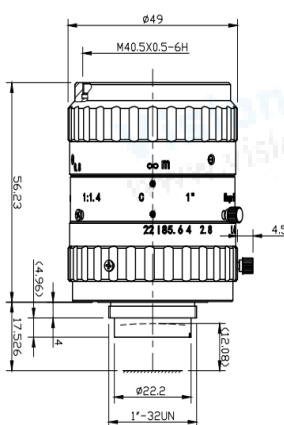
EFL (mm)	6mm
Aperture (F/#)	F1.8-F22
Sensor Size	1"
FOV (D/H/V)	104.6°/95.1°/78.7°
Minimum Object Distance	0.1m
Optical Back Focal Distance	11.5mm (in air)
TV Distortion	-0.7% (at far)
Iris	Manual
Frang. Back	17.526mm
Size	Ø54x50.3mm
Mount	C-Mount
Resolution	6.4µm

### VT-LEM1214SWIR-H1



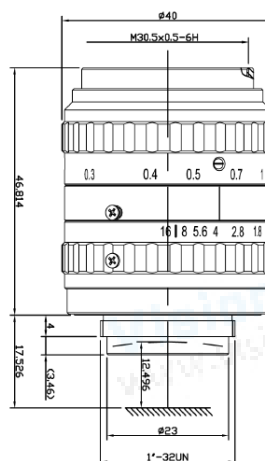
EFL (mm)	12.25 mm
Aperture (F/#)	F1.4-22
Sensor Size	1"
FOV (D/H/V)	66.83°/54.58°/44.10°
Back Focus (mm)	15.08mm
TTL (mm)	93.1 mm
MOD	300mm
Max. CRA	8.1°
Iris	Manual
Distortion	-2.88%
Filter Screw Size	M62X0.75-7H
Focus Rang	300mm~∞
Mount	C-Mount
Resolution	5MP

### VT-LEM2514SWIR-H1



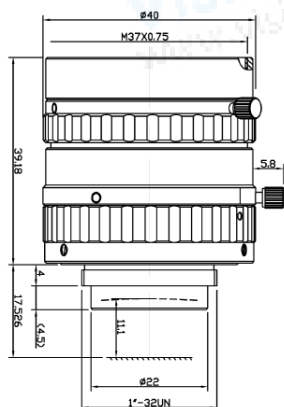
EFL (mm)	25 mm
Aperture (F/#)	F1.49
Sensor Size	1"
FOV (D/H/V)	36°/27.8°/21°
Back Focus (mm)	12.08 mm
TTL (mm)	65.5 mm
Front/Rear Effective Dia. (mm)	Front : Ø29.54mm Rear : Ø19.5mm
Max. CRA	4.16°
Iris	Manual
Distortion	<-0.15%
Filter Screw Size	M40xP0.5
Dimension (mm)	Ø49x56.23 mm
Mount	C-Mount
Resolution	40lp/mm

### VT-LEM2518SWIR-H1



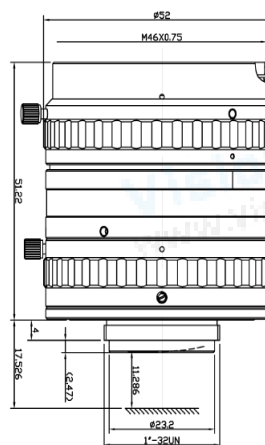
EFL (mm)	25 mm
Aperture (F/#)	F1.8
Sensor Size	1"
FOV (D/H/V)	35.49°/28.5°/21.74°
Back Focus (mm)	13.09 mm
TTL (mm)	59.639 mm
Front/Rear Effective Dia. (mm)	Front : Ø24.19mm Rear : Ø19.76mm
Max. CRA	0.65°
Iris	Manual
Distortion	<-0.5%
Filter Screw Size	M30.5xP0.5
Dimension (mm)	Ø40x46.81 mm
Mount	C-Mount
Resolution	100lp/mm

### VT-LEM3514SWIR-H1



EFL (mm)	35 mm
Aperture (F/#)	F1.4
Sensor Size	1"
FOV (D/H/V)	31.2°/25.4°/18.7°
Back Focus (mm)	11.1 mm
TTL (mm)	54.01 mm
Front/Rear Effective Dia. (mm)	Front : Ø28.64mm Rear : Ø15.62mm
Max. CRA	0.65°
Iris	Manual
Distortion	<0.1%
Filter Screw Size	M37xP0.75
Dimension (mm)	Ø40x39.18 mm
Mount	C-Mount
Resolution	50lp/mm

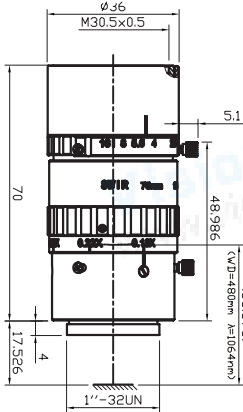
### VT-LEM5014SWIR-H1



EFL (mm)	50 mm
Aperture (F/#)	F1.4
Sensor Size	1"
FOV (D/H/V)	18.18°/14.48°/10.97°
Back Focus (mm)	11.29 mm
TTL (mm)	65.99 mm
Front/Rear Effective Dia. (mm)	Front : Ø36.12mm Rear : Ø16.12mm
Max. CRA	12.66°
Iris	Manual
Distortion	<0.05%
Filter Screw Size	M46xP0.75
Dimension (mm)	Ø52x51.22 mm
Mount	C-Mount
Resolution	50lp/mm

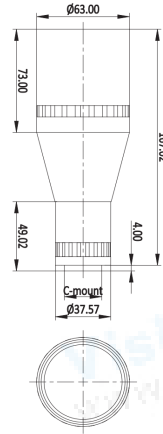


### VT-LEM7525SWIR-H1



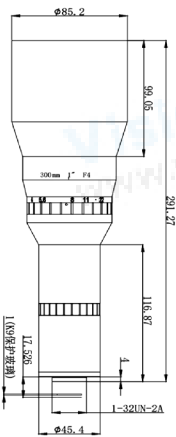
EFL (mm)	75 mm
Aperture (F/#)	F2.5
Sensor Size	1"
FOV (D/H/V)	9.08°/7.26°/5.45°
Back Focus (mm)	38.875 mm
TTL (mm)	95 mm
Front/Rear Effective Dia. (mm)	Front: Ø22.4mm Rear: Ø10.9mm
Max. CRA	-
Iris	Manual
Wavelength	900-1700nm
Distortion	<0.32%
Filter Screw Size	M30.5x0.5
Dimension (mm)	Ø36x70 mm
Mount	C-Mount
Resolution	90lp/mm

### VT-LEM20040SWIR-H1



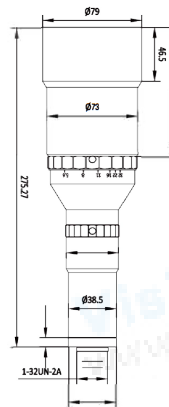
EFL (mm)	200 mm
Aperture (F/#)	F4-F22
Sensor Size	1"(16mm)
Working Distance	10m~∞
FOV (D/H/V)	4.57°x3.66°x2.75°
Back Focus (mm)	48.7mm
TTL (mm)	180mm
Iris	Manual
Wavelength	900-1700nm
Distortion	0.3%@y=8mm
Filter Screw Size	M60x0.5mm
Dimension (mm)	Ø63x170mm
Mount	C-Mount
Object Size[in M.O.D]	800x640x480mm

### VT-LEM30040SWIR-H1



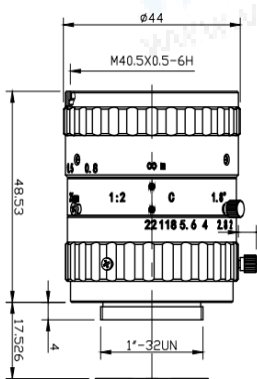
EFL (mm)	300 mm
Aperture (F/#)	F4-F22
Sensor Size	1"(16mm)
Working Distance	10m~∞
FOV (D/H/V)	3.06°x2.44°x1.83°
Back Focus (mm)	81.02mm
TTL (mm)	300mm
Iris	Manual
Wavelength	400-1700nm
Distortion	0.06%@y=8mm
Filter Screw Size	M82x0.75mm
Dimension (mm)	Ø85.2x292mm
Mount	C-Mount
Object Size[in M.O.D]	535x428x321 mm

### VT-LEM40056SWIR-H1



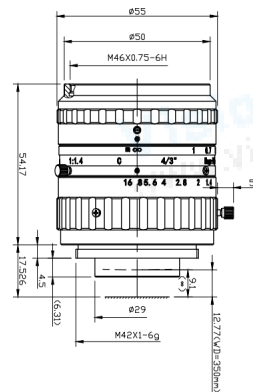
EFL (mm)	400 mm
Aperture (F/#)	F5.6
Sensor Size	1"(16mm)
Working Distance	20m~∞
FOV (D/H/V)	2.29°x1.83°x1.37°
Back Focus (mm)	106.6mm
TTL (mm)	290mm
Iris	Manual
Wavelength	900-1700nm
Distortion	0.28%
Filter Screw Size	/
Dimension (mm)	Ø33.5x58mm
Mount	C-Mount
Object Size[in M.O.D]	805.1x644.1x483.1mm

### VT-LEM2520SWIR-H2



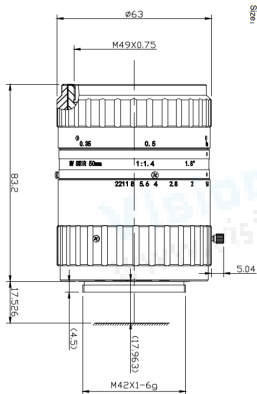
EFL (mm)	25 mm
Aperture (F/#)	F2.0
Sensor Size	28 mm
FOV (D/H/V)	48.04°/39.19°/29.8°
Back Focus (mm)	15.07 mm
TTL (mm)	64 mm
Front/Rear Effective Dia. (mm)	Front: Ø27.37mm Rear: Ø16.37mm
Max. CRA	25.05°
Iris	Manual
Distortion	<-2.3%
Filter Screw Size	M40.5xP0.5
Dimension (mm)	Ø44x48.53 mm
Mount	C-Mount
Resolution	40lp/mm

### VT-LEM3514SWIR-H2



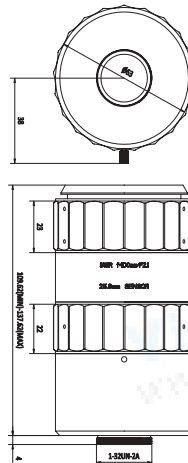
EFL (mm)	35 mm
Aperture (F/#)	F1.4
Sensor Size	4/3"
FOV (D/H/V)	31.2°/25.4°/18.7°
Back Focus (mm)	9.1 mm
TTL (mm)	67 mm
Front/Rear Effective Dia. (mm)	Front: Ø34.13mm Rear: Ø20.91mm
Max. CRA	15.64°
Iris	Manual
Distortion	<-0.4%
Filter Screw Size	M46xP0.75
Dimension (mm)	Ø55x54.17 mm
Mount	M42
Resolution	60lp/mm

## VT-LEM5014SWIR-H2



EFL (mm)	50 mm
Aperture (F/#)	F1.4
Sensor Size	28.6 mm
FOV (D/H/V)	23.18°/18.66°/14.05°
Back Focus (mm)	17.96 mm
TTL (mm)	101 mm
Front/Rear Effective Dia. (mm)	Front : Ø42.91mm Rear : Ø30.16mm
Max. CRA	10.67°
Iris	Manual
Distortion	<-0.22%
Filter Screw Size	M49×P0.75
Dimension (mm)	Ø63×83.2 mm
Mount	M42 x 1
Resolution	90lp/mm

## VT-LEM10021SWIR-H2



EFL (mm)	100 mm
Aperture (F/#)	F2.1-22
Sensor Size	25.6 mm
FOV (D/H/V)	25.6mm 14.33°/11.52°/8.72° 4/3" 11.96°/9.68°/7.26° 1" 9.08°/7.30°/5.50° 1/2" 4.58°/3.64°/2.80°
Back Focus	25.485 mm
Focusing Range	0.4m~+∞
Object Size[in M.O.D]	25.6mm 109.44/87.55/65.66mm 4/3" 90.84x72.67x54.50mm 1" 68.10x54.48x40.86mm 1/2" 34.00x27.20x20.40mm
Wavelength	800-1700nm
Iris	Manual
Distortion	25.6mm 0.17%@y=12.8mm 4/3" 0.12%@y=11.5mm 1" 0.068%@y=8mm 1/2" 0.018%@y=4mm
Filter Screw Size	M49×P0.75
Size	Ø69.5×141.62 mm
Mount	M42/C/F-Mount

## VT-LEM1616022SWIR-H1

EFL (mm)	16 - 160mm
Aperture (F/#)	F2.2-Close
Sensor Size	1"(16mm)
Field of View	43.6 X33.4 °. at 16mm 4.6 X 3.4 °. at 160mm
Back Focus (mm)	18.6mm(In Air)
Flange Back	17.526mm
Iris	Motorized
Focus	Motorized
Zoom	Motorized
Zoom Ratio	10X
M.O.D	1.1m(From Front Vertex)
Wavelength	900-1700nm
Filter Screw Size	M77x0.75mm
Dimension (mm)	117X100X176mm
Mount	C-Mount

## VT-LEM2036060SWIR

EFL (mm)	20 - 360mm
Aperture (F/#)	F6-10
Sensor Size	12.3 mm
Field of View	20.3X15.1°. at 20mm 1.1X 0.84 °. at 360mm
Image Format :	7.2X5.4mm(D9mm)
Flange Back	17.526mm
Zoom Ratio	18X
M.O.D	15m(From Front Vertex)
Wavelength	400-1700nm
Dimension (mm)	93X92X196mm
Iris	-
Focus	Motorized
Zoom	Motorized
Mount	C-Mount

## VT-LEM2050036SWIR

EFL (mm)	20- 500mm
Aperture (F/#)	F3.6-Close
Sensor Size	1/1.8"
Field of View	18.9 X14.2°. at 20mm 0.84 X 0.63°. at 500mm
Iris	Motorized
Focus	Motorized
Zoom	Motorized
Flange Back	17.526mm
Zoom Ratio	37.5X
M.O.D	4m(From Front Vertex)
Wavelength	900-1700nm
Dimension (mm)	120X120.5X306.8mm
Mount	C-Mount

## VT-LEM2075036SWIR

EFL (mm)	20- 750mm
Aperture (F/#)	F3.6-Close
Sensor Size	1/1.8"
Field of View	18.9 X14.2°. at 20mm 0.6 X 0.4°. at 750mm
Iris	Motorized
Focus	Motorized
Zoom	Motorized
Flange Back	17.526mm
Zoom Ratio	37.5X
M.O.D	4m(From Front Vertex)
Wavelength	900-1700nm
Dimension (mm)	120X120.5X306.8mm
Mount	C-Mount

## VT-LEM25120048SWIR

EFL (mm)	25 - 1200mm
Aperture (F/#)	F4.8 - 10
Sensor Size	12.3 mm
Field of View	16.4 X 9.2° at 25mm 0.34 X 0.2° at 1200mm
Iris	Fixed
Focus	Motorized
Zoom	Motorized
Flange Back	17.526mm
Zoom Ratio	48X
Working Distance	15m~∞
Wavelength	400-1700nm
Dimension (mm)	178X139X429mm
Mount	C-Mount

Vision Datum  
www.visiondatum.com

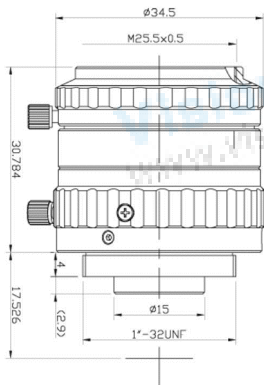
Vision Datum  
www.visiondatum.com

Vision Datum  
www.visiondatum.com

Vision Datum  
www.visiondatum.com

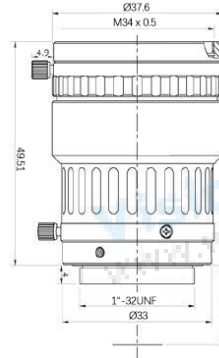
# UV Lenses

## VT-LEN2528UV



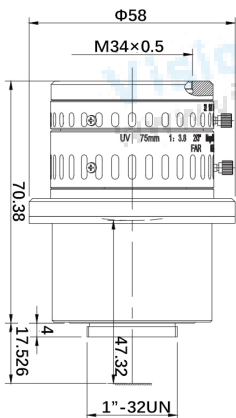
EFL (mm)	25
Resolution	100lp/mm (2MP)
Aperture (F/#)	F2.8
Sensor Size	2/3"
FOV (D/H/V)	24.81°/15.04°/19.96°
Back Focus (mm)	12.45
Distortion	<0.4%
Focusing Range	∞ ~ 0.2m
Iris	Manual
Design Wavelength (nm)	200-1000
Filter Thread Size	M25.5 x 0.5
Dimension (mm)	Ø34.5x30.78
Mount	C-Mount

## VT-LEN5030UV



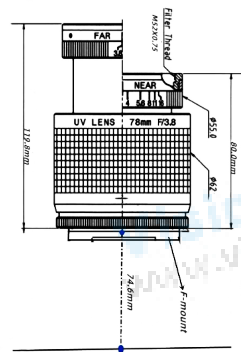
EFL (mm)	50 mm
Resolution	100lp/mm (2MP)
Aperture (F/#)	F3.0
Sensor Size	2/3"
FOV (D/H/V)	12.55°/7.55°/10.06°
Back Focus (mm)	26.55mm
Distortion	<-0.08%
Focusing Range	∞ ~ 0.3m
Iris	Manual
Design Wavelength (nm)	200nm-1000nm
Filter Thread Size	M34 x 0.5
Dimension (mm)	Ø37.6 x 49.51 mm
Mount	C-Mount

## VT-LEN7538UV



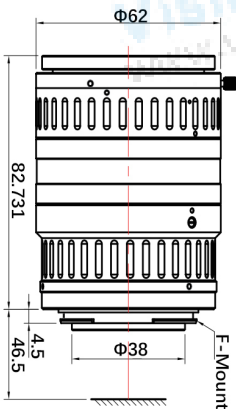
EFL (mm)	75
Resolution	100lp/mm (2MP)
Aperture (F/#)	F3.8
Sensor Size	2/3"
FOV (D/H/V)	8.38°/5.04°/6.72°
Back Focus (mm)	47.32
Distortion	<0.1%
Focusing Range	∞ ~ 0.5m
Iris	Manual
Design Wavelength (nm)	200-1000
Filter Thread Size	M34 x 0.5
Dimension (mm)	Ø40.2 x 70.38
Mount	C-Mount

## VT-LENF7838UV-H1



EFL (mm)	78
Resolution	-
Aperture (F/#)	F3.8-16
Image Circle/mm	35mm
FOV (D/H/V)	15.05° x 12.29° x 9°
Back Focus (mm)	74.6
Distortion	<0.1%
Working Distance	0.22m- ∞
Iris	Manual
Design Wavelength (nm)	190-1000
Filter Thread Size	M52 x 0.75
Dimension (mm)	Φ 64 x 80
Mount	F-Mount

## VT-LENF8528UV



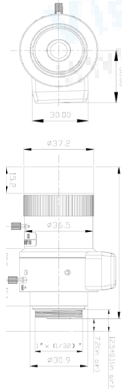
EFL (mm)	85 mm
Resolution	65lp/mm
Aperture (F/#)	F2.8
Sensor Size	25 mm
FOV (D/H/V)	14.03°/11.28°/8.48°
Back Focus (mm)	43.34 mm
Distortion	<0.1%
Focusing Range	-
Iris	Manual
Design Wavelength (nm)	-
Filter Thread Size	M55 x 0.75
Dimension (mm)	Ø62 x 82.73 mm
Mount	F-Mount

Vision Datum  
www.visiondatum.com

# 1/3" -1" ZOOM Lenses

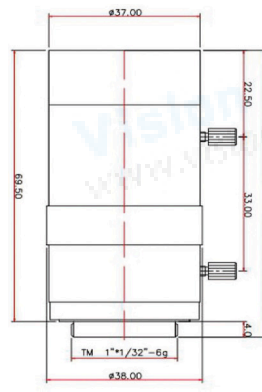
- 1-12MP pixels.
- Any focal length within the zoom range can be used for photography.
- Arrange the picture composition more ideally before shooting.
- High environmental adaptability, can work normally in the environment of -10°C ~ 50°C .

## VT-LEM0510016i-AI



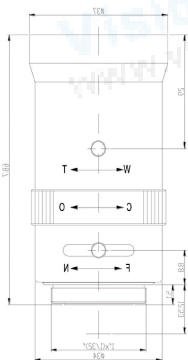
EFL (mm)	5-100 mm
FNo.	F=1.6
Image Fromat	1/3"
F.O.V. (H)	52 ~ 2.8°
M.O.D. (m)	0.7
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø37.5 × 87.4 × 57.4
Weight (g)	164±5%
Operation Focus	W / Locks
Operation Zoom	W / Locks
Operation Iris	DC
Temperature	-10~+50°C

## VT-LEM055016



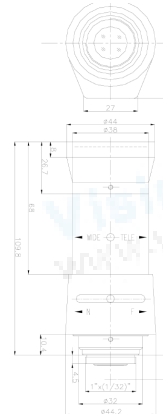
EFL (mm)	5-50 mm
FNo.	F=1.6
Image Fromat	1/3" CCD/CMOS
F.O.V.	4.2 ~ 53.6°
M.O.D. (m)	0.3
BFL(mm)	8
Lens-Mount	CS-Mount
Dimension Ø×L(mm)	Ø36 × 74.5
Weight (g)	160
Operation Zoom	W / Locks
Operation Iris	W / Locks
Temperature	-10~+50°C

## VT-LEM066016i



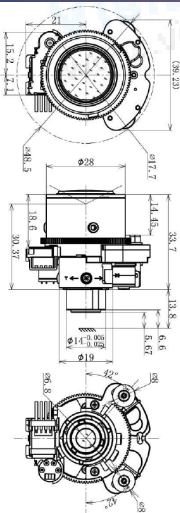
EFL (mm)	6-100 mm
FNo.	F=1.6
Image Fromat	1/3" CCD/CMOS
F.O.V. (H)	44° ~ 4.58°
M.O.D. (m)	0.5
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø37 x 68.7 x 34
Weight (g)	118±3
Operation Focus	W / Locks
Operation Zoom	W / Locks
Operation Iris	Manual
Temperature	-10~+50°C

## VT-LEM10120016i-AT



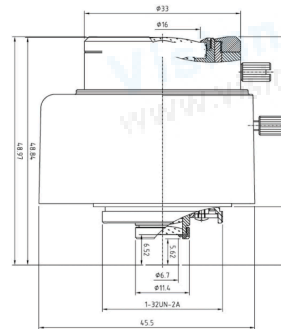
EFL (mm)	10-120 mm
FNo.	F=1.6
Image Fromat	1/3" CCD/CMOS
F.O.V. (H)	27 ~ 2.3°
M.O.D. (m)	2
Resolution	1MP / IR
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø44 x 109.8 x 50.6
Weight (g)	210±2
Operation Focus	W / Locks
Operation Zoom	W / Locks
Operation Iris	Manual
Temperature	-10~+50°C

## VT-LEM0281016-AT



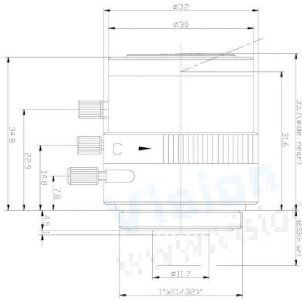
EFL (mm)	2.8-10
FNo.	F=1.6
Image Fromat	1/2.8" CCD/CMOS
F.O.V. (D/H/V)	D: 128° ~ 41° H: 97° ~ 33° V: 70° ~ 24.5°
M.O.D. (m)	0.5
Distortion	-51%W~-5.0%T
Resolution	1MP
TTL (mm)	49.04
BFL (mm)	6.23-12.79
Iris	P-Iris (ICR)
Lens-Mount	Ø14
Dimension Ø×L×W(mm)	Ø28×33.7×Ø48.5
Operation Zoom	-
Temperature	-10~+50°C

## VT-LEM0281016i



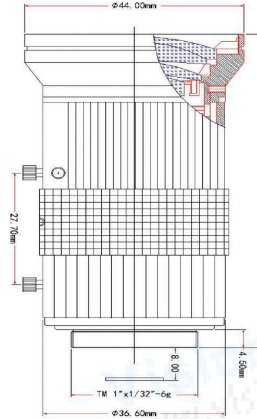
EFL (mm)	2.8-10
FNo.	F=1.6
Image Fromat	1/2.8" CCD/CMOS
F.O.V. (D/H/V)	D: 120.6° ~ 40.2° H: 94.2° ~ 32.1° V: 69° ~ 24.4°
M.O.D. (m)	0.1
Distortion	-
Resolution	0.3@200lp/mm
BFL (mm)	6.52-13.4
Effective Aperture	Ø16mm Ø6.7mm
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø33×36.47×45.5
Operation Iris	Auto
Temperature	-10~+50°C

### VT-LEM03310514i



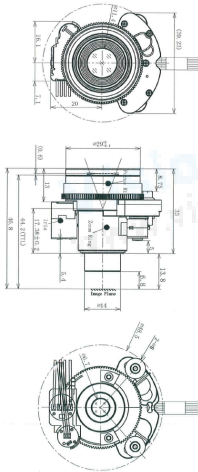
EFL (mm)	3.3-10.5 mm
FNo.	F=1.4
Image Format	1/2.5" CCD/CMOS
F.O.V. (H)	90.5 ~ 30.4°
M.O.D. (m)	0.3
Resolution	3MP / IR
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø32 × 39.3
Weight (g)	48±2
Operation	Focus W / Locks Zoom W / Locks Iris Manual
Temperature	-10~+50°C

### VT-LEM055014i-MP3



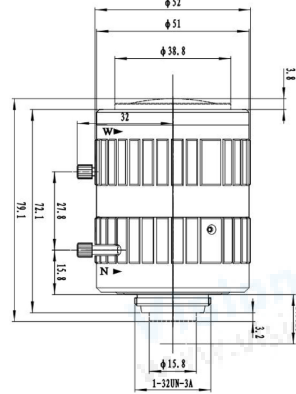
EFL (mm)	5-50
FNo.	F=1.4
Image Format	1/2.5" CCD/CMOS
F.O.V.	5.36° - 51.5°
M.O.D. (m)	0.2
Resolution	3MP
BFL(mm)	8
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø44 x 77.8
Weight (g)	152.5
Operation	Zoom W / Locks Iris W / Locks
Temperature	-10~+50°C

### VT-LEM102221-AT



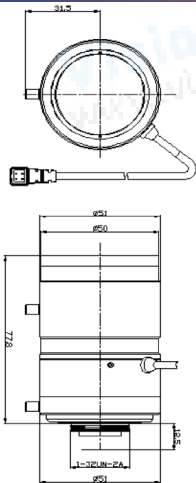
EFL (mm)	10-22
FNo.	F=2.1
Image Format	1/2.5" CCD/CMOS
F.O.V. (D/H/V)	D: 40 ~ 20° H: 31.2 ~ 16° V: 23 ~ 12°
M.O.D. (m)	0.3
Resolution	1MP
BFL(mm)	7.64 ~ 13.95
TV Distortion	-5%W ~ -0.83%T
Iris	DC-Iris(ICR)
Lens-Mount	Ø14
Dimension Ø×L×W(mm)	Ø29×33×Ø48.5
Operation Zoom	-
Temperature	-10~+50°C

### VT-LEM041816-AI



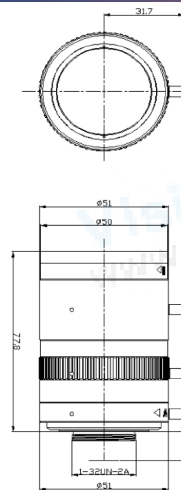
EFL (mm)	4-18
FNo.	F=1.6
Image Format	1/1.8" CCD/CMOS
F.O.V. (D/H/V)	137°/110°/82°
M.O.D. (m)	0.3
Resolution	3MP
BFL(mm)	8-20
Distortion	-57.5% ~ -2.7%
Lens-Mount	C-Mount
Dimension Ø×L(mm)	Ø52 x 79.1
Weight (g)	207.3±5
Operation	Focus Manual Zoom Manual Iris Auto (DC)
Temperature	-20~+60°C

### VT-LEM03818MP12-AT



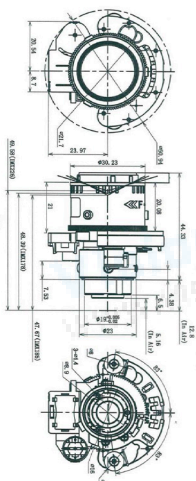
EFL (mm)	3.8-18
FNo.	F=1.5
Image Format	1/1.7" CCD/CMOS
F.O.V. (D/H/V)	W: 156° / 111° / 80° T: 38° / 30° / 23°
Resolution	12MP
FBL (mm)	12.5
Focus range (m)	0.3 (W) ~ ∞
Distortion	-57.5% ~ -2.7%
TTL	≤96mm
Lens-Mount	CS-Mount
Dimension Ø×L(mm)	Ø51 × 77.8
Operation	Focus Manual Zoom Manual Iris Auto (DC)
Temperature	-10~+50°C

### VT-LEM03618MP12



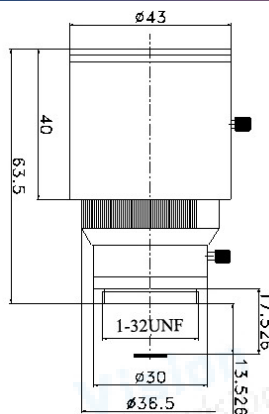
EFL (mm)	3.6-18
FNo.	F=1.5
Image Format	1/1.7" CCD/CMOS
F.O.V. (D/H/V)	W: 156° / 111° / 80° T: 38° / 30° / 23°
Resolution	12MP
FBL (mm)	12.5
Focus range (m)	0.3 (W) ~ ∞
TV Distortion	<-28%
TTL	≤96mm
Lens-Mount	CS-Mount
Dimension Ø×L(mm)	Ø51 x 77.8
Operation	Focus Manual Zoom Manual Iris Manual
Temperature	-10~+50°C

### VT-LEM0441012-AT



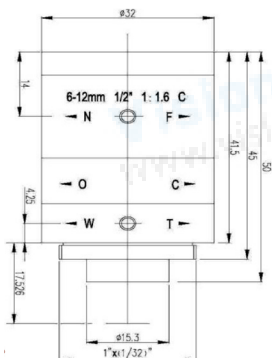
EFL (mm)	4.4-10
FNo.	F=1.2(W)-F2.9(T)
Image Fromat	1/1.7" CCD/CMOS
F.O.V. (D/H/V)	D: 150 ~ 57.7° H: 104 ~ 45.8° V: 73.6 ~ 34.2°
M.O.D. (m)	0.5
Resolution	1MP
BFL(mm)	6.28 ~ 11.64
Focus range	0.3 m (W) ~ ∞
Distortion	-29%W ~ -6%T
TTL(mm)	52.76
Iris	P-Iris (ICR)
Lens-Mount	CS-Mount
Dimension Ø×L×W(mm)	Ø30.2 × 40.2 × Ø51
Temperature	-10~+50°C

### VT-LEM0281216i



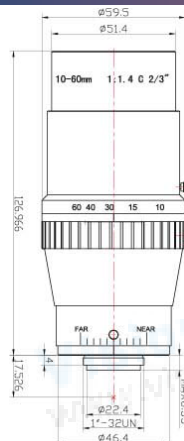
EFL (mm)	2.8-12
FNo.	F=1.6
Image Fromat	1/2" CCD/CMOS
F.O.V. (H)	98-30.5°
M.O.D. (m)	≥0.3
Resolution	3MP
Lens-Mount	C-Mount
Dimension Ø×L (mm)	Ø43 x 67.5
Weight (g)	140g
Operation	Focus W / Locks Zoom Fixed Iris Manual
Temperature	-10~+50°C

### VT-LEM061216



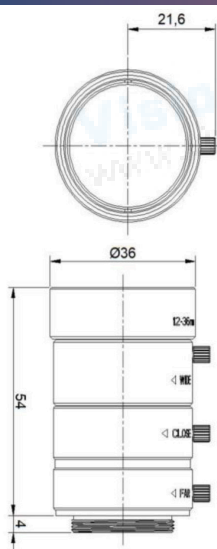
EFL (mm)	6-12
FNo.	F=1.6
Image Fromat	1/2" CCD/CMOS
F.O.V. (H)	53.9° x 29.6°
M.O.D. (m)	0.1
Resolution	3MP
Distortion	-0.1%
Lens-Mount	C-Mount
Dimension Ø×L (mm)	Ø32 x 49.6
Weight (g)	118g
Operation	Focus Manual Zoom Manual Iris Manual
Temperature	-10~+50°C

### VT-LEM1060MP2



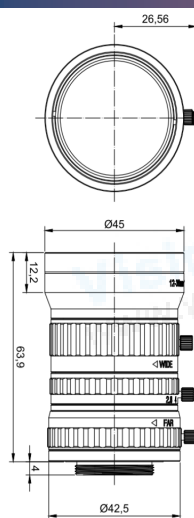
EFL (mm)	10-60
FNo.	F=1.4
Image Fromat	2/3" CCD/CMOS
F.O.V. (D/H/V)	51° ~ 11°
BFL (mm)	10.51
Resolution	2MP
Wavelength(nm)	400-950
Distortion(mm)	<12~1%
IR Correction	OK
Filter Size(mm)	M49×0.75
Lens-Mount	C-Mount
Dimension Ø×L (mm)	Ø59.5×126.966
Operation Iris	Manual
Temperature	-10~+50°C

### VT-LEM1236MP3-23



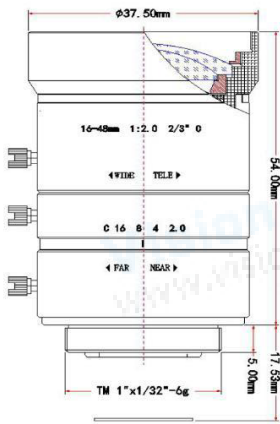
EFL (mm)	12-36
FNo.	F=2.8
Image Fromat	2/3"
F.O.V. (D/H/V)	W:50.8°/41.3°/31.2° T: 17.0°/13.8°/10.4°
M.O.D. (m)	-
Resolution	3MP
Wavelength(nm)	420~1000
Focus Range(mm)	W: 0.15m-∞ T: 0.45m-∞
Distortion (mm)	W: -3.43%@y=5.5 T: 2.30%@y=5.5
Filter Size(mm)	M35.5×0.5
Lens-Mount	C-Mount
Dimension Ø×L (mm)	Ø36 x 59
Weight (g)	105.25g
Operation	Zoom Manual Iris Manual
Temperature	-20~+60°C

### VT-LEM1236MP10



EFL (mm)	12-36
FNo.	F=2.8
Image Fromat	2/3"
F.O.V. (D/H/V)	W:50.8°/41.3°/31.2° T: 17.0°/13.8°/10.4°
M.O.D. (m)	-
Resolution	10MP
Wavelength(nm)	420~1000
Focus Range(mm)	W: 0.15m-∞ T: 0.45m-∞
Distortion (mm)	W: -3.43%@y=5.5 T: 2.30%@y=5.5
Filter Size(mm)	C-Mount
Lens-Mount	M40.5×0.5
Dimension Ø×L (mm)	Ø36 x 59
Weight (g)	182 g
Operation	Zoom Manual Iris Manual
Temperature	-20~+60°C

### VT-LEM1648MP3



EFL (mm)	16-48
FNo.	F=2.0
Image Format	2/3" CCD/CMOS
F.O.V. (D/H/V)	W: 30°×22.7° T: 11.2°×8.4°
M.O.D. (m)	0.2
Resolution	3MP
BFL (mm)	17.53
Lens-Mount	C-Mount
Filter Size (mm)	M40.5×0.5
Dimension $\phi \times L$ (mm)	$\phi 37.5 \times 54.0$
Weight (g)	128 g
Operation	Focus W / Locks
	Zoom W / Locks
	Iris W / Locks
Temperature	-10~+50°C

### VT-LEM1632MP5-H1

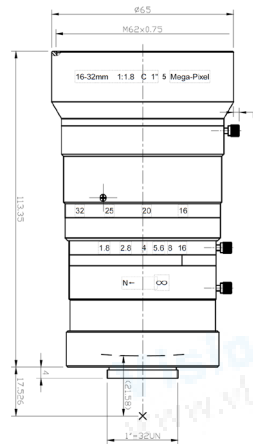


Image Size (inch)	1"
Focal Length (mm)	16-32
Aperture, F/#	1.8
M.O.D.	1.5~∞ m
FOV (°)	W: 53.26° / 33.44° / 43.85° T: 27.57° / 17.01° / 22.43°
Distortion (TV)	-1.89%~1.98%
Back Focus	21.58 mm
TTL	129mm
Resolution	100 lp/mm
Filter Size	M62×0.75
Mount	C-Mount
Dimension (mm)	$\phi 65.00 \times 113.35$
Iris	Manual
Temperature Range	-20°C ~ +60°C
Weight	619g

Vision Datum  
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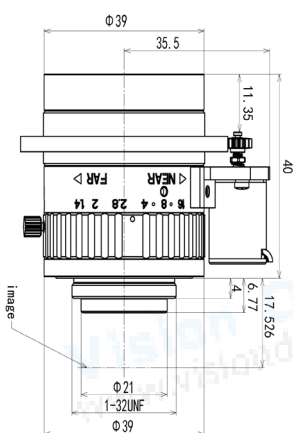


## 2/3" Motor Focus Lenses

- 1.Support 20MP area scan cameras
- 2.High relative illumination,with big aperture
- 3.Compatible with 2/3" sensor
- 4.Distortion < 0.1%

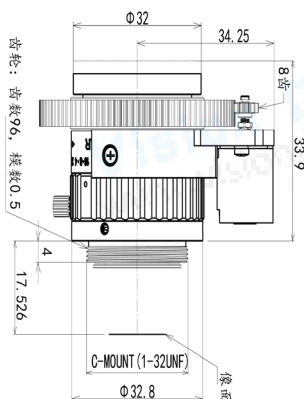


### VT-LEMAF0814-MP10



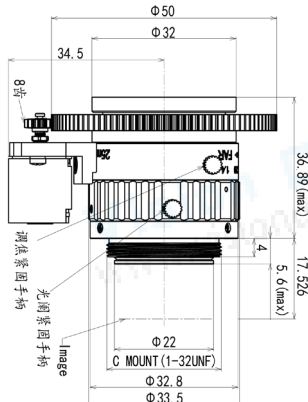
Focal Length	8mm	Working distance(mm)	900	Optical Magnification	Field of View(H/V)	
Aperture, F/#	F1.4~F16		900	0.009X	976.8 731.5	
M.O.D.	0.1m		850	0.010X	923.3 691.4	
Flange back	17.526mm		800	0.010X	869.8 651.3	
Back focus	10.74mm		750	0.011X	816.3 611.2	
Filter Size	M37×0.5		700	0.012X	762.8 571.1	
Front/Rear Effective Dia.	Front Ø26.2mm Rear Ø12.7mm		650	0.013X	709.3 531.0	
Mount	C-Mount		600	0.014X	655.8 490.9	
Temperature Range	-10~+50° C		550	0.015X	602.3 450.8	
Storage Temperature Range	-20~+60° C		500	0.016X	548.8 410.7	
Image Size (inch)	2/3"	1/2"	450	0.018X	495.3 370.6	
Angle of View	H	56.3°	42.5°	400	0.020X	441.8 330.5
	V	43.7°	32.4°	350	0.023X	388.3 290.4
	D	67.1°	51.9°	300	0.027X	334.8 250.3
Object Dimension at WD.100mm	H	123mm	88mm	250	0.032X	281.2 210.2
	V	91mm	65.5mm	200	0.039X	227.7 170.0
	D	154.8mm	111mm	150	0.052X	174.2 129.9
Distortion(TV)	< 1%	< 0.8%	100	0.075X	120.7 89.8	

### VT-LEMAF1614-MP10



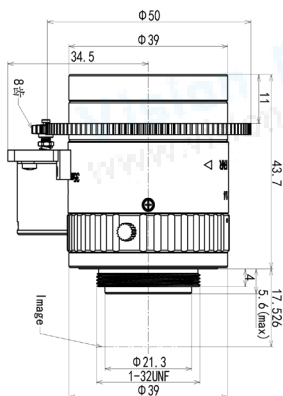
Focal Length	16mm	Working distance(mm)	900	Optical Magnification	Field of View(H/V)	
Aperture, F/#	F1.4~F16		900	0.018X	503.2 376.8	
M.O.D.	0.1m		850	0.019X	475.6 356.2	
Flange back	17.526mm		800	0.020X	448.0 335.5	
Back focus	12.7mm		750	0.021X	420.4 314.8	
Filter Size	M30.5×0.5		700	0.023X	392.8 294.1	
Front/Rear Effective Dia.	Front Ø19mm Rear Ø14.2mm		650	0.024X	365.2 273.4	
Mount	C-Mount		600	0.026X	337.6 252.8	
Temperature Range	-10~+50° C		550	0.029X	310.0 232.1	
Storage Temperature Range	-20~+60° C		500	0.031X	282.5 211.4	
Image Size (inch)	2/3"	1/2"	1/3"	450	0.035X	254.9 190.7
Angle of View	H	30.3°	22.3°	400	0.039X	227.3 170.0
	V	23°	16.8°	350	0.044X	199.7 149.4
	D	37.3°	27.8°	300	0.052X	170.4 127.6
Object Dimension at WD.100mm	H	170.4mm	123.7mm	250	0.061X	144.5 108.0
	V	127.6mm	92.7mm	200	0.076X	116.9 87.3
	D	212.8mm	154.9mm	150	0.100X	89.3 66.6
Distortion(TV)	< 0.1%	< 0.3%	< 0.1%	100	0.145X	61.7 45.9

### VT-LEMAF2514-MP10



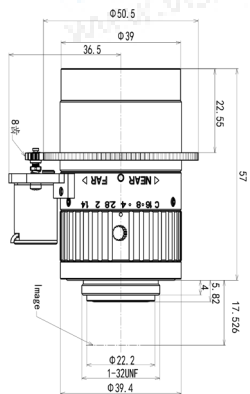
<b>Focal Length</b>	25mm	Working distance(mm)	900	Optical Magnification	0.028X	Field of View(H/V)	317.5 237.7
<b>Aperture, F/#</b>	F1.4~F16		900		0.028X		
<b>M.O.D.</b>	0.1m		850		0.029X		299.9 224.5
<b>Flange back</b>	17.526mm		800		0.031X		282.3 211.3
<b>Back focus</b>	12.25mm		750		0.033X		264.6 198.1
<b>Filter Size</b>	M30.5×0.5		700		0.036X		247.0 184.9
<b>Front/Rear Effective Dia.</b>	Front Ø22.7mm Rear Ø12.6mm		650		0.039X		229.4 171.6
<b>Mount</b>	C-Mount		600		0.042X		211.8 158.4
<b>Temperature Range</b>	-10~+50° C		550		0.046X		194.1 145.2
<b>Storage Temperature Range</b>	-20~+60° C		500		0.050X		176.5 132.0
<b>Image Size (inch)</b>		2/3"	450		0.056X		158.9 118.8
	H	20°	400		0.063X		141.2 105.6
	V	15°	350		0.072X		123.6 92.4
<b>Angle of View</b>	D	24.6°	300		0.084X		108.0 82.0
	H	108mm	250		0.100X		88.3 66.0
<b>Object Dimension at WD.100mm</b>	V	82mm	200		0.126X		70.7 52.7
	D	136mm	150		0.168X		53.0 39.5
<b>Distortion(TV)</b>		< 0.2%	100		0.253X		35.3 26.3

### VT-LEMAF3514-MP10



<b>Focal Length</b>	35mm	Working distance(mm)	900	Optical Magnification	0.037X	Field of View(H/V)	236.2 176.9
<b>Aperture, F/#</b>	F1.4~F16		900		0.037X		
<b>M.O.D.</b>	0.15m		850		0.040X		223.2 167.2
<b>Flange back</b>	17.526mm		800		0.042X		210.3 157.5
<b>Back focus</b>	8.7mm		750		0.045X		197.3 147.8
<b>Filter Size</b>	M37×0.5		700		0.048X		184.3 138.1
<b>Front/Rear Effective Dia.</b>	Front Ø24.8mm Rear Ø13.6mm		650		0.052X		171.4 128.4
<b>Mount</b>	C-Mount		600		0.056X		158.4 118.6
<b>Temperature Range</b>	-10~+50° C		550		0.061X		145.5 108.9
<b>Storage Temperature Range</b>	-20~+60° C		500		0.067X		132.5 99.2
<b>Image Size (inch)</b>		2/3"	450		0.074X		119.6 89.5
	H	13.9°	400		0.083X		106.6 79.8
<b>Angle of View</b>	V	10.4°	350		0.094X		93.7 70.1
	D	17.3°	300		0.110X		80.7 60.4
<b>Object Dimension at WD.100mm</b>	H	81mm	250		0.131X		67.7 50.6
	V	60mm	200		0.162X		54.7 40.9
	D	100mm	150		0.213X		41.8 31.2
<b>Distortion(TV)</b>		-0.8%	-		-		-

### VT-LEMAF5014-MP10



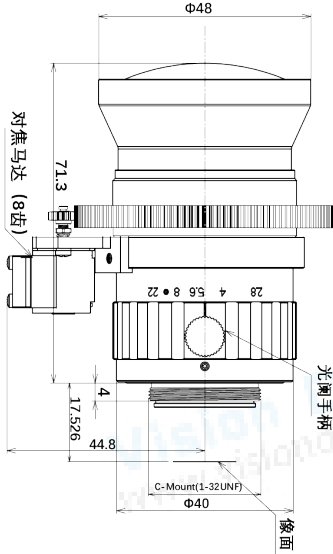
<b>Focal Length</b>	50mm	Working distance(mm)	2000	Optical Magnification	0.025X	Field of View(H/V)	352.0 264.0
<b>Aperture, F/#</b>	F1.4~Close		2000		0.025X		
<b>M.O.D.</b>	0.3m		1000		0.051X		172.5 129.4
<b>Flange back</b>	17.526mm		900		0.057X		154.4 115.8
<b>Back focus</b>	12.4mm		850		0.06X		146.7 110.0
<b>Filter Size</b>	M37×0.5		800		0.064X		137.5 103.1
<b>Front/Rear Effective Dia.</b>	Front Ø24mm Rear Ø11.78mm		750		0.068X		129.4 97.1
<b>Mount</b>	C-Mount		700		0.073X		120.5 90.4
<b>Temperature Range</b>	-10~+50° C		650		0.079X		111.4 83.5
<b>Storage Temperature Range</b>	-20~+60° C		600		0.0858X		102.6 76.9
<b>Image Siz )</b>		2/3"	550		0.094X		93.6 70.2
	H	10.46°	500		0.104X		84.6 63.5
<b>Angle of View</b>	V	7.86°	450		0.116X		75.9 56.9
	D	13.04°	400		0.131X		67.2 50.4
<b>Object Dimension at WD.100mm</b>	H	46.8mm	350		0.15X		58.7 44.0
	V	35.08mm	300		0.177X		49.7 37.3
	D	58.54mm	-		-		-
<b>Distortion(TV)</b>		-0.8%	-		-		-

# 1.1" Motor Focus Lenses

- 1.Ultra-high imaging quality
- 2.Focus range from 0.1m to infinity
- 3.Compatible with 1" sensor
- 4.Distortion < 0.1%

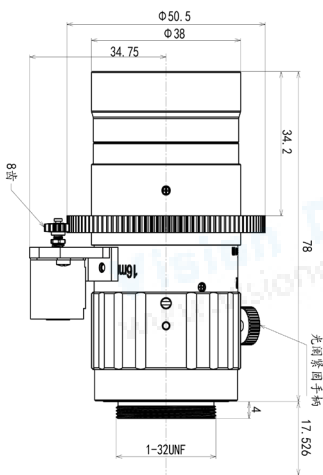


## VT-LEMAF1228-MP20-H1.1



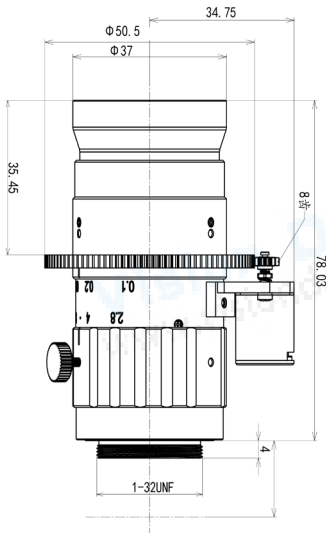
Focal Length	12.0mm	Working distance(mm)	5000	Optical Magnification	Field of View(H/V)	
Aperture, F/#	F2.8~F22			0.002X	5727 4295.3	
M.O.D.	0.1m		2000	0.006X	2307 1730.2	
Flange back	17.526mm		1000	0.012X	1166.9 875.2	
Back focus	10.6mm		900	0.013X	1052.9 789.7	
Filter Size	-		800	0.015X	938.9 704.2	
Front/Rear Effective Dia.	Front Ø42.9mm Rear Ø20.5mm		700	0.017X	824.9 618.5	
Mount	C-Mount		600	0.02X	710.9 533.2	
Temperature Range	-10~+50° C		550	0.022X	653.9 490.4	
Storage Temperature Range	-20~+60° C		500	0.024X	596.9 447.7	
Image Size (inch)	1.1" 1" 2/3"	450	0.026X	539.9	405	
Angle of View	H 57°	54.8°	38.9°	400	0.029X	482.9 362.2
	V 45°	42.3°	29.6°	350	0.033X	425.9 319.4
	D 66.7°	66.1°	47.9°	300	0.038X	368.9 276.6
Object Dimension at WD.100mm	H 254.9mm	240.0mm	109.3mm	250	0.045X	312 233.9
	V 191.1mm	179.2mm	119.5mm	200	0.056X	254.9 191.1
	D 318.6mm	298.7mm	119.2mm	150	0.072X	197.2 148.4
Distortion(TV)	< 1.5%	< 1.5%	< 1%	100	0.103X	141 105

## VT-LEMAF1628-MP20-H1.1



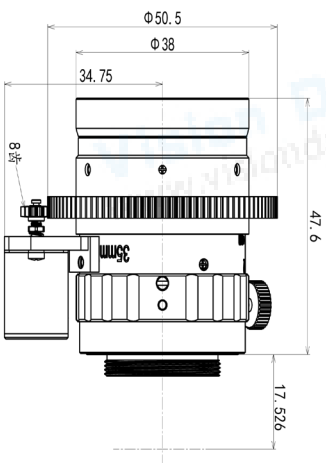
Focal Length	16.0mm	Working distance(mm)	5000	Optical Magnification	Field of View(H/V)	
Aperture, F/#	F2.8~F22			0.0032X	4473.2 3361	
M.O.D.	0.1m		2000	0.0079X	1793.5 1347.4	
Flange back	17.526mm		1000	0.0158X	900.6 676.4	
Back focus	22.4mm		900	0.0176X	811.3 609.4	
Filter Size	M35.5×0.5		800	0.0197X	722.4 542.6	
Front/Rear Effective Dia.	Front Ø26.7mm Rear Ø19.2mm		700	0.0225X	632.9 475.4	
Mount	C-Mount		600	0.0262X	543.6 408.3	
Temperature Range	-10~+50° C		550	0.0286X	498.7 374.6	
Storage Temperature Range	-20~+60° C		500	0.0314X	454.2 341	
Image Size (inch)	1.1" 1" 2/3"	450	0.0348X	409.5	307.6	
Angle of View	H 46.3°	43.6°	30.8°	400	0.0391X	364.9 274
	V 36°	33.4°	23.3°	350	0.0445X	320.2 240.3
	D 55.4°	53.1°	37.9°	300	0.0518X	275.4 206.8
Object Dimension at WD.100mm	H 186mm	168.4mm	115.3mm	250	0.0618X	230.8 173.2
	V 139.6mm	125.9mm	86.3mm	200	0.0767X	186 139.6
	D 232.1mm	210.9mm	144.5mm	150	0.101X	141.3 106
Distortion(TV)	< 0.5%	< 0.5%	< 0.3%	100	0.148X	96.5 72.4

### VT-LEMAF2528-MP20-H1.1



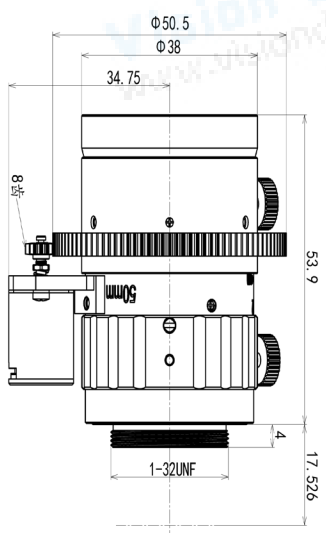
<b>Focal Length</b>	25.0mm			<b>Working distance(mm)</b>		<b>Optical Magnification</b>	<b>Field of View(H/V)</b>	
<b>Aperture, F/#</b>	F2.8~F22			5000		0.005X	2820	2120
<b>M.O.D.</b>	0.1m			2000		0.013X	1084.6	815.4
<b>Flange back</b>	17.526mm			1000		0.025X	564	424
<b>Back focus</b>	29.6mm			900		0.028X	503.6	378.6
<b>Filter Size</b>	M35.5×0.5			800		0.031X	454.8	341.9
<b>Front/Rear Effective Dia.</b>	Front Ø20mm Rear Ø19.2mm			700		0.036X	391.7	294.4
<b>Mount</b>	C-Mount			600		0.042X	335.7	252.4
<b>Temperature Range</b>	-10~+50° C			550		0.045X	313.3	235.5
<b>Storage Temperature Range</b>	-20~+60° C			500		0.050X	282	212
<b>Image Size (inch)</b>		1.1"	1"	2/3"	450	0.055X	256.4	192.7
	H	30.4°	27.6°	19.2°	400	0.061X	231.1	173.8
	V	23°	20.9°	14.5°	350	0.070X	207.4	151.4
	D	37.6°	34.2°	23.9°	300	0.081X	174.1	130.9
<b>Object Dimension at WD.100mm</b>	H	119.4mm	108.5mm	74.6mm	250	0.096X	146.9	110.4
	V	89.5mm	81.4mm	74.6mm	200	0.118X	119.4	89.5
	D	186.5mm	135.6mm	93.2mm	150	0.154X	91.6	68.8
<b>Distortion(TV)</b>	< 0.1%	< 0.1%	< 0.03%	100		0.221X	63.8	48

### VT-LEMAF3528-MP20-H1.1



<b>Focal Length</b>	35.0mm			<b>Working distance(mm)</b>		<b>Optical Magnification</b>	<b>Field of View(H/V)</b>	
<b>Aperture, F/#</b>	F2.8~F22			5000		0.0069X	2029	1528.2
<b>M.O.D.</b>	0.2m			2000		0.0174X	809.4	609.6
<b>Flange back</b>	17.526mm			1000		0.0349X	503	303.5
<b>Back focus</b>	22.9mm			900		0.0388X	362.6	273
<b>Filter Size</b>	M35.5×0.5			800		0.0437X	322	242.4
<b>Front/Rear Effective Dia.</b>	Front Ø23mm Rear Ø19.1mm			700		0.05X	281.4	211.8
<b>Mount</b>	C-Mount			600		0.0585X	240.8	181.2
<b>Temperature Range</b>	-10~+50° C			550		0.0639X	220.5	165.9
<b>Storage Temperature Range</b>	-20~+60° C			500		0.0703X	200.3	187.6
<b>Image Size (inch)</b>		1.1"	1"	2/3"	450	0.0783X	180	135.5
	H	22.6°	20.6°	14.3°	400	0.0882X	199.5	120.2
	V	17°	15.45°	10.7°	350	0.101X	174.5	140
	D	28.3°	25.75°	17.86°	300	0.1181X	115.9	89.9
<b>Object Dimension at WD.100mm</b>	H	78.2mm	71mm	48.8mm	250	0.1421X	99.4	74.7
	V	58.7mm	53.3mm	36.6mm	200	0.1805X	78.2	58.7
	D	97.68mm	88.8mm	61mm	-	-	-	-
<b>Distortion(TV)</b>	< 0.02%	< 0.02%	< 0.01%	-		-	-	-

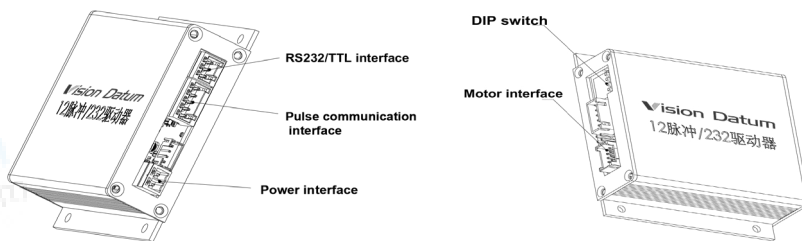
### VT-LEMAF5028-MP20-H1.1



<b>Focal Length</b>	50.0mm			<b>Working distance(mm)</b>		<b>Optical Magnification</b>	<b>Field of View(H/V)</b>	
<b>Aperture, F/#</b>	F2.8~F22			5000		0.01X	1379	1035.5
<b>M.O.D.</b>	0.3m			2000		0.026X	547.1	410.7
<b>Flange back</b>	17.526mm			1000		0.052X	273.5	205.3
<b>Back focus</b>	21.1mm			900		0.057X	245.6	184.3
<b>Filter Size</b>	M35.5×0.5			800		0.065X	218.3	163.8
<b>Front/Rear Effective Dia.</b>	Front Ø24mm Rear Ø21.7mm			750		0.069X	204.5	153.4
<b>Mount</b>	C-Mount			700		0.074X	190.6	143
<b>Temperature Range</b>	-10~+50° C			600		0.08X	176.7	132.5
<b>Storage Temperature Range</b>	-20~+60° C			650		0.087X	162.8	122.1
<b>Image Size (inch)</b>		1.1"	1"	2/3"	550	0.095X	148.9	111.7
	H	15.9°	14.6°	10.1°	500	0.105X	134.9	99
	V	11.9°	10.9°	7.5°	450	0.117X	121	90.7
	D	19.9°	18.2°	12.6°	400	0.132X	107	80.2
<b>Object Dimension at WD.100mm</b>	H	79mm	71.6mm	49.3mm	350	0.152X	92.9	69.7
	V	59.3mm	53.8mm	37mm	300	0.179X	79	59.3
	D	98.9mm	89.7mm	61.6mm	-	-	-	-
<b>Distortion(TV)</b>	< 0.04%	< 0.04%	< 0.02%	-		-	-	-

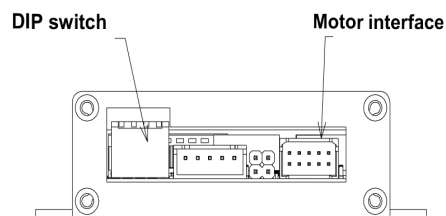
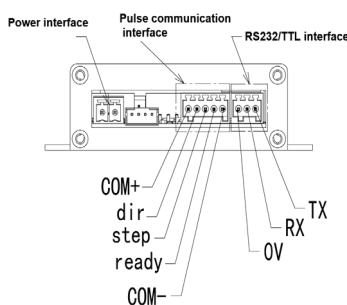
### Motor Parameters

Voltage (v)	24v
Power (w)	5w
Range of speed (RPM)	0-400RPM
Rated speed (RPM)	150RPM
Response time	<1ms
Maximum output torque	0.08N·M
Self-locking torque	0.12N·M
Motion precision/accuracy	±0.001°
Operating temperature/humidity	-40°C - 105°C, RH0%-90%
Rotate direction	CW, CCW



### Drive Interface Definition

Communication mode	Interface definition
Pulse communication interface	COM+ open collector(NPN (OC-NPN)), voltage range 5v-24v
	Dir Motor rotation direction during pulse signal
	Step Pulse signal
	Ready Response signal (low level means the motor is running, high level means the motor is stopped)
RS232/TTL Communication Interface	COM- grounding
	0V grounding
	RX data reception
	TX data transmission



## Telecentric Lenses



**BTL Series: High Precision Bi-telecentric Lenses**



**BTLM Series: High Performance Bi-telecentric Lenses**



**CLW2-10MP Series: High Resolution Telecentric Lenses**



**CLW2-MP Series: Large Object Distance Telecentric Lenses**



**CLW3-ST Series: Standard Resolution Telecentric Lenses**



**BTLP Series: 360 Multi-Angle Imaging Device**

For more telecentric lens product information, please contact your sales engineer for confirmation.

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