

Voigtländer

VITO IIa
24 × 36 - 35 mm



I N S T R U C T I O N S F O R U S E

www.orphancameras.com

*R*ight Here

is the first and most important piece of advice for the VITO IIa: Please read this booklet carefully. Make yourself thoroughly familiar with all the operations and controls of the camera. Then you can load your first film and begin to take pictures.

Remember also that the VITO IIa is an optical and mechanical precision instrument which wants gentle and understanding treatment. The camera will repay careful handling with beautifully clear and sharp pictures for many years to come.

200 YEARS

Voigtländer

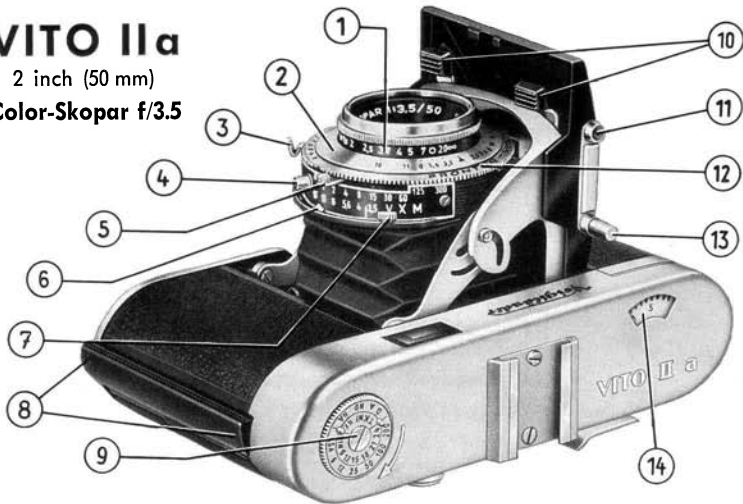
VOIGTLÄNDER A.G. BRAUNSCHWEIG

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VITO IIa

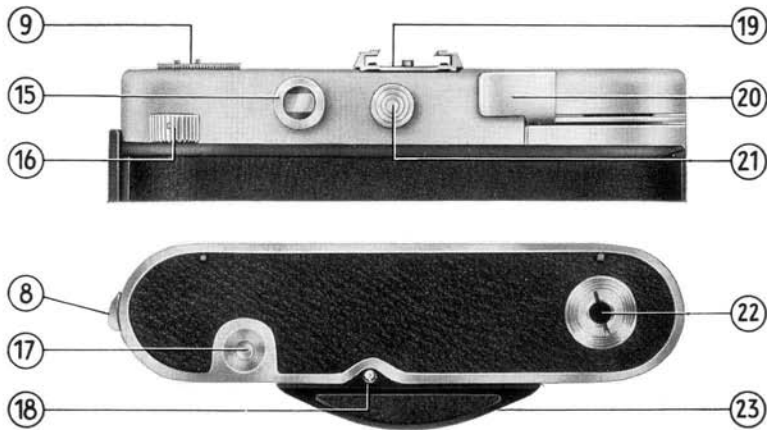
2 inch (50 mm)

Color-Skopar f/3.5

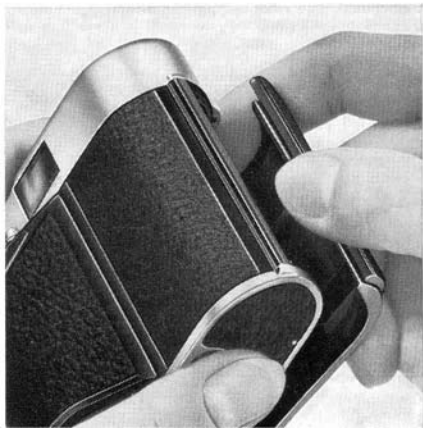


- 1 Focusing Scale
- 2 Depth of Field Indicator
- 3 Aperture and Light Value Setting Lever
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- 11 Cable Release Socket
- 12 Shutter Speed Ring
- 13 Release Button
- 14 Film Counter Window

- 8** Back Lock
- 9** Rewind Knob with Film Indicator
- 15** Viewfinder Eyepiece
- 16** Reversing Lever
- 17** Button to Open Baseboard
- 18** Baseboard Leg
- 19** Accessory Shoe
- 20** Rapid Winding Lever
- 21** Film Counter Setting Button
- 22** Tripod Bush
- 23** Baseboard



Loading and Unloading the Camera



The VITO IIa takes all makes of perforated 35 mm. miniature film – black-and-white or colour – available throughout the world. These films are sold in daylight cassettes holding 36 or 20 exposures 24 x 36 mm.

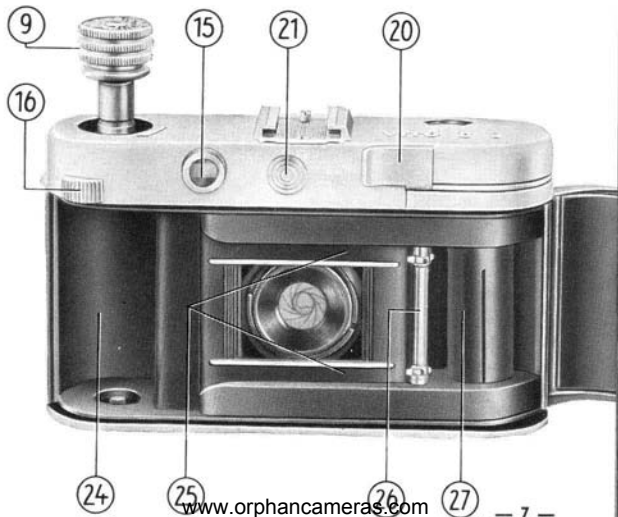
Opening the Camera Back

Slightly raise the back lock (8) and pull the back away from the body (see illustration).

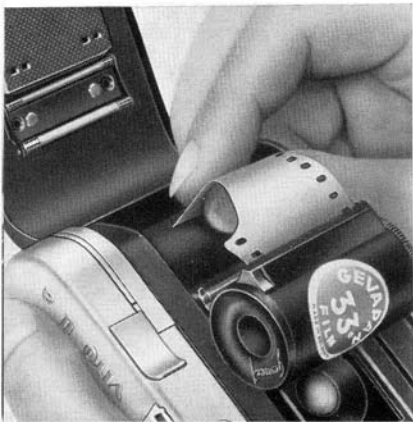
Extending the Rewind Knob

Before inserting the cassette, the rewind knob (9) must be fully extended. To do that, push the reversing lever (16) to the left. The rewind knob will jump up; pull it upwards as far as it will go.

- 9** Rewind Knob with
Film Indicator
(fully extended)
- 15** Viewfinder
Eyepiece
- 16** Reversing Lever
- 20** Rapid Winding
Lever
- 21** Film Counter
Setting Button
- 24** Film Chamber
- 25** Film Track
- 26** Film Transport
Sprocket
- 27** Take-up Spool

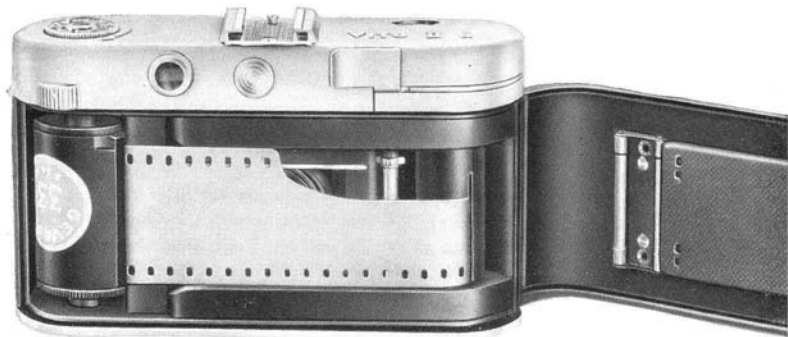


Inserting the Cassette



The narrow slit of the take-up spool (27) must face upwards before threading the film leader. If necessary, turn the take-up spool (with one finger or by working the rapid winding lever) to the correct position. Then:

- Pull out a short length of the film leader from the cassette, and push it into the slit of the take-up spool as far as it will go (see illustration).
- Draw the cassette across the transport sprocket and the film track, and insert it in the film chamber.
- Finally push back the rewind knob fully into the camera body, turning it slightly if necessary to engage the centre spool of the cassette.



The illustration above shows the correctly loaded camera before closing and setting the film counter. The rewind knob is pushed down into the body, and the film lies flat in the film track. Now close down the camera back, and press it against the body; make sure that the back lock engages properly.



Setting the Film Counter

Fully pull out the rapid winding lever (20). Push the reversing lever (16) to the left (this extends the rewind knob), and keep pushing the film counter setting button (21) to the right until the letter "F" appears below the red triangular ▼ index in the curved film counter window (14). (See illustration). Push the rewind knob back into the body, and pull out the rapid winding lever **as far as it will go**.

Work the reversing lever a second time, and immediately push back the extended rewind knob into the body. **Fully**

pull out the rapid winding lever once more. No. 1 (for the first exposure) is now below the red ▼ index (see illustration). Every time the film is advanced, the film counter automatically shows the correct frame number.

Setting the Film Indicator

Rotate the disc in the rewind knob **in the direction of the arrow** until the index line on the milled ring is opposite the appropriate marking. The black figures indicate film speeds of black-and-white film in ASA index numbers and DIN degrees; the red letters stand for one of the following types of colour film loaded into the camera:

D (T) = Daylight type reversal film	ND (NT) = Daylight type negative film
A (K) = Artificial light type reversal film	NA (NK) = Artificial light type negative film

After the last shot the exposed film must be rewound into its cassette. Proceed as follows:

- Push the reversing lever to the left to extend the rewind knob (see illustration).
- Turn the rewind knob smoothly in the direction of the arrow. At the same time watch the film counter window; the film counter will now count backwards from the number of the last exposure.
- When the letter "F" reappears below the red ▼ index mark in the counter window, the film is fully rewound. It can now be removed by opening the camera back and fully pulling out the rewind knob.

Unloading the Camera



Changing Partly Exposed Films

With the VITO II a you can always unload a partly exposed film and change over to another one (e. g. from black-and-white to colour) without a darkroom.

- Rewind the partly exposed film into its cassette, as already described on page 11. But make a note of the number of the last exposure which appeared in the curved film counter window.
- When reloading the partly exposed film, proceed as described on pages 8 to 10, up to setting the film counter to No. 1.
- Then push the reversing lever to the left (extending the rewind knob), and keep working the rapid winding lever until the triangular ▼ index mark in the film counter window indicates two frames beyond the number noted when you unloaded the film.
- Finally push back the rewind knob into the body, once more pull the rapid winding lever as far as it will go, and carry on exposing the film in the normal way.

Briefly press the button (17) underneath the camera to release the baseboard (see illustration). Pull it out by its two corners until the struts engage firmly. The lens panel is now in its taking position.

To close, simultaneously depress both keys (10), and push the baseboard back against the body.

Please note especially: During all these operations avoid pressing on the release button which rises out of the edge of the baseboard during opening, and automatically disappears again on closing.

Opening and Closing the Baseboard

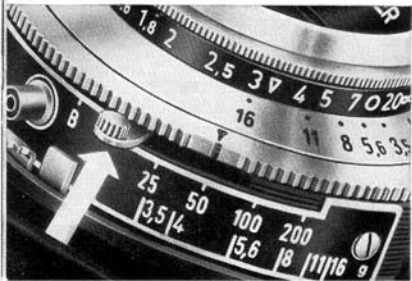


Setting the Shutter Speed and Aperture

The VITO IIa is available with either the **Pronto** or the **Prontor-SVS shutter with exposure value scale**. Setting the shutter and aperture on models with the Pronto shutter is described below and opposite. See pages 16 to 18 for directions for setting the Prontor-SVS shutter.

The Pronto shutter can be set to "B", 1/25, 1/50, 1/100, and 1/200 second. It is X-synchronized (see pages 24 to 27). To set the speed, turn the shutter speed ring until the red index line is above the required exposure time. When set to "B" the shutter remains open as long as the release button is depressed.

The Pronto shutter must be tensioned before every exposure – even when set to "B". For this purpose pull the tensioning lever upwards as far as it will go (see illustration).



The iris diaphragm of the lens controls the amount of light reaching the film – and thus indirectly the exposure – as well as the extent of the depth of field. The aperture numbers are 3.5 (maximum aperture), 4, 5.6, 8, 11, and 16 (smallest aperture). Remember that the larger the aperture number, the smaller the actual lens opening, and vice versa. It is thus related to the exposure time: if for instance the correct shutter setting at $f/5.6$ is $1/50$ second, the corresponding value at $f/8$ will be $1/25$ second, and at $f/4$ it will be $1/100$ second. For further details about aperture and depth of field, see page 31.

To set the aperture, move the aperture lever so that the edge lines up with the index line corresponding to the required aperture number (see illustration).

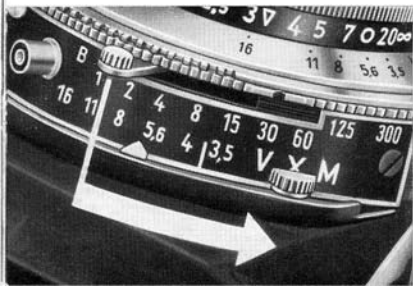
After some experience it becomes reasonably easy to estimate the correct aperture-shutter speed combination. A photo-electric exposure meter is, however, more reliable – especially in difficult light conditions or with subjects of extreme brightness range.



The Prontor-SVS shutter with exposure value scale carries shutter speeds from 1 to $\frac{1}{300}$ second, as well as a "B" setting for time exposures. It is MX-synchronized for flash (see pages 24 to 27). For all shots without flash it is immaterial whether the synchronizing lever is set to M or X.

The Prontor-SVS shutter must be tensioned before every exposure – even when set to "B". To do that, pull the tensioning lever upwards as far as it will go (see illustration). When set to "B", the shutter opens on pressing the release button and remains open as long as the button is kept depressed.

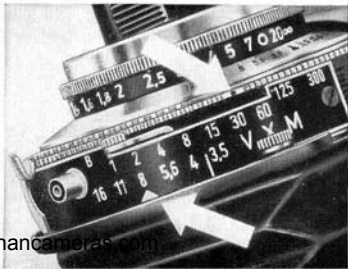
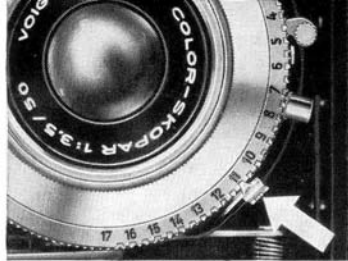
The aperture and speed controls are coupled. The relation between exposure time and lens opening is expressed in terms of "exposure values". The exposure value required depends on the prevailing light conditions when taking the picture; setting the exposure value on the shutter always provides the correct combination of aperture and exposure time. A series of such correct combinations (e. g. $\frac{1}{60}$ second at f/5.6, $\frac{1}{30}$ second at f/8, $\frac{1}{15}$ second at f/11) always corresponds to **one and the same** exposure value setting.



Setting the Exposure Value

Pull the aperture lever slightly outwards, and set it so that the red index mark engages in the serrated rim exactly on the exposure value number you had read off your exposure meter (see top illustration). If necessary, turn the shutter speed ring against the movement of the aperture lever so that the latter can engage even the end numbers of the exposure value scale when appropriate.

This sets just one of the many possible aperture-speed combinations (e. g. $\frac{1}{30}$ second at f/8, for a exposure value of 11 — see bottom illustration). If a faster shutter speed is required, simply turn the shutter speed ring to this speed; that automatically opens up the lens aperture to correspond to the shorter exposure time. Conversely, the shutter speed ring can be used to adjust the aperture, which simultaneously changes the shutter speed to suit. In-between exposure value settings are also possible for specially accurate exposures with colour film.



Setting the Exposure Value (continued)

A given exposure value setting, however, does **not** permit the use of every single aperture and shutter speed marked on the shutter. On turning the shutter speed ring either the aperture scale or the shutter speed scale reaches the limit of its movement. Beyond that no further aperture-speed combinations are then possible at the same exposure value.

Note: When the speed index (the red line on the shutter speed ring) reaches the left-hand end of the speed scale at "B", the shutter opening and closing is no longer controlled automatically by the mechanism. With the exposure value unchanged, expose for 2 seconds in this case.

If you have obtained the aperture-speed combination from an exposure meter without exposure values, the aperture and speed must be set separately on the shutter. First turn the shutter speed ring until the red index on it is above the required speed marking. Then adjust the aperture lever until the pointer indicates the appropriate aperture number. The settings are now coupled to an exposure value, and can be adjusted together as already described.

Aperture and speed settings without an exposure meter: In principle proceed as described above, but you will have to estimate the correct shutter speed and aperture setting. To avoid wrong settings, please note the order: first adjust the shutter speed, and then the aperture.

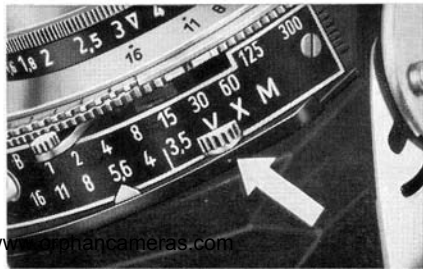
Setting the Self-Timer

The delayed action mechanism (self-timer) built into the Pronto and Prontor-SVS shutters allows you to include yourself in your pictures without having to ask other people to "press the button" for you.

After setting the shutter speed and aperture (or the exposure value), and the distance, tension the shutter in the usual way. On the Pronto shutter then pull the red self-timer lever sideways as far as it will go (see top illustration).

On the Prontor-SVS shutter simply set the synchronizing lever to the green dot marked "V". On the Prontor-SVS (but not on the Pronto) the setting of the lever can be changed again if desired without making an exposure.

On pressing the release button, the shutter will now open automatically after a delay of about 7 to 10 seconds. Note: The self-timer **cannot** be used with the shutter set to "B".



Setting the Distance



You can determine the subject distance by estimation, or, better still, with the aid of an accessory rangefinder. The Voigtlander clip-on rangefinder is particularly suitable for this purpose. Its robust design and special suparent contrast mirror ensure absolute accuracy over a measuring range from infinity to 3 feet.

To focus the camera lens, turn the large milled ring carrying the distance scale until the appropriate distance figure is opposite the triangular ▲ index mark (see illustration). The scale also carries two additional marks: ▽ at about 11 feet, and ○ at about 30 feet. These are the snapshot focusing settings (see opposite page).

Snapshot Focusing

Candid action shots (e. g. of children at play) often yield surprisingly live pictures. On such occasions do not waste time over focusing on an exact distance. Instead, set the focusing scale to the near zone mark ∇ for subjects between 8 and 17 feet, or to the far zone mark $\bigcirc$ for subjects between 17 feet and infinity. You must, however, stop down to at least f/5.6 to ensure adequate depth of field.

Provided the light is good enough, these focusing zones are very useful when photographing sports subjects, where distances may change very suddenly.



The Rapid Winder and Double Interlock



One **full movement** of the rapid winding lever transports the film and advances the film counter. The spring then returns the lever to its original position.

The rapid winding lever can of course also be worked in a number of short movements. In that case keep pulling the lever until it locks.

The automatic double interlock prevents the rapid winding lever from being operated a second time before the shutter is released. At the same time, the shutter can only be released once the film has been advanced.

Note: Do not press the reversing lever (16) between exposures. Otherwise the double exposure lock comes into action, and you lose a frame.

Holding and Releasing

For shooting we suggest you hold the camera as shown in the illustrations on the right. Keep the eye close to the finder eyepiece so that **all** four corners of the finder field are clearly visible.

When releasing the shutter, hold your breath, and smoothly depress the release button as far as it will go – never jab at it. Short instantaneous exposures ($1/30$ second or faster) are usually taken with the camera held in the hand. Avoid holding the camera unsupported for exposures longer than $1/30$ second; prop up your arms or lean against something solid.

For time exposures with the shutter set to "B" preferably mount the camera on a tripod, and release the shutter by means of a cable release. This screws into the cable release socket (11).





Flash Shots

Both the Pronto and the Prontor-SVS shutters permit synchronized flash shots up to the fastest shutter speeds. Any flash gun on the market can be connected to the shutter.

Please Note:

With black-and-white film the flash (clear or blue bulbs, or electronic flash) can be used on its own, or combined with daylight or artificial light sources such as tungsten lamps.

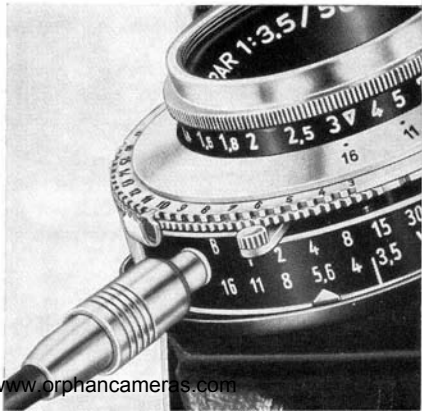
With daylight colour film only blue coated flash bulbs or electronic flash can be used as supplementary light. With the artificial light types of colour film only clear flash bulbs should be used.

Small light-weight units, such as the Voigtländer battery-capacitor flash gun, can be fitted directly into the accessory shoe on top of the camera (see illustration left). Larger flash guns or the lamp holders of electronic flash units are generally fitted to the side of the camera with the aid of a special mounting bracket.

The flash cable completes the electric circuit between the flash unit and the camera shutter. Push the plug of the cable over the flash socket on the camera shutter (see illustration right).

Warning: Never use the shutter contacts to fire flash bulbs from the 110 or 220 volt mains.

Mounting the Flash Gun on the Camera:



The Synchronizing Settings

Flash bulbs and electronic flash units differ in their characteristics such as firing delay and light output; the table opposite classifies them in several groups. To ensure that the peak brightness of the flash co-incides with the instant when the shutter is fully open, there are two types of synchronization: "M" and "X".

- The Pronto shutter is only X-synchronized. Flash shots (with or without the self-timer) are possible only with the types of flash and shutter speeds given in the table under "X (red)". The shutter requires no special setting.
- The Prontor-SVS shutter is X- and M-synchronized. Before taking a flash shot therefore select the appropriate synchronization by moving the synchronizing lever to the red dot marked X or the yellow dot marked M. You can then use all the types of flash and all shutter speeds listed in the table opposite under "X (Red)" or "M (Yellow)".

For flash shots with the self-timer (**with the synchronizing lever of the Prontor-SVS set to the green dot marked V**) use only the shutter speeds listed in the table under "X (Red)".

Suitable Shutter Speeds

Flash Bulbs		Synchronizing Lever Set to	
Make	Type	X (Red)	M (Yellow)
Gen. Electric West Electric West Electric Sylvania West Electric	SM SS SF	1 to 1/125	Not suitable for M-synchronization
Philips Osram Philips Osram Gen. Electric Sylvania West Electric	PF 1 XM 1 PF 5 XM 5 M-2 2-M	1 to 1/30	1/60 to 1/300
West Electric West Electric West Electric Gen. Electric West Electric Gen. Electric Sylvania Sylvania	0 3 5 P-5 8 25	1 to 1/30	1/60 to 1/300
Electronic Flash		Synchronizing Lever	
Type		Set to X	
Instantaneous Firing		1 to 1/300	

Voigtländer Filters

are made of spectroscopically tested optical glass, dyed in the mass, and hard coated. The filter factors given below are approximate values, as they necessarily depend on the colour sensitivity of the black-and-white film used, and on the prevailing light conditions at the time of the exposure.

Yellow Filter G1.5x	Slight filtering effect for outdoor shots requiring short exposures, such as sports and action subjects, and pictures with low sun. Filter factor: $1\frac{1}{2}$ times, or open aperture by $\frac{1}{2}$ stop.
Yellow Filter G3x	Universal filter for landscapes and other outdoor subjects; indispensable for snow pictures. Filter factor: 3 times, or open aperture by $1\frac{1}{2}$ stops.
Green Filter Gr4x	Lightens green tones in landscapes. Recommended for artificial light portraiture and copying of coloured originals. Filter factor: 4 times, or open aperture by 2 stops.
Orange Filter Or5x	Strong filter effect through appreciable suppression of blue light. Reduces atmospheric haze in distant views. Filter factor: 5 times, or open aperture by $2\frac{1}{2}$ stops.
Ultra-violet Filter UV	Cuts out ultra-violet radiation in high mountains or near the sea. Eliminates any unpleasant blue cast in colour shots. No exposure increase required.

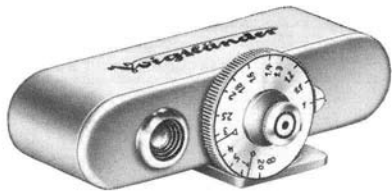
Voigtländer Focar Lenses

The Focar supplementary lenses extend your scope to the highly interesting field of large close-ups of small objects and animals (flowers, coins, insects, etc.). They are also eminently suitable for copying book pages, postage stamps, and small illustrations.

In effect, the Focar lenses shorten the focal length of the camera lens, and thus permit the Camera to approach closer to the subject than the normal limit of 3½ feet. We shall be pleased to supply on request a detailed instruction booklet with data for scales of reproduction, depth of field, etc.

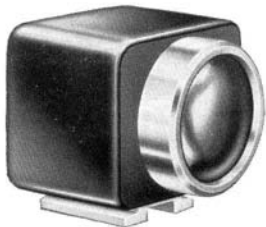
Focar Close-Focusing Table

Camera set to	Subject-lens distance with		
	Focar 1	Focar 2	Focar 2+1
∞	2' 7½"	1' 5½"	11¼"
60'	2' 6¼"	1' 5"	11"
○	2' 5¼"	1' 4¾"	11"
20'	2' 4"	1' 4½"	10¾"
15'	2' 3"	1' 4"	10½"
12'	2' 2"	1' 3½"	10½"
▽	2' 1½"	1' 3¼"	10¼"
10'	2' 1"	1' 3¼"	10¼"
8'	1' 11¾"	1' 2¾"	10"
7'	1' 11"	1' 2½"	10"
6'	1' 10"	1' 2"	9¾"
5'	1' 8¾"	1' 1½"	9½"
4.5'	1' 8"	1' 1¼"	9¼"
4'	1' 7"	1' 1"	9"
3.5'	1' 6"	1' ½"	8¾"



The Voigtländer Rangefinder

This is an instrument of high precision, yet easy to use in a matter of seconds. It relieves you of all focusing worries (see top illustration).



The Voigtländer Kontur Finder

Specially suitable for sighting rapidly moving subjects (sports and candid action shots), as the scene is viewed with both eyes open.

The Voigtländer Lens Hood

This useful accessory clips over the lens mount and screens off disturbing stray light. In bad weather it also protects the lens against drops of rain.

Aperture and Depth of Field

The depth of field covers that part of the subject area in front of and behind the focused distance which appears acceptably sharp in the picture. The extent of this sharp zone is by no means constant; it increases the more you stop down the lens, and decreases the larger the lens aperture. In short:

Large apertures (e. g. $f/4$) = **reduce** the depth of field.

Small apertures (e. g. $f/11$) = **increase** the depth of field.

The available depth of field zone is easily determined. Once you have set the lens to the correct subject distance, look at the depth of field scale. This carries two sets of similar aperture numbers arranged to each side of the ▲ index mark. The depth of field now extends from the distance figure opposite the appropriate left hand aperture number to the distance figure opposite the corresponding right hand aperture number. See zone focusing illustration on page 21.

Care of the Camera and Lens

Successfull results and long life of the camera depend largely on proper care and correct operation. Therefore always handle the camera gently, and never use force. If you are doubtful on any point, have another look at the appropriate section of these instructions. In case of trouble take the camera to your photo dealer, or post it to

The Service Department, VOIGTLÄNDER A.G., BRAUNSCHWEIG (W. Germany).

For cleaning the lens we recommend a small patch of soft cloth free from fluff or special lens cleaning tissue. Large specks of dust or grains of sand from the beach must first be carefully removed with a soft sable brush; finger prints and similar grease stains must be wiped off with a piece of cotten wool moistened with alcohol or ether.