





Comparison

between image

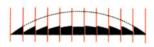
of an ordinary

focusing screen

and image of a

focusing screen

with a Fresnel lens



This diagram shows the construction and the effect of the Fresnel lens

THEFRESNELLENS

constitutes a particular advantage of the IKOFLEX. The view-finder pictures of mirror reflex cameras with an ordinary focusing screen do not quite come up to the actual tones of brightness, as their brightness decreases rapidly towards the margin. On looking, however, into the finder hood of the IKOFLEX you will be surprised at the brilliant picture and the uniform edge-to-edge illumination of the picture field. It is the Fresnel lens by which this singular effect is obtained.

The Fresnel lens, which was invented by the French physicist Fresnel (1788–1872), ensures the same performance as a much thicker and heavier convex lens. It provided with concentric steps of a breadth of 12 mm, which are too small to be seen when looking at the lens from a normal distance, but large enough to produce this excellent light-condensing effect. Being fitted in the finder hood of the IKOFLEX, this unbreakable plexiglas lens serves as a light condenser as well as a focusing screen. Its brilliant image shows a uniform edge-to-edge illumination. Even under poor lighting conditions it is not at all difficult to get dead sharp focus. The viewfinder image of the IKOFLEX will be bright even when ordinary focusing screens fail.

IKOFLEX

I K O F L E X I a



I K O F L E X la

for 12 pictures 21/4" × 21/4" on roll film B II/8 (120)

Taking lens: Coated Novar f/3.5 lens, focal length 75 mm.

or Coated Tessar f/3.5 lens, focal length 75 mm.

Viewing lens: Coated Teronar f/3.5 lens, focal length 75 mm.

Shutter: Prontor-SV, fully synchronized, speeded B, 1,

1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/300 sec.,

with delayed action release

Film lock with automatic stop, automatic picture counter

Prevention of double exposures and blanks

Flash synchronization contact built into body of camera

Light-condensing focusing screen of great luminosity owing to Fresnel lens

Correction of parallax for all distances

Large magnifier hinged in the finder hood

Direct vision viewfinder for photographing at eye level

Exposure table fitted on finder hood

Depth-of-focus scale near focusing knob

Camera back hinges open

Tripod socket in base of camera

Light metal body

Outer metal parts are chromium-plated.

Size: 51/2" × 37/8" × 3" Weight: 334/5 ozs.





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THE LENSES OF THE IKOFLEX are high-speeded, of excellent definition and colour correction for black and whites as well as for colour photographs, and are coated, including the viewing lens. The Novar f/3.5, focal length 75 mm., of the IKOFLEX Ia takes pictures of sharp edge-to-edge definition, even if not stopped down. The ZEISS Tessar f/3.5, focal length 75 mm., has been known for decades as a first-class lens of pin-point definition.

THE FOCUSING SCREEN of the IKOFLEX produces a uniform edge-to-edge illumination of the image, owing to its Fresnel lens.

THE MAGNIFIER in the finder hood of the IKOFLEX facilitates focusing by permitting convenient viewing of the image on the whole focusing screen. The manipulation of the IKOFLEX is particularly easy: While the left hand sets the diaphragm and the distance, the right one sets the exposure time, advances the film, winds the shutter, and presses the body release. This explains the quick readiness of the camera to take pictures, which is even increased, in the case of the IKOFLEX IIa, by the automatic shutter wind and the possibility to verify from above the lens aperture and the exposure time.

THE FILM TRANSPORT is effected by turning the film winding knob until it is locked. The picture counter indicates the frame that will be exposed next. A red sign indicates that the respective frame has not yet been exposed. Double exposures are prevented by the fact that the shutter lock is released only when the film has been advanced. The film lock, which is not released before the release button has been pressed down, prevents unexposed frames.

THE AUTOMATIC SHUTTER WIND of the IKOFLEX IIa is interlocked with the film transport. When the film is advanced to the next frame, the shutter is automatically cocked. Unintentional release of the shutter when the finder hood is closed is prevented by a lock near the body release button.

THE FILM CANAL, exactly calculated by ZEISS IKON and approved for decades, prevents scratching of the film and ensures absolutely correct position of the film and, consequently, uniform definition on the whole focal plane.

THE EXPOSURE TABLE on the side panel of the finder hood gives exposure times for various conditions.

THE FLASH SYNCHRONISATION CONTACT is bipolar, so that no current will enter the IKOFLEX when a flash is fired. All current flash bulbs, electronic flashes, and magnesium flashes can be used.

THE RED-DOT SETTING ensures quick readiness to take pictures, if the lighting conditions are good. Everything from 13 ft. to infinity is automatically brought into focus. A subsequent check on the focusing screen is not necessary when this setting is used.

THE DIRECT VISION VIEWFINDER of the IKOFLEX is particularly useful for sports photographs and for photographs of quickly moving subjects, as it shows the subject at eye level and in its actual size.

THE DEPTH-OF-FOCUS SCALE near the focusing knob indicates the range of sharpness for each distance setting and lens stop.



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I K O F L E X Ila

for 12 pictures 21/4" × 21/4" on roll film B II/8 (120)

Taking lens: Coated ZEISS TESSAR f/3.5 lens, focal length 75mm.

Viewing lens: Coated Teronar f/3.5 lens, focal length 75 mm.

Shutter: Fully synchronised Synchro-Compur shutter,

speeded B, 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100,

1/250, 1/500 sec.

Film lock with automatic stop, automatic picture counter

Prevention of double exposures and blanks

Shutter wind and film transport are interlocked

Body release with lock

Flash synchronization contact built into camera body

Light-condensing focusing screen of great luminosity owing to Fresnel lens

Correction of parallax for all distances down to 3 ft.; when using the close-up attachement, also for nearer distances

Large magnifier hinged in the finder hood

Lens apertures and exposure times can be verified from above

Direct vision viewfinder for photographing at eye level

Exposure table fitted on finder hood

Depth-of-focus scale near focusing knob

Camera back hinges open

Tripod socket in base of camera

Light metal body

Size: 51/2" × 37/8" × 3" Weight: 38 ozs.

I K O F L E X IIa





The IKOFLEX enables its user to cover all fields of photography. It is much appreciated by amateur and professional photographers for its high performance and solid construction. The scope of this camera is considerably widened by convenient accessories. The owner of an IKOFLEX is, therefore, at any time ready to photograph any subject.

The IKOFLEX when used by the professional photographer in his studio, for news-reporting work or on expeditions, will fulfil its mission better if equipped with suitable accessories. Whether the amateur takes pictures at home or takes his IKOFLEX along with him on travels or for photographing sporting events, the accessories created for the IKOFLEX will enable him to take those delightful snapshots and excellent photographs that make photographing so interesting.

The accessories make the IKOFLEX a complete photographic outfit and permit using it for all photographic tasks. They increase the pleasure you derive from your IKOFLEX and from photography.

THE EVEREADY CASE

made of genuine cow-hide, is not only elegant in appearance but also protects the IKOFLEX effectively from detrimental influences and damage. Opening of the case is done in an instant, the IKOFLEX being immediately ready for action. The eveready case for the valuable IKOFLEX IIa is lined with deerskin.

Case for IKOFLEX Ia

Case for IKOFLEX IIa







With leather case

T H E I K O P O L Polarizing Filters

considerably extends the scope of the IKOFLEX. Reflexes on shining surfaces like show windows, glass, plastics, water, and paintings can be attenuated or completely eliminated with a polarizing filter. The effect of the IKOPOL depends on how much the filter is rotated before it is fitted on the lens.

The IKOFLEX is particularly suited for photographing with the polarization filter. By fitting the IKOPOL polarization filter attachment on the IKOFLEX you place a polarization filter before the viewing lens and the taking lens; both filters can be turned simultaneously. When by viewing the focusing screen and turning the viewfinder filter you have found the position in which the annoying reflexes are attenuated or eliminated, the filter in front of the taking lens automatically will produce the same effect. The IKOPOL does not only permit special photographs but also many shots which otherwise would not be worth-while. Besides, colour photographs made with the IKOPOL when the sky is overcast will show richer colours.







With leather case

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T H E I K O P R O X
Close-up Lenses

Indoors and outdoors you often find small subjects which it is worth-while to photograph. This is, however, difficult insofar as the camera can not be brought near enough to the subject. The IKOPROX close-up attachment will in this case enable you to photograph small objects at a short distance. It is slipped on the viewfinder lens and the taking lens and automatically eliminates the parallax between these two lenses. It has been created for the two ranges $3' 3^3/s'' - 1' 7^3/4''$ (f = 1 m.) and $1' 7^3/4'' - 11^3/4''$ (f = 0.5 m.).

Everyone who likes photography will know how very delightful these close-ups are. Professional work often calls for photographs of small objects like coins, jewels, and the like. In all these cases the close-up attachment is indispensable.

IKOPROX

 $f = 3' \ 3^3/8''$

and

 $f = 1' 7^3/4''$



Taken without IKOPROX at 3' 38/8"



With IKOPROX $f = 1 \text{ m. at } 1' 7^3/4''$



With IKOPROX $f = 0.5 \text{ m. at } 11^3/4''$



T H E I K O P H O T Exposure Meter

ensures good pictures by indicating correct exposures. Even small amounts of light are recorded correctly and without time-consuming calculations you can immediately read off the correct exposure time and lens aperture for any film sensitivity. The IKOPHOT can be manipulated with one hand. Its solid and light-proof casing protects the sensitive photoelectric cell and instrument a convenient and elegant eveready case offers further protection.

THE LENS HOOD

protects the lens from direct rays when taking photographs against the light. The lens hood (A 37 mm.) is slipped on the lens mount and can also be used on a screw-on filter.



ZEISS IKON FILTERS

Photographic filters produce certain tonal effects values. With yellow filters the blue sky, the clouds and the snow will be rendered more effectively, while a yellow-green filter brightens the sunny spring and summer landscapes. Orange filters increase contrasts. Whereas red filters penetrate haze and thus render far distances more clearly. Ultraviolet filters are useful in high mountains.

ZEISS IKON filters are made of glass coloured in the mass and are plane-parallel. They are not affected by light, humidity, and high or low temperatures. The ZEISS IKON filters with screw mount (S 35.5 mm.) for the IKOFLEX are supplied in convenient transparent cases made of plastic.