

Extender EF 1.4x II

Lens Attachment	EF 135mm f/2L USM	EF 180mm f/3.5L Macro USM	EF 200mm f/1.8L USM	EF 200mm f/2.8L II USM	EF 300mm f/2.8L IS USM	EF 300mm f/4L IS USM	EF 400mm f/2.8L IS USM	EF 400mm f/4.0L DO IS USM
Focal Length (mm)	189	252	280	280	420	420	560	560
f-stop (f)	2.5 - 45	4.5 ^{*4} - 45	2.5 - 32	2.5 - 32	4 - 45	5.6 - 45	4 - 45	5.6 - 45
Max. Magnification (x)	0.27	1.40	0.12	0.22	0.15	0.33	0.22	0.17
AF	○	○ ^{*10}	○	○	○	○	○	○

Lens Attachment	EF 400mm f/5.6L USM	EF 500mm f/4L IS USM	EF 600mm f/4L IS USM	EF 1200mm f/5.6L USM	EF 70-200mm f/2.8L IS USM	EF 70-200mm f/2.8L IS USM	EF 70-200mm f/4L USM	EF 100-400mm f/4.5-5.6L IS USM
Focal Length (mm)	560	700	840	1,680	98 - 280	98 - 280	98 - 280	140 - 560
f-stop (f)	8 - 45	5.6 - 64	5.6 - 64	8 - 45	4 - 45	4 - 45	5.6 - 45	6.7 - 54 ^{*4}
Max. Magnification (x)	0.18	0.17	0.17	0.12	0.22	0.24	0.31	0.28
AF	○ ^{*11}	○	○	×	○ ^{*9}	○	○	○ ^{*11} *12

Extender EF 2.5x II

Lens Attachment	EF 135mm f/2L USM	EF 180mm f/3.5L Macro USM	EF 200mm f/1.8L USM	EF 200mm f/2.8L II USM	EF 300mm f/2.8L IS USM	EF 300mm f/4L IS USM	EF 400mm f/2.8L IS USM	EF 400mm f/4.0L DO IS USM
Focal Length (mm)	270	360	400	400	600	600	800	800
f-stop (f)	4 - 64	6.7 ^{*4} - 64	3.5 - 45	5.6 - 64	5.6 - 64	8 - 64	5.6 - 64	8 - 64
Max. Magnification (x)	0.38	2.00	0.18	0.32	0.28	0.47	0.31	0.24
AF	○	×	○	○	○	○ ^{*11} *12	○	×

Lens Attachment	EF 400mm f/5.6L USM	EF 500mm f/4L IS USM	EF 600mm f/4L IS USM	EF 1200mm f/5.6L USM	EF 70-200mm f/2.8L IS USM	EF 70-200mm f/2.8L IS USM	EF 70-200mm f/4L USM	EF 100-400mm f/4.5-5.6L IS USM
Focal Length (mm)	800	1,000	1,200	2,400	140 - 400	140 - 400	140 - 400	200 - 800
f-stop (f)	11 - 64	8 - 90	8 - 90	11 - 64	5.6 - 64	5.6 - 64	8 - 64	9.5 - 76
Max. Magnification (x)	0.18	0.25	0.24	0.18	0.33	0.33	0.45	0.41
AF	×	○ ^{*11} *12	○ ^{*11} *12	×	○ ^{*9}	○	○ ^{*11}	×

(○ = possible × = impossible)

- *1. Maximum number of Hood III / IV attachable. In the case of zoom lenses, the maximum number applies to the shortest focal length.
 - *2. Mechanical full-time manual focusing built-in.
 - *3. Micro motor.
 - *4. Data based on EOS models with exposures displayed in 1/2 stop increments. It varies slightly with the EOS-1Ds, EOS-1D, EOS-1V, EOS-1N, EOS-1 and EOS-3.
 - *5. With EF 50mm f/2.5 Compact Macro.
 - *6. Extension Tube EF 12 can be used with EF lenses except the EF 14mm f/2.8L USM, 50mm f/1.0L USM, and lenses which cannot be focused manually.
 - *7. Extension Tube EF 25 can be used with EF lenses except the EF 14mm f/2.8L USM, 15mm f/2.8 Fisheye, 20mm f/2.8 USM, 24mm f/1.4L USM, 50mm f/1.0L USM, 17-35mm f/2.8L USM at the shorter focal lengths, 20-35mm f/3.5-4.5 USM at the shorter focal lengths, TS-E 45mm, and lenses which cannot be focused manually.
 - *8. Image circle dia. 58.6 mm.
 - *9. If the EF 70-200mm f/2.8L USM lens is attached to an EOS camera having multiple focusing points and an Extender is attached to the lens, only the center focusing point will be usable for AF.
 - *10. The autofocus range is from 0.8m / 2.6ft to infinity.
 - *11. With the EOS-1Ds, EOS-1D, EOS-1V and EOS-3, AF is possible with the center focusing point.
 - *12. The Image Stabilizer does not operate with the following cameras: EOS 650, 620, 630 / 600, RT, 700, 750, 850, EOS-1, A2/A2E, 10s, Elan, Rebel / Rebel S, Rebel II / Rebel SII.
- NC : Not compatible with Gelatin Filter Holder III / IV.

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1-800-OK-CANON
www.usa.canon.com/eflenses

Canon U.S.A., Inc.
One Canon Plaza
Lake Success, NY 11042 U.S.A.

Canon Canada Inc.
6390 Dixie Road, Mississauga,
Ontario L5T 1P7 Canada

Canon Mexicana, S. DE R.L. DE C.V.
Periférico Sur No. 4124, 5^o y 6^o pisos
Col. Ex-Rancho de Anzaldo
01900 México, D.F.

Canon Latin America
703 Waterford Way, Suite 400,
Miami, FL 33126 U.S.A.

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Canon

EF LENSES
For EOS Cameras



Images From Your Imagination, Delivered by Canon EF Lenses

Ever noticed that “imagination” contains the word “image”? That’s because creating an image starts with your imagination. When you have an image in mind, you must choose a lens which can capture that image. And whatever that image may be, you can be sure that Canon has the lens you need. Whether it is a 15mm fisheye or a 1200mm super telephoto, all Canon EF lenses feature the finest materials (especially the L-series lenses) and technologies. They include Fluorite, UD (Ultra-low Dispersion) glass, Aspherical lenses, lens-based Ultrasonic Motors, inner and rear focusing, Image Stabilizer, Diffractive Optics, and a fully-electronic interface. Only the variety and versatility of EF lenses can match your wondrous imagination.



Getting Everything In

If your mind's eye calls for a very wide shot, how about one of the three ultra-wide zoom lenses? The zoom range of these lenses suits the vast majority of wide-angle shots you will ever take. Or, try a standard zoom lens with a focal length from wide to telephoto to get the most out of your camera.

ULTRA-WIDE ZOOM LENSES



EF 16-35mm f/2.8L USM
•f/2.8 •2 sec.

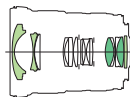


EF 17-40mmf/4L USM
•f/8 •1/250 sec.

EF 16-35mm f/2.8L USM



A superb lens that covers nearly every professional wide-angle task. Outstanding optical performance comes from three Aspherical lens elements, and (for the first time ever in an EF wide-angle zoom lens) two Ultra-low Dispersion UD elements. Weather-resistant construction, a rear gel filter holder, close-focusing to 11 inches (0.28m), and a circular diaphragm are among its many highlights.

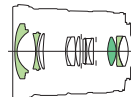


US AL₃ UD₂ VR FT-M DW-R

EF 17-40mm f/4L USM



About half the price of the 16-35 f/2.8 lens, this L-series lens has an entirely new optical design with three Aspherical elements and a Super UD-glass element. The combination provides superb contrast and sharpness, even at the widest settings. It's ideal for both film and digital SLRs, and features the same weather-resistant design, rear gel filter holder, and high-speed Ultrasonic Motor as the EF 16-35mm lens.

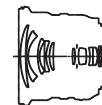


US AL₃ S-UD₁ VR FT-M DW-R

EF 20-35mm f/3.5-4.5 USM



A superior performance ultra-wide-angle zoom lens, covering the entire range of popular wide-angle focal lengths. A ring-type USM and an inner focus design provide fast and silent AF, along with full-time manual focus override. Priced within the range of serious photo enthusiasts, it's a great all-around choice.



US VR FT-M

All-Around, Practical Lenses

Very likely, your first EF lens will be (or was) one of these lenses. After all, they feature the most popular focal lengths. From wide-angle to telephoto, you get the best of both worlds. The ten lenses in this category give you a choice of zoom ranges and maximum apertures. The smaller the maximum aperture, the smaller and lighter the lens. Take a look at them all and get the one suiting your needs and budget.

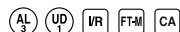
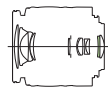
EF-S 18-55mm f/3.5-5.6

Available only with Digital Rebel Kit



NEW

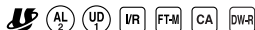
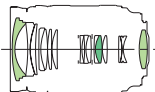
A standard zoom exclusively for the Digital Rebel SLR camera with APS-C size image circle equivalent to an approx. 28-90mm focal length. Compact and ultra-lightweight with impressive close-focusing ability of 0.9 ft (0.28m). Features optimized coating for digital imaging sensor to minimize ghost images and flare. **The lens can only be mounted on the Digital Rebel with shorter back focus than ordinary EF lenses.**



EF 24-70mm f/2.8L USM



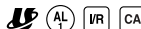
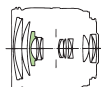
A superb new professional lens that offers an even wider zoom range than its predecessor—ideal for digital cameras. It now features two types of Aspherical elements, and an entirely new UD-glass element for superb optical performance even wide-open. It focuses closer than before, and even faster with revised electronics and a new processor. And, it's now sealed against dust and moisture at the lens mount, the zoom and focus rings, and the switch plate. The ultimate professional standard zoom lens just got better.



EF 24-85mm f/3.5-4.5 USM



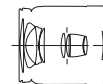
An excellent all-around zoom lens that covers the range from ultra-wide-angle to true portrait-length telephoto. Its solid construction, fast USM autofocus and smooth operation are matched by its excellent optical quality. This compact lens is an ideal choice for shooters who want wider coverage than provided by most standard zooms. The extra-wide coverage also makes it a great standard zoom for digital SLRs.



EF 28-80mm f/3.5-5.6 II



For many EOS users, this is their first EF lens. Light, compact and affordable, it covers a practical range of focal lengths—ideal for almost everything from family snapshots and travel to event photography. A lightweight DC-focusing motor provides brisk autofocus, as close as 1.3 feet (0.38m), enough to fill the frame with a subject about the size of a postcard.



EF 24-70mm f/2.8L USM
•f/11 •1/60 sec.



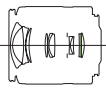
EF 28-90mm f/4-5.6 II USM
•f/5.0 •1/200 sec.



EF 28-90mm f/4-5.6 II USM



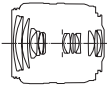
Super-light and compact like its predecessor, but now with even faster AF due to new internal electronics and a faster lens CPU. It's optically unchanged, which is a good thing—images are sharp and crisp throughout the zoom range, and the Micro USM provides quick and ultra-quiet AF. It's an ideal standard lens, and one of the most popular in the entire EOS system.



EF 28-105mm f/3.5-4.5 II USM



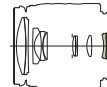
This lens is an outstanding choice as a standard zoom for advanced photographers looking for durability and performance. It has the same optical formula (and quality) as the previous highly-regarded EF 28-105mm USM lens, but with a refined exterior appearance. Its ring-type USM gives the silent and fast autofocus that EOS users expect, along with full-time manual focusing capability—even when in the AF mode.



EF 28-105mm f/4-5.6 USM



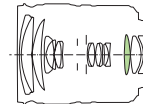
This incredible lens is the smallest and lightest in its class. It's totally new optically, with an Aspherical element to keep the quality up and the size down. Even more noteworthy is an entirely new Micro USM, that's about half the length of previous designs—with the same focusing power and performance. Features like circular diaphragm blades (for natural backgrounds) and internal focusing (the front element never rotates) round out this great new lens.



EF 28-135mm f/3.5-5.6 IS USM



An unbeatable combination of zoom range, silent and fast USM autofocus, excellent optics and Canon's Image Stabilization technology. IS allows steady hand-held operation at shutter speeds up to two full stops slower than would normally be possible, and makes this a practical lens even in low-light situations. It's one of the most versatile lens choices in the entire EF line-up for the advanced EOS photographer.

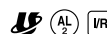
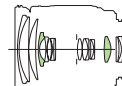


EF 28-105mm f/3.5-4.5 II USM
•f/8 •1/180 sec.

EF 28-200mm f/3.5-5.6 USM



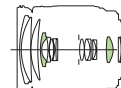
The ultimate all-in-one zoom lens, and one of the world's closest-focusing 28-200mm zooms with internal focusing down to 17.7 inches (0.45m) at all focal lengths. Canon's Micro USM provides the quick and quiet AF, and sixteen optical elements (with two Aspheric elements) provide the highest optical quality in its class. A brilliant choice when you need one zoom lens to perform many different tasks.



EF 35-80mm f/4-5.6 III



The most affordable zoom lens in the entire EF lens system. Light and ultra-compact, this lens isn't lacking for optical performance—it has an Aspherical lens element for better optical quality, and its close-focusing allows filling the frame with a subject the size of a postcard at its 80mm focal length. It's a great entry into SLR photography and the EOS system.



Isolate the Interesting Part

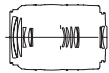
The eye tends to see the whole rather than the individual parts. It also sees what's near and not what's far. By bringing attention to those things missed by the eye, you can create many interesting pictures. It could be the grimace of an athlete, the grill of a classic car, or a girl against a blurred background. Telephoto lenses can also compress images to give dramatic effects. You are limited only by your imagination.

EF 55-200mm f/4.5-5.6 II USM



NEW

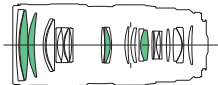
Super-compact and light, this lens is ideal for digital SLRs – used on the Digital Rebel, it's equivalent to an approx. 90-320mm lens. The 13-element design's new optical coatings are optimized for digital cameras, it's a lightweight telephoto that's perfect for any EOS SLR. It focuses down to under 4 feet (1.2m), and its Micro USM-powered AF is faster than ever, due to new electronics within the lens.



EF 70-200mm f/2.8L IS USM



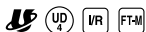
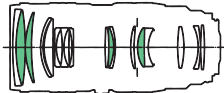
A spectacular professional lens, combining the virtues of the legendary EF 70-200 f/2.8L with the Canon's newest Image Stabilization technology. The IS system now offers up to a three-stop improvement in hand-held ability, responds faster than ever before, and functions on a solid tripod. Additional improvements include faster AF response and tracking speed, weather-resistant construction, and the entirely new optical system focuses even closer (to 4.6 feet/1.4m) than the non-IS version.



EF 70-200mm f/2.8L USM



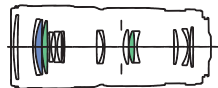
For years, the most popular professional lens in the entire Canon line-up. Superbly sharp and versatile, its constant f/2.8 maximum aperture makes it a favorite of photojournalists and low-light shooters. Four UD-glass elements contribute to its excellent performance. Full compatibility with the EF Extenders 1.4x II and 2x II extends its usefulness, and it's also compatible with the EF Extension Tubes 12 and 25, and the 77mm Close-up Lens 500D.



EF 70-200mm f/4L USM



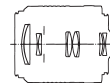
A truly professional L-series telephoto zoom lens, with reduced size and weight for applications where portability is important. Superb optically, it combines a Fluorite element with two UD-glass elements for outstanding contrast and performance. Its ring-type USM is fast, silent, and permits full-time minimum focus, as well as the closest MF of any of the L-series 70-200 designs. It's also compatible with EF Extenders 1.4x II and 2x II, and accepts an optional accessory tripod collar.



EF 80-200mm f/4.5-5.6 II



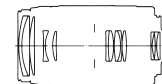
The ultimate compact telephoto zoom lens in the EF system, and a great choice for travel and other applications where portability is a priority. It's especially well-suited for compact SLR bodies such as the EOS Rebel and Elan series, and even compact digital EOS SLRs, with a weight of only 8.8 oz. (250g). Its optical quality is assured by a five-group zooming system.



EF 75-300mm f/4-5.6 III USM



With the addition of a Micro USM for faster and even quieter autofocus, this version of the EF 75-300mm is well-suited for sports and other applications requiring fast AF. The USM version shares the compact size, close focusing range, and accessory compatibility of the non-USM lens. For many advanced amateurs, the 75-300 range is ideal as a versatile entry into telephoto photography.



EF 70-200mm f/2.8L USM
•f/4 •1/1500 sec.

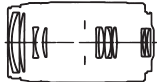


EF 100-400mm f/4.5-5.6L IS USM
•f/14 •1/80 sec.

EF 75-300mm f/4-5.6 III



The most affordable of Canon's long telephoto zooms, this lens is excellent for subjects from portraits to wildlife and nature. It shares the same 13-element optical system as the 75-300mm USM lens, but uses a DC motor for autofocus. Close-focusing down to 4.9 feet (1.5m) allows filling the frame (at 300mm) with a subject the size of a dollar bill, and it's compatible with the Canon 58mm Close-up lens 500D for even more spectacular shots of small objects.



EF 75-300mm f/4-5.6 IS USM



A significant lens in the history of Canon optics, this was the first SLR lens in the world to offer Image Stabilization — providing up to two stops of improvement in hand-held capability at slow shutter speeds. Its 15-element optical formula is unique, but it offers capabilities similar to Canon's 75-300 versions without IS. Image Stabilization gives this lens amazing real-world sharpness in many situations, and is especially advantageous when combined with lightweight camera bodies.

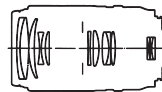


IS

EF 100-300mm f/4.5-5.6 USM



This affordable and lightweight zoom differs from the 75-300mm models with its higher-performance ring-type Ultrasonic focusing motor and superior AF speed. It also uses rear group focusing, so the front elements never rotate during focusing, and adds full-time manual focusing capability. It's excellent not just for outdoor sports, but any subjects requiring the versatility of a telephoto zoom.

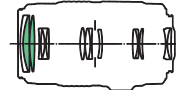


VR FT-M

EF 35-350mm f/3.5-5.6L USM



A unique professional L-series lens, covering an amazing 10x zoom range from wide-angle to super-telephoto. It's a magnificent choice for travel photography and other outdoor applications. The zoom control has a separate ring to adjust or lock the zooming action, enhancing its already excellent handling. The 21-element optical formula includes two UD-glass elements, and at its 135mm zoom setting, close-focusing to two feet (0.6m) is possible.

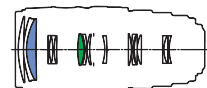


UD₂ VR FT-M

EF 100-400mm f/4.5-5.6L IS USM



A truly professional L-series telephoto zoom lens with Image Stabilization, making hand-holding practical even at its 400mm focal length. Both a Fluorite and a Super UD-glass element ensure outstanding contrast and sharpness, and it accepts the EF Extenders 1.4x II and 2x II. A ring-type USM makes AF fast and silent down to 5.9 feet (1.8m), and of course it offers full-time manual focus override. This durable L-series lens is regarded by many pros as one of the world's finest telephoto zooms for hand-held outdoor use.



Fluorite CaF₂ S-UD VR FT-M Float IS

Wide and Fast

If you need an ultra-wide angle and a large aperture, one of the following lenses will fit the bill. Ultra-wide-angle lenses can capture scenes beyond your natural field of vision. The EF 15mm f/2.8 Fisheye, the widest of them all, has a 180° angle of view. For more normal-looking wide-angle shots, there are longer wide-angle lenses up to 35mm with the maximum aperture you need.



EF 24mm f/1.4L USM
•f/8 •1/640 sec.

EF 15mm f/2.8 Fisheye
•f/16 •1/640 sec.

EF 15mm f/2.8 Fisheye



A full-frame fisheye lens that's ideal for special effects with any EOS camera, film or digital. It focuses as close as eight inches (0.2m), and is tack-sharp throughout its focus range. Up to three gel filters can be inserted into its built-in rear filter holder.

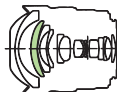


VR

EF 14mm f/2.8L USM



This is a true rectilinear ultra-wide-angle lens that's absolutely corrected for linear distortion—straight lines remain straight. It's outstanding for shooting in confined areas and interiors, and is often used by professionals because of the unique “look” its extreme wide-angle perspective provides. The optics are superb, highlighted by a ground and polished aspherical element. It has a gel filter holder in the rear that allows up to three gel filters to be used for color correction.



AL VR FT-M Float

EF 20mm f/2.8 USM



The optical performance, fast f/2.8 speed and ultra-wide-angle coverage make this a great choice for many applications, like interiors, scenics, travel and photojournalism. It uses a “floating” optical system for excellent sharpness even at its minimum focusing distance of under 10 inches (0.25m), and with a ring-type USM and full-time manual focusing capability, offers the speed and handling pros expect.

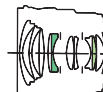


VR FT-M Float

EF 24mm f/1.4L USM



That f/1.4 is not a typo—this is the fastest ultra-wide-angle lens in the world. The first EF lens to combine Aspherical and UD Ultra-low Dispersion glass L-series optical technologies, the 24mm f/1.4L provides outstanding sharpness and contrast even wide open. It focuses down to 10 inches/0.25m, and the AF is what you'd expect from a professional Canon lens with USM—fast and silent, with smooth full-time manual focus available at any time.



AL UD VR FT-M Float



EF 35mm f/1.4 L USM
•f/1.4 •1/500 sec.

EF 24mm f/2.8



Another superb ultra-wide-angle choice, with floating optics for superior performance throughout its focus range and a fast f/2.8 aperture that makes it a great alternative to a zoom lens for low-light shooting. Its rear-group focusing system reaches down to less than 10 inches (0.25m).



EF 28mm f/1.8 USM



Combine a fast f/1.8 aperture with 28mm wide-angle focal length, and add Canon's Ultrasonic Motor AF. The result is this surprisingly affordable fixed focal length alternative to wide-angle zooms that's ideal for low-light shooting. Internal, rear-group focusing means the front element never moves, so it's easy to use with filters and accessories. The autofocus is virtually silent, and full-time manual focus is always available.



EF 28mm f/2.8



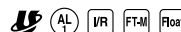
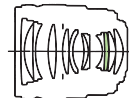
The most affordable fixed focal length wide-angle lens in the Canon EF line-up continues to give benefits difficult or impossible to find with zooms. The fast f/2.8 aperture makes it easy to use in lowlight, and provides a bright viewfinder image in the camera. It focuses as close as 10 inches/0.25m without accessories. And optically, it provides excellent edge-to-edge contrast and sharpness along with superior correction of linear distortion, so straight lines in a subject (such as architecture) remain straight.



EF 35mm f/1.4L USM



Long requested by professionals, it's the standard lens for many photo-journalists and others who value its low-light capability and performance. With the help of an Aspheric lens element, its contrast and sharpness are stunning, even wide-open at f/1.4. Solid construction, a powerful ring-type USM for smooth and fast AF, and full-time manual focusing make this a great lens for film or digital shooters.



EF 35mm f/2



An affordable lens that's ideal for tasks like group photos and other applications calling for excellent optical performance and moderately wide focal length. It's compact and lightweight, and with f/2.0 speed, it's a compelling alternative to a wide-angle zoom lens for low-light shooting.



Medium and Standard

A medium telephoto lens with a large aperture brings the subject closer, creates excellent background blur, gives a longer flash range, and affords a faster shutter speed to freeze the action. A standard zoom lens, with its natural angle of view and perspective, captures the subject plainly, with no special effects. However, you can use standard lenses in creative ways by varying the subject distance, aperture, and angle. Three medium telephoto lenses and two standard telephoto lenses are available.

EF 50mm f/1.4 USM



The ultimate “normal” lens in the EF system. This superb lens is sharp even wide-open, and of course its f/1.4 speed makes it perfect for available-light shooting. For many, it’s an ideal lens to accompany a zoom when shooting in low-light conditions. Compact and affordable, it’s the only lens in the EF system to combine the extra-small Micro USM and still provide full-time manual focusing when the lens is in the AF mode.



EF 50mm f/1.8 II



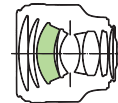
Lightweight and affordable, this sharp lens with a fast f/1.8 aperture is an excellent first lens for those who prefer a fixed focal length, and makes an excellent addition to any photographer’s system for available-light shooting. A traditional Gauss-type optical design ensures sharp performance even wide-open, and it focuses as close as 18 inches/0.45m.



EF 85mm f/1.2L USM



The fastest telephoto lens in the entire Canon EF line-up, and the world’s fastest 85mm autofocus lens. This exquisite professional lens is obviously popular for its available-light capabilities, but its proven performance makes it ideal for portraits, fashion and even sports. Two Aspherical elements provide thorough correction of spherical aberrations. A ring-type USM means silent AF from 3ft./0.9m to infinity, and full-time electronic manual focusing is also available.



EF 85mm f/1.8 USM



Sharp. Lightweight. Responsive. These are just a few adjectives that describe this terrific portrait-length telephoto lens. With a powerful ring-type USM and fast f/1.8 aperture, subjects zip into focus in the viewfinder. It’s great for all types of work calling for moderate telephoto power, but comes into its own in low-light situations, and offers a 1/3-stop speed advantage over the 100mm f/2 USM lens.



EF 85mm f/1.2L USM
•f/1.2 •1/750 sec.

EF 100mm f/2 USM



Another option in high-speed moderate telephotos, this compact lens is ideal for portraits and low-light work. Compared to the 85mm f/1.8 USM lens, it provides that little bit extra of telephoto power sometimes necessary outdoors or for candid shooting. Like the 85mm, it’s super-sharp (even wide-open), and has fast USM autofocus along with full-time manual focusing.



Long and Fast

A telephoto lens is essential to any serious photographer. For sports action, you will need a fast shutter speed and a long focal length. A large maximum aperture allows a faster shutter speed. In this telephoto lens line-up, the focal lengths range from 135mm to 300mm. If you want compactness, choose a lens with a smaller maximum aperture.

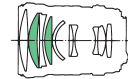


EF 135mm f/2L USM
•f/2 •1/200 sec.

EF 135mm f/2L USM



One of the finest lenses of its type in the world today. This magnificent telephoto lens uses two UD-glass elements to provide incredible sharpness and contrast, even wide-open. It's perfect for outdoor portraits, but comes into its own in low-light situations. It focuses down to 3 feet (0.9m), and is fully compatible with both the EF 1.4x II and 2x II tele extenders.



EF 135mm f/2.8 with Sofffocus
•Soft level: 2

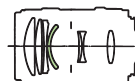


EF 135mm f/2.8 with Sofffocus
•Soft level: 0

EF 135mm f/2.8 with Sofffocus



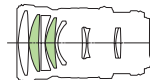
A unique, compact telephoto lens that gives the choice of razor-sharp images, or with the twist of a ring, two degrees of soft focus. It works by applying "softness over sharpness," using deliberate spherical aberration on top of a sharp "core" image at apertures from f/2.8 thru 5.6; images taken at apertures smaller than f/5.6 are always sharp. Autofocus continues to function, with or without the soft focus in use. This lens is an ideal addition to a portrait or scenic photographer's arsenal. A perfect combination with an EOS Digital SLR, with the camera enabling review of soft focus effect on the LCD monitor.



EF 200mm f/2.8L II USM



Lighter by more than 1.2 pounds (545g) than the 70-200 f/2.8L zoom lens, this fast telephoto lens is a perfect alternative for low-light shooting or just reducing weight in the gadget bag. Two UD-glass elements and internal rear-group focusing are among its optical highlights, and it's fully compatible with Canon's EF 1.4x II and 2x II tele extenders. A detachable hood is included, and Tripod Ring A (B) is available as an accessory.



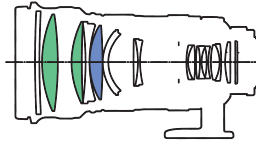


EF 300mm f/2.8L IS USM
•f/3.5 •1/180 sec.

EF 300mm f/2.8L IS USM



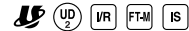
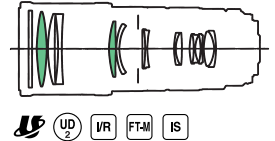
Image Stabilization adds to what's already a legendary professional lens. The 300mm f/2.8L IS lens focuses closer (down to 8.2 feet/2.5m), offers the world's fastest autofocus when used with EOS bodies having 45-point AF, is gasketed and sealed against dust and moisture, and has a lightweight magnesium alloy barrel and tripod collar. Its image quality, aided by both Fluorite and UD-glass, is stellar, and its advanced IS even works on a rock-steady tripod—as well as on a monopod or when hand-held.



EF 300mm f/4L IS USM



Excellent optics and superb handling in a compact package with Image Stabilization. The IS allows safe hand-holding at shutter speeds up to two stops slower than otherwise possible—making it even more useful in low-light levels. It's less than half the weight of the 300mm f/2.8L IS, and it focuses to an incredibly close 4.9 ft/1.5m, filling the frame with a subject the size of a postcard. Like all of Canon's fixed focal length L-series lenses above 135mm, it's compatible with Canon's EF Extenders 1.4x II and 2x II.



EF 300mm f/4L IS USM
•f/13 •1/60 sec.

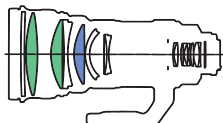
See a Different Dimension

A super telephoto lens can make an ordinary scene into an extraordinary one. Its ability to see surpasses that of the human eye. It can compress images and make them look as if they come from another dimension. It opens up new realms of photographic expression. All EF super telephoto lenses are L-series lenses to provide the highest quality. The USM provides quiet and high-speed autofocus. These lenses promise outstanding delineation and put your imagination to the test.

EF 400mm f/2.8L IS USM



Virtually the standard lens for many professional sports shooters, this optical powerhouse is ideal for any film or digital application where you need telephoto power and low-light capability. With one Fluorite element and two UD-glass elements, it's one lens you won't need to stop down to get a good image. The Image Stabilization only adds to its all-around abilities. Details include a network of weather-resistant seals and gaskets, and a focus preset that enables instant return to a memorized focusing distance.

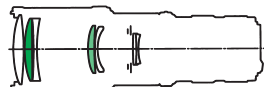


USM CaF₂ UD₂ VR FT-M FP IS AF-S DW-R

EF 400mm f/5.6L USM



Light. Portable. Excellent handling. Sharp. And amazingly fast autofocus. The 400mm f/5.6L is all of these things, and a premier choice for wildlife and nature photographers—one of the finest telephoto lenses in the world for fast-moving subjects such as birds in flight or motor sports. It uses UD-glass elements to provide outstanding optical quality, even wide-open, and image quality is preserved when used with either the EF 1.4x II or EF 2x II tele extenders. It accepts 77mm filters, and has a built-in removable tripod collar.

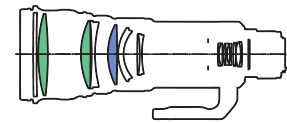


USM CaF₂ S-UD₁ VR FT-M

EF 500mm f/4L IS USM



Always a favorite of motor sports, wildlife and nature shooters, the relatively lightweight 500mm lens now adds Image Stabilization for an unbeatable package of handling and sharpness. Fluorite and UD-glass—a combination available from no other lens manufacturer—provide great performance, even with the EF 1.4x II or 2x II tele extender attached. It focuses down to less than 15 feet (4.5m), and offers the same weather-resistant design and incredible AF speed as its 300mm, 400mm and 600mm siblings.



USM CaF₂ UD₂ VR FT-M FP IS AF-S DW-R



EF 400mm f/4 IS DO USM
•f/4 •1/1250 sec.

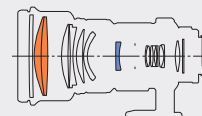
World's First Diffractive Optics Lens for Photography

EF 400mm f/4 DO IS USM



An entirely new optical technology for SLR camera lenses, Multi-Layer Diffractive Optics, makes possible a 400mm super-telephoto lens that's about 1/3rd shorter and significantly lighter. Diffractive Optics don't end there—combined with a small Fluorite

element, they permit almost total elimination of chromatic aberrations, and at the same time are able to combat spherical aberrations. Combining portability and easy handling, Image Stabilization, weather-resistant construction, superb optics and incredible AF performance, the 400mm DO IS lens is ideal for photographers who want super-telephoto power along with good lens speed in a hand-holdable package.



DO USM CaF₂ VR FT-M FP IS AF-S DW-R



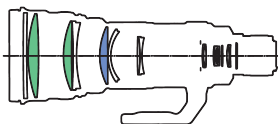
EF 600mm f/4L IS USM
•f/10 •1/500 sec.

EF 600mm f/4L IS USM



An outstanding professional lens for bridging distances in sports, wildlife, and many other applications—including commercial and fashion for the distinct “compressed” telephoto character and totally out-of-focus backgrounds its images can possess. Fluorite and UD-glass are combined for incredible image quality, even wide-open. Image Stabilization adds a new dimension in this long lens’ usefulness, even in marginal lighting. It works beautifully with both 1.4x II and 2x II extenders, and now focuses as close as 17.5 feet/

5.4 m. It has the same weather-resistant gaskets and sealed focusing and focus pre-set rings as Canon’s other Image Stabilized super-telephoto lenses.



Extender EF 1.4x II



A powerful addition to any serious photographer’s arsenal, this compact extender is compatible with every fixed focal length L-series lens 135mm and over, as well as the 70-200/2.8L, 70-200/2.8 IS, 70-200/4L, and 100-400/4.5-5.6L IS lenses. It multiplies the lens’ marked focal length 1.4 times, with a light loss of only one stop. Most impressively, its superior optics preserve the lens’ inherent image quality. New with the version II extender are improved internal anti-reflective blackening, and enhanced weather resistance.



Extender EF 2x II



A totally new 7-element optical design for this version II extender means superior image quality combined with a doubling of the lens’ marked focal length (with a two-stop reduction in effective aperture). Compatible with the same lenses as the 1.4x II extender, the EF 2x II still allows autofocus with any EOS body when used with a lens f/2.8 or faster. It shares the improved anti-reflection internal design and weather-resistant exterior, including seals at its front and rear lens mounts matching those on Canon’s newest professional lenses and camera bodies.



SUPER TELEPHOTO LENSES

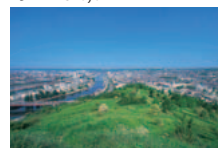
Focal Length Comparison



15mm Fisheye



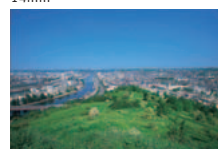
85mm



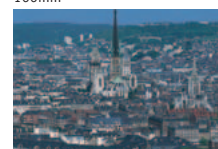
14mm



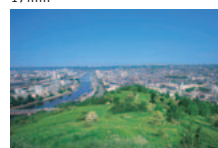
100mm



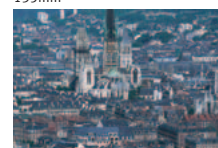
17mm



135mm



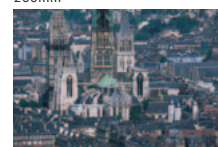
20mm



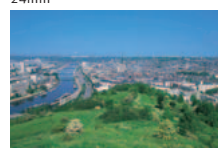
200mm



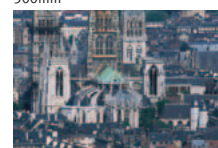
24mm



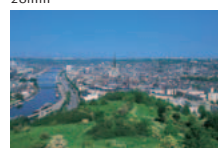
300mm



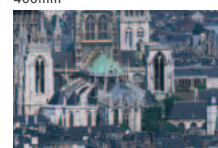
28mm



400mm



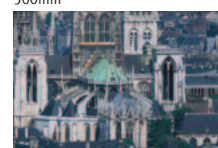
35mm



500mm



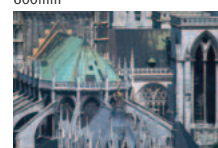
50mm



600mm



70mm



1200mm

Discovering a Small World

The small things we see and ignore every day can actually reveal much surprise and fascination up close. A world all their own. Canon offers several ways to discover this world. The four EF macro lenses are the most effective and versatile, while the three screw-on Close-up lenses are the most convenient. Also available are the Life-Size Converter EF and two Extension Tubes.



MP-E 65mm f/2.8 1-5x Macro Photo
•f/11 •1/125 sec. (3.0x)

EF 50mm f/2.5 Compact Macro



A versatile macro lens with focusing from infinity down to half life-size (0.5x), and floating optics to insure sharpness and contrast at any focusing distance. With f/2.5 speed, it's actually an ideal general-purpose normal lens that adds true macro capability, and it's great for photographing flat artwork or subjects because of its outstanding center-to-corner flat field performance. A dedicated optional accessory Life Size Converter, available separately, allows focusing down to full life-size (1x magnification) and its optics actually increase working distance from the front of the lens to the subject.



Float

Life-Size Converter EF



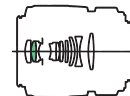
A unique accessory, dedicated exclusively for the EF 50mm f/2.5 Compact Macro lens. Unlike a conventional extension tube, the Life Size Converter EF has a 4-element optical design that acts like a tele extender, allowing magnifications from 0.26x to 1x (full life-size) while increasing the working distance from the front of the lens to the subject. Optical quality is outstanding with the Life Size Converter EF in place.



MP-E 65mm f/2.8 1-5x Macro Photo



This special-purpose lens is strictly for high-magnification shooting between 1x (life-size) and 5x—at its closest focus distance, you can fill the frame with a grain of rice. Its optics, dedicated for macro work, are superb. Focus is manual only, and there's a detailed magnification scale engraved on the barrel. It includes a tripod collar, and is fully compatible with Macro Ring Lite MR-14EX and Macro Twin Lite MT-24EX.



Float UD

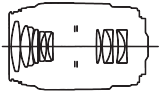


EF 100mm f/2.8 Macro USM
•f/5.6 •1/6 sec.

EF 100mm f/2.8 Macro USM



Many EOS shooters consider this two professional lenses in one: a superior-performance portrait-length tele with a fast f/2.8 aperture and lightning-quick USM AF; and a superb macro lens that focuses to life-size (1x) without accessories. It has a unique internal focusing design and floating optics for sharpness throughout its vast focus range, and allows a working distance of 5.9 inches (149mm) at life-size. Full-time manual focusing and an available Tripod Mount B with adapter round out this terrific macro lens.

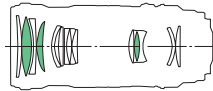


VR FT-M Float

EF 180mm f/3.5L Macro USM



One of the sharpest lenses in the entire EOS system, and a brilliant all-around telephoto lens that can focus to true life-size (1x) —with a working distance of almost 10 inches (0.25m) from the subject! Three UD-glass elements, a floating optical system, and internal focusing assure superb performance at any distance. It's even compatible with the EF 1.4x II and 2x II tele extenders. A powerful ring-type USM means fast and silent AF, along with full-time manual focus. It includes a tripod collar and detachable lens hood.



UD₃ VR FT-M Float

About Macro Magnification

A life-size macro lens—that is, a 1x magnification records an image on film at its actual size. If you're photographing a flower, for example, and it has a diameter of 1 in., it will occupy 1 in. on your film. Other macro lenses have lower or higher magnifications. A lens with 0.5x magnification would produce an image on film that is half the size of the actual subject. Your 1 in. flower, then, would only occupy 0.5 in. on film. In the other direction, a 5x magnification lens would convert the 1 in. flower to a 5 in. diameter image. Since the entire image wouldn't fit in the frame of your film, you would have an enlarged image of a detail of the flower. Magnification is not the same thing as focal length. A 50mm lens and a 135mm might both be macro lenses with, for example, 1.0x magnification. The advantage of the longer lens is that it allows greater distance from a subject. You would choose the 135mm macro lens to photograph a butterfly or a bird. The 50mm lens would be more suitable for a subject that won't move away when you approach it.



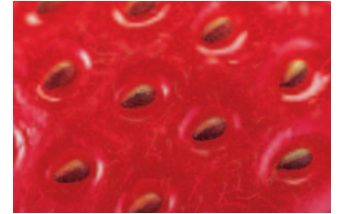
0.25x



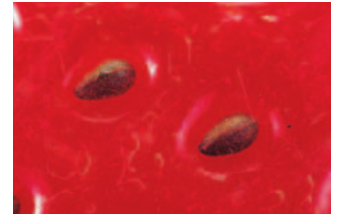
0.5x



1.0x



3.0x



5.0x

Extension Tube EF 12 II
Extension Tube EF 25 II



Extension tubes are one method of getting closer with EF lenses. A powerful tool when attached to standard and wide-angle lenses, they're also used with telephotos to get just a bit closer. With any lens, the longer the extension tube, the greater the close-up effect. The 12mm EF 12 II is often used with wide-angle lenses, while the longer EF 25 II is a better choice for normal or telephoto lenses. Auto exposure continues to work reliably, but manual focus is recommended in most instances. The version II extension tubes are also compatible with EF-S 18-55mm f/3.5-5.6.

Close-up Lens 250D
Close-up Lens 500D
Close-up Lens 500



An effective close-up method with telephoto lenses, and the only close-up accessory that doesn't lose light. The 250D is optimized for lenses between 50 and 135mm, while the 500D works best with lenses from 75mm through 300mm. Both have a double-element design, so their optical quality is excellent. The Close-up lens 500, a single-element design, offers an even more affordable alternative.

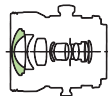
For Advanced Photo Work

With a Canon TS-E lens, you can control the angle of the plane of focus and the picture's perspective. The effects of large-format camera movements can be obtained with TS-E lenses for EOS cameras. Although manual focusing is required, automatic aperture control enables autoexposure and autoexposure bracketing. The tilt and shift axes intersect at a 90° angle. They can be made parallel at an authorized Canon Service Facility (modified at owner's expense).

TS-E 24mm f/3.5L



The widest tilt-shift lens in the Canon system, and a marvelous problem-solver for architecture, scenics, and many other applications calling for a wide-angle perspective. With floating optics, it's sharp from infinity down to 1 ft. (0.3m), and it uses a ground and polished Aspherical front element to assure excellent quality. Like all the TS-E lenses, it has a fully automatic diaphragm, so there's never a risk of forgetting to stop the lens down.

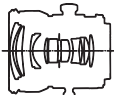


AL Float

TS-E 45mm f/2.8



The normal lens in the TS-E system, and an excellent choice for product shooting and other applications calling for a natural perspective. It allows up to 11mm of shift off-center, and even more impressive, tilting of the front standard up to 8° to modify the plane of focus. Among the TS-E 45mm f/2.8's optical highlights are a floating optical system (focusing down to 1.3 ft/0.4m), and a precise rear-group focusing system.

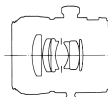


Float

TS-E 90mm f/2.8



Telephoto perspective, f/2.8 speed, and full tilt and shift movements in a compact, professional package. Impressively sharp, its ability to alter the plane of focus can provide a "look" that previously required a view camera to achieve. Pros have found it a great option for portraits, products and even fashion work. At its closest focus distance (1.6 ft/0.5m), it gives magnifications of about 1/3 life-size.



TS-E 45mm f/2.8
•f/4 •1/30 sec.

TS-E Lens Movements

TS-E lenses are capable of tilt and shift movements which greatly expand picture-taking possibilities. Tilt movements alter the angle of the plane of focus between the lens and film plane, and shift movements move the lens' optical axis in parallel.

Tilt Movements

If you want to bring the entire length of the hedge into focus, you could use a wide-angle lens and a small aperture to obtain a wide depth of field (Photo 1-a). With tilt movements, you can achieve this wide depth of field even at the maximum aperture. By tilting the center of the TS-E lens barrel, you can tilt the lens so that the plane of focus is uniform on the film plane (Photo 1-b).



Photo 1-a
Uncorrected

Using Tilt Movement to Focus an Oblique Subject Plane

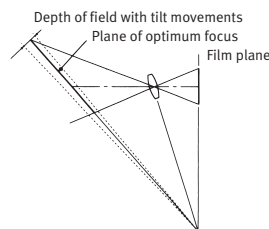


Photo 1-b
Corrected with tilt

Shift Movements

Normally, when you point your camera up at a tall building, the building will look slimmer toward the top. It becomes trapezoidal (Photo 2-a). This perspective effect is more pronounced with shorter lens focal lengths, distorting the building even more. By altering the parallel position between the lens and the film plane with the TS-E lens, this perspective effect can be corrected. With the camera's film plane set parallel to the building, shifting the lens upward will obtain a more rectangular-looking building (Photo 2-b).

Using Shift Movements to Focus Tall Building

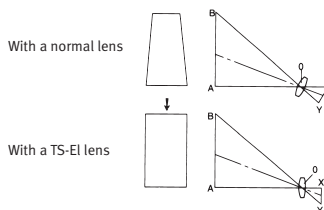


Photo 2-a
Uncorrected



Photo 2-b
Corrected with shift

Technology Where It Counts

Canon's innovations put your images on film quickly, quietly, and easily with outstanding results.

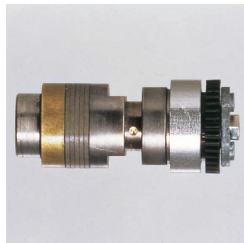


Ultrasonic Motors (USM)

The Ultrasonic Motor (USM) in Canon EF lenses is the world's first lens-based motor. Based on a totally new technology, the motor spins by ultrasonic oscillation energy. The USM is quiet and quick. It has made EF lenses almost noiseless and autofocus fast, precise, and practical. The direct-drive construction is very simple, with no gear train. This makes it durable and efficient. It also consumes little power. Two types of USM are used: Ring-type USM and Micro USM. The former type is found in large-aperture and super telephoto lenses, while the latter is used in more compact lenses. Using the optimum type of USM in the lens results in maximum efficiency and effectiveness.



MRing-type USM



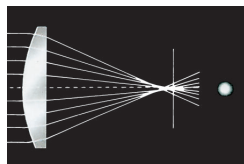
Micro USM



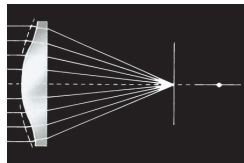
Aspherical Lenses

Ordinary spherical elements have an inherent flaw in that the point of focus for the lens center does not match that of the lens periphery. Spherical aberrations of large-aperture lenses and distortion by ultra-wide-angle lenses cannot be resolved with spherical elements alone. The Aspherical lens element was therefore developed. The curvature of the lens element is calculated and shaped to achieve the ideal single point of focus. The result is high contrast with minimal flare even with a large-aperture lens. Distortion can also be effectively corrected in ultra-wide-angle lenses. Canon started to develop manufacturing technology for Aspherical elements early on. We eventually succeeded in establishing a mass-production grinding and polishing process with a polishing precision of 5/10,000 mm. In 1971, Canon marketed the FD 55mm f/1.2AL lens, the world's first large-aperture Aspherical lens for SLRs. This was followed by many other Canon lenses incorporating Aspherical elements and they were well received.

Also, Canon developed mass-production technology for glass-molded aspherical elements and replicated Aspherical lenses. The former was produced by an ultra-high-precision aspherical lens-molding machine which shaped the glass directly. For the latter, the Aspherical surface was formed by ultraviolet-hardened resin film applied on a spherical element. Canon has developed numerous compact-size lenses, taking full advantage of Aspherical elements to attain high image quality.



Spherical aberration of spherical lens.

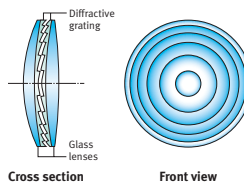


Convergence of parallel light rays by an Aspherical lens.



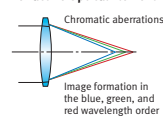
Diffraction Optics

Another world's first in camera lens optical design, Canon introduced new technology in order to build a super telephoto that complements its latest compact film and digital SLR cameras. This cutting-edge technology employs diffractive optical elements that use the principle of diffraction to change the direction of the lightwave's path. This revolutionary element has Aspherical characteristics, which help define superior maximum aperture image quality, as well as optical qualities superior to UD-glass to totally correct color fringing. The Multi-Layer Diffractive Optical Elements exhibit outstanding ability to correct chromatic aberrations (color defects), and are especially effective in super telephoto lens design where these specific types of optical defects are most likely to happen. You can see how well the technology works in your own pictures by examining the straight edges of a subject in your picture. You will see a crisp, clear edge without the telltale, prismatic color fringing that is visible with images shot using inferior optics.

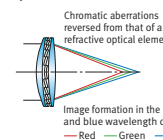


Cross section Front view
Multi-Layer Diffractive Optical Element Construction

Refractive Optical Element



Multi-Layer Diffractive Optical Element



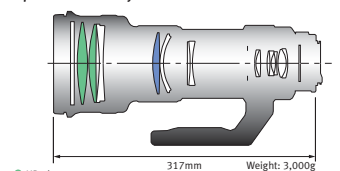
Correction of Chromatic Aberration by the Multi-Layer Diffractive Optical Element

Glass lens elements refract, or bend lightwaves, as they pass through to form an image. That's simply the naturally occurring physics of light. We use multiple elements and special glass to help keep the waves focused like a pinpoint instead of spreading them into the rainbow of color seen when light passes through a glass prism. To diffract a lightwave means

that the ray goes through a change in direction before passing through the lens. The change in direction is caused by a diffraction grating—very fine parallel grooves or slits on the surface. Canon found that using a concentric diffraction grating that gets smaller toward the edges—some as fine as tenths of a micrometer—solved many of one inherent physical limitations of camera optics. The design also makes it possible to obtain the same effect as an Aspherical lens. And taking the technology a step beyond, we actually use two single-layer diffractive optical elements whose diffraction gratings are bonded together face-to-face. Since longer wavelengths form an image closer to the lens due to the large diffractive angle, and shorter wavelengths form an image farther from the lens due to the smaller diffractive angle, putting the DO elements with conventional glass optics actually cancels out each other's chromatic aberrations and is exceptionally effective in correcting this optical defect. The diffraction that occurs with Canon's Multi-Layer Diffractive optical elements actually corrects the optical system's chromatic aberrations and improves the image formation performance.

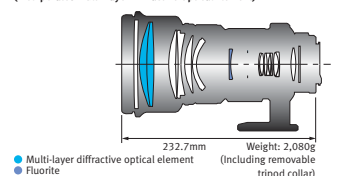
The net result of Canon's DO technology is a lens design with reduced size and weight while offering higher image quality than a comparable focal length lens that incorporates conventional glass optical elements. It means a new generation of high-performance lenses that complement the more compact designs of our latest SLR film and digital cameras.

400mm f/4 Lens Designed with a Refractive Optical Element Only



317mm Weight: 3,000g

400mm f/4 DO IS USM (Incorporates Multi-Layer Diffractive Optical Element)



232.7mm Weight: 2,080g (Including removable tripod collar)

● UD element
● Fluorite

Lens Downsizing with the Multi-Layer Diffractive Optical Element

Note: If a very bright spotlight like a mercury lamp is photographed with a DO lens, a ring of light may occasionally appear around the light source, due to the imaging characteristics of the Multi-Layer Diffractive Optical Element.

Image Stabilizer

No matter how great the lens is, camera shake can spoil the shot. Blurred photos due to camera shake usually occur when the shutter speed is slower than the reciprocal of the lens focal length. For example, a shutter speed slower than $1/200$ sec. at the 200mm focal length can invite a blurred photo caused by camera shake. In such cases, a tripod is necessary. However, a tripod can be a heavy and troublesome burden when you go hiking or traveling. There are even places where using tripods is prohibited. Using a slow shutter speed then becomes difficult. To resolve this problem, Canon became the first manufacturer to incorporate an Image Stabilizer in an SLR camera lens. Optical shake is detected by gyro sensors which provide the data necessary to shift the image-stabilizing lens group in parallel to neutralize the shake. This increases the usable shutter speed range by up to 2 full steps for hand-held shooting. Except for the EF 28-135mm f/3.5-5.6 IS USM and EF 75-300mm f/4-5.6 IS USM lenses, IS lenses have two IS modes. One is for normal image stabilization and the other is for panned shots. With a monopod, the Image Stabilizer on all IS lenses operates normally as during hand-held shooting. Also, the EF 300mm f/2.8L IS USM, EF 400mm f/2.8L IS USM, EF 500mm f/4L IS USM, and EF 600mm f/4L IS USM lenses have a mechanism that prevents having the Image Stabilizer turned on while the lens is mounted on a tripod.



With Image Stabilizer on



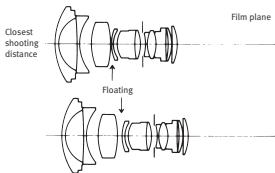
With Image Stabilizer off

Float

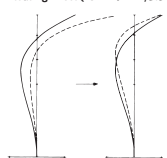
Floating System

Ordinary lenses are designed to give the best results when the correction of aberrations is most effective. This is usually at the most commonly-used focusing distances. At other focusing distances, aberrations tend to appear. Canon's floating system suppresses aberrations at close focusing distances. This system adjusts the gap between certain lens elements in correspondence to the focusing distance. The aberration is effectively corrected. The result is high image quality with aberrations suppressed at all focusing distances.

TS-E 24mm f/3.5L Floating System

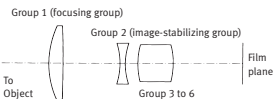


Floating Effect (TS-E 24mm f/3.5L)

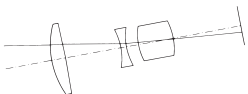


Floating System

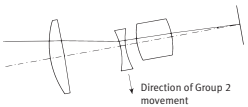
1: No camera shake



2: Lens front shakes downward



3: Image-stabilizing group counteracting downward camera shake



How the Image Stabilizer Works in the EF 75-300mm f/4-5.6 IS USM

Circular Aperture

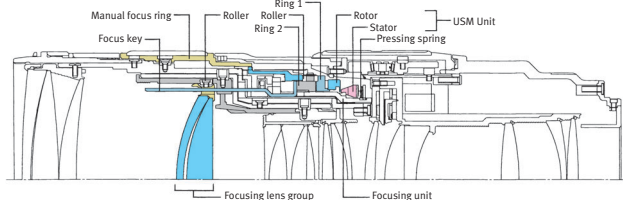
Certain Canon lenses feature a new Circular Aperture diaphragm unit, which uses curved aperture blades to provide for a more rounded opening as the lens is stopped down. It's especially effective at rendering out-of-focus background highlights as natural rounded shapes. In lenses such as the EF 70-200mm f/2.8L IS lens, the lens opening is virtually circular from f/2.8 to f/5.6. These lenses retain all the benefits previously available with Canon's Electromagnetic Diaphragm — smooth and consistent stop-down operation (even at up to 10 fps with the EOS-1v), near-silent aperture control, and total absence of mechanical levers or switches in the lens mount.

Full-Time Manual Focusing

Canon EF lenses and EOS cameras have very high AF precision. Optimum focus can be achieved quickly for almost any shooting situation. Recent EOS cameras have been equipped with multiple focusing points for higher flexibility in composing a photo while using AF. Picture-taking is even more flexible with Canon's full-time manual focusing which overrides the autofocus mode. Lenses with this feature allow you to switch to manual focusing even in the AF mode. You can keep looking through the viewfinder and touch up the focus manually without switching the focus mode switch. Since the focusing ring does not rotate during autofocus, we could make it wider for better holding comfort and easier manual focusing. Another ergonomic design which lets you convey your intentions quickly. Full-time manual focusing comes in two types. One is electronic manual focusing where the rotation amount of the focusing ring is detected and the focusing motor is driven electronically. The other type is mechanical manual focusing where the rotation of the focusing ring adjusts the focus mechanically.



Input pulse board for electronic manual focusing



Full-time mechanical manual focus mechanism

AF Stop Feature

AF stop is featured on the EF 300mm f/2.8L IS USM, EF 400mm f/2.8L IS USM, EF 500mm f/4L IS USM, and EF 600mm f/4L IS USM lenses. If something passes between the camera and subject during autofocus, pressing the AF stop buttons momentarily locks the AF to prevent the focus from shifting to the obstruction passing by. After the obstruction is gone, the focus is still maintained on the subject and you can quickly resume shooting. The AF stop buttons are positioned at four locations around the lens grip at the front of the lens for easy access during both horizontal and vertical shooting.

Dust- and Water-Resistant Construction

The new EF 300mm f/2.8L IS USM, EF 400mm f/2.8L IS USM, EF 500mm f/4L IS USM, and EF 600mm f/4L IS USM lenses are highly dust- and water-resistant. The switch panel, exterior seams, and drop-in filter compartment have rubber linings. Moving parts such as the focusing ring and switches are also designed to prevent water and dust from entering. These lenses can therefore be used in harsh conditions without dust and water getting inside.

The lens is equipped with a rubber ring on the mount to improve its dustproofing and waterproofing characteristics. As the lens is repeatedly mounted and detached, the rubber ring will leave fine abrasion marks on the outside of the camera mount. This will not affect operation.



Focus Preset

With the focus preset feature, you can set the desired focusing distance in memory and later instantly focus the lens at that distance. Normal picture-taking and focusing are possible even while focus preset has been set. At a soccer game, for example, you can preset the focus for the goal. You can focus normally while the player approaches the goal, then when the ball is shot into the goal, you can obtain instant focus.



Fluorite (CaF₂) and UD-Glass

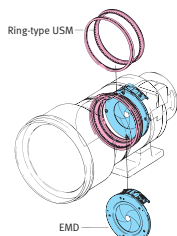
The refraction of light differs depending on the wavelength. The point of focus therefore differs depending on the different wavelengths or colors. When the different wavelengths are focused at different points, the colors look smeared. This is called chromatic aberration. The longer the focal length, the more pronounced chromatic aberration becomes. Usually, an achromatic element is used in a lens to correct chromatic aberration. However, normal optical glass can only be corrected for two primary spectral colors. An exception to this limitation is Fluorite, an ideal material. Fluorite, which is crystalline, has abnormally low refraction and low dispersion characteristics, which optical glass cannot achieve. It also has anomalous dispersion from the green to blue wavelengths. Canon developed production technologies to manufacture Fluorite. By incorporating Fluorite in lenses, the points of focus of the three primary spectral colors of red, green, and blue all meet at one point for ideal correction of chromatic aberration. There is also UD-glass, which is a special type of optical glass whose properties nearly match those of Fluorite. The effect of two UD-glass elements is equivalent to having one Fluorite element. And one super UD-glass element gives almost the same effect as one Fluorite element.

Large, Fully Electronic Mount System

The conventional interface between the lens and camera body was mechanical, with the use of engaging levers and gears. This method caused physical problems such as wear and rattle. It was limited and more diverse information could not be exchanged. Canon EF lenses do not use such mechanical links at all. About 50 items of information are exchanged as digital signals between the lens and camera in real time. This enables high-speed and high-precision control. And since the lens mount diameter is an ample 54 mm, special lenses such as large-aperture lenses and TS-E lenses can be used. The EF mount is an advanced interfacing system with infinite possibilities.

Built-In Motor and EMD

Canon EF lenses (except TS-E and MP-E lenses) have a built-in AF motor. Compared to camera body-based AF motors, lens-based motors have driving energy with lower transmission loss. The optimum AF motor for the particular lens can also be selected and installed. The AF operation is therefore quick, quiet, and highly precise. The lenses also have an EMD (Electromagnetic Diaphragm) to control the aperture electronically. The aperture can be set either with an electronic dial or with the electronic pulse signal sent according to the exposure reading. Aperture control precision is therefore unmatched.

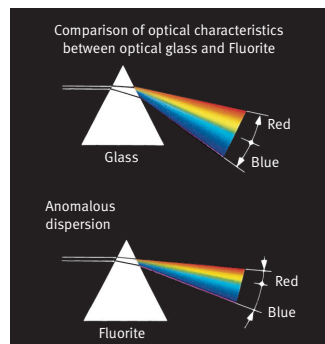


Built-in motor and EMD



Inner Focusing and Rear Focusing

An inner focusing lens has the focusing lens group(s) in front of the diaphragm, while a rear focusing lens has the focusing lens group(s) behind the diaphragm. Both focusing systems allow the focusing lens group to be small. This minimizes the load on the actuator which drives the autofocus. In turn, the AF speed is faster. The whole optical system can also be made more compact. Also, since the lens does not rotate during focusing, the effects of a circular polarizing filter or gelatin filter remain intact.



Fluorite and UD glass

Description of Lens Designation

The lens designations follow a standard format to identify the lens.

EF 75-300mm f/4-5.6 IS USM

Focal length: Indicates the focal length range from the shortest to longest length. (See below for details.)

Maximum aperture: Indicates the lens' maximum aperture. (See below for details.)

Special Function: Any special feature such as an image stabilizer, macro feature, etc., is indicated.

USM: Indicates that the lens uses an Ultrasonic Motor for autofocus. (See page 34 for details.)

Focal Length

A focal length of 50mm is closest to what the eye sees. This focal length is used as a reference point for lens categories. For example, lenses with a shorter focal length are called wide-angle lenses, while those with a longer focal length are called telephoto lenses. Single focal length lenses have only one focal length, while zoom lenses have a range of focal lengths. (When EF lenses are used with the EOS IX, the focal length corresponds to 1.25 times that indicated for 35mm cameras.)

Angle of View

This indicates how much coverage of the scene you can see through the lens. Telephoto lenses have a narrower angle of view than wide-angle lenses.

Angle of View and Perspective

Perspective refers to the distance between the near and far objects that you can see at the same time. When the angle of view is wide (with a shorter focal length), the perspective becomes more apparent. And with a narrow angle of view (with a longer focal length), the perspective becomes less apparent. The image also becomes more compressed, with the far objects looking like they are right behind the nearer objects.

Maximum Aperture

This indicates the speed of the lens. A fast lens has a large maximum aperture, allowing more light to enter. The smaller the maximum aperture's F-number, the larger the aperture opening is. A larger maximum aperture makes the image look brighter and easier to see through the viewfinder. You can also use a faster shutter speed or obtain better background blur. On the other hand, a smaller maximum aperture (the F-number is larger) allows the lens to be more compact and light. Single focal length lenses have only one maximum aperture while zoom lenses may have

two, one for each end of the focal length range. For example, a EF 28-80mm f/3.5-5.6 lens has a maximum aperture of f/3.5 at 28mm and f/5.6 at 80mm.

Aperture and Shutter Speed

Under the same light level, if the aperture opening is made larger by one step, the shutter speed can be increased by one step. For example, if an aperture of f/5.6 and shutter speed of 1/60 sec. are set, adjusting the aperture to f/4 will enable a shutter speed of 1/125 sec. to be used. An aperture of f/2.8 will allow a faster shutter speed of 1/250 sec. while the same exposure level is maintained.

Depth of Field

Normally, there is only one point of optimum focus. However, we often see objects in front of or behind this point also in focus. This is made possible by a wide depth of field.

Depth of Field with the Aperture and Focal Length

The depth of field is mainly determined by the lens focal length, aperture, and subject distance. For example, if a wide-angle lens is used at the minimum aperture, almost everything in the picture will be in focus. However, if a telephoto lens is used at maximum aperture, the background will be really blurred, making the subject in focus stand out.

Canon EF Lens Accessories

General Purpose Filters for Black and White or Color Film

Sky (1A), Haze (UV-1), ND (03 • 0.6)

• 52mm • 58mm • 72mm

Conversion Filters for Color Film

80A, 80B, 85, 85B, FCB, FCD

• 52mm • 58mm • 72mm

General Purpose Filters for Black and White Film

Yellow 2, Green 11, Orange 15, Red 25A

• 52mm • 58mm • 72mm

Softmat Filters

Softmat filters mildly soften the focus for flattering portraits and dreamy landscapes. These filters utilize the effect of diffraction which occurs between light passing through the transparent part and light passing through the coated part. Use Softmat No. 1 filter for a gentle softfocus effect, and Softmat No. 2 for a stronger effect.

No.1, No.2

• 52mm • 58mm

Warming Filters for Color Film

81A, 81B

• 52mm • 58mm • 72mm

Circular Polarizing Filters PL-C

Polarizing filter enhances picture quality by blocking harmful reflected light. Use it to reduce polarized light reflections from glass and water surfaces or to improve color saturation. Simple to use, circular polarizing filters (such as Canon's PL-C) polarize light circularly, rather than linearly, so it does not interfere with autofocus or TTL light metering.

• 52mm • 58mm • 67mm • 72mm • 77mm (Type II)

Loupe 8x & 4x



The Canon Loupe 4x is a high-performance magnifier for viewing the entire picture area (24 x 36mm) of a 35mm-format slide or negative. With three lens elements in three groups, chromatic aberration and distortion are effectively corrected to give crystal-clear images. Eye fatigue is not a problem even after prolonged use. Loupe 8x is another magnifier for viewing the entire picture area, but with special emphasis on a 24mm-diameter area at the center. The four lens elements in four groups attain high performance and a high magnification. All elements have Super Spectra Coating to make image viewing clear enough for you to effectively check the quality of photos taken with EF lenses. These two loupes can make your evaluation of photos more accurate.

Drop-in Filters



Drop-in Filters PL-C

Drop-in Filters PL-C can be rotated from the outside without removing them from the lens for precise control. The 48mm PL-C filter can be used with the following lenses – EF 200mm f/1.8L USM and EF 1200mm f/5.6L USM; the 52mm PL-C filter is designed for use with the EF 300mm f/2.8L IS USM, EF400mm f/2.8L IS USM, EF 500mm f/4L IS USM and EF 600mm f/4L IS USM.



Drop-in Gelatin Filter Holders

These glass-backed holders accept up to three commercially available cut-to-size gelatin filters for rear-insertion lenses. A 48mm holder is provided standard with EF 200mm f/1.8L USM and EF 1200mm f/5.6L USM; and a 52mm holder, with EF 300mm f/2.8L IS USM, EF 400mm f/2.8L IS USM, EF 500mm f/4L IS USM and EF 600mm f/4L IS USM.



Drop-in Screw Filter Holders With Protect Filters

The enclosed regular filter can be exchanged with other commercially available screw-type filters. Note that only filters with correct filter frame thickness can be mounted on the lens.

• 48mm • 52mm

Only Canon filters are guaranteed for use with EF lenses.

Gelatin filter Holders III & IV



Gelatin Filter Holder III

Gelatin Filter Holder IV

Gelatin Filter Holder III uses 3 x 3-inch gelatin filters and Gelatin Filter Holder IV uses 4 x 4-inch gelatin filters. Holders III and IV both provide extension hoods and ø52 mm, 58 mm, 67 mm, 72 mm and 77 mm adapters. Refer to the EF Lens Accessory Table for information on lens combinations.

• 52mm • 58mm • 67mm • 72mm • 77mm
• Adapter III for EF 50mm 1: 1.4

Canon EF Lenses

Limited only by your imagination.

Ultra-Wide Zoom



EF 16-35mm
f/2.8L USM
ULTRASONIC



EF 17-40mm
f/4 L USM
ULTRASONIC



EF 20-35mm
f/3.5-4.5 USM
ULTRASONIC

Standard Zoom



NEW
EF-S 18-55mm
f/3.5-5.6

Available only with the EOS Digital Rebel kit. Compatible only with EOS Digital Rebel.



EF 24-70mm
f/2.8L USM
ULTRASONIC



EF 24-85mm
f/3.5-4.5 USM
ULTRASONIC



EF 28-80mm
f/3.5-5.6 II



EF 28-90mm
f/4-5.6 II USM
ULTRASONIC



EF 28-90mm
f/4-5.6 II



EF 28-105mm
f/3.5-4.5 II USM
ULTRASONIC



EF 28-105mm
f/4-5.6 USM
ULTRASONIC



EF 28-135mm
f/3.5-5.6 IS USM
ULTRASONIC



EF 28-200mm
f/3.5-5.6 USM
ULTRASONIC



EF 35-80mm
f/4-5.6 III



EF 35-350mm
f/3.5-5.6L USM
ULTRASONIC



NEW
EF 55-200mm
f/4.5-5.6 II USM
ULTRASONIC



EF 70-200mm
f/2.8L USM
ULTRASONIC



EF 70-200mm
f/4L USM
ULTRASONIC



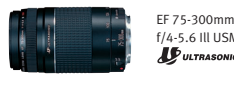
EF 70-200mm
f/2.8L IS USM
ULTRASONIC

IMAGE STABILIZER

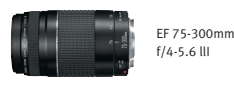


EF 75-300mm
f/4-5.6 IS USM
ULTRASONIC

IMAGE STABILIZER



EF 75-300mm
f/4.5-6.3 III USM
ULTRASONIC



EF 75-300mm
f/4-5.6 III



EF 80-200mm
f/4.5-5.6 II

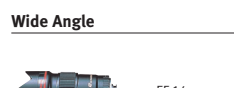


EF 100-300mm
f/4.5-5.6 USM
ULTRASONIC



EF 100-400mm
f/4.5-5.6L IS USM
ULTRASONIC

IMAGE STABILIZER



EF 14mm
f/2.8L USM
ULTRASONIC



EF 15mm f/2.8
Fisheye



EF 20mm
f/2.8 USM
ULTRASONIC



EF 24mm
f/1.4L USM
ULTRASONIC

ULTRASONIC



EF 24mm f/2.8



EF 28mm
f/1.8 USM
ULTRASONIC



EF 28mm f/2.8



EF 35mm
f/1.4L USM
ULTRASONIC

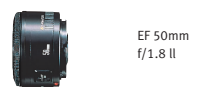


EF 35mm f/2.0

Standard & Medium Telephoto



EF 50mm
f/1.4 USM
ULTRASONIC



EF 50mm
f/1.8 II



EF 85mm
f/1.2L USM
ULTRASONIC



EF 85mm
f/1.8 USM
ULTRASONIC



EF 100mm
f/2 USM
ULTRASONIC

Telephoto



EF 135mm
f/2L USM
ULTRASONIC



EF 135mm f/2.8
w/ Softfocus



EF 200mm f/2.8L II USM
ULTRASONIC



EF 300mm f/2.8L IS USM
ULTRASONIC

IMAGE STABILIZER



EF 300mm f/4L IS USM
ULTRASONIC

IMAGE STABILIZER



EF 500mm f/4L IS USM
ULTRASONIC

IMAGE STABILIZER



EF 600mm f/4L IS USM
ULTRASONIC

IMAGE STABILIZER



EF 1200mm f/5.6L USM
ULTRASONIC

IMAGE STABILIZER

Macro Lenses



EF 50mm f/2.5
Compact Macro



Life Size
Converter EF



MP-E 65mm f/2.8
1-5x Macro Photo



EF 100mm f/2.8
Macro USM
ULTRASONIC



EF 180mm f/3.5L
Macro USM
ULTRASONIC

TS-E Lenses



TS-E 24mm f/3.5L
Tilt-Shift



TS-E 45mm
f/2.8 Tilt-Shift



TS-E 90mm f/2.8
Tilt-Shift

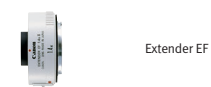
Extension Tubes



NEW
Extension
Tube EF 12 II

NEW
Extension
Tube EF 25 II

Tele-Extenders



Extender EF 1.4x II



Extender EF 2x II

Canon EF Lens Specifications & Accessories Table

Lens	Angle of View (horizontal • vertical • diagonal)	Lens Construction (elements/groups)	No. of Diaphragm Blades	Minimum Aperture	Closest Focusing Distance (m/ft)	Maximum Magnification (x)	AF Actuator	Filter Diameter (mm)	Max. Diameter x Length (mm/in)	Weight (g/oz)	Magnification with Extension Tube EF 12 II	Magnification with Extension Tube EF 25 II	Lens Hood	Hard Case	Soft Case	G.F. Holder III (Hood II) *1	G.F. Holder IV (Hood IV) *1
EF 16-35mm f/2.8L USM	98° - 54° • 74°10' - 38° • 108°10' - 63°	14 / 10	7	22	0.28 / 0.9	0.22	USM	77	83.5 / 3.3 x 103 / 4.1	600 / 1.3 lb.	0.87 ~ 0.36	1.09 ~ 0.80	EW-83E	—	LP1319	NC	(0)
EF 17-40mm f/4L USM	84° - 34° • 53° - 19°30' • 74° - 29°	12 / 9	7	22	0.28 / 0.92	0.24 (at 40mm)	Ring USM ²	77	83.5 / 3.3 x 96.8 / 3.8	500 / 17.6	0.83 ~ 0.32	1.02 ~ 0.40	EW-83E	—	LP1319	NC	(0)
EF 20-35mm f/3.5-4.5 USM	84° - 54° • 62° - 38° • 94° - 63°	12 / 11	5	22 - 27	0.34 / 1.1	0.13 (at 35mm)	USM ²	77	83.5 / 3.3 x 68.9 / 2.7	340 / 12.0	0.70 ~ 0.36	1.00 ~ 0.80	EW-83II	LH-D11	LP1214	NC	(0)
EF-S 18-55mm f/3.5-5.6*	65°30' - 23°20' • 45°30' - 15°40' • 75°20' - 75°50'	11 / 9	6	22 - 38	0.28 / 0.92	0.28 (at 55mm)	MM	58	69 / 2.7 x 66.2 / 2.6	190 / 6.7	0.81 ~ 0.23	0.92 ~ 0.51	EW-60C	—	LP814	NC	(0)
EF 24-70mm f/2.8L USM	84° - 34° • 53° - 19°30' • 74° - 29°	16 / 13	8	22	0.38 / 1.25	0.29 (at 70mm)	USM ²	77	83.2 / 3.3 x 123.5 / 4.9	500 / 2.1	0.63 ~ 0.18	1.25 ~ 0.40	EW-83F	—	LP1219	(0)	(0)
EF 24-85mm f/3.5-4.5 USM	74° - 24° • 53° - 16° • 84° - 28°30'	15 / 12	6	22 - 32	0.5 / 1.6	0.16 (at 85mm)	USM ²	67	73.0 / 2.9 x 69.5 / 2.7	380 / 13.4	0.59 ~ 0.15	1.23 ~ 0.33	EW-73II	LH-C13	ES-C9 / LP1014	NC	(0)
EF 28-80mm f/3.5-5.6 II	75° - 30° • 46° - 17° • 65° - 25°	10 / 10	5	22 - 38	0.38 / 1.25	0.26 (at 80mm)	MM ³	58	67 / 2.6 x 71 / 2.8	200 / 7.8	0.57 ~ 0.16	1.14 ~ 0.35	EW-60C	—	LP814	(0)	(0)
EF 28-90mm f/4-5.6 II USM	65° - 22°40' • 46° - 15°10' • 75° - 27°	10 / 8	5	22 - 32	0.38 / 1.3	0.30 (at 90mm)	Micro USM	58	67 / 2.6 x 71 / 2.8	190 / 6.7	0.56 ~ 0.14	1.13 ~ 0.31	EW-60C	—	LP814	(0)	(0)
EF 28-90mm f/4-5.6 II	65° - 22°40' • 46° - 15°10' • 75° - 27°	10 / 8	5	22 - 32	0.38 / 1.3	0.30 (at 90mm)	MM	58	67 / 2.6 x 71 / 2.8	190 / 6.7	0.56 ~ 0.14	1.13 ~ 0.31	EW-60C	—	LP814	(0)	(0)
EF 28-105mm f/3.5-4.5 II USM	65° - 19°20' • 46° - 13° • 75° - 23°20'	15 / 12	7	22 - 27 ⁴	0.5 / 1.64	0.19 (at 105mm)	USM ²	58	72.0 / 2.8 x 75.0 / 3.0	375 / 13.1	0.53 ~ 0.12	0.75 ~ 0.27	EW-63II	LH-C13	ES-C13 / LP814	(0)	(0)
EF 28-105mm f/4-5.6 USM	65° - 19°20' • 46° - 13° • 75° - 23°20'	10 / 9	6	22 - 32	0.48 / 1.57	0.19 (at 105mm)	Micro USM	58	67 / 2.6 x 68 / 2.7	210 / 7.4	0.54 ~ 0.12	1.11 ~ 0.27	EW-63B	—	LP814	(0)	(0)
EF 28-135mm f/4.5-5.6 IS USM	65° - 15° • 46° - 10° • 75° - 18°	16 / 12	6	22 - 36	0.5 / 1.64	0.19 (at 135mm)	USM ²	72	78.4 / 3.1 x 96.8 / 3.8	540 / 18.9	0.53 ~ 0.09	1.09 ~ 0.21	EW-78BII	—	LP1116	(0)	(0)
EF 28-200mm f/3.5-5.6 USM	65° - 10° • 46° - 7° • 75° - 12°	16 / 12	6	22 - 36	0.45 / 1.5	0.28 (at 200mm)	Micro USM	72	78.4 / 3.1 x 89.6 / 3.5	500 / 17.6	0.54 ~ 0.06	1.10 ~ 0.14	EW-78D	—	LP1116	NC	(0)
EF 35-80mm f/4-5.6 III	54° - 25° • 38° - 17° • 63° - 30°	8 / 8	5	22 - 32	0.4 / 1.3	0.23 (at 80mm)	MM ³	52	65.0 / 2.6 x 63.5 / 2.5	175 / 6.2	0.50 ~ 0.16	0.97 ~ 0.35	EW-54II	LH-C13	ES-C9 / LP814	(1)	(1)
EF 35-350mm f/3.5-5.6L USM	54° - 6° • 38° - 4° • 63° - 7°	21 / 15	8	22 - 32 ⁴	0.6 / 2 (at 135mm)	0.25 (at 135mm)	USM ²	72	85.0 / 3.3 x 167.4 / 6.7	1,385 / 3.1 lb.	0.43 ~ 0.04	0.82 ~ 0.08	EW-78II	LH-D22	LZ1324	NC	(0)
EF 55-200mm f/4.5-5.6 II USM	36° - 10° • 25° - 7° • 43° - 12°	13 / 13	6	22 - 27	1.2 / 3.9	0.21 (at 200mm)	Micro USM	52	70.4 / 2.8 x 97.3 / 3.8	310 / 10.9	0.26 ~ 0.06	0.50 ~ 0.14	ET-54	—	LP1016	(3)	(3)
EF 70-200mm f/2.8L IS USM	29° - 10° • 19°30' - 7° • 34° - 12°	23 / 18	8	32	1.4 / 4.6	0.17	USM	77	86.2 / 3.4 x 197 / 7.8	1,470 / 3.24 lb.	0.22 ~ 0.06	0.41 ~ 0.14	ET-86	—	LZ1324	(0)	(1)
EF 70-200mm f/2.8L USM	29° - 10° • 19°30' - 7° • 34° - 12°	18 / 15	8	32	1.5 / 4.9	0.16 (at 200mm)	USM ²	77	84.6 / 3.3 x 193.6 / 7.6	1,310 / 2.9 lb.	0.22 ~ 0.06	0.41 ~ 0.14	ET-83II	LH-D24B	LZ1324	(2)	(2)
EF 70-200mm f/4L USM	29° - 10° • 19°30' - 7° • 34° - 12°	16 / 13	8	32	1.2 / 3.9	0.21 (at 200mm)	USM ²	67	76 / 3.0 x 172 / 6.8	705 / 25	0.23 ~ 0.06	0.39 ~ 0.13	ET-74	—	LP1224	(2)	(3)
EF 75-300mm f/4-5.6 IS USM	27° - 6°50' • 18°11' - 4°35' • 32°11' - 8°15'	15 / 10	8	32 - 45	1.5 / 4.9	0.26 (at 300mm)	Micro USM	58	78.5 / 3.1 x 137.2 / 5.4	650 / 1.4 lb.	0.21 ~ 0.04	0.39 ~ 0.09	ET-64II	LH-D18B	LP1022	(5)	(4)
EF 75-300mm f/4-5.6 III USM	27° - 6°50' • 18°11' - 4°35' • 32°11' - 8°15'	13 / 9	7	32 - 45	1.5 / 4.9	0.25 (at 300mm)	Micro USM	58	71.0 / 2.8 x 122 / 4.8	480 / 16.8	0.21 ~ 0.04	0.39 ~ 0.09	ET-60	—	LP1019	(5)	(4)
EF 75-300mm f/4-5.6 III	27° - 6°50' • 18°11' - 4°35' • 32°11' - 8°15'	13 / 9	7	32 - 45	1.5 / 4.9	0.25 (at 300mm)	MM ³	58	71.0 / 2.8 x 122 / 4.8	480 / 16.8	0.21 ~ 0.04	0.39 ~ 0.09	ET-60	—	LP1019	(5)	(4)
EF 80-200mm f/4.5-5.6 II	25° - 10° • 17° - 7° • 30° - 12°	10 / 7	5	22 - 27 ⁴	1.5 / 4.9	0.16 (at 200mm)	MM ³	52	69.0 / 2.7 x 78.5 / 3.1	250 / 8.8	0.21 ~ 0.06	0.39 ~ 0.14	ET-54	LH-B12	ES-C13 / LP1014	(5)	(4)
EF 100-300mm f/4.5-5.6 USM	20° - 6°50' • 14° - 4°35' • 24° - 8°15'	13 / 10	8	32 - 38 ⁴	1.5 / 4.9	0.20 (at 300mm)	USM ²	58	73.0 / 2.9 x 121.5 / 4.8	540 / 1.2 lb.	0.26 ~ 0.04	0.37 ~ 0.09	ET-65III	—	ES-C17 / LP1019	(5)	(4)
EF 100-400mm f/4.5-5.6L IS USM	20° - 5°10' • 14° - 3°30' • 24° - 6°10'	17 / 14	8	32 - 38 ⁴	1.8 / 5.9	0.20 (at 400mm)	USM ²	77	92.0 / 3.6 x 189.0 / 7.4	1,380 / 3.0 lb.	0.19 ~ 0.03	0.35 ~ 0.07	ET-83C	—	LZ1324	(4)	(5)
EF 14mm f/2.8 USM	104° • 81° • 114°	14 / 10	5	22	0.25 / 0.8	0.10	USM ²	Rear Gel Holder	77.0 / 3.0 x 89.0 / 3.5	560 / 1.2 lb.	—	—	Built-in	LH-C13	ES-C13 / LP1016	NC	NC
EF 15mm f/2.8 Fisheye	141°54' • 91°44' • 180°	8 / 7	5	22	0.2 / 0.7	0.14	AFD	Rear Gel Holder	73.0 / 2.9 x 62.2 / 2.4	330 / 11.6	0.94 ~ 0.80	—	Built-in	LHP-C10	ES-C13 / LP814	NC	NC
EF 20mm f/2.8 USM	84° • 62° • 94°	11 / 9	5	22	0.25 / 0.8	0.14	USM ²	72	77.5 / 3.1 x 70.6 / 2.8	405 / 14.3	0.72 ~ 0.60	—	EW-75II	LH-D13	LP1214	NC	NC
EF 24mm f/1.4L USM	74° • 53° • 84°	11 / 9	7	22	0.25 / 0.82	0.16	USM ²	77	83.5 / 3.3 x 77.4 / 3.0	550 / 19.4	0.66 ~ 0.50	—	EW-83DII	—	LP1214	NC	(0)
EF 24mm f/2.8	74° • 53° • 84°	10 / 10	6	22	0.25 / 0.8	0.16	AFD	58	67.5 / 2.7 x 48.5 / 1.9	270 / 9.5	0.64 ~ 0.50	1.22 ~ 1.11	EW-60II	LH-B9	ES-C9 / LP811	(0)	(0)
EF 28mm f/1.8 USM	65° • 46° • 75°	10 / 9	7	22	0.25 / 0.8	0.18	USM ²	58	73.6 / 2.9 x 55.6 / 2.2	310 / 10.9	0.61 ~ 0.43	1.13 ~ 0.96	EW-63II	LHP-C10	ES-C9 / LP814	(0)	(0)
EF 28mm f/2.8	65° • 46° • 75°	5 / 5	5	22	0.3 / 1	0.13	AFD	52	67.4 / 2.7 x 42.5 / 1.7	185 / 6.5	0.56 ~ 0.43	1.09 ~ 0.95	EW-65II	LHP-B9	ES-C9 / LP1011	(1)	(1)
EF 35mm f/1.4L USM	54° • 38° • 63°	11 / 9	8	22	0.3 / 0.98	0.18	USM ²	72	79.0 / 3.1 x 86.0 / 3.4	580 / 20.5	0.54 ~ 0.36	0.97 ~ 0.79	EW-78C	—	LP1214	NC	(0)
EF 35mm f/2	54° • 38° • 63°	7 / 5	5	22	0.25 / 0.8	0.23	AFD	52	67.4 / 2.7 x 42.5 / 1.7	210 / 7.4	0.58 ~ 0.35	1.00 ~ 0.77	EW-65II	LH-B9	ES-C9 / LP1011	(2)	(2)
EF 50mm f/1.4 USM	40° • 27° • 46°	7 / 6	8	22	0.45 / 1.5	0.15	Micro USM ²	58	73.8 / 2.9 x 50.5 / 2.0	290 / 10.2	0.39 ~ 0.24	0.68 ~ 0.53	ES-71II	LHP-C10	ES-C9 / LP1014	(2)	(2)
EF 50mm f/1.8 II	40° • 27° • 46°	6 / 5	5	22	0.45 / 1.5	0.15	MM ³	52	68.2 / 2.7 x 41.0 / 1.6	130 / 4.6	0.39 ~ 0.24	0.68 ~ 0.53	ES-62 with Adapter Ring	LH-B9	ES-C9 / LP1014	(2)	(1)
EF 85mm f/1.2L USM	24° • 16° • 28°30'	8 / 7	8	16	0.85 / 3.1	0.11	USM	72	91.5 / 3.6 x 84.0 / 3.3	1,025 / 2.3 lb.	0.25 ~ 0.15	0.42 ~ 0.33	ES-79II	LH-D12	LP1219	(5)	(5)
EF 85mm f/1.8 USM	24° • 16° • 28°30'	9 / 7	8	22	0.85 / 2.8	0.13	USM ²	58	75.0 / 3.0 x 71.5 / 2.8	425 / 15.0	0.27 ~ 0.15	0.44 ~ 0.32	ET-65III	LH-B12	ES-C13 / LP1014	(5)	(4)
EF 100mm f/2 USM	20° • 14° • 24°	8 / 6	8	22	0.9 / 3	0.14	USM ²	58	75.0 / 3.0 x 73.5 / 2.9	460 / 1.0 lb.	0.27 ~ 0.13	0.42 ~ 0.28	ET-65III	LH-B12	ES-C13 / LP1014	(5)	(4)
EF 135mm f/2L USM	15° • 10° • 18°	10 / 8	8	32	0.9 / 3	0.19	USM ²	72	82.5 / 3.2 x 112.0 / 4.4	750 / 1.7 lb.	0.29 ~ 0.09	0.41 ~ 0.20	ET-78II	LH-D16II	LP1219	(5)	(5)
EF 135mm f/2.8 with Softfocus	15° • 10° • 18°	7 / 6	6	32	1.3 / 4.3	0.12	AFD	52	69.2 / 2.7 x 98.4 / 3.9	390 / 13.8	0.22 ~ 0.09	0.33 ~ 0.20	ET-65III	LH-C13	ES-C13 / LP1016	(5)	(4)
EF 200mm f/2.8L II USM	10° • 7° • 12°	9 / 7	8	32	1.5 / 4.9	0.16	USM ²	72	83.2 / 3.3 x 136.2 / 5.4	765 / 1.7 lb.	0.23 ~ 0.06	0.32 ~ 0.14	ET-83BII	LH-D18II	LP1222	(5)	(5)
EF 300mm f/2.8L IS USM	6°50' • 4°35' • 8°15'	17 / 13	8	32	2.5 / 8.2	0.13	USM ²	52 Drop-in	128.0 / 5.0 x 252.0 / 9.9	2,550 / 5.6 lb. (lens only)	0.18 ~ 0.04	0.24 ~ 0.09	ET-120	Lens Case 300	—	NC	NC
EF 300mm f/4L IS USM	6°50' • 4°35' • 8°15'	15 / 11	8	32	1.5 / 4.9	0.24	USM ²	77	90.0 / 3.5 x 221.0 / 8.7	1,190 / 2.6 lb.	0.30 ~ 0.04	0.37 ~ 0.09	Built-in	LH-D27	LZ1128	(5)	(5)
EF 400mm f/2.8L IS USM	5°10' • 3°30' • 6°10'	17 / 13	8	32	3 / 9.8	0.15	USM ²	52 Drop-in	163.0 / 6.4 x 349.0 / 13.7	5,370 / 11.8 lb.	0.19 ~ 0.03	0.23 ~ 0.06	ET-155	Lens Case 400	—	NC	NC
EF 400mm f/4.0L DO IS USM	5°10' • 3°30' • 6°10'	17 / 13	8	32	3.5 / 11.48	0.12	USM	52 Drop-in	128.0 / 5.0 x 232.7 / 9.4	1,940 / 4.3 lb	0.16 ~ 0.03	0.20 ~ 0.07	ET-120	Lens Trunk	—	NC	NC
EF 400mm f/5.6L USM	5°10' • 3°30' • 6°10'	7 / 6	8	32	3.5 / 11.5	0.12	USM ²	77	90.0 / 3.5 x 256.5 / 10.1	1,250 / 2.8 lb.	0.16 ~ 0.03	0.21 ~ 0.07	Built-in	LH-D29	LZ1132	(5)	(5)
EF 500mm f/4L IS USM	4° • 2°45' • 5°	17 / 13	8	32	4.5 / 14.8	0.12	USM ²	52 Drop-in	146.0 / 5.8 x 387.0 / 15.2	3,870 / 8.5 lb.	0.15 ~ 0.03	0.18 ~ 0.05					