

# WELTAFLEX

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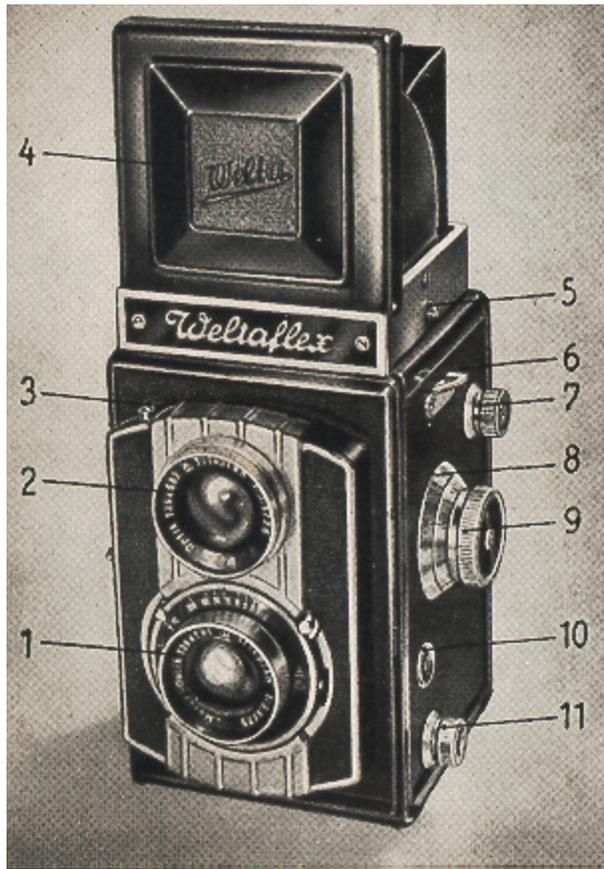


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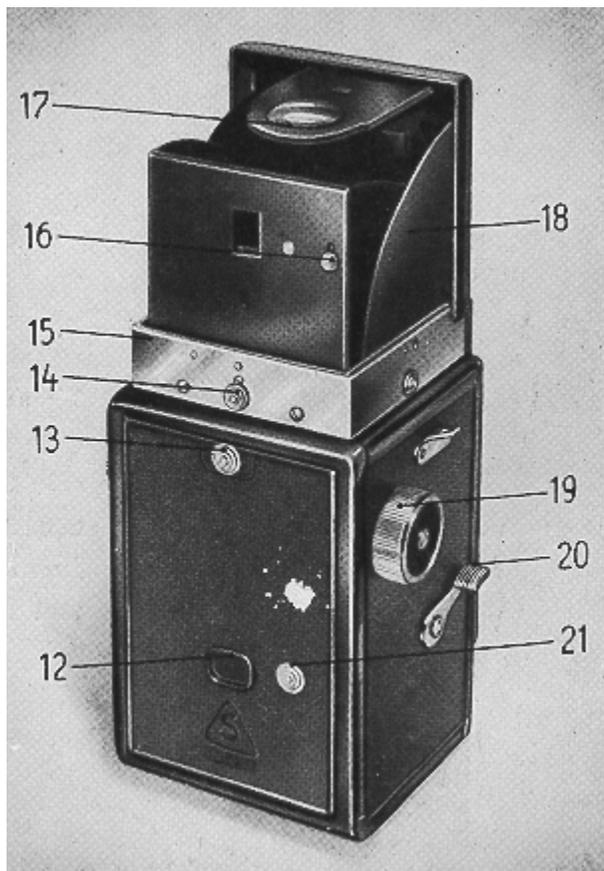
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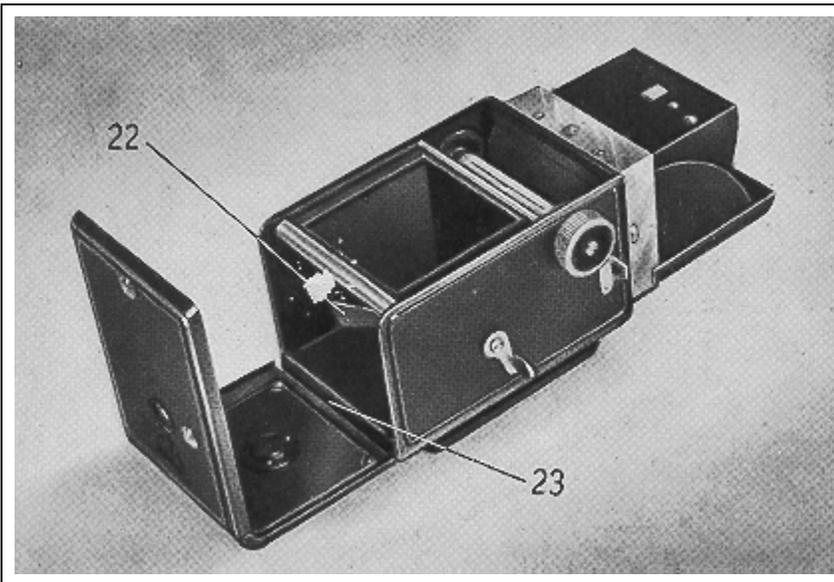




1. Taking lens
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3. Cable release connection
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7. Spool knob
8. Depth-of-field scale



9. Focusing knob
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- 16. Knob
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## WELTAFLEX 6X6

The Weltaflex is a twin-lens mirror reflex camera.

Special feature of this camera is the use of a separate lens, with the same aperture as the taking lens, for focusing the image on the ground glass. Continual viewing and supervising of the subject is thus possible.

Whether amateur or professional, you will always find the Weltaflex a valuable asset.

If you want to derive genuine pleasure from your camera, first study the Instructions for Use thoroughly and practice using the camera without a film in it.

The Weltaflex takes the usual 2 1/4; < 2 1/4" (6 X 6 cm.-) - B II - 8 film, and divides this film into 12 exposures.

### **A: Inserting and changing the film -**



Fig. 1

#### **1. To open the camera back**

Hold the camera in your left hand, with the lens towards the palm. Do not touch the glass surface of the lens for fear that you might damage the coating. Press the latch knob (13) on the camera back to the left with your right index finger and fold the back away from the camera body (Fig. 1).

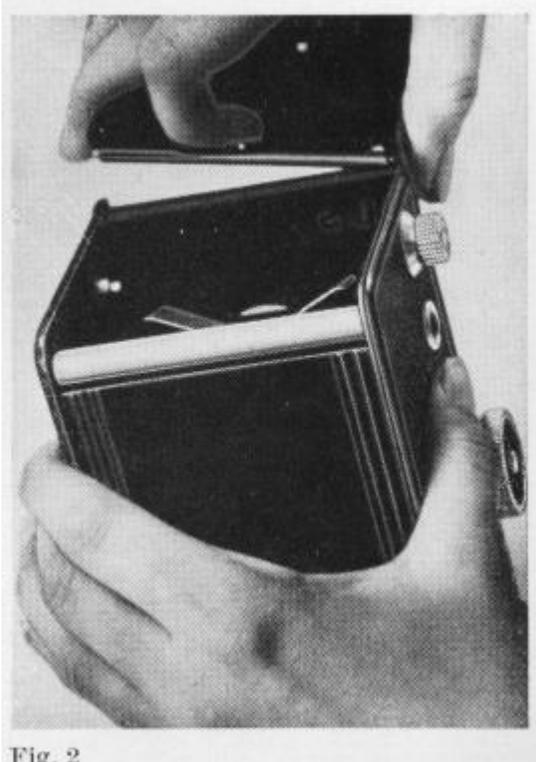


Fig. 2

The camera back is removable in the following manner:  
(Fig. 2).

Take hold of the camera back with your right hand, push back the hinge pin (23) on the inside of the back with your index finger and lift the back off. To replace the camera back, do these performances in the opposite order, making sure that the back clicks in accurately.

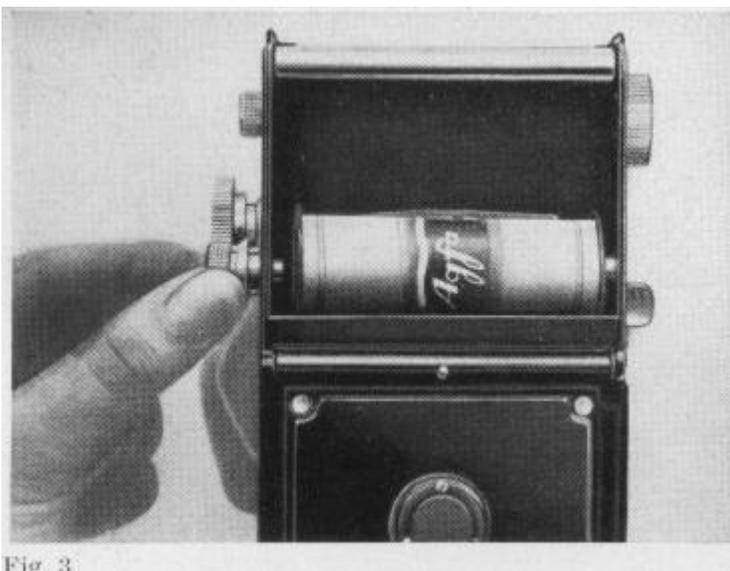


Fig. 3

## 2. Inserting the film spool.

Take the camera into your right hand, pull out the lower spool knob (11) and fasten it by a slight turn to the left. Place the full film spool into the camera with the colored (red) surface of the unrolling film facing outwards, loosen the lower spool knob (Fig. 3) by a short turn to the right, press the full film spool against the brake spring (22) with your thumb until you hear the spool knob snap into the hole in the disc of the film spool. The paper tongue of the film leader must now be drawn across the guide roller and



Fig. 4

pushed into the slit of the empty spool in the upper spool chamber (Fig. 4).

Turn the film transport knob slightly forward, in order to tighten the film, at the same time making sure that the paper strip is lying perfectly straight.

For NEWER version that do not have red window. There is a small lever cam at the bottom that MUST be against the bottom "automating" pin when you close the back. That pin sets the "auto-number" counter on the side of the newer version. Fire shutter, press in pin with hand and roll on the roll from the bottom to top spool stopping the arrows at the bottom rollers. Make sure the arm and pin are touching and that will set the auto framing. wind the shutter, then wind to the first frame.

It will stop automatically (if everything is working right ! ) After you fire.. set shutter, wind.

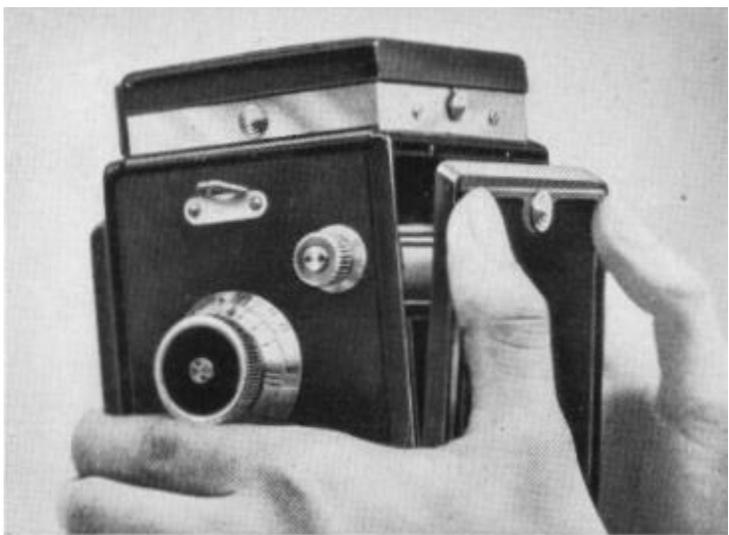


Fig. 5

### 3. Closing the camera

Fold down the camera back and press it to the camera body. Latch knob (13) must click in audibly (Fig. 5).

### 4. Opening the pan-protection window

Push up the pan-protection knob (21) on the left-hand side of the pan-protection window (12). The protective paper on the film now becomes visible, and the light circle which you see when the pan-proof cover is closed, disappears.

### 5. Film transport

Rotate film transport knob (19) until, after the caution sign, the number "1" appears in the pan-protection window.

### 6. Closing the film window

Push the pan-protection knob (21) downward, whereupon the light circle appears in the pan-proof window, and the camera is ready for picture-taking.

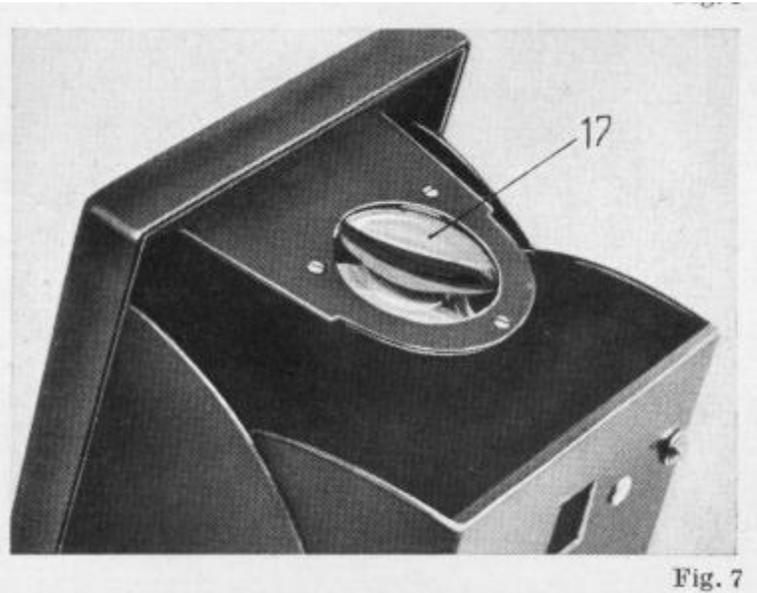
Performances 4 to 6 are repeated after every exposure, i.e. 12 times with each film.

## 7. Removing the film

You have already been told in paragraph 1 how to open the camera back. Having opened the camera, you pull out the upper spool knob (7) and fasten it by a slight turn to the left. Remove the exposed film carefully and paste down the gumstrip.

Take the empty spool from the lower spool chamber immediately and place it into the upper spool chamber, so that the camera will always be ready to receive a new film. Take care to make the slotted disc of the empty spool catch the driving shaft of the film transport knob.

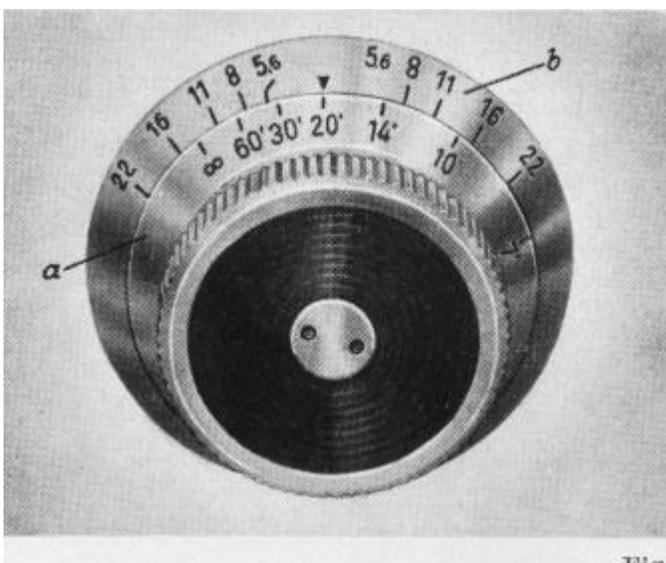
### B: The technique of exposing



#### 1. Opening and closing the light hood

By pushing up the light hood knob (14) on the light hood frame (15) causes the light hood (18) to jump into working position.

To close the light hood, push the cover down towards the back, and the rear flap will fold in automatically. The light hood closes with an audible click. Make sure that the focusing magnifier (17) has been swung in beforehand.



#### 2. Focusing

Focusing is performed by means of the focusing knob (9) on the left side of the camera.

The image is visible on the ground glass screen and can be focused at distances between infinity (∞) and 1 meter (3' 4") The camera mechanism guarantees absolutely even sharpness between finder lens (2) and taking lens (1).

You will find two scales on the focusing knob (9)

a) the rotatable distance scale with figures indicating feet, or meters,

b) the firmly attached depth-of-field scale (8) showing the diaphragm numbers. The latter are in symmetrical order (Fig. 6).

For critical focusing, you have the focusing magnifier (17) in the light hood (Fig. 7).

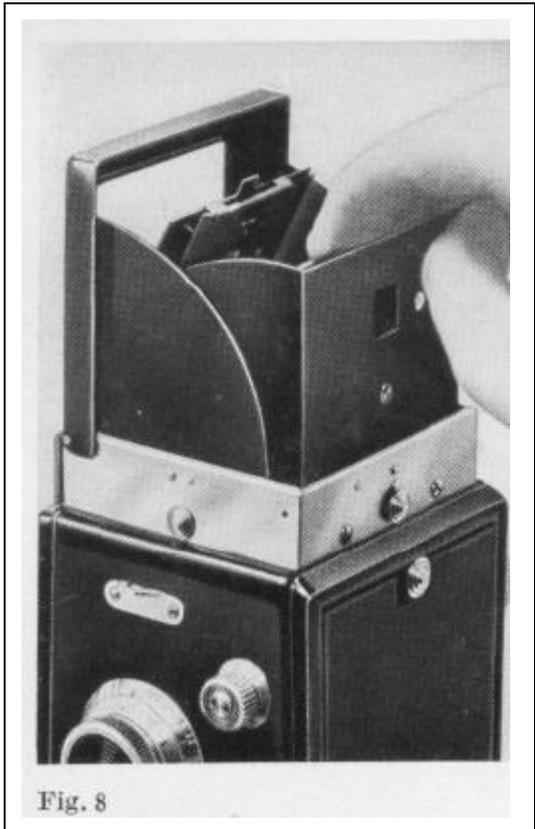


Fig. 8

This magnifier is swung up by pressure on the magnifier mount, in the direction of the arrow. To get the magnifier up.. looking from the back, slide the magnifier to the left side, it will pop up. Press it back down and it will snap into place. Having focused your image and set the diaphragm stop, you will immediately be able, on the depth-of-field scale, to determine within which range of distance your picture will be sharp.

For example: At a distance of 20' (6 meters), with the diaphragm at f/8, the sharpness reaches from 12' to 55'.

### 3. How to use the sports finder

The sports finder in the light hood gives you the choice of focusing either by means of the ground glass image or in direct-vision.

On opening the light hood you will, at first, always see the ground glass image.

If you intend using the sports finder, you have to push in the cover (4) bearing the factory sign until you hear it click. First make sure that the focusing magnifier is not swung up.

The eyepiece of the sports finder is provided with parallax compensation - adjustment by means of the little knob (16) on the rear flap. Before closing the light hood, do not forget first to fold back the cover (4) with the factory sign. This is done by pressure on the rear flap from the inside, whereby the little cover jumps back to its original position (Figs. 8 and 9).



Fig. 9

#### 4. The light hood

The constructive arrangement of the light hood (18) allows for future attachment of supplementary equipment. For this purpose there are the latches (5) which hold the light hood in place and have to be pushed back so that the light hood can be taken off.

We would draw your special attention to the fact that the light hood should be removed only when, at a later date, the other accessories are available.

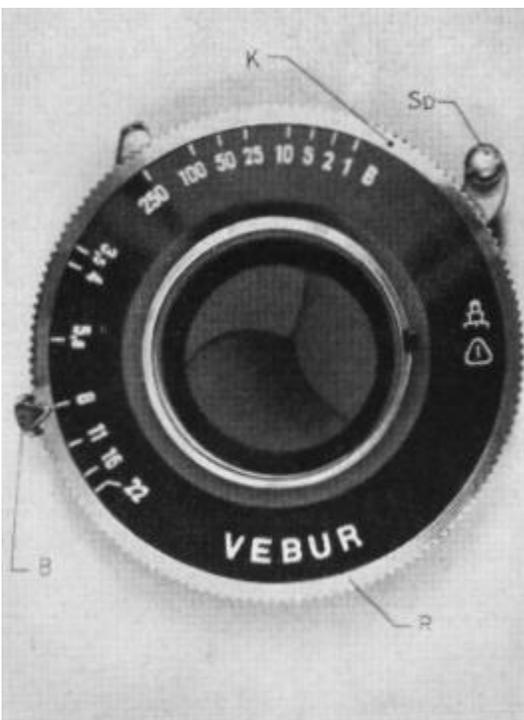


Fig. 10

#### 5. Setting the shutter speeds

##### 6.1. The Vebur Shutter

The Vebur is a between-the-lens shutter with speeds ranging from 1 sec. to 1/250 sec. and B (any desired length of time) (Fig. 10).

##### Instant exposures - (meaning the shutter is open less than a second)

Turn the milled ring (R) until the desired number stands under the (K) mark, wind up the shutter by pressing the lever (Sp) downwards as far as it will go. The film is exposed by pressure on the body shutter release (2).

#### Time exposures

Turn the milled ring (R) until the "B" stands under the (K) mark and press the lever (Sp) downwards as far as it will go. Pressure on the body shutter release (20) will open the shutter which closes again as soon as the release lever is liberated. It is required to use a tripod and a cable release for time exposures. (most film has estimates on time exposures on the package)

The Vebur shutter can also be released by means of any one of the commonly marketed self-releases.

## 6. Setting the diaphragm

The diaphragm lever (B) is designed for setting the diaphragm stops between the largest aperture  $f/3.5$  and the smallest  $f/22$ .

Important: The smaller the diaphragm, the longer will have to be the exposure. But also: the smaller the diaphragm, the greater will be the depth of field (see depth-of-field scale).



Fig. 11

## 7. Releasing the shutter

The shutter is released, as already described, by pressure on the body shutter release (20).

You will find it most convenient to release the shutter with your right thumb, holding the camera firmly between your right and left hands (Fig. 11) and so protecting it from unsteadiness. You can also make the exposure by means of a wire release. The connecting piece (3) for the wire release is on the right-hand upper front of the camera (Fig. 11). To avoid faulty exposures, always depress the body shutter release as far as it will go.

## 8. Prevention against double exposures

At the moment the shutter is being released, the device preventing double exposures coupled to the shutter starts operating. The shutter cannot be actuated again before the film has been advanced by rotation of the transport knob and the shutter-winding lever (Sp) has been wound up. The camera is ready for the next exposure as soon as the following film number appears in the pan-protection window (12).

## 9. The flash contact

The flash connection (10) is situated on the left sidewall of the camera and is joined to the shutter by a cable. The synchronous flash contact built into the Vebur shutter (X contact) permits flashlight exposures, also instant shots, with flash bulbs, flash tubes (electronic flashes) and flash powder.

In the Vebur shutter, the electric circuit is closed at full opening of the shutter (X contact). This makes the use of electronic flashes (without delay) possible with all shutter speeds. Flash bulbs, on the other hand, can be used only with the shutter speeds named in the chart. The shortest shutter speed for electronic flashes with delay is  $1/50$  sec.

In order to obtain shutter synchronization with powder flashes for instant exposures, you will need an electric kindling device. Advice regarding shutter speeds is given by the manufacturers.

| Flash Bulbs  | Shutter Speed        | Remarks  |
|--|----------------------|--|
| Osram: AP<br>RFT: F 19   | 1/50 sec. or longer  | or other flash bulbs with suitable characteristics |
| Osram: F 1; F 2; S 1; S 0; X 0<br>.RFT; F 20; F 32; F 40; DF 40<br>Philips; Pf 14; Pf 3; Pf 25; Pf 60<br>USA Bulbs: Press 25; 40; 50<br>No. 0; 2 | 1/25 sec. or longer  |  |
| Osram: S 2<br>RFT: DF 20; DF 70 N<br>Philips: Pf 100<br>USA Bulbs: No. 3; 50   | 1/10 sec. or longer  |  |
| USA: SM and SF   | 1/100 sec. or longer |  |

For the general use of powder flashes without shutter synchronization, the shutter has to be set at "B" and released by means of a special cable release which is fastened automatically when the shutter opens and is unlocked on second pressure.

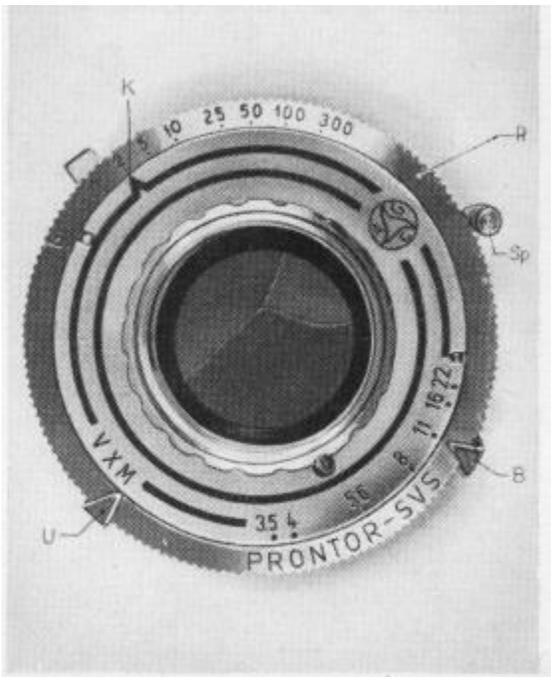


Fig. 12

**The Prontor SVS shutter**

The Prontor SVS shutter is a between-the-lens shutter with built-in delayed-action device, X and M contact (Fig. 12). Exposure speeds range from 1 sec. to 1/300 sec. (instantaneous) and time exposures of any desired length in the "B" setting.

**Instant exposures**  
Turn the milled ring (R) until the (K) mark stands underneath the desired number. Wind up the shutter by pushing the lever (Sp) upwards as far as it will go. The exposure is made by pressure on the body shutter release (20) on the right hand side of the camera. Always make sure that the film has been advanced beforehand. From 1 sec. to 1/100 sec., also in-between speeds may be selected (e. g. between 1/ and 1/10 sec.), for the shutter speed rises

## **Time exposures**

Turn the milled ring until the (K) mark stands underneath the B. Again, push the lever (Sp) upwards. The shutter is opened by pressure on the body shutter release and closes again as soon as the release lever is liberated (after any desired length of time). We advise using a tripod and a wire release for time exposures. A tripod socket is built into the bottom of the camera.

The X and M contacts are set by means of the transfer lever (U).

X or M exposure is exclusively determined by the position of the transfer lever (U) as follows:

1. Exposures without flash: M or X setting.
2. Exposures with flash: Setting according to chart.
3. Exposures with self-timer: V setting.

Self-timer exposures with flash are subject to the same rules as the X setting (see chart).

When making your preparations for the exposure, besides winding up the shutter and setting diaphragm stop and shutter speed, you need only to adjust the transfer lever.

Very important feature: It does not matter in which sequence you accomplish these performances. Also the transfer lever may be adjusted either before or after the shutter has been wound up; this means that you can change its position as often as you wish!

## **Setting the diaphragm**

The desired diaphragm stop is set by swinging the diaphragm lever (B) on the lower part of the shutter in either direction.

The smaller the diaphragm stop, the longer will have to be the exposure.

But also : the smaller the diaphragm stop, the greater will be the depth of field (see depth-of-field scale).

Strap holders

A carrying strap can be fastened to the eyelets (6) on the right and left of the camera body, should you wish to carry the camera without a case.

A few hints concerning the exposure

1. Do not forget to advance the film after each exposure !
2. Exposure time and diaphragm stop are closely related. The more light you take/ away by stopping down to f/8, f/11, or further, the more you will have to increase the exposure time.

For example: A speed setting of 1/100 sec. at f/5.6 will give the same result as f/8 and 1/50 sec., or f/11 and /25sec. These figures can be continued in either direction as desired. The only difference will be the depth of field.

**Depth of field scale** for the 75 mm lens, f/3.5

| A   | D          | 3' 3"            | 4'              | 5'              | 7'               | 10'          | 14'               | 20'         | 30'         | 60'            | ∞        |
|-----|------------|------------------|-----------------|-----------------|------------------|--------------|-------------------|-------------|-------------|----------------|----------|
| 3.5 | from<br>to | 3' 1"<br>3' 4,4" | 3' 10"<br>4' 2" | 4' 8"<br>5' 4"  | 6' 5"<br>7' 8"   | 9'<br>11' 7" | 11' 10"<br>17' 4" | 16'<br>28'  | 21'<br>52'  | 32' 6"<br>338' | 70'<br>∞ |
| 4   | from<br>to | 3' 1"<br>3' 5"   | 3' 9"<br>4' 3"  | 4' 8"<br>5, 5"  | 6' 4"<br>7' 9"   | 9'<br>12'    | 11' 5"<br>18'     | 15'<br>29'  | 20'<br>58'  | 35' 5"<br>∞    | 60'<br>∞ |
| 5.6 | from<br>to | 3'<br>3' 6"      | 3' 8"<br>4' 4"  | 4' 7"<br>5' 7"  | 6' 2"<br>8' 2"   | 8'<br>13'    | 10' 9"<br>20'     | 14'<br>36'  | 18'<br>90'  | 25' 7"<br>∞    | 45'<br>∞ |
| 8   | from<br>to | 3'<br>3' 7"      | 3' 7"<br>4' 5"  | 4' 5"<br>5' 10" | 5' 10"<br>8' 10" | 8'<br>14' 5" | 9' 10"<br>24' 10" | 12'<br>55'  | 15'<br>700' | 20' 6"<br>∞    | 30'<br>∞ |
| 11  | from<br>to | 2' 11"<br>3' 9"  | 3' 6"<br>4' 8"  | 4' 3"<br>6' 2"  | 5' 6"<br>9' 9"   | 7'<br>17'    | 8' 10"<br>35' 8"  | 10'<br>150' | 13'<br>∞    | 16' 5"<br>∞    | 22'<br>∞ |
| 16  | from<br>to | 2' 10"<br>3' 11" | 3' 4"<br>5' 1"  | 4'<br>7'        | 5'<br>12'        | 6'<br>26'    | 7' 7"<br>152'     | 8'<br>∞     | 10'<br>∞    | 12' 4"<br>∞    | 15'<br>∞ |
| 22  | from<br>to | 2' 8"<br>4' 3"   | 3' 1"<br>5' 8"  | 3' 8"<br>8' 2"  | 4' 6"<br>16'     | 5'<br>65'    | 6' 7"<br>∞        | 7' 5"<br>∞  | 8'<br>∞     | 9' 10"<br>∞    | 11'<br>∞ |

A = Aperture    D = Distance in feet    Circle of confusion  $\phi = 0.075$  mm