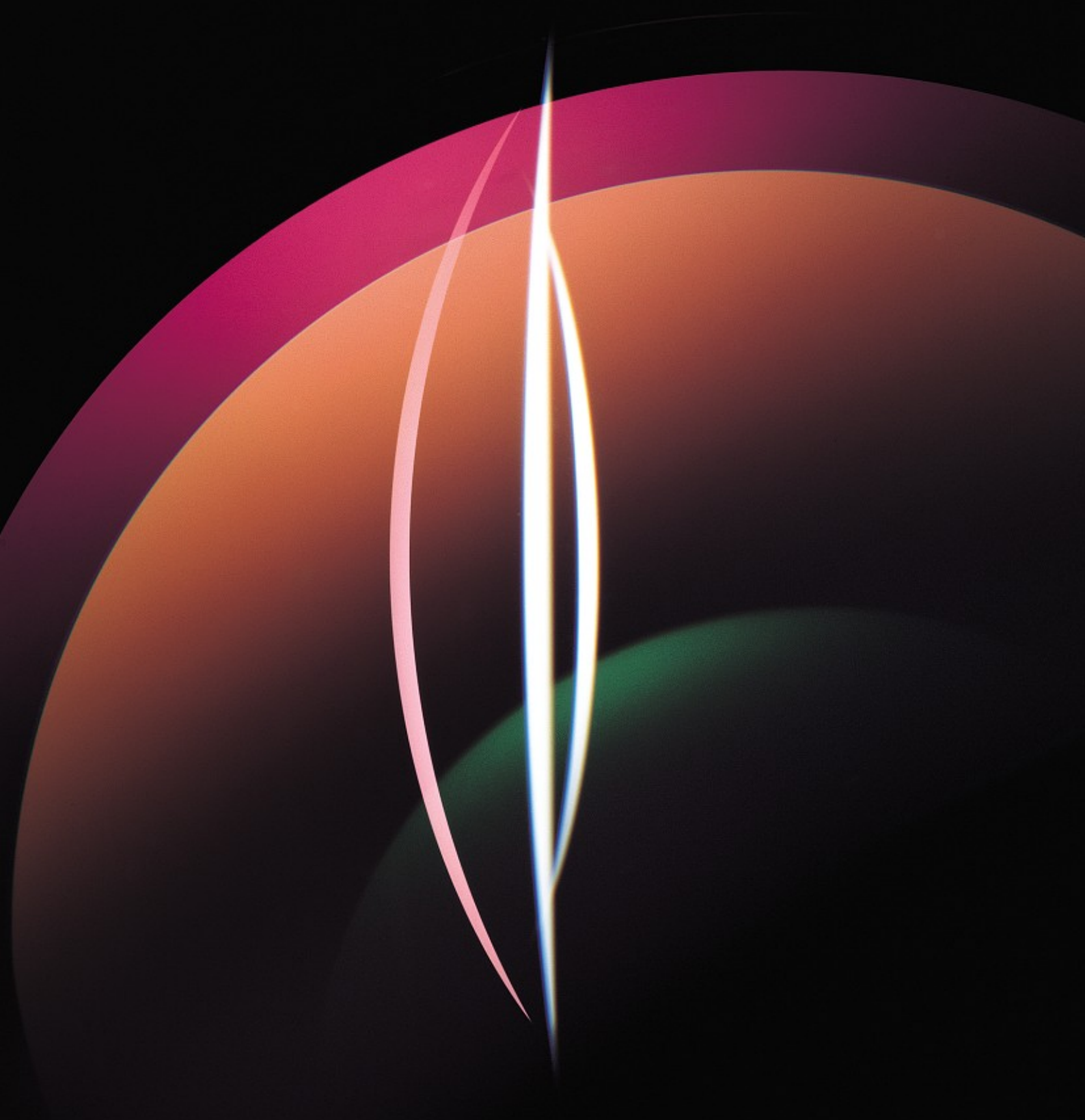




At the heart of the image

NIKKOR LENSES



Nikkor Lenses – Seamless Performance, Absolute

When 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.

The reasons for this are many, not the least of which is

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 manufacturing extends to performance. For each Nikkor lens is

DX Nikkor Lenses

Pp. 8-11

DX Nikkors, designed exclusively for use with **Nikon DX-Format digital SLRs**, offer digital photographers unprecedented creative potential.



Fisheye & Wide angle & Normal AF Nikkor Lenses

Pp. 18-21



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.

Zoom- AF Nikkor Lenses

Pp. 12-17

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



Telephoto AF Nikkor Lenses

Pp. 22-27

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.

Absolute Precision, and Total Reliability

designed to function seamlessly with Nikon SLRs in a synergy of purpose that is simply unparalleled. 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.**



AF Micro- & PC Micro-Nikkor Lenses

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

Pp. **28-29**



Manual-focus Lenses

Pp. **32-33**

A **versatile** and **unique selection** of manual focus lenses.

Accessories

P **35**

Suggested equipment combinations, and accessories for Nikkor lenses.

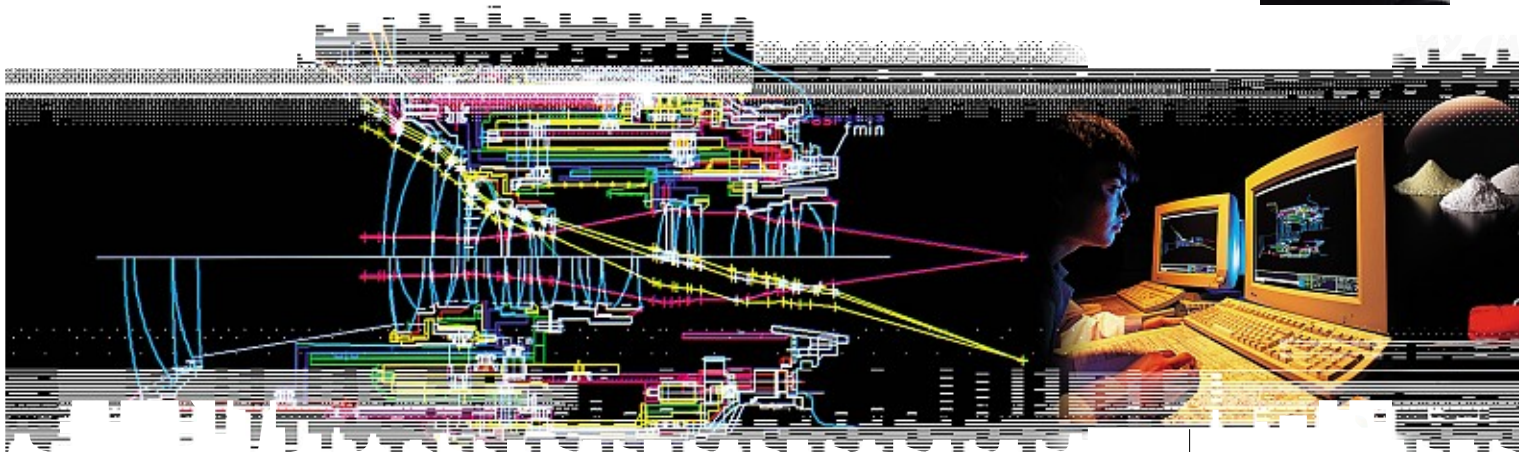


A history of exceptional performance –

Nikkor lenses

Nikon began producing lenses under the Nikkor name in 1933, and since then more than 38 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.**



Optical design using computer

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 super-telephoto Nikkors.

Lens construction

The peerless craftsmanship of Nikkor lens elements is matched by the structures that house them. Only the best materials are used for the mechanical construction of each lens. Fine metal alloys and polycarbonates make up the helicoids in some lenses. 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 Nikon-developed software to determine the optical design of each lens. Using this data together with their accumulated experience, they create the finest SLR lenses available.

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

Electronics – micro-computer 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 micro-computer works with the Nikon AF camera computer system to provide information that ensures fast autofocus, Matrix exposure metering, Balanced Fill-Flash, and other Nikon innovations in SLR performance.

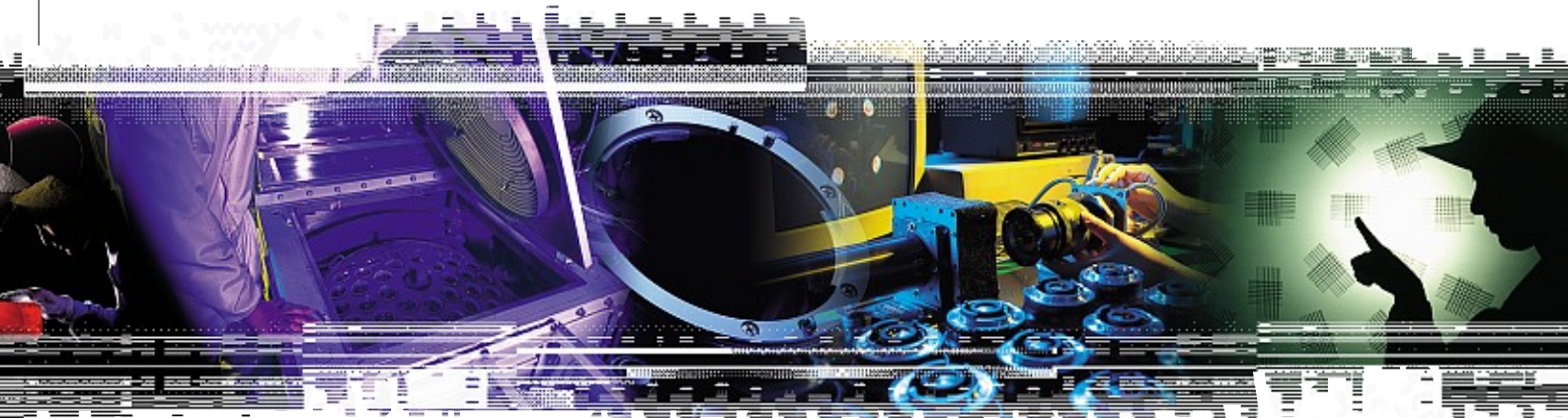
your Nikon equipment can accommodate future system advances.

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

(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. All of which ensures that the lens does what it's supposed

Optical glass raw materials



Inspecting glass blocks

Coating lenses

Adjusting optical axis

Inspecting resolution

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 that your Nikon camera is compatible with most Nikkor lenses and that

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 hard-coated to emerge as one of the world's finest lens elements. After being precisely mounted in lens barrels, the lens elements and their assemblies under go a battery of tests and inspections, including vibration and temperature-resistance analysis. One of these tests concerns the lens' Optical Transfer Function

to — provide the outstanding optical performance and reliability that make Nikkor lenses the pro's choice the world over.



Designed to be the best lenses in the world

ED ED glass — an essential element of Nikkor telephoto lenses



ED glass

Nikon developed ED (Extra-low Dispersion) glass to enable the production of lenses that offer superior 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 optical elements

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

SC 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.

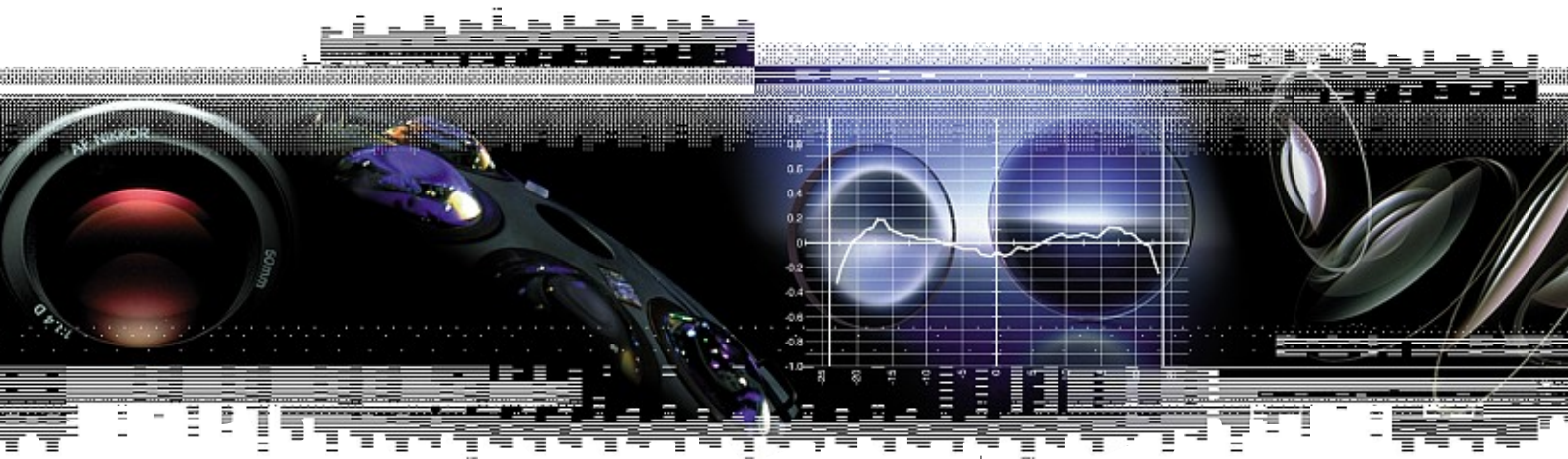
Nikon Super Integrated Coating achieves a number of

NC Nano Crystal Coat is an anti-reflective coating that originated in the development of NSR-series (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 ultra-fine crystallized particles of nano size (one

of aspherical lens elements. **Precision-ground** aspherical lens elements are the finest expression of lens-crafting 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.

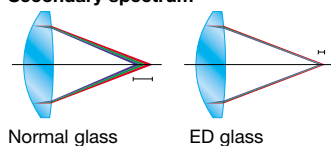
CR Close-Range Correction system

The Close-Range Correction (CRC) system is one of Nikon's most important focusing innova-



Aspherical lens elements

Secondary spectrum



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' refractive 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.

objectives, including minimised 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 industry.

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.

ASP 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 employs three types

of aspherical lens elements. **Precision-ground** aspherical lens elements are the finest expression of lens-crafting 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.

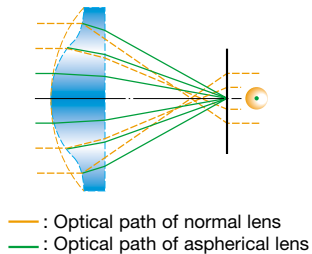
With CRC, the lens elements are configured in a "floating element" design wherein each lens group moves independently to achieve focusing. This ensures superior lens performance even when shooting at close distances.

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

IF Internal Focusing (IF)

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

Aspherical lens



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.

RF Rear Focusing (RF)

With Nikon's Rear Focusing (RF) system, all the lens elements are divided into specific lens groups, with only the rear lens group moving for focusing. This

possible advances like 3D Matrix Metering and 3D Multi-Sensor Balanced Fill-Flash.

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, D80, D100, D70s/D70, D50 and D40X/D40.

Flash control; F6, F5, F100, F90X, F80, F75, F70, D2 series, D1 series, D200, D80, D100, D70s/D70, D50 and D40X/D40.

SWM Silent Wave Motor

Nikon's AF-S technology is yet another reason professional photographers like Nikkor telephoto lenses. AF-S Nikkors feature Nikon's SWM which converts "travelling

shooting at dusk, at night, and even in poorly lit interiors. The lens' VR system also detects automatically when the photographer pans — no special mode is required.

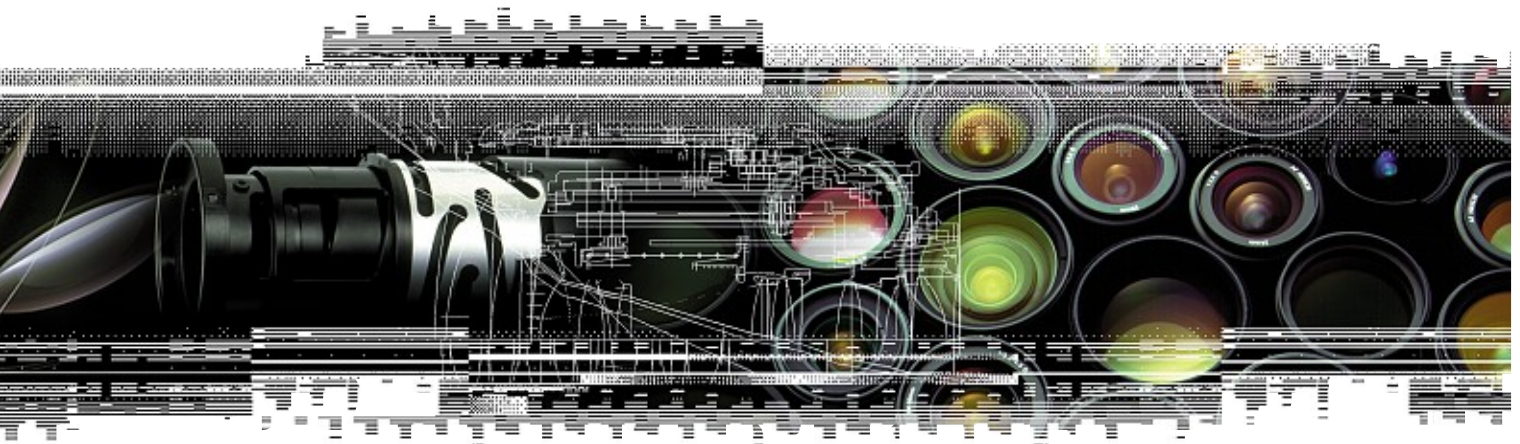


VR lens unit

* As determined by Nikon performance tests.

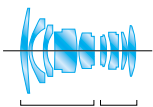
DX DX Nikkor

Compact and lightweight DX Nikkor lenses featuring a smaller image circle are specially designed and optimised for Nikon D2-series, D1-series, D200, D80, D100,



Cam for zoom mechanism

CRC (AF 24mm f/2.8D)



makes autofocus operation smoother and faster.

AF DC-Nikkors — unique Nikkors for 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.

waves" into rotational energy to focus the optics. This enables high-speed autofocus that's extremely accurate and super quiet.

M/A 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.

VR Vibration Reduction (VR)

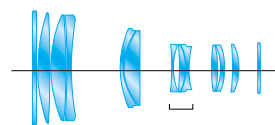
This innovative VR system minimises image blur caused by camera shake, and offers the equivalent of shooting at a shutter speed three stops (eight times) faster.* It allows handheld

D70s/D70, D50 and D40x/D40 digital SLR cameras. 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 35mm (135) or IX240 format cameras.

Focusing lens groups

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



RF (AF DC 135mm f/2D)



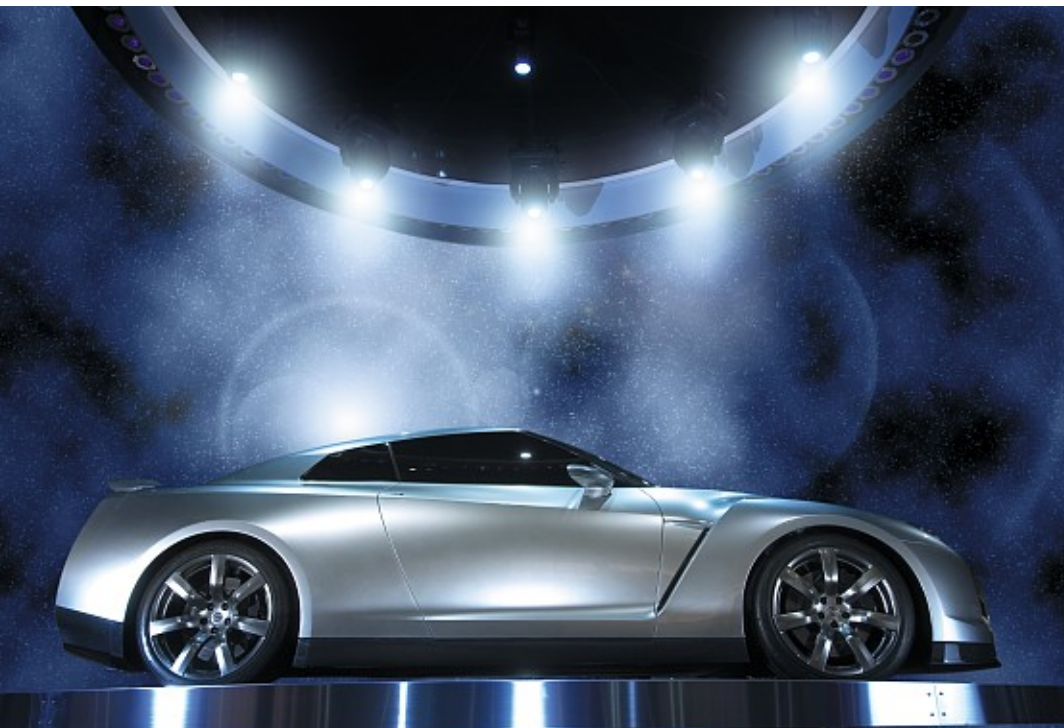
SWM

Nikon
Technology

DX Nikkor Lenses



AF DX Fisheye-Nikkor 10.5mm 1/2.8G ED © Toshiaki Kameto



AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED © Tim Andrew

The 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, light-weight package.

Nikon offers nine 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.

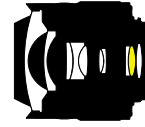
AF DX Fisheye-Nikkor 10.5mm f/2.8G ED* ED D SC DX



Frame-filling fisheye lens for exclusive use with Nikon digital SLR

- 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
■: Aspherical lens elements



Lens construction: 10 elements in 7 groups
Closest focusing: 0.14m/0.46 ft.
Picture angle with Nikon DX Format: 35mm (1.35) format equivalent to 16mm
Filter attachment size: Rear-attachment type 27mm
Hood: Built-in Dimensions: 63 x 62.5mm
Weight: 305g

AF-S DX Zoom-Nikkor 12-24mm f/4G IF-ED* (2.0x) ED ASP IF D SWM M/A SC DX



Ultra-wideangle zoom lens for exclusive use with Nikon digital SLR

- 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



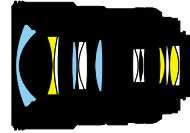
Lens construction: 11 elements in 7 groups
Closest focusing: 0.3m/1 ft. Picture angle with Nikon DX Format: 35mm (1.35) format equivalent to 18-36mm
Filter attachment size: 77mm Hood: HB-23 (provided)
Dimensions: 82.5mm x 90mm Weight: 465g

AF-S DX Zoom-Nikkor 17-55mm f/2.8G IF-ED* (3.2x) ED ASP IF D SWM M/A SC DX



Wideangle zoom lens for exclusive use with Nikon digital SLR

- 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: 14 elements in 10 groups
Closest focusing: 0.36m/1.2 ft. Picture angle with Nikon DX Format: 35mm (1.35) format equivalent to 25.5-82.5mm
Filter attachment size: 77mm
Hood: HB-31 (provided)
Dimensions: 85.5 x 110.5mm
Weight: 755g

AF-S DX Zoom-Nikkor 18-55mm f/3.5-5.6G ED II* (3.0x) ED ASP D SWM SC DX



Affordable wideangle zoom lens for exclusive use with Nikon digital SLRs

- Ultracompact and light (205g)
- 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 (1.35) format
Filter attachment size: 52mm
Hood: HB-33
Dimensions: 70.5 x 74mm
Weight: 205g

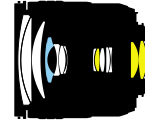
* The G-type Nikkor has no aperture ring; aperture should be selected from camera body.

AF-S DX Zoom-Nikkor 18-70mm f/3.5-4.5G IF-ED* (3.8x) ED ASP IF D SWM M/A SC DX



High-power wideangle zoom lens for exclusive use with Nikon 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 DX Zoom-Nikkor 18-135mm f/3.5-5.6G IF-ED* (7.5x) ED ASP IF D SWM SC DX



A high-power zoom lens with SWM for exclusive use with Nikon digital SLRs

- Built-in SWM for ultra-fast, ultra-quiet operation
- Aspherical lenses and ED glass element
- Seven-blade rounded diaphragm
- High-power 7.5x zoom lens



Lens construction:
15 elements in
13 groups
Closest focusing:
0.45m/1.5 ft.
Picture angle with
Nikon DX Format: 35mm (135) format
equivalent to 27-202.5mm
Filter attachment size: 67mm Hood: HB-32
Dimensions: 73.5 x 86.5mm Weight: 385g

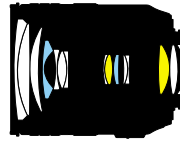
AF-S DX VR Zoom-Nikkor 18-200mm f/3.5-5.6G IF-ED* (11.1x) ED ASP IF D SWM M/A SC VR DX



High-power zoom lens with VR II for exclusive use with Nikon 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

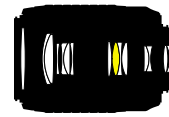
AF-S DX VR Zoom-Nikkor 55-200mm f/4-5.6G IF-ED* (3.6x) ED IF D SWM SC VR DX



Affordable zoom lens with VR for exclusive use with Nikon digital SLRs

- VR offers the equivalent of a shutter speed 3 stops faster**
- Newly developed, compact SWM
- An ED glass element helps minimise chromatic aberration
- Seven-blade rounded diaphragm

** As determined by Nikon performance tests.



Lens construction:
15 elements in
11 groups
Closest focusing:
1.1m/3.6 ft.
Picture angle with Nikon DX format:
equivalent to 82.5 – 300mm in 35mm
(135) format Filter attachment size: 52mm
Hood: HB-37 Dimensions: 73 x 99.5mm
Weight: 335g

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



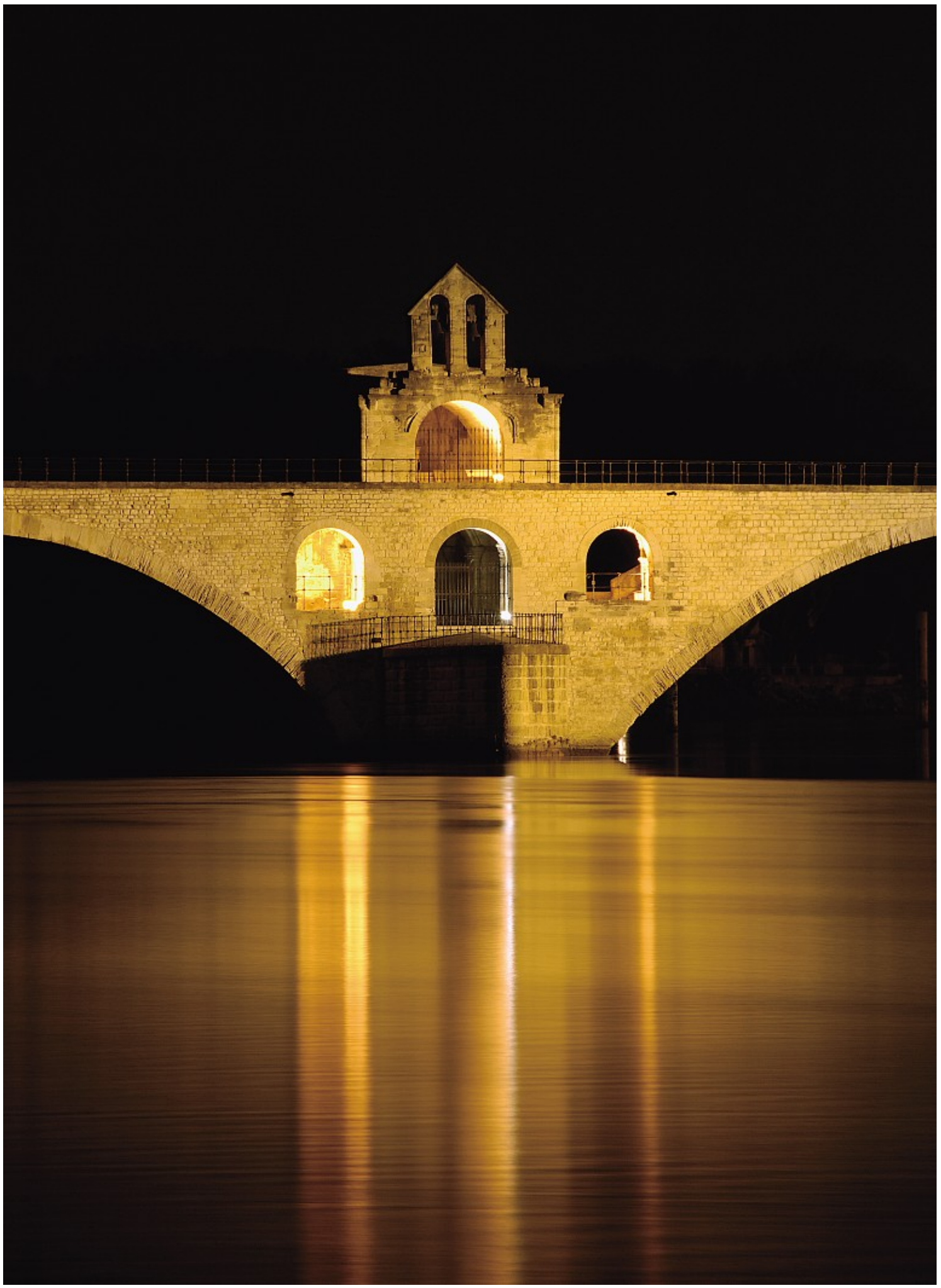
Affordable high-power zoom lens for exclusive use with Nikon digital SLRs

- 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: 255g

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



AF Zoom- Nikkor Lenses



AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED © John Shaw

Nikon 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 high-power 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)**.



AF Zoom-Nikkor 18-35mm f/3.5-4.5D IF-ED © Steven Yee Pui Chung

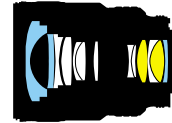
AF-S Zoom-Nikkor 17-35mm f/2.8D IF-ED (2.1x) ED ASP IF D SWM M/A SIK



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

- ED glass elements
- Aspherical lens elements



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

AF Zoom-Nikkor 18-35mm f/3.5-4.5D IF-ED (1.9x) ED ASP IF D SIK



Portable ultra-wideangle zoom lens

- Aspherical lenses and ED glass elements
- 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:** 370g

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



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

■: ED glass elements
■: Aspherical lens elements

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

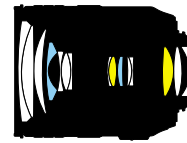


High-power wideangle zoom lens featuring SWM and VR system

- 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, D80, D100, D70s/D70, D50 and D40x/D40



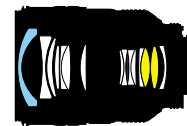
Lens construction: 15 elements in 13 groups
Closest focusing: 0.5m/1.6 ft.
Picture angle with Nikon DX Format: 35mm (135) format equivalent to 36-180mm
Filter attachment size: 72mm **Hood:** HB-25 (provided) **Dimensions:** 77 x 94mm
Weight: 575g

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, D80, D100, D70s/D70, D50 and D40x/D40



Lens construction: 21 elements in 15 groups
Closest focusing: 1.5m/5 ft. **Picture angle with Nikon DX Format:** 35mm (135) format equivalent to 105-300mm **Filter attachment size:** 77mm **Hood:** HB-29 (provided)
Dimensions: 87 x 215mm **Weight:** 1,470g (1,395g without tripod mounting foot)

* 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, D80, D100, D70s/D70, D50 and D40x/D40, and the [P] and [S] modes of the F4, F90 series, F70, F-801 series and F-601M. Other cameras are not compatible.





© Arthur Meyerson
AF Zoom-Nikkor 70-300mm f/4-5.6G

AF Zoom-Nikkor 70-300mm f/4-5.6G* (4.3x)  









High-power G-type telephoto zoom lens

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



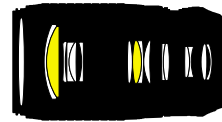
Lens construction: 13 elements in 9 groups
Closest focusing: 1.5m/4.9 ft. **Picture angle with Nikon DX Format:** 35mm (135) format equivalent to 105-450mm **Filter attachment size:** 62mm **Hood:** HB-26 (provided)
Dimensions: 74 x 116.5mm **Weight:** 425g

AF-S VR Zoom-Nikkor 70-300mm f/4.5-5.6G IF-ED* (4.3x)       



A high-power, high-performance telephoto zoom lens with VR II

- Built-in SWM for ultra-fast, ultra-quiet operation
- VR II offers the equivalent of a shutter speed 4 stops faster**
- Two ED glass elements ensure superior optical performance
- M/A mode for quick switching between autofocus and manual focus operation
- Nine-blade rounded diaphragm



Lens construction: 17 elements in 12 groups
Closest focusing: 1.5m/4.9 ft. **Picture angle with Nikon DX Format:** 35mm (135) format equivalent to 105-450mm **Filter attachment size:** 67mm **Hood:** HB-36 **Dimensions:** 80 x 143.5mm
Weight: 745g

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

* 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, D80, D100, D70s/D70, D50 and D40X/D40, and the [P] and [S] modes of the F4, F90 series, F70, F-801 series and F-601M. Other cameras are not compatible.



© Chase Jarvis
AF-S VR Zoom-Nikkor 200-400mm f/4G IF-ED

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



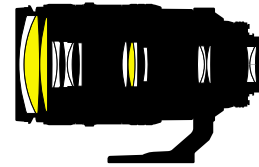
Compact, lightweight telephoto zoom lens with Vibration Reduction

- 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, D80, D100, D70s/D70, D50 and D40X/D40

- 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 x 171mm Weight: 1,360g (1,210g without tripod mounting foot)

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



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, D80, D100, D70s/D70, D50 and D40X/D40



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 x 365mm Weight: 3,275g

Fisheye & **Wide** angle AF **Nikkor Lenses**



AF Fisheye-Nikkor 16mm f/2.8D © Tim Andrew

Normal AF **Nikkor Lenses**



AF Nikkor 50mm f/1.8D © Steve Zhao

Wideangle and Normal AF Nikkors — distinguishing features

Wideangle 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

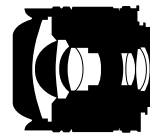


Frame-filling fisheye makes dramatic images

- 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

AF **Fisheye** Nikkor Lenses



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

AF **Wideangle** Nikkor Lenses



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

AF Nikkor 20mm f/2.8D

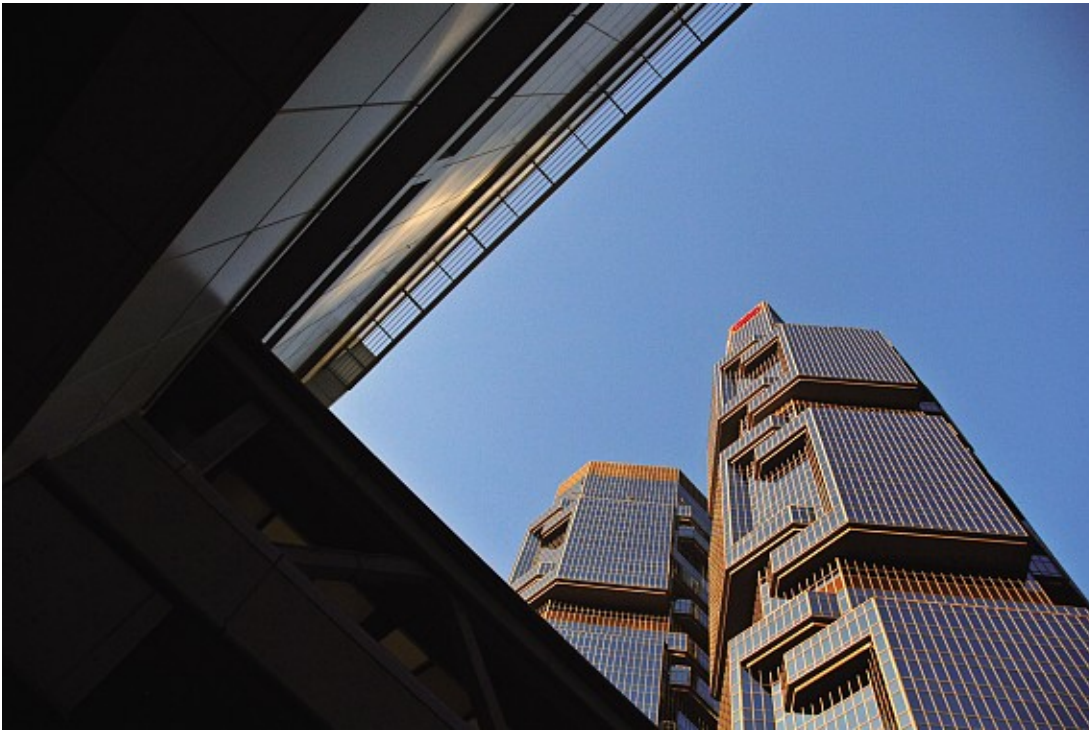


Versatile ultra-wideangle lens for general photography

- 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



AF Nikkor 28mm f/2.8D © Steven Yee Pui Chung

AF Nikkor 24mm f/2.8D   



Superb wideangle for landscapes or candid

- 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  



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  



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: 0.25m/0.85 ft.
Picture angle with Nikon DX Format: 35mm (135) format equivalent to 52.5mm
Filter attachment size: 52mm **Hood:** HN-3
Dimensions: 64.5 x 43.5mm **Weight:** 205g



AF Nikkor 50mm f/1.4D © Chase Jarvis

- : ED glass elements
- : Aspherical lens elements

AF Nikkor 50mm f/1.4D  



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
AF Nikkor Lenses



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  



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:** 155g

AF Telephoto Nikkor Lenses

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



AF-S Nikkor 300mm f/4D IF-ED © Frans Lanting

Telephoto AF
Nikkors — distin-
guishing features

With an array of focal lengths from 85mm to 600mm, extraordinary optics and high-performance auto-focusing, 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 autofocus for the Nikon F6, F5, F100, F90X, F90, F80, F75, F70, F65, PRONEA S, PRONEA 600i, D2-series, D1-series, D200, D80, D100, D70s/D70, D50 and D40X/D40 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 autofocus time.

For exceptional portrait photography, try the **AF DC-Nikkor** lenses. They offer Nikon's exclusive **Defocus-image Control** which allows you to adjust the amount of foreground or background blur with a rotating ring. Nine-blade diaphragm built into the lenses creates a rounded out-of-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/1.8D © Peter Frank


AF Nikkor 85mm f/1.4D IF



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 out-of-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: 550g

AF Nikkor 85mm f/1.8D



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: HN-23 (Provided)
 Dimensions: 71.5 x 58.5mm Weight: 380g

AF DC-Nikkor 105mm f/2D



Standard portrait lens with Defocus-image Control

- Fast, medium telephoto lens with Defocus-image Control
- Large maximum aperture allows shooting in dim light
- Rounded diaphragm opening makes out-of-focus 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    







High-performance telephoto with Defocus-image Control

- Fast telephoto lens featuring Defocus-image Control
- Large maximum aperture allows shooting in dim light
- Rounded diaphragm opening makes out-of-focus 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

AF Nikkor 180mm f/2.8D IF-ED    



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:** Built-in **Dimensions:** 78.5 x 144mm **Weight:** 760g

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



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.



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 x 203mm **Weight:** 2,900g

** As determined by Nikon performance tests.



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

- Nano Crystal Coat
- Super ED glass elements
- ED glass elements
- Aspherical lens elements

AF-S VR Nikkor 300mm f/2.8G IF-ED* ED IF D SWM M/A SC N VR



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.



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

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

AF-S Nikkor 300mm f/4D IF-ED ED IF D SWM M/A SC



A light, compact AF-S telephoto lens

- High optical performance even with a tele-converter 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: 1.45m/4.8 ft. **Picture angle with Nikon DX Format:** 35mm (135) format equivalent to 450mm **Filter attachment size:** 77mm **Hood:** Built-in **Dimensions:** 90 x 222.5mm **Weight:** 1,440g (1,300g without tripod mounting foot)

* 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, D80, D100, D70s/D70, D50 and D40X/D40 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 α ED IF D SWM M/A SC

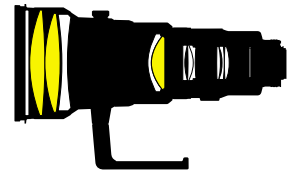


Compact, high-performance supertelephoto

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

■ 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

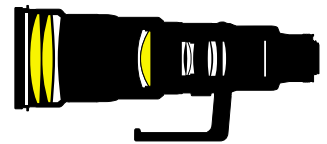
* At normal temperature

AF-S Nikkor 500mm f/4D IF-ED II ED IF D SWM M/A SC



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

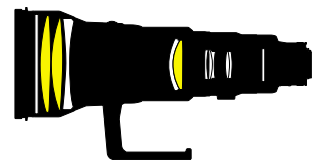
* At normal temperature

AF-S Nikkor 600mm f/4D IF-ED II ED IF D SWM M/A SC



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

* At normal temperature

AF-S Teleconverters



AF-S Nikkor 400mm f/2.8D IF-ED II with TC-14E II © Foto Natura

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)

Lens construction: 7 elements in 6 groups
Dimensions: 66 x 55mm Weight: 355g

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

AF Micro- and PC
Micro-Nikkors — dis-
tinguishing features

AF Micro- and



AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED © Chase Jarvis



PC Micro-Nikkor 85mm f/2.8D (with tilting) © N. Yuasa



PC Micro-Nikkor 85mm f/2.8D (without tilting) © N. Yuasa

PC Micro- Nikkor Lenses

For 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 close-ups** 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



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 reproduction ratio)
- 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 (1/35) format equivalent to 90mm
Working distance*: 90.4mm
Filter attachment size: 62mm Hood: HN-22
Dimensions: 70 x 74.5mm Weight: 440g

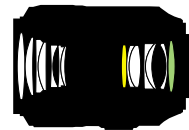
AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED*



The world's first macro lens equipped with SWM and VR systems

- Versatile medium telephoto lens for portrait and detail work
- Close-up to approx. 0.31m/1 ft. (1:1 reproduction 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 (VR II) operation offers the equivalent of using a shutter speed 4 stops faster*

* 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 (1/35) 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



Telephoto Micro lens for close-ups and nature photography

- Extremely versatile telephoto lens with long working distance
- Close-up to approx. 0.5m/1-5/8 ft. (1:1 reproduction ratio)
- 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 (1/35) format equivalent to 300mm
Working distance*: 260mm
Filter attachment size: 62mm Hood: HN-30
Dimensions: 76 x 193mm Weight: 1,190g

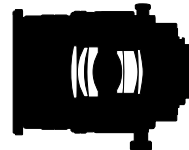
PC Micro-Nikkor 85mm f/2.8D



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

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

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 PRONEA S camera.



Lens construction: 6 elements in 5 groups
Closest focusing: 0.39m (1.3 ft.)
Picture angle with Nikon DX Format: 35mm (1/35) format equivalent to 127.5mm
Working distance*: 210mm
Filter attachment size: 77mm Hood: HB-22
Dimensions: 83.5 x 109.5mm Weight: 775g

*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.



Only the subject's face is in focus. (with tilting)

* 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, D80, D100, D70s/D70, D50 and D40X/D40, and the [P] and [S] modes of the F4, F90 series, F70, F-801 series and F-601M. Other cameras are not compatible.

Specifications

Lens	Lens Construction (groups/elements)	Picture Angle with 35mm (135) format	Picture Angle with Nikon DX Format	Minimum f/Stop	Closest Marked Focus Distance [Macro Setting] [m (ft.)]	Maximum Reproduction Ratio [Macro Setting]	Filter Attachment Size (mm)	Lens Case	Lens Hood	Dia. x Length (extension from lens mount) (mm)
DX										
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
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
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
AF-S DX 18-55mm f/3.5-5.6G ED II	5/7	—	76°-28°50'	22	0.28 (0.9)	1/3.2	52	CL-0715	HB-33	70.5 x 74
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
AF-S DX 18-135mm f/3.5-5.6G IF-ED	13/15	—	76°-12°	22	0.45 (1.5)	1/4.25	67	CL-0915	HB-32	73.5 x 86.5
AF-S DX VR 18-200mm f/3.5-5.6G IF-ED	12/16	—	76°-8°	22	0.5 (1 5/8)	1/4.5	72	CL-1018	HB-35	77 x 96.5
AF-S DX VR 55-200mm f/4-5.6G IF-ED	11/15	—	28°50'-8°	22	1.1 (3.6)	1/4.25	52	CL-0918	HB-37	73 x 99.5
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
Zoom										
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
AF 18-35mm f/3.5-4.5D IF-ED	8/11	100°-62°	76°-44°	22	0.33 (1.1)	1/6.7	77	CL-S2	HB-23	82.5 x 82.5
AF 24-85mm f/2.8-4D IF	11/15	84°-28°30'	61°-18°50'	22	0.5 (1.6) [0.21 (0.7)]	1/5.9 [1/2]	72	CL-S2	HB-25	78.5 x 82.5
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
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
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
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
AF-S VR 70-300mm f/4.5-5.6G IF-ED	12/17	34°20'-8°10'	22°50'-5°20'	32	1.5 (4.9)	1/4	67	CL-1022	HB-36	80 x 143.5
AF 80-200mm f/2.8D ED [†]	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
AF VR 80-400mm f/4.5-5.6D ED [†]	11/17	30°10'-6°10'	20°-4°	32	2.3 (7.5)	1/4.8	77	CL-M1	HB-24	91 x 171
AF-S VR 200-400mm f/4G IF-ED [†]	17/24	12°20'-6°10'	8°-4°	32	2 (6.6)	1/3.7	52	CL-L2	HK-30	124 x 365
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
AF-S 300mm f/4D IF-ED [†]	6/10	8°10'	5°20'	32	1.45 (4.8)	1/3.7	77	CL-M2	Built-in	90 x 222.5
AF-S 400mm f/2.8D IF-ED II [†]	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
AF-S 500mm f/4D IF-ED II [†]	9/11	5°	3°10'	22	4.6 (15.1)	1/8.2	52	CT-502, CL-L2	HK-28	139.5 x 394
AF-S 600mm f/4D IF-ED II [†]	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
Special Purpose										
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
AF-S VR Micro 105mm f/2.8G IF-ED	12/14	23°20'	15°20'	32	0.314 (1)	1	62	CL-1020	HB-38	83 x 116
AF Micro 200mm f/4D IF-ED [†]	8/13	12°20'	8°	32	0.5 (1 5/8)	1	62	CL-M2, CL-45	HN-30	76 x 193
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
AF-S Teleconverters[†]										
TC-14E II	5/5	—	—	—	—	—	—	CL-0715	—	66 x 24.5
TC-17E II	4/7	—	—	—	—	—	—	CL-0715	—	66 x 31.5
TC-20E II	6/7	—	—	—	—	—	—	CL-0715	—	66 x 55

Weight (g)	TC-201	TC-301	TC-14A	TC-14B	TC-14E II	TC-17E II	TC-20E II	AF-3	Max. number of HN-36 hoods usable	AF-4	Max. number of HN-37 hoods usable
305	—	—	—	—	—	—	—	Not usable		Not usable	
465	—	—	—	—	—	—	—	✓ ^{7b}	0	✓	0
755	—	—	—	—	—	—	—	✓	0	✓	0
205	—	—	—	—	—	—	—	✓	0	✓	1
390	—	—	—	—	—	—	—	✓	0	✓	0
385	—	—	—	—	—	—	—	✓	0	✓	1
560	—	—	—	—	—	—	—	✓	0	✓	0
335	—	—	—	—	—	—	—	✓	5	✓	5
255	—	—	—	—	—	—	—	✓	5	✓	5
745	①	—	①	—	—	—	—	✓ ^{7b}	0	✓	0
370	①	—	①	—	—	—	—	✓ ^{7b}	0	✓	0
545	①	—	①	—	—	—	—	✓ ^{7b}	0	✓	0
575	—	—	—	—	—	—	—	✓ ^{7b}	0	✓	0
935	④	—	④	—	—	—	—	✓ ^{7b}	0	✓	0
1,470	—	—	—	—	②	②	②	✓	0	✓	2
425	—	—	—	—	—	—	—	✓	3	✓	4
745	—	—	—	—	—	—	—	✓	2	✓	4
1,300	④	—	④	①	—	—	—	✓	0	✓	3
1,360	④	—	—	—	—	—	—	✓	2	✓	3
3,275	—	—	—	—	②	①	①	Not usable		Not usable	
290	①	—	①	—	—	—	—	Not usable		Not usable	
670	①	—	①	—	—	—	—	Not usable		Not usable	
270	①	—	①	—	—	—	—	✓ ^{7a}	0	✓	0
270	①	—	①	—	—	—	—	✓	0	✓	1
205	①	—	①	—	—	—	—	✓	0	✓	1
205	①	—	①	—	—	—	—	✓	1	✓	2
230	③	—	③	—	—	—	—	✓	1	✓	3
155	①	—	①	—	—	—	—	✓	1	✓	3
550	①	—	①	—	—	—	—	✓	1	✓	3
380	③	—	⑤	—	—	—	—	✓	2	✓	4
640	—	—	—	—	—	—	—	✓	1	✓	5
815	—	—	—	①	—	—	—	✓	1	✓	4
760	④	—	④	—	—	—	—	✓	5	✓	5
2,900	—	—	—	—	②	②	②	Not usable		Not usable	
2,870	—	—	—	—	②	②	②	Not usable		Not usable	
1,440	—	①	—	①	②	①	①	✓ ^{7a}	2	✓	5
4,440	—	①	—	①	②	②	②	Not usable		Not usable	
3,430	—	①	—	①	②	①	①	Not usable		Not usable	
4,750	—	①	—	①	②	①	①	Not usable		Not usable	
440	③	—	③	—	—	—	—	✓	1	✓	3
790	—	—	—	—	①	①	①	✓	4	✓	5
1,190	—	—	—	—	—	—	—	✓	5	✓	5
775	—	—	—	①	—	—	—	✓ ^{7b}	0	✓	0
200	—	—	—	—	—	—	—	—	—	—	—
250	—	—	—	—	—	—	—	—	—	—	—
355	—	—	—	—	—	—	—	—	—	—	—

*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



© Fraser Harding

Nikkor 20mm f/2.8



Versatile ultra-wideangle lens for general photography

- 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 candid

- 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.
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

Lens construction: 8 elements in 8 groups
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 of f/1.4

- High-speed wideangle lens
- High-contrast, sharp images even at maximum aperture
- 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

Nikkor 50mm f/1.2



Ultra-fast f1.2 aperture normal lens

- High-speed normal lens
- High-contrast, sharp images even at maximum aperture
- Ideal for candid, scenic, 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
 Weight: 360g

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

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 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	Max. number of AF-3 hoods usable	Max. number of AF-4 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 ^{*2}	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	✓ ^a	0	✓	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.

*3 With a PN-11 ring.

① Usable.

✓ Usable.

*2 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.

② When used at smaller aperture than f/11 with high shutter speeds, there is occasional uneven exposure.

*a Slight vignetting occurs.

— Not usable.

*b Vignetting will occur only in certain situations.

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.



16mm



20mm



24mm



28mm



35mm



50mm



105mm



135mm



180mm



210mm



300mm



600mm

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 eye.

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.



20mm



50mm



200mm



400mm

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 (f-number)

The maximum aperture of the lens can determine how and in what lighting situations you can shoot. Aperture value is indicated by f-number 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, wide-angle lenses offer inherently more depth of field along the entire focal length while telephoto lenses have less.



Great depth of field (f/16)



Shallow depth of field (f/2.8)

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.



CT-F1



CL-S2

CL-S3

CL-S4

CL-L2

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.

Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.

© 1998-2007 NIKON CORPORATION

Other Nikon product brochures

Brochures are available for all Nikon imaging products. Please consult your nearest authorized dealer, or check your local Nikon website via <http://nikonimaging.com/global/about/worldwide.htm>



D2xs



D2Hs



D200



D80



D40x



D40



Total Digital
Imaging System



COOLPIX Lineup



F6

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



WARNING

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



Visit the Nikon Europe website at: www.europe-nikon.com



NIKON CORPORATION

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

Nikon U.K. Ltd. Nikon House, 380 Richmond Road, Kingston, Surrey KT2 5PR, U.K. www.nikon.co.uk
Foto Distributors 516 Kyalami Boulevard, Kyalami Business Park, Midrand 1684, South Africa www.nikon.co.za
NIKON CANADA INC. 1366 Aerowood Drive, Mississauga, Ontario, L4W 1C1, Canada www.nikon.ca