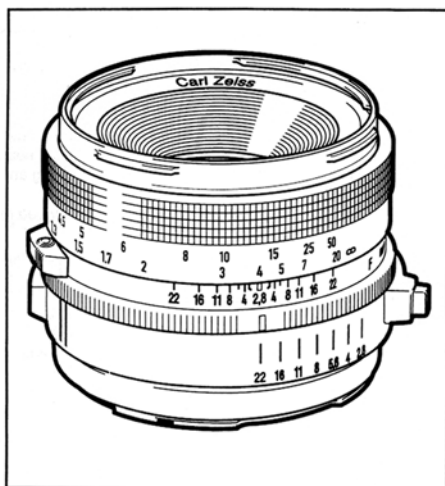


HASSELBLAD

Lenses Objektive Objectifs Objetivos Obiettivi Objektiv Objectieven FE



Lens functions

Most instructions below are also found in the camera manuals. Fig. numbers refer to the illustrations on the r.h. fold-out cover pages iv – vi.

Removing the lens (fig. 2)

Depress the lens release button and keep it depressed. Rotate the lens counter-clockwise until it stops. Lift it out of the mount.

NOTE: You can only remove the lens when the camera is fully wound and not pre-released.

Always attach the rear protective cover when the lens is separated from the camera body!

Attaching the lens (fig. 3-5)

Make sure that both camera and lens are fully cocked. Fig. 3 on the r.h. fold-out page iv shows the correct relationship between the drive shaft, the lens drive coupling and their respective indexes.

If the lens is not cocked, you can insert a coin or the like in the coupling slot and rotate it clockwise until it locks (about 4/5 of a turn).

You will find that holding the camera in your left hand and the lens in your right hand, as shown in fig. 4, is the easiest way of attaching the lens.

When you have aligned the red index on the lens' bayonet plate with the one in the camera mount as shown in fig. 5, the lens will easily drop into the bayonet fitting. You can then rotate it clockwise until it stops with a faint click as the lens catch locks it in place.

Aperture (fig. 6)

The aperture setting ring is the ring closest to the shutter speed ring on the camera body. The preselected aperture value is set against the central lens index. All marked full values and intermediate half positions have click-stops. The FE lenses have automatic diaphragms which are normally open, but stop down to the preselected aperture at the start of the exposure sequence.

Focusing (fig. 7)

The focusing ring is the ring with a knurled rubber grip, closest to the front of the lens. It carries the distance scales in feet (orange) and in meters (white).

Focus the lens by rotating the focusing ring until the image of the subject in the viewfinder is sharp. Read the distance between the subject and the film plane off the distance scales opposite the central lens index.

Depth-of-field (fig. 8)

The depth of field available at any given f-stop is read off the distance scale against the depth-of-field scale on both sides of the central index.

GB Hasselblad FE Lenses Manual

This part of the manual describes the features which are common for the Hasselblad FE lenses.

For further information on special features for some FE lenses please refer to the appendix below.

Contents

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Common Information

The Hasselblad FE lenses have no built-in shutter. They are primarily designed for use on the Hasselblad 200 and 2000 series cameras with focal plane shutters. All lenses are delivered with front and rear protective covers.

Parts and components

See fig. 1 on the l.h. fold-out cover page iii. The illustration shows the Planar FE 80 mm lens, but the organisation of the operational means is identical on all FE lenses, although the size of the focusing ring and the aperture setting range may differ between different lens types.

FE lenses with a different design and/or operation are described in the appendix.

- | | |
|--|--|
| 1. External and internal front bayonet mount | 8. Shutter speed/aperture ring (EV) interlock button |
| 2. Focusing ring | 9. Central index |
| 3. Focusing distance scale (meters and feet) | 10. Aperture ring and scale |
| 4. Depth-of-field preview knob | 11. FE databus contacts *) |
| 5. System mark | 12. Lens drive shaft coupling |
| 6. Lens bayonet plate with index | 13. Exposure values (EV) |
| 7. Depth-of-field scale | 14. Drive shaft catch |

***) Avoid touching the four databus contacts on the lens bayonet plate!**

2 English

The red rings in the illustration indicate how to read the depth-of-field for an aperture of f/8.

Depth-of-field preview (fig. 9)

The lens is normally opened to the largest aperture to provide the brightest possible viewfinder image with the most shallow depth-of-field. You can stop down the lens diaphragm to the preset aperture by pushing down the depth-of-field preview knob until it locks.

To reopen it, depress the lower end of the knob.

Infrared (IR) photography (fig. 10)

When photographing with infrared (IR) light you have to compensate for the refraction difference by setting the focusing distance opposite the red IR index line to the right of the common index line.

Follow this procedure:

1. Focus as usual on the focusing screen.
2. Mark or memorize the distance on the focusing scale opposite the central index line.
3. Rotate the focusing ring to set this distance opposite the IR index.

Exposure value (fig. 11)

Every combination of shutter speed and aperture has an equivalent exposure value (EV) which you can read and set against the triangular EV index on the lower right hand side of the lens.

EV-interlocked shutter speed / aperture (201F only) (fig. 12)

On the aperture ring there are two serrated grips, one of which has a button that, when depressed, interlocks the aperture ring and the shutter speed ring on the 201F model only, to maintain the exposure value (EV) when shutter speed or aperture is changed.

Lens shades and filters (fig. 13)

FE lenses with Ø 60 or Ø 70 front bayonets have internal and external bayonet accessory mounts. The internal bayonet mount is for filters and on the Ø 60 also for Proxar close-up lenses, and the external is for lens shades.

See the Appendix for additional information on the use of filters on the Distagon FE 50mm and Tele-Tessar FE 350mm lenses.

Common specifications:

Diaphragm: Normally open, manually preselected automatic diaphragm
Data transfer: Four databus contacts for digital lens data transmission
Lens mount: Hasselblad bayonet
Complete lens data sheets are available upon request.

English 3

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Appendix

In this appendix you will find additional information on the following lenses:

Distagon FE f/2.8 50 mm (page 5); Tele-Tessar FE f/4 350 mm (page 6)

The Distagon FE 50 mm lens has a "Floating Lens Element (FLE)" design for optimized image quality and short close-up distance

The Tele-Tessar FE 350 mm is a true telephoto lens with internal focusing. It also has a quick-coupling plate with a 1/4" tripod thread.

Attaching filters (Page vi, fig's. 14, 15)

Distagon FE 50: fig. 14; Tele-Tessar FE 350: fig 15.

The Ø 93 filter (2) should be installed between the Filter retaining ring (1, fig. 14) alt. Lens shade (1, fig. 15) and the Ø 93 Adapter ring (3, fig. 14) alt. the lens' front mount.

1. Unscrew the Filter retaining ring alt. Lens shade
2. Insert the filter into the Filter retaining ring or Lens shade.
3. Screw the ring or shade with filter into the adapter ring alt. lens mount.

Distagon FE f/2,8 50 mm (20516)

The powerful Distagon FE 50 lens is supplied with a lens shade installed on the lens, a lens cap and a rear protective cover.

The lens shade, consisting of two rings screwed together and also serving as a mount for the Ø 93 filters, is screwed into the threaded front mount of the lens (see "Attaching Filters" above).

The "Floating Lens Element" design provides a very high image quality at close-up distances and a very short near limit focusing distance.

Parts and components (fig. 14, page vi)

1. Filter retaining ring
2. Filter Ø 93 (accessory, not included)
3. Ø 93 Adapter ring

Distagon FE 50 mm specifications:

Common FE lens specifications see page 4.

Max. aperture: f/2.8
Focal length: 51.7 mm
Angular field 2w: diagonal 75.5°; side 57°
Aperture scale: 2.8 – 4 – 5.6 – 8 – 11 – 16 – 22
Spectral range: Visible light
Focusing range: 0.32 m – ∞ (12 3/4" – ∞)
Filter size: Hasselblad Ø 93
Weight: Approx. 1.24 kg

Tele-Tessar FE f/4 350 mm (20559)

The Tele-Tessar FE 350 is a true telephoto lens with very high image qualities, unusually fast for its focal length. Internal focusing gives unchanging exterior dimensions and a very short close-up focusing distance.

It is delivered with lens shade, front cap and rear protective cover. The lens shade also serves as a mount for the Ø 93 filters. The shade is screwed into the threaded front mount of the lens (see "Attaching Filters" above).

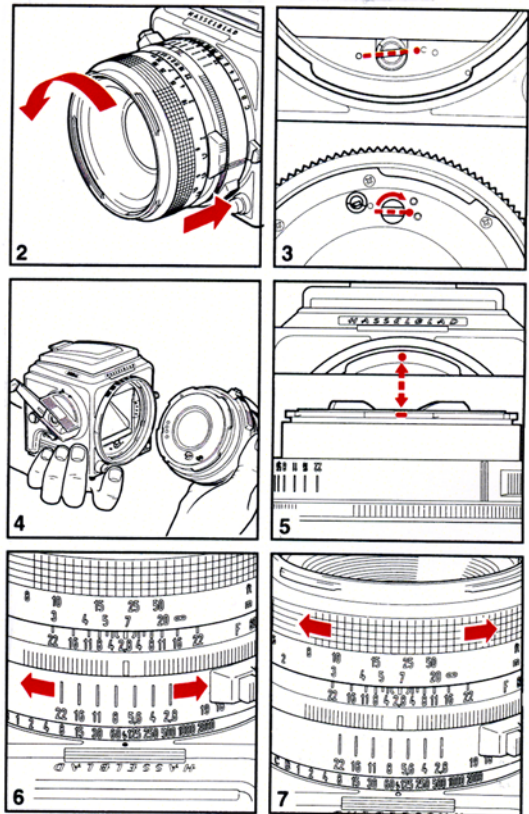
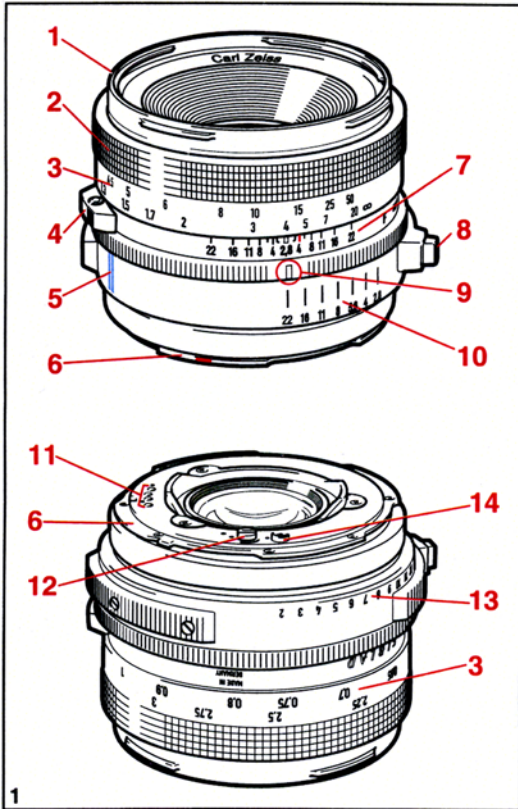
Parts and components (fig. 15, page vi)

1. Lens shade tube with filter mount
2. Filter Ø 93 (accessory, not included)
3. Quick coupling plate with 1/4" tripod thread

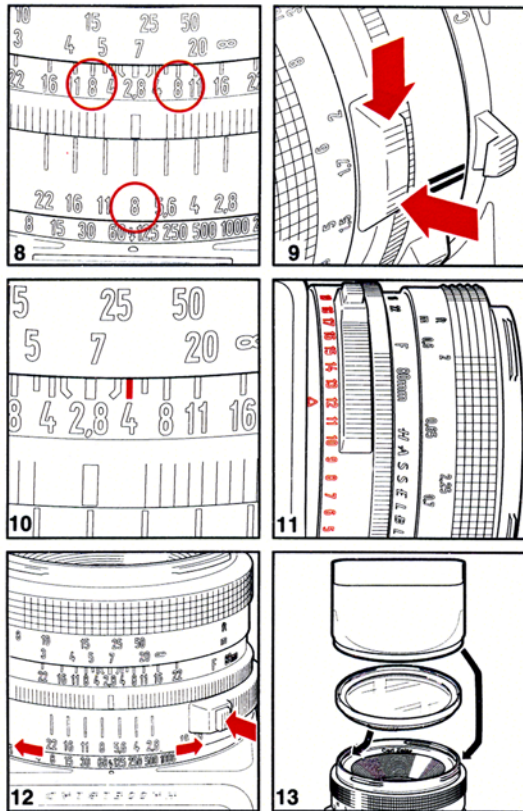
Tele-Tessar FE 350 mm specifications:

Common FE lens specifications see page 4.

Max. aperture: f/4
Focal length: 350.3 mm
Angular field 2w: diagonal 13°; side 9.2°
Aperture scale: 4 – 5.6 – 8 – 11 – 16 – 22 – 32
Spectral range: Visible light
Focusing range: 1.9 m – ∞ (6'4" – ∞)
Filter size: Hasselblad Ø 93
Weight: Approx. 2.0 kg

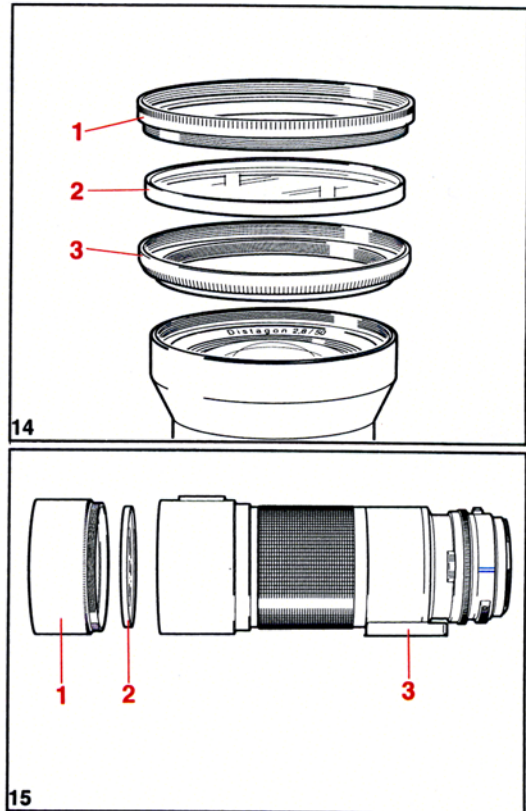


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