This manual is for reference and historical purposes, all rights reserved.

This page is copyright© by M. Butkus, NJ.
This page may not be sold or distributed without the expressed permission of the producer
I have no connection with any camera company

On-line camera manual library
This is the full text and images from the manual. This may take 3 full minutes for the PDF file to download.

If you find this manual useful, how about a donation of $3 to: M. Butkus, 29 Lake Ave., High Bridge, NJ 08829-1701 and send your e-mail address so I can thank you. Most other places would charge you $7.50 for a electronic copy or $18.00 for a hard to read Xerox copy.

This will allow me to continue to buy new manuals and pay their shipping costs. It'll make you feel better, won't it?

If you use Pay Pal or wish to use your credit card, click on the secure site on my main page.
PayPal Name  Lynn@butkus.org
Right Here
is the first and most important piece of advice for the VITO BL: 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 BL is an optical and mechanical precision instrument which requires gentle and understanding treatment. The camera will repay careful handling with beautifully clear and sharp pictures for many years to come.

VOIGTLÄNDER A.G. BRAUNSCHWEIG
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening the camera and inserting the film</td>
<td>6–9</td>
</tr>
<tr>
<td>Setting the film counter</td>
<td>10</td>
</tr>
<tr>
<td>Determining the exposure</td>
<td>11–14</td>
</tr>
<tr>
<td>Setting the shutter and aperture</td>
<td>15–17</td>
</tr>
<tr>
<td>Setting the distance</td>
<td>18–19</td>
</tr>
<tr>
<td>Rapid winder · Double exposure lock</td>
<td></td>
</tr>
<tr>
<td>Releasing</td>
<td>20–21</td>
</tr>
<tr>
<td>Flash exposures</td>
<td>22–25</td>
</tr>
<tr>
<td>Unloading the camera</td>
<td>26</td>
</tr>
<tr>
<td>Changing partly exposed films</td>
<td>27</td>
</tr>
<tr>
<td>Aperture and depth of field</td>
<td>28</td>
</tr>
<tr>
<td>Hints for using the exposure meter</td>
<td>29–32</td>
</tr>
<tr>
<td>Filters · Focal lenses</td>
<td>33–34</td>
</tr>
<tr>
<td>Accessory range finder · Kontur finder</td>
<td>35</td>
</tr>
<tr>
<td>Care of camera and lens</td>
<td>36</td>
</tr>
</tbody>
</table>
1 Focusing scale
2 Depth of field indicator
3 Milled knob
   of light-value scale
4 Light-value scale ring
5 Shutter speed scale
   for exposure times from
   \( \frac{1}{300} \) to 1 sec.
6 Synchronizing lever
   for flash contact M or X
   and self-timer V
7 Film reversing lever
8 Rewind knob with
   film indicator
9 Aperture scale
10 Exposure meter –
    BEWI-AUTOMAT
11 Film counter window
12 Release button
3 Milled knob of light-value scale
8 Rewind knob with film indicator
13 Viewfinder eyepiece
14 Base plate latch
15 Base plate flap
16 Flash contact for the connection of flash units
17 Press-button of Exposure-Meter
18 Rapid winder to tension shutter and advance film
19 Tripod bush
20 Film counter setting ring
21 Camera support
OPENING THE CAMERA and INSERTING THE FILM

The VITO BL takes all makes of 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. For reasons of economy also daylight or darkroom spools with ready cut lengths of film or 35 mm bulk film, which must be cut beforehand to suit the number of photographs intended can be used.

During loading and unloading avoid handling the cassettes in brilliant light; so carry out all operations in the shade – even the shadow of your own body will do.

To Open the Camera

first lift up the base plate latch and turn it through a quarter turn to the right. Then fold away the base plate flap (see illustration), and swing the back open (the illustration on the right shows the camera fully open).

--- 6 ---
8 Rewind Knob with Film Indicator
13 Viewfinder Eyepiece
14 Base Plate Latch
15 Base Plate Flap
17 Press-button of Exposure Meter
18 Rapid Winder to tension Shutter and advance Film
22 Film Chamber for Daylight Cassette
23 Shaft of Rewind Knob
24 Transport Sprocket
25 Take-up Spool
Inserting the Cassette:

The narrow slit of the take-up spool must face upwards to take the beginning of the film. If necessary turn the take-up spool with the finger or by working the rapid winder until it is in 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 film window and insert it in the film chamber.

If the shaft of the rewind knob does not immediately engage the centre spool of the cassette, push the reversing lever backwards (see illustration on page 26) to extend the rewind knob. Turn the latter to and fro a little, then push the knob back into the body.
This is how the loaded camera must appear before closing. The film lies flat in the film track, with the sprocket engaging the film perforations.

**To Close the Camera**

First push the back against the body, and press the base plate flap into position. Lock the base plate latch, and fold down.

**Note:** If the camera back should not close properly, check that the cassette is properly in position (left).
The Film Counter and Film Indicator:

Every time the film is advanced (see page 20), the film counter automatically shows the number of exposures still available. The numbers are easily read off from above.

- **With 36-exposure cassettes:** Turn the film counter setting ring underneath the camera (see illustration) until the diamond mark \( \uparrow \) appears in the counter window. Pull the rapid winder once or twice until it locks, press the release button, and work the rapid winder until it locks once more. The film counter window now indicates No. 36 for the first exposure.

- **With 20-exposure cassettes:** Turn the film counter setting ring until No. 22 appears in the counter window. Then carry on as described above; the film counter should indicate No. 20 for the first exposure.

To set the film indicator built into the rewind knob, turn the milled ring to the appropriate symbol:

- **RD (UT)** = Daylight type reversal colour film
- **RA (UK)** = Artificial light type reversal colour film
- **ND (NT)** = Daylight type negative colour film
- **NA (NK)** = Artificial light type negative colour film
- **N (N)** = Black-and-white negative film
- **R (U)** = Black-and-white reversal film
DETERMINING THE EXPOSURE

A special feature of the built-in BEWI-AUTOMAT exposure meter is its automatic press-button operation and scale lock to indicate the correct shutter speed and aperture. You can therefore sight the subject through the finder to determine the required view, and at the same time automatically measure the light with the photo-electric exposure meter. The scale lock retains the result for future reference.

In practice this method (pointing the meter at the subject from the camera position) is known as reflected light measurement, since the selenium cell of the BEWI AUTOMAT reacts to the light reflected from the subject. An alternative method is incident light measurement. In this case a diffusing screen is mounted in front of the selenium cell, and the meter pointed from the subject at the proposed camera position. A diffusing screen is enclosed with every camera, and can be carried in the ever-ready case.

Pages 29—32 give further hints for both methods of using the meter. Filter correction factors are given on page 34.
The BEWI AUTOMAT is mounted in a shock-proof spring-suspension system. It covers a great measuring range with a high initial sensitivity. The spectral sensitivity of the cell is carefully matched to give correct results with black-and-white as well as colour films even in tricky light conditions.

1. Cell window
2. Film speed index
3. Milled film speed setting ring
4. Aperture scale
5. Press-button for taking a reading
6. Window for light-values
7. Shutter speed scale
8. Twin scale with ASA and DIN speed values
Using the Exposure Meter: www.butkus.us

First set the speed of the film loaded in the camera. Turn the milled ring (3) until the appropriate speed value of the twin scale (8) is opposite the film speed index (2). The twin scale indicates film speeds in ASA and DIN speed groups (see also comparison table on the following page).

To take a reading, sight the subject in the finder, and at the same time fully depress the button (5) for at least one second. On releasing the button (let it slide out slowly) the scale reading is automatically locked. You can now read off the correct light value in the window 6 (see also pages 15-17).

When using the meter, please note especially:

- The cell window must be completely unobstructed, and not partly covered up by one finger.
- After operation of the scale lock a red dot may appear at the bottom of the shutter speed scale (7). This is a warning signal to indicate that the available light is insufficient for a reading. In that case even the shutter speed settings still visible on the scale are useless.
**Film speed Comparison Table**

<table>
<thead>
<tr>
<th>°B. S. Log. Index</th>
<th>ASA</th>
<th>Din /100</th>
<th>Weston</th>
<th>Scheiner</th>
<th>General Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>10</td>
<td>11</td>
<td>8</td>
<td>22</td>
<td>12</td>
</tr>
<tr>
<td>22</td>
<td>12</td>
<td>12</td>
<td>10</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>23</td>
<td>16</td>
<td>13</td>
<td>13</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>24</td>
<td>20</td>
<td>14</td>
<td>16</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>25</td>
<td>25</td>
<td>15</td>
<td>20</td>
<td>26</td>
<td>32</td>
</tr>
<tr>
<td>26</td>
<td>32</td>
<td>16</td>
<td>24</td>
<td>27</td>
<td>40</td>
</tr>
<tr>
<td>27</td>
<td>40</td>
<td>17</td>
<td>32</td>
<td>28</td>
<td>50</td>
</tr>
<tr>
<td>28</td>
<td>50</td>
<td>18</td>
<td>40</td>
<td>29</td>
<td>64</td>
</tr>
<tr>
<td>29</td>
<td>64</td>
<td>19</td>
<td>50</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>30</td>
<td>80</td>
<td>20</td>
<td>64</td>
<td>31</td>
<td>100</td>
</tr>
<tr>
<td>31</td>
<td>100</td>
<td>21</td>
<td>80</td>
<td>32</td>
<td>125</td>
</tr>
<tr>
<td>32</td>
<td>125</td>
<td>22</td>
<td>100</td>
<td>33</td>
<td>160</td>
</tr>
<tr>
<td>33</td>
<td>160</td>
<td>23</td>
<td>125</td>
<td>34</td>
<td>200</td>
</tr>
<tr>
<td>34</td>
<td>200</td>
<td>24</td>
<td>160</td>
<td>35</td>
<td>250</td>
</tr>
<tr>
<td>35</td>
<td>250</td>
<td>25</td>
<td>200</td>
<td>36</td>
<td>300</td>
</tr>
<tr>
<td>36</td>
<td>320</td>
<td>26</td>
<td>250</td>
<td>37</td>
<td>400</td>
</tr>
<tr>
<td>37</td>
<td>400</td>
<td>27</td>
<td>320</td>
<td>38</td>
<td>500</td>
</tr>
<tr>
<td>38</td>
<td>500</td>
<td>28</td>
<td>400</td>
<td>39</td>
<td>640</td>
</tr>
</tbody>
</table>

**Films slower than 26° B. S.**
are fine grain films of the highest resolving power permitting correspondingly big enlargements. They need specially accurate exposure.

**Films from 27° to 29° B. S.**
are ideal for all average subjects. They are fast, yet yield fine grain.

**Films faster than 30° B. S.**
are useful when short exposures are required in poor light. Their high red sensitivity makes them specially useful for artificial light photography.

**Remember:**
Every increase or decrease of 3° B. S. halves or doubles the exposure required.
THE BETWEEN-LENS SHUTTER

works at speeds ranging from 1 to $\frac{1}{300}$ sec., has full M-X synchronization and a built-in self-timer. The electrical contact for flash synchronization (see pages 22-25) and the operation of the self-timer (see page 17) are both controlled by the synchronizing lever (see arrow in illustration). For all exposures made without flash or use of the self-timer it is quite immaterial whether the synchronizing lever is set on M or X.

Lens aperture and shutter speed controls are coupled together on a single scale, and the relationship between aperture and shutter speed is expressed in terms of "light values". The light value depends on the lighting conditions prevailing at the time of making an exposure, and when it is applied to the camera controls it always provides the correct aperture-speed combination. Combinations such as f 5.6 and $\frac{1}{60}$ sec., f 8 and $\frac{1}{30}$; or f 11 and $\frac{1}{15}$ sec., correspond to the same light value.
Setting shutter and aperture:

Press in the left-hand milled knob on the light-value scale ring (see black arrow in illustration above) and turn the ring by means of the two knobs until the appropriate light value number (see page 13) clicks into position above the red index-mark on the shutter setting ring (see white arrow). If necessary turn the shutter setting ring in the opposite direction so that a number at the extreme end of the scale ring can click into position.

You now have one of the many possible combinations of shutter speed and lens aperture, e.g. \( \frac{1}{60} \) sec. at f 5.6 (see illustration below) at light value 11. If a different shutter speed (or aperture) is required: turn the shutter setting ring until the desired shutter speed or aperture number comes opposite the index-mark. The other number — aperture or shutter speed — will then be automatically adjusted in the correct proportion.
With a light value scale there is, however, a limit to the number of possible combinations of shutter speed and lens aperture, as when the shutter speed ring is turned, either the shutter speed or aperture mark may reach the end of the scale.

But please note: When the shutter mark (black dot under the shutter scale) reaches the end of the shutter scale and comes opposite the green letter "B", the self-timer becomes inoperative; if the light value remains unchanged the correct exposure is 2 seconds. The shutter speed mark may come opposite "B" with a light value between 7 and 2 (e.g. L.V. 4 = f 4 — see illustration). In this event, if a still smaller aperture is required to obtain sufficient depth of field (see page 28), you must set the desired aperture number on the light value scale ring to the aperture index-mark, and expose for the number of seconds indicated in green figures on the time scale under the aperture number. With the example here illustrated this works out at 4 secs. at f 8, 8 secs. at f 11, 15 secs. at f 16 and 30 secs. at f 22.

Setting the self-timer:

When the correct combination of shutter speed and lens aperture has been chosen and the shutter tensioned, turn the synchronizing lever to the "V" mark (see illustration). When the release button is pressed, the shutter opens automatically after a delay of about 8 secs., and the synchronizing lever automatically jumps out of the V-position. Do not use the self-timer when the shutter is set to "B".
You can either estimate the subject distance, or better still measure it with an accessory rangefinder. The Voigtländer slip-on rangefinder is particularly suitable for this purpose. Its special contrast reflector and robust design ensure absolute accuracy over a range from infinity to 3 feet.

To focus the camera lens turn the large milled ring until the appropriate distance figure engraved on it comes opposite the mark (see illustration). Between the distance figures you will see two additional symbols: \( \triangledown \) at about 11 feet, and \( O \) at about 33 feet. These are the zone focus settings (see opposite page).
Zone Focusing:

Candid action shots (for instance of children at play) often yield surprisingly live pictures. On such occasions don’t waste time by focusing on exact distances. Instead, set the focusing scale to the near zone mark ▽ for subjects between 8 and 17 feet, or to the far zone mark ○ 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 tensions the shutter, and advances the film and 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.

An automatic lock prevents the rapid winder from being operated a second time before the shutter is released. At the same time, the shutter can only be released after working the rapid winder.

This prevents both double exposures and blank frames. If the camera is empty, the rapid winder moves freely without tensioning the shutter.
**Holding and Releasing**

When exposing, hold the camera in one of the ways suggested in the illustrations on the right. The specially large and bright optical finder shows a full-size view of the subject.

To release the shutter, hold your breath, and gently depress the release button as far as it will go. Never jab at it.

Short instantaneous exposures (\(1/30\) second or faster) are usually made with the camera held in the hand. Whenever possible, don't make hand-held exposures longer than \(1/30\) second, unless you have a support for your arms or you can lean against something solid. For time exposures at the B setting preferably mount the camera on a tripod, and expose with the aid of a cable release. This screws into the socket in the release button.
FLASH SHOTS

The PRONTOR-SVS shutter permits synchronized flash shots up to the fastest shutter speed of $\frac{1}{300}$ second. 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 Voigtlander 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 by means of a special bracket.

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

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

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 coincides with the instant when the shutter is fully open, there are two types of synchronization: M and X.

Before taking a flash shot therefore select the appropriate synchronization. To do this, move the synchronizing lever of the PRONTOR-SVS shutter to the yellow dot marked M or the red dot X. You can then use all types of flash and all shutter speeds listed in the table opposite under M or X. Note: For flash shots with the self-timer (with the synchronizing lever set to the green dot V) use only the shutter speeds listed in the table under X.

The lens aperture required for correct exposure can be obtained from the so-called guide number. This is usually quoted on the flash bulb packing or in leaflets issued by the makers of the bulb or electronic flash unit. To find the correct aperture, divide the appropriate guide number by the distance in feet between the flash and the subject. In short: Aperture = guide number : distance.
<table>
<thead>
<tr>
<th>Flash Bulbs</th>
<th>Synchronizing Lever Set to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make</td>
<td>Type</td>
</tr>
<tr>
<td>Gen. Electric</td>
<td>SM</td>
</tr>
<tr>
<td>West Electric</td>
<td>SS</td>
</tr>
<tr>
<td>West Electric</td>
<td>SF</td>
</tr>
<tr>
<td>Sylvania</td>
<td></td>
</tr>
<tr>
<td>West Electric</td>
<td></td>
</tr>
<tr>
<td>Philips</td>
<td>PF 1</td>
</tr>
<tr>
<td>Osram</td>
<td>XM 1</td>
</tr>
<tr>
<td>Philips</td>
<td>PF 5</td>
</tr>
<tr>
<td>Osram</td>
<td>XM 5</td>
</tr>
<tr>
<td>Gen. Electric</td>
<td>M-2</td>
</tr>
<tr>
<td>Sylvania</td>
<td></td>
</tr>
<tr>
<td>West Electric</td>
<td>2-M</td>
</tr>
<tr>
<td>West Electric</td>
<td>0</td>
</tr>
<tr>
<td>West Electric</td>
<td>3</td>
</tr>
<tr>
<td>West Electric</td>
<td>5</td>
</tr>
<tr>
<td>Gen. Electric</td>
<td>5</td>
</tr>
<tr>
<td>West Electric</td>
<td>P 5</td>
</tr>
<tr>
<td>Gen. Electric</td>
<td>8</td>
</tr>
<tr>
<td>Sylvania</td>
<td>25</td>
</tr>
</tbody>
</table>

**Electronic Flash**

<table>
<thead>
<tr>
<th>Synchronizing Lever Set to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
</tr>
<tr>
<td>Instantaneous Firing</td>
</tr>
</tbody>
</table>
UNLOADING THE CAMERA

After the last frame the exposed film must be rewound from the take-up spool into the daylight cassette. Proceed as follows:

- Push back the reversing lever; the rewind knob will jump into its operating position (see illustration).

- Turn the rewind knob in the direction of the arrow while observing the film counter window.

- The film counter now runs backwards from No. 1 (the last exposure) to No. 36 (or 20). When the diamond mark (or No. 22) appears again, the film is fully rewound. Now open the camera back and remove the cassette.

— 26 —
CHANGING PARTLY EXPOSED FILMS

With the VITO BL you can always unload a partly exposed film and change over to another one (e.g. from black & white to colour) without a darkroom. Proceed as follows:

- Rewind the partly exposed film into its cassette as already described on page 26. Make a note, however, of the last number that appeared in the film counter window.

- Reload the partly exposed film and set the film counter to the diamond ♦ mark (or to No. 22) exactly as described on pages 8–10.

- Push back the reversing lever (letting the rewind knob jump up), and keep working the rapid winder until the film counter indicates the next number after the one you noted when unloading the film. Note: Stop operating the winding lever as soon as the number appears.

- Finally, push back the rewind knob into the top of the camera, pull the rapid winder as far as it will go, and carry on exposing the film to the end in the normal way.
In some cases close-up readings are necessary for more accurate measurement. This applies to:

- Light subjects against a dark background, and vice versa;
- Close-ups of small objects and animals;
- Nearly all pictures of people, particularly portrait photographs.

In this case only the main subject areas should be used to determine the brightness range.

When taking a close-up reading, approach the subject sufficiently closely to that the cell of the exposure meter only receives the light reflected by the individual subject areas. If necessary, measure two or three extreme tones, and take a mean value. Always see that the shadow of the camera or of your own body does not obscure the part from which you are taking a reading. **Note this rule of thumb for close-up readings:** The exposure meter should not be farther away from the area measured than the width of that area.
With tricky subjects or situations involving extreme brightness differences between the subject and its background or surroundings (e.g. snowscapes), incident light measurement is often more useful.

In that case mount the diffusing screen in front of the meter cell, and take the reading with the meter pointing from the subject at the camera position to be used. This measures the light reaching the subject, without taking into account the subject brightness itself. Incident light measurement is also successful with interiors with or without artificial light sources. You there read the general lighting level rather than the reflected light over a limited angle, since the diffusing screen extends the acceptance angle of the exposure meter.

Subjects against the light are a special case. Here again the diffusing screen is mounted in front of the meter cell, but the latter is pointed at the subject from the camera position. The reading then needs some correction: Open up the aperture obtained by two stops for contrasty against-the-light views which should still record some shadow detail; open up by one stop where the contrast is less.
Exposure for Colour

The light-sensitive selenium cell of the exposure meter is balanced for the primary colours and correctly evaluates the colour brightness of the subject tones. You can therefore take readings in the same way with colour film as with black-and-white. The only point of importance is that reversal colour film has a very limited exposure latitude and needs specially careful readings.

To make quite certain of correct results with reversal colour film, it is advisable to calibrate the meter for the camera and film by exposure tests. When you first try out a colour film therefore choose a few interesting subjects and make an exposure with the shutter speed and aperture indicated by the meter. Then make additional exposures of the same subject from the same viewpoint and in the same light but giving half a stop and a whole stop above and below the basic setting.

Overexposure of reversal colour film yields a very light transparency which may, however, still be usable. Underexposure results in dark images. The density of the transparencies should be judged on projection.
The Focar supplementary lenses extend your scope to 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.

<table>
<thead>
<tr>
<th>Camera set to</th>
<th>Focar 1</th>
<th>Focar 2</th>
<th>Focar 2+1</th>
</tr>
</thead>
<tbody>
<tr>
<td>∞</td>
<td>2' 7½''</td>
<td>1' 5½''</td>
<td>11¾''</td>
</tr>
<tr>
<td>60'</td>
<td>2' 6½''</td>
<td>1' 5''</td>
<td>11''</td>
</tr>
<tr>
<td>O</td>
<td>2' 5½''</td>
<td>1' 4¾''</td>
<td>11''</td>
</tr>
<tr>
<td>20'</td>
<td>2' 4''</td>
<td>1' 4½''</td>
<td>10¾''</td>
</tr>
<tr>
<td>15'</td>
<td>2' 3''</td>
<td>1' 4''</td>
<td>10½''</td>
</tr>
<tr>
<td>12'</td>
<td>2' 2''</td>
<td>1' 3½''</td>
<td>10½''</td>
</tr>
<tr>
<td>▲</td>
<td>2' 1½''</td>
<td>1' 3¼''</td>
<td>10¼''</td>
</tr>
<tr>
<td>10'</td>
<td>2' 1''</td>
<td>1' 3¼''</td>
<td>10½''</td>
</tr>
<tr>
<td>8'</td>
<td>1'11½''</td>
<td>1' 2¼''</td>
<td>10''</td>
</tr>
<tr>
<td>7'</td>
<td>1'11''</td>
<td>1' 2½''</td>
<td>10''</td>
</tr>
<tr>
<td>6'</td>
<td>1'10''</td>
<td>1' 2''</td>
<td>9½''</td>
</tr>
<tr>
<td>5'</td>
<td>1' 8¼''</td>
<td>1' 1½''</td>
<td>9½''</td>
</tr>
<tr>
<td>4.5'</td>
<td>1'' 8''</td>
<td>1' 1¼''</td>
<td>9½''</td>
</tr>
<tr>
<td>4'</td>
<td>1' 7''</td>
<td>1' 1''</td>
<td>9''</td>
</tr>
<tr>
<td>3.5'</td>
<td>1' 6''</td>
<td>1' ½''</td>
<td>8½''</td>
</tr>
</tbody>
</table>
VOIGTLÄNDER FILTERS

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

Yellow filter G 1.5 x  Slight filtering effect for outdoor shots requiring short exposures, such as sports and action subjects, and pictures with low sun.

Filter factor: 1½ times, or open lens by ½ stop.

Yellow filter G 3 x  Universal filter for landscapes and other outdoor subjects; indispensable for snow pictures.

Filter factor: 3 times, or open lens 1½ stops.

Green filter Gr 4 x  Lightens green tones in landscapes. Recommended for artificial light portraiture and copying of coloured originals.

Filter factor: 4 times, or open lens by 2 stops.

Orange filter Or 5 x  Strong filter effect through appreciable suppression of blue light. Reduces atmospheric haze in distant views.

Filter factor: 5 times, or open lens by 2½ 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.
THE VOIGTLÄNDER RANGEFINDER
This is an instrument of high precision, yet easy to use in a matter of seconds. It relieves you of all worries over correct focusing (see 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.
CARE OF THE CAMERA AND LENS

Successful 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 any trouble take the camera to your photo dealer or post it to the sole Voigtländer importer in your country, or 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 cotton wool moistened with alcohol or ether.

— 36 —
We Guarantee

this camera against defects due to faulty materials or workmanship according to the present standard of technical perfection. Should any such defects become apparent in use they will be rectified free of charge if the claim is made within a reasonable period after purchase. Claims for further damages, consequential or otherwise, or for the free repair of faults due to incorrect handling or storage cannot be recognised.

VOIGTLÄNDER A.G. BRAUNSCHWEIG