

A NEW ERA IN OPTICS

EXPERIENCE AN UNPRECEDENTED
LEVEL OF PERFORMANCE



CAPTURE TOMORROW

NIKKOR[®] Z[™]



How far can optical performance evolve?

Lenses take on the essential role of receiving information about subjects in the form of light. If the information transmitted by light can be conveyed to a camera's image sensor in the purist possible form, could this be the next stage in the evolution of image expression? Based on this concept, Nikon's new Z mount mirrorless camera system is designed to improve the optical performance of lenses by using a large-diameter mount and short flange focal distance. Overwhelmingly sharp resolution that reproduces every minute detail accurately, lens aberrations suppressed to the utmost, superior reproduction of point light sources, natural and beautiful bokeh: all of these factors flow forth from this one simple concept. NIKKOR Z opens up a new dimension in optical performance.



NIKKOR Z 58mm f/0.95 S Noct

NIKKOR Z 50mm f/1.8 S

NIKKOR Z 35mm f/1.8 S

NIKKOR Z 24-70mm f/4 S

NIKKOR Z 24-70mm f/2.8 S

NIKKOR Z 14-30mm f/4 S



The vast NIKKOR F lens lineup continues to shine brightly with Nikon mirrorless cameras

Mount Adapter FTZ

The great potential of the latest mirrorless camera system, Nikon Z mount system, can be extended to NIKKOR F lenses with the Mount Adapter FTZ. Throughout the approx. 60 years of Nikon F-mount history, NIKKOR F lenses amounting to a total production of over 100 million



units have continuously focused on a great diversity of scenes and subjects.

The diversified image expression provided by the approx. 360 types of F-mount lens will continue to be actively delivered in the new mirrorless camera field.

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Nikon's lens technology realizes new-dimensional optical performance



The overwhelming optical performance achieved with the new Nikon Z mount

The newly adopted Nikon Z mount system features completely new specifications such as a large inner diameter of 55 mm and a short flange focal distance of 16 mm that permit sufficient light to be received even in the peripheral areas of an image sensor. These specifications realize much higher flexibility in lens design that enables the pursuit of new-dimensional optical performance. As a result, the development of incomparable, extremely high-performance lenses that were conventionally difficult to produce is made possible.

The evolution of imaging devices with a higher pixel count, higher frame rate and higher dynamic range is continuously proceeding and "reality" is increasingly demanded for images. In such a situation, this new mount was developed to be compatible with the high-speed, large-capacity communication of highly precise information that is essential for enhancing the quality of expression as an imaging system. Minutely detailed communication of diversified lens data between the camera body and lens contributes to remarkably advanced AF control with outstanding accuracy.

While greatly expanding the range of image expression, the new-generation mirrorless camera system featuring the Nikon Z mount provides remarkable potential and possibilities to keep pace with advancements in the imaging technologies of today and the future.



Nikon's optical design technologies integrate tradition with the latest breakthroughs

For over a century, Nikon has investigated how to express three-dimensional space within two-dimensional images and continuously explored in diverse directions. The results are precise imaging performance on the focal plane ensured by effective compensation for various lens aberrations that cause bleeding, distortion and unclear images, and beautiful bokeh characteristics enabled with the pursuit of optical performance for both focused and defocused areas. To surpass the performance of conventional versatile lenses, the new NIKKOR Z lenses will enable active investigation of new possibilities integrating traditional optical technologies consecutively

inherited from the NIKKOR concept with the dynamism of the constantly advancing technologies.







The ground aspherical lens that is employed in the highest-class model, Noct, is one of the results of these explorations. Guaranteed grinding precision that was formerly an issue in the mass production of large-diameter aspherical lenses was attained through advancement of processing techniques, realizing consistent surface accuracy. Also, in addition to Nano Crystal Coat with its proven high tolerance for incident light from a diagonal direction as well as a vertical direction, a newly developed anti-reflective coating, ARNEO Coat, that is more effective for incident light from a vertical direction specifically, is adopted. Utilizing both of these coating systems, ghost and flare are radically reduced for incident light from any direction. Thus, Nikon's optical design technologies integrating tradition with the latest breakthroughs will further enhance the optical performance of NIKKOR lenses.

S-Line lenses deliver the richest image experience with elaborate optical performance

For the S-Line series of the NIKKOR Z lenses, a much higher level of standards of design principles, and quality control that is even stricter than Nikon's long-inherited standards are newly established. The title of the S-Line is reserved only for lenses that have cleared these more rigorous standards for evaluating various factors, including MTF performance. While utilizing the advantage of outstanding flexibility in lens design of the new Nikon Z mount, the S-Line lenses achieve outstanding imaging performance by integrating the tradition of Nikon's optical design technologies with the latest optical design technologies. The S-Line lenses including f/1.8 prime lenses and a fixed f/4 zoom lens will totally change the perception from that of the conventional lenses associated with their specifications. Every S-Line model features the refined, glistening silver-colored line and the NIKKOR emblem with a decorative "S" on the lens barrel. The "S" represents the first letter of various words such as "Superior", "Special" and "Sophisticated." It also stands for silver-colored line. All of the S-Line lenses employ Nano Crystal Coat, and will also incorporate such new technologies as ARNEO Coat and a multi-focusing system. The elaborately crafted exterior design and optical performance attained at an extremely high level make the S-Line lenses as pleasurable to own as they are to use.

Grading of NIKKOR Z lenses

All NIKKOR Z lenses employ a large-diameter mount and integrate NIKKOR optical technologies, but the “S-Line” designation is used for a special class of high-performance lenses that comply with new, stricter standards of design principles and quality control.

S-Line	 NIKKOR Z 58mm f/0.95 S Noct	<p>The culmination of the NIKKOR quest for the groundbreaking optical performance</p> <p>This lens has the ability to depict subjects in ways that have never been seen before, including by rendering them with an extremely shallow depth of field.</p>
	 NIKKOR Z 14-30mm f/4 S	<p>Versatile lenses offering a new dimension of optical performance</p> <p>These lenses bring a higher level of imaging power, achieving superior reproduction with high resolution even at the periphery of the image, and utilizing the full potential of the lens at maximum aperture, for any subject.</p>
	 NIKKOR Z 24-70mm f/2.8 S	
	 NIKKOR Z 24-70mm f/4 S	
	 NIKKOR Z 35mm f/1.8 S	
 NIKKOR Z 50mm f/1.8 S		
Other lenses	<p>Lenses other than the S-Line series will be announced at a later date.</p>	<p>Well-balanced, high-performance lenses</p> <p>These lenses strike an optimum balance between advanced functionality, compactness and value for money, while retaining the basic concept of the S-Line series.</p>



S-Line

New-dimensional optical performance that innovates image expression

The title of the S-Line is reserved only for NIKKOR Z lenses that have cleared newly established standards of design principles and quality control that are even stricter than Nikon's conventional standards. The “S” represents the first letter of various words such as “Superior”, “Super” and “Sophisticated.” It also stands for the silver-colored line on the lens barrel: the symbol of the series.

All NIKKOR Z lenses that are released together with the new mirrorless cameras are S-Line models. Whichever model you may choose, every S-Line lens achieves new-dimensional optical performance including outstanding resolution that can keep pace with future imaging demands, providing photographers with excitement and richly satisfying shooting experiences.

Nano Crystal Coat

Nikon's original coating technology, Nano Crystal Coat, that is highly evaluated among professionals is employed in every S-Line lens.



Latest optical technologies

The multi-focusing system that provides superb resolution throughout the entire range of focus distances is incorporated. Also, the latest technologies such as Nikon's new anti-reflection coating, ARNEO Coat, that delivers similar performance to Nano Crystal Coat will be employed in every S-Line lens.

Stricter standards of lens design and quality control

When evaluating optical performance with MTF curves, for example, measurements are conducted in a wider area of the frame from the center to the periphery and at a higher frequency than conventional ranges, to attain high-definition images compatible with an approaching era of high pixel count and high dynamic range. Higher-level standards have also been established for measuring various factors such as distortion, axial/lateral chromatic aberration, ghost/flare effect and movie performance, enabling richer gradation and image expression.

Development roadmap of the NIKKOR Z lenses

Roadmap

A variety of lenses will be added to the NIKKOR Z lens lineup for the coming three years. New lenses include a fast prime lens with a maximum aperture of f/1.2 that can make the most of the new-dimensional optical performance provided by the Z mount, as well as a zoom lens with a fixed maximum aperture of f/2.8 that professionals are strongly demanding. A number of attractive lenses produced on the basis of individual product concepts will effectively comply with the diverse requirements of users ranging from professionals and advanced amateurs to entry users.

2018	2019	2020	2021
	S-Line NIKKOR Z 35mm f/1.8 S		
	S-Line NIKKOR Z 50mm f/1.8 S		
	S-Line NIKKOR Z 24-70mm f/4 S		
		S-Line NIKKOR Z 58mm f/0.95 S Noct	
		S-Line 20mm f/1.8	
		S-Line 85mm f/1.8	
		S-Line 24-70mm f/2.8	
		S-Line 70-200mm f/2.8	
		S-Line 14-30mm f/4	
			S-Line 50mm f/1.2
			S-Line 24mm f/1.8
			S-Line 14-24mm f/2.8

Reading the lens name

The major specifications of each NIKKOR Z lens can be read from the model name.

NIKKOR Z 00mm f/0.00 S Noct

1 2 3 4

NIKKOR Z 00-00mm f/0.0-0.0 S

1 2 3 4

- 1 Lens mount: NIKKOR Z
Lenses designed exclusively for the Nikon Z mount system.
- 2 Focal length: e.g. 58mm, 24-70mm
Prime (single-focal-length) lenses indicate a single value while zoom lenses indicate two values (wide-angle end and telephoto end).
- 3 Maximum aperture: e.g. f/0.95, f/1.8, f/4
The f-number is a value to indicate lens brightness, and the lower the value, the brighter the lens. Zoom lenses that change f-number with zooming show two values (at the wide-angle end and telephoto end), e.g. f/3.5-4.5.
- 4 Grade name: S/Noct
"S" is added to every S-Line lens, and the highest-class models in the S-Line lens lineup indicate a specific name.

Rich image experience is encapsulated within Nikon's lens technologies



Highly accurate AF that only Nikon can offer

Considering a coming era of imaging devices with a higher pixel count, higher frame rate and higher dynamic range, and that "reality" is increasingly demanded for images, focusing accuracy is essential to maximize the resolving power of the latest high-megapixel digital SLRs. More precise focusing is also crucial for NIKKOR Z lenses that provide shallower depth of field than NIKKOR F lenses. With every NIKKOR Z lens, outstanding AF accuracy is attained clearing targeted design values that are more rigorous than those of conventional lenses. Besides the focal-plane phase-detection AF system incorporated in the camera, with the stricter standards of lens design principles, and minutely detailed lens information with high-speed, large-capacity data communication between the camera and lens, the NIKKOR Z lenses realize exceptionally accurate AF control. To maximize this advantage, a higher-speed, quieter AF actuator and optimized AF algorithm are employed. Some lenses incorporate a newly developed multi-focusing system that achieves extremely high focusing accuracy while strictly compensating aberrations at close distances via the highly precise control provided by the combination of AF drive units within the lens body.

Movie performance that can fully meet the expectations of users

Every NIKKOR Z lens delivers high optical performance in both still and movie shooting, reproducing high-resolution images that project a sense of depth. Superior movie performance is realized through elaborate design carefully considering movie recording. Contrary to still images that are completed in each frame, the continuity of frames must be attached importance to so that a clip can be viewed as smoothly moving images. To effectively attain this, we have developed a particular optical design that can minimize focus breathing (shifting of the angle of view when adjusting focus), achieving supremely natural movie expression with a minimized sense of incongruity. What's more, a control ring is incorporated in every lens to which settings such as focus (M/A), aperture and exposure compensation can be assigned. By rotating the ring, these assigned functions can be adjusted seamlessly. The zoom ring and control ring can be operated comfortably with the appropriate torque to ensure outstandingly smooth image creation. The operation sounds of the control ring, zoom, focus and diaphragm mechanisms are intensively suppressed to prevent them from being recorded in the movie file.

Nikon's genuine camera style that embodies the accumulation of its design know-how

It is essential that photographic equipment should be ultimately refined tools that can function as if they are a part of the photographer, allowing full concentration on shooting. An advanced level of completion for such tools that feature highly sophisticated and functional design has been pursued in developing NIKKOR Z lenses.

Various lenses feature the same layout of the control ring so that common operability is ensured even when a lens is changed. Optimization of the shape of control parts and their layouts, as well as the lens form that enables fingers to reach them naturally, provide intuitive operation at the user's fingertips while looking into the viewfinder. In addition, when designing the control ring, focus ring and zoom ring, factors such as material, width and groove shape of knurling were intensively evaluated in order to achieve fine and accurate operational feel, assuring comfortable shooting for both stills and movies.

Shock-resistant performance equivalent to that of NIKKOR F lenses is also ensured. Every lens is designed carefully considering dust- and drip-resistant capability to protect the inside of the lens against dust and water droplets, for enhanced weather-resistant performance. In addition, Nikon's original fluorine coat applied to lens surfaces provides high antifouling performance and durability. These advanced weather-resistant features give photographers the freedom to continue shooting reliably and comfortably.



Design concept that stimulates shooting enjoyment

Design concept that achieves integration of the lens and body 1

Paints and texture used for connecting parts are common to both lenses and the camera body. A refined impression of unity is projected whichever lens is attached to the body.

Silver-colored line 2

The silver-colored line is featured on the lens barrel of S-Line models as a symbol of high-grade lenses. The diamond-cut of the dark silver line projects refined brilliance when viewed from certain directions to emphasize the presence of the S-Line lenses in a dignified way.

Lens information panel 5

An organic EL lens information panel is incorporated in some S-Line lenses that enables quick confirmation of aperture, focus distance, depth of field, etc. without looking into the viewfinder. The display information can be easily viewed even in dark situations.

Metallic finish 6

Metallic material is used for the connecting sections of the S-Line lenses to enhance the high-quality feel of the series. Specifically for the Noct, every part is finished with metal cutting work that gives the impression of being machined from a metal ingot to emphasize the refined texture.

NIKKOR emblem 3

The NIKKOR emblem is employed on the lens barrel. For S-Line lenses, the decorative "S" emblem is also featured.

Flocking inside the hood 7

For the higher-class models of the S-Line series such as the Noct, the inside of the lens hood is felt-lined. While emphasizing a feel of high quality, it contributes to delivering clear rendering by preventing light reflection inside the hood.

Inscribed letters 4

Focal length and maximum aperture are inscribed on the lens barrel of the S-Line models. Especially for the Noct, the specific name is also inscribed and colored. The inscribed letters produce a refined impression and ensure legibility over a long period.

Knurling 8

Knurling for the zoom ring, focus ring and control ring was designed in pursuit of natural finger reach and accurate operability while considering the basic concept of each lens. To ensure smooth shooting for both stills and movies, even such details as material, pitch width and groove shape were intensively investigated and verified using a tremendous number of trial models to achieve the ideal design



NIKKOR Z 58mm f/0.95 S Noct

Fast, manual-focus lens delivering superb point-image reproduction and elaborate rendering with f/0.95 maximum aperture

Groundbreaking optical performance with f/0.95 maximum aperture

The Noct Nikkor 58mm f/1.2 released in 1977 was at that time highly evaluated as a lens that finely reproduced point light sources as point images. While further evolving the design concept of that original Noct Nikkor, Nikon created a new Noct featuring f/0.95 maximum aperture that delivers new-dimensional rendering performance, thanks to a new mount system providing a much larger amount of light and improved flexibility in lens design. Besides the inherited superior point-image reproduction of point light sources, the new Noct achieves outstanding resolving power from the maximum aperture by intensively compensating the various aberrations that are usually noticeable with fast lenses. Also, utilizing an optical design in pursuit of possibilities for bokeh effects, an optimum continuity of bokeh that gently transforms from the sharply focused plane is realized. As the highest-grade, symbolic lens in the NIKKOR Z series that concentrates Nikon's renowned technologies, this lens provides an exquisite balance of resolution and bokeh, creating attractive, unprecedented spatial expression while delivering an impressive sense of depth.

Uncompromising, unique and unprecedented optical performance

New image expression enabled through the rendering capability achieved with f/0.95

The new Noct realizes the utmost optical performance, delivering outstanding resolution and bokeh characteristics from the f/0.95 maximum aperture that only NIKKOR lenses provide. In portrait and landscape shooting, even fine details can be captured with superb rendering performance that achieves extremely sharp resolution and high contrast. Also, because of an optical design that pursues greater possibilities for bokeh characteristics, an ideally smooth transition of bokeh from the focused plane is attained. Even for situations where the distance between the main subject and the background is insufficient, due to the reproduction of both an extremely sharp focus plane enabled by the shallow depth of field provided with the large aperture, and elaborate bokeh, images that impressively emphasize the subject with a greater sense of depth can be reproduced.

Superb point-image reproduction capability that meets expectations for the name "Noct"

The Noct Nikkor name was derived from the word "Nocturne". Inheriting the basic concept of the original lens, this new Noct provides the highest point-image reproduction capability of point light sources among NIKKOR lenses across the entire frame, even with the aperture set at the maximum f/0.95. Shooting point light sources using a general fast lens at the maximum aperture will usually produce noticeable sagittal coma flare, an aberration where a point image forms a conspicuous image resembling a bird spreading its wings. With the Noct, causes of sagittal coma flare are intensively eliminated across the entire frame. As a result, point light sources are reproduced as point images even at the peripheries, for clear and crisp night landscapes and astronomical shots.

New optical technologies that realize the highest-class model among S-Line lenses

Ground aspherical lenses

Improved aberration correction with the optimum high-refractive-index glass

In order to attain the very finest optical performance among the NIKKOR lens lineup, the NIKKOR Z 58mm f/0.95 S Noct newly adopts a highly accurate, large-diameter ground aspherical lens element. While achieving higher surface accuracy, glass material with a high refractive index that was previously considered difficult to employ for molded-glass aspherical lenses is utilized to effectively compensate various lens aberrations with improved corrective capability. Also, the spherical lens elements incorporated in this lens are made using glass of outstandingly high quality and surface accuracy.

ARNEO Coat

Effective ghost/flare reduction for incident light from a vertical direction

ARNEO Coat that provides anti-reflection performance almost equivalent to that of Nano Crystal Coat for incident light reaching the lens surface from a vertical direction is adopted. This multi-layer lens coating system realizes ultra-low reflectance stably over the entire visible light range due to high-density, uniform coating layer thickness. Thanks to Nikon's original thin layer manufacturing technology with an optimized algorithm, reflectance much closer to design values can be achieved for every lens with consistent quality. Together with Nano Crystal Coat that is specifically effective for incident light from a diagonal direction, ARNEO Coat ensures the capture of clear and crisp images with minimal ghost and flare effects across a wide variety of backlit situations that are normally troublesome to deal with.

Premium styling appropriate for a highest-class lens is integrated with precision feel and superb operability

To achieve an outstanding exterior design projecting a sense of high quality that is suitable for such a symbolic lens, a silver-colored line, lens information panel and inscription of the Noct name are featured on the lens barrel, and every exterior part is finished with metal cutting work. In addition to its refined exterior design, this lens also provides superior practicality in pursuit of precision feel and excellent operability. The high-precision focus ring enables accurate manual focusing with appropriate torque and a large rotation angle even for the shallow depth of field delivered with f/0.95 that usually makes it difficult to achieve focus, and is ideal for both still and movie shooting. Comfortable shooting operation is also ensured with the newly adopted control ring to which functions such as aperture setting and exposure compensation are assigned. The inside of the lens hood is felt-lined, delivering clear rendering by effectively preventing light reflection inside the hood.

Advanced functions and features that live up to the expectations and trust of users

Lens information panel that enables confirmation of aperture, focus distance and depth of field without looking into the viewfinder is incorporated, a first for NIKKOR lenses. The number of functions that can be assigned to the lens Fn button has been increased to match those of the Fn1/Fn2 buttons on the camera body. An electromagnetic diaphragm mechanism is incorporated that provides accurate diaphragm control for stable aperture control even during continuous shooting. Fluorine coat that ensures easy removal of dust and dirt even when they adhere to the lens surface is applied to the front element for enhanced antifouling performance. These features all add up to assure worry-free, comfortable shooting.





Camera body: Z 7 • Lens: NIKKOR Z 14-30mm f/4 S • Image quality: JPEG FINE • Exposure: [A] mode, 2 s, f/8 • White balance: Cloudy
 • Sensitivity: ISO 400 • Picture Control: Standard © Jimmy McIntyre

Superior optical performance achieves exceptional rendering across the entire frame

The NIKKOR Z 14-30mm f/4 S adopts four ED glass and four aspherical lens elements. It delivers the superior optical performance that only the S-Line lenses can offer, including superb resolution that brings out the full potential of high-pixel-count digital cameras, such as the Z 7 with 45.7 effective megapixels.

Thanks to its outstanding resolving power, peripheral subjects can be rendered sharply. Superb point-image reproduction is achieved when capturing point light sources in night landscapes or starry night skies utilizing ultra-wide angles of view. Nano Crystal Coat effectively reduces ghost and flare, ensuring clear images even when shooting at ultra-wide angles of view, in compositions where the sun tends to be included in the shot.



© David Evans



© Jimmy McIntyre

NIKKOR Z 14-30mm f/4 S

Filter-attachable ultra-wide-angle zoom lens offering portability, high image quality and expanded shooting possibilities

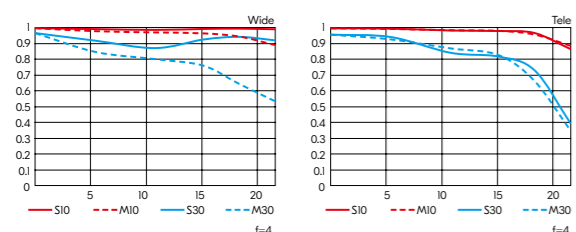


Compact and lightweight lens for wider shooting applications

While maintaining the minimum required size to deliver an extremely high standard of optical performance, this lens provides outstanding portability, making it an ideal partner for the compact Z series cameras. The easy-to-carry, approx. 485 g lightweight body employs a lens mechanism that can extend/retract the lens via zoom ring rotation without pressing a button, ensuring remarkable agility for faster shooting compared to conventional retractable-type lenses.



© David Evans



Spatial Frequencies	S: Sagittal	M: Meridional
10 lines/mm	—	- - -
30 lines/mm	—	- - -



■ : Aspherical lens elements
 ■ : ED glass elements

STM N ED AS M/A IF

Lens construction: 14 elements in 12 groups (4 ED glass and 4 aspherical lens elements, elements with Nano Crystal Coat, and fluorine-coated front lens element)

Minimum focus distance: 0.28 m/0.92 ft

Maximum reproduction ratio: 0.16x

Filter-attachment size: 82 mm

Accessories: • LC-82B 82 mm snap-on Front Lens Cap (supplied) • LF-N1 Rear Lens Cap (supplied) • HB-86 Bayonet Hood (supplied) • CL-C1 Lens Case (supplied) • 82 mm screw-on filters (82 mm Neutral Color NC Filter/82 mm Circular Polarizing Filter II) (optional)

World's first* filter-attachable ultra-wide-angle zoom lens covering a focal length from 14 mm

The NIKKOR Z 14-30mm f/4 S covers a focal length from 14 mm to 30 mm, allowing it to deliver images with dynamic perspectives, as well as capture a broad range of scenes. With its small diameter and slim front lens element, it is the world's first* wide-angle zoom lens with a focal length from 14 mm that is also filter-attachable. Photographers can shoot more creatively with Polarizing or ND filters, which cannot be used with conventional lenses. Because the lens can be protected with a filter or lens hood, is sealed for dust- and drip-resistance and has a fluorine coat applied to its front surface, photographers can shoot more actively with ease.

* Among FX-format (full-size) compatible interchangeable lenses for digital cameras, available as of January 8, 2019. Based on Nikon research.



Constant maximum aperture at f/4 throughout the zoom range

The maximum aperture is fixed at f/4 at any zoom setting. Photographers can shoot at faster shutter speeds without raising sensitivity even for relatively dark scenes. While many zoom lenses change the maximum aperture according to focal length, this lens enables photographers to reflect their intentions with exposure control.

Enhanced movie recording performance achieved through rigorous design

The NIKKOR Z 14-30mm f/4 S employs a control ring that can have various functions assigned to it, such as focus (M/A*), aperture and exposure compensation, ensuring smooth and quiet operation with an appropriate amount of torque. Focus breathing (shifting of the angle of view when adjusting focus) is effectively compensated for smoother movie recording. The lens also incorporates various advanced movie functions, including smooth diaphragm control that enables natural transitions in image brightness during recording.

* M/A mode allows you to switch from autofocus to manual simply by rotating the control ring.

Other features and functions

- Highly accurate AF control for both still and movie shooting, thanks to higher standards of lens design principles and minutely detailed lens information enabled by high-speed, large-capacity communication between camera and lens
- Stepping motor (STM) employed for quiet and responsive AF control
- Electromagnetic diaphragm mechanism provides accurate, stable aperture control even during high-speed continuous shooting

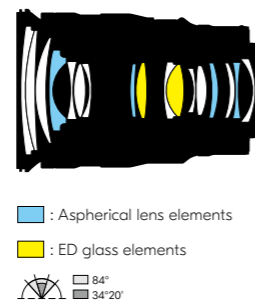
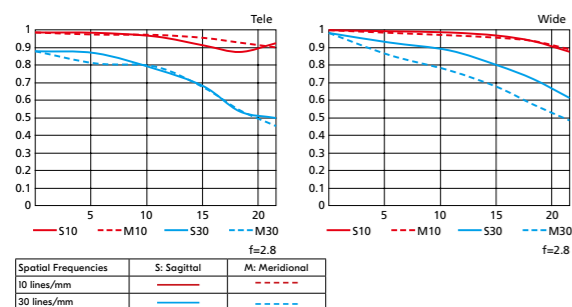




Camera body: Z 7 • Lens: NIKKOR Z 24-70mm f/2.8 S • Image quality: JPEG FINE • Exposure: [M] mode, 1/640 s, f/7.1 • White balance: Natural light auto • Sensitivity: ISO 64 • Picture Control: Standard © Ami Vitale

NIKKOR Z 24-70mm f/2.8 S

Fast standard zoom realized as an ideal versatile lens that provides overwhelming rendering quality, whatever the shooting scene



STM N ED AS M/A IF

Lens construction: 17 elements in 15 groups (2 ED glass and 4 aspherical lens elements, elements with Nano Crystal Coat or ARNEO Coat, and fluorine-coated front and rear lens elements)

Minimum focus distance: 0.38 m/1.25 ft

Maximum reproduction ratio: 0.22x

Filter-attachment size: 82 mm

Accessories: • LC-82B 82 mm snap-on Front Lens Cap (supplied) • LF-N1 Rear Lens Cap (supplied) • HB-87 Bayonet Hood (supplied) • CL-C2 Lens Case (supplied) • 82 mm screw-on filters (82 mm Neutral Color NC Filter/82 mm Circular Polarizing Filter II) (optional)

Outstanding optical performance achieved with a fast zoom lens featuring f/2.8 maximum aperture

The NIKKOR Z 24-70mm f/2.8 S, one of the high-performance S-Line models, is a fast standard zoom lens with f/2.8 maximum aperture covering the frequently used focal-length range from wide-angle 24 mm to 70 mm. Superior optical performance is realized by fully utilizing the latest optical technologies while maximizing the high flexibility in lens design that the Z mount system provides. For the AF drive system, the new "multi-focusing system" is adopted. While contributing to highly accurate, high-speed AF, it achieves an extremely sharp focal plane across the entire shooting range, including close distances, for any scene. Also, the large bokeh effect that the f/2.8 maximum aperture enables, as well as the natural, beautiful bokeh characteristics with minimal coloring, let you bring impressive emphasis to main subjects. Outstandingly high image quality that you might only expect from the highest-class standard zoom lens can be enjoyed from the maximum aperture at all shooting distances.



© Ami Vitale



© Ami Vitale

Compact and light body is attained for a high-performance zoom lens

Portability is an important factor in making this fast standard zoom lens highly versatile. Thanks to the Z mount system that provides substantially improved flexibility in lens design, a compact and light lens body that was previously thought difficult to achieve with an f/2.8 zoom lens is realized while delivering a higher standard of optical performance. The easy-to-carry body with a weight of approx. 805 g and a length of 126.0 mm increases shooting opportunities, enabling creation of imaginative works for both business and leisure/hobby situations, as well as dynamic landscape shots during travel.

Size comparison



NIKKOR Z 24-70mm f/2.8 S
AF-S NIKKOR 24-70mm f/2.8E ED VR



© Ami Vitale

Great movie recording performance realized by intensive consideration for even the smallest details

The NIKKOR Z 24-70mm f/2.8 S delivers high rendering performance in both still and movie shooting. Genuine movie performance is achieved via the adoption of a variety of features that enable smooth movie expression. It incorporates a control ring to which aperture or exposure compensation setting can be assigned. Smooth and quiet recording is made possible with its click-less operational feel. Also, the operation sounds of AF and diaphragm mechanisms are intensively suppressed to ensure comfortable recording. Focus breathing (shifting of the angle of view when adjusting focus) is effectively compensated for smoother movie recording. Other advanced movie functions include smooth diaphragm control that provides natural transitions in image brightness during recording.

High-performance lens coating systems for effective ghost and flare reduction

As well as Nano Crystal Coat, the lens also adopts the newly developed anti-reflection coating system, ARNEO Coat. This system is particularly effective for incident light reaching the lens surface from a vertical direction. Utilized with Nano Crystal Coat that is effective for incident light from a diagonal direction, ARNEO Coat realizes ultra-low reflectance stably over the entire visible light range. Thanks to this, sharp and clear images with minimal ghost and flare effects can be captured even when a light source is located within the frame.

Refined styling and high functionality that a higher-class S-Line model provides

In addition to an easy-to-use control ring that functions independently of the focus ring, a lens information panel is incorporated that enables quick confirmation of aperture, focus distance, depth of field, etc., without looking into the viewfinder. It also adopts a L-Fn (lens function) button, which enhances convenience by allowing an increased number of functions to be assigned. For the lens hood, a hood release is employed to prevent unintentional dropping of the hood. All of these features contribute to the refinement of design and functionality.



Reliability that enables photographers to use it with supreme confidence

The lens body was designed carefully considering dust- and drip-resistant performance. Various areas including movable parts of the lens barrel are sealed to prevent dust and water droplets from entering the body. Nikon's original fluorine coat is applied to the front and rear lens elements, that are likely to get dirty during outdoor shooting. Besides its superb anti-fouling performance, its anti-reflection performance also contributes to obtaining clearer images, whatever the circumstances.

Other features and functions

- Electromagnetic diaphragm mechanism provides accurate, stable aperture control even during high-speed continuous shooting





Camera body: Z 7 • Lens: NIKKOR Z 24-70mm f/4 S • Image quality: JPEG FINE • Exposure: Manual, 1/80 s, f/4 • White balance: Color temperature (5700K) • Sensitivity: ISO 100 • Picture Control: Vivid © Tamara Lackey

Superior optical performance optimized for high-megapixel digital cameras

Employing one aspherical ED glass, one ED glass and three aspherical lens elements, outstanding optical performance is realized. Sharp resolution is retained even in the peripheral areas of the frame throughout the entire zoom range from the maximum aperture. Minimum focus distance of 0.3 m across the zoom range, fine point-image reproduction and high tolerance for backlight with Nano Crystal Coat are also provided, resulting in high image quality for both stills and movies in diverse scenes.



© Tamara Lackey

Standard zoom lens covering 24-70 mm to comply with diverse scenes

The frequently used, standard focal-length range from wide-angle 24 mm to medium-telephoto 70 mm can effectively cover a wide variety of scenes and subjects. In general shooting from snapshots of everyday life to portraits and landscapes, this lens enables the capture of high-quality images without changing lenses.



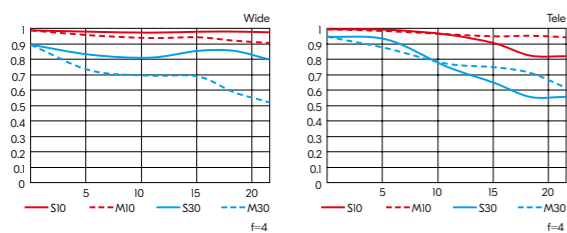
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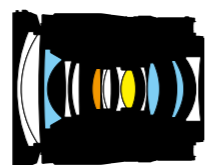
© Tamara Lackey

NIKKOR Z 24-70mm f/4 S

Portable, high-performance standard zoom lens, with superb rendering that can transform every scene into a work of art



Spatial Frequencies	S: Sagittal	M: Meridional
10 lines/mm	—	—
30 lines/mm	—	—



- : Aspherical ED glass element
- : Aspherical lens elements
- : ED glass element



STM N ASED ED AS M/A IF

Lens construction: 14 elements in 11 groups (1 aspherical ED glass, 1 ED glass and 3 aspherical lens elements, elements with Nano Crystal Coat, and fluorine-coated front lens element)

Minimum focus distance: 0.3 m/0.99 ft

Maximum reproduction ratio: 0.3x

Filter-attachment size: 72 mm

Accessories: • LC-72B 72 mm snap-on Front Lens Cap (supplied) • LF-N1 Rear Lens Cap (supplied) • HB-85 Bayonet Hood (supplied) • CL-C1 Lens Case (supplied) • 72 mm screw-on filters (72 mm Neutral Color NC Filter/72 mm New Soft Focus Filter/72 mm Circular Polarizing Filter II) (optional)

Constant maximum aperture of f/4 throughout the entire zoom range

The maximum aperture is f/4 at any zoom setting. This enables the use of high-speed shutter without increasing ISO sensitivity even in comparatively dark situations. Also, while many zoom lenses change the maximum aperture according to focal length, this lens permits shooting using the same f/4 aperture throughout the zoom range, enabling photographers to reflect their intentions with exposure control. In portrait shooting using a medium-telephoto 70 mm focal length, it is possible to emphasize the subject by softly blurring the background utilizing natural bokeh characteristics delivered with f/4 aperture.

Achieving high optical performance in shooting and portability

While maintaining the minimum required size to deliver an extremely high standard of optical performance, this lens provides outstanding portability. The easy-to-carry, approx. 500 g lightweight body employs a retractable lens mechanism that can be set on/off via zoom ring rotation without pressing a button, ensuring remarkable agility for faster shooting compared to conventional retractable-type lenses. Also, A control ring is newly adopted for more comfortable shooting operation. Functions such as focus (M/A), aperture and exposure compensation can be assigned to the ring, ensuring more intuitive, smoother shooting.

Great movie recording performance realized by intensive consideration even for details

Focus breathing (shifting of the angle of view when adjusting focus) is effectively compensated and various sounds (AF drive, diaphragm drive, control ring operation) are reduced. Also, smooth diaphragm control enables the recording of movies with natural transition of image brightness. In addition, smoother image expression can be achieved via the superb operational feel of each operation ring.

Other features and functions

- Lens body is designed carefully considering dust- and drip-resistant performance for enhanced reliability
- Fluorine coat applied to front lens surface
- Highly accurate AF control for both still and movie shooting with higher standards of lens design principles and minutely detailed lens information with high-speed, large-capacity communication
- A stepping motor (STM) is employed for quiet and responsive AF control
- Electromagnetic diaphragm mechanism that accurately controls the aperture for stable aperture control even during continuous shooting





Camera body: Z 7 • Lens: NIKKOR Z 35mm f/1.8 S • Image quality: JPEG FINE • Exposure: [A] mode, 1/5000 s, f/1.8 • White balance: Auto (6000K)
 • Sensitivity: ISO Auto (100) • Picture Control: Standard © Ross Harvey

NIKKOR Z 35mm f/1.8 S

New-generation, fast, wide-angle lens useful in a wide variety of situations, delivering superior rendering that overwhelms other 35mm f/1.8 lenses



Superior rendering capability that overturns the perception of an f/1.8 lens

Higher optical performance very different from conventional f/1.8 lenses is realized through the following four factors: 1) resolving power compatible with high-megapixel digital cameras that enables reproduction of even minute texture, 2) superb point-image reproduction when capturing point light sources in night landscapes, 3) soft and natural bokeh characteristics, and 4) reduced axial chromatic aberration for minimal color fringing. Specifically, regarding resolution, thanks to the adoption of a multi-focusing system, high imaging performance is provided at any focus distance. Even minute details of distant scenery are sharply reproduced, while in close-range portraits, it is possible to emphasize the subject by rendering the eyes in sharp focus against a softly blurred background. Also, Nano Crystal Coat that effectively reduces ghost and flare is employed to ensure clear, sharp reproduction even for backlit situations. While achieving higher optical performance, compact design is also attained for superb portability.



© Yoshitsugu Enomoto



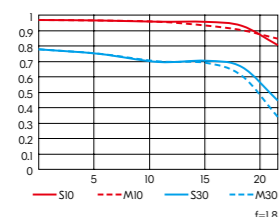
© Ross Harvey

Quiet, high-speed and highly accurate AF

With the adoption of the multi-focusing system, higher standards of lens design principles, and more detailed lens information with high-speed, large-capacity communication between the camera and lens, outstandingly accurate AF control is attained for both still and movie shooting. The multi-focusing system is a new AF drive system that also contributes to enhancing optical performance. Via the combination of AF drive units within the lens body, the position of the lens focus groups is precisely controlled. By drastically reducing aberrations, superb imaging performance is delivered across the entire shooting range including close distances. Furthermore, extremely accurate and high-speed AF control is also realized. A new, powerful stepping motor (STM) that enables highly precise lens stopping control is employed for further improved focusing accuracy. Utilizing a stepping motor also results in an outstandingly quiet AF drive mechanism.

Highly convenient features and superior operability

A control ring is newly adopted to which functions such as focus (M/A), aperture and exposure compensation can be assigned. The ring enables comfortable shooting with its superior operational feel. It also works as the focus ring when manual focus mode is selected.



Spatial Frequencies	S: Sagittal	M: Meridional
10 lines/mm	—	- - -
30 lines/mm	—	- - -



■ : Aspherical lens elements
 ■ : ED glass elements



STM N ED AS M/A RF

Lens construction: 11 elements in 9 groups (2 ED glass elements and 3 aspherical lens elements, and elements with Nano Crystal Coat)

Minimum focus distance: 0.25 m/0.82 ft

Maximum reproduction ratio: 0.19×

Filter-attachment size: 62 mm

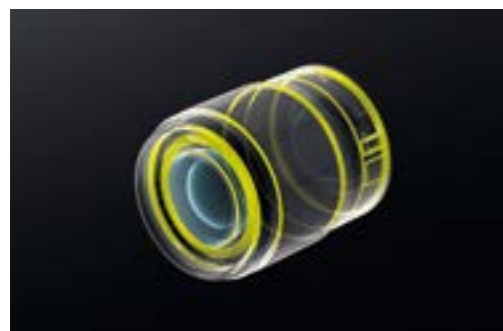
Accessories: • LC-62B 62 mm snap-on Front Lens Cap (supplied) • LF-N1 Rear Lens Cap (supplied) • HB-89 Bayonet Hood (supplied) • CL-C1 Lens Case (supplied) • 62 mm screw-on filters (62 mm Neutral Color NC Filter/62 mm New Soft Focus Filter/62 mm Circular Polarizing Filter II) (optional)

Great movie recording performance realized by intensive consideration even for details

Focus breathing (shifting of the angle of view when adjusting focus) is effectively compensated and various sounds (AF drive, diaphragm drive, control ring operation) are minimized. Also, smooth diaphragm control enables the recording of movies with natural transition of image brightness. In addition, smooth image expression is achieved with comfortable operation of the control ring.

Other features and functions

- Lens body is designed carefully considering dust- and drip-resistant performance for enhanced reliability
- Electromagnetic diaphragm mechanism that accurately controls the aperture for stable aperture control even during high-speed continuous shooting





Camera body: Z 7 • Lens: NIKKOR Z 50mm f/1.8 S • Image quality: JPEG FINE • Exposure: Manual, 1/200 s, f/1.8 • White balance: Auto 1 (4780K) • Sensitivity: ISO 100 • Picture Control: Portrait © Kenta Aminaka

Outstanding rendering realized with the new Z mount optical system that overturns perceptions about f/1.8 lenses

Optical performance remarkably superior to that of conventional lenses is achieved by the lens arrangement made possible by the new Z lens mount. The lens construction of 12 elements in 9 groups including ED glasses and aspherical lenses provides evidence of a superb optical design that delivers uncompromising image quality. Higher optical performance that differs from conventional f/1.8 lenses is attained through the following four factors: 1) resolving power compatible with high-megapixel digital cameras that enables reproduction of even minute texture, 2) soft and beautiful bokeh characteristics even at short distances, 3) intensively reduced axial chromatic aberration, and 4) superb point-image reproduction. The full potential of this lens can be realized even at the maximum aperture. Superb resolving power, specifically, is retained at a higher level, providing sharp reproduction of details across the entire frame at any focus distance. Also, Nano Crystal Coat that effectively reduces ghost and flare is employed to ensure clear, sharp rendering even under backlit conditions. Outstanding rendering performance that changes perceptions about f/1.8 lenses enables the capture of images just the way photographers imagine they will be. While enhancing optical performance, compact design is also achieved for superb portability.



© Kenta Aminaka



© Kenta Aminaka

NIKKOR Z 50mm f/1.8 S

New-generation, fast prime lens with superior rendering for exquisite image expression that redefines perceptions of what a 50mm f/1.8 lens can do

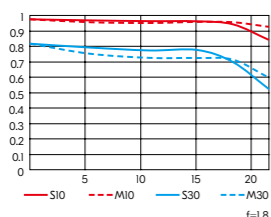


Quiet and highly accurate AF

With the higher standards of lens design principles, and more detailed lens information via high-speed, large-capacity communication between the camera and lens, outstandingly accurate AF control is provided for both still and movie shooting. A new, powerful stepping motor (STM) that enables quiet and accurate AF control is adopted as an AF actuator. The stepping motor realizes quiet AF shooting while ensuring high optical performance, which is usually difficult to attain.

Highly convenient features and superior operability

A control ring is newly adopted to which functions such as focus (M/A), aperture and exposure compensation can be assigned. The ring enables comfortable shooting with its superior operational feel. It also works as the focus ring when manual focus mode is selected.



Spatial Frequencies	S: Sagittal	M: Meridional
10 lines/mm	—	---
30 lines/mm	—	---



■ : Aspherical lens elements
 ■ : ED glass elements



STM N ED AS M/A IF

Lens construction: 12 elements in 9 groups (2 ED glass elements and 2 aspherical lens elements, and elements with Nano Crystal Coat)
Minimum focus distance: 0.4 m/1.32 ft
Maximum reproduction ratio: 0.15×
Filter-attachment size: 62 mm
Accessories: • LC-62B 62 mm snap-on Front Lens Cap (supplied) • LF-N1 Rear Lens Cap (supplied) • HB-90 Bayonet Hood (supplied) • CL-C1 Lens Case (supplied) • 62 mm screw-on filters (62 mm Neutral Color NC Filter/62 mm New Soft Focus Filter/62 mm Circular Polarizing Filter II) (optional)

Great movie recording performance realized by intensive consideration even for details

Focus breathing (shifting of the angle of view when adjusting focus) is effectively compensated and various sounds (AF drive, diaphragm drive, control ring operation) are minimized. Also, smooth diaphragm control enables the recording of movies with natural transition of image brightness. In addition, smooth image expression is achieved with superb operational feel of the control ring.

Other features and functions

- Lens body is designed carefully considering dust- and drip-resistant performance for enhanced reliability
- Electromagnetic diaphragm mechanism that accurately controls the aperture for stable aperture control even during high-speed continuous shooting





Camera body: Z 7 • Lens: AF-S Micro NIKKOR 60mm f/2.8G ED + Mount Adapter FTZ
 • Image quality: JPEG FINE • Exposure: Manual, 1/160 s, f/3.2
 • White balance: Day white fluorescent, B3.50, M3.50
 • Sensitivity: ISO 100 • Picture Control: Portrait © Lafugue Logos



Mount Adapter FTZ

Extend the superb performance of the new Nikon mirrorless camera system to the vast NIKKOR F lens lineup

Nikon's new mount system plays an essential role in the realization of this unprecedented imaging system. What's more, the Mount Adapter FTZ allows long-time Nikon users to continue utilizing their existing NIKKOR F lenses seamlessly with the new system. Shooting with AE is enabled with a total of approx. 360 types of NIKKOR F lens from AI type onwards, while shooting with AF/AE is available with 93 types of AF-P/AF-S/AF-I lenses, ensuring the same operation as with the new Nikon mirrorless camera system.



- Shooting with AE is available with approx. 360 types of NIKKOR F lens from AI type onwards.
- Shooting with AF/AE is available with 93 types of AF-P/AF-S/AF-I lenses.
- In shooting with AF, all AF/AF-area modes of Nikon mirrorless camera system can be used without limitation. AF speed setting during movie recording is available with some lenses.
- In shooting with AE, all metering/exposure modes of Nikon mirrorless camera system can be used without limitation.
- Image quality equivalent to using Nikon mirrorless camera system is ensured, maximizing the optical performance of each NIKKOR F lens.
- In-camera VR available when attaching a NIKKOR F lens without built-in VR.
- When attaching a NIKKOR F lens with built-in VR, both in-lens VR and in-camera VR activate to detect camera shake in three rotational directions (yaw, pitch and roll).
- Various sections are effectively sealed to ensure dust- and drip-resistant performance equivalent to that of NIKKOR F lenses.



Camera body: Z 7 • Lens: AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED + Mount Adapter FTZ © Lafugue Logos



Camera body: Z 7 • Lens: AF-S NIKKOR 180-400mm f/4E TCI.4 FL ED VR + Mount Adapter FTZ © Marsel Van Oosten

Supported Features

Supported features are indicated by check marks (✓), unsupported features by dashes (—).

Lens		Mode	Focus mode			Shooting mode		Metering mode
			AF	MF (with electronic rangefinder)	MF	AUTO, P, S	A, M	
Autofocus	CPU	AF-S Type G, E, and D; AF-P Type G and E; AF-I Type D	✓	✓	✓	✓	✓	✓
		AF Type G and D	—	✓	✓	✓	✓	✓
		Other AF Lenses	—	—	—	✓	✓	✓
Manual focus	CPU	PC-E NIKKOR Series, PC NIKKOR 19mm f/4E ED	—	—	✓	✓	✓	✓
		PC Micro 85mm f/2.8D	—	—	✓	—	✓*	✓
		AI-P Lenses	—	—	✓	✓	✓	✓
	Non-CPU	AI-, AI-Modified NIKKOR or Nikon Series E Lenses	—	—	✓	—	✓	✓

*Mode M only.

Telling Lenses Apart

■ AF-S Type G, E, and D; AF-P Type G and E; AF-I Type D

An AF-S NIKKOR 50mm f/1.4G is shown.



■ AF Type G and D

An AI AF Nikkor 50mm f/1.4D is shown.



■ Other AF Lenses

An AI AF Nikkor 50mm f/1.4S is shown.



■ AI-, AI-Modified NIKKOR or Nikon Series E Lenses

An AI Nikkor 50mm f/1.4S lens is shown.



Exposure meter coupling guide

AI-, AI-modified NIKKOR, and Nikon Series E lenses have an exposure meter coupling guide on the aperture ring; they do not have CPU contacts and their labels do not begin with "AF".

Points Common to all F Mount NIKKOR Lenses

The following restrictions and precautions apply to all F mount NIKKOR lenses:

- If the lens is equipped with an aperture ring, select minimum aperture (the highest f-number) before attaching the lens to the mount adapter.
- Attaching a DX lens automatically selects the DX image area and disables the Image Dust Off ref photo option in the camera setup menu.
- Custom Setting f2 (Custom control assignment) > Lens Fn button option in the camera menus applies to the lens focus function button. In the case of lenses equipped with a focus function selector, the option chosen with the camera applies only if AF-L is selected with the focus function selector.
- The Focus shift shooting option in the camera photo shooting menu can be used with AF-S and AF-P lenses. No peaking stack image is recorded.
- The Vignette control and Auto distortion control options in the movie shooting menu have no effect.
- The edges of pictures taken with Auto distortion control enabled in the photo shooting menu may be cropped out in order to reduce distortion. Take a test shot and view the results in the display.
- Sounds may be audible from the lens or mount adapter during shooting or when the camera is turned on or off.
- The WT-7/A/B/C Wireless Transmitter cannot be attached to the camera tripod mount while the Mount Adapter FTZ is in use. Insert the WT-7/A/B/C into its supplied case and attach it to the strap or the tripod.
- The option selected for Custom Setting g4 (AF speed) applies only to AF-P lenses and the lenses listed below. All other lenses focus at maximum speed.

* For details, see the instruction manual of the Mount Adapter FTZ.

Incompatible Lenses and Accessories

The following lenses and accessories cannot be used with the Mount Adapter FTZ. Attempting to forcibly attach any of this equipment could damage the adapter or the lens. Individual variation may render lenses other than those listed below incompatible; do not use force if you encounter resistance when attempting to attach a lens.

- Non-AI lenses
- IX-NIKKOR
- TC-16A AF Teleconverter
- Lenses that require the AU-1 focusing unit (400mm f/4.5, 600mm f/5.6, 800mm f/8, 1200mm f/11)
- Fisheye (6mm f/5.6, 7.5mm f/5.6, 8mm f/8, OP 10mm f/5.6)
- 2.1cm f/4
- K2 Extension Ring
- 180-600mm f/8 ED (serial numbers 174041-174180)
- 360-1200mm f/11 ED (serial numbers 174031-174127)
- 200-600mm f/9.5 (serial numbers 280001-300490)
- AF lenses for the F3AF (AF 80mm f/2.8, AF 200mm f/3.5 ED, TC-16 AF Teleconverter)
- PC 28mm f/4 (serial number 180900 or earlier)
- PC 35mm f/2.8 (serial numbers 851001-906200)
- PC 35mm f/3.5 (old type)
- Reflex 1000mm f/6.3 (old type)
- NIKKOR-H Auto 2.8cm f/3.5 (28mm f/3.5) lenses with serial numbers below 362000
- NIKKOR-S Auto 3.5cm f/2.8 (35mm f/2.8) lenses with serial numbers below 928000
- NIKKOR-S Auto 5cm f/2 (50mm f/2)
- NIKKOR-Q Auto 13.5cm f/3.5 (135mm f/3.5) lenses with serial numbers below 753000
- Micro-NIKKOR 5.5cm f/3.5
- Medical-NIKKOR Auto 200mm f/5.6
- Auto NIKKOR Telephoto-Zoom 85-250mm f/4-4.5
- Auto NIKKOR Telephoto-Zoom 200-600mm f/9.5-10.5

Optical technologies

Aspherical lens **AS**

Aspherical lens elements are particularly useful for correcting distortion and spherical aberration. Because a single aspherical lens element provides a compensation effect equivalent to that of several spherical lenses, a compact and light design can be achieved.

For the NIKKOR Z 58mm f/0.95 S Noct, a larger-diameter, ground aspherical lens is utilized. Besides providing uniformly precise lens surface, via the adoption of glass material with a high refractive index that was previously considered difficult to employ for molded-glass aspherical lenses, the ground aspherical lens accurately compensates various lens aberrations with its outstanding aberration correction capability.

ARNEO Coat

In addition to the proven Nano Crystal Coat, the newly developed ARNEO Coat anti-reflection coating system is incorporated in some S-Line lenses. This advanced system delivers an equivalent or superior anti-reflection effect to that of Nano Crystal Coat for incident light reaching the lens surface from a vertical direction. Utilized in combination with Nano Crystal Coat, ARNEO Coat enables the capture of clear and crisp images with minimal ghost and flare effects even when a light source is located within the frame.

Thanks to Nikon's original thin-layer manufacturing technology with its optimized algorithm, reflectance that closely approaches design values can be attained for every lens with consistent quality due to high-density, uniform coating layer thickness, realizing ultra-low reflectance stably over the entire visible light range.

Effective for incident light from a vertical direction



ED (Extra-low Dispersion) glass **ED**

Nikon was the world's first camera maker to develop ED (Extra-low Dispersion) glass that could minimize prism-caused color dispersion. Color fringing caused by differences in focal length is effectively minimized.

Aspherical ED glass **ASED**

Using ED (Extra-low Dispersion) glass that successfully minimizes color fringing as a material, this type of lens features non-spherical surfaces on one or both sides of the glass. It provides superior rendering capability by maximizing the advantages of both ED glass and an aspherical lens – effectively correcting various lens aberrations such as lateral chromatic aberration, coma flare at the periphery, as well as distortion and spherical aberration.

HRI (High Refractive Index) lens

With a refractive index of more than 2.0, one HRI lens can offer effects equivalent to those obtained with several normal glass elements and can compensate for both field curvature and spherical aberration. Therefore, HRI lenses achieve great optical performance in an even more compact body.

Nano Crystal Coat **N**

Nano Crystal Coat is an antireflective coating that employs an extra-low refractive index coating featuring ultra-fine, nano-sized crystal particles. This coating effectively reduces ghost and flare effects caused by red light and light entering the lens diagonally, resulting in clearer images.

Fluorine coat

Nikon's fluorine coat efficiently repels dust, water droplets, grease or dirt, ensuring easy removal even when they adhere to the lens surface. Thanks to Nikon's original technology, it delivers higher durability and is more peel-resistant. Its anti-reflective effect also contributes to the capture of clear images.

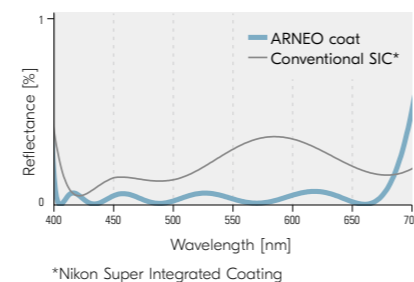
Nikon Super Integrated Coating

Nikon's exclusive multilayer lens coating applied to all current lenses in the NIKKOR lineup provides high transmittance over a wider wavelength range. Even for zoom lenses with a large number of glass elements, this coating system effectively reduces the ghost and flare effects that are likely to occur in backlit situations, helping you achieve high-contrast images with rich gradation. With outstanding color balance and reproduction capability, superb optical performance is delivered even in special applications including infrared photography.

Focus breathing reduction in movie recording

Focus breathing is a phenomenon that shifts the angle of view when adjusting focus. NIKKOR Z lens reduces this defect by carefully considering the optical system, ensuring smooth movie expression with minimal shift of angle of view.

Ultra-low reflectance across the entire visible light range



*Nikon Super Integrated Coating

Mechanical technologies

Multi-focusing system

Via the combination of multiple AF drive units providing driving power at high speed and with high accuracy, the position of the focus groups is precisely controlled resulting in superb imaging performance at all focus distances, as well as achieving extremely accurate and high-speed AF control while strictly compensating aberrations. Even when shooting subjects at the minimum focus distance that is likely to produce aberrations, high-resolution images with minimized defects can be captured.



Stepping motor **STM**

Operated with pulse electric power, this AF drive motor offers high response and controllability for starting and stopping, and its simple mechanical structure allows for supremely quiet operation — advantageous for video shooting and other times when operational noise from the lens is a concern.

For the NIKKOR Z 50mm f/1.8 S, a new, powerful stepping motor that provides superb driving power and quiet AF control is incorporated. With the higher driving power through the strengthened rotational torque, even large-diameter lenses of a fast lens can be easily controlled, resulting in high optical performance and high-resolution rendering. Also, via the adoption of ball bearings for the shaft, smoother shaft rotation is achieved, contributing to quiet and comfortable AF control. The high shock-resistant performance of the motor further enhances reliability.

Rounded diaphragm

When shooting scenes that include point light sources such as street illuminations, blurry, polygon-shaped spots are likely to appear in images. A rounded diaphragm was realized by using specialized blades resulting in a beautiful, naturally round shape for out-of-focus objects.

M/A (manual-priority auto) mode **M/A**

Simply by rotating a focus ring, M/A mode allows you to switch from autofocus to manual with virtually no time lag. This makes it possible to seamlessly switch to fine manual focusing while looking through the viewfinder.

Internal Focusing **IF**

With this focusing method, all the lens elements are divided into front, middle and rear groups, with only the middle group moving to focus. Variations in degree of aberration caused by focusing are reduced. Also, lens-driving torque is light and weight balance does not change during focusing. The focusing speed of AF lenses can be increased.

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 makes autofocus operation smoother and faster.

Electromagnetic diaphragm mechanism

An electromagnetic diaphragm mechanism is incorporated inside the body of lenses and controlled via electronic signals from the camera body. This permits incredibly accurate aperture control even during high-speed continuous shooting.

Product name		NIKKOR Z 14-30mm f/4 S	NIKKOR Z 24-70mm f/2.8 S		NIKKOR Z 24-70mm f/4 S	NIKKOR Z 35mm f/1.8 S	NIKKOR Z 50mm f/1.8 S	Mount Adapter FTZ
Mount		Nikon Z mount	Nikon Z mount		Nikon Z mount	Nikon Z mount	Nikon Z mount	Nikon Z mount
Focal length		14-30 mm	24-70 mm		24-70 mm	35 mm	50 mm	—
Maximum aperture		f/4	f/2.8		f/4	f/1.8	f/1.8	—
Lens construction		14 elements in 12 groups (4 ED glass and 4 aspherical lens elements, elements with Nano Crystal Coat, and fluorine-coated front lens element)	17 elements in 15 groups (2 ED glass and 4 aspherical lens elements, elements with Nano Crystal Coat or ARNEO Coat, and fluorine-coated front and rear lens elements)		14 elements in 11 groups (1 aspherical ED glass, 1 ED glass and 3 aspherical lens elements, elements with Nano Crystal Coat, and fluorine-coated front lens element)	11 elements in 9 groups (2 ED glass and 3 aspherical lens elements, and elements with Nano Crystal Coat)	12 elements in 9 groups (2 ED glass and 2 aspherical lens elements, and elements with Nano Crystal Coat)	—
Angle of view		114° – 72° (FX format) 90° – 50° (DX format)	84° – 34°20' (FX format) 61° – 22°50' (DX format)		84° – 34°20' (FX format) 61° – 22°50' (DX format)	63° (FX format) 44° (DX format)	47° (FX format) 31°30' (DX format)	—
Focal length scale		14, 16, 20, 24, 30 mm	24, 28, 35, 50, 70 mm		24, 28, 35, 50, 70 mm	—	—	—
Focusing	Focusing system	Internal Focusing (IF) system	Internal Focusing (IF) system		Internal Focusing (IF) system	Rear Focus (RF) system	Internal Focusing (IF) system	—
	Multi-focusing system	—	Yes		—	Yes	—	—
	AF actuator	STM	STM		STM	STM	STM	—
Minimum focus distance		0.28 m/0.92 ft from focal plane at all zoom positions	0.38 m/1.25 ft from focal plane at all zoom positions		0.3 m/0.99 ft from focal plane at all zoom positions	0.25 m/0.82 ft from focal plane	0.4 m/1.32 ft from focal plane	—
Maximum reproduction ratio		0.16×	0.22×		0.3×	0.19×	0.15×	—
Diaphragm blades		7 (rounded diaphragm opening)	9 (rounded diaphragm opening)		7 (rounded diaphragm opening)	9 (rounded diaphragm opening)	9 (rounded diaphragm opening)	—
Aperture range		f/4 - 22	f/2.8 - 22		f/4 - 22	f/1.8 - 16	f/1.8 - 16	—
Filter-attachment size		82 mm (P=0.75 mm)	82 mm (P=0.75 mm)		72 mm (P=0.75 mm)	62 mm (P=0.75 mm)	62 mm (P=0.75 mm)	—
Dimensions (max. diameter × distance from camera lens mount flange)		Approx. 89.0 × 85.0 mm (when lens is retracted)	Approx. 89.0 × 126.0 mm		Approx. 77.5 × 88.5 mm (when lens is retracted)	Approx. 73.0 × 86.0 mm	Approx. 76.0 × 86.5 mm	Approx. 70.0 (excluding projections) × 80.0 mm
Weight		Approx. 485 g/1 lb 1.2 oz	Approx. 805 g/1 lb 12.4 oz		Approx. 500 g/1 lb 1.7 oz	Approx. 370 g/13.1 oz	Approx. 415 g/14.7 oz	Approx. 135 g/4.8 oz
Circular Polarizing Filter II	Lens only	Compatible	Compatible		Compatible	Compatible	Compatible	—
	Hood	Compatible	Compatible		Compatible	Compatible	Compatible	—
Supplied accessories		• LC-82B 82 mm snap-on Front Lens Cap • LF-NI Rear Lens Cap • HB-86 Bayonet Hood • CL-C1 Lens Case	• LC-82B 82 mm snap-on Front Lens Cap • LF-NI Rear Lens Cap • HB-87 Bayonet Hood • CL-C2 Lens Case		• LC-72B 72 mm snap-on Front Lens Cap • LF-NI Rear Lens Cap • HB-85 Bayonet Hood • CL-C1 Lens Case	• LC-62B 62 mm snap-on Front Lens Cap • LF-NI Rear Lens Cap • HB-89 Bayonet Hood • CL-C1 Lens Case	• LC-62B 62 mm snap-on Front Lens Cap • LF-NI Rear Lens Cap • HB-90 Bayonet Hood • CL-C1 Lens Case	• BF-1B Body Cap • LF-NI Rear Lens Cap

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. March 2019

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WARNING

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



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