

The  
Contax  
Technical Evolution

III

Lenses of the first  
Period

*Luiz Paracampo*

## About the lenses

The first period can be taken from the presentation of the first Contax I in 1932, and commercialized from 1933 up to the end of WWII, specially up to the German surrender in May 1945.

This period was defined as the era of the two Contaxes in two different stages; the *Model I* with its variations and the Contaflex, Nettax, Super Nettels, stage and the *Contax II (III)* stages including the prototypes (Spezial, Model IV, Syntax and pre-IIa).

This era was marked by a continuous lens development. The first two Contax variants came only with Tessar 3.5 5cm or Tessar 2.8 5cm and had options of two more normal lenses the Sonnar 2 5cm and the 1.5 5cm, on demand. The only accessory Zeiss lens was the 4 13,5cm lens, but two more lenses made by Goerz (a Zeiss associated) were put upon request the Dagor 9 2,5cm (no focus nor diaphragm) and the Dogmar 4.5 180 both in chrome from 1932, previewing the next generation. Zeiss began presenting the camera using existing lenses from the "Stiftung" to be used in the new camera.

The idea was to create a "Non Plus Ultra" camera not exactly for commercial purposes, but for a Germany's "Propaganda Show", (Deutsch über Alles) by this reason they prepared the best possible laboratories and reunited the best brains of the time. Costs were not a matter once the company was nationally owned and everything was diluted. Nowadays such an enterprise would be impossible, mainly considering the limited market share and the income amount of money according to the prices practiced.

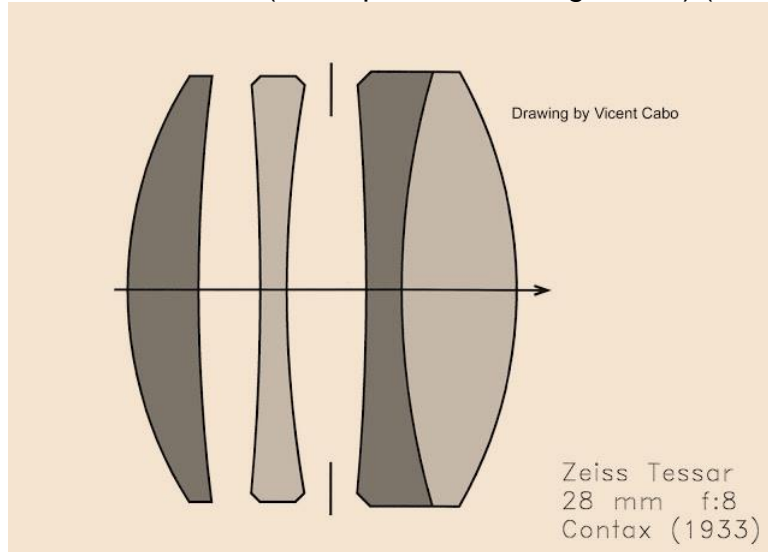
The main idea of the "Paper Clip" operation was to take possession of the huge studies done and test the prototypes in order to obtain the American supremacy, but for political reasons and absence of qualified personnel in USA, all those efforts were practically lost on garbage.

Those "useless" documentation and equipment kept as secret, was years ahead sold by a song, and "Angels of the Technological Culture" took those materials to claim to the World the Marvel of the Apogee of the Science.

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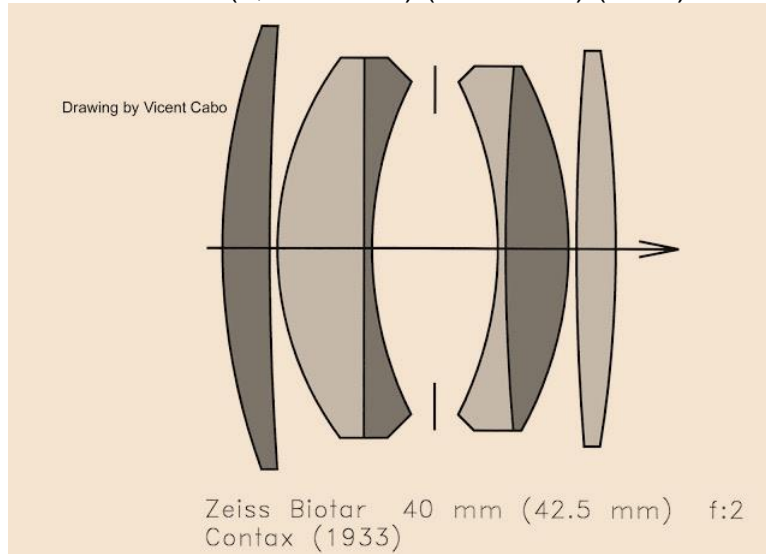
## Black and Nickel lenses at the time of the Contax I variations: The First Period.

- Tessar 2.8cm f:8 (uncoupled to the rangefinder) (1933)



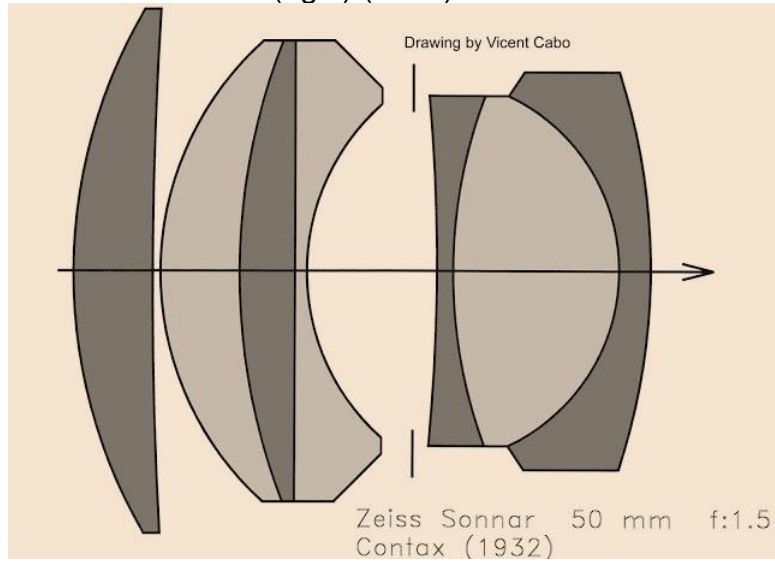
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- **Biotar 4cm f:2 (4,25 cm f:2 ) (4 ¼ cm f2) (1933)**



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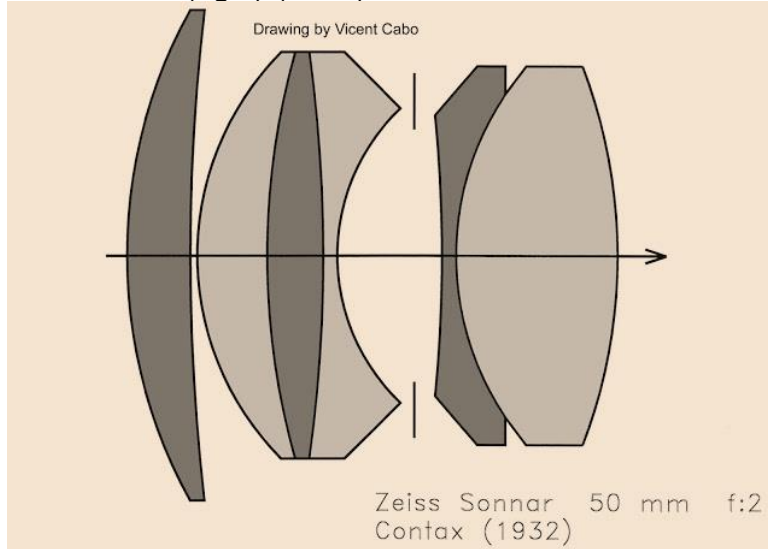
- **Sonnar 5cm f:1.5 (rigid) (1932)**



First and last production  
Two versions observe filter thread

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- **Sonnar 5cm f:2 (rigid) (1932)**

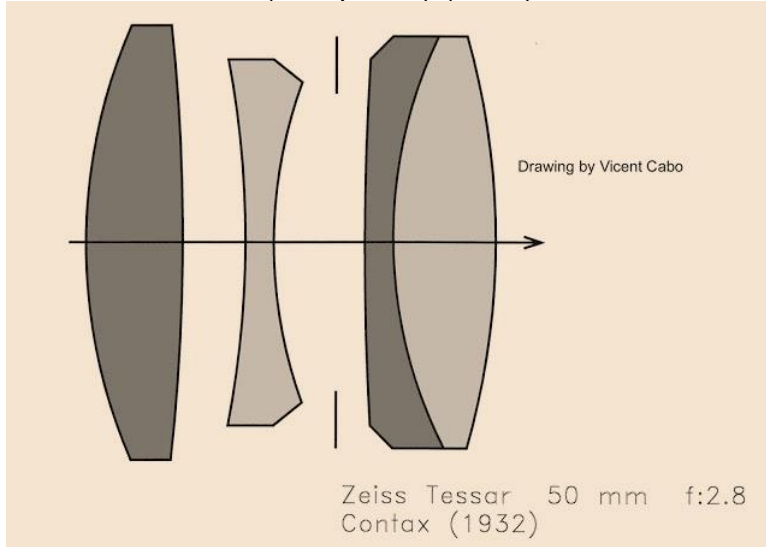


No filter thread

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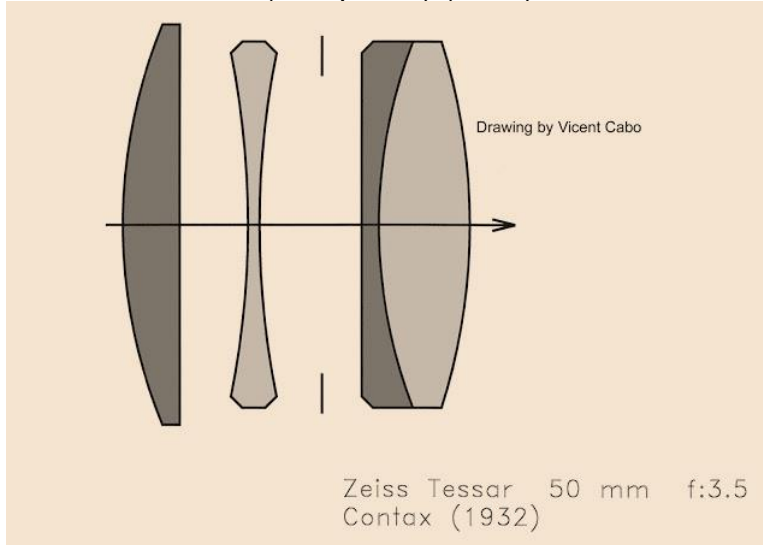


- Tessar 5cm f:2.8 (collapsible) (1932)



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- Tessar 5cm f:3.5 (collapsible) (1932)

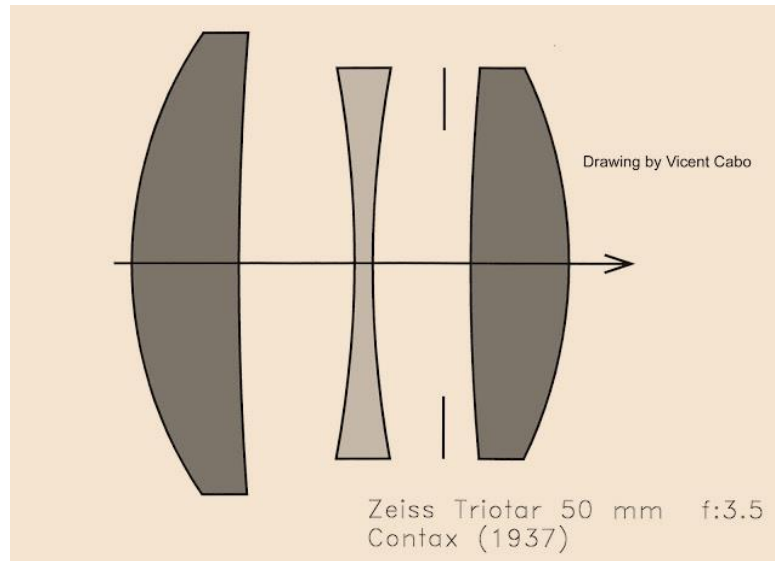


Black and Nickel face

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- **Spezial Anastigmat 5cm f:9**



Reproduction and Copy lens





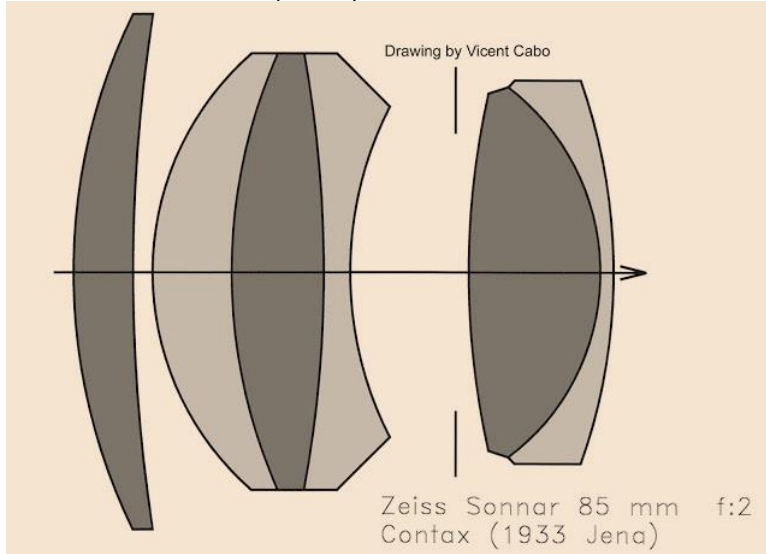
On Contax III



Reproduction and Copy device

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- **Sonnar 8.5cm f:2 (1933)**



shown with “Agfacolor Farba” Filter



## Ducars for Autochrome Plates

### A-Ducars for Agfa Colour Screen Plates



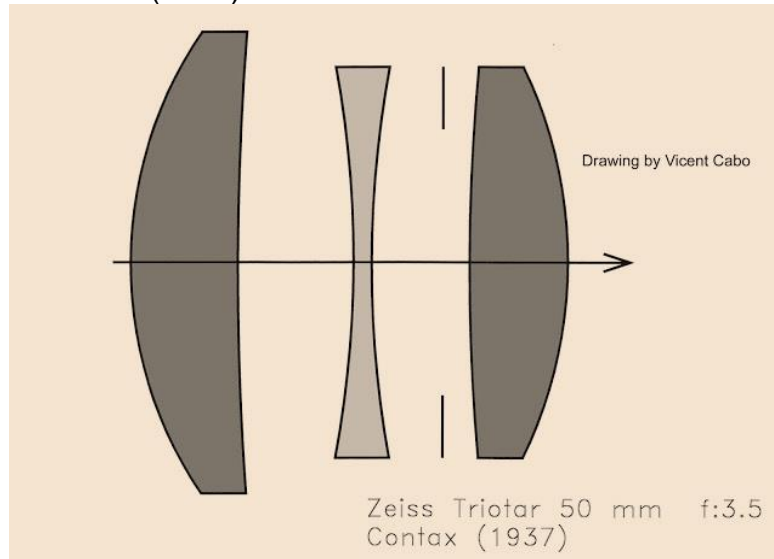
In these filters the purely chromatic effect required to rectify the colour values is associated with a very slightly diverging effect. The latter is such that a Ducar slipped over the front of the objective shifts the plane of the sharp image back exactly by the thickness of the plate into the plane of the emulsion at the back of the colour screen plate. This does away with the necessity when taking colour photographs for any special adaptation of the camera, focusing scale, dark slide or ground glass focusing screen. All that is needed is to defer putting on the Ducar until the image has been focused on the ordinary ground glass focusing screen having its dull side facing the objective. This has the incidental advantage that, during the act of focusing, the picture is seen in its natural colours. The Ducars are mounted to slip over or into the lens mount.

*When ordering a Ducar, the focal length  $f$  of the objective should be taken into account as well as the diameter of the mount.*

An alternative to the multicolored filter Zeiss also made the A- Ducars a multi-ringed prism filter where a spectrum was formed. Years after a similar filter, now with large spaced concentric rings was made in Hungary by Jenó Dulovits with his DUTO filter for soft portraiture in two levels of softness 1 and 2.

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- Triotar 8.5cm f:4 (1937)



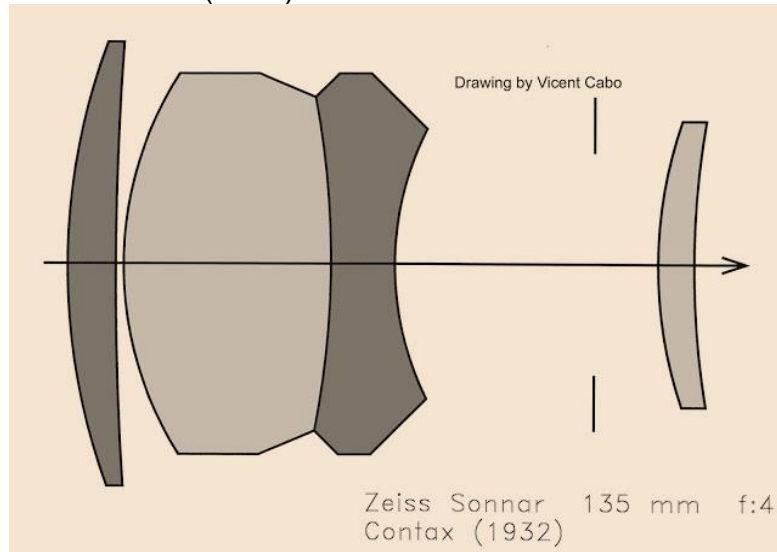
Second batch

meter engravings

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- **Sonnar 13.5cm f:4 (1932)**



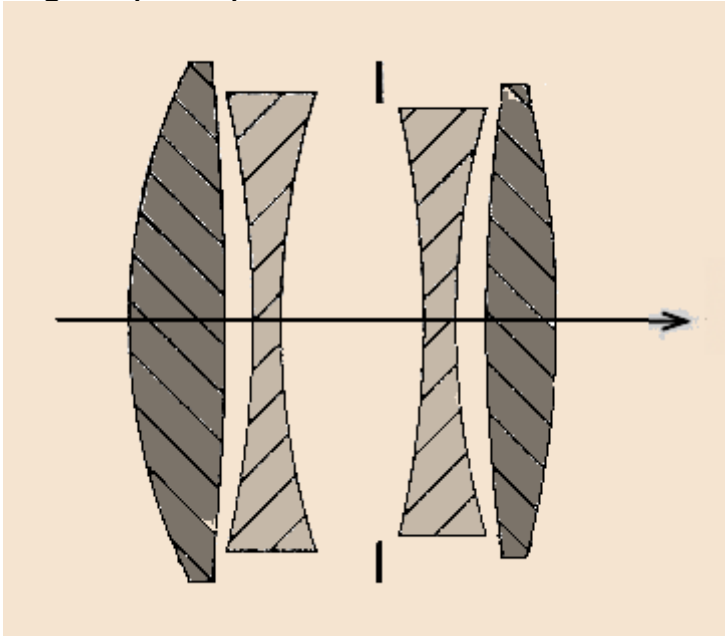
first and third batch

differences in top finish and meter engravings

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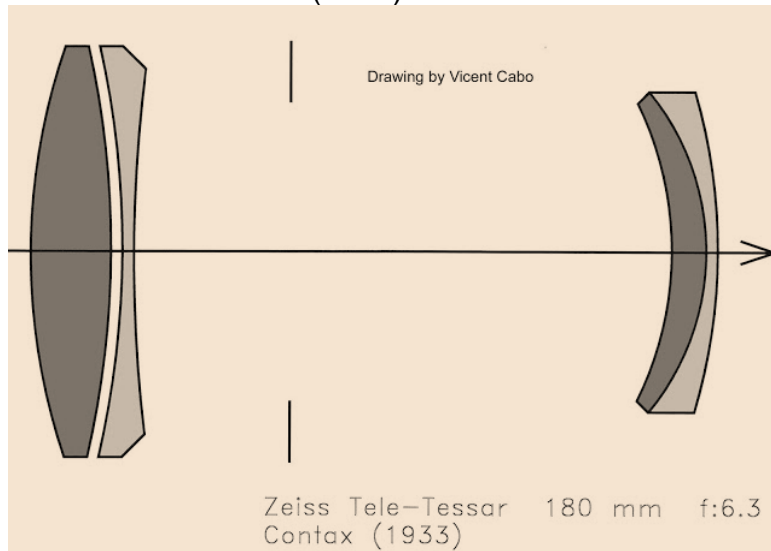


- Dogmar (Goerz) 18cm f4.5



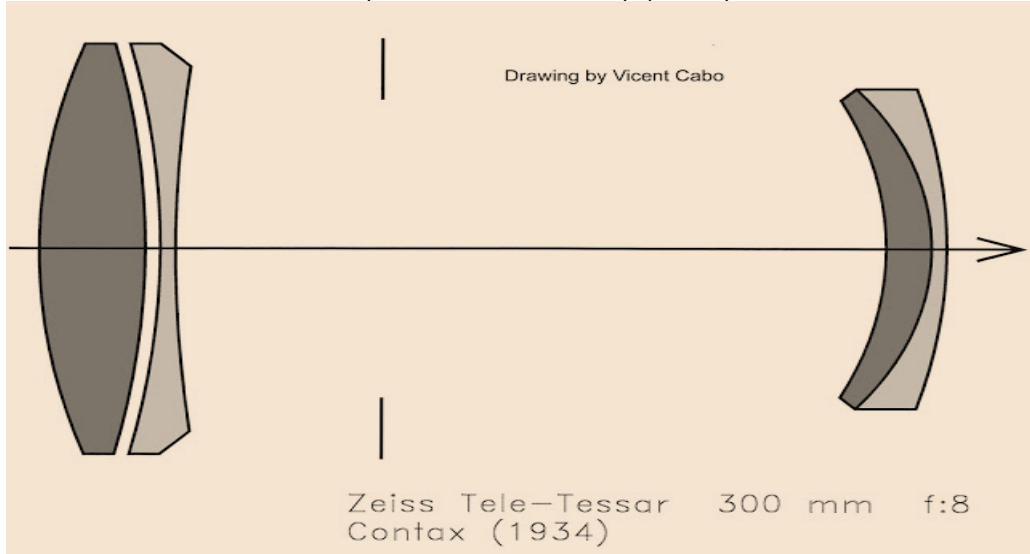
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- **Tele-Tessar K 18cm f:6.3 (1933)**



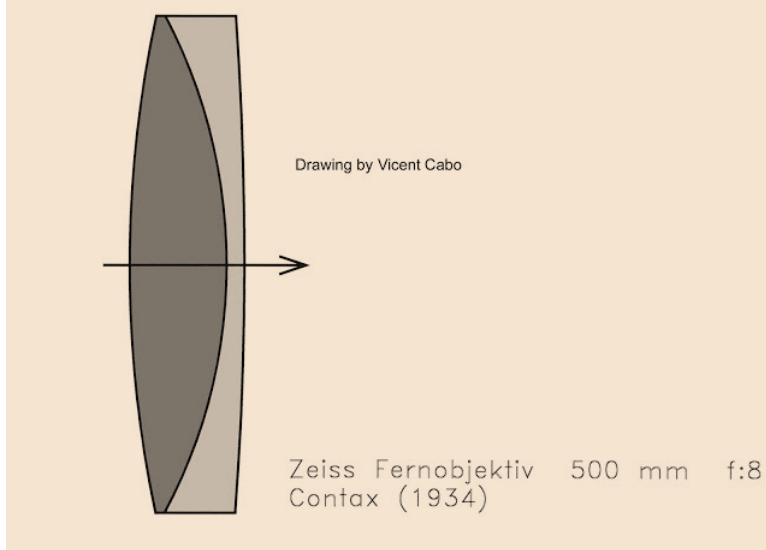
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- **Tele-Tessar K 30cm f:8 (direct mount, rare) (1934)**



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- Fernobjektiv 50cm F:8, (only direct mount, rare) (1934)



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During this first period Engineers and Designers developed a multitude of lenses in order to put the Contax at the highest ranking of versatility.



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Upper picture: Back run : Biotar f2 5cm Biotar f2.8 5cm; Front: two Sphaeragon

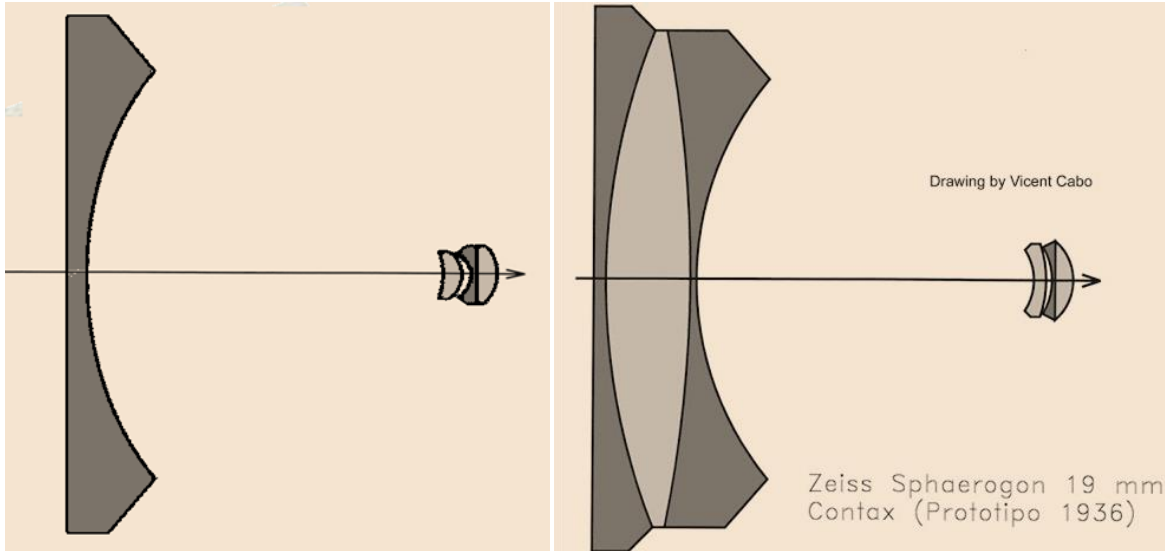
Bottom picture: Back run Sonnar 2 5cm rigid no filter thread; Front run: Perimeter 6.3 2,5cm, Triotar 3,5 5cm.

All lenses from left ro right.



**Experimental lenses for Contax included:**

- **Sphaerogon 1.9cm f:8**, 50 ex. In three versions made in 1935 and 1936, the version 1 and 2 differed only through its rear objective complement. two examples survived so far, both located in Sweden.



First version 1935

Third type 1936



Nickel and Chrome versions

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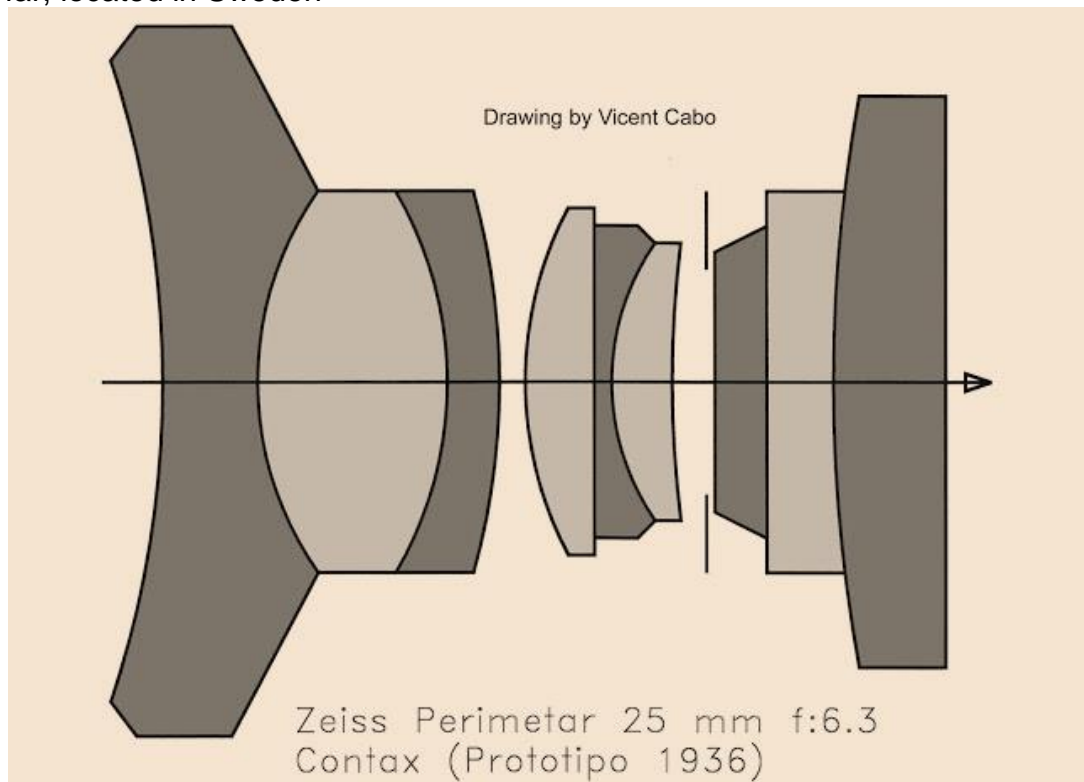




Sphaeragon 6.8 16cm V 1936 180° (Milos Mladek)

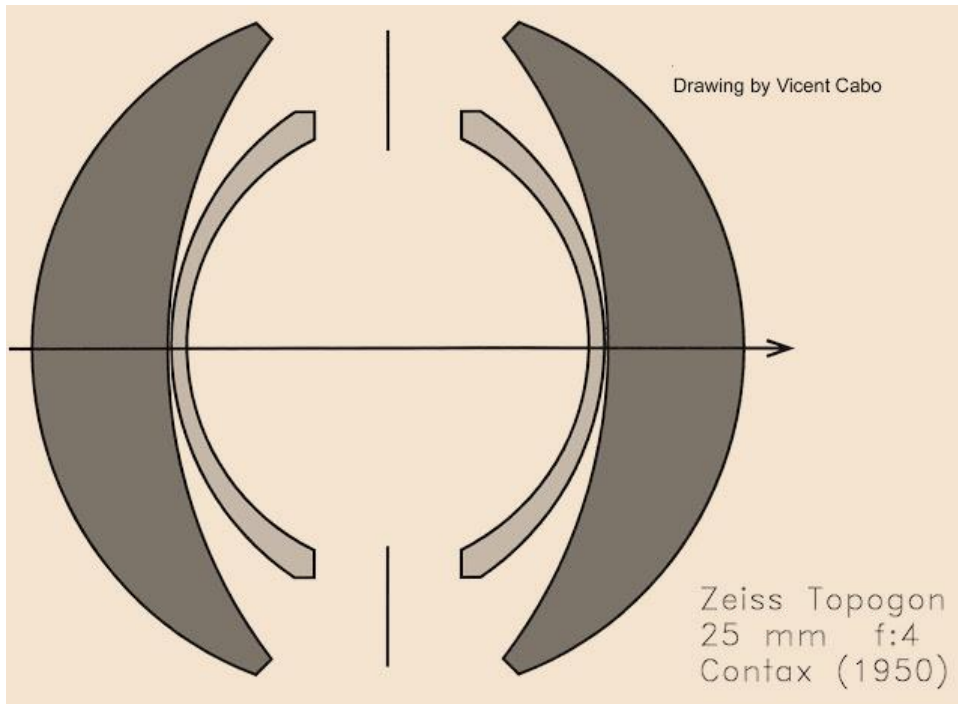
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- **Perimatar 2.5cm f:6.3**, 50 ex. made in 1936, one example survived so far, located in Sweden



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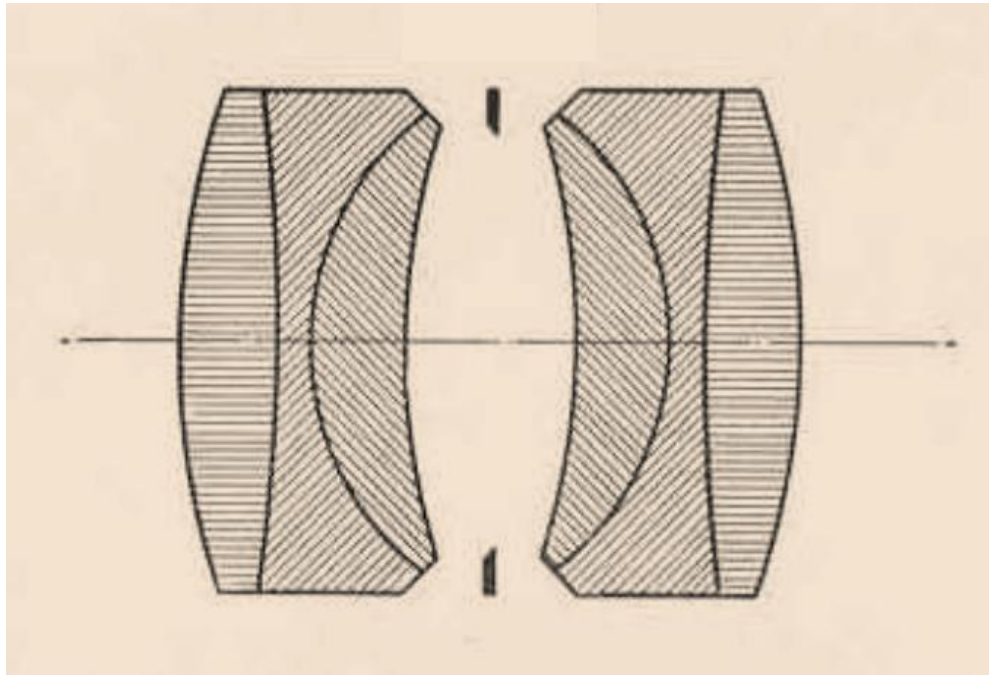
- **Topogon 2.5cm f:4.5**, 50 ex. made in 1936, several examples survived so far



Mounted on Tessar 8 28mm Diaphragm 4.5 to 22 RF Uncoupled

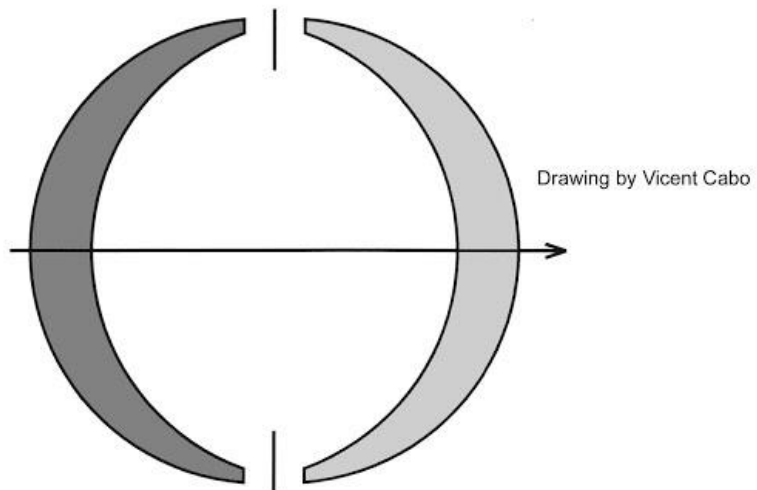
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- **Goerz-Dagor 2.5cm f:9**, made in 1932, in Contax mount, one example survived so far, located in Sweden mounts on inner bayonet.



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- **Hypergon 2.5cm f:8**, made in 1940



Zeiss Hypergon 25 mm f:8  
Contax (Prototipo)

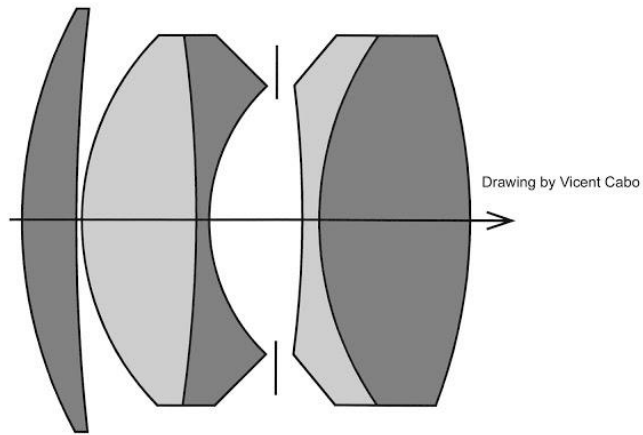


Mounted on Tessar 8 28mm base fixed f8 aperture RF Uncoupled

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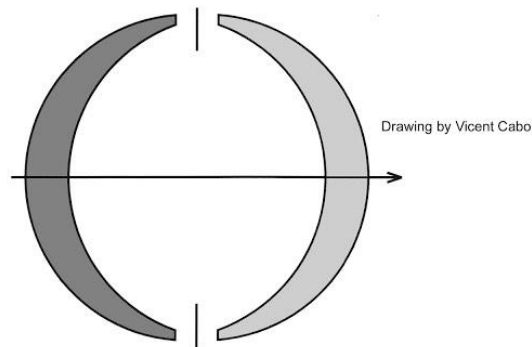


- **Sonnar 35mm f2.8** made in 1938



Zeiss Sonnar 35 mm f:2.8 (Prototipo)  
Contax (1938)

- **Hypergon 3.75cm f:5.6**, made in 1940



Zeiss Hypergon 25 mm f:8  
Contax (Prototipo)

Both assembled in Mounted on Herar 3.5 35mm cannon. Hypergon with fixed diaphragm and uncoupled rangefinder.



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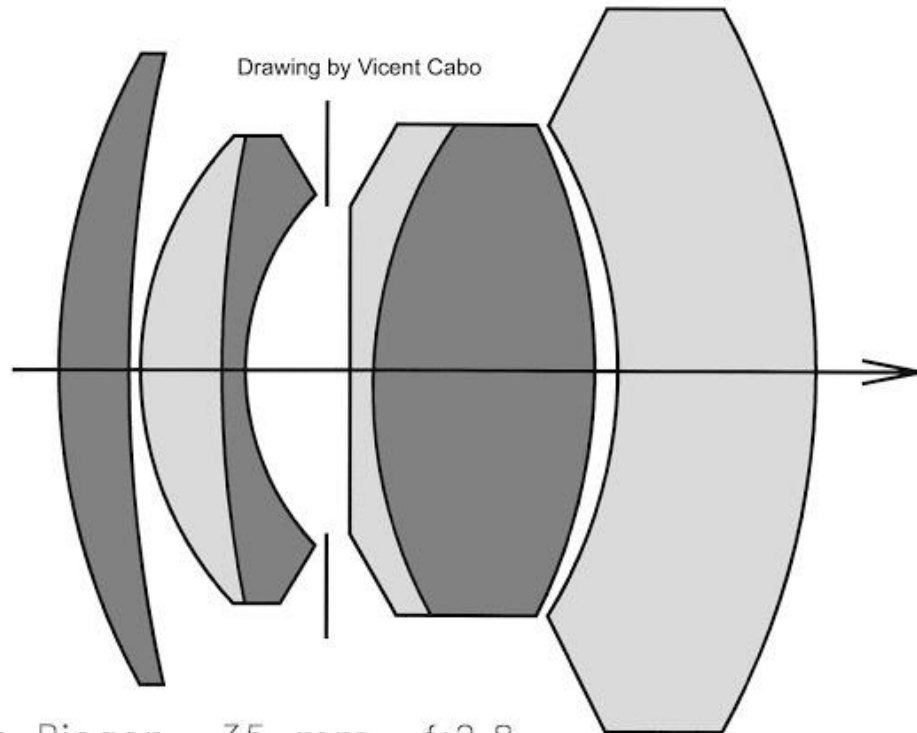
**Chrome models, at the time of the Contax II and III: from 1936.  
The Second Period.**

- **Tessar 2.8cm f:8** (uncoupled to the rangefinder)  
Same as previous schematics



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- **Biogon 3.5cm f:2.8** (large rear element, does not mount on Contax Ila or IIIa)

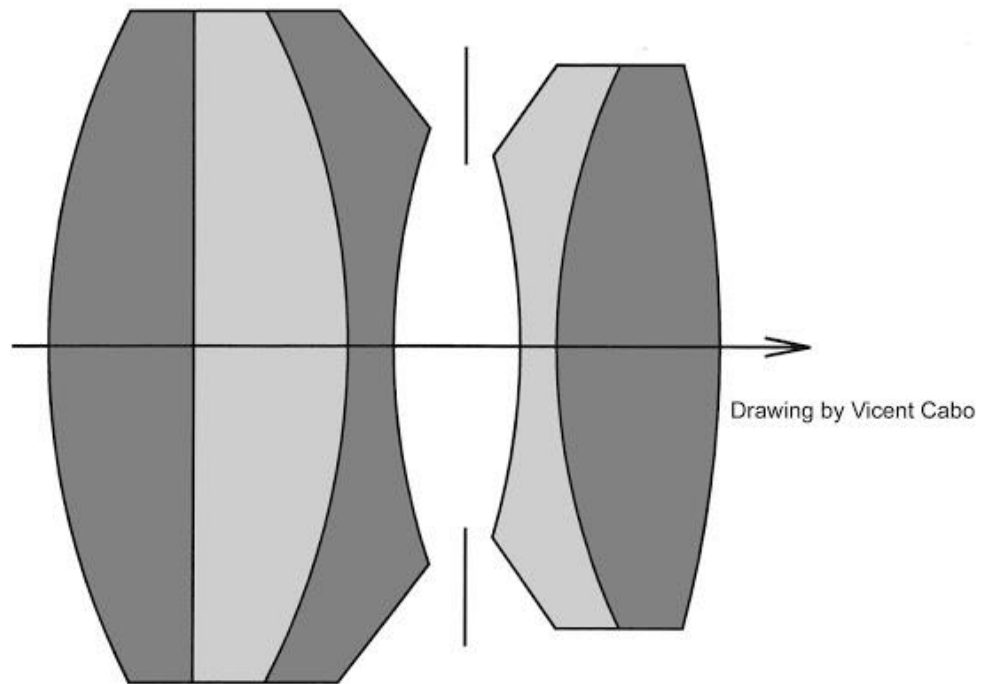


Zeiss Biogon 35 mm f:2.8  
Contax (1937 Jena)



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- Herar 3.5cm f:3.5 (rare)

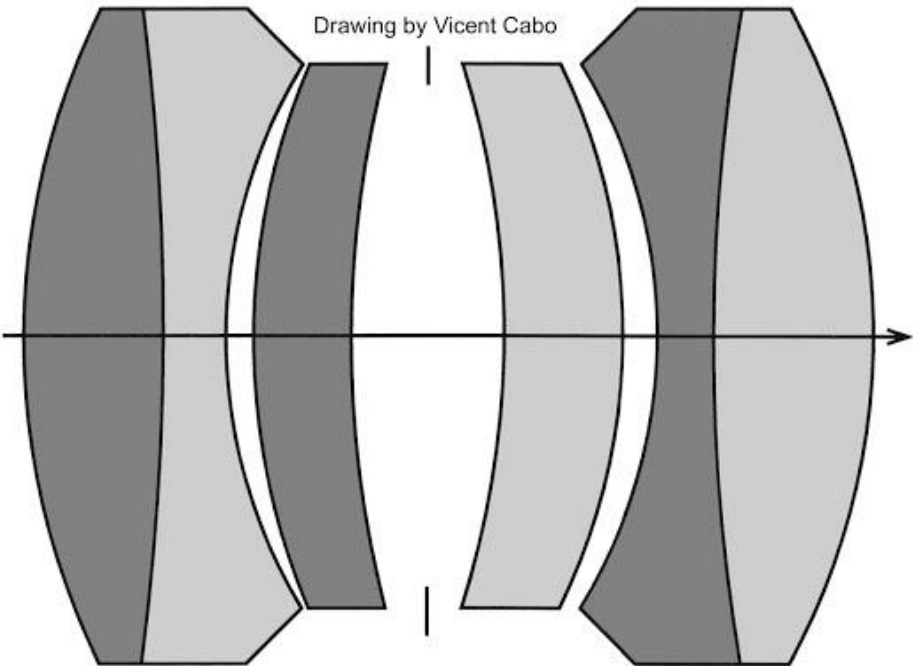


Zeiss Herar 35 mm f:3.5  
Contax (1936)



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- Orthometar 3.5cm f:4.5 (uncommon)

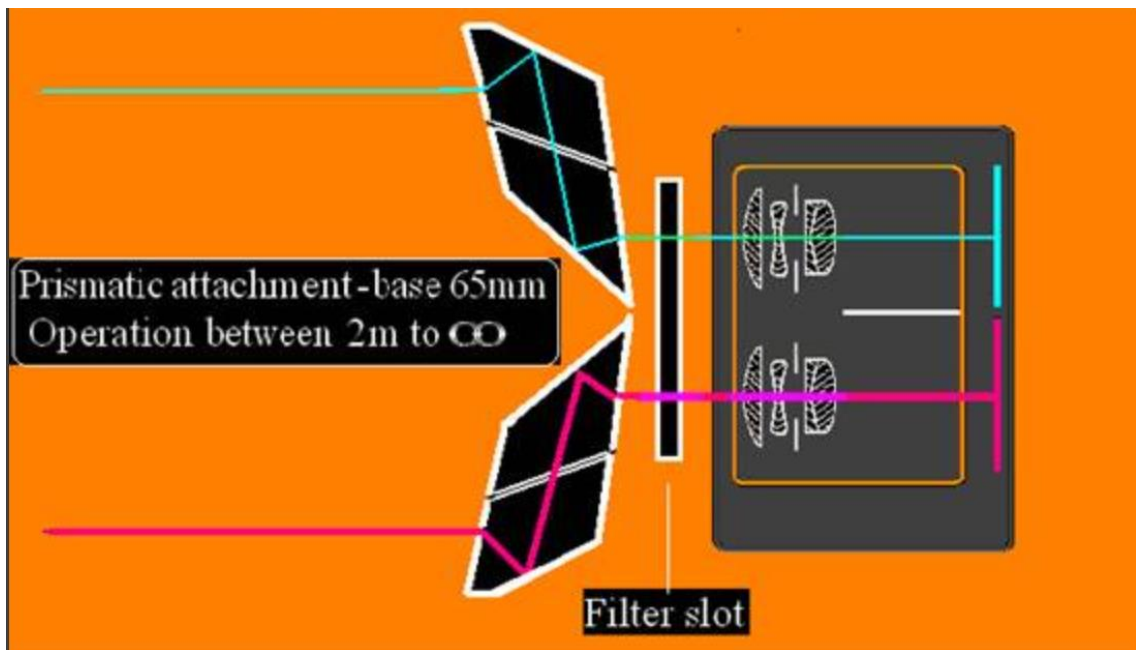


Zeiss Orthometar 35 mm f:4.5  
Contax (1937)



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- Stereotar "C" (2x Tessar 3,5cm f:4)



double close up lens,finder double optics large base prisms,  
case, cap and instructions.

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- Biotar 4cm f:2 and 4 1/4cm f:2 (rare) same as previous nickel



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- Sonnar 5cm f:1.5 (rigid) same as previous nickel



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- **Sonnar 5cm f:2** (collapsible or rigid (mounted in 1.5 tube) (rare)



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- **Tessar 5cm f:2.8** (collapsible) chrome or black face same as previous nickel

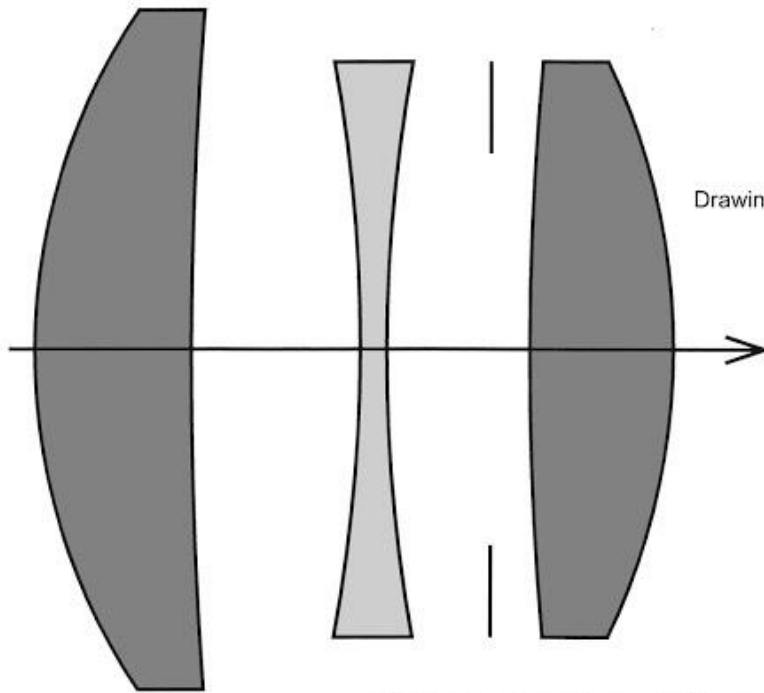


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- **Tessar 5cm f:3.5** (collapsible black and chrome or rigid (rare) same as



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Drawing by Vicent Cabo

Zeiss Triotar 50 mm f:3.5  
Contax (1937)



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**Sonnar 8.5cm f:2 Same as previous nickel**



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- **Triotar 8.5cm f:4 same as previous nickel**



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- Tessar 13.5cm f:4,5 same as previous nickel (rare)



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- Sonnar 13.5cm



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- Panflex Tessar 13.5cm f:4 (rare, only about 10 lenses survived so far)



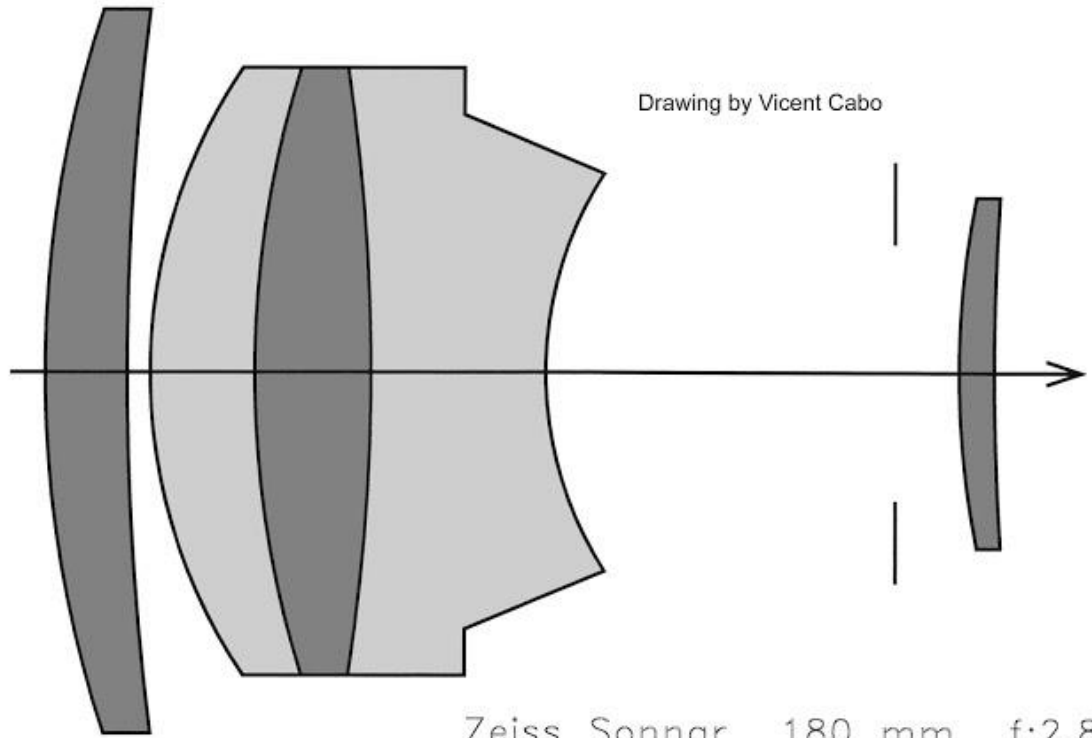
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- Tele-Tessar K 18cm f:6.3 same as previous black/nickel



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- **Sonnar 18cm f:2.8**, first direct mount (rare), then in Flektoskop mount



Zeiss Sonnar 180 mm f:2.8  
Contax (1936)



Zeiss Historica



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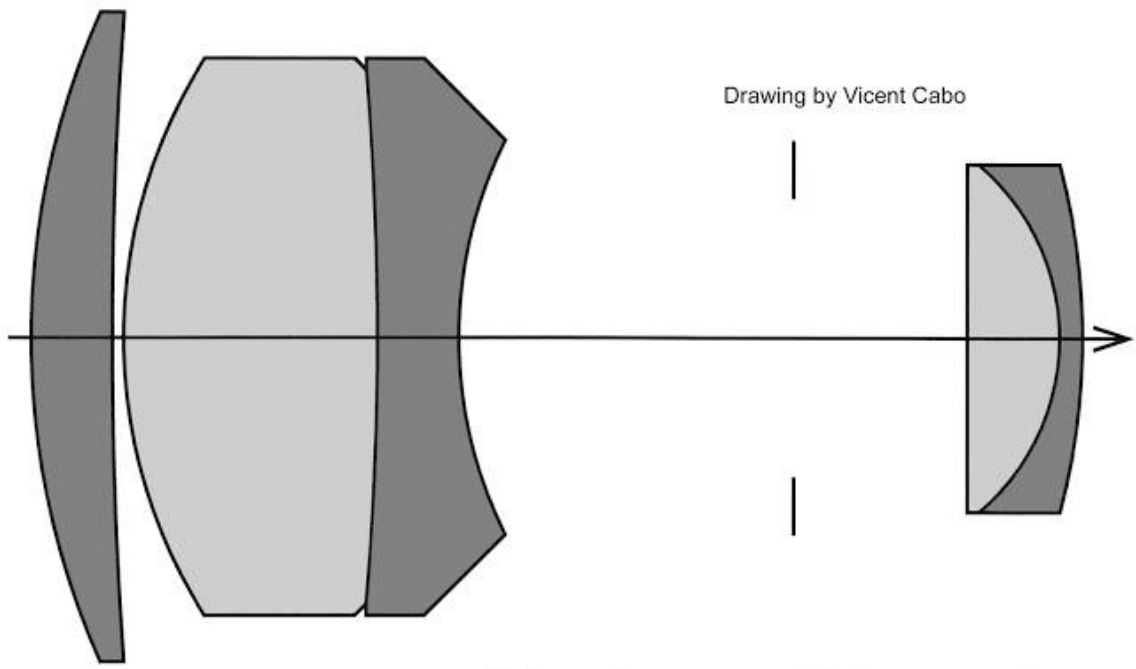
- **Tele-Tessar K 30cm f:8** only direct mount (rare) Same as previous schematics



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Drawing by Vicent Cabo

Zeiss Sonnar 300 mm f:4  
Contax (1939)



First version



**Second version**

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- **Fernobjektiv 50cm F:8**, first direct mount (rare), then Flektoskop mount



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## Flektoscope



**That was the first introduced Zeiss reflex housings aiming telephoto lenses. It was first made for 180/2.8 Olympia Sonnar, introduced for professional picture taking at 1936 Olympic Games. Later the same device could be used with the 300/4 Sonnar and 500/8 Fernobjektiv. Difficult to use and with large left screw thread mount of small pinch. Normally each scope came with its own lens.**

**The collar with the tripod mount rotates, and the release is made through a cable. The first model has the image upside down and reversed. The second made from 1949 the image was only corrected to be right side up, but still laterally reversed. The final model was the Flektomter using normal pentaprism for complete correct viewing. (see pictures on Sonnar 30cm).**

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## Panflex



The Panflex was another reflex housing aiming scientific photography and macro work, capable of accepting through its external bayonet mount, all accessory lenses greater than 8,5cm and 3.5cm wide angles with an extra tube for high magnifying degrees. The pre-war type can also be used with a special Tessar 135/4 that focus up to infinity. It uses the same viewing head of the Flektoscop first version, so giving a 180° reversed viewing image. This lens could also be used with bellows for macro photo. Few units were sold due to difficulties of using and excessive weight, turning hand held photos near impossible.

Both the Panflex and Flektoscope have a focusing eyepiece for diopter correction.

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