

High-resolution Telecentric Lenses

SE-65-M/SE-110-M Series

- Compatible with 5-megapixel cameras*
* 2/3"L (5.98 mm height, 11.26 mm width) 3.45 μm/pixel,
 Applicable models: SE-110VT03-5M and SE-110ST03-5M
- Ideal for the combination with megapixel cameras*
* Approx. 4.65 μm/pixel min.
- Two working distances: 65 mm and 110 mm
- Both Coaxial and Straight Types are available.
- Optical magnifications: 0.3x to 6.0x

Total of **28** Models

WD 65 mm — SE-65-M Series —

Coaxial type **6** models

Straight type **6** models

WD 110 mm — SE-110-M Series —

Coaxial type **8** models

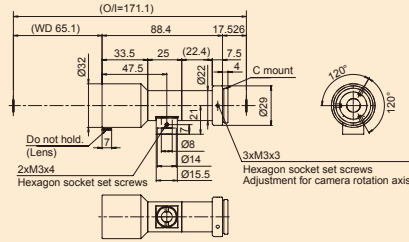
Straight type **8** models

WD 65 mm

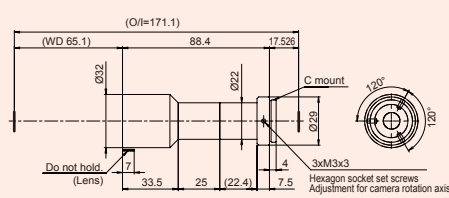
0.5x

Model	Coaxial	SE-65VT05-M
	Straight	SE-65ST05-M
Optical magnification	0.5x ±5%	
WD	65.1±2 mm	
Depth of field *1 *2	2.87 mm	
Optical resolution *2 *3	12.0 μm	
NA *2	0.028	
Actual F number (Fe) *2	9.0	
TV distortion *2	-0.001%	
Weight	Coaxial	80 g
	Straight	77 g
Maximum image size	2/3" (ø11.00 mm)	

SE-65VT05-M



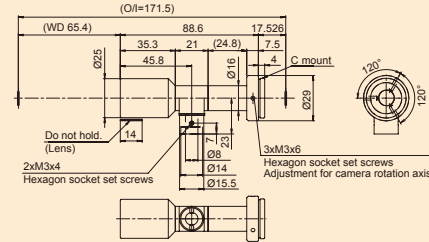
SE-65ST05-M



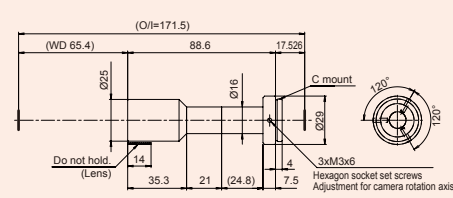
0.8x

Model	Coaxial	SE-65VT08-M
	Straight	SE-65ST08-M
Optical magnification	0.8x ±5%	
WD	65.4±2 mm	
Depth of field *1 *2	1.18 mm	
Optical resolution *2 *3	8.0 μm	
NA *2	0.042	
Actual F number (Fe) *2	9.4	
TV distortion *2	+0.006%	
Weight	Coaxial	62 g
	Straight	57 g
Maximum image size	2/3" (ø11.00 mm)	

SE-65VT08-M



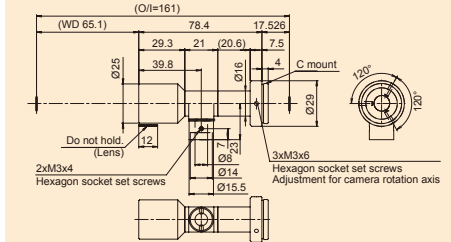
SE-65ST08-M



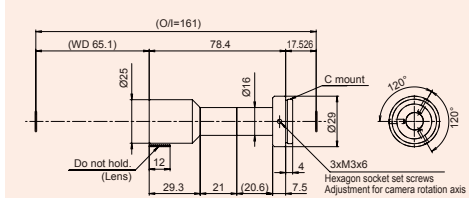
1.0x

Model	Coaxial	SE-65VT10-M
	Straight	SE-65ST10-M
Optical magnification	1.0x ±5%	
WD	65.1±2 mm	
Depth of field *1 *2	0.79 mm	
Optical resolution *2 *3	6.7 μm	
NA *2	0.05	
Actual F number (Fe) *2	9.8	
TV distortion *2	-0.023%	
Weight	Coaxial	54 g
	Straight	49 g
Maximum image size	2/3" (ø11.00 mm)	

SE-65VT10-M



SE-65ST10-M

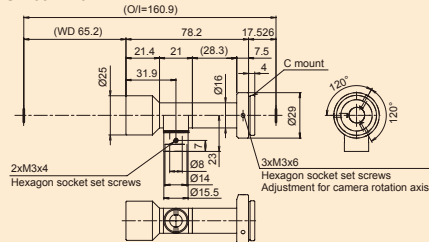


*1 Calculations are based on a permissible circle of confusion diameter of 40 μm. *2 These are calculated values. *3 Theoretical resolution calculations are based on a wavelength of 550 nm.

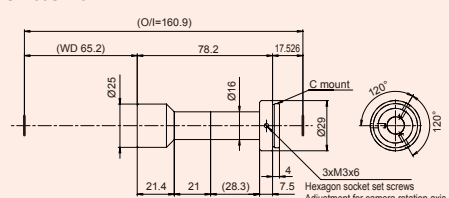
2.0x

Model	Coaxial	SE-65VT20-M
	Straight	SE-65ST20-M
Optical magnification	2.0x ±5%	
WD	65.2±2 mm	
Depth of field *1 *2	0.26 mm	
Optical resolution *2 *3	4.4 μm	
NA *2	0.076	
Actual F number (Fe) *2	12.9	
TV distortion *2	+0.021%	
Weight	Coaxial	55 g
	Straight	49 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-65VT20-M



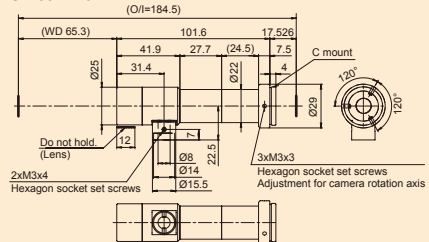
SE-65ST20-M



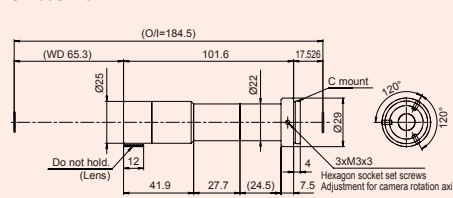
4.0x

Model	Coaxial	SE-65VT40-M
	Straight	SE-65ST40-M
Optical magnification	4.0x ±5%	
WD	65.3±2 mm	
Depth of field *1 *2	0.08 mm	
Optical resolution *2 *3	2.9 μm	
NA *2	0.118	
Actual F number (Fe) *2	16.9	
TV distortion *2	-0.003%	
Weight	Coaxial	85 g
	Straight	83 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-65VT40-M



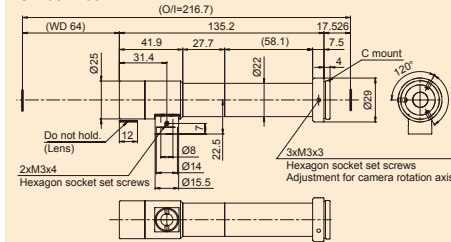
SE-65ST40-M



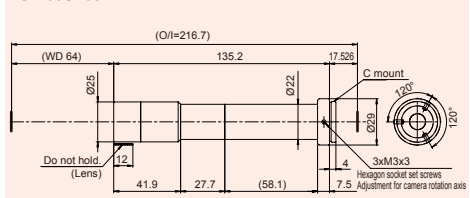
6.0x

Model	Coaxial	SE-65VT60-M
	Straight	SE-65ST60-M
Optical magnification	6.0x ±5%	
WD	64±2 mm	
Depth of field *1 *2	0.06 mm	
Optical resolution *2 *3	2.9 μm	
NA *2	0.118	
Actual F number (Fe) *2	25.5	
TV distortion *2	-0.026%	
Weight	Coaxial	100 g
	Straight	98 g
Maximum image size	2/3" (ø12.75 mm)	

SE-65VT60-M



SE-65ST60-M



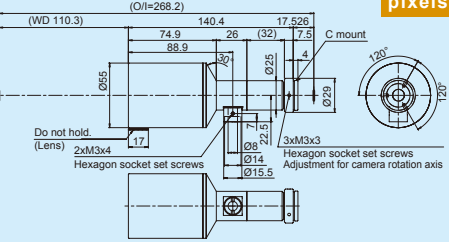
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WD 110 mm 0.3x

Model	Coaxial	SE-110VT03-5M
	Straight	SE-110ST03-5M
Optical magnification	0.3x ±5%	
WD	110.3±3.3 mm	
Depth of field *1 *2	5.75 mm	
Optical resolution *2 *3	14.5 μm	
NA *2	0.023	
Actual F number (Fe) *2	6.5	
TV distortion *2	+0.026%	
Weight	Coaxial	212 g
	Straight	211 g
Maximum image size	2/3"L (ø12.75 mm)	

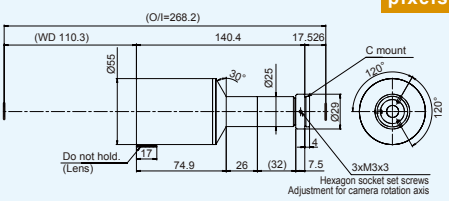
SE-110VT03-5M

5 M pixels



SE-110ST03-5M

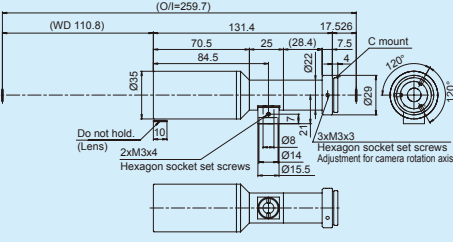
5 M pixels



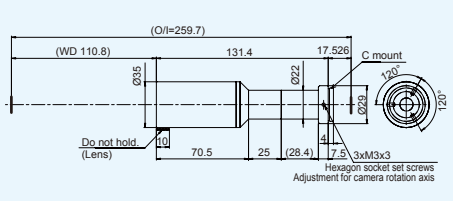
0.5x

Model	Coaxial	SE-110VT05-M
	Straight	SE-110ST05-M
Optical magnification	0.5x ±5%	
WD	110.8±3.3 mm	
Depth of field *1 *2	3.03 mm	
Optical resolution *2 *3	12.7 μm	
NA *2	0.026	
Actual F number (Fe) *2	9.4	
TV distortion *2	-0.009%	
Weight	Coaxial	131 g
	Straight	128 g
Maximum image size	2/3" (ø11.00 mm)	

SE-110VT05-M



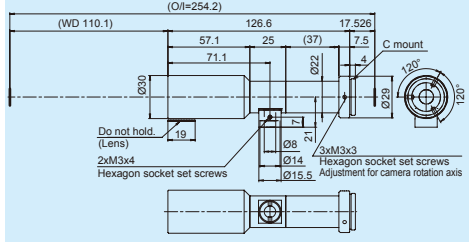
SE-110ST05-M



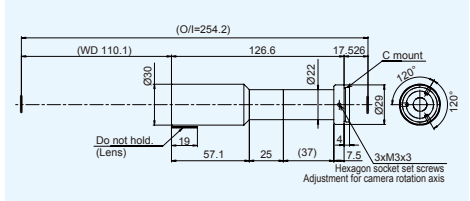
0.8x

Model	Coaxial	SE-110VT08-M
	Straight	SE-110ST08-M
Optical magnification	0.8x ±5%	
WD	110.1±3.3 mm	
Depth of field *1 *2	1.31 mm	
Optical resolution *2 *3	8.8 μm	
NA *2	0.038	
Actual F number (Fe) *2	10.3	
TV distortion *2	-0.026%	
Weight	Coaxial	106 g
	Straight	103 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-110VT08-M



SE-110ST08-M

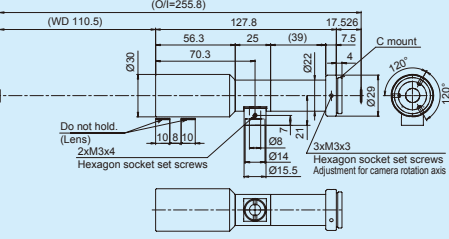


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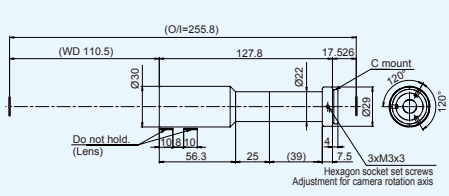
1.0x

Model	Coaxial	SE-110VT10-M
	Straight	SE-110ST10-M
Optical magnification	1.0x ±5%	
WD	110.5±3.3 mm	
Depth of field *1 *2	0.82 mm	
Optical resolution *2 *3	6.9 μm	
NA *2	0.049	
Actual F number (Fe) *2	10.2	
TV distortion *2	-0.0007%	
Weight	Coaxial	108 g
	Straight	105 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-110VT10-M



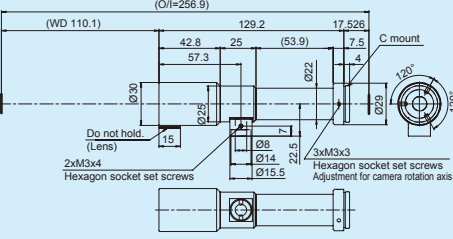
SE-110ST10-M



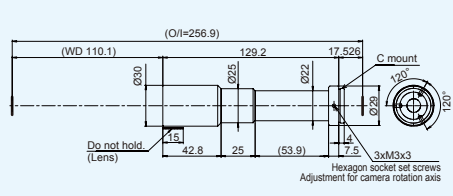
1.5x

Model	Coaxial	SE-110VT15-M
	Straight	SE-110ST15-M
Optical magnification	1.5x ±5%	
WD	110.1±3.3 mm	
Depth of field *1 *2	0.42 mm	
Optical resolution *2 *3	5.2 μm	
NA *2	0.064	
Actual F number (Fe) *2	11.7	
TV distortion *2	+0.024%	
Weight	Coaxial	110 g
	Straight	108 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-110VT15-M



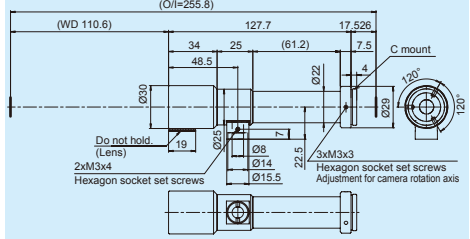
SE-110ST15-M



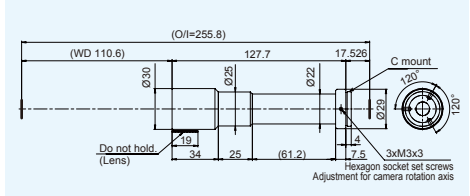
2.0x

Model	Coaxial	SE-110VT20-M
	Straight	SE-110ST20-M
Optical magnification	2.0x ±5%	
WD	110.6±3.3 mm	
Depth of field *1 *2	0.27 mm	
Optical resolution *2 *3	4.5 μm	
NA *2	0.075	
Actual F number (Fe) *2	13.0	
TV distortion *2	-0.018%	
Weight	Coaxial	115 g
	Straight	113 g
Maximum image size	2/3"L (ø12.75 mm)	

SE-110VT20-M



SE-110ST20-M



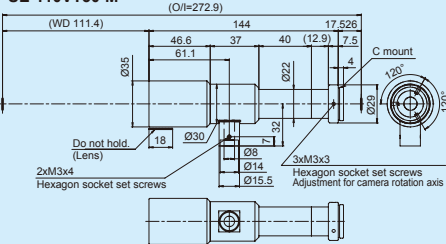
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WD 110 mm

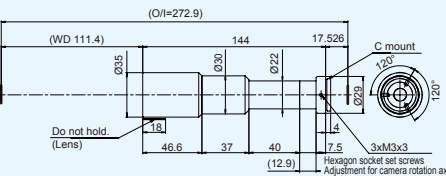
3.0x

Model	Coaxial	SE-110VT30-M
	Straight	SE-110ST30-M
Optical magnification	3.0x ±5%	
WD	111.4±3.3 mm	
Depth of field *1 *2	0.14 mm	
Optical resolution *2 *3	3.6 μm	
NA *2	0.094	
Actual F number (Fe)*2	16.0	
TV distortion *2	+0.008%	
Weight	Coaxial	166 g
	Straight	160 g
Maximum image size	2/3" (Ø12.75 mm)	

SE-110VT30-M



SE-110ST30-M

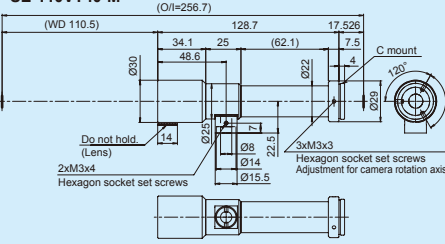


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 *2 These are calculated values.
 *3 Theoretical resolution calculations are based on a wavelength of 550 nm.

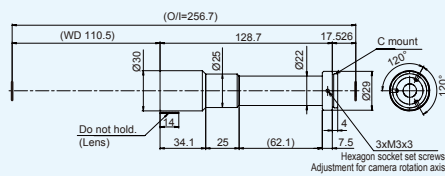
4.0x

Model	Coaxial	SE-110VT40-M
	Straight	SE-110ST40-M
Optical magnification	4.0x ±5%	
WD	110.5±3.3 mm	
Depth of field *1 *2	0.11 mm	
Optical resolution *2 *3	3.7 μm	
NA *2	0.091	
Actual F number (Fe)*2	21.9	
TV distortion *2	-0.004%	
Weight	Coaxial	121 g
	Straight	120 g
Maximum image size	2/3" (Ø11.00 mm)	

SE-110VT40-M



SE-110ST40-M



We can offer Lenses and Lights together as a set.

Ideal for Coaxial Type!

High-output Spot Lights
HLV2 Series



Ideal for Straight Type!



A variety of Lights, such as Ring Lights and Bar Lights, are available.

Please feel free to inquire.

Common Specifications

Lens type	Object-space telecentric lens (fixed magnification)
Camera mount	C mount
Applicable wavelength	400 to 700 nm
Operating environment	Temperature: 0 to 40°C, Humidity: 85%RH max. (with no condensation)
Storage environment	Temperature: -20 to 60°C (with no condensation)
Environmental regulation	RoHS compliant

Application Precautions

- Do not disassemble or modify the product.
- Do not subject it to impact.
- Handle the lens with care during daily use. Make sure no dust, dirt, or fingerprints adhere to the lens.
- Remove dust and dirt by blowing it off with air. Do not touch the lens with your hand.
- Use a soft, finely woven cloth to wipe away any marks, such as fingerprints.
- The lens barrel has a lens at the object-side end. Do not hold it too tight. For details of the relevant part, refer to the dimension diagrams.

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CAUTION

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- The design and specifications of those products are subject to change without notification for product improvement.

CCS Inc.

Headquarters

Shimodachiuri-agaru, karasuma-dori, kamigyo-ku,
Kyoto 602-8011 JAPAN
TEL : +81-75-415-8284 / FAX : +81-75-415-8278
URL : <http://www.ccs-grp.com/>
E-mail : sales@ccs-inc.co.jp

CCS Asia PTE LTD

63 Hillview Avenue #07-10, Lam Soon Industrial
Building, Singapore 669569
TEL : +65-6769-1669 / FAX : +65-6769-3422
URL : <http://www.ccs-asia.com.sg/>
Email : sales@ccs-asia.com.sg

CCS America, Inc

6 Lincoln Knoll Lane, Suite 102,
Burlington, MA. 01803, U.S.A.
TEL : +1-781-272-6900 / FAX : +1-781-272-6902
URL : <http://www.ccsamerica.com/>
Email : info@ccsamerica.com

CCS Inc. Shanghai Office

Room 308B-309, CIMIC Tower No.1090 Century Avenue,
Pu Dong New Area, Shanghai 200120, P.R. China
TEL : +86-21-5835-8728 / FAX : +86-21-5835-8928
Email : ccschina@ccs-inc.co.jp

CCS Europe NV/SA

Bergensesteenweg 421B,
1600 Sint-Pieters-Leeuw, Belgium
TEL : +32-(0)2-333-0080 / FAX : +32-(0)2-333-0081
Email : info@ccseu.com

CCS Inc. Shenzhen office

17B, China Economic Trade Building, 7Rd Zizhu, Zhuzilin,
Futian District, Shenzhen 518040 P.R.China
TEL : +86-755-8279-0477 / FAX : +86-755-8279-0478
Email : ccschina@ccs-inc.co.jp