

Nikkor Lenses

*Nikkor lenses and Nikon cameras
They were made
They were made
A tradition of*



Nikkor lenses have helped chronicle many an event and recreate many a moment in the history of our times. In the process they have changed the shape and content of 35 mm SLR photography, making history themselves, particularly in the areas of zoom, fisheye and reflex lenses. Nikkor lenses arm legions of photographers, both amateur and professional, with tools that advance the art, craft and science of taking pictures, as well as make life more interesting and infinitely rewarding. With Nikon, inventiveness is a tradition. The more than 60 Nikkor lenses available today, and many of the newly designed, compact, light and economical Nikon Series E lenses that take after them in

*eras have a great thing going.
e for each other.
ade for you.*

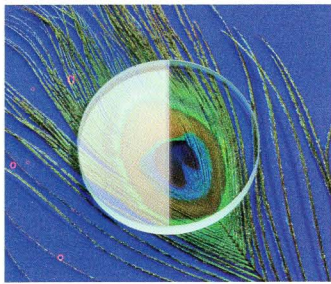
f innovation

**design philosophy, offer a wide array of innovations—
from Nikon Integrated Coating to “Internal Focusing.”
Quite a few use Nikon’s unique “Extra-low Dispersion”
glass. All invariably are made of optical glass of
Nikon’s own make. For Nikon is one of but a handful of
camera manufacturers in the world with the tech-
nology and resources to make their own optical
glass. To innovation, add reliability, quality and ver-
satility — hallmarks all of Nikon — and you have
the Nikkor story.**



Always at the vanguard

Like the Nikon cameras for which they are created, Nikkor lenses have a legendary quality that has made both "Nikon" and "Nikkor" proud names in 35 mm SLR photography. And the reason behind this is no secret: since their introduction more than three decades ago, Nikkor lenses have been at the forefront of technological advances, constantly defining and redefining the frontiers of optical innovation.



Right half of lens element has NIC; left half doesn't.

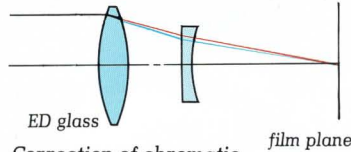
Nikon Integrated Coating

The bouncing of light off the surface of a lens and absorption of light into glass cause ghost images, flare, poor contrast and unfaithful color rendition. To solve these problems, Nikon applies multiple layers of microscopically thin coatings to the lens elements of all Nikkor and most Nikon Series E lenses. Unlike other lens manufacturers, however, Nikon **integrates** its multilayer coating process, called Nikon Integrated Coating (NIC), into the design of **every** Nikkor lens, making sure that the right number of coatings is applied to each lens element and that this matches both lens type and glass used. The result is a sharp increase in image contrast and a corresponding reduction in ghost and flare.

Close-Range Correction System

Lenses generally function best in medium subject-to-camera distances or when set to infinity. As you get closer to your subject, image quality tends to deteriorate. This was the problem especially with large-aperture, short-focal-length lenses of the retrofocus type, as well as with large-aperture lenses of the symmetric type. Nikon's solution is its unique Close-Range Correction (CRC) system. With CRC, curvature has been strictly corrected at short distances in wideangle lenses, while spherical aberration at close shooting distances has been virtually eliminated in one Nikkor medium telephoto lens. This ensures that high resolution and image quality are maintained from infinity to the closest focusing distance.

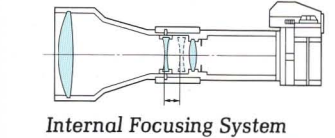




Correction of chromatic aberration by use of ED glass element

Extra-Low Dispersion Glass

All photographs are made with light. With panchromatic B&W and color films, both blue and red light rays should be brought to focus at the same plane to prevent color 'fringing' and unsharpness. This is no longer a problem for normal and wideangle lenses, but with telephoto lenses, particularly those of 180mm or longer focal length, even the slightest variation in focus between red and blue light rays is magnified, making it virtually impossible for any ultra-telephoto lens to equal a 'shorter' lens in sharpness and color correction. Nikon has overcome this by developing a new type of optical glass: Extra-low Dispersion (ED) glass. The glass is as hard and scratch-resistant as other optical glasses, so it can be used even in exposed front and rear lens elements.



Internal Focusing System

Conventional Focusing by Helicoid

Internal Focusing

The conventional double helicoid focusing system makes it necessary for all lens groups to "move" either to the front or rear of the lens barrel during focusing, thus changing the length of the lens. This complicated and bulky mechanism necessitates the design of a large lens which in hand-held shooting can become unwieldy, especially at the crucial moment of focusing. To remedy this situation, Nikon developed its Internal Focusing (IF) system in which the lens elements move internally during focusing. This has resulted in a substantial reduction in the size and weight of a lens, making even hand-held shooting possible with super-telephotos. Focusing becomes a great deal faster and easier. The IF system likewise enables the design of lenses with a closer minimum focusing distance and the correction of image fall-off, a characteristic disadvantage of close-focusing telephotos.



Normal Lenses

Like your eyes only



Lenses with a focal distance of around 50mm are called "normal." This focal distance approximates the length of the diagonal line across the film frame area and offers the 43° picture angle said to be most akin to human vision.

Images obtained with normal lenses look "natural"—making them the most versatile lenses for a wide variety of applications indoors and outdoors.

With maximum apertures ranging from $f/1.2$ to $f/1.8$, normal lenses offer high speed and produce



E50mm f/1.8

a bright and easy-to-focus image in the viewfinder, thus allowing available-light shooting for a variety of subjects. Normal Nikkors come in three models with different maximum f-stops. The 50mm f/1.2, the fastest, makes pinpoint focusing easy, providing a bright viewfinder image even where there's little light. With its moderate speed, size and weight, the 50mm f/1.4 is the more typical normal lens. The compact 50mm f/1.8, weighing a mere 220 g, is useful for general photography, close-ups and photo duplication. And for the budget-minded, there's the Nikon Series E 50mm f/1.8.



50mm f/1.8

50mm f/1.2

50mm f/1.4





Fisheye Lenses

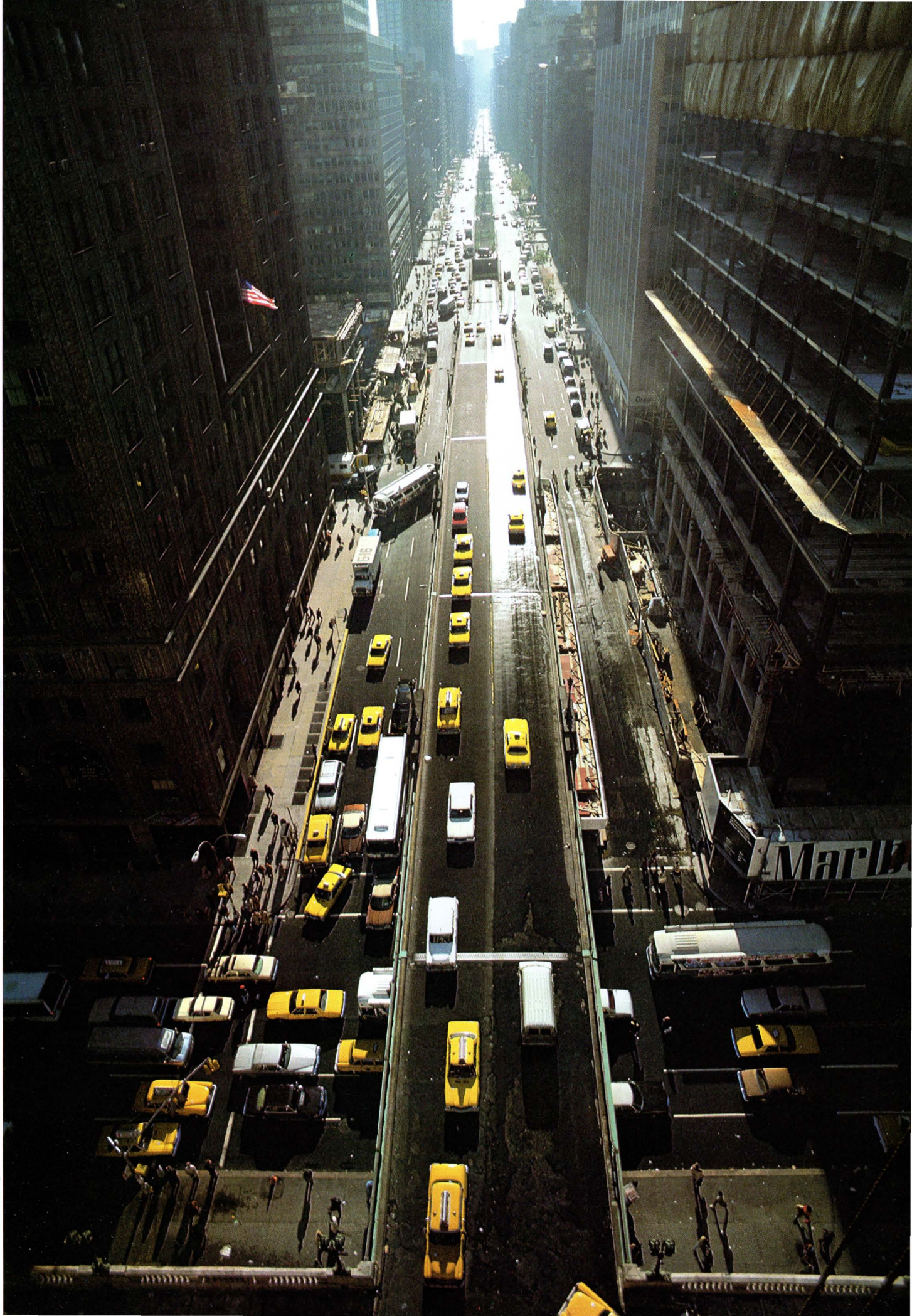
Other worlds, other images



With a picture angle of more than 180°, fisheye lenses allow you to distort the scene on film intentionally, causing the otherwise straight line at the periphery of the image field to form a curve that becomes more remarkable as you get closer to the periphery. Originally developed for scientific use, fish-

eye lenses are now widely used to create dramatic images for advertising and other commercial uses, as well as for general photography. There are two types of fisheye lenses—the Equidistant Projection type and the Full-Frame Projection type. The Equidistant Projection fisheye renders the image inside a round circle. The Fish-eye-Nikkor 6mm f/2.8 and 8mm f/2.8 are included in this category. The 6mm f/2.8 has the widest picture angle of 220° among all Nikkor lenses; the 8mm f/2.8 has a 180° picture angle and is the more compact and lightweight of the two. For fisheyes, both lenses have a large maximum aperture of f/2.8. This makes them easy to focus; they are especially useful in measuring zeniths and azimuths. As for the Full-Frame Projection fisheye, it renders the image on a full 35 mm film format (24mm × 36mm). The Fisheye-Nikkor 16mm f/2.8 is this type. Although it has the size and weight of a normal lens, it still gives you the curving effect unique to fisheyes.





Ultra-Wideangle Lenses

Wider than wide



Ultra-wide-angle lenses encompass

an enormous amount of space while exaggerating the perspective of the picture. Objects up close look gigantic, and those in the distance downright picayune. Since you can exaggerate pictorial perspective virtually to no end, dynamic, three-dimensional picture-making becomes possible in architectural photography.

Ultra-Wideangle Nikkor lenses are available in four models—the 13 mm f/5.6 which eliminates light falloff and poor resolution in the edges of the frame; the 15 mm f/3.5, which has an immense depth of field; the 18 mm f/3.5, which is the basic ultra-wide-angle; and the 20 mm f/3.5 which makes for a good introduction to the ultra-wideangle view. Each lens, well corrected for distortion and other aberrations, is capable of creating a unique image. The 13 mm f/5.6, 15 mm f/3.5 and 18 mm f/3.5 employ Nikon's unique Close-Range Correction (CRC) system to enhance performance even in close-range shooting. The 20 mm f/3.5 is compact and handy.





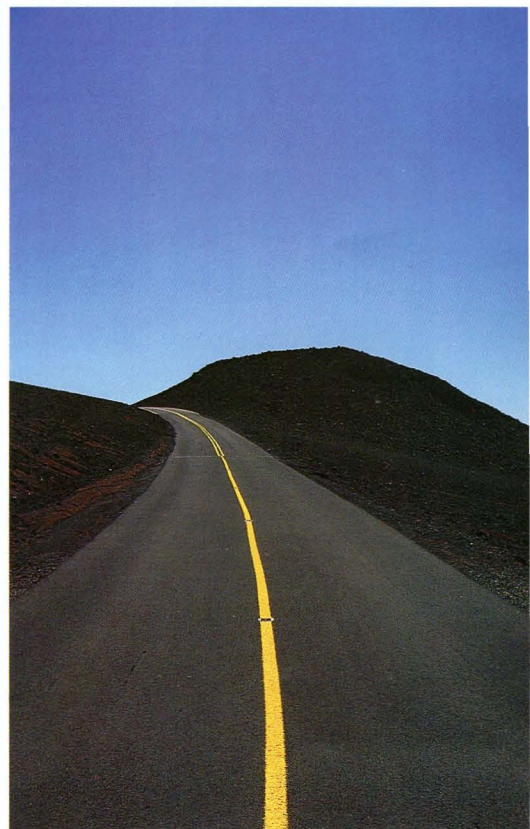
Wideangle Lenses

Encompass the scene



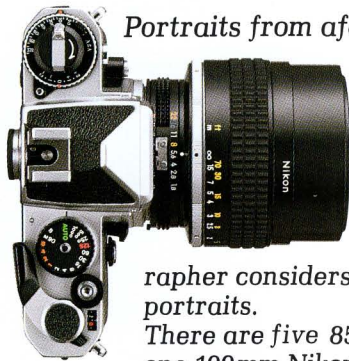
With its large picture angle and extra depth of field, the wideangle lens is excellent for "grab shooting." Nikon offers you a choice of eight wideangle Nikkor and two Nikon Series E models that can encompass the scene with focal lengths of from 24mm to 35mm. The 24mm is available in two models, both with large maximum apertures of $f/2$ and $f/2.8$, respectively, which give them a decisive edge in available-light

shooting. The adoption of the CRC system ensures that image as close as 0.3m (1ft) come out sharp and clear. Four types of wideangle 28mm lenses are available: $f/2$, $f/2.8$, Series E $f/2.8$, and $f/3.5$. The bright $f/2$ features the CRC system for excellent results in close-range photography. The $f/2.8$ has the shortest focusing distance of 0.2m (0.7ft)—the shortest of all Nikkor lenses. The CRC system is adopted as well. As for Series E $f/2.8$, it features Nikon's unique NIC. Next comes the moderate-speed $f/3.5$ which makes for an exceptionally light lens. Finally, we have the 35mm wideangles whose picture angle matches the coverage of most electronic flash units. They provide the most natural image among wideangle lenses. Four models are available. The $f/1.4$, the fastest Nikkor wideangle, adopts the CRC system to ensure extraordinary resolution and sharpness down to 0.3m (1ft). The fast $f/2$ and $f/2.8$ both allow shooting even in dim light. For moderate speed, you have the Series E $f/2.5$. All are surprisingly compact and light.



Medium Telephoto Lenses

Portraits from afar



With medium telephotos, the “long-distance” (i.e., **tele**) effect does not appear pronounced at all, and you have a more natural-looking perspective. With their shallow depth of field at each *f*/stop, short telephotos provide that optimum out-of-focus background effect so suited for portraiture in general. Many a photog-

raper considers them as the ideal lenses for head-and-shoulder portraits.

There are five 85mm to 105mm medium telephoto Nikkors and one 100mm Nikon Series E lens; the former include the very fast *f*/1.4 and the amazingly compact *f*/2 that’s no bigger than a normal lens. In addition, there’s the AF-Nikkor 80mm. The 85mm *f*/1.4 is the fastest Nikkor telephoto and the first in the lineup to feature the CRC system, ensuring high definition even at close distances. The selective focusing possible at maximum aperture makes this lens very suitable for portraiture. As for the Series E 100mm *f*/2.8, it’s very convenient for taking flattering portraits. The 105mm *f*/1.8 and *f*/2.5 lenses are superb instruments for creative portraiture and candid photography. The *f*/1.8, the fastest presently available in the 100 ~ 105mm class, offers a combination of shallow depth of field and almost natural perspective, resulting in extraordinarily life-like portraits. As for the *f*/2.5, professionals readily acclaim it as one of the finest lenses ever made for 35mm photography.

The AF-Nikkor 80mm *f*/2.8 offers automatic focus operation in conjunction with the DX-1 AF Finder—fully automatic with the autofocus Nikon F3AF, electronically-aided with regular F3 cameras.





Telephoto Lenses

Pull the distant scene in



To achieve such typical telephoto "effects" as distant subjects coming up close or subject emphasis through a blurred background, you need a telephoto lens 135 mm or longer. Shooting at wide apertures, you can isolate the subject by blurring out distracting or unwanted background and/or foreground. Another characteristic of the telephoto lens is that it seems to compress the space between objects,

producing the impression of a flattened perspective.

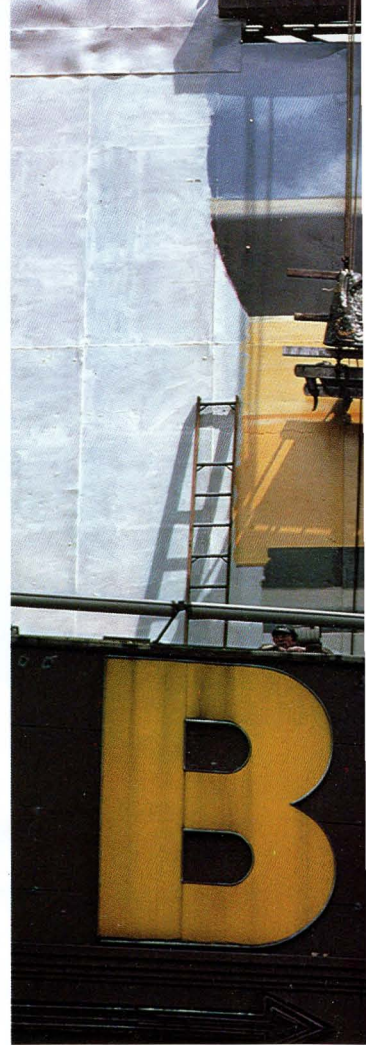
The 135 mm telephoto is available in three Nikkor and one Series E models. The f/2, one of the fastest telephotos available today, offers a bright viewfinder image for pinpoint focusing. For its focal length, the f/2.8 is very compact and light. The Series E f/2.8 is a popular choice for a "first telephoto." And the f/3.5 is exceptionally small. All have built-in telescopic, click-stopped lens hoods.

The 180 mm f/2.8 ED uses Nikon's unique Extra-low Dispersion (ED) glass for sharp, high-contrast images even at full aperture, complete with superb color rendition.

Professional photographers consistently choose the faster 200 mm f/2 IF-ED for its excellent color reproduction. Focusing is quick and accurate, making it a good choice for action and sports photography even in dim light. On the other hand, the 200 mm f/4 offers the type of superior optical performance that has made it one of the most often used lenses of our time.

As for the 300 mm lens, it is available in four types. The fastest 300 mm on the market, the f/2 IF-ED, is the top choice of many professional photographers. You can extend its focal length to 420 mm (with a maximum aperture of f/2.8) by attaching the dedicated TC-14C Teleconverter. The f/2.8 IF-ED, the second fastest 300 mm lens, is also one of the best choices of professionals. The f/4.5 IF-ED, exceptionally compact and light for a 300 mm lens, gives truly spectacular telephoto effects with a compressed perspective and an extremely shallow depth of field. The 300 mm f/4.5 is a powerful telephoto in a portable package. Focusing with the IF models is quick and accurate, making them suitable for sports, news and nature photography.

There's another 200 mm Nikkor, the AF-Nikkor 200 mm f/3.5 IF-ED. Automatic focus is available when it is mounted on a Nikon F3AF with DX-1 AF Finder—electronically-aided when the camera is a regular F3.



300 mm f/2 IF-ED



E135mm f/2.8

AF 200mm
f/3.5 IF-ED

135mm f/2

180mm f/2.8 ED

200mm f/4

TC-14C



135mm
f/3.5



135mm
f/2.8



300mm f/2.8 IF-ED



200mm f/2 IF-ED



300mm f/4.5



300mm f/4.5 IF-ED

Super-Telephoto Lenses

Get closer still



Telephoto lenses with a focal length of 400mm and longer are called super-telephoto lenses. Each one of Nikon's array of the finest super-telephoto lenses adopts Nikon's IF system for quick and easy focusing, and ED glass for faithful color rendition. Super-Telephoto Nikkor lenses are available in eight models

from 400mm to 1200mm in focal length. The 400mm f/3.5 IF-ED, f/5.6 IF-ED; 600mm f/4 IF-ED, f/5.6 IF-ED; 800mm f/8 IF-ED and 1200mm f/11 IF-ED adopt



Nikon's IF system and use ED glass—resulting in high performance super-telephotos with surprisingly compact bodies. IF assures focusing with minimal shift in gravity, thus facilitating smooth and faster focusing to cope with that precious moment of shutter release. ED, on the other hand, means chromatic aberration has been virtually eliminated. So you have a sharp image even at full aperture. Each lens adopts a presettable ring that locks the focusing ring once it is focused; this is especially convenient for repeated shooting of the same subject.



1200mm f/11 IF-ED



800mm f/8 IF-ED



600mm f/5.6 IF-ED



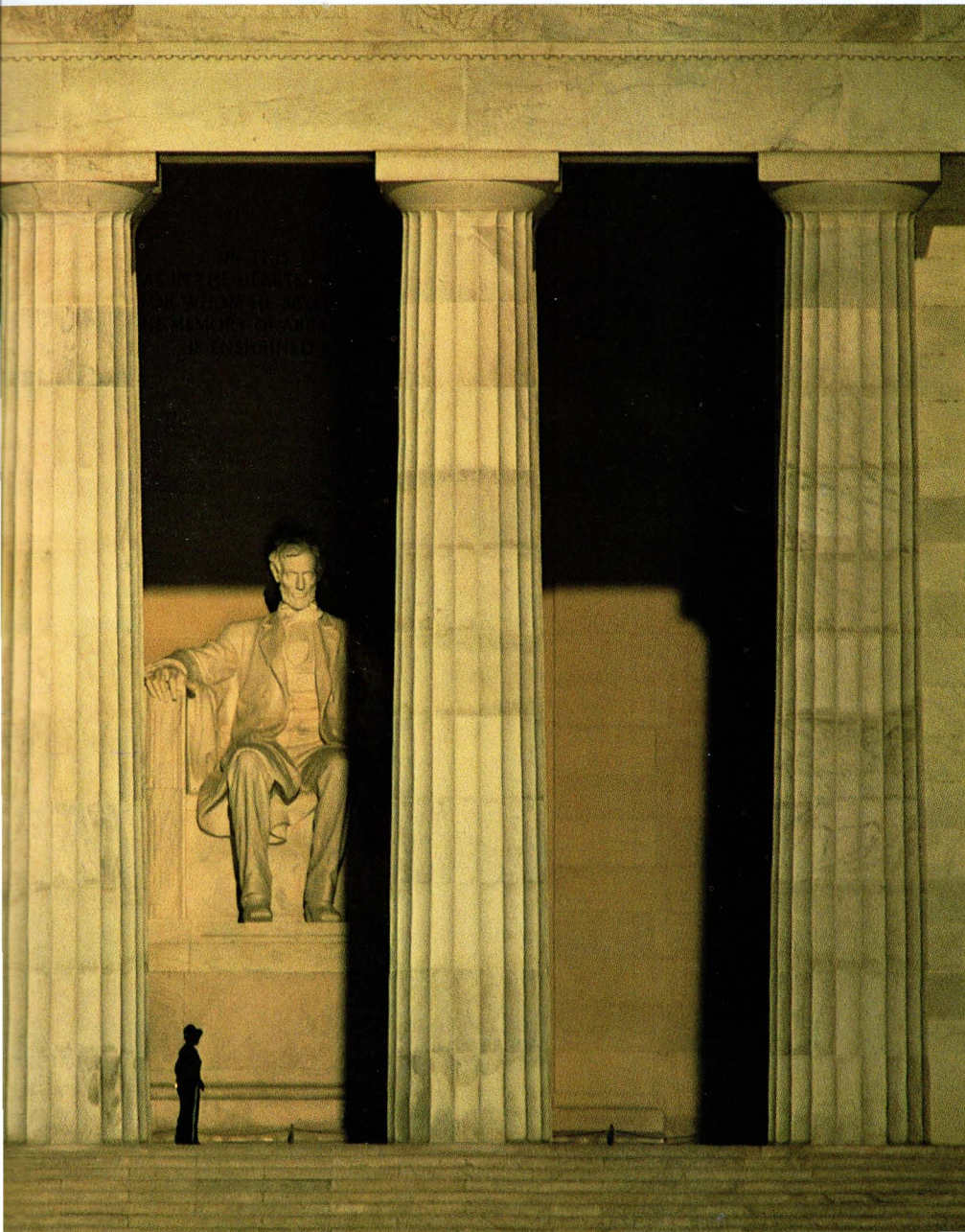
600mm f/4 IF-ED



400mm f/3.5 IF-ED



400mm f/5.6 IF-ED





Reflex Lenses

The long and short of it



Reflex lenses are really super-telephoto lenses, the most significant difference being their unusually short lens barrels. They're called "reflex" and, sometimes, "mirror" lenses because they

use mirrors and lens elements whose optical paths are made to bounce back and forth inside the lens barrel to produce an extra-long focal length without resorting to bulk or sheer physical length.

For their focal lengths (the shortest is 500mm), reflex lenses are amazingly compact, light and easy to carry around, making them firm favorites of newspaper, sports and wildlife photographers. Chromatic aberrations are kept minimal, and there's no need to compensate for infrared focusing. The eminently portable 500mm and 1000mm are easy to carry around and prove convenient for shooting wild life, sports, etc.; the 2000mm is ideal for revealing very distant subjects in sharp detail. All three models can transform out-of-focus points of light into unique doughnut-shaped blurs.

Reflex 2000mm f/11

Reflex 1000mm f/11

Reflex 500mm f/8



Micro Lenses

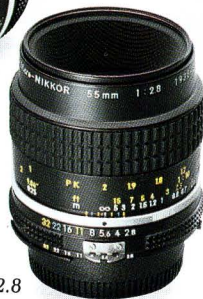
For close-up specialists



Micro 200mm f/4 IF



Micro 105mm f/4



Micro 55mm f/2.8



Close-up work, including macrophotography, is a very specialized type of photography demanding the use of special-purpose lenses such as the Micro-Nikkor lenses. Nikon makes three models: the 55mm f/2.8 which adopts the CRC system, 105mm f/4, and 200mm f/4 IF. All three are remarkable for their ability to focus ultra-close and for superb image quality at all subject-to-camera distances from macro to infinity. And they're versatile enough to be widely used as "universal" lenses. Micro-Nikkors offer continuous focusing from infinity to a reproduction ratio of 1:2. The use of an optional auto extension ring or a teleconverter makes even closer focusing possible—from 1:2 to 1:1 life-size.



Short Zoom Lenses

Optical "picture-trimming"



With its variable focal length, the zoom lens enables you to frame your subject any number of ways. Take the Zoom-Nikkor 35 ~ 70mm, for example. You can shoot the whole scene with a wide 35mm, zoom in to the normal 50mm and then go up close to 70mm short telephoto to

choose that part of the image you really want to shoot.

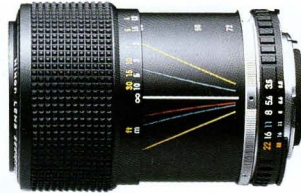
Zoom-Nikkor lenses in the short zoom range are available in three types—the 25 ~ 50mm, 35 ~ 70mm and the new 35 ~ 105mm. Plus there's the Series E 36 ~ 72mm Zoom.

The Zoom-Nikkor 25 ~ 50mm f/4 is a handy lens with a coverage of from 25mm wideangle to the 50mm normal—especially convenient for candid, travel, landscape and general photography. Correction of aberrations is excellent, and sharp images are assured at every focal length.

The Zoom-Nikkor 35 ~ 70mm f/3.5 offers a very short focusing distance of 0.7mm (2.5ft). With the use of a macro mechanism (at the focal length of 70mm with the zooming ring locked), you can get closer still to 0.35m (1.2ft), a distance that makes rendering at a 1:4 life-size reproduction ratio possible.

Genuinely versatile, the Series E 36 ~ 72mm f/3.5 Zoom delivers wideangle-to-short-telephoto coverage.

As for the new Zoom-Nikkor 35 ~ 105mm f/3.5 ~ 4.5, you can focus from 1.4m (5ft) to infinity; a separate macro ring operates over the 35 ~ 105mm focal length range, for focusing as close as 0.27m (0.9ft).



E36 ~ 72mm f/3.5

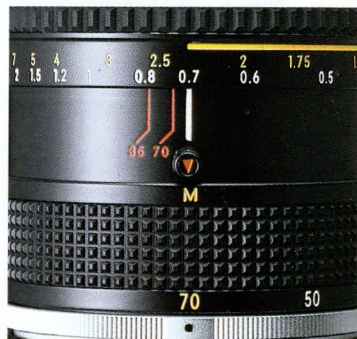
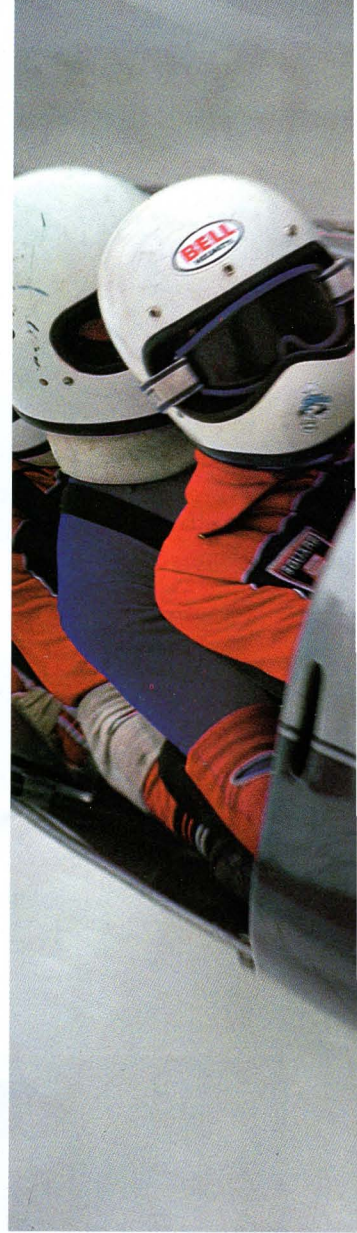
25 ~ 50mm f/4



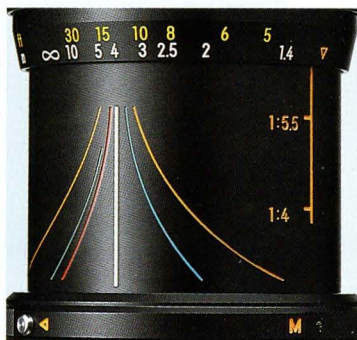
35 ~ 105mm
f/3.5 ~ 4.5



35 ~ 70mm f/3.5



Macro setting at 70mm focal length
(35 ~ 70mm f/3.5)



Macro operation throughout
35 ~ 105mm focal length range
(35 ~ 105mm f/3.5 ~ 4.5)



Telephoto Zoom Lenses

Zooming power

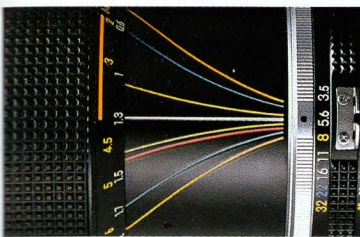


Nikkor telephoto zoom lenses are available in seven types from 50 ~ 135 mm to 360 ~ 1200 mm in focal length. Nikon Series E lenses, on the other hand, come in two types—a 75 ~ 150 mm and a 70 ~ 210 mm. Providing the shooting flexibility of a bagful of short and medium telephotos, the Series E 75 ~ 150 mm f/3.5 offers fine image quality and color rendition. With a full 3X zoom ratio, the Series E 70 ~ 210 mm f/4.5 covers most of commonly used telephoto focal lengths.

Dramatic close-ups, down to 0.56m (2ft), are another possibility thanks to the macro function. The Zoom-Nikkor 50 ~ 135 mm f/3.5 offers a coverage of from the normal picture angle of 46° to a head-and-shoulders one of 18°; macro focusing is also possible (at the 50 mm focal length setting). The Zoom-Nikkor 80 ~ 200 mm f/4 succeeds Nikon's legendary Zoom-Nikkor 80 ~ 200 mm f/4.5; the 80 ~ 200 mm f/2.8 ED is the fastest telephoto zoom lens in the world today, offering a brighter viewfinder image even in dim light. Their convenient single focusing/zooming ring assures quick response to fast-action photography. The Zoom-Nikkor 50 ~ 300 mm f/4.5 ED is a high-power zoom lens with a 6X zooming ratio, the largest among Nikkor lenses. ED glass is used to keep chromatic aberrations to a minimum. Focusing and zooming are via separate rings.

The Zoom-Nikkor 200 ~ 400 mm f/4 ED is a high speed supertelephoto zoom lens that provides exceedingly bright viewfinder images. Both the Zoom-Nikkor 180 ~ 600 mm f/8 ED and 360 ~ 1200 mm f/11 ED also use ED glass for great contrast and natural color rendition. All three lenses have automatic diaphragms that enable full-aperture metering; conveniently, each lens has a single focusing/zooming ring that assures extra handling speed.

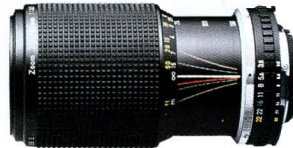




Macro setting at 50mm focal length



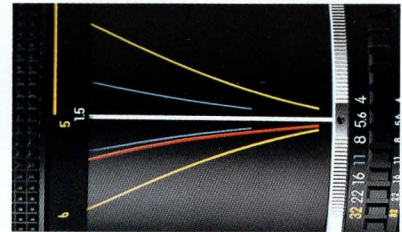
80 ~ 200mm f/2.8 ED
50 ~ 135mm f/3.5



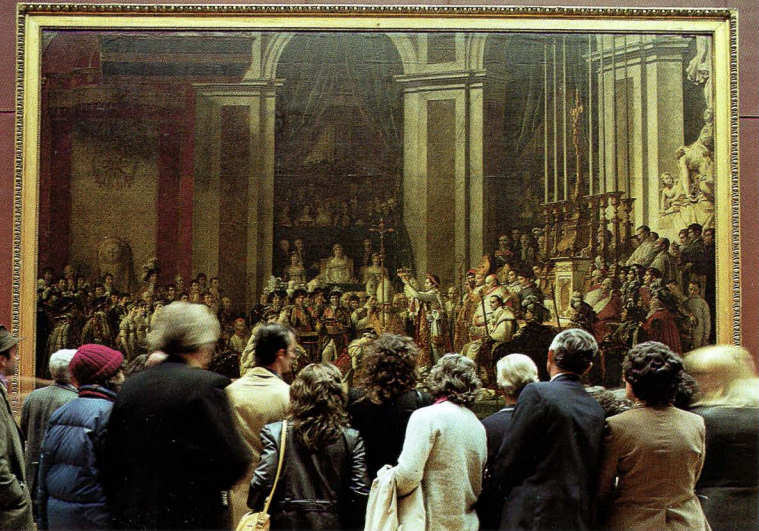
E75 ~ 150mm f/3.5



E70 ~ 210mm f/4



Macro setting at 70mm focal length



PC Lenses

All-around image control



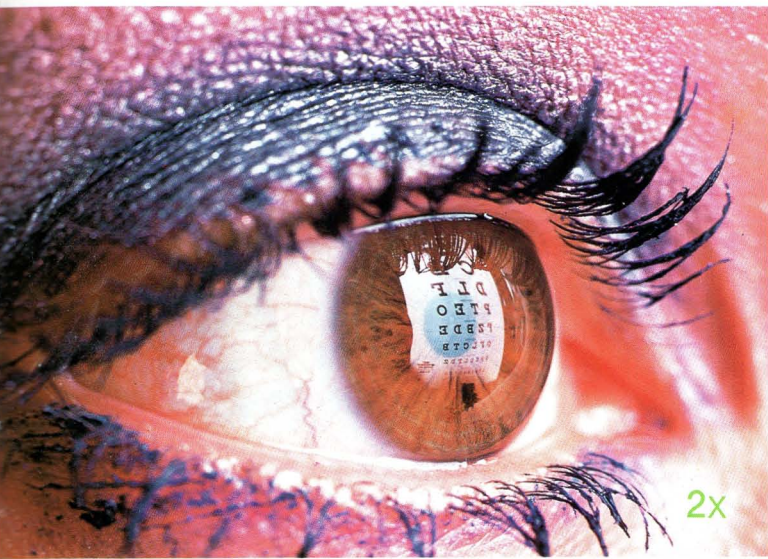
As you can surmise, PC stands for perspective control. You can shift the lens barrel of a PC-Nikkor lens up to 11mm off-axis and rotate it a full 360°. This gives you truly full image control. The PC-Nikkor 28mm f/3.5 and PC-Nikkor 35mm f/2.8 are convenient for correcting the distortion caused by horizontal and vertical lines in architectural and interior photography, or for avoiding the obstacles in front of your subject.

Night Lens

Night eyes

Designed for shooting at night or in very dim light, Nikon's unique, very bright Noct-Nikkor 58mm f/1.2 employs an aspherical lens surface to enable coma correction at full aperture. This means that those bright lights scattered over a dark background that you usually get with regular lenses will turn out crisp and natural with the Noct-Nikkor even when you set it at full aperture. The lens features outstanding aberration correction, enabling you to obtain sharp, high-contrast images at night or when there's very little light.





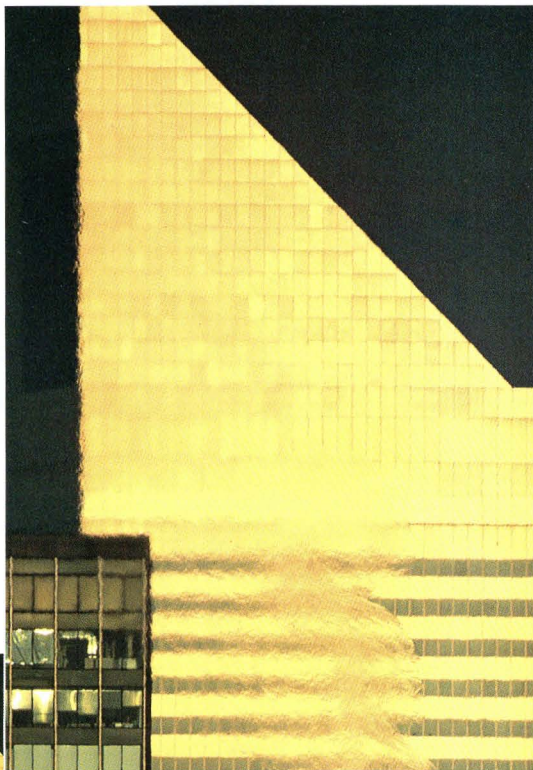
Medical Lens

For very special applications



Medical 120mm f/4 IF

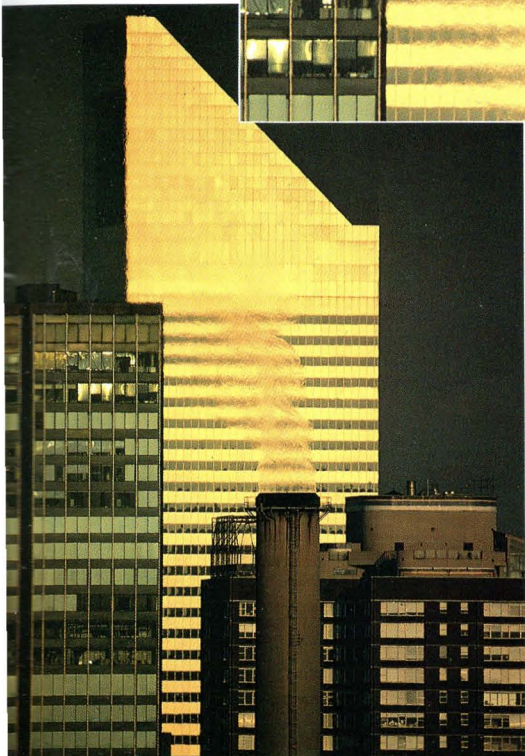
The Medical-Nikkor 120mm f/4 IF is a professional close-up lens with a built-in ringlight. It is widely used in applications ranging from medical photography to general close-ups. By itself, this lens provides continuously variable reproduction ratios from 1/11X to 1X; used in conjunction with a single 2X close-up attachment lens, the ratios are also continuously variable from 0.8X to 2X. You can superimpose the reproduction ratio in use on film. Also, optimum exposure becomes automatic because the aperture is set automatically according to the shooting distance, with flash output itself being determined by the film speed set. This has been made possible through the incorporation into the lens of a "Guide Number system".



Teleconverters

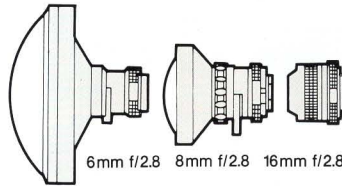
The more, the merrier

Nikon teleconverters are a wonderful way of doubling the focal length of a lens without any loss in picture quality. They are made to the same exacting standards used in the design and manufacture of Nikkor lenses. The TC-201 and TC-301 double focal lengths; the TC-14A and TC-14B multiply the focal length by 1.4X.

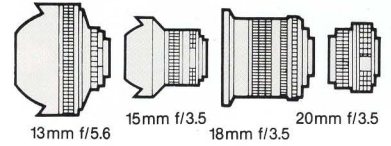


Picture Angle

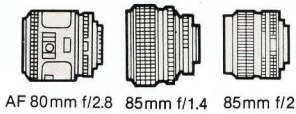
Fisheye
8mm — 180°



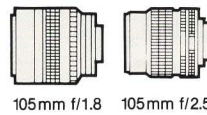
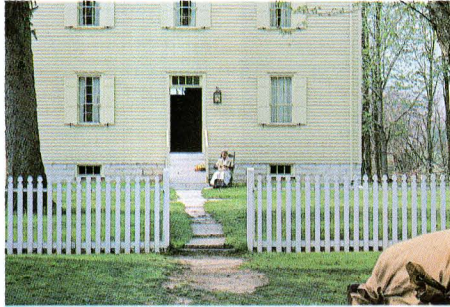
Ultra-Wideangle
15mm — 110°



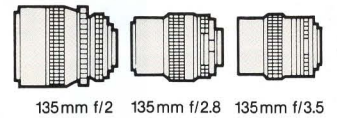
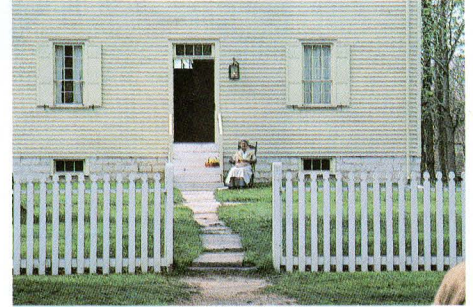
Medium Telephoto
85mm — 28°30'



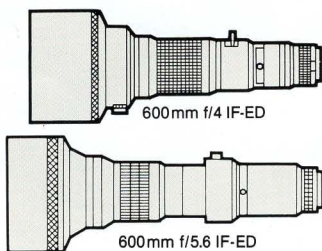
105mm — 23°20'



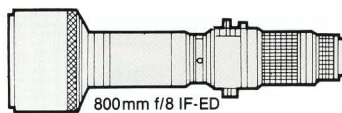
Telephoto
135mm — 18°



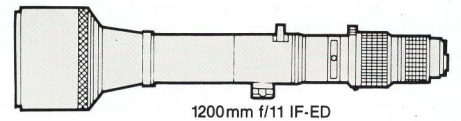
600mm — 4°10'



800mm — 3°

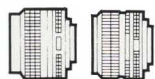


1200mm — 2°



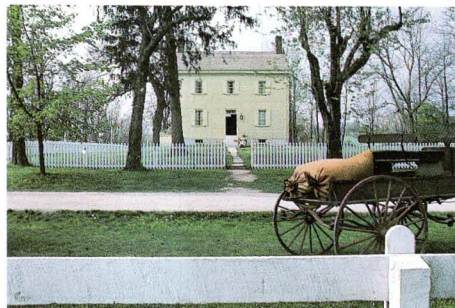
Wideangle

24mm — 84°

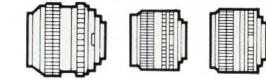


24mm f/2 24mm f/2.8

35mm — 62°



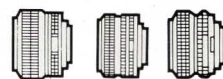
28mm f/2 28mm f/2.8 28mm f/3.5



35mm f/1.4 35mm f/2 35mm f/2.8

Normal

50mm — 46°

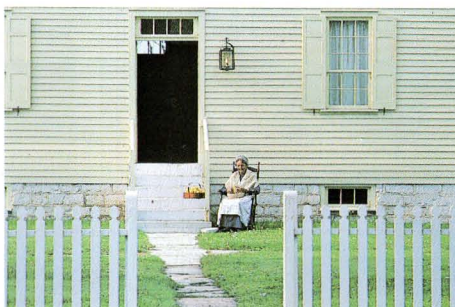


50mm f/1.2 50mm f/1.4 50mm f/1.8

180mm — 13°40'

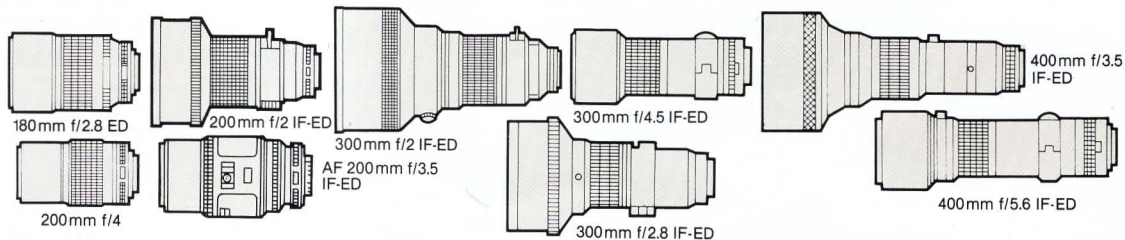


200mm — 12°20'



Super-Telephoto

400mm — 6°10'

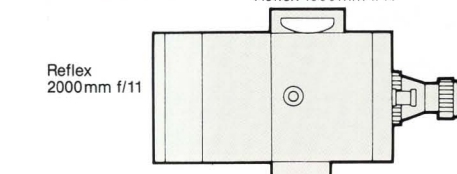
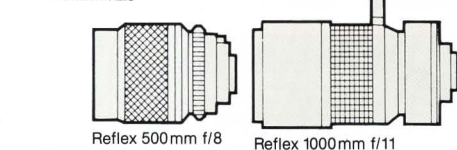
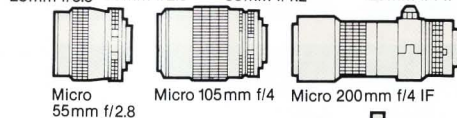
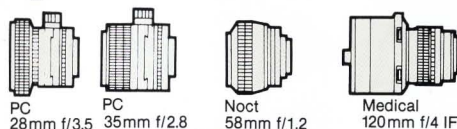


Short Zoom



25-50mm f/4 35-70mm f/3.5 35-105mm f/3.5-4.5

Special Lenses



Reflex 2000mm f/11

TC-201

TC-301

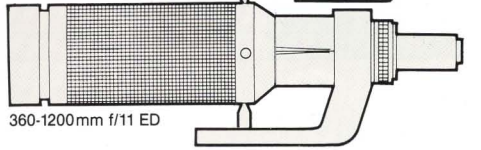
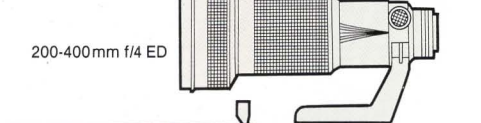
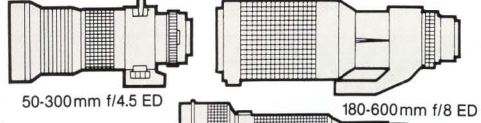
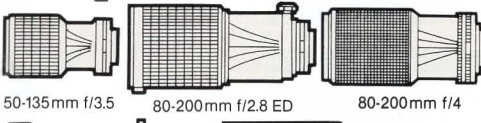
TC-14A

TC-14B

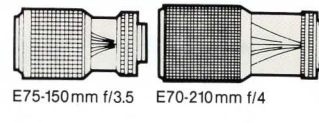
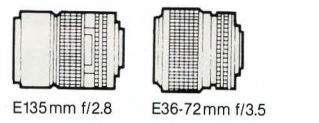
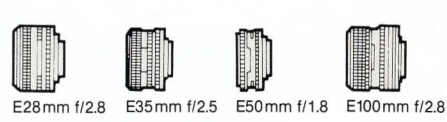
TC-14C

* Comes supplied with 300mm f/2 IF-ED (not optional)

Telephoto Zoom



Series E Lenses




Specifications


Descriptions	Lens Construction (Groups-Elements)	Picture Angle	Minimum f/Stop	Closest Marked Focusing Distance m (ft.)	Filter (mm)	Lens Case	Lens Hood	Weight (g)	Dimensions (mm) $\phi \times L$ (Lens extension from lens mount)	TC-201	TC-301	TC-14A	TC-14B
Wideangle													
13mm f/5.6	12~16	118°	22	0.3 (1)	Provided	CL-14	Built-in	1200	115 × 99 (88.5)		—		—
15mm f/3.5	11~14	110°	22	0.3 (1)	Provided	CL-17	Built-in	630	90 × 94 (83.5)		—		—
18mm f/3.5	10~11	100°	22	0.25 (0.82)	72	CL-37 CP-8	HK-9	350	75 × 72.5 (61.5)		—		—
20mm f/3.5	8~11	94°	22	0.3 (1)	52	CL-30S No.61 CP-8	HK-6	235	63 × 50 (40.5)		—		—
24mm f/2	10~11	84°	22	0.3 (1)	52	CL-31S No.61 CP-8	HK-2	300	63 × 63 (51.5)		—		—
24mm f/2.8	9~9	84°	22	0.3 (1)	52	CL-30S No.61 CP-8	HN-1	250	63 × 57 (46)		—		—
28mm f/2	8~9	74°	22	0.25 (0.9)	52	CL-31S No.62 CP-8	HN-1	360	63 × 68.5 (58.5)		—		—
28mm f/2.8	8~8	74°	22	0.2 (0.7)	52	CL-30S No.62 CP-8	HN-2	250	63 × 53 (44.5)		—		—
28mm f/3.5	6~6	74°	22	0.3 (1)	52	CL-30S No.61 CP-8	HN-2	220	63 × 54.5 (46.5)		—		—
35mm f/1.4	7~9	62°	16	0.3 (1)	52	CL-31S No.61 CP-8	HN-3	400	67.5 × 74 (62)		—		—
35mm f/2	6~8	62°	22	0.3 (1)	52	CL-30S No.61 CP-8	HN-3	280	63 × 59.5 (51.5)		—		—
35mm f/2.8	5~5	62°	22	0.3 (1)	52	CL-30S No.61 CP-8	HN-3	240	63 × 54 (46)		—		—
Normal													
50mm f/1.2	6~7	46°	16	0.5 (1.7)	52	CL-34A No.61 CP-8	HS-12, HR-2	380	68.5 × 59 (47.5)		—		—
50mm f/1.4	6~7	46°	16	0.45 (1.5)	52	CL-34A No.61 CP-8	HS-9, HR-1	250	63 × 50.5 (40)		—		—
50mm f/1.8	5~6	46°	22	0.45 (1.5)	52	CL-30S No.61 CP-8	HS-11, HR-1	210	63.5 × 48 (37)		—		—
Telephoto													
AF 80mm f/2.8	4~6	30°20'	32	1 (3.5)	52	CL-32S	HS-7, HR-5	390	69 × 78 (70)		—		—
85mm f/1.4	5~7	28°30'	16	0.85 (3)	72	CL-17 No.62 CP-9	HN-20	620	80.5 × 72.5 (64.5)		—		—
85mm f/2	5~5	28°30'	22	0.85 (3)	52	CL-31S No.61 CP-8	HS-10	310	63 × 60.5 (52.5)		—		—
105mm f/1.8	5~5	23°20'	22	1 (3.5)	62	CL-15S No.62 CP-9	Built-in	580	78.5 × 88.5 (80.5)		—		—
105mm f/2.5	4~5	23°20'	22	1 (3.5)	52	CL-32S No.62 CP-9	Built-in	435	64 × 77.5 (69.5)		—		—
135mm f/2	4~6	18°	22	1.3 (4.5)	72	CL-15S No.62 CP-9	Built-in	860	80.5 × 103 (93.5)		—		—
135mm f/2.8	4~5	18°	32	1.3 (4.5)	52	CL-32S No.62 CP-9	Built-in	435	64 × 91.5 (83.5)		—		—
135mm f/3.5	4~4	18°	32	1.3 (4.5)	52	CL-32S No.62 CP-9	Built-in	420	64 × 89.5 (81.5)		—		—
180mm f/2.8 ED	5~5	13°40'	32	1.8 (6)	72	CL-35A	Built-in	800	78.5 × 138 (130)		—		—
200mm f/2 IF-ED	8~10	12°20'	22	2.5 (9)	122	CL-63	Built-in	2400	138 × 222 (214)		—		—
AF 200mm f/3.5 IF-ED	6~8	12°20'	32	2 (7)	62	CL-35A	Built-in	870	80 × 157 (149)		—		—
200mm f/4	5~5	12°20'	32	2 (7)	52	CL-13 No.63 CP-9	Built-in	510	65 × 124 (116)		—		—
300mm f/2 IF-ED	8~11	8°10'	16	4 (13)	52	CT-300	Built-in	7100	183 × 339 (331)		—		—
300mm f/2.8 IF-ED	6~8	8°10'	22	4 (13)	122/39°	CL-63	Built-in	2500	138 × 249 (241)		—		—
300mm f/4.5	5~6	8°10'	32	3.5 (12)	72	CL-20A	Built-in	1200	78.5 × 202 (194)		—		—
300mm f/4.5 IF-ED	6~7	8°10'	22	2.5 (10)	72	CL-20A	Built-in	990	80 × 200 (192)		—		—
400mm f/3.5 IF-ED	6~8	6°10'	22	4.5 (15)	122/39°	CL-61A No.57	Built-in	2800	134 × 304 (296)		—		—
400mm f/5.6 IF-ED	6~7	6°10'	32	4 (15)	72	CL-27A	Built-in	1200	85 × 262 (254)		—		—
600mm f/4 IF-ED	6~8	4°10'	22	6.5 (25)	160/39°	CT-601	Built-in	6300	177 × 460 (452)		—		—
600mm f/5.6 IF-ED	6~7	4°10'	32	5.5 (20)	122/39°	CL-62A No.57	Built-in	2700	134 × 382 (374)		—		—
800mm f/8 IF-ED	7~9	3°	32	10 (35)	122/39°	CT-1203	Built-in	3300	134 × 460 (452)		—		—
1200mm f/11 IF-ED	8~9	2°	32	14 (45)	122/39°	CT-1203	Built-in	3900	134 × 577 (569)		—		—
Reflex													
500mm f/8	3~5	5°	—	4 (13)	39	CL-23	Screw-in	1000	93 × 142 (135)		—		—
1000mm f/11	5~5	2°30'	—	8 (25)	39	CL-29	Built-in	1900	119 × 241 (233.5)		—		—
2000mm f/11	5~5	1°10'	—	18 (60)	Built-in	Trunk case	—	17500	262 × 598 (593.5)		—		—
Zoom													
25~50mm f/4	10~11	80°40'~47°50'	22	0.6 (2)	72	CL-15S No.62 CP-9	HK-7	600	75 × 112 (104)		—		—
35~70mm f/3.5	9~10	62°~34°20'	22	0.35 (1.2)	62	CL-33S No.62 CP-9	HN-22	520	66.5 × 105 (96.5)		—		—
35~105mm f/3.5~4.5	12~16	62°~23°20'	22	0.27 (0.9)	52	CL-33S No.63	HK-11	510	64 × 95 (86.5)		—		—
50~135mm f/3.5	13~16	46°~18°	32	0.6 (2)	62	CL-38	HK-10	700	71 × 133 (125)		—		—
80~200mm f/2.8 ED	11~15	30°10'~12°20'	32	2.5 (10)	95	CL-66	HN-25	1900	99 × 231 (223)		—		—
80~200mm f/4	9~13	30°10'~12°20'	32	1.2 (4)	62	CL-35A No.63	HN-23	810	73 × 162 (154)		—		—
50~300mm f/4.5 ED	11~15	46°~8°10'	32	2.5 (8.5)	95	CL-64 CE-2	HK-5	1950	98 × 247 (239)		—		—
200~400mm f/4 ED	10~15	12°20'~6°10'	32	4 (13)	122	No.58	Built-in	3650	144 × 338 (330)		—		—
180~600mm f/8 ED	11~18	13°40'~4°10'	32	2.5 (8.5)	95	CZ-1860	HN-16	3600	105 × 402 (395)		—		—
360~1200mm f/11 ED	12~20	6°50'~2°	32	6 (20)	122	CZ-3612	HN-17	8250	125 × 704 (696)		—		—

Descriptions Lens	Lens Construction (Groups-Elements)	Picture Angle	Minimum f/Stop	Closest Marked Focusing Distance m (ft.)	Filter (mm)	Lens Case	Lens Hood	Weight (g)	Dimensions (mm) φ × L (Lens extension from lens mount)	TC-201	TC-301	TC-14A	TC-14B
Fisheye													
6mm f/2.8	9 ~ 12	220°	22	0.25 (0.9)	Built-in	Trunk case	—	5200	236 × 171 (160)		—		—
8mm f/2.8	8 ~ 10	180°	22	0.3 (1)	Built-in	CL-11	—	1100	123 × 139 (128)		—		—
16mm f/2.8	5 ~ 8	180°	22	0.3 (1)	Provided	CL-30S No.61 CP-8	—	330	63 × 66 (55.5)		—		—
Special Purpose													
PC 28mm f/3.5*	8 ~ 9	74°	22	0.3 (1)	72	CL-34A No.62	HN-9	380	78 × 69 (64.5)	—	—	—	—
PC 35mm f/2.8*	7 ~ 7	62°	32	0.3 (1)	52	CL-34A No.61	HN-1	320	62 × 66 (61.5)	—	—	—	—
Noct 58mm f/1.2	6 ~ 7	40°50'	16	0.5 (1.7)	52	CL-34A No.61 CP-8	HS-7, HR-2	465	74 × 63 (51.5)		—		—
Micro 55mm f/2.8	5 ~ 6	43°	32	0.25 (0.9)	52	CL-31S No.61 CP-8 CL-33S* No.62*	HN-3	290	63.5 × 70 (62)		—		—
Micro 150mm f/4	3 ~ 5	23°20'	32	0.47 (1.55) 0.419 (1.4) ^Δ	52	CL-33S CP-9 CL-35A ^Δ No.63 ^Δ	Built-in	500	68.5 × 104 (96)			—	
Micro 200mm f/4 IF	6 ~ 9	12°20'	32	0.71 (2.34)	52	CL-36	Built-in	800	66 × 180 (172)	—			—
Medical 120mm f/4 IF [■]	6 ~ 9	18°50' (1/11X)	32	0.35 (1.1)	49 [▲]	Leatherette compartment case	—	890	98 × 150 (142)	—	—	—	—
Nikon Series E Lenses													
28mm f/2.8	5 ~ 5	74°	22	0.3 (1)	52	CL-30S No.61 CP-8	HR-6	155	62.5 × 44.5 (35)		—		—
35mm f/2.5	5 ~ 5	62°	22	0.3 (1)	52	CL-30S No.61 CP-8	HR-4	150	62.5 × 44.5 (35)		—		—
50mm f/1.8	5 ~ 6	46°	22	0.6 (2)	52	CL-30S No.61 CP-8	HR-4	155	62.5 × 33 (24)		—		—
100mm f/2.8	4 ~ 4	24°20'	22	1 (3.5)	52	CL-31S No.61 CP-8	HR-5	215	62.5 × 57.5 (49.5)		—		—
135mm f/2.8	4 ~ 4	18°	32	1.5 (5)	52	CL-32S No.62 CP-9	Built-in	395	62.5 × 88.5 (80.5)		—		—
36 ~ 72mm f/3.5 Zoom	8 ~ 8	62° ~ 33°30'	22	1.2 (4)	52	CL-32S No.62 CP-9	HK-8	380	67 × 71.5 (63)		—		—
75 ~ 150mm f/3.5 Zoom	9 ~ 12	31°40' ~ 17°	32	1 (3.5)	52	CL-13 No.63 CP-9	HN-21	520	65 × 125 (117)		—		—
70 ~ 210mm f/4 Zoom	9 ~ 13	34°20' ~ 11°50'	32	0.56 (2)	62	CL-35A No.63	HN-24	730	72.5 × 156 (148)		—		—
Teleconverters													
TC-201	5 ~ 7	—	—	—	—	CL-30S No.61 CP-8	—	230	64.5 × 52	—	—	—	—
TC-301	5 ~ 5	—	—	—	—	CL-33S No.62 CP-9	—	280	64.5 × 115	—	—	—	—
TC-14A	5 ~ 5	—	—	—	—	CL-30S No.61	—	145	65 × 25.5	—	—	—	—
TC-14B	5 ~ 5	—	—	—	—	CL-30S No.61	—	165	65 × 34	—	—	—	—
TC-14C [◇]	5 ~ 5	—	—	—	—	CL-30S No.61	—	200	65 × 35.5	—	—	—	—

 : Usable.

 : When used at smaller aperture than f/11 with high shutter speeds, there is occasional uneven exposure.

 : Usable, but there is occasional vignetting.

 : Usable, if the rear screw-in filter is removed.

* : Preset. Not usable with the EM.

○ : Front filter/rear filter

• : w/PK-13

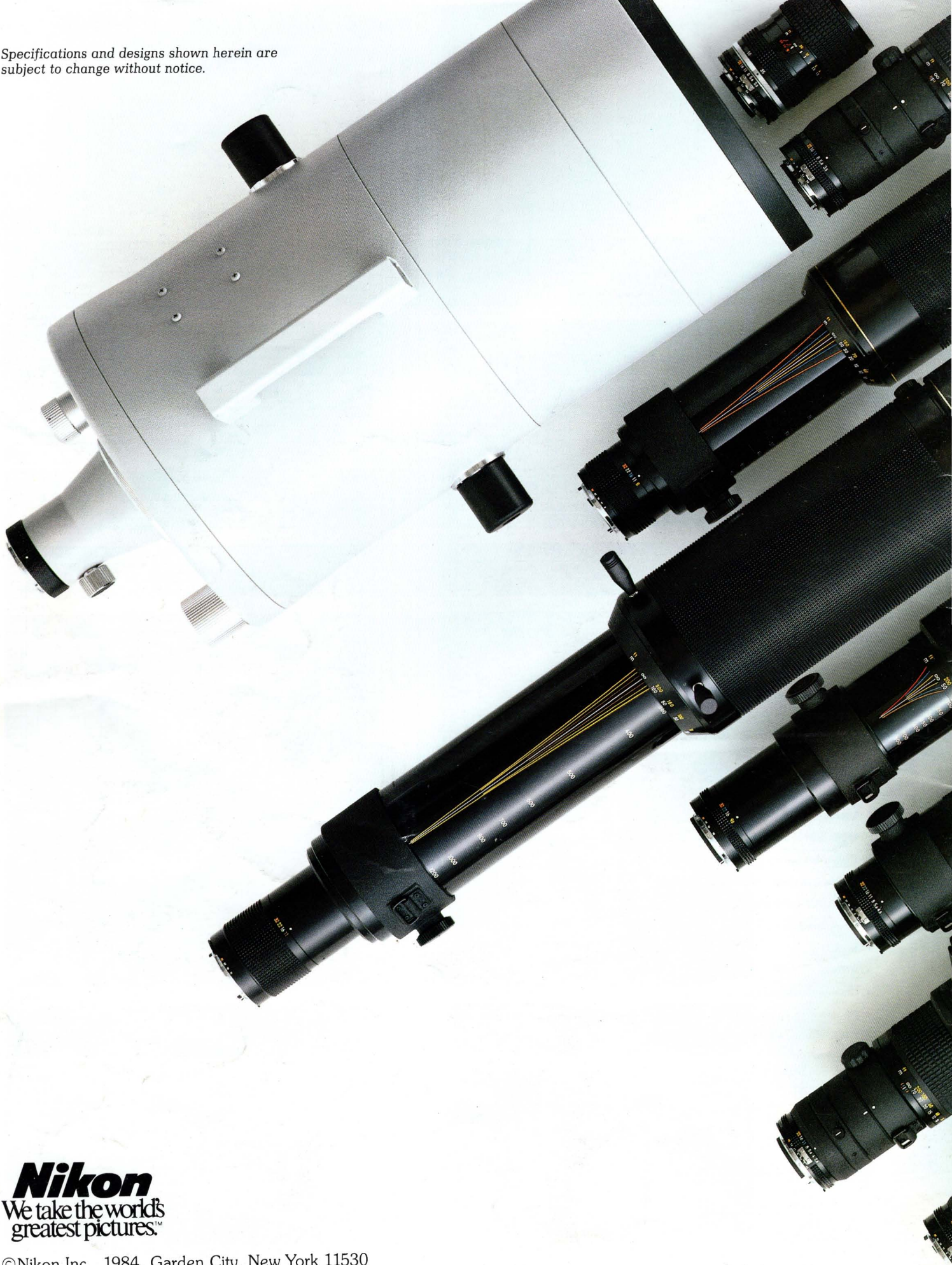
Δ : w/PN-11

▲ : Close-up attachment lens size.

■ : Power source: Power is supplied only by an AC Power Unit LA-2 or a DC Power Unit LD-2 (both optional).

◇ : Comes supplied with 300/2 IF-ED (Not optional)

Specifications and designs shown herein are subject to change without notice.



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