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Lenses for Moving Pictures, Industrial Purposes and Additional Lenses please refer to Volume 2

Anytar 1:4.5 f = 12cm

Lens design	4 lens elements in 3 groups	Angle of view	56°
Aperture scale	depending on shutter	Minimum range	depending on camera
Diameter x length	Diameter 30mm x 13mm length (front lens)	Weight	21 g (front lens)
	Diameter 30mm x not known (rear lens)	Weight	not known (rear lens)
Filter mount / Lens hood	No filter thread		

Type 1 Black barrel with milled front ring and milled inner ring. Engraving on out side of the black barrel and filled-in white: „Nippon Kogaku Tokyo“ „N.Q.“ „1:4.5 12cm“. On rear of front portion, mounting thread of 28.5mm.
Lenses were found on Lily Hand cameras, (Manufacturer: Konishi Roku), format 63 x 89mm (glass plates) or format 62 x 88mm (film). The lens is mounted on a „COMPUR“ shutter.
Manufactured in about 1932 or 1933.
< # 3015 > # 3093

Nikkor 1:4.5 f = 7.5cm

Lens design	4 lens elements in 3 groups	Angle of view	56°
Aperture scale	depending on shutter	Minimum range	depending on camera
Diameter x length	(not known)	Weight	(not known)
Filter mount / Lens hood	No filter thread		

Type 1 Black barrel with milled front ring and milled inner ring. Engraving on out side of the black barrel and filled-in white: „Nippon Kogaku Tokyo“ „N.Q.“ „Nikkor“ „1:4.5 7.5cm“. On rear of front portion, mounting thread of 29.5mm.
Rear lens portion with xxx
Manufactured in about 1936 or 1937
< # 760 > # 792

Nikkor 1:4.5 f = 10.5cm

Lens design	4 lens elements in 3 groups	Angle of view	56°
Aperture scale	depending on shutter	Minimum range	depending on camera
Diameter x length	Diameter 30mm x 26mm length (with shutter)	Weight	25 g (front lens)
Filter mount / Lens hood	Filter thread 28mm	Weight	15 g (rear lens)

Type 1 Black barrel with filter thread. Engraving on front ring: „Nippon Kogaku Tokyo“ „N.Q.“ „Nikkor“ „1:4.5 10.5cm“. On rear of front portion, mounting thread of 29.5mm.
Lenses were found on Lily Hand Cameras, (Manufacturer: Konishi Roku). The lens is mounted on a „COMPUR“ shutter.
Manufactured in about 1935.
Only known serial number # 3545



Lily Hand camera with Anytar 12cm f/4.5 lens.



Lily Hand camera with Nikkor 10.5cm f/4.5 lens, leather case, glass plate cassette.



The studio lenses of 1946: NIKKOR-Q-C 20cm f/3.5 and NIKKOR-T-C 21cm f/4



NIKKOR-Q-C 20cm f/3.5 lens and NIKKOR-T-C 21cm f/4 lens with rear side view of the narrow foldable Okuhara large format camera.



NIKKOR-Q 300mm f/9 with COPAL No. 3 shutter, 62mm front cap, original early box and guarantee card..



NIKKOR-Q 450mm f/9 with COPAL No. 3 shutter, 62mm front cap, rear cap and original early box.

Large-Format NIKKOR Lenses for Leaf Shutters T-Series



Wista 4 x 5 inch camera with NIKKOR-T*ED 600mm f/9 800mm f/12, with 800mm f/12 rear lens and standard lens board.

NIKKOR Lenses for Leaf Shutters - T-Series

The Nikkor-T series lenses are of the telephoto type which does not require a long length of camera bellows, a big advantage for field-type cameras with limited length of the camera bellows. To maximize correction of chromatic aberration, inherent in long focal length lenses, Nikon has employed ED (Extra-Low Dispersion) glass for the first time in Nikkor lenses for large-format cameras. In addition, the high degree of correction of image distortion and curvature, combined with Nikon's unique NIC (Nikon Integrated Coating) lens coating, produces remarkably sharp, clear images, even at full aperture, free from flare and ghost.

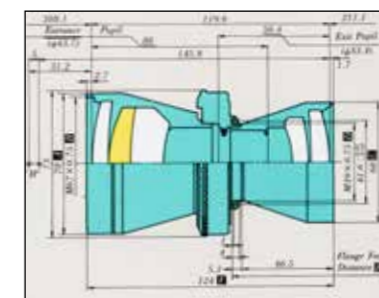
Initially, Nikon offered only two T-series lenses, the NIKKOR-T*ED 270mm f/6.3 (1981) and the NIKKOR-T*ED 360mm f/8 (1981), although Nikon had already announced both lenses at Photokina 1980.

NIKKOR-T 270mm f/5.6 NIKKOR-T*ED 270mm f/6.3

This lens is interesting because the presentation at Photokina shows a different lens than the later series. For one thing, it has the largest aperture, which is specified as f/5.6 (the series has f/6.3). For another, there is no indication that ED glass is used, although it is referenced in the Photokina 1980 information. Also, the other data of the lens differ a little, including the image circle of 100mm (series 114mm). It is also unusual that the f/5.6 version weighs significantly less than the f/6.3 version.

This telephoto lens is not changeable like its two sisters, i.e. the rear lens group is not interchangeable. The image circle of this lens is designed for 4" x 5" format, and the angle of view is 21°. The front and rear lens sections are fixed to the Nikon shutter (COPAL 1). In the front lens portion, there is an ED glass lens in the middle between the other two lenses, protecting it against mechanical impact.

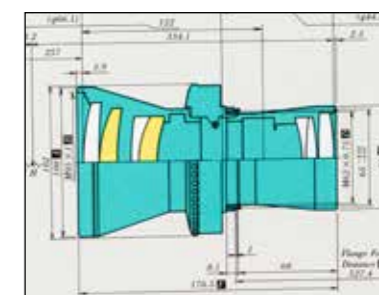
It was produced from 1981 until 2005 probably unchanged. Since this lens does not appear too often on the used market, the number of units produced should be limited. According to the US price list 1985 the price was USD 1,225 and in the price list of Nikon Germany, the retail price in 2005 was EUR 1,719.



From a brochure: Optical design of the NIKKOR-T*ED 360mm f/8 with one ED lens element, which is identical to the other combinations of the 360mm front portion.



From a 1980 Photokina leaflet: Nikkor-T 270mm f/5.6 and Nikkor-T 360mm f/8.



From a brochure: Optical design of the NIKKOR-T*ED 800mm f/12 with two ED lens elements, which is identical to the other combinations of the 600mm front portion.



NIKKOR-T*ED 270mm 1:6.3 on a COPAL O shutter, with a Nikon lens board.

35mm Format

NIKKOR Lenses with 39mm Screw Mount (LTM) Wide-Angle Lenses



Wide-angle NIKKOR lenses with screw mount: top from left, 3.5cm f/3.5 (black belt), 3.5cm f/1.8 and 3.5cm f/2.5 (black belt), middle, 3.5cm f/3.5 Tokyo (left), 3.5cm f/3.5 Japan (right), bottom, 2.8cm f/3.5 (left) and 2.5cm f/4 (right).

Nippon Kogaku produced a 2.1cm f/4 lens in Nikon bayonet mount as a lens for their rangefinder cameras with the widest angle of view. There are said to be two prototypes of this lens in screw mount. Whether this corresponds to the facts is not known. However, it is a fact that the rear lens element protrudes so far into the camera body that with the significantly shorter distance between flange focal length and film of a screw mount camera, the rear lens element of a 2.1cm lens should actually protrude into the shutter curtain.

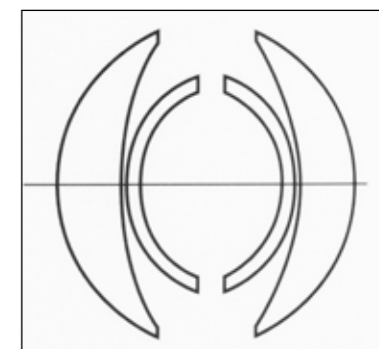
W-NIKKOR-C 2.5cm f/4

The optical design of this lens comes from the Zeiss Jena Topogon 2.5cm f/4. If you compare BM and SM lenses you would think at first that this can't be the same lens, because the dimensions are too different. Due to the external bayonet of the Nikon rangefinder cameras, this lens looks much larger in contrast to the very small SM lens. The BM lens uses the dial on the camera to adjust the distance, the SM lens uses an adjustment ring on the lens. There is also a big difference in operating the aperture ring. With the BM lens, you have to grab the front of the lens and move a small, flat, black lever, which is rather awkward and problematic, especially in the rain and when your fingers are cold (gloves) or dirty. On the SM lens, the easy-to-read aperture ring on the side near the front of the lens is easily adjustable. The depth of field scale is engraved inside the front of the BM lens, as is the distance scale; on the SM lens, both scales are engraved on the outside of the lens and are easier to see. It is also interesting to note that on the chrome-plated version of the BM lens, the distance scale digits and the depth-of-field scale both face inward, while the aperture scale has digits facing outward. In the black version of the BM lens, the digits of all scales point inward.

A note on the Nikon History website is worth noting. First of all, it is mentioned there that the development of the lens was started in autumn 1953 and the production in September 1954. The lens has a symmetrical construction with 4 strongly concave-convex lenses, where the two inner lenses are extremely



W-NIKKOR-C 2.5cm f/4 with the tiny and rare screw-in lens hood.



Lens section: W-NIKKOR 2.5cm f/4.



W-NIKKOR C 2.5cm f/4 with 2.5cm finder.

EL-NIKKOR Lenses

Nippon Kogaku began developing and producing an enlarger lens in 1936 for the Seiki Kogaku company, as they did for the Hansa Canon camera. The latter had placed an order to produce not only a lens for the Canon camera, but also a lens for an enlarger, so that customers could also enlarge their negatives.

Shortly after World War 2, Nippon Kogaku then began to manufacture a first El-Nikkor lens for a short time, but for whatever reason, it was discontinued after a short production period. It was not until after 1956 that production of enlarging lenses gradually began, reaching a wide range of models in the 1970s and 1980s. More about this in the following chapters.

HERMES 1:3.5 f = 5.5cm

In Greek mythology, Hermes was, among other roles, the „bringer of wealth”, who was associated with the success of trade.

This lens was designed and manufactured by Nippon Kogaku for the Seiki Kogaku company, now Canon Corporation. Unfortunately, the production dates for this lens vary considerably. Generally, it is assumed that production began in 1936. In N100, however, Nikon indicates a production start only in February 1939. Which is correct? Well, I don't want to claim that the information in N100 is wrong, but the serial number assignment of the lenses rather points to a production start before 1939. More about that below.

For which enlarger was this lens developed by Nippon Kogaku? Answer: For a Seiki Kogaku enlarger - but more about that later. However, two completely different enlargers were advertised in the late 1930s, one by Seiki Kogaku and one by its partner Hansa, which had distributed the Canon camera and Nikkor lenses through its trade channels.



Picture courtesy by Wils Nieuwhof: Advertisement of the Seiki Kogaku enlarger and the Hermes 5.5cm f/3.5.

Two side views of a Nippon Kogaku Hermes 5.5cm f/3.5 lens, on right with the old aperture scale and with a progressive style.

Let's start with the Seiki Kogaku enlarger. The only picture I know of shows an enlarger identical to a Leitz Focomat Ib. The only barely noticeable difference is the Seiki Kogaku logo on the front of the enlarger. Like the Focomat, the enlarger has a very complex construction, with a wooden board, a metal rod on which the enlarger is adjusted in height by means of parallelogram-like bars. The large lamp housing is made of sheet metal and the image stage is made of black painted cast iron. To the left and right are half-shells on which a 35mm film of complete length (rolled up) can be placed. A black tube covers almost the entire lens, with only the aperture setting sticking out. The ad for the enlarger was published in Asahi Camera magazine in March 1938. Among other information, this ad has the following content: „If you think Japan domestic made products have inferior quality, you obviously don't know about our airplanes flying all over China and extremely precise quality of Canon Cameras“. And further: „Only dedicated F3.5 lens in Japan.“ And „Enlarger with most perfect performance“. And (*note: Canon Camera*): „Comes with Nikkor F3.5 which will be released soon. JPY 355.00 including case and accessories.

The price of the Seiki Kogaku enlarger was listed as 160 YEN in 1938.

Another advertisement from 1939 shows a „New Standard“ Canon S with late Nikkor 5cm f/3.5 and a Hermes lens. However, an image of a Seiki Kogaku enlarger is missing. The ad includes the following text: „Hermes lens can be readily applied to Leica Enlargers“. Oho, what's that? No more reference to the Seiki Kogaku enlarger, but rather an indirect advertisement for the Focomat enlarger from Leitz.

One of the world's major collector of Canon cameras and lenses told me that he has been looking for a Seiki Kogaku enlarger for decades, but has never seen one, nor does he know of any Canon collector (even in Japan) who owns one. The assumption is that Seiki Kogaku either never made such an enlarger or it never got past the prototype stage. Presumably, production was far too costly for the intended small number of units. The distributor Hansa started selling the Hansa Canon Camera in 1936. It was not until about 1938 that Seiki Kogaku went into their own distribution. I know of an advertisement for a „HANSA PATENT ENLARGER“ that shows a Hansa Canon camera next to the enlarger (not a Canon S). Consequently, this ad would have to be from 1936 or 1937. That is, the Hansa enlarger was manufactured earlier and is fundamentally different from the Seiki Kogaku enlarger. In a Hansa advertisement from 1938, a lens with f/3.5 is specified for the 35mm format and an f/6.3 lens for the film formats 6 x 9cm. Whether this is a (Nippon Kogaku) Hermes lens is not stated, but more likely not. The enlarger is designed for both horizontal and vertical projection and consists of a wooden board and a wooden rod. The height adjustment is done by means of a bellows, the film stage is made of wood, the lamp housing is made of sheet metal. The price of this enlarger may have been significantly lower than the enlarger announced by Seiki Kogaku.

It seems that Seiki Kogaku and Hansa parted ways in 1938 and Seiki Kogaku began selling the camera directly. The Hansa enlarger probably did not meet the requirements of Seiki Kogaku or their users, so they wanted to launch their own enlarger with a Nippon Kogaku lens. This also speaks for a production start of the lens in 1938 - or the planning and order placement to Nippon Kogaku started already in 1937.



Pictures on this page were taken by the permission of the Carl Zeiss Archive, Jena: Advertisement of the Seiki Enlarger and the Nippon Kogaku Hermes 5.5cm f/3.5 lens.



Advertisement of the Hansa enlarger and the Canon camera with Nikkor 5cm f/3.5 lens.