

New Lenses from Carl Zeiss

Zeiss Distagon T* 18mm f/3.5 ZF and 35mm f/2 Lenses

By Stan Sholik



18mm f/3.5 Distagon lens without lens shade



35mm f/2 Biogon lens

Zeiss Distagon T* 18mm f/3.5 ZF Lens

When legendary camera lens manufacturer Carl Zeiss began releasing manual exposure/manual focus/single focal length lenses for Nikon, I had the opportunity to review the 25mm f/2.8 and 35mm f/2 Distagon T* and the 50mm f/1.4 and 85mm f/1.4 Planar T* lenses. Testing them with both film and digital (D2X) cameras, I was unequivocal in my praise of both their optical and mechanical quality.

So when the opportunity arose to test the latest Zeiss offering, the Distagon T* 18mm f/3.5 lens, I jumped at the chance as I had a Nikon D3 available on which to test it.

Nikon doesn't have an 18mm lens in its arsenal any longer, having discontinued the 18mm f/2.8 a few years ago. I do own the Nikkor 17–35mm f/2.8 IF-ED, an excellent lens in the new multi-focal length wide-angle zoom style, so I was curious to see how the image quality of the almost 'retro' Zeiss lens would compare on the D3. The results were eye opening.

But first, a little about the ZF lens line in general. ZF lenses function with all film and digital SLRs that are designed for Nikon lenses from the original Nikon F to the latest D3s as well as Kodak and Fuji DSLRs. Not only are the classic Nikon metering prong (which can be easily removed if desired), auto-indexing (AI) ring and tiny secondary aperture scale included, but both

the aperture and focusing rings rotate in the same direction as Nikon's original lenses. Even the markings are engraved and filled with white paint—no silk-screening here.

Zeiss has incorporated an improved T* anti-reflection coating and a nine-bladed aperture for an almost perfectly circular diaphragm. The silky-smooth focusing ring provides long rotations for more accurate focusing. The aperture ring includes half-stop detents that click firmly into place between the marked aperture settings. The extensive use of metal in the lens construction gives them the look and feel (and weight) of classic Nikkors.

Technicians at the Carl Zeiss factory in Oberkochen, Germany, create the optical and mechanical specifications along with quality targets for the ZF lenses. Production is done at the Cosina factory in Japan under the watchful eye of Carl Zeiss employees in charge of quality assurance. The actual quality control is performed on measuring machines designed and made by Carl Zeiss in Oberkochen, just as it has been on all Japanese-made Zeiss Contax lenses. While the Zeiss ZF line is made for Nikon bodies, many of the lenses are also available in ZE mount for Canon EOS bodies, ZK mount for Pentax and other K-mount bodies, and ZS mount for M42 screw-mount bodies.

The 18mm f/3.5 is currently available in ZF (Nikon) and ZK (Pentax) mount only. Weighing less than one pound, and 3.3

inches long by 3.4 inches in diameter, it is a compact little bundle. Filter diameter is 82mm, and Zeiss includes a 'flower-petal' style lens shade.

The Nikon D3 (and other recent Nikon digital bodies) allows you to program lenses into the body to take advantage of aperture-priority and manual metering and viewfinder focus confirmation without embedded computer chips like this Distagon. These Nikon bodies will record aperture data in the EXIF file as well.

At its minimum aperture of $f/22$, depth of field extends from just over one foot to infinity. Minimum focusing distance is slightly less than one foot. With the ability to focus this closely, you can really take advantage of the wide field of view to place a foreground subject in the context of its environment. In my shooting with the D3, image quality both at minimum aperture and minimum focusing distance was superb.

With a focal length this short and a complex optical design, stray light can easily cause flare and reduce image contrast. I never found flare or lowered contrast to be an issue with the lens, even when I put light sources within or close to the edge of the frame. The T* multicoating, which can be as much as nine different coatings on a single element, was able to deal with all potential contrast-reducing internal reflections.

The eye-opener came when I tested the Zeiss lens against my 17–35mm Nikkor set at 18mm. On close 1:1 comparison on the monitor, I could see slight color fringing on tree branches at the edge of the frame with the Nikkor, but none with the Zeiss. In every test capture, the Zeiss was sharper and showed higher contrast than the Nikkor at comparable aperture settings.

I suspect the differences would have been less noticeable had I tested the Zeiss against the new 14–24mm Nikkor, but I didn't have one available to see. While the 14–24mm Nikkor offers more and even wider focal lengths, autofocus and full exposure automation, the Zeiss is far smaller and considerably lighter. If these are important considerations for you, and you are looking for a close-focusing wide-angle lens with superb image quality, the Zeiss Distagon T* 18mm

f/3.5 has no equal in the marketplace today. MSRP is \$1450. See www.zeiss.com/photo for more information about the 18mm and the other Zeiss lenses for Nikon, Canon, K-mount and M42 screw-mount lenses.

Zeiss C Biogon T* 35mm f/2.8 ZM Lens

Designing camera lenses always involves a number of compromises, particularly with SLR cameras where designers need to deal with the mirror box. In order to show off their lens design abilities for still cameras, Carl Zeiss company teamed with Cosina to produce a rangefinder camera, where lens design can be optimized without regard for compromises required by the presence of a mirror. Thus the new Zeiss Ikon camera, borrowing its name from the legendary Zeiss Ikon cameras of the 60s and 70s, came into being in 2005.

At the present time there are 12 Zeiss ZM lenses for the Zeiss

Specifications

Distagon T* 18mm f/3.5

Focal length: 18mm
Aperture range: f/3.5—f/22 (½-stop intervals)
Number of elements/groups: 13/11
Focusing range: 0.98 feet—infinity
Coverage at close focusing: 1.7x1.1 inches
Filter thread: M82 x 0.75
Length (with caps): 3.3 inches
Diameter: 3.4 inches
Weight: 15.9 ounces

C Biogon T* 35mm f/2.8

Focal length: 35mm
Aperture range: f/2.8—f/22 (1/3-stop intervals)
Number of elements/groups: 7/5
Focusing range: 2.3 feet—infinity
Coverage at close focusing: 16x24 inches
Filter thread: M43 x 0.75
Length (with caps): 2.2 inches
Diameter: 2.0 inches
Weight: 7.0 ounces

Ikon rangefinder. The mount for ZM lenses is an M39 bayonet, identical to that of the Leica rangefinder lenses, so it is possible to use the new Zeiss lenses on all Leica bodies. This is how I tested the new Zeiss C Biogon T* 35mm f/2.8 ZM lens, by removing my Leitz 35mm f/2 lens and mounting the Zeiss on my Leica M6.

The “C” in the name of the Zeiss lens refers to the compact design. Biogon lenses are generally fairly large for their focal length, necessitated by the nearly symmetrical Biogon design that delivers better performance wide open and at close focusing distances than Distagon or Summicron (Leica) designs. The Zeiss Biogon 35mm f/2.8 is very compact for its design, being only slightly longer than my Leica Summicron 35mm f/2, identical in diameter, and ac-

tually 20 percent lighter.

I have always felt that this 35mm focal length is the most versatile one for the Leica. With it you can shoot landscapes, street



Top: The 18mm on the Nikon D3 allows you to capture sweeping vistas with lots of depth of field. At $f/22$, depth of field extends from under one foot to infinity. Even here at $f/5.6$, depth of field is tremendous.

Above: 35mm is an ideal focal length for 35mm rangefinder cameras, especially with a lens as compact as the 35mm Biogon. The focal length is wide enough for a slight wide-angle perspective effect, but the camera remains light, unobtrusive and compact. Original image shot on Kodak 100G transparency film, scanned on a Nikon 400ED scanner and converted to monochrome with Nik Silver Efex software.



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Architectural photographers will appreciate the wide field of view and edge-to-edge sharpness of the 18mm on a full frame camera both for interiors and exteriors.

shooting, travel, people, just about anything other than portraits. The Zeiss 35mm with its compact size and light weight only strengthened this conviction. And used with the Leica M8

rangefinder digital camera, the 35mm focal length becomes equivalent to 50mm.

Image quality at maximum aperture seemed slightly better

Right: The 35mm Biogon, as with nearly all rangefinder lenses, is not intended for close-up photography. But image quality at its closest focusing distance is still excellent. Original image shot on Kodak 100G transparency film, scanned on a Nikon 400ED scanner and converted to monochrome with Nik Silver Efex software.

with the Zeiss than my Leica. Both deliver such high contrast and sharpness compared to SLR lenses that they make you remember why you haven't sold that Leica rangefinder when most of your work involves digital imaging. What I did prefer about the Zeiss 35mm was the 1/3-stop click stops compared to the 1/2-stops on the Leica 35mm.

There is no question that lenses for 35mm rangefinder cameras are a niche market in a niche market. It is wonderful to see that Zeiss has chosen this market to show off its abilities. The Zeiss C Biogon T* 35mm f/2.8 ZM is a superb example of the optical quality that can be achieved when freed from the constraints of designing for an SLR body. MSRP of the lens is \$817 and it is available in black or silver finish.



Stan Sholik is a contributing writer for NewsWatch Feature Service. He is also a commercial photographer with over 30 years of large format studio and location experience.

Further Information

Carl Zeiss, Inc.
www.zeiss.com/photo

