

DZOFILM
MAKE YOUR MOVIE

Pictor Zoom Cinema Lens
Users' Manual

20-55 T2.8
50-125 T2.8

绘梦师系列
电影镜头使用说明书

www.dzofilm.com

Introduction

Pictor Zoom series lenses are the products of DZOFILM for S35 cameras.

Thank you for your purchase of this product. Be sure that you have read this manual and understood its content before using the camera. Keep the manual where it will be read by all who use the product.

For repair, inspection and internal test, please contact your DZOFILM dealer.

Make sure that you use the lens correctly. Read the Manual carefully before use.

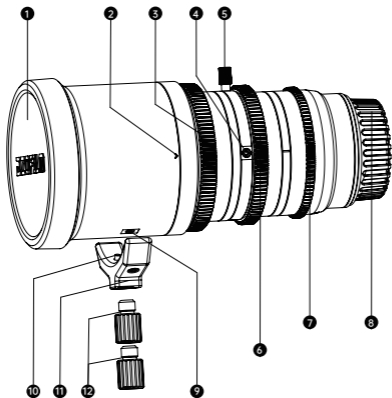
Product Care

- When using a matte box, do not pick up or hold the camera using only the hood.
- Use a blower to remove dust and lint from the glass surfaces of the lens or filter. To remove smudges and fingerprints, apply a small amount of lens cleaner to a soft, clean cotton cloth or lens-cleaning tissue and clean from the center outwards using a circular motion. Do not leave smears or touch the glass with your finger.
- Never use organic solvents such as paint thinner or benzene to clean the lens.
- Attach the front and rear caps when the lens is not in use.
- Store the lens and filter in cool, dry locations to prevent mold and rust. Do not store in direct sunlight or with naphtha or camphor moth balls.
- Please keep the lens dry and wipe the water droplets off if there are droplets on the glass surface.
- Leaving the lens near heater or in other extremely hot locations could cause damage or warping.
- There may be a case that the glasses of the lens mist when the lens is carried from a cool place to a high temperature and high humidity. To avoid a mist on the glasses, before using the lens, let the lens adjust to the ambient temperature of the place where the lens will be used.

Supplied Accessories

Front cap	EF rear cap
PL mount	PL rear cap
Supporting base	Case for shims
Case for shims	Supporting rod*2
Zoom lever (detachable)	Pictor Zoom Sticker
DZOFILM QC & Support Card	T6 Trox driver (for bayonet)
Screws for PL bayonet (M2*5, 12pcs)	Screws for Supporting base (M3*8, 8pcs)
2,5mm hexagon driver (for supporting base)	
Shims * 1set (T0.3*1;T0.1*1;T0.05*2;T0.03*2;T0.02*2)	

Parts of the Lens



- | | |
|--------------------------------|---|
| ① Front cap | ⑥ Zoom ring |
| ② Markings | ⑦ Iris ring |
| ③ Focusing ring | ⑧ EF rear cap |
| ④ Zoom lever socket*4 (M3*4mm) | ⑨ Socket for supporting base*2 (M3*3mm) |
| ⑤ Zoom lever | |

Attach the Lens to the Camera

Remove the body cap from the camera and the rear cap from the lens. Place the lens on the mount, keeping the marks on the lens and the camera aligned, and then rotate the lens until it clicks into place. Note that in some cases there may not be a mounting mark on the camera body.

When attaching the lens, ensure that dust or other foreign matter does not enter the camera and be careful not to touch the camera's internal parts. Do not press the lens release button while attaching the lens and be sure the latch has securely clicked into place.

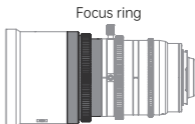
Before using the lens for the first time or after attaching it to a different camera, measure the flange-back distance.

Lens Control

Use the lens controls to zoom in to zoom out, adjust aperture or focus.

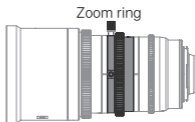
Focus

Rotate the focus ring to increase or decrease the focus distance.



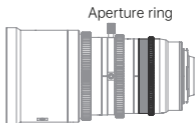
Zoom

Rotate the zoom ring to zoom out, increasing the area visible in the frame or zoom in on the subject so that it fills a larger area in the frame.



Aperture

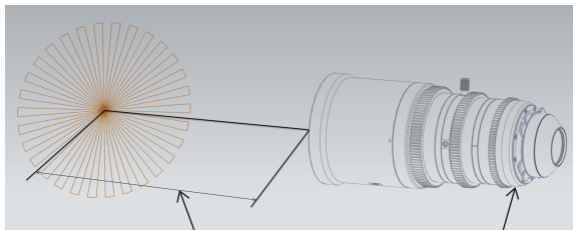
Rotate the aperture ring to stop aperture down, raising T-stop narrowing the aperture, or lower the T-stop the aperture.



How to Adjust Back Focus of Pictor Zoom

Pictor Zoom series lenses will all go through flange back test with shims based on S35 standard before shipping, but flange back distance can vary on different cameras. If the flange back distance is incorrect, the camera will not focus at the correct distance.

- 1.To start with, prepare a Siemens Star chart, or other black-and-white (high-contrast) resolution chart to test;
- 2.Attach your Pictor Zoom lens to the camera;
- 3.Rotate the iris to wide open;
- 4.Set up Siemens Star chart at 1.5M(4.9 Feet) away from the camera (flange), and make sure the target is in the image center.
 - A. Zoom in to the longest focal length, focus on the target until the target is sharpest, and mark down the focus distance as S1.
 - B. Zoom out to the widest, focus on the target until the target is sharpest, and mark down the focus distance as S2.
 - C.If the figure $S2 < S1$, increasing shim(s) is needed; If $S2 > S1$, then reduce the shim(s).
 - D.Repeat step A to C until $S2=S1$. At this moment the lens is under Parfocal.



The testing target should lay on the center of image, and 1.5M away from the camera sensor

Maximum T-stop

Table for flange distance adjustment

55mm object distance at best focus S1	20mm object distance at best focus S2	Change of total shim thickness(mm)
1.5m	0.9	+0.36
	1	+0.27
	1.1	+0.19
	1.2	+0.14
	1.3	+0.1
	1.4	+0.05
	1.5	0
	1.7	-0.04
	2	-0.1
	2.5	-0.16
	3	-0.18
	3.5	-0.2
	4.5	-0.24
	6	-0.27
10	-0.3	

Table for flange distance adjustment

125mm object distance at best focus S1	50mm object distance at best focus S2	Change of total shim thickness(mm)
1.5m	1.3m	+0.33
	1.35m	+0.2
	1.4m	+0.12
	1.5m	0
	1.6m	-0.1
	1.7m	-0.25
	1.8m	-0.37

PS:This table is only for reference

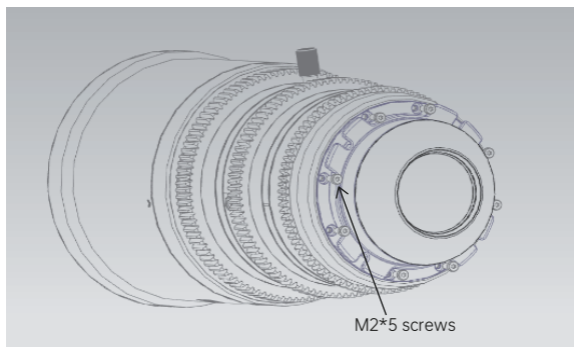
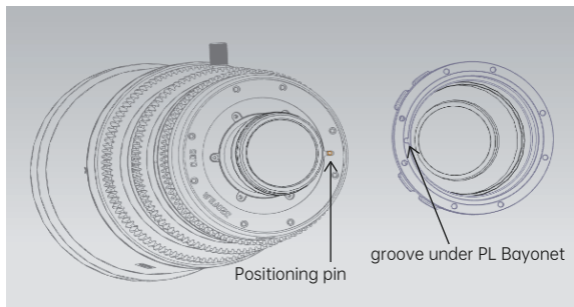
Minus sign: Shims need to be removed; Plus sign: Shims need to be added

Assemble PL Mount

Align the groove under the PL bayonet to the positioning pin. Place the bayonet plat on the rear of the lens;

Slightly twist the mount, and make sure the bayonet is in plat condition;

Finally drive 8pcs M2*5 screws into screw holes in symmetrical order



Assemble EF Mount

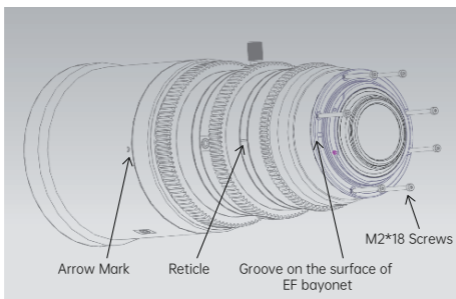
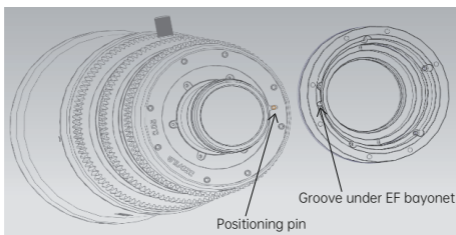
Align the groove under the EF bayonet to the positioning pin. Place the bayonet plat on the rear of the lens;

At this moment, the groove on the surface shall align the Arrow Mark and Reticle. If not, that means the position of bayonet is incorrect.

Slightly twist the mount, and make sure the bayonet is flat;

Finally drive 7pcs M2*18 screws into screw holes in symmetrical order.

PS. After changing the mount into EF mount, the rear glass element exceeds the mount a little bit. Do not place this end on the desk without rear cap in order to avoid scratches.



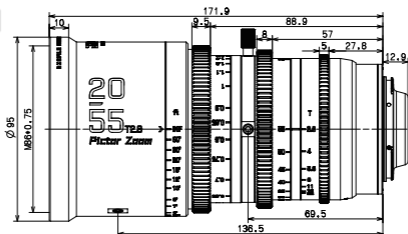
Specification

Specifications	20-55	50-125
Lens mount	EF/PL	EF/PL
Focal length	20-55 mm	50-125 mm
Zoom ratio	2.75X	2.5X
Minimum T-stop	T2.8	T2.8
Aperture range	T2.8-T22	T2.8-T22
Image Circle	24.89 mm*19.3 mm (φ31.5 mm) ratio 1.33:1	24.89 mm*19.3 mm (φ31.5 mm) ratio 1.33:1
Flange Distance	52mm(PL) / 44.14mm(EF)	52mm(PL) / 44.14mm(EF)
Close Focus Distance (to sensor)	0.6m/2ft	0.8m/2ft8in
FOV.		
Horizontal	64.3°- 24.8°	28.1°-10.8°
Vertical	49.6°- 19.0°	20.9°-8.2°
Diagonal	78.0°- 30.6°	35.8°-13.3°
Shooting Area under Close Focus	20mm: 547 mm * 24.8mm	50mm: 348 mm*257 mm
	55mm: 193mm*146 mm	125mm: 132mm*100 mm
Effective lens Dia.		
Front	53.0 mm	61.0 mm
Back	25.8 mm	29.4 mm
Aperture control	Manual (ring rotates up to 65°)	Manual (ring rotates up to 72°)
Zoom control	Manual (ring rotates up to 100°)	Manual (ring rotates up to 100°)
Focus control	Manual (ring rotates up to 270°)	Manual (ring rotates up to 270°)
Size:	φ95.0*164mm(PL) φ95.0*171.9mm(EF)	φ95.0*175mm(PL) φ95.0*182.9mm(EF)
Weight:	≈1520g	≈1700g
Front Outer Dia.	φ95 mm	φ95 mm
Filter Size	M86*0.75	M86*0.75
Gear Pitch (aperture, zoom, and focus)	0.8 M	0.8 M
Number of blades	16 Pcs	16 Pcs

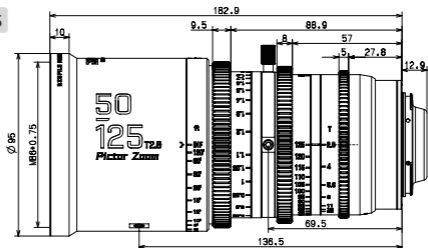
*Improvements may result in unannounced changed on specification and appearance. Owing to how this lens is constructed the distance shown by the camera focus distance indicator (distance indicator) may in some cases differ from the actual focus distance. (Use the "distance indicator" as a guide only).

Appearance

20-55



50-125



Repair and Maintenance

Repairs

Return the product to the point of purchase for repairs. Please note that we reserve the right to refuse service in the event of damage so severe that there is little hope of function being restored, whether said damage is caused by physical shocks, immersion in sand, mud, or water or the like.

Warranty service

Should the product malfunction in the course of normal use as set forth in the users' manual and accompanying documentation, it may

be returned to the point of purchase for repairs within warranty period. The owner is responsible for all shipping costs. The warranty period varies with the country or region of purchase. Stored dated receipts or other proof of purchase in a safe place, as it will be required for repairs made under warranty.

Service Outside the Warranty Period

Request for service will normally be accepted within a period of roughly 5 years following the end of production, during which time spares will be kept on hand, although owners may be offered an equivalent product during this period in the event that spares are not available. Compatibility with consumables and accessories for the original product is not guaranteed. To prevent waste, repairs or replacement may be made using refurbished parts or products, and DZOFILM may collect returned parts or products for later use. When returning a product for repair, please let us know if you need the original parts.

Privacy

DZOFILM obeys all applicable laws and regulations concerning the handling of names, addresses, phone numbers, and other personal information provided by users.

简介

绘梦师系列是DZOFILM旗下S35画幅产品。

感谢您购买本产品。在使用之前，请仔细阅读并理解本手册内容，阅读完后，请妥善保管手册，以随时查阅。

有关维修、检查和内部测试的信息，请与DZOFILM当地经销商联系。

请确保正确使用镜头，请在使用前仔细阅读手册，特别是安全注意事项。

产品保养

- 若使用镜头遮光斗，拿起摄影机时，切勿通过遮光斗受力；
- 请使用吹气球去除镜头或滤镜玻璃表面的灰尘，若要去除污点和指纹，可使用一块滴有少许镜头清洁剂的干净软绵布或镜头清洁纸，以圆周运动方式从里向外进行清洁，注意不要留下污渍，也不要用手指触摸玻璃；
- 切勿使用涂料稀释剂或苯等有机溶剂清洁镜头；
- 不使用镜头时，请盖上镜头前后盖；
- 为防止发霉，请将镜头和滤镜存放在阴凉、干燥的地方，切不可存放在直射阳光下，也不要与石脑油或樟脑丸放在一起；
- 保持镜头干燥，如受潮或有水滴请擦拭干净；
- 勿将镜头放置在加热器旁或其他极其炎热的地方，否则可能导致损坏或变形；
- 将镜头从寒冷的地方拿到温度和湿度较高的地方时，镜头的玻璃镜片上可能会产生雾气，为避免雾气，使用镜头前，请先让镜头适应使用环境。

附带配件

镜头前盖

PL卡口

支撑座

变焦螺杆 (可拆卸)

PL卡口固定螺丝 (M2*5, 12颗)

DZOFILM 质量认证&服务支持卡

公制2.5mm内六角扳手 (配支撑座固定螺丝使用)

卡口垫片一套 (T0.3*1; T0.1*1; T0.05*2; T0.03*2; T0.02*2)

EF卡口后盖

PL卡口后盖

卡口垫片盒子

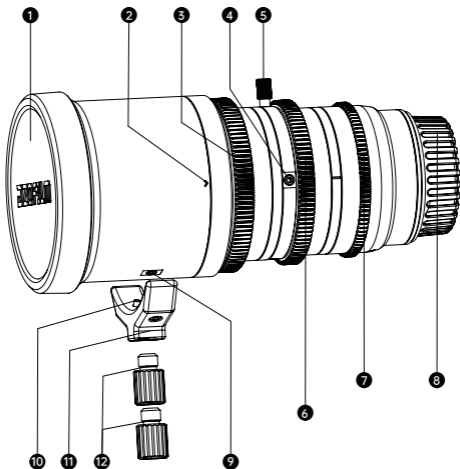
支撑座延长杆*2

Pictor Zoom贴纸

支撑座固定螺丝 (M3*8, 4颗)

T6梅花扳手 (配卡口固定螺丝使用)

镜头部件说明



① 镜头前盖

② 镜头标记

③ 对焦环

④ 变焦螺杆插孔*4 (M3, 深4mm)

⑤ 变焦螺杆

⑥ 变焦环

⑦ 光圈环

⑧ EF卡口后盖

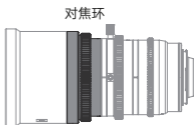
⑨ 支撑座插孔*2 (M3, 深3mm)

镜头控制

使用镜头控制可进行对焦、放大或缩小光孔，调整后焦距。

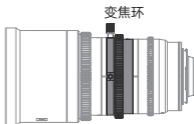
对焦控制

旋转对焦环，可增加或减少对焦距离



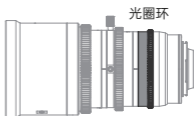
变焦控制

旋转变焦环，可放大或缩小画面中的可视区域，可增大或缩小视场角



光圈控制

旋转光圈环可放大或缩小光孔直径，使得通过镜头到达摄影机的光线增加或减少



绘梦师后焦垫片调整说明

绘梦师系列电影镜头在出厂前会按照标准S35调整后焦，但不同的S35摄影机的法兰距在出厂时可能会略微不同，为了方便与不同的摄影机匹配，达到最佳成像效果，绘梦师系列配备了快速后焦调节机构，后焦调节拨杆位于光孔环与镜头后口之间。

调节过程，请执行以下步骤。

- 1、准备好拍摄对象。可使用“星状测试图” (<http://www.dzofilm.com/xiaozai/0.html>) 或其他黑白相间的、对比度较高的拍摄对象；
- 2、将镜头安装到摄影机；
- 3、选择最大光圈；
- 4、将拍摄对象在距离相机成像面约1.5M处放置，拍摄对象位于画面中心；

调整操作：

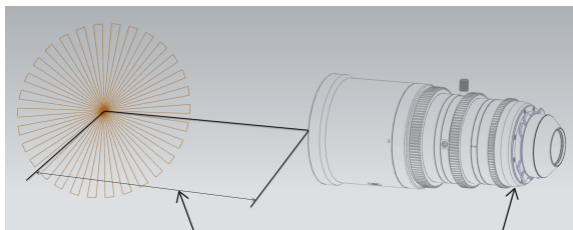
A: 旋转变焦环至最长焦端，然后旋转对焦环至画面最清晰状态，记下此时的对焦刻度值S1；

B: 旋转变焦环至最广角端，然后旋转对焦环至画面最清晰状态，记下此时的对焦刻度值S2；

C: 对比S2与S1的大小，若S2小于S1，则需要增加后焦垫片；若S2大于S1，则需要减少后焦垫片；（垫片的调整量与S1S2的差值对应的对焦环旋转角度有关，旋转角度越大，需要调整的垫片越多，反之亦然）

D: 重复 A-B 步骤，直到S2等于S1时，说明镜头已处于parfocal状态，调整结束；

举例：以Pictor Zoom 50-125为例，假设镜头变焦至125端，对焦至画面最清晰时，对焦刻度值为1.5m，再将镜头变焦至50端，重新对焦至画面最清晰时，对焦刻度值为1.4m，比1.5m小，按经验值，将后焦垫片增加0.1后，重新确认，125端和50端，画面最清晰时对焦刻度值都在1.5m，说明镜头已处于parfocal状态，调整结束；



将拍摄对象在距离相机成像面约1.5M处放置，拍摄对象位于画面中心

最大光圈

20-55后焦垫片调整参考表

55端对焦刻度值 S1	20端对焦刻度值 S2	后焦垫片调整参考值
1.5m	0.9	+0.36
	1	+0.27
	1.1	+0.19
	1.2	+0.14
	1.3	+0.1
	1.4	+0.05
	1.5	0
	1.7	-0.04
	2	-0.1
	2.5	-0.16
	3	-0.18
	3.5	-0.2
	4.5	-0.24
	6	-0.27
10	-0.3	

50-125后焦垫片调整参考表

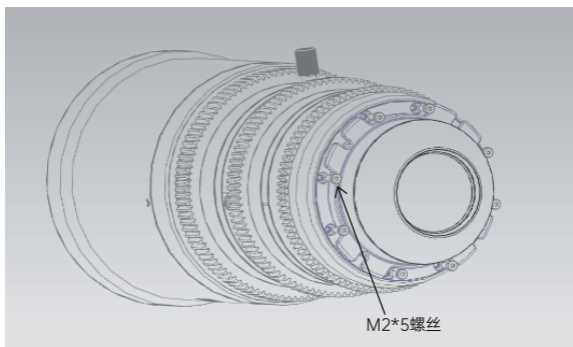
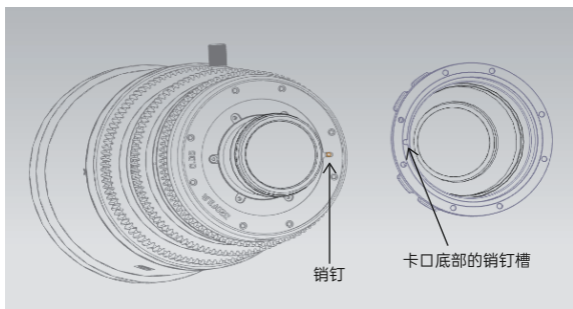
125端对焦刻度值 S1	50端对焦刻度值 S2	后焦垫片调整参考值
1.5m	1.3m	+0.33
	1.35m	+0.2
	1.4m	+0.12
	1.5m	0
	1.6m	-0.1
	1.7m	-0.25
	1.8m	-0.37

PS:上記表格仅做参考使用。

后焦垫片调整值，“+”代表要增加垫片，“-”代表要减少垫片；

PL卡口安装说明

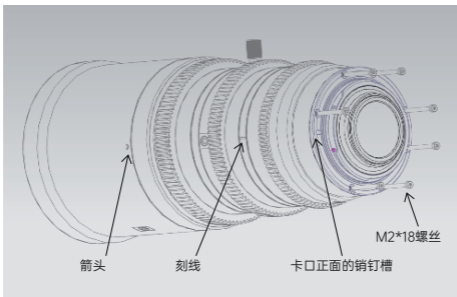
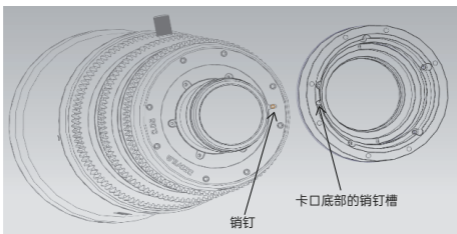
将PL卡口底部的销钉槽，对准镜头后端的销钉，平放在镜头后端，左右轻轻扭动卡口，有感受到停顿感，说明卡口已安装平稳到位。然后依次对称锁入8颗M2*5螺丝



EF卡口安装说明

将EF卡口底部的销钉槽，对准镜头后端的销钉，平放在镜头后端，此时，卡口正面的销钉槽，应该与镜头侧面的箭头、刻线对齐，不对齐则说明卡口方向放置有误。左右轻轻扭动卡口，有感受到停顿感，说明卡口已安装平稳到位。然后依次对称锁入7颗M2*18螺丝。

PS:更换EF卡口之后，镜头最后一枚镜片是凸出镜头的，此时不可将镜头小头朝下放置，以免镜片损伤。



技术规格

Specifications	20-55	50-125
镜头卡口	EF/PL	EF/PL
焦距	20-55 mm	50-125 mm
变焦倍率	2.75X	2.5X
最小T值	T2.8	T2.8
光圈范围	T2.8-T22	T2.8-T22
画面大小	24.89 mm*19.3 mm (φ31.5 mm) ratio 1.33:1	24.89 mm*19.3 mm (φ31.5 mm) ratio 1.33:1
法兰距(空气中)	52mm(PL) / 44.14mm(EF)	52mm(PL) / 44.14mm(EF)
最近对焦距离	0.6m/2ft	0.8m/2ft8in
视场角		
水平	64.3°- 24.8°	28.1°-10.8°
竖直	49.6°- 19.0°	20.9°-8.2°
对角线	78.0°- 30.6°	35.8°-13.3°
在最小对焦距离下的拍摄区域	20mm: 547 mm * 24.8mm	50mm: 348 mm*257 mm
	55mm: 193mm*146 mm	125mm: 132mm*100 mm
有效镜头直径		
前部元件	53.0 mm	61.0 mm
后部元件	25.8 mm	29.4 mm
光圈控制	Manual (ring rotates up to 65°)	Manual (ring rotates up to 72°)
变焦控制	Manual (ring rotates up to 100°)	Manual (ring rotates up to 100°)
对焦控制	Manual (ring rotates up to 270°)	Manual (ring rotates up to 270°)
外部尺寸: 直径×长度 (近似值)	φ95.0*164mm(PL) φ95.0*171.9mm(EF)	φ95.0*175mm(PL) φ95.0*182.9mm(EF)
重量:	≈1520g	≈1700g
镜头前部的外径	φ95 mm	φ95 mm
滤镜直径	M86*0.75	M86*0.75
齿轮齿距 (光圈、变焦和对焦)	0.8 M	0.8 M
叶片数量	16 Pcs	16 Pcs

*为改进产品，我们有可能更改其部分规格和外观，恕不另行通知；

由于该镜头的构造方式，在某些情况下，摄影机对焦距离指示（距离指示）所示的距离可能与实际对焦距离不同，请将“距离指示”仅用于参考。

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