



## Digital Cinema Lens

**CN-R14mm T3.1 L F**

**CN-R20mm T1.5 L F**

**CN-R24mm T1.5 L F**

**CN-R35mm T1.5 L F**

**CN-R50mm T1.3 L F**

**CN-R85mm T1.3 L F**

**CN-R135mm T2.2 L F**

## OPERATION MANUAL

Read this operation manual before using the product.

**ENG**

## NOTE

This lens is a full manual lens for shooting movies.

Depending on the camera attached or the function used, the lens may not operate properly or the indications may not be correct.

In addition, do not operate the lens during initialization of the camera settings.

For other latest product information, please check our website.

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# GENERAL SAFETY INFORMATION

The safety warnings and cautions provided on the product or in this operation manual must be observed. Failure to observe these warnings and cautions may result in injury or accident.

Read this operation manual carefully to familiarize yourself with its contents and ensure that you can operate the product properly. Also, store this manual in a safe place where it can easily be referenced whenever necessary.

This operation manual uses the following symbols and terms to identify hazards in order to prevent accidents.

## **WARNING**

This indicates a potentially hazardous situation which, if not heeded, may result in death or serious injury to you or others. Be sure to heed all warning notices to ensure safe operation at all times.

## **CAUTION**

This indicates a potentially hazardous situation which, if not heeded, may result in a minor injury to you or others, or damage to property. Be sure to heed all caution notices to ensure safe operation at all times.

## **NOTE**

This indicates cautions and recommendations for operation. It contains information which, if not heeded, may result in this product failing to function properly. These notices also contain useful information for operation.

## HANDLING THE PRODUCT

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### **WARNING**

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Do not stare at the sun or other bright objects through the lens. It may injure your eyes.

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### **CAUTION**

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1. Ensure that all mountings are securely tightened. If a mounting becomes loose, parts may fall off and cause injury.
2. Inspect mountings regularly (about every six months to one year) to ensure they are securely tightened. If a mounting becomes loose, parts may fall off and cause injury.

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## **NOTE**

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1. Do not expose the lens to strong impact. Striking or dropping the lens may cause the malfunction of the product.
2. Take measures to avoid sudden changes in temperature where the lens is used, which may prevent operation temporarily if condensation forms in the lens.

## DEALING WITH ABNORMALITIES

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### WARNING

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If any of the following situations occurs, immediately dismount the lens from the camera and contact your Canon sales representative or dealer.

- Smoke, fumes, or unusual noises
- Entry of foreign objects (such as liquid or metal objects) inside the product

## MAINTENANCE AND INSPECTION

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### NOTE

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1. Clean off any dust on the lens surface using a lens blower or a soft lens brush. In case of getting fingerprints or stains on the lens, use a clean cotton cloth moistened with commercial lens cleaning fluid, or use lens cleaning paper. Gently wipe in a spiral pattern from the center of the lens. Be careful not to rub dust across the lens, which may scratch the lens surface.
2. Routine inspection about once a year is recommended, depending on the conditions and environment of use. Request overhaul, if needed.

## STORAGE



### WARNING

Always attach the lens cap, hood cap, dust cap or covers before storage. Storing the lens without the caps or covers attached poses a risk of fire if the lens concentrate light in direct sunlight.

### NOTE

Immediately wipe off any moisture on the lens from misty or foggy environments, using a dry cloth. Seal the lens in a plastic bag with a desiccant (preferably new) to prevent moisture inside. Otherwise it may cause the mold or the malfunction of the product.

## TO THE CUSTOMER

1. Canon shall bear no responsibility for damage resulting from improper operation of this product by the customer.
2. Canon shall make no guarantees about the product quality, functions, or operation manual and its marketability and suitability for the customer's purpose. Moreover, Canon shall bear no responsibility for any damage, direct or incidental, that results from usage for the customer's purpose.
3. The product specifications, configuration, and appearance are subject to change without prior notice.
4. For further information on repairs, maintenance, or adjustments not mentioned in this operation manual, contact your Canon sales representative or dealer.
5. Note that Canon may be unable to undertake servicing or repair of a product if it is modified without consulting Canon or your Canon sales representative.

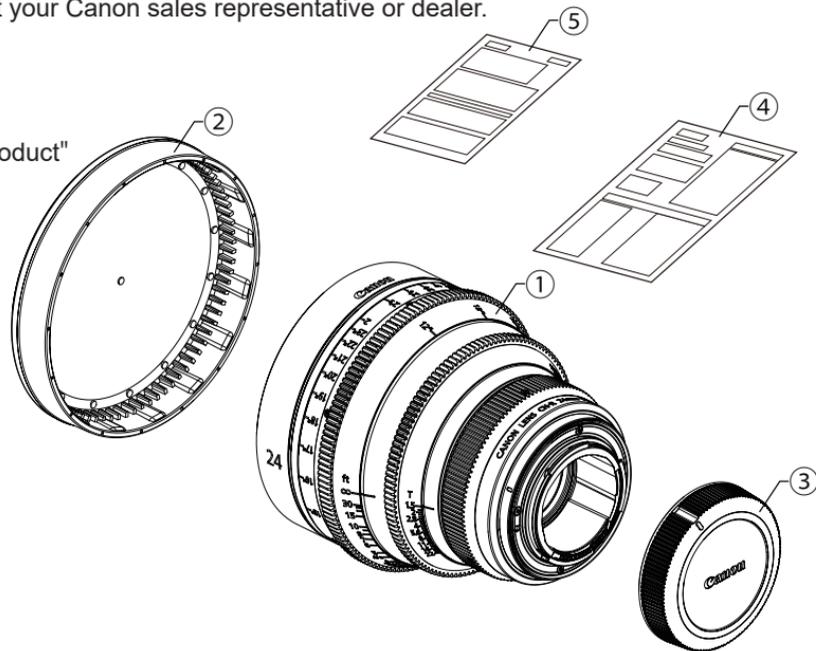
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# PRODUCT LIST

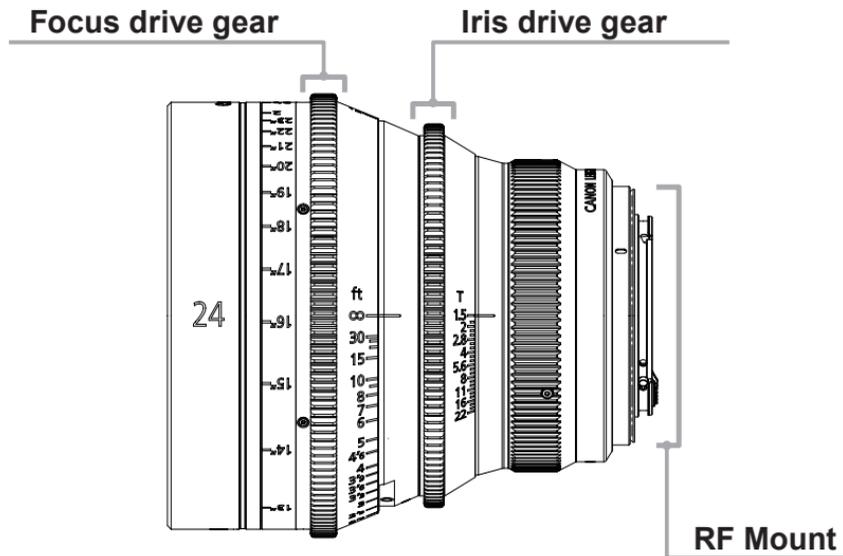
Make sure all of the following items are included in the packing box.  
If you find any item missing, please contact your Canon sales representative or dealer.

- ① Lens body
- ② Lens cap
- ③ Rear lens cap
- ④ Operation Manual "Before Using The Product"
- ⑤ Operation Manual "Regulations"



The illustrations in this manual show CN-R24mm T1.5 L F unless otherwise specified.  
The shapes of product may vary depending on models and specifications.

# NAMES OF PARTS



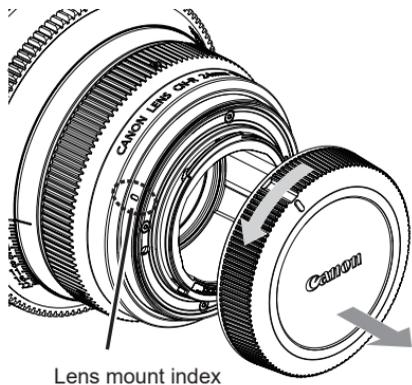
# ATTACHING AND DETACHING THE LENS

Set the camera's power switch to OFF when attaching or detaching the lens.  
Refer to your camera's instructions for details on attaching and detaching the lens.

## Attaching the Lens

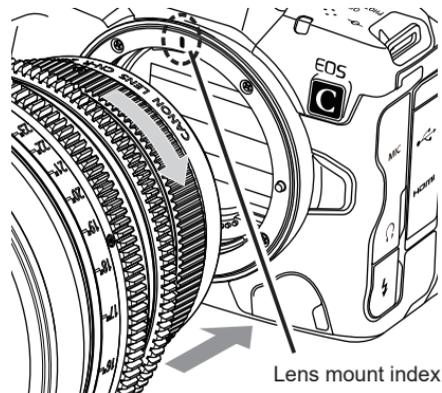
### 1 Detach the rear lens cap

Detach the rear lens cap by turning it as shown by the arrows.



### 2 Attach the lens

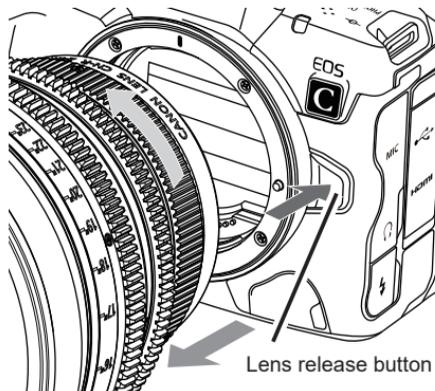
Align the lens mount indexes of the lens and camera, and turn the lens as shown by the arrows until you hear a click.



## Detaching the Lens

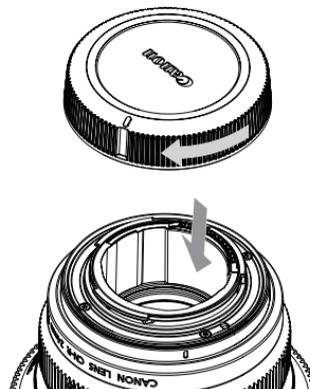
### 1 Detach the lens

Turn the lens as shown by the arrows while pressing the camera's lens release button. Detach the lens once it has stopped turning.



### 2 Attach the rear lens cap

Attach the rear lens cap by turning it as shown by the arrows.

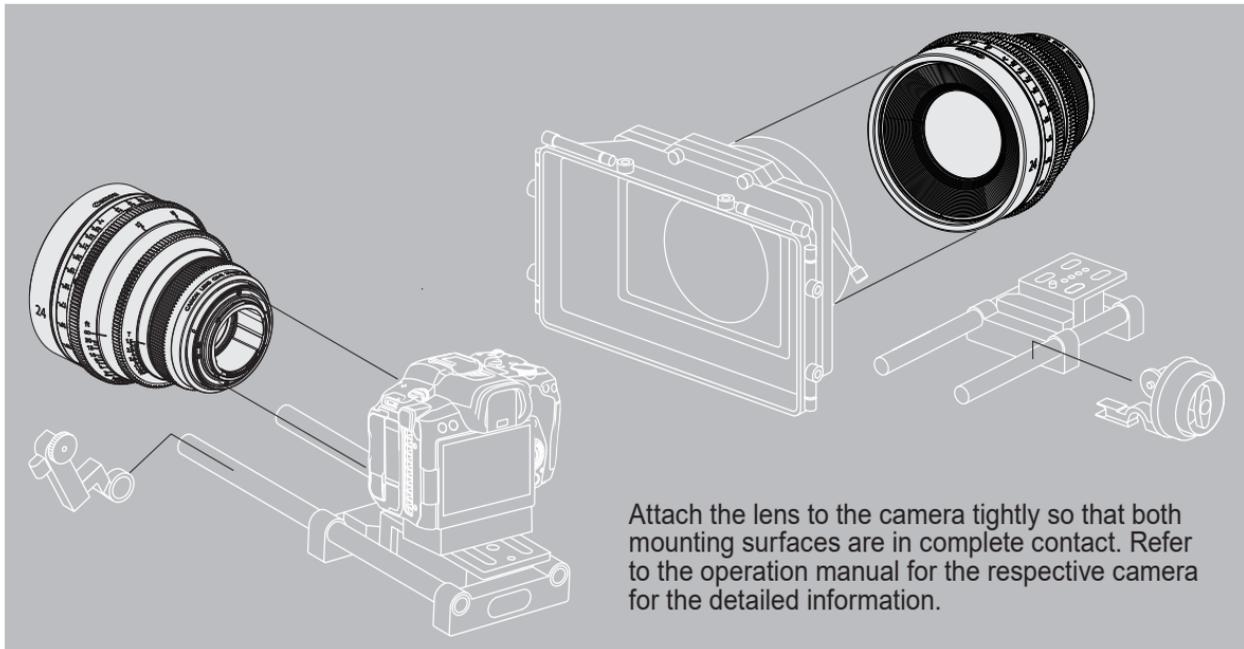


#### NOTE

- Attach the lens cap before detaching the lens from the camera.
- After detaching the lens, place the lens with the rear end up to prevent the lens surface and contacts from getting scratched.
- If the contacts get soiled, scratched, or have fingerprints on them, corrosion or faulty connections can result. The camera and lens may not operate properly.
- If the contacts get soiled or have fingerprints on them, clean them with a soft cloth.

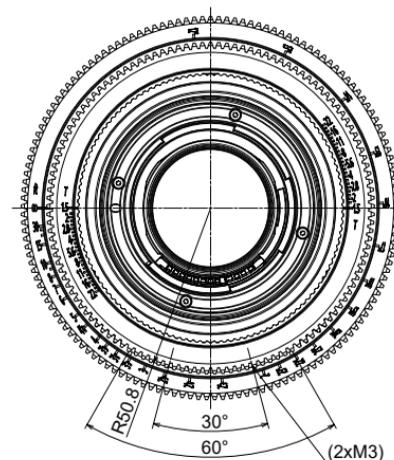
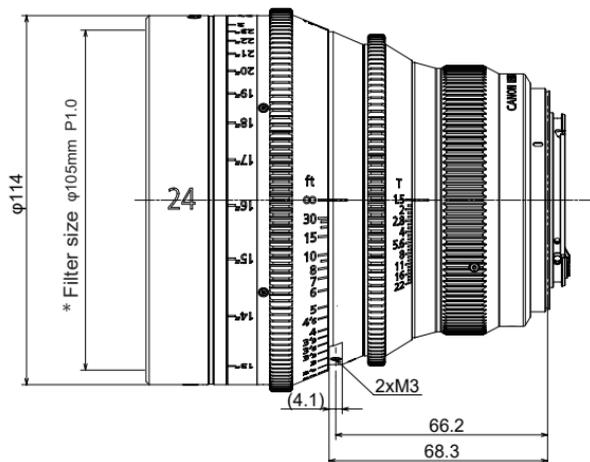
## AVAILABLE ACCESSORIES

A variety of professional camera accessories compatible with the  $\phi$  15 mm and  $\phi$  19 mm rod system can be used with this lens. Be sure to check the mounted condition before use.



# DIMENSIONS OF PARTS

(Unit : mm)



## Spur gear specifications

	Focus drive gear	Iris drive gear
Number of teeth	146	126
Module	0.8	0.8
P.C.D.	116.8 mm	100.8 mm
Angular rotation	300°	36°

\* CN-R14mm T3.1 L F cannot be used with a filter.

## SPECIFICATIONS

	CN-R14mm T3.1 L F			CN-R20mm T1.5 L F		
Lens Mount	RF			RF		
Focal Length	14mm			20mm		
Maximum Relative Aperture(Tno)	1 : 3.1			1 : 1.5		
Iris Blade	11			11		
Image Circle	φ43.3mm			φ43.3mm		
Aspect Ratio	1.5 : 1	1.78 : 1	1.9 : 1	1.5 : 1	1.78 : 1	1.9 : 1
Dimensions (H x V)	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm
Angle of View (H / V)	104.3° / 81.2°	82.6° / 52.5°	86.2° / 52.5°	84.0° / 61.9°	63.2° / 38.1°	66.4° / 38.1°
Minimum Object Distance(M.O.D.) [from the image sensor]	0.2m (8")			0.3m (12")		
Object Dimensions at M.O.D. (H x V)	24.8 x 16.5cm	16.9 x 9.5cm	18.0 x 9.5cm	33.8 x 22.5cm	23.1 x 13.0cm	24.6 x 13.0cm
Front Diameter	φ114mm			φ114mm		
Thread for filters	— *			φ105mm P1.0		
Size (W x H x L)	Approx. 118.4 x 118.4 x 118.0mm			Approx. 118.4 x 118.4 x 125.5mm		
Weight	Approx. 1.3kg			Approx. 1.4kg		

- A variety of professional camera accessories compatible with the φ 15 mm and φ 19 mm rod system can be used with this lens.
- Lenses compatible with Full-frame, Super 35mm, APS-H and APS-C Sensor cameras. When mounted on a camera with a different image size, the angle of view changes.

\* CN-R14mm T3.1 L F cannot be used with a filter.

	CN-R24mm T1.5 L F			CN-R35mm T1.5 L F		
Lens Mount	RF			RF		
Focal Length	24mm			35mm		
Maximum Relative Aperture(Tno)	1 : 1.5			1 : 1.5		
Iris Blade	11			11		
Image Circle	φ43.3mm			φ43.3mm		
Aspect Ratio	1.5 : 1	1.78 : 1	1.9 : 1	1.5 : 1	1.78 : 1	1.9 : 1
Dimensions (H x V)	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm
Angle of View (H / V)	73.7° / 53.1°	54.3° / 32.1°	57.3° / 32.1°	54.4° / 37.8°	38.7° / 22.3°	41.0° / 22.3°
Minimum Object Distance(M.O.D.) [from the image sensor]	0.3m (12")			0.3m (12")		
Object Dimensions at M.O.D. (H x V)	28.8 x 19.2cm	19.7 x 11.0cm	21.0 x 11.0cm	20.1 x 13.4cm	13.7 x 7.7cm	14.6 x 7.7cm
Front Diameter	φ114mm			φ114mm		
Thread for filters	φ105mm P1.0			φ105mm P1.0		
Size (W x H x L)	Approx. 118.4 x 118.4 x 125.5mm			Approx. 118.4 x 118.4 x 125.5mm		
Weight	Approx. 1.3kg			Approx. 1.3kg		

- A variety of professional camera accessories compatible with the φ 15 mm and φ 19 mm rod system can be used with this lens.
- Lenses compatible with Full-frame, Super 35mm, APS-H and APS-C Sensor cameras. When mounted on a camera with a different image size, the angle of view changes.

	CN-R50mm T1.3 L F			CN-R85mm T1.3 L F		
Lens Mount	RF			RF		
Focal Length	50mm			85mm		
Maximum Relative Aperture(Tno)	1 : 1.3			1 : 1.3		
Iris Blade	11			11		
Image Circle	φ43.3mm			φ43.3mm		
Aspect Ratio	1.5 : 1	1.78 : 1	1.9 : 1	1.5 : 1	1.78 : 1	1.9 : 1
Dimensions (H x V)	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm
Angle of View (H / V)	39.6° / 27.0°	27.6° / 15.7°	29.4° / 15.7°	23.9° / 16.1°	16.5° / 9.3°	17.5° / 9.3°
Minimum Object Distance(M.O.D.) [from the image sensor]	0.45m (18")			0.95m (3'2")		
Object Dimensions at M.O.D. (H x V)	24.9 x 16.6cm	17.0 x 9.5cm	18.1 x 9.5cm	34.3 x 22.9cm	23.4 x 13.1cm	25.0 x 13.1cm
Front Diameter	φ114mm			φ114mm		
Thread for filters	φ105mm P1.0			φ105mm P1.0		
Size (W x H x L)	Approx. 118.4 x 118.4 x 125.5mm			Approx. 118.4 x 118.4 x 125.5mm		
Weight	Approx. 1.2kg			Approx. 1.5kg		

- A variety of professional camera accessories compatible with the φ 15 mm and φ 19 mm rod system can be used with this lens.
- Lenses compatible with Full-frame, Super 35mm, APS-H and APS-C Sensor cameras. When mounted on a camera with a different image size, the angle of view changes.

	CN-R135mm T2.2 L F		
Lens Mount	RF		
Focal Length	135mm		
Maximum Relative Aperture(Tno)	1 : 2.2		
Iris Blade	11		
Image Circle	φ43.3mm		
Aspect Ratio	1.5 : 1	1.78 : 1	1.9 : 1
Dimensions (H x V)	36 x 24mm	24.6 x 13.8mm	26.2 x 13.8mm
Angle of View (H / V)	15.2° / 10.2°	10.4° / 5.9°	11.1° / 5.9°
Minimum Object Distance(M.O.D.) [from the image sensor]	1m (3'4")		
Object Dimensions at M.O.D. (H x V)	21.1 x 14.1cm	14.4 x 8.1cm	15.4 x 8.1cm
Front Diameter	φ114mm		
Thread for filters	φ105mm P1.0		
Size (W x H x L)	Approx. 118.4 x 118.4 x 139.6mm		
Weight	Approx. 1.5kg		

- A variety of professional camera accessories compatible with the φ 15 mm and φ 19 mm rod system can be used with this lens.
- Lenses compatible with Full-frame, Super 35mm, APS-H and APS-C Sensor cameras. When mounted on a camera with a different image size, the angle of view changes.

## Reference Information

This lens is a full manual lens for shooting movies.

- RF Cinema lenses were developed primarily for movie production, and have a color balance typical for movies. When using this lens together with EF/RF lenses which are basically used to shoot still images, adjust the color balance (redo the white balance etc.) as necessary.
- In general, the depth of field becomes shallow and the focusing range becomes extremely narrow near the widest aperture and when shooting a subject at close range. In addition, this tendency increases for lenses with longer focal lengths. When shooting images, carefully check the focusing condition using the zoom mode of the finder or other means, and shoot a sufficient number of test images before performing focus operations.

## EXTERNAL VIEW

CN-R14mm T3.1 L F .....	E20
CN-R20mm T1.5 L F .....	E22
CN-R24mm T1.5 L F .....	E24
CN-R35mm T1.5 L F .....	E26
CN-R50mm T1.3 L F .....	E28
CN-R85mm T1.3 L F .....	E30
CN-R135mm T2.2 L F .....	E32

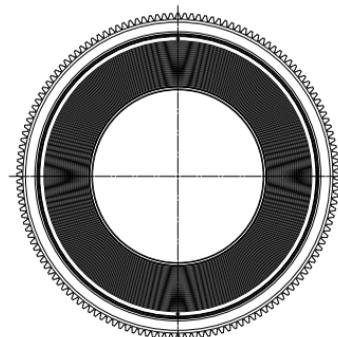
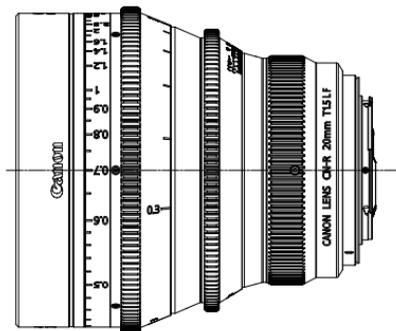




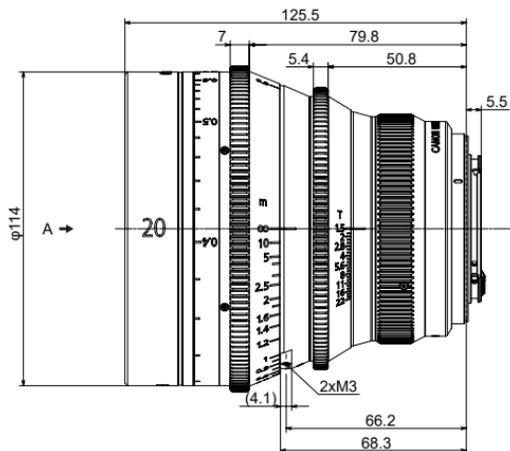


# CN-R20mm T1.5 L F

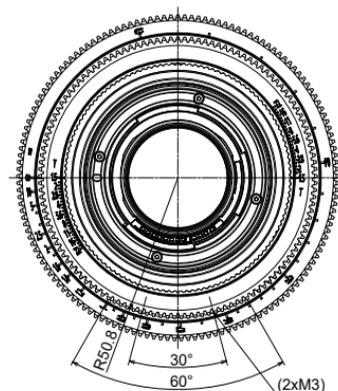
Meter



View A

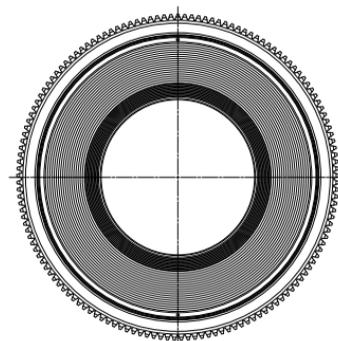
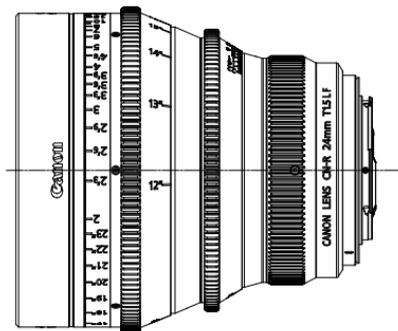


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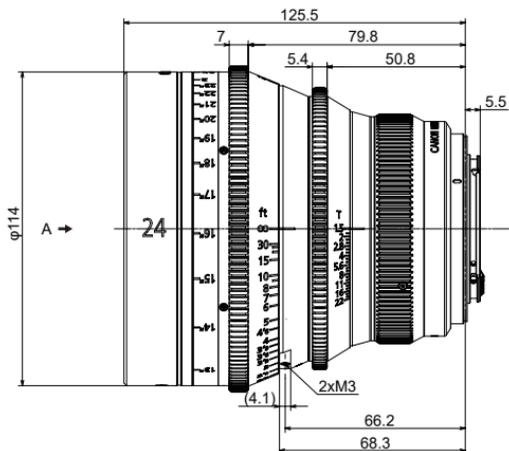


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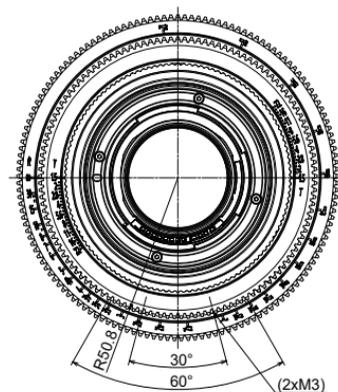
Feet



View A

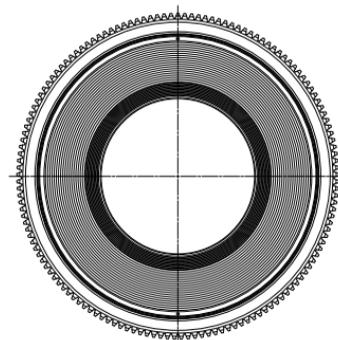
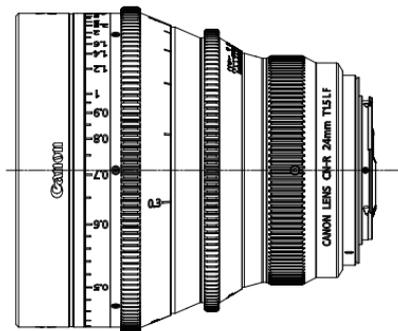


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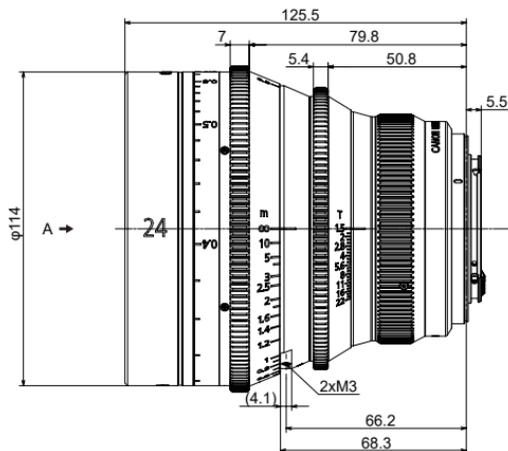


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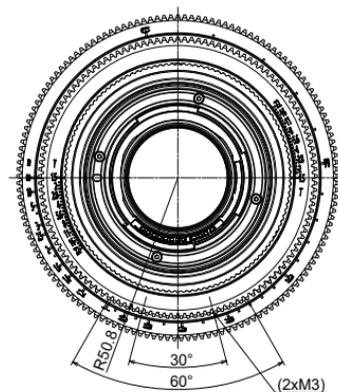
Meter



View A



(Unit : mm)





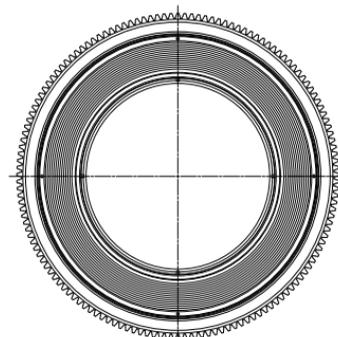
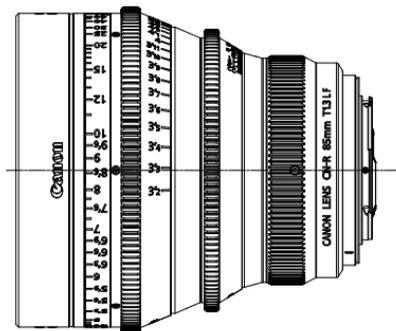




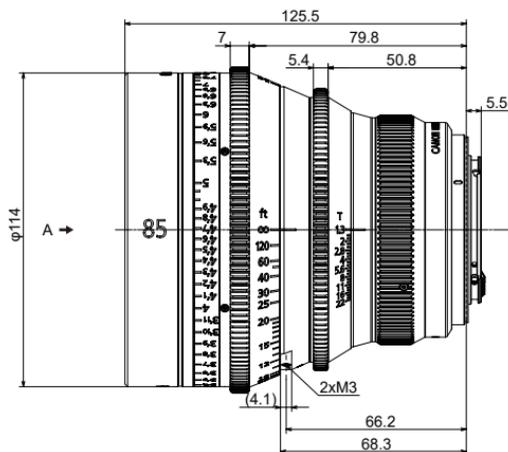


# CN-R85mm T1.3 L F

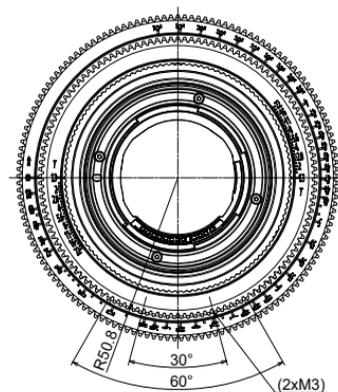
Feet



View A

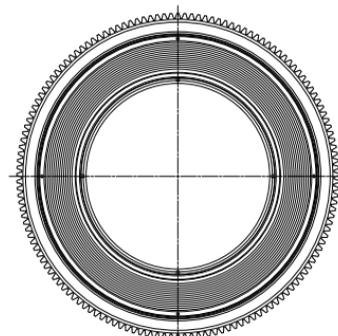
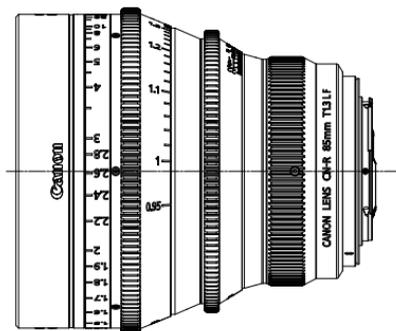


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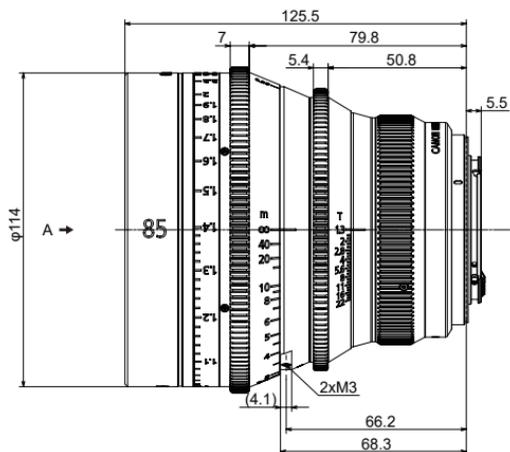


# CN-R85mm T1.3 L F

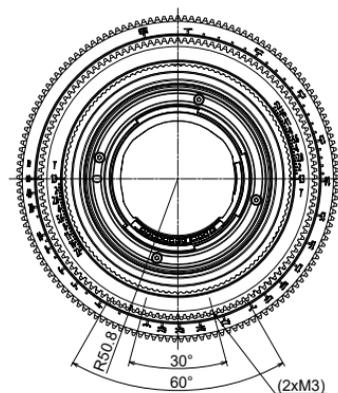
Meter



View A

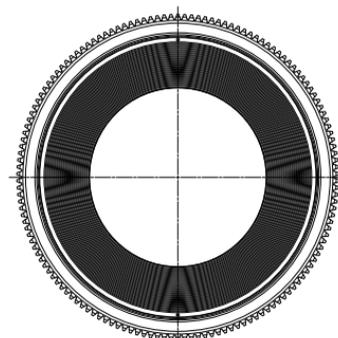
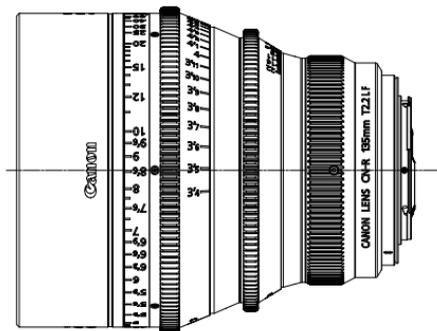


(Unit : mm)



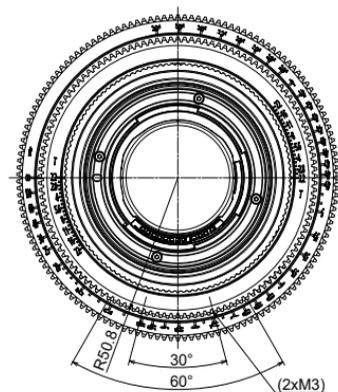
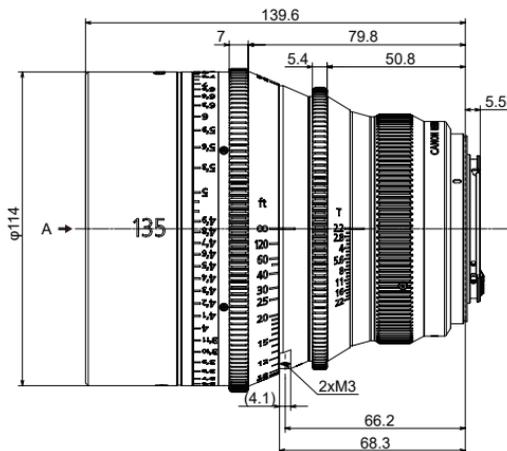
# CN-R135mm T2.2 L F

Feet



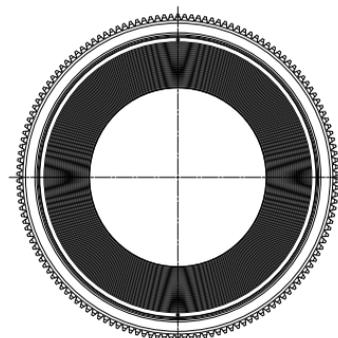
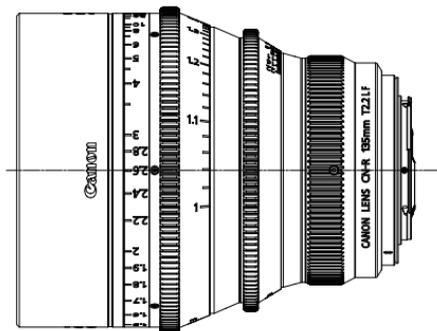
View A

(Unit : mm)



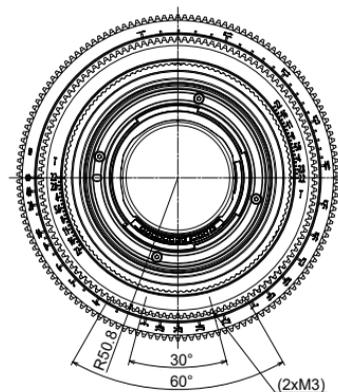
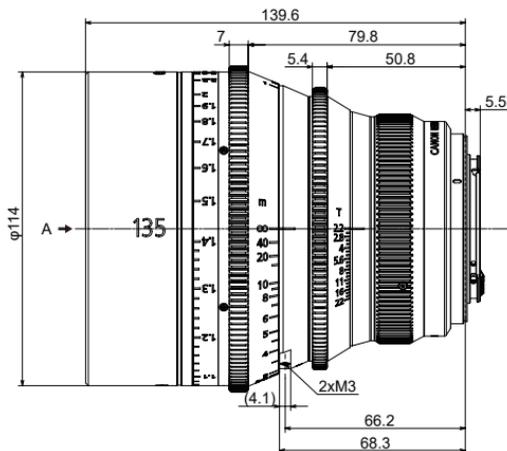
# CN-R135mm T2.2 L F

Meter



View A

(Unit : mm)





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