Other Nikon product brochures

Nikon offers comprehensive brochures on all of our digital imaging products. Please consult your nearest authorized dealer, or check your local Nikon website via http://nikonimaging.com/global/about/worldwide.htm



















Imaging System







You can also download brochures at http://www.nikonimaging.com/global/products/brochure/



TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.



NIKON CORPORATION

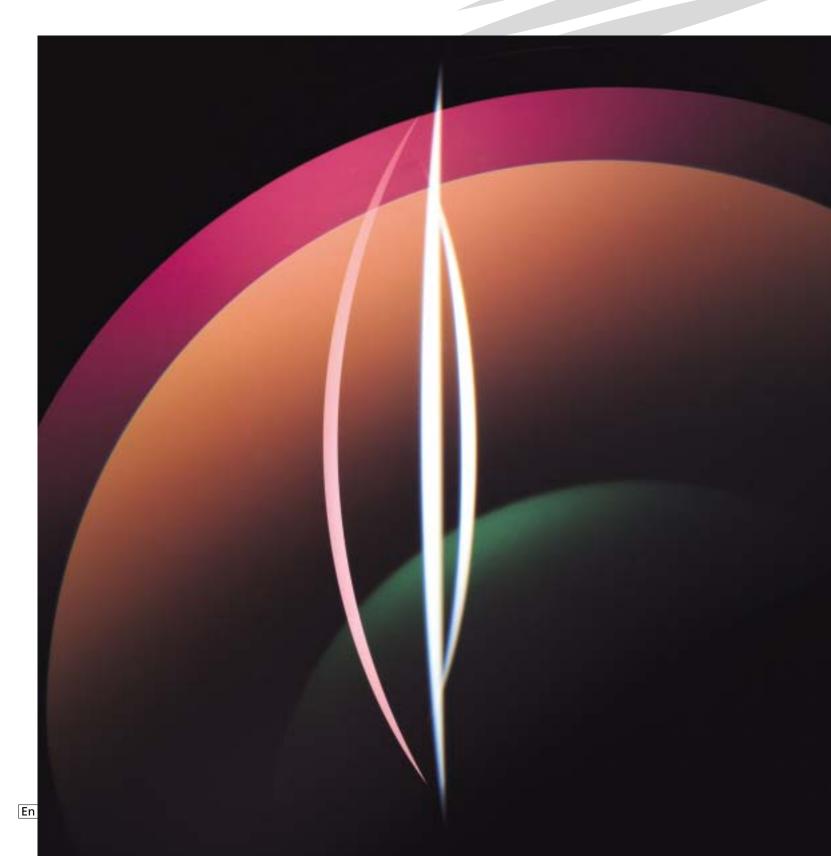
Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8331, Japan http://nikonimaging.com/





NIKKOR LENSES

At the heart of the image



Nikkor Lenses — Seamless Performance, Abs olute Precision, and Total Reliability

hen it comes to choosing photographic equipment, perhaps the most important decision a photographer faces is which lens system to use. For the majority of professional photographers, that choice is simple: Nikkor. Why? Because Nikkor lenses offer unrivalled clarity, sharpness, focusing accuracy, range and reliability.

Nikon's total commitment to controlling every aspect of lens manufacturing. By selecting only the finest raw materials and employing the most advanced processing and design techniques, Nikon produces the precision-crafted lens elements that help you take the world's greatest pictures.

This no-compromise attitude toward ultrahigh-tech manufac-The reasons for this are many, not the least of which is turing extends to performance. For each Nikkor lens is

designed to function seamlessly with Nikon SLRs in a synergy of purpose that is simply unparallelled. This is exemplified most clearly in the legendary Nikon F mount. For even the most advanced Nikkor lenses incorporate this standard that has won over decades of devotees for its consistency and reliability. This design also ensures that when we release revolutionary cameras like the Nikon F6, F5 and D2 series with features

such as 3D Colour Matrix Metering and i-TTL Balanced Fill-Flash, you can be sure to find an array of Nikkor lenses that can handle these advances too.

Once you see for yourself how smoothly the Nikon-Nikkor combination works, chances are you'll do what most of the world's professional photographers do — when you reach for a lens, it'll be a Nikkor.

Nikkor Le





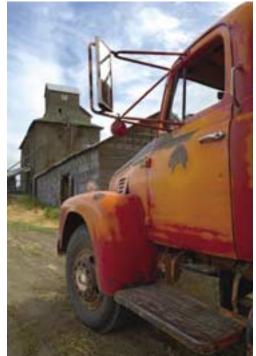


Fisheye & Wide angle & A Nikkor Lenses



Wideangle AF **Nikkors**, including AF Fisheye Nikkor, provide superior depth of field and fast apertures for photojournalism and travel. There are also Normal AF **Nikkors** for a natural perspective for diverse applications, from landscapes to candid shots.

creative potential.





Provide both versatility and portability for every type of photographer from beginners to pros for every moment.



Telephoto

Telephoto AF Nikkors, including AF DC-Nikkors, AF-S Nikkors, and **AF-S Teleconverters**, create dramatic sports, wildlife, portrait photographs and everything in between. AF DC-Nikkors offer creative focusing control for exceptional portraits.





For absolute clarity and sharpness of detail for close-up photography.







A versatile and unique selection of manual focus lenses.



A history of exceptional performance —

Nikkor lenses N I ikon began producing lenses under the Nikkor name in 1933, and since then more than 35 million lenses have been sold worldwide. Throughout the years, our unwavering commitment to quality and innovation has yielded many breakthroughs in the photographic industry. For example, Nikon introduced the Nikkor Auto 24mm f/2.8 incorporating Nikon-pioneered Close-Range Correction (CRC) system in 1967, and started production of aspherical lenses in 1968. In addition, Nikon developed ED (Extra-low **Dispersion) glass** which made its first appearance in the 300mm f/2.8 ED Nikkor telephoto in 1972, and is now incorporated in many other Nikkors. And in 2003, Nikon produced the **AF-S DX Zoom-Nikkor** 12-24mm f/4G IF-ED, as the first lens optimised for Nikon DX-Format digital SLRs in the new DX Nikkor series.

> These are just a few of the many achievements in lens design that exemplify Nikon's position as the world's preeminent manufacturer of professional photographic equipment. The following offers in-depth technical information that will help you understand more fully that Nikkor lenses provide superior performance and are thus the best match for your Nikon SLR.

improved overall lens design and ensuring the superior performance of the finished product.

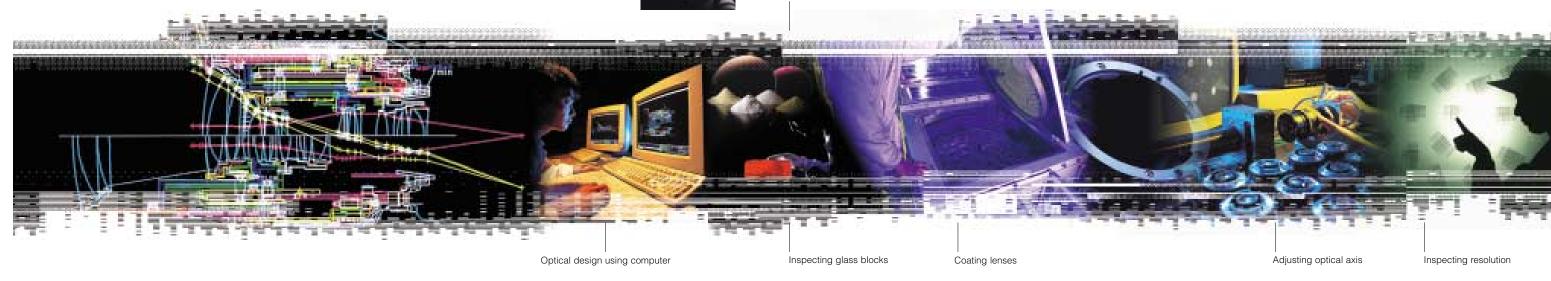
Electronics — microcomputer innovation for precise performance

The recent advances in the computer industry play an integral role in the makeup as well as design of Nikkor lenses. For in addition to superior optics, each AF Nikkor features a built-in microcomputer. This microcomputer works with the Nikon AF camera computer system to provide information that ensures fast autofocus, Matrix exposure metering,

that your Nikon camera is compatible with most Nikkor lenses and that your Nikon equipment can accommofuture advances.

Moreover, the F mount achieves something no other design can — it is compatible with both types of lens drive systems — the conventional mechanical AF coupling design for wideangle and standard zooms, and Nikon's exclusive SWM (Silent Wave Motor) system featured in the most advanced supertelephoto Nikkors. This is just one example why the Nikon F perature-resistance analysis. One of these tests concerns the lens' Optical Transfer Function (OTF), which evaluates the resolving power and contrast of the lens. To perform this test, Nikon developed the exclusive Nikon OTF Analyser (NOA).

In addition to these uncompromising tests, Nikon technicians further guarantee the performance of the final product by going over every detail of every finished lens. They check and assure the mechanical construction. electronics, AF movement, zoom and aperture mechanisms, and lens resolution.



Optical glass

raw materials

Where it all begins -Nikon glassworks

To make the finest lens elements, you must begin with the finest optical glass. To ensure this, Nikon does what few makers can — it manufactures the glass for nearly all Nikkor lenses in its own glassworks. This means our lens designers have over 200 types of glass to choose from, giving them an exceptional variety from which to select just the right optical glass for their requirements.

Moreover, when these requirements demand lens properties not yet available, the glass technicians work to find a solution — which often results in engineering new types of glass. This is precisely how Nikon developed Extra-low Dispersion (ED) glass in 1972 — to meet design demands for supertelephoto Nikkors.

Lens construction

The peerless craftsmanship of Nikkor lens elements is matched by the structures house them. Only that best materials are used for the mechanical construction of each lens Fine metal alloys polycarbonates make the helicoids in some Inner and outer sleeves are tooled with maximum precision, resulting in the smooth lens movement that characterises

the Nikkor lens. The lens mount, too, features similar materials.

Computers and lens design

Nikon designers employ the latest computers and Nikondeveloped software to determine the optical design of each lens. Using this data together with their accumulated experience, they create the finest SLR lenses avail-

Computer-aided design simulation is also used to ensure the utmost precision in the optical and mechanical parts of each lens as well as the quality of the lens assembly process. In this way, computers can identify problematic areas thus leading to

Balanced Fill-Flash, and other Nikon innovations in SLR performance.

Only Nikkor lenses are designed for today's and tomorrow's Nikon SLR cameras, based on information and insight available exclusively within Nikon — including autofocusing parameters. No other lens maker can provide this type of assurance.

The Nikon F lens mount a tradition of continuity and forward compatibility

The debut of the original Nikon F also marked the introduction of what is perhaps its most significant technological innovation the Nikon F lens mount. This legendary design ensures including vibration and tem-

mount continues to be an integral part of Nikon camera equipment design.

Reliability — lenses made to withstand the toughest conditions

Each Nikkor lens is manufactured to meet the most stringent requirements in the industry. The optical glass is scrutinised to assure it is free of imperfections, whereupon it is then remelted, cast. ground, polished and hardcoated to emerge as one of the world's finest lens elements. After being precisely mounted in lens barrels, the lens elements and their assemblies undergo a battery of tests and inspections.

All of which ensures that the lens does what it's supposed to — provide the outstanding optical performance and reliability that make Nikkor lenses the pro's choice the world



Designed to be the best lenses in the world

ED glass — an essential element of Nikkor telephoto lenses



that offer superior ED glass sharpness and colour correction by minimising chromatic aberration.

Put simply, chromatic aberration is a type of image and colour dispersion that occurs when light rays of varying wavelengths pass through optical glass. In the past, correcting this problem for telephoto lenses required special

ness and contrast even at their largest apertures. In this way, Nikkor's ED-series lenses exemplify Nikon's preeminence in lens innovation and performance.

Nikon Super Integrated Coating ensures exceptional performance

To enhance the performance of its optical lens elements. Nikon employs an exclusive multilayer lens coating that helps reduce ghost and flare to a negligible level.

Nikon Super Integrated Coating achieves a number of objectives, including min-

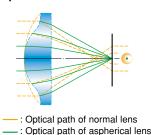
Nano Crystal Coat

Nano Crystal Coat is an antireflective coating that originated in the development of NSRseries (Nikon Step and Repeat) semiconductor manufacturing devices. It virtually eliminates internal lens element reflections across a wide range of wavelengths, and is particularly effective in reducing ghost and flare peculiar to ultra-wideangle lenses. Nano Crystal Coat employs multiple layers of Nikon's outstanding extra-low refractive index coating, which features ultrafine crystallized particles of

Nikon employs three types of aspherical lens elements. Precision-ground aspherical lens elements are the finest expression of lenscrafting art, demanding extremely rigorous production standards. **Hybrid** lenses are made of a special plastic moulded onto optical glass. Moulded glass aspherical lenses are manufactured by moulding a unique type of optical glass using a special metal die technique.

Close-Range Correction system

The Close-Range Correction (CRC) system is one of **Aspherical lens**



optical movement is limited to the interior of the nonextending lens barrel. This allows for a more compact, lightweight construction as well as a closer focusing distance. In addition, a smaller and lighter focusing lens group is employed to ensure faster focusing. The IF system is featured in most Nikkor telephoto and selected Nikkor zoom lenses.

Rear Focusing (RF)

With Nikon's Rear Focusing (RF) system, all the lens elements are divided into specific lens groups, with only the

camera bodies. This then handheld makes possible advances like 3D Matrix Metering and 3D Multi-Sensor Balanced Fill-

Note: D-type and G-type Nikkors provide distance information to the following cameras: Auto exposure; F6, F5, F100, F90X, F80, F75, F70, F65, F60, F55, F50, PRONEA S, PRONEA 600i, D2 series, D1 series, D200, D100, D70s/D70 and D50.

Flash control; F6, F5, F100, F90X. F80. F75, F70, D2 series, D1 series, D200, D100, D70s/D70 and D50.

Silent Wave Motor

Nikon's AF-S technology is yet another reason professional photographers like Nikkor telephoto lenses

shooting at dusk. night, and even in poorly lit interiors. The lens' VR system also

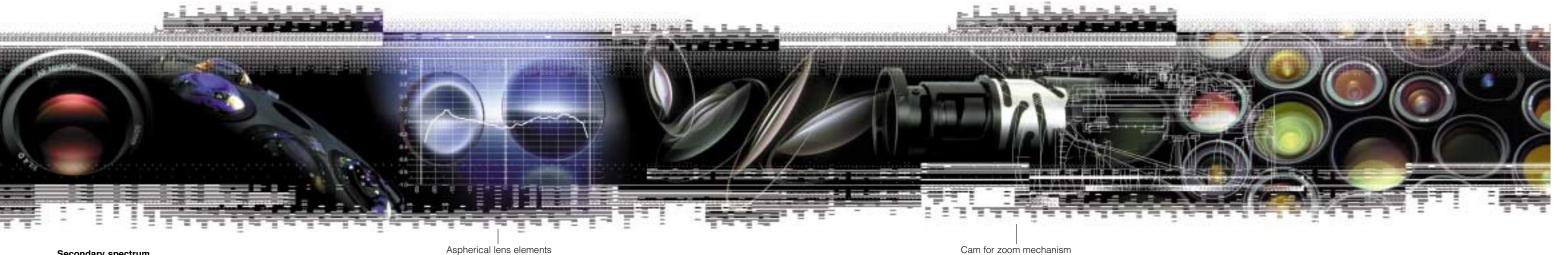


detects automatically when the photographer pans — no special mode is required.

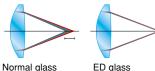
* As determined by Nikon performance tests.

DX Nikkor

Compact and lightweight DX Nikkor lenses featuring a smaller image circle are specially designed and optimised



Secondary spectrum



optical elements that offer anomalous dispersion characteristics — specifically calcium fluoride crystals. However, fluorite easily cracks and is sensitive to temperature changes that can adversely affect focusing by altering the lens' refrac-

tive index. So Nikon designers and engineers put their heads together and came up with ED glass, which offers all the benefits, yet none of the drawbacks of calcium fluorite-based glass. With this innovation, Nikon developed several types of ED glass suitable for various lenses.

They deliver stunning sharp-

imised reflection in the wider wavelength range and superior colour balance and reproduction, even with Zoom-Nikkors featuring a large number of elements. It is also effective in minimising ghost and flare caused by internal reflections from the image sensors of Nikon digital SLRs.

Also, Nikon's multilayer coating process is tailored to the design of each particular lens. The number of coatings applied to each lens element is carefully calculated to match the lens type and glass used, and also to assure the uniform colour balance that characterises Nikkor lenses. This results in lenses that meet much higher standards than the rest of the

nano size (one nanometer equals one millionth of a mm). Nikon now proudly marks a world first by applying this coating technology to a wide range of lenses for use in consumer optical products.

Aspherical lens elements

Nikon introduced the first photographic lens with aspherical lens elements in 1968. What sets them apart? Aspherical lenses virtually eliminate the problem of coma and other types of lens aberration — even when used at the widest aperture. They are particularly useful in correcting the distortion in wideangle lenses. In addition, use of aspherical lenses contributes to a lighter and smaller lens design.

Nikon's most important focusing innovations, for it provides superior picture quality at close focusing distances and increases the focusing range.

With CRC, the lens elements are configured in a "floating element" design wherein each lens group moves independently to achieve focusina. This ensures superior lens performance even when shooting at close distances.

The CRC system is used in fisheye, wideangle, Micro, and selected medium telephoto Nikkors.

Internal Focusing (IF)

Imagine being able to focus a lens without it changing in size. Nikon's IF technology enables just that. All internal

CRC (AF 24mm f/2.8D)



Focusing lens groups

IF (AF-S 300mm f/2.8D IF-ED II)

RF (AF DC 135mm f/2D)



and faster. AF DC-Nikkor lenses— unique Nikkors for

rear lens group moving for

focusing. This makes autofo-

cusing operation smoother

unique portraits

AF DC-Nikkors feature exclusive Nikon Defocus-image Control technology. This allows photographers to control the degree of spherical aberration in the foreground or background by rotating the lens' DC ring. This will create a rounded out-of-focus blur that is ideal for portrait photography. No other lenses in the world offer this special technique

Distance information

D-type and G-type Nikkors relay subject-to-camera distance information to AF Nikon

AF-S Nikkors feature Nikon's SWM which converts "travelling waves" into rotational energy to focus the optics. This enables high-speed autofocusing that's extremely accurate and super quiet.

M/A mode

AF-S Nikkors feature Nikon's exclusive M/A mode, that allows switching from autofocus to manual operation with virtually no time lag — even during AF servo operation and regardless of AF mode in use. V Vibration Reduction

(VR)

This innovative VR system minimises image blur caused by camera shake, and offers the equivalent of shooting at a shutter speed three stops

(eight times) faster.* It allows

These are ideal options for landscape photographers and others who need to shoot expansive scenes with Nikon DX-Format digital SLRs. Note: We do not recommend use of DX Nikkor with

for Nikon D2-series, D1-series,

D200. D100. D70s/D70 and

D50 digital SLR cameras.

35mm (135) or IX240 cameras





D Wikkor Lenses





DX Nikkors distinguishing features

he newest addition to Nikon's world-class Nikkor lens lineup, the DX Nikkor series was developed in response to the demands of professional and advanced amateur digital SLR users for higher optical performance. The popularity of Nikon's digital SLRs has risen significantly, and Nikon has answered with the kind of innovation you'd expect from a world leader in optical technology.

Nikon created the DX Nikkor series to provide Nikon DX-Format digital SLR owners with greater wideangle covering power. Mounting a 35mm format 14mm wideangle lens, for example, onto a digital camera would result in a picture angle equivalent to that of a 21mm lens — negating the benefit of wideangle coverage. DX Nikkor, the first interchangeable lenses designed specifically for use with Nikon DX-Format digital SLRs, give owners wideangle shooting capability in a compact, lightweight package.

Nikon offers seven DX Nikkor lenses—various Zoom-Nikkor lenses and the 10.5mm Fisheye—to cover a range of shooting situations. In addition to lenses with popular zoom ranges, the lineup includes newer zoom lenses with telephoto ranges that extend up to 200mm (equivalent to 300mm in 35mm format). The 18-200mm lens offers an astonishing 11.1x zoom power.

Note: We do not recommend use of DX Nikkor lenses with 35mm (135) or IX240 format cameras.

AF DX Fisheye-Nikkor 10.5mm f/2.8G ED* D S DX



Frame-filling fisheye lens exclusively for use with Nikon DX-Format digital

- Full-frame fisheye images with a picture angle of 180° (diagonal)
- ED glass elements
- Focuses down to 0.14m/0.46 ft.



ED glass elements

Lens construction: 10 elements in 7 groups Closest focusing: 0.14m/0.46 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 16mm Filter attachment size: Rear-attachment type □27mm Hood: Built-in Dimensions: 63 x 62.5mm Weight: 305g



Ultra-wideangle zoom lens for exclusive use with Nikon DX-Format digital

- Aspherical lenses and ED glass elements
- Built-in SWM for ultra-fast, ultra-quiet operation
- M/A mode for quick switching between autofocus and manual operation
- Lightweight and compact design



Lens construction: 11 elements in 7 groups Closest focusing: 0.3m/1 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 18-36mm Filter attachment size: 77mm Hood: HB-23 (provided) Dimensions: 82.5mm x 90mm Weight: 465a

AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED* (3.2x) 🗓 🖾 🖫 🖸 📉 📆 🗓



Wideangle zoom lens exclusively for use with Nikon DX-Format digital SLR

- Aspherical lenses and ED glass ele-
- Built-in SWM for ultra-fast, ultra-quiet operation
- M/A mode for quick switching between autofocus and manual operation
- Lightweight and compact design



Lens construction: 14 elements in 10 groups Closest focusing: 0.36m/1.2 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 25.5-82.5mm Filter attachment size: 77mm Hood: HB-31 (provided) Dimensions: 85.5 x 110.5mm Weight: 755a

AF-S DX Zoom-Nikkor 18-55mm f/3.5-5.6G ED* (3.0x) 🖭 🖾 🖸 📈



Affordable wideangle zoom lens for exclusive use with Nikon DX-format digital SLRs

- Ultracompact and light (210g)
- Aspherical lens and ED glass elements
- Newly developed, compact SWM
- Focuses as close as 0.28m/0.9 ft.



Lens construction: 7 elements in 5 groups Closest focusing: 0.28m/0.9 ft. Picture angle with Nikon DX Format: equivalent to 27-82.5mm in 35mm (135) format Filter attachment size: 52mm Hood: HB-33 Dimensions: 69 x 74mm Weight: 210g

^{*} The G-type Nikkor has no aperture ring; aperture should be selected from camera body.



AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED © Joe McNally

AF-S DX Zoom-Nikkor 18-70mm f/3.5-4.5G IF-ED* (3.8x) 🗓 🔯 🗓 🖼 🔯



High-power wideangle zoom lens exclusively for use with Nikon DX-Format digital SLR

- Aspherical lens and ED glass elements
- Built-in SWM for ultra-fast, ultra-quiet operation
- M/A mode for quick switching between autofocus and manual operation
- Lightweight and compact design



Lens construction: 15 elements in 13 groups Closest focusing: 0.38m/1.2 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 27-105mm Filter attachment size: 67mm Hood: HB-32 (provided) Dimensions: 73 x 75.5mm Weight: 390g

AF-S VR DX Zoom-Nikkor 18-200mm f/3.5-5.6G IF-ED* (11.1x) 🗓 🖾 🔟 🖸 🚾 📆 🚾 🔯 💆



High-power zoom lens with VR II for exclusive use with Nikon DX-format digital SLRs

- VR II offers the equivalent of a shutter speed 4 stops faster**
- Two ED glass elements
- Built-in SWM for ultra-fast, ultra-quiet operation
- M/A mode for quick switching between autofocus and manual operation
- Seven-blade rounded diaphragm ** As determined by Nikon performance tests.



Lens construction: 16 elements in 12 groups Closest focusing: 0.5m/1.6 ft. Picture angle with Nikon DX format: equivalent to 27-300mm in 35mm (135) format Filter attachment size: 72mm Hood: HB-35 (provided) Dimensions: 77 x 96.5mm Weight: 560g

AF-S DX Zoom-Nikkor 55-200mm f/4-5.6G ED* (3.6x) D M S D



Affordable high-power zoom lens for exclusive use with Nikon DX-format digital SLRs

- Ultracompact and light (255g)
- Two ED glass elements
- Newly developed, compact SWM
- Nine-blade rounded diaphragm



Lens construction: 13 elements in 9 groups Closest focusing: 0.95m/3.1 ft.

Picture angle with Nikon DX format: equivalent to 82.5-300mm in 35mm (135) format Filter attachment size: 52mm

Hood: HB-34 (provided) Dimensions: 68 x 79mm Weight: 255a

Questions & Answers on DX Nikkor

What is the DX Nikkor?

It is a lens developed specifically for use with Nikon digital SLRs that employ the Nikon DX format

> The DX Nikkor features a smaller image circle that is optimised for use with the Nikon DX-format image sensor. As a result, Nikon can produce lenses that are smaller and lighter than those designed for the 35mm (135) format in the same focal range.

What is the Nikon DX format? Q:

Nikon DX format refers to the size of the image sensor employed in Nikon digital SLRs. Picture angle will be approximately 1.5x focal length in 35mm (135) format equivalent. In addition to DX-Nikkor lenses, Nikkor lenses designed for the 35mm (135) format are also compatible with Nikon DX-format digital SLRs.

Does the focal length of a lens increase when the lens is attached to a DX-format digital camera?

No. Image sensor size is not a factor in determining optical focal length. Lens focal length does not change if you switch from a 35mm (135) format to DX-format camera. However, the picture angle of the lens with a Nikon DX-format camera is approximately 1.5 times the lens focal length when converted to 35mm (135) format equivalent. For example, the picture angle of a 12mm lens in DX format is equivalent to that of an 18mm lens in 35mm (135) format. This makes it difficult to produce an ultra-wideangle lens compatible with the DX format.

What is the advantage of the DX Nikkor lens?

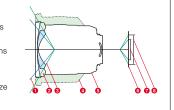
The reduced size of the image circle projected on the image sensor makes it possible for the DX Nikkor lens to be lighter and more compact than comparable 35mm (135) format lenses. The DX Nikkor is thereby a compact, lightweight lens that covers an ultra-wideangle focal range and is compatible with the Nikon DX format.

Comparison of Body Size

DX 12-24mm lens vs. hypothetical 35mm (135) lens

If we were to produce a 35mm-format large-aperture lens with 12-24mm focal range, it would be impracticably large.

- 1 Incident light for DX Nikkor lens
- Projected diameter of 35mm (135) lens. 3 Incident light for 35mm (135) lens
- 4 Projected body size of 35mm (135) lens
- 6 DX Nikkor lens body
- 6 Focal plane
- 7 Nikon DX-Format digital SLR image size
- 8 35mm (135) image size



Isn't the optical performance of the DX Nikkor, featuring a smaller image circle, inferior to that of the 35mm (135) format

The quality standards for each type of lens are different. MTF (Modulation Transfer Function) testing has been conducted on DX Nikkor lenses under more stringent standards than ever before. The DX Nikkor offers uniformly high optical performance from the centre to the periphery of the image—equivalent to the optical performance of a comparable 35mm (135) format lens.

Does the DX Nikkor lens use a mount other than the F mount?

No, the lens uses an F mount.

35mm (135) format SLR.

Can a DX Nikkor lens be used with a 35mm (135) format SLR?

The DX Nikkor lens can be attached to a 35mm (135) format SLR because it employs an F mount. However, the smaller image circle can cause vignetting within the lens' wideangle range (from 12mm to approx. 18mm) to a degree that can be detected in the viewfinder, although this will not occur at the longer focal range of the lens (18mm and beyond). We cannot guarantee the performance of the lens under these conditions, as it was developed to ensure peak performance when used with a camera employing the Nikon DX format. Therefore, we do not recommend using this lens with a

Does the introduction of the DX Nikkor lens lineup mean that you plan to discontinue production of 35mm (135) lenses at some point in the future?

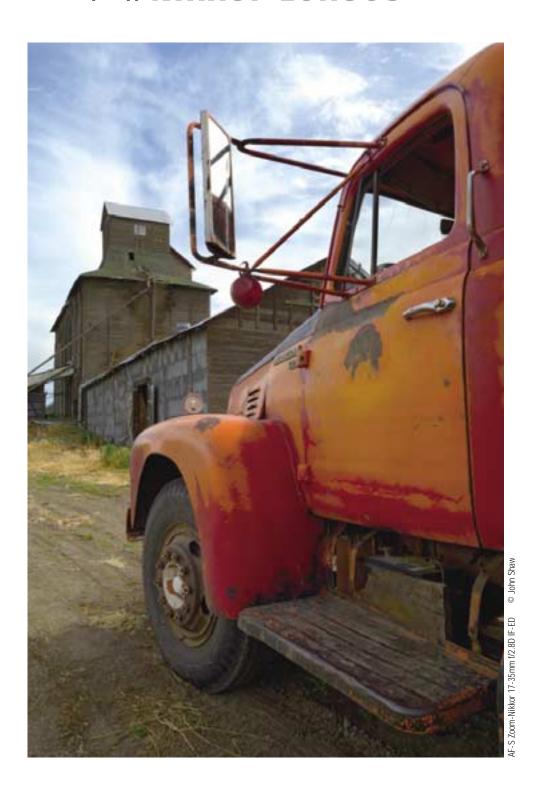
No, we will continue to sell both types of lenses, since DX Nikkor lenses are particularly well suited to wideangle lenses and 35mm (135) format lenses are better for telephoto shooting, although, as mentioned earlier, both types of lenses provide equally high levels of performance when used with Nikon digital SLRs.

Can Teleconverters be used with the DX Nikkor lenses?

No. Teleconverters cannot be used with these lenses.

^{*} The G-type Nikkor has no aperture ring; aperture should be selected from camera body.

AFNikkor Lenses



AF Zoom-Nikkors — distinguishing features

kon offers over a dozen AF Zoom-Nikkors all of which are outstanding. The information below will give you a better idea of which lenses are most suitable for you.

The most obvious starting point when considering a zoom lens is **focal length**, for that will determine your range of usage. Need a great standard zoom for the wideangle to medium telephoto range? For greater wideangle coverage, the 17-**35mm** and **18-35mm** are favourites of landscape photographers and others who need to shoot expansive scenes. Then there are the more powerful lenses like the **70-300mm** or **80-400mm**. These are ideal for sports and action photography, and for taking shots of people from a distance. And for truly highpower zoom needs, the 24-**120mm** lens offers 5x ratio. Not only is this lens versatile, this is compact as well.

The speed, or maximum aperture that a lens offers is another crucial factor. There are several AF Zoom-Nikkors in the wide, medium and powerful telephoto range with a fast f/2.8 that are sure to fit your demands. The AF-S 17-35mm f/2.8D IF-ED, AF-S 28-70mm f/2.8D IF-ED and AF-S VR 70-200mm f/2.8G IF-ED are all perfectly suited for hand-held shooting in dim light.

Macro focusing is another feature that most AF Zoom-Nikkors offer. Those lenses with the highest reproduction ratios are the 24-85mm f/2.8-4D IF (1/2), and the VR 70-200mm f/2.8G IF-ED (1/3.7).



: ED glass elements

: Aspherical lens elements

AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED (2.1x) 🗓 🖾 🗓 🖼 🚻 🖾



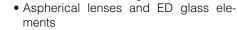
A high-performance, ultra-wideangle zoom lens with SWM

- Aspherical lenses and ED glass elements
- 0.28m/0.9 ft. closest focusing throughout zoom range
- M/A mode for quick switching between autofocus and manual focus operation
- Nine-blade rounded diaphragm

Lens construction: 13 elements in 10 groups Closest focusing: 0.28 m/0.9 ft. Picture angle with Nikon DX Format: 35 mm (135) format equivalent to 25.5-52.5 mm Filter attachment size: 77 mm Hood: HB-23 (provided) Dimensions: $82.5 \times 106 \text{mm}$ Weight: 745 q

AF Zoom-Nikkor 18-35mm f/3.5-4.5D IF-ED (1.9x) 🗓 🖾 🗓 🖸

Portable ultra-wideangle zoom lens



- Focuses down to 0.33m/1.1 ft.
- IF (Internal Focusing) technology
- Seven-blade rounded diaphragm



Lens construction: 11 elements in 8 groups Closest focusing: 0.33m/1.1 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 27-52.5mm Filter attachment size: 77mm Hood: HB-23 (provided) Dimensions: 82.5 x 82.5mm Weight: 370a

AF Zoom-Nikkor 24-85mm f/2.8-4D IF (3.5x) ☑ Ⅱ ☑ ☑



High-performance standard zoom lens for landscapes to portraits

- Fast f/2.8 maximum aperture at 24mm focal length
- Provides maximum 1:2 reproduction ratio from 35-85mm
- Hybrid and moulded-glass aspherical lens elements
- Nine-blade rounded diaphragm



Lens construction: 15 elements in 11 groups Closest focusing: 0.5m/1.6 ft. (0.21m/0.7 ft. at macro setting) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 36-127.5mm Filter attachment size: 72mm Hood: HB-25 (provided) Dimensions: 78.5 x 82.5mm Weight: 545g

13

: ED glass elements: Aspherical lens elements

AF-S VR Zoom-Nikkor 24-120mm f/3.5-5.6G IF-ED* (5.0x) 🗓 🖾 🗓 🕅 🌃

High-power wideangle zoom lens featuring SWM and VR system

- SWM for ultra-fast, ultra-quiet AF
- VR operation offers the equivalent of using a shutter speed 3 stops faster (at 120mm)**
- High-power 5x zoom lens
- Two aspherical lenses and two ED glass elements

** As determined by Nikon performance tests.

Note: VR operation works with the Nikon F6, F5, F80, F75, F65, D2 series, D1 series, D200, D100, D70s/D70 and D50



Lens construction: 15 elements in 13 groups Closest focusing: 0.5 m/1.6 ft. Picture angle with Nikon DX Format: 35 mm (135) format equivalent to 36-180 mm Filter attachment size: 72 mm Hood: HB-25 (provided) Dimensions: $77 \times 94 \text{mm}$ Weight: 575 g

AF-S Zoom-Nikkor 28-70mm f/2.8D IF-ED (2.5x) 🗓 🖾 🖫 🛣 🛣



A high-performance standard zoom lens with SWM

- Two ED glass elements and moulded glass aspherical lens element
- Superior optical performance
- M/A mode for quick switching between autofocus and manual focus operation
- Nine-blade rounded diaphragm



Lens construction: 15 elements in 11 groups Closest focusing: 0.7m/2.3 ft. (0.5m/1.6ft. at macro setting) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 42-105mm Filter attachment size: 77mm Hood: HB-19 (provided)
Dimensions: 88.5 x 121.5mm Weight: 935g

AF-S VR Zoom-Nikkor 70-200mm f/2.8G IF-ED* (2.9x) ☑ [□ 🔀 📉 📉



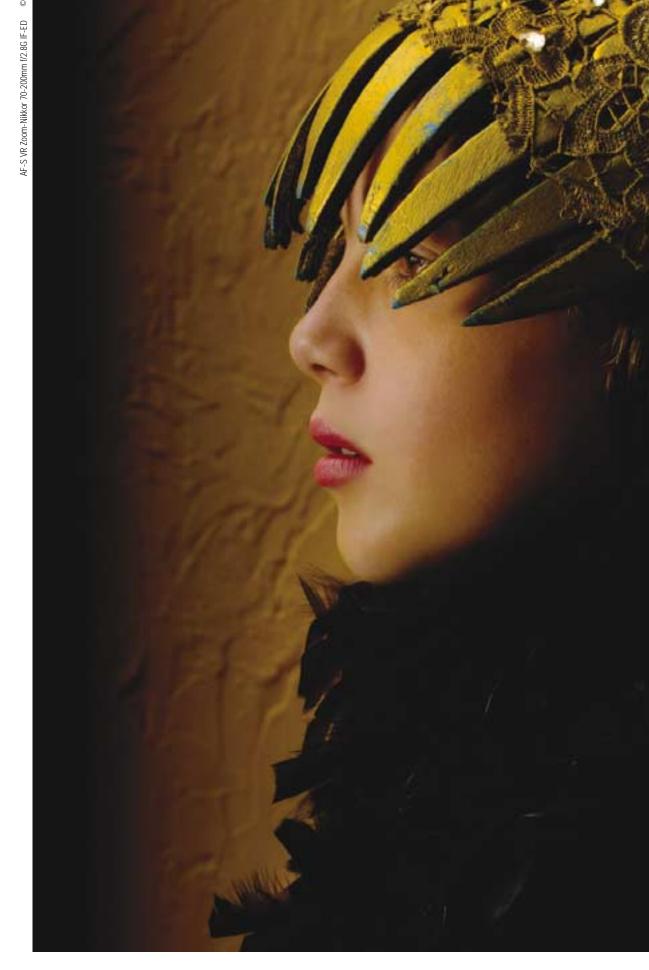
Compact, lightweight G-type fast telephoto zoom lens with Vibration Reduction

- Built-in SWM for ultra-fast, ultra-quiet AF operation
- VR operation offers the equivalent of using a shutter speed 3 stops (eight times) faster**
- Two VR modes are available; [NORMAL] and [ACTIVE]
- Five ED glass elements
- ** As determined by Nikon performance tests.

 Note: VR operation works with the Nikon F6, F5, F100, F80, F75, F65, D2 series, D1 series, D200, D100, D70s/D70 and D50



* The G-type Nikkor has no aperture ring; aperture should be selected from camera body.
G-type Nikkor is compatible with all exposure modes of the Nikon F6, F5, F100, F80, F75, F65, F60, F55, F50, F-401 series, PRONEA 600i, PRONEA S, D2 series, D1 series, D200, D100, D70s/D70 and D50, and the [P] and [S] modes of the F4, F90 series, F70, F-801 series and F-601м. Other cameras are not compatible.





AF Zoom-Nikkor 70-300mm f/4-5.6D ED (4.3x) □ □ □



High-power, portable telephoto zoom

- Powerful 4.3× telephoto zoom lens
- ED glass elements ensure superior optical performance
- Rotating zoom ring for precise zoom operation



Lens construction: 13 elements in 9 groups Closest

focusing: 1.5m/5 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 105-450mm Filter attachment size: 62mm Hood: HB-15 (provided) Dimensions: 74 x 116mm Weight: 505q



High-power G-type telephoto zoom lens

- Nine-blade rounded diaphragm
- Provides distance information to AF Nikon cameras



Lens construction: 13 elements in 9 groups Closest focusing: 1.5m/4.9 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 105-450mm Filter attachment size: 62mm Hood: HB-26 (provided) Dimensions: 74 x 116.5mm Weight: 425g

AF Zoom-Nikkor 80-200mm f/2.8D ED (2.5x) 🗓 🗓 🖫



Superb telephoto zoom for sports and portraits

- High-performance, high-speed, telephoto zoom lens
- Holds its fast f/2.8 maximum aperture over the entire range of focal lengths
- Three ED glass elements
- Rotating zoom ring for precise zoom operation



Lens construction: 16 elements in 11 groups Closest focusing: 1.8m/6 ft. (1.5m/4.9 ft. at macro setting) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 120-300mm Filter attachment size: 77mm Hood: HB-7 Dimensions: 87 x 187mm Weight: 1,300g

AF VR Zoom-Nikkor 80-400mm f/4.5-5.6D ED (5x) ⊕ D 5€ 17€



Compact, lightweight telephoto zoom lens with Vibration Reduction

- VR operation offers the equivalent of using a shutter speed 3 stops (eight times) faster*
- Vibration Reduction for the viewfinder is cancellable to conserve battery power
- Panning is automatically detected
- Three ED glass elements ensure superior optical performance
- Nine-blade rounded diaphragm
- * As determined by Nikon performance tests.

 Note: VR operation works with the Nikon F6, F5, F100, F80, F75, F65, D2 series, D1 series, D200, D100, D70s/D70 and D50

: ED glass elements : Aspherical lens elements



Lens construction: 17 elements in 11 groups Closest focusing: 2.3m/7.5 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 120-600mm Filter attachment size: 77mm Hood: HB-24 (provided) Dimensions: $91 \times 171\text{mm}$ Weight: 1,360g (1,210g without tripod mounting foot)

AF-S VR Zoom-Nikkor 200-400mm f/4G IF-ED* (2x) D II D M M SI M



The AF-S VR supertelephoto 2x zoom lens

- VR operation offers the equivalent of using a shutter speed 3 stops (eight times) faster**
- Two VR modes are available; [NORMAL] and [ACTIVE]
- Focus Preset function
- M/A mode for quick switching between autofocus and manual focus operation
- Four ED glass elements

** As determined by Nikon performance tests.

Note: VR operation works with the Nikon F6, F5, F100, F80, F75, F65, D2 series, D1 series, D200, D100, D70s/D70 and D50



Lens construction: 24 elements in 17 groups Closest focusing: 2m/6.5 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 300-600mm Filter attachment size: 52mm Hood: HK-30 (provided) Dimensions: $124\times365\text{mm}$ Weight: 3,275g

17

* The G-type Nikkor has no aperture ring; aperture should be selected from camera body.

G-type Nikkor is compatible with all exposure modes of the Nikon F6, F5, F100, F80, F75, F65, F60, F55, F50, F-401 series, PRONEA 600i, PRONEA S, D2 series, D1 series, D200, D100, D703/D70 and D50, and the [P] and [S]

modes of the F4, F90 series, F70, F-801 series and F-601м. Other cameras are not compatible.

Fisheye & Wide angle Anikkor Lenses Willow Deliver John March 1981

Norma A Fikkor Lenses



Wideangle and Normal AF Nikkors distinguishing features

ideangle Nikkors are perfect for shooting in tight indoor areas or when taking group shots. Travel, landscape, and commercial photography are just a few of the applications suited to these lenses. The 14mm f/2.8D ED offers the widest views.

For one of the most unique perspectives in photography, there's the **16mm** fisheye f/2.8D. Featuring Nikon's unique Close-Range Correction (CRC) system, the lens provides a 180° angle of view with consistent picture quality from all focusing distances.

Normal lenses are so called because they provide a 46° picture angle, for an angle of view that approximates that of the human eye. They are useful for many applications, from landscapes to candid shots. Other advantages include wide maximum apertures. The 50mm f/1.4D is extremely fast, and the 50mm f/1.8D is the most compact of all AF Nikkor lenses.

AF Fisheye-Nikkor 16mm f/2.8D (T) D (T)

ima • Fu ar • Cl

Frame-filling fisheye makes dramatic images

- Full-frame fisheye images with a picture angle of 180° (diagonal)
- Close-Range Correction (CRC) system provides high performance at both near and far focusing distances
- Focuses down to 0.25m/0.85 ft.

☐: ED glass elements☐: Aspherical lens elements





Lens construction: 8 elements in 5 groups Closest focusing: 0.25m/0.85 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 24mm Filter (provided): L37C, A2, B2, O56 Hood: Built-in Dimensions: 63 x 57mm Weight: 290g

AF Nikkor 14mm f/2.8D ED 🗓 🖾 🔃 🗓 🖫



High-performance, ultra-wideangle lens for photo journalism

- Hybrid aspherical lens elements and ED glass element
- Picture angle with Nikon DX Format is equivalent to that of 21mm lens in 35mm (135) format
- RF (Rear Focusing) system





Lens construction: 14 elements in 12 groups Closest focusing: 0.2m/0.66 ft. Picture angle with Nikon DX Format: 35m [135] format equivalent to 21mm Filter attachment size: Rear-attachment type $\square 27\text{mm}$ Hood: Built-in Dimensions: $87 \times 86.5\text{mm}$ Weight: 670g

AF Nikkor 20mm f/2.8D (T) 50



Versatile ultra-wideangle lens for general photography

- Compact ultra-wideangle lens construction
- Close-Range Correction (CRC) system
- 94° picture coverage with edge-to-edge sharpness



Lens construction: 12 elements in 9 groups Closest focusing: 0.25m/0.85 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 30mm Filter attachment size: 62mm Hood: HB-4

Dimensions: 69 x 42.5mm Weight: 270g

19



AF Nikkor 24mm f/2.8D (50) 50



Superb wideangle for landscapes or candids

- Compact wideangle lens
- Lightweight construction
- Close-Range Correction (CRC) system
- 84° picture coverage with edge-to-edge sharpness



Lens construction: 9 elements in 9 groups Closest focusing: 0.3m/1 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 36mm Filter attachment size: 52mm Hood: HN-1 Dimensions: 64.5 x 46mm Weight: 270g

AF Nikkor 28mm f/2.8D D



Standard wideangle for general photography

- Compact, lightweight wideangle lens
- 74° picture coverage for superlative flexibility
- Focuses down to 0.25m/0.85 ft.



Lens construction: 6 elements in 6 groups Closest focusing: 0.25m/0.85 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 42mm Filter attachment size: 52mm Hood: HN-2 Dimensions: 65 x 44.5mm Weight: 205g

AF Nikkor 35mm f/2D D



Versatile wideangle ideal for a broad range of uses

- Compact, lightweight wideangle lens
- 62° picture coverage
- Great for travel and candid photography
- Focuses down to 0.25m/0.85 ft.



Lens construction: 6 elements in 5 groups Closest focusing: 0.25 m/0.85 ft. Picture angle with Nikon DX Format: 35 mm (135) format equivalent to 52.5 mm Filter attachment size: 52 mm Hood: HN-3 Dimensions: $64.5 \times 43.5 \text{mm}$ Weight: 205 g



☐: ED glass elements
☐: Aspherical lens elements

AF Nikkor 50mm f/1.4D D



High-performance normal lens

- High-speed normal lens
- Great for travel and for shooting full-length portraits in available light
- Distortion-free images with superb resolution and colour rendition
- Provides high-contrast images even at maximum aperture

Normal AFNikkor Lense:



Lens construction: 7 elements in 6 groups Closest focusing: 0.45m/1.5 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 75mm

Filter attachment size: 52mm Hood: HR-2 Dimensions: 64.5 x 42.5mm Weight: 230g

AF Nikkor 50mm f/1.8D D



Portable normal lens

- Compact, affordable normal lens
- Lightweight (155g)
- Great depth-of-field control stops down to f/22
- Ideal for close-up photography with an Auto Extension Ring

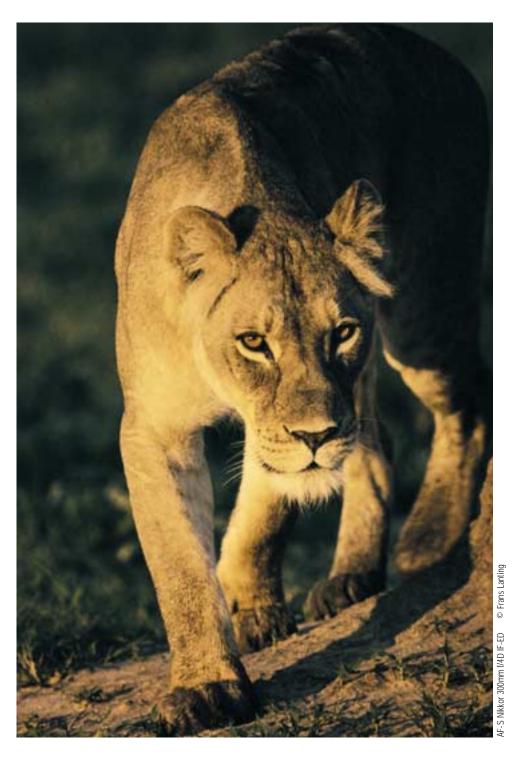


Lens construction: 6 elements in 5 groups Closest focusing: 0.45m/1.5 ft. Picture angle with Nikon DX Format:

35mm (135) format equivalent to 75mm Filter attachment size: 52mm Hood: HR-2 Dimensions: 63.5 x 39mm Weight: 155q

AFNikkor Lenses

(DC-Nikkors, AF-S Nikkors, AF-S Teleconverters)



Telephoto AF Nikkors — distinguishing features

With an array of focal lengths from 85mm to 600mm, extraordinary optics and high-performance autofocusing, telephoto AF Nikkors have much to offer any serious photographer.

Nikkor telephoto lenses bearing the AF-S name offer incredibly fast, quiet autofocus operation, thanks to Nikon's exclusive SWM. Indispensable for shooting fast-moving action, these telephoto lenses deliver superior autofocusing for the Nikon F6, F5, F100, F90X, F90, F80, F75, F70, F65, PRONEA S, PRONEA 600i, D2-series, D1-series, D200, D100, D70s/D70 and D50 cameras, and provide manual focusing for other Nikon SLRs.

Other AF-S Nikkor features include an innovative M/A control that lets you switch quickly from automatic to manual focusing modes, ergonomically placed focus lock buttons, and a focus range limiter that diminishes autofocusing time.

For exceptional portrait photography, try the AF DC-Nikkor lenses. They offer Nikon's exclusive Defocusimage Control which allows you to adjust the amount of foreground or background blur with a rotating ring. Nineblade diaphragm built into the lenses creates a rounded outof-focus blur that is ideal for portraits.

Nikon also offers AF-S Teleconverters designed exclusively for AF-S Nikkor lenses. You can increase the focal length of Nikkor telephoto lens by 1.4x with the TC-14E II, 1.7x with the TC-17E II or 2.0x with the TC-20E II.



AF Nikkor 85mm f/1.4D IF II D II



The fastest Nikkor telephoto — great for indoor portraits

- High-performance medium telephoto lens
- Fast maximum aperture of f/1.4
- IF (Internal Focusing) technology for fast AF operation
- Rounded diaphragm opening makes outof-focus elements appear more natural

☐: ED glass elements☐: Aspherical lens elements



Lens construction: 9 elements in 8 groups Closest focusing: 0.85m/3 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 127.5mm Filter attachment size: 77mm Hood: HN-31 (Provided) Dimensions: 80 x 72.5mm Weight: 550q

AF Nikkor 85mm f/1.8D N D



Portable medium telephoto — ideal for portraits

- High-speed telephoto lens
- RF (Rear Focusing) technology for fast AF operation
- Very compact and lightweight
- Ideal for indoor or outdoor portrait shooting



Lens construction: 6 elements in 6 groups Closest focusing: 0.85m/3 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 127.5mm Filter attachment size: 62mm Hood: HIN-23 (Provided) Dimensions: 71.5 x 58.5mm Weight: 380g

AF DC-Nikkor 105mm f/2D III D SI



Standard portrait lens with Defocus-image Control

- Fast, medium telephoto lens with Defocusimage Control
- Large maximum aperture allows shooting in dim light
- Rounded diaphragm opening makes out-offocus elements appear more natural
- RF (Rear Focusing) technology for fast AF operation



Lens construction: 6 elements in 6 groups Closest focusing: 0.9m/3 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 157.5mm Filter attachment size: 72mm Hood: Built-in Dimensions: 79 x 111mm Weight: 640g



AF DC-Nikkor 135mm f/2D © Gordon Nash

AF DC-Nikkor 135mm f/2D III D SI



High-performance telephoto with Defocusimage Control

- Fast telephoto lens featuring Defocus-image Control
- Large maximum aperture allows shooting in dim light
- Rounded diaphragm opening makes out-offocus elements appear more natural
- RF (Rear Focusing) technology for fast AF operation



Lens construction: 7 elements in 6 groups Closest focusing: 1.1m/4 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 202.5mm Filter attachment size: 72mm Hood: Built-in

Dimensions: 79 x 120mm Weight: 815g

EUROPEESCHE

AF-S VR Nikkor 300mm f/2.8G IF-ED © Soenar Chamid

AF-S VR Nikkor 300mm f/2.8G IF-ED* ⓓ Ⅱ ѝ Ⅷ ☒ ☒ ☒ ☒



Telephoto with SWM and VR for serious sport photographers

- VR operation offers the equivalent of using a shutter speed 3 stops faster**
- ED glass elements
- Nano Crystal Coat reduces ghost and flare for clear images
- M/A mode allows rapid switching between autofocus and manual operation
- Focus Preset function
- ** As determined by Nikon performance tests.

: Aspherical lens elements

∷ Nano Crystal Coat∷ Super ED glass elements∷ ED glass elements

Lens construction: 11 elements in 8 groups Closest focusing: 2.3 m/7.5 ft. (2.2 m/7.2) ft. for MF) Picture angle with Nikon DX Format: 35 mm (135) format equivalent to 450 mm Filter attachment size: 52 mm Hood: HK·30 (Provided) Dimensions: Approx. $124 \times 267.5 \text{mm}$ Weight: Approx. 2,870 g

Note: Nano Crystal Coat is applied to the rear (camera side) of lens surfaces.

AF Nikkor 180mm f/2.8D IF-ED I II I



High-performance medium telephoto for sports arenas or concert halls

- High-performance telephoto lens
- Perfect for news, sports, action and astronomical photography
- ED glass element
- IF (Internal Focusing) technology

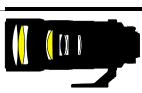
Lens construction: 8 elements in 6 groups Closest focusing: 1.5m/5 ft. Picture angle with Nikon DX Format: 35mm (135) format equivalent to 270mm Filter attachment size: 72mm Hood: Buill-in Dimensions: 78.5 x 144mm Weight: 760g

AF-S Nikkor 300mm f/4D IF-ED 🗓 🖫 🕅 👭



A light, compact AF-S telephoto lens

- High optical performance even with a teleconverter attached
- ED glass elements
- Focuses down to 1.45m/4.8 ft.
- M/A mode allows rapid switching between autofocus and manual operation
- Nine-blade rounded diaphragm



Lens construction: 10 elements in 6 groups Closest focusing: $1.45 \, \text{m}/4.8$ ft. Picture angle with Nikon DX Format: $35 \, \text{mm}$ (135) format equivalent to $450 \, \text{mm}$ Filter attachment size: $77 \, \text{mm}$ Hood: Built-in Dimensions: $90 \times 222.5 \, \text{mm}$ Weight: $1,440 \, \text{g}$ (1,300g without tripod mounting foot)

25

AF-S VR Nikkor 200mm f/2G IF-ED* D D M M SG M



High-performance telephoto featuring SWM and VR system

- VR operation offers the equivalent of using a shutter speed 3 stops faster**
- Four ED glass elements including one Super ED glass
- Two VR modes are available; [NORMAL] and [ACTIVE]
- Focus Preset function
- Focuses down to 1.9m/6.2 ft.

 ** As determined by Nikon performance tests.



Lens construction: 13 elements in 9 groups Closest focusing: 1.9m/6.2 ft. Picture angle with Nikon DX Format: 35mm [135] format equivalent to 300mm Filter attachment size: 52mm Hood: HK-31 (Provided) Dimensions: $124 \times 203mm$ Weight: 2,900g

* The G-type Nikkor has no aperture ring; aperture should be selected from camera body.

G-type Nikkor is compatible with all exposure modes of the Nikon F6, F5, F100, F80, F75, F65, F60, F55, F50, F-401 series, PRONEA 600i, PRONEA S, D2 series, D1 series, D200, D100, D70s/D70 and D50 and the [P] and [S] modes of the F4, F90 series, F70, F-801 series and F-601m. Other cameras are not compatible.



AF-S Nikkor 500mm f/4D IF-ED II © Foto Natura

AF-S Nikkor 400mm f/2.8D IF-ED II D III D



Compact, high-performance supertelephoto

- Magnesium alloy ensures lightweight bodyIdeal for wildlife and sports photography
- ED glass elements
- M/A mode allows rapid switching between autofocus and manual focus operation
- Nine-blade rounded diaphragm

Ct. high-performance supertele-



ED glass elements

Aspherical lens elements

Lens construction: 11 elements in 9 groups Closest focusing: 3.5m/11.5 ft. (3.4m/11.2 ft. in MF)* Picture angle with Nikon DX Format: 35mm (135) format equivalent to 600mm Filter attachment size: 52mm Hood: HK-27 (provided) Dimensions: 159.5 x 351.5mm Weight: 4,440g * At normal temperature

AF-S Nikkor 500mm f/4D IF-ED II D II D SIM MIN SI



Powerful supertelephoto with SWM

- Magnesium alloy ensures lightweight body
- ED glass elements
- M/A mode allows rapid switching between autofocus and manual focus operation
- Nine-blade rounded diaphragm

Lens construction: 11 elements in 9 groups Closest focusing: 4.6m/15.1 ft. (4.4m/14.4 ft. in MF)* Picture angle with Nikon DX Format: 35mm (135) format equivalent to 750mm Filter attachment size: 52mm Hood: HK-28 (provided) Dimensions: 139.5 x 394mm Weight: 3,430g * At normal temperature



Powerful supertelephoto for distant fast-moving subjects and wildlife

- Magnesium alloy ensures lightweight body
- ED glass elements
- M/A mode allows rapid switching between autofocus and manual focus operation
- Perfect for sports and fast-action photography
- Nine-blade rounded diaphragm

Lens construction: 10 elements in 7 groups Closest focusing: 5.6m/18.4 ft. (5.4m/17.7 ft. in MF)* Picture angle with Nikon DX Format: 35mm (135) format equivalent to 900mm Filter attachment size: 52mm Hood: HK-29 (provided) Dimensions: 166 x 430.5mm Weight: 4,750g * 4t normal temperature

AF-S Teleconverters



Note:

AF-S Teleconverters
are compatible with AF-S and
AF-I Nikkor lenses except
AF-S 17-35mm f/2.8D IF-ED,
VR 24-120mm f/3.5-5.6G IF-ED,
28-70mm f/2.8D IF-ED and
DX Nikkor lenses.

AF-S Teleconverter TC-14E II



- Sophisticated design matches the latest AF-S Nikkor lenses
- Increases the original focal length by 40%
- Reduces lens aperture by one f-stop
- Autofocus possible with AF-S and AF-I Nikkors having maximum aperture of f/4 or larger (except AF-S VR Micro 105mm f/2.8G IF-ED)
- Front Cap BF-3A (can be used as body cap)

Lens construction: 5 elements in 5 groups Dimensions: 66 x 24.5mm Weight: 200g

AF-S Teleconverter TC-20E II



- Sophisticated design matches the latest AF-S Nikkor lenses
- Increases the original focal length by 100%
- Reduces lens aperture by two f-stops
- Autofocus possible with AF-S and AF-I Nikkors having maximum aperture of f/2.8 or larger (except AF-S VR Micro 105mm f/2.8G IF-ED)
- Front Cap BF-3A (can be used as body cap)

27

AF-S Teleconverter TC-17E II



- Sophisticated design matches the latest AF-S Nikkor lenses
- Increase the original focal length by 70%
- Reduces lens aperture by 1.5 f-stops
- Autofocus possible with AF-S and AF-I Nikkors having maximum aperture of f/2.8 or larger (except AF-S VR Micro 105mm f/2.8G IF-ED)
- Front Cap BF-3A (can be used as body cap)

Lens construction: 7 elements in 4 groups Dimensions: 66 x 31.5mm Weight: 250g

AFMicro-and







Micro-Nikkor Lenses

AF Micro- and PC Micro-Nikkors — distinguishing features

or close-up photography without compromise, Micro-Nikkor lenses are the obvious choice for your Nikon SLR.

Each of the AF Micro-Nikkors offers f-stops down to f/32, and the PC Micro-Nikkor down to **f/45**: this permits maximum depth of field, so crucial for close-up and macro shooting. Plus. Nikon's Super Integrated Coating and Close-Range Correction system offer superior optical performance and colour reproduction.

The three fixed focal length AF Micro-Nikkors (60mm f/2.8D, 105mm f/2.8G IF-ED, 200mm f/4D **IF-ED**) allow photographers to shoot 1:1 life-size closeups without any accessory.

The PC Micro-Nikkor 85mm f/2.8D is equipped with a tilt/shift mechanism that lets photographers manipulate image perspective, distortion and focus. With 1:2 life-size macro capability, this lens is ideal for commercial photographers who shoot tabletop product photos.

AF Micro-Nikkor 60mm f/2.8D (T) [7]



Nikon's most compact Micro lens for close-up and general photography

- Versatile lens for macro photography
- Close-up to approx. 0.22m/0.6 ft. (1:1 reproduc-
- Close-Range Correction (CRC) system provides high performance at both near and far focusing distances



: Nano Crystal Coat : ED glass elements

: Aspherical lens elements

Lens construction: 8 elements in 7 groups

Closest focusing: 0.219m (8-3/4 in.) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 90mm Working distance*: 90.4mm Filter attachment size: 62mm Hood: HN-22 Dimensions: 70 x 74.5mm Weight: 440g

AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED* 🗊 🖾 🗓 🗓 🖼 🚻 🖾 🛣 📖 🗕



The world's first macro lens equipped with SWM and VR systems • Versatile medium telephoto lens for portrait and

- Close-up to approx. 0.31m/1 ft. (1:1 reproduc-
- tion ratio) • Nano Crystal Coat reduces ghost and flare for
- clear images • Built-in SWM for ultra-fast, ultra quiet AF operation
- Nikon Vibration Reduction System (VRII) operation offers the equivalent of using a shutter speed 4
- * As determined by Nikon performance tests



Lens construction: 14 elements in 12 groups Closest focusing: 0.314m (1 ft.) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 157.5mm Working distance*: 154mm Filter attachment size: 62mm Hood: HB-38 (provided) Dimensions: 83 x 116mm Weight: 790g

AF Micro-Nikkor 200mm f/4D IF-ED D II GT D ST



Telephoto Micro lens for close-ups and nature photography

- Extremely versatile telephoto lens with long work ing distance
- Close-up to approx. 0.5m/1-5/8 ft. (1:1 reproduc-
- 26cm working distance for easy close-ups • Close-Range Correction (CRC) system
- Nine-blade rounded diaphragm
- ED glass elements



Lens construction: 13 elements in 8 groups Closest focusing: 0.5m (1-5/8 ft.) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 300mm Working distance*: 260mm Filter attachment size: 62mm Hood: HN-30 Dimensions: 76 x 193mm **Weight**: 1,190g

PC Micro-Nikkor 85mm f/2.8D (T) []



Note: The camera's exposure metering and flash control system do not work properly when shifting and/or tilting the lens or when using an aperture other than the maximum aperture. Shifting and/or tilting the lens to a large degree can cause some vignetting. This lens cannot be used with the Nikon

85mm medium telephoto lens with tilt/shift mechanism and macro capability

- Wide tilting and shifting range (tilt: ±8.3°, shift: ±12.4mm)
- 1/2 life-size macro shooting capability (at 0.39m/1.3 ft.)
- ±90° lens revolving capability for versatile tilt/shift effects.

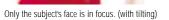




Lens construction: 6 elements in 5 groups Closest focusing: 0.39m (1.3 ft.) Picture angle with Nikon DX Format: 35mm (135) format equivalent to 127.5mm Working distance*: 210mm Filter attachment size: 77mm Hood: HB-22 Dimensions: 83.5 × 109.5mm Weight: 775a

*Working distance is the distance between the front of the lens and the subject. It is desirable to have a longer free working distance for close-up work due to lighting and subject considerations

* The G-type Nikkor has no aperture ring; aperture should be selected from camera body. G-type Nikkor is compatible with all exposure modes of the Nikon F6, F5, F100, F80, F75, F65, F60, F55, F50, F-401 series, PRONEA 600i, PRONEA S, D2 series, D1 series, D200, D100, D70s/D70 and D50, and the IPI and ISI modes of the F4, F90 series, F70, F-801 series and F-601_M. Other cameras are not compatible



Specifications



Lens	Lens Construction	Picture Angle with 35mm (135) format	Picture Angle with Nikon DX Format	Minimum	Closest Marked Focus Distance [Macro Setting]	Maximum Reproduction Ratio [Macro Setting]	Filter Attachment Size (mm)	Lens Case	Lens Hood	Dia. x Length (extension from lens mount) (mm)	Weight (g)	TC-201	TC-301	TC-14A	TC-14B	TC-14E II	TC-17F II	TC-20E II	AF-3	Max. number	AF-4	Max. number
	(groups/			f/Stop				20110 0000							10 145	10 14211	10 112 11	10 202 11	""	of HN-36 hoods usable	4	of HN-37 hoods usable
 DX	elements)	(100) Ioimat			[m (ft.)]	[muoro ocumg]	OIZC (IIIII)			Tono mounty (mm)										nous usubic		noous usubic
AF DX Fisheye 10.5mm f/2.8G ED	7/10	_	180°	22	0.14 (0.46)	1/5	Rear-attachment type	CL-0715	Built-in	63 x 62.5	305	_	_	_	_	_	_	_	Not	usable	Not	t usable
AF-S DX 12-24mm f/4G IF-ED	7/11	_	99°-61°	22	0.3 (1)	1/8.3	77	CL-S2	HB-23	82.5 x 90	465	_	_	_	_	_	_	_	✓ *b	0	V	0
AF-S DX 17-55mm f/2.8G IF-ED	10/14	_	79°-28°50′	22	0.36 (1.2)	1/5	77	CL-1120	HB-31	85.5 x 110.5	755	_	_			_	_	_	~	0	V	0
AF-S DX 18-55mm f/3.5-5.6G ED	5/7	_	76°-28°50′	22	0.28 (0.9)	1/3.2	52	CL-0715	HB-33	69 x 74	210	 						_	V	0	V	1
AF-S DX 18-70mm f/3.5-4.5G IF-ED	13/15		76°-22°50'	22	0.38 (1.2)	1/6.2	67	CL-0915	HB-32	73 x 75.5	390	_						_	<i>V</i>	0	· ·	0
AF-S DX VR 18-200mm f/3.5-5.6G IF-E			76°-8°	22	0.5 (1 5/8)	1/4.5	72	CL-1018	HB-35	77 x 96.5	560	+							· ·	0	· ·	0
AF-S DX 55-200mm f/4-5.6G ED	9/13		28°50'-8°	22	0.95 (3.1)	1/3.5	52	CL-0815	HB-34	68 x 79	255	_							· ·	5	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5
Zoom	77.10		20 00 0		0.70 (0.1)	170.0	32	02 0010	115 01	00 X 7 7	200								•			-
AF-S 17-35mm f/2.8D IF-ED	10/13	104°-62°	79°-44°	22	0.28 (0.9)	1/4.6	77	CL-76	HB-23	82.5 x 106	745	(1)		1		_	_	_	✓ *b	0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0
AF 18-35mm f/3.5-4.5D IF-ED	8/11	104 -02 100°-62°	76°-44°	22	0.20 (0.7)	1/4.0	77	CL-70	HB-23	82.5 x 82.5	370	(1)		<u>(1)</u>					V*b	0	- V	0
AF 24-85mm f/2.8-4D IF	11/15	84°-28°30'	61°-18°50′	22	0.55 (1.6) [0.21 (0.7)]	1/5.9 [1/2]	72	CL-S2	HB-25	78.5 x 82.5	545	1		1					✓ *b	0		0
																			V*b			0
AF-S VR 24-120mm f/3.5-5.6G IF-ED	13/15	84°-20°30'	61°-13°20′	22	0.5 (1.6)	1/4.8	72	CL-S2	HB-25	77 x 94	575	-		<u> </u>				_	_	0	<i>V</i>	0
AF-S 28-70mm f/2.8D IF-ED	11/15	74°-34°20'	53°-22°50′	22	0.7 (2.3) [0.5 (1.6)]	1/8.6 [1/5.6]	77	CL-74	HB-19	88.5 x 121.5	935	4		4					V *b	0	_ •	
AF-S VR 70-200mm f/2.8G IF-ED	15/21	34°20'-12°20'	22°50′-8°	22	1.5 (5)	1/6.1	77	CL-M2	HB-29	87 x 215	1,470	_		_		2	2	2	<i>V</i>	0	V	2
AF 70-300mm f/4-5.6D ED	9/13	34°20'-8°10'	22°50′-5°20′	32	1.5 (5)	1/3.9	62	CL-S4	HB-15	74 x 116	505	1		1					<i>V</i>	3	-	5
AF 70-300mm f/4-5.6G	9/13	34°20'-8°10'	22°50′-5°20′	32	1.5 (4.9)	1/3.9	62	CL-S4	HB-26	74 x 116.5	425	<u> </u>						_	<i>'</i>	3	<i>'</i>	4
AF 80-200mm f/2.8D ED*1	11/16	30°10'-12°20'	20°-8°	22	1.8 (6) [1.5 (4.9)]	1/7.1 [1/5.9]	77	CL-M2, CL-43A	HB-7	87 x 187	1,300	4		4	1				~	0	<i>'</i>	3
AF VR 80-400mm f/4.5-5.6D ED*1	11/17	30°10'-6°10'	20°-4°	32	2.3 (7.5)	1/4.8	77	CL-M1	HB-24	91 x 171	1,360	4							~	2	<i>'</i>	3
AF-S VR 200-400mm f/4G IF-ED*1	17/24	12°20'-6°10'	8°-4°	32	2 (6.6)	1/3.7	52	CL-L2	HK-30	124 x 365	3,275					2	1	1	Not	usable	Not	tusable
Fisheye																						
AF Fisheye 16mm f/2.8D	5/8	180°	107°	22	0.25 (0.85)	1/10	Provided	CL-0715	Built-in	63 x 57	290	1		1					Not	usable	Not	tusable
Wideangle																						
AF 14mm f/2.8D ED	12/14	114°	90°	22	0.2 (0.66)	1/6.7	Rear-attachment type	CL-S2	Built-in	87 x 86.5	670	1	_	1		_	_	_	Not	usable	Not	tusable
AF 20mm f/2.8D	9/12	94°	70°	22	0.25 (0.85)	1/8.3	62	CL-S2	HB-4	69 x 42.5	270	1		1			_	_	✓ *3	0	~	0
AF 24mm f/2.8D	9/9	84°	61°	22	0.3 (1)	1/8.9	52	CL-0715	HN-1	64.5 x 46	270	1		1				_	~	0	~	1
AF 28mm f/2.8D	6/6	74°	53°	22	0.25 (0.85)	1/5.6	52	CL-0715	HN-2	65 x 44.5	205	1		1				_	~	0	~	1
AF 35mm f/2D	5/6	62°	44°	22	0.25 (0.85)	1/4.2	52	CL-0715	HN-3	64.5 x 43.5	205	1	_	1			_	_	V	1	V	2
Normal																						
AF 50mm f/1.4D	6/7	46°	31°30′	16	0.45 (1.5)	1/6.8	52	CL-0715	HR-2	64.5 x 42.5	230	3	_	3	_	_	_	1	~	1	~	3
AF 50mm f/1.8D	5/6	46°	31°30′	22	0.45 (1.5)	1/6.6	52	CL-0715	HR-2	63.5 x 39	155	1	_	1	_	_	_	_	~	1	~	3
Telephoto																						
AF 85mm f/1.4D IF	8/9	28°30'	18°50′	16	0.85 (3)	1/8.8	77	CL-44	HN-31	80 x 72.5	550	1	_	1	_	_	_	_	V	1	V	3
AF 85mm f/1.8D	6/6	28°30'	18°50′	16	0.85 (3)	1/9.2	62	CL-0815	HN-23	71.5 x 58.5	380	3	_	(5)	_	_	_	_	~	2	~	4
AF DC 105mm f/2D	6/6	23°20'	15°20′	16	0.9 (3)	1/7.7	72	CL-S3, CL-38	Built-in	79 x 111	640	_	_	_	_	_	_	_	~	1	~	5
AF DC 135mm f/2D	6/7	18°	12°	16	1.1 (4)	1/7.1	72	CL-S4, CL-38	Built-in	79 x 120	815	_	_	_	1	_	_	_	~	1	~	4
AF 180mm f/2.8D IF-ED	6/8	13°40'	9°	22	1.5 (5)	1/6.6	72	CL-S4, CL-38	Built-in	78.5 x 144	760	4	_	4		_	_	_	~	5	V	5
AF-S VR 200mm f/2G IF-ED	9/13	12°20'	8°	22	1.9 (6.2)	1/8.1	52	CL-L1	HK-31	124 x 203	2,900	_	_	_	_	2	②	2	Not	usable	Not	t usable
AF-S VR 300mm f/2.8G IF-ED	8/11	8°10'	5°20′	22	2.2 (7.2)	1/6.4	52	CL-L1	HK-30	124 x 267.5	2,870	_	_	_	_	2	2	2		usable		tusable
AF-S 300mm f/4D IF-ED*1	6/10	8°10'	5°20′	32	1.45 (4.8)	1/3.7	77	CL-M2	Built-in	90 x 222.5	1,440	_	(1)	_	1	2	1	1	✓ *2	2	~	5
AF-S 400mm f/2.8D IF-ED II*1	9/11	6°10'	4°	22	3.5 (11.5)	1/7.7	52	CT-402, CL-L2	HK-27	159.5 x 351.5	4,440	_	1		1	2	<u> </u>	<u> </u>	Not	usable	Not	tusable
AF-S 500mm f/4D IF-ED II*1	9/11	5°	3°10′	22	4.6 (15.1)	1/8.2	52	CT-502, CL-L2	HK-28	139.5 x 394	3,430	+ -	1)	_	1	2	1	1		usable	 	tusable
AF-S 600mm f/4D IF-ED II*1	7/10	4°10'	2°40'	22	5.6 (18.4)	1/8.6	52	CT-606, CL-L2	HK-29	166 x 430.5	4,750	_	<u>(1)</u>		<u>(1)</u>	<u>(2)</u>	<u>(1)</u>	1		usable	 	t usable
Special Purpose			2.10		5.0 (10.1)	., 5.5		2. 300, OL EZ	27		.,,		<u> </u>		<u> </u>		<u> </u>	<u>.</u>	1101		1,00	
AF Micro 60mm f/2.8D	7/8	39°40'	26°30′	32	0.219 (8 3/4 in.)	1	62	CL-0815	HN-22	70 x 74.5	440	(3)		(3)	_			_		1	V	3
AF-S VR Micro 105mm f/2.8G IF-ED	12/14	23°20'	15°20′	32	0.219 (8 3/4 111.)	1	62	CL-0013	HB-38	83 x 116	790					<u> </u>	<u> </u>	<u> </u>	~	4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	5
AF Micro 200mm f/4D IF-ED*1			8°	32		1	62	CL-1020 CL-M2, CL-45	HN-30	76 x 193	1,190	 -							V	5	V	5
	8/13	12°20'			0.5 (1 5/8)													_			-	
PC Micro 85mm f/2.8D *3	5/6	28°30'	18°50′	45	0.39 (1.3)	1/2	77	CL-75	HB-22	83.5 x 109.5	775	_			1			_	✓ *b	0	V	0
AF-S Teleconverters*2	F /F							01.0745		// 215	200											
FC-14E II	5/5							CL-0715	_	66 x 24.5	200								_			
C-17E II	4/7	_	_		_	_		CL-0715		66 x 31.5	250								_			
TC-20E II	6/7	_	_	_	_	_	_	CL-0715	_	66 x 55	355	I —	_	_	_	_	_	_	_	_	1 -	_

- *1 Tripod mounting collar is provided.
- *2 Compatible with AF-S lenses except AF-S 17-35mm f/2.8D IF-ED, 24-85mm f/3.5-4.5G IF-ED, VR 24-120mm f/3.5-5.6G IF-ED, 28-70mm f/2.8D IF-ED and DX Nikkor lenses.
- *3 The camera's exposure metering and flash control system do not work properly when shifting and/or tilting the lens, or when using an aperture other than the maximum aperture. Shifting and/or tilting the lens to a large degree can cause some vignetting. This lens cannot be used with the Nikon PRONEA S camera.
- ① Usable. Autofocusing is not possible.
- ② Usable. Autofocusing is possible.
- 3 When used at smaller aperture than f/11 with high shutter speeds, there is occasional uneven exposure.
- 4 Usable, but there is occasional vignetting.
- (5) There is occasional vignetting. And when used at smaller aperture than f/11 with high shutter speeds, there is occasional uneven exposure.
- Not usable.
- ✓ Usable.*a Slight vignetting occurs.
- *b Vignetting will occur only in certain situations.

Note: Lens hood names indicate type: HN for Screw-in, HR for Rubber Screw-in, HK for Slip-on, HS for Snap-on, and HB for Bayonet.



Manual-focus Lenses A versatile and unique selection of lenses



© Paolo Patrizi

Nikkor 20mm f/2.8



Versatile ultra-wideangle lens for general pho-

- Compact, ultra-wideangle lens construction
- 94° picture angle with edge-to-edge sharpness
- Close-Range Correction (CRC) system

Lens construction: 12 elements in 9 groups Closest focusing: 0.25m/0.85 ft. Picture angle: 94°

Filter attachment size: 62mm

Hood: HK-14

Dimensions: 65 x 42.5mm

Weight: 260g

Nikkor 24mm f/2.8



Superb wideangle for landscapes or candids

- Compact wideangle lens
- 84° picture angle with edge-to-edge sharpness
- Close-Range Correction (CRC) system

Lens construction: 9 elements in 9 groups Closest focusing: 0.3m/1 ft.

Lens construction: 8 elements in 8 groups

Picture angle: 84°

Filter attachment size: 52mm

Hood: HN-1

Dimensions: 63 x 46mm

Weight: 275g

Nikkor 28mm f/2.8



Standard wideangle for general photography

- Compact, lightweight wideangle lens
- 74° picture angle for superlative flexibility
- Close-Range Correction (CRC) system

Closest focusing: 0.2m/0.7 ft. Picture angle: 74°

Filter attachment size: 52mm

Hood: HN-2

Dimensions: 63 x 44.5mm Weight: 250g

Nikkor 35mm f/1.4



Superior image quality with a wide aperture

- High-speed wideangle lens
- High-contrast, sharp images even at maximum
- Close-Range Correction (CRC) system

Lens construction: 9 elements in 7 groups Closest focusing: 0.3m/1 ft.

Picture angle: 62°

Filter attachment size: 52mm Hood: HN-3

Dimensions: 67.5 x 62mm Weight: 400g

*2 The camera's exposure metering and flash control system do not work properly

Nikkor 50mm f/1.2



Ultra-fast f1.2 aperture normal lens

- High-speed normal lens
- · High-contrast, sharp images even at maximum
- Ideal for candids, scenics, and available-light shooting

Lens construction: 7 elements in 6 groups Closest focusing: 0.5m/1.7 ft. Picture angle: 46° Filter attachment size: 52mm Hood: HS-12, HR-2 Dimensions: 68.5 x 47.5mm

Nikkor 50mm f/1.4



High-performance normal lens

- High-speed normal lens
- Distortion-free images with superb resolution
- Great for travel and for shooting full-length portraits in available light

Lens construction: 7 elements in 6 groups Closest focusing: 0.45m/1.5 ft. Picture angle: 46°

Filter attachment size: 52mm Hood: HS-9, HR-1 Dimensions: 63 x 40mm Weight: 250g

Weight: 360g

Micro-Nikkor 55mm f/2.8



Superb normal Macro lens with 1/2 maximum reproduction ratio

- Versatile lens for macro photography
- Close-up to approx. 0.25m/0.9 ft. (1:2 reproduction ratio)
- Close-Range Correction (CRC) system

Lens construction: 6 elements in 5 groups Closest focusing: 0.25m/0.9 ft. Picture angle: 43° Filter attachment size: 52mm Hood: HN-3

Dimensions: 63.5 x 62mm Weight: 290g

Micro Nikkor 105mm f/2.8



Medium telephoto with macro close-up capability

- Versatile medium telephoto lens for close-up and candid photography
- Close-up to approx. 0.41m/1.34 ft. (1:2 reproduction ratio)
- Close-Range Correction (CRC) system

Lens construction: 10 elements in 9 groups Closest focusing: 0.41m/1.34 ft. Picture angle: 23°20′ Filter attachment size: 52mm Hood: HS-14 (provided)

Dimensions: 66.5 x 83.5mm Weight: 515g

Specifications

Lens	Lens Construction (groups/ elements)	Picture Angle	Minimum f/Stop	Closest Marked Focus Distance [Macro Setting] [m (ft.)]	Maximum Reproduc- tion Ratio [Macro Setting]	Filter Attach- ment Size (mm)	Lens Case	Lens Hood	Dia. x Length (extension from lens mount) (mm)	Weight (g)	TC- 201	TC- 301	TC- 14A	TC- 14B		Max. number of HN-36 oods usable	AF-4	Max. number of HN-37 hoods usable
Wideangle																		
20mm f/2.8*1	9/12	94°	22	0.25 (0.85)	1/8.3	62	CL-0915	HK-14	65 x 42.5	260	1	_	1	_	✓ * ^a	0	~	0
24mm f/2.8*1	9/9	84°	22	0.3 (1)	1/8.8	52	CL-0915	HN-1	63 x 46	275	1	_	1	_	~	0	~	1
28mm f/2.8*1	8/8	74°	22	0.2 (0.7)	1/3.9	52	CL-0815	HN-2	63 x 44.5	250	1	_	1	_	~	0	~	1
35mm f/1.4*1	7/9	62°	16	0.3 (1)	1/5.6	52	CL-S2	HN-3	67.5 x 62	400	2	_	2	_	~	0	~	1
Normal																		
50mm f/1.2	6/7	46°	16	0.5 (1.7)	1/7.9	52	CL-0915	HS-12, HR-2	68.5 x 47.5	360	1	_	1	_	~	1	~	2
50mm f/1.4	6/7	46°	16	0.45 (1.5)	1/6.8	52	CL-0815	HS-9, HR-1	63 x 40	250	2	_	2	_	~	1	~	3
Special Purpose																		
PC Micro 85mm f/2.8D*1,	*2 5/6	28°30'	45	0.39 (1.3)	1/2	77	CL-75	HB-22	83.5 x 109.5	775	_	_		1	✓ *b	0	V	0
Micro 55mm f/2.8*1	5/6	43°	32	0.25 (0.9)	1/2	52	CL-0915	HN-3	63.5 x 62	290	1	_	1	_	~	1	~	3
Micro 105mm f/2.8*1	9/10	23°20'	32	0.41 (1.34)	1/2	52	CL-1018, CL-38*3	HS-14	66.5 x 83.5	515	1	_	1	_	~	3	~	5

- *1 Features Close-Range Correction (CRC) system.
- when shifting and/or tilting the lens, or when using an aperture other than the maximum aperture. Shifting and/or tilting the lens to a large degree can cause some vignetting. This lens cannot be used with the Nikon PRONEA S camera.
- *3 With a PN-11 ring. Usable.
 - (2) When used at smaller aperture than f/11 with high shutter speeds, there is occasional uneven exposure.
 - Not usable

- ✓ Usable
- *a Slight vignetting occurs. *b Vignetting will occur only in
 - certain situations.

33

Choosing the right lens some points to consider

Selecting which lens to purchase is one of the most important decisions you can make as a photographer, for the lens often determines both what and how you can shoot. Below, we've outlined a range of technical factors to consider when searching for the lens that's right for you.















Picture angle Picture angle refers to the

view or image area the lens provides. and different picture angles can dramatically affect the way you view the world through your lens.

Basically, it is the focal length of the lens that determines the picture angle — the shorter the focal length, the wider

the picture angle and the smaller the image size. A longer focal length means a narrower picture angle and larger image size. For example, a 50mm normal lens is so called because it gives a 46° picture angle for images that are about the same size with that of the human eve.

Accordingly, wideangle lenses offer broader views and are the favourite lenses of landscape photographers and those who shoot in tight interior spaces. Telephoto lenses pull in distant subjects and scenes, for a narrower picture angle that can provide dramatic closeups for many types of photography.









Perspective Perspective is a phenomenon that is easier to understand by example than explanation and is wholly determined by the camera-to-subject distance (see photos, above).

In short, perspective is the relative

size and depth of subjects within a picture: that is, how far the foreground and background appear to be separated from each other. If foreground objects appear much larger than those in the background — which occurs when

using wideangle lenses — this is called exaggerated perspective.

Understanding the different perspectives offered by different lenses will help in choosing which lens to use to create certain photographic effects.

Maximum aperture The maximum aper-**(f-number)** ture of the lens can determine how

and in what lighting situations you can shoot. Aperture value is indicated by fnumber which can be expressed in various ways: f/8, F8 and 1:8, for example, all refer to the same effective aperture. Lenses with large maximum apertures (smaller f-numbers) are 'fast' lenses that allow photographers to use faster shutter speeds in dim light. This minimises the need for a tripod or flash, allows greater depth-of-field control (see below) and offers a brighter image through the lens finder for easier focusing.

Lenses with smaller maximum aper-

tures (larger f-numbers) allow the use of lower shutter speeds for available light but are also lighter and smaller than faster lenses. Nikon offers some Nikkor lenses with equal focal lengths, but different maximum apertures to give you a variety from which to choose.

Depth of field This term refers to the areas of the photograph — both in front of and behind the main subject — that are acceptably sharp. You can adjust depth of field by adjusting the lens aperture. The smaller the aperture (larger f-number) gives you a greater depth of field. This means that shooting at larger apertures like f/1.8 will make the background appear blurred, while using small apertures like f/16 or f/22

will result in a picture where much of the scene is in sharp focus.

Focal length is also important, for the depth of field decreases as the lens' focal length increases. Thus, wideangle lenses offer inher-

ently more depth of field along the entire focal length while telephoto lenses have less



Great depth of field



Shallow depth of field (f/2.8)

ACCessories TOT Nikkor Lenses

Close-up Accessories

Auto Extension Rings PK and PN

Compact, lightweight and easy to attach, these rings — PK-11A, PK-12, PK-13 and PN-11 — offer a wide range of reproduction ratios. They fit between the camera body and lens either isolated or in combination.

Tripod Mounting Spacer

AH-5 for the PC Micro-Nikkor 85mm f/2.8D

When using a tripod with the PC Micro-Nikkor 85mm f/2.8D, the AH-5 provides space between the camera body and tripod for smoother tilt/shift operation.

Photographic Attachment

This attachment lets you transform Nikon Fieldscopes III/III A/EDIII/EDIII A into an 800mm f/12.8 (1,000mm f/13.3 with the ED78/ED78A/ED82/ED82A) supertelephoto lens.

Fieldscope Digital SLR Camera Attachment

FSA-L1

Transform your Fieldscope into a 1.200mm* or 1.500mm* super-telephoto lens for Nikon digital SLR cameras and take spectacular close-up images. * 35mm-format equivalent

Lens Hoods

Lens hoods minimise stray light, helping reduce flare and eliminate "ghost" images; they also protect the lens.

CI -M2



0000

Lens Caps

Made of hard plastic, metal or leather, these caps protect the front and rear portions of the lens from dust. smudges and scratches.

Front lens caps are available in the following attachment sizes: 52mm, 58mm, 62mm, 72mm, 77mm, 85mm, 95mm, 108mm. Rear Lens Cap LF-1 is compatible with all lenses.

Lens Strap

The lens strap LN-1 is easily adjustable for carrying various telephoto lenses, even large, heavy ones, comfortably on a shoulder.

Lens Cases

Nikon lens cases keep your fine optical equipment safe from dust, dampness and shocks.

Cylindrical Case (CL): The handsome black leatherette finish is complemented by soft, plush lining.

Trunk Case (CT): A durable trunk case is supplied with larger lenses including fast supertelephoto lenses.

Soft Pouch (CL-S2~S4/M1/M2/L1/

L2): Accommodates a variety of lenses of different focal lengths.







CL-S3