

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.**

INSTRUCTIONS FOR USE

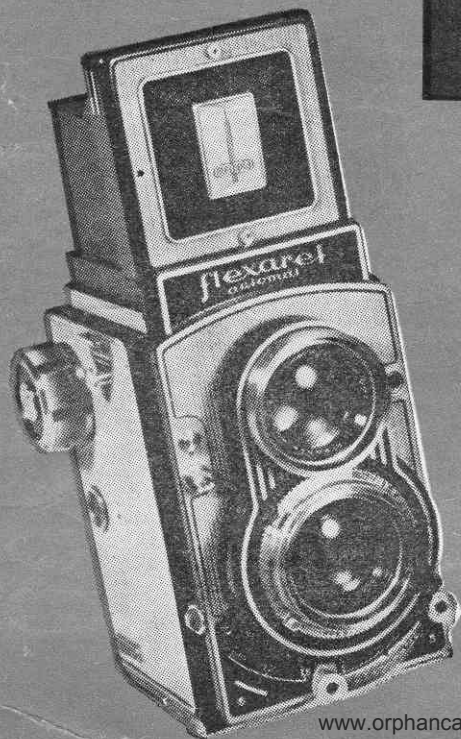


flexaret VII

meopta



flexaret VII

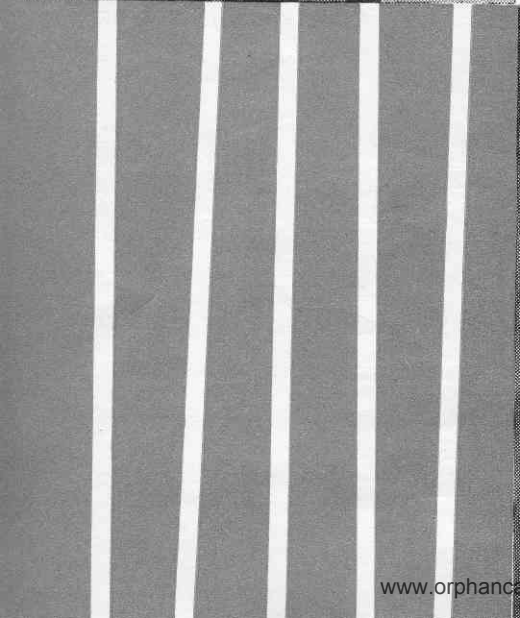
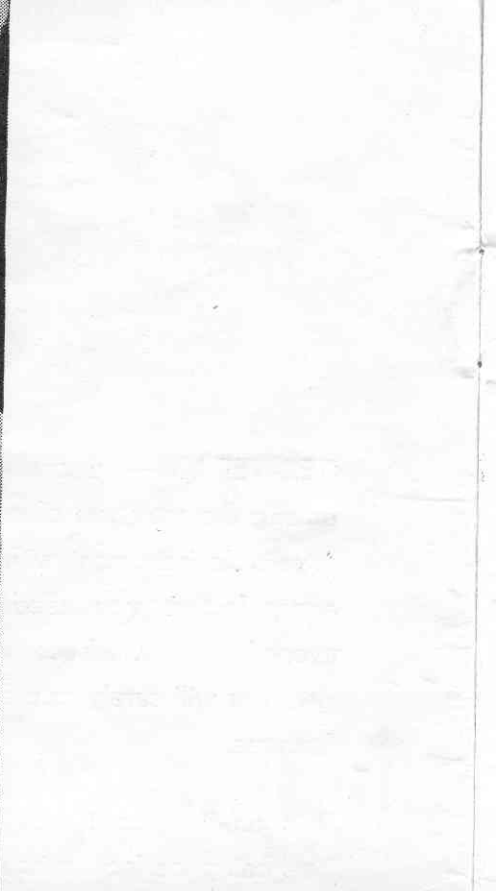
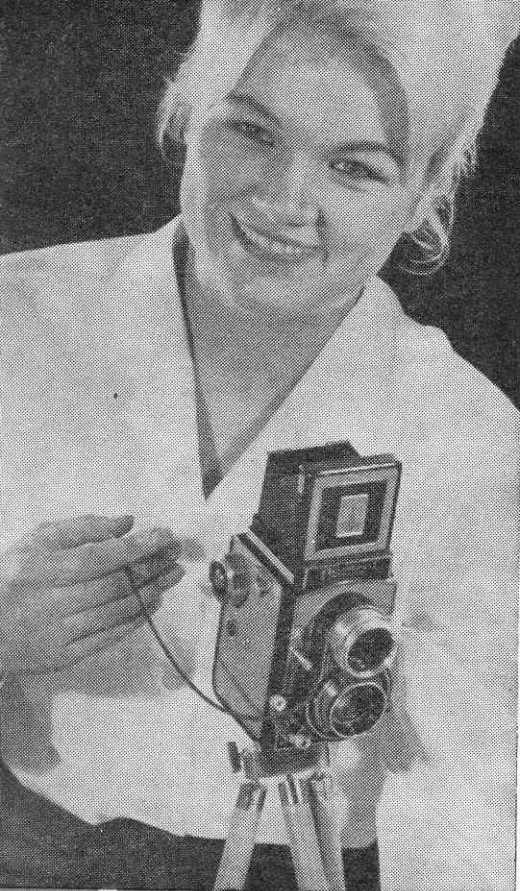


me opta

FLEXARET VII — a camera whose possession places you among the members of a large family of satisfied owners. A reliable instrument with lines of classical simplicity, with every feature you need for taking brilliant pictures of every kind. It will become an inseparable friend of yours and you will surely appreciate its numerous advantageous features.

It is an instrument easy to handle even for a beginner. Yet, being perfect in its technical conception and design, it is capable of satisfying even the highest demands of an expert amateur or professional.

We feel sure that the Flexaret camera will give you much enjoyment and pleasure and the pictures taken will attract the attention of your friends. This camera has all the prerequisites to give full satisfaction to its users, in spite of absolute simplicity of handling — it will give your creative individuality full scope. If you photograph with interest and care, there is no doubt that excellent results will be attained in any kind of photographic work.



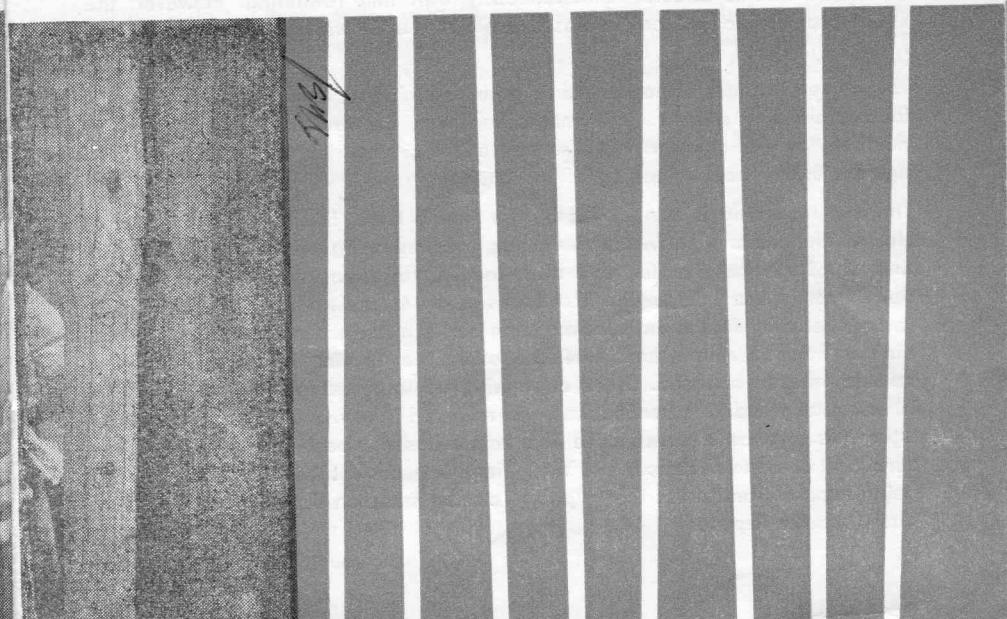
Photography

This is a designation composed of two Greek words. The first of them signifies „light“, while the other is an equivalent for „drawing, writing, painting“. And this is what photography really is: painting with light or, if you wish, producing a picture with the aid of chemical processes, evoked by light.

Someone once said that photography is the art of allowing a correct amount of light to pass through a correct aperture for a correct length of time onto a correct place. These wise words we shall follow in the paragraphs of this little booklet which we submit to your kind attention.

It is not so easy to make perfect snapshots. It requires the ability of selecting a captivating motive, to choose the right exposure, further, to master perfectly the processing of films etc. In the first place it is, however, of primary importance, to become acquainted with all the mysteries hidden in the Flexaret camera and with all the magic it is able to perform.

Read this little pamphlet carefully in order not to overlook any of the technical possibilities offered by the Flexaret camera; then, you will be able to make the most of it and utilize it to the greatest advantage.



First of all, let us have a good look at the camera ...

The Flexaret VII is a fully-automatic twin-lens^{LENs} reflex camera. Twelve pictures 6X6 cm or 16 pictures 4,5X6 cm in size can be made on B2 roll film, or 31 up to 34 pictures 24X36 mm or 43 to 46 pictures 24X24 mm in size on 35 ciné film.

The focussing is carried out by the movement of a focussing lever within the limits of about 110° from 1 m in infinity (∞), the two lenses being moved simultaneously. In order to enable speedy focussing adjustment the focussing lever is provided with catches for near medium and infinite (∞) distance. These catches can be dispensed with and the lever moves then continuously. The camera is equipped with a depth-of-focus scale engraved on the focussing lever proper. To facilitate the focussing a magnifier is used which can be tilted over the ground-glass. The image seen on the ground glass screen is not reversed vertically and it is perfectly bright. The snapshots can also be taken from eye level by adjusting the viewfinder to eye-level shots (direct vision - D. V. finder). This method is used to advantage when taking rapid sporting snapshots. The taking lens proper is a BELAR four-glass anastigmat f 3.5, F=80 mm, which also is used as a viewing lens. Both lenses are provided with antireflection coating.

The mounts of the two lenses are fitted with B 36 bayonet lock for attaching the filters and adapter lenses. A sunshade can be fixed to the bayonet lock B 40 on the outer mount of the taking lens.

The Prestor shutter is a five-lamellae central-type shutter with automatic release (delayed action) and a flashlight synchronizer. The shutter cocking is automatic and is effected simultaneously with film rewinding. However, the shutter can be cocked and released arbitrarily even without simultaneous film rewinding.

The camera shutter release is of a push-button type, with threaded aperture for flexible wire release. It is interlocked with the rewinding mechanism. In addition, on the camera body there is a device securing the camera release against undesirable releasing of the shutter.

The film rewinding is carried out by the rewind knob, fitted on the right-hand side of the instrument. When rewinding the beginning of the film up to the first exposure and the film end after the twelfth exposure, the knob can be turned continuously. From the first exposure up to the twelfth the rewind knob is automatically locked in position after the film length corresponding to one picture has been rewound. Simultaneously the shutter is cocked and the camera release released. By its depressing up to the stop when the negative is being exposed, the rewind knob is released anew and it can be turned again. As long as the respective film length has not been rewound, no exposure can be made. Hence, the film (negative) cannot be advanced without being exposed, and no further exposure can be made on the negative which has already been exposed.

The number of exposures 1 to 12 is indicated automatically by means of the film counter which is automatically set to zero when the camera rear cover is opened (i. e. when loading the camera).

For exposures 4.5X6 cm made on the B2 roll film a mask (cache) has to be inserted into the apparatus onto the film guide and into the viewfinder and the transmission lever on the right-hand side of the instrument has to be set to the correct position. This transmission lever adjustment also applies to the 24X24 mm exposures made on 35 mm cine film.

For counting more than 12 exposures, the camera is equipped with an additional counter indicating tens of exposures. This ancillary counter is located beside the window of the main counter, and its adjustment to the tens has to be done manually. By inserting a mask upon the film guide the exposure counter is so adjusted that it is automatically set to the number „1“ when the eleventh exposure is made. The exposure-number higher than 11 is then read on both counters.

If a 35 mm ciné film, is used, the camera can be easily adjusted for this purpose. It is only necessary to place a guide of 35 mm film into the camera, to set a special-type 35 mm spool upon the upper spool pivots and to provide the lower ones with extension pivots.

The exposed film is then rewound back into the original magazine by means of the rewind knob. In the middle of the latter there is a push-button enabling the reverse rewinding of a 35 mm film. Also when using a 35 mm cine film, the rewind knob and the camera release lever are interlocked against double exposure and the advancing of a non-exposed film. The release lever is located near the viewing lens and it is easily controlled by the forefinger of the right hand, this being very advantageous because, when photographing, the camera can be held firmly with both hands thus ensuring its stability, whilst the focussing lever is controlled with the thumb and forefinger of the left hand.

Hence, control of all actions to be performed before the exposure is made, is very simple and speedy, without crossing the hands, all their movements being very purposeful.

In the space between the lens and the film plane antireflection diaphragms are inserted which serve to capture the rays reflected from the camera walls and prevent the former from striking the sensitive layer of the film what would result in the formation of false images. On the camera rear lid the table of colour filters is placed. Below this table a special device is located which records the kind and sensitivity of the loaded film. In its centre there is a window in which the number indicating the size of the loaded film is automatically set. On the camera side there are fitted the slides which serve for sliding on an optical D. V. viewfinder (eye-level finder) for photographing on a cine film.

3.

.... and then we learn how to handle it

1. Sensitive material:

If 6X9 cm roll film (B2 film) is used, twelve 6X6 cm pictures or 16 pictures 4.5X6 cm in size can be obtained.

If you work with 35 mm perforated film, use standard packing in magazines with the filling of 1.60 m enabling 31 pictures 24X36 mm in size, or 43 pictures 24X24 mm in size to be made. It is evident that various sensitive material – black-and-white as well as colour material – can be utilized.

2. Opening of the camera

On the left-hand side of the camera there is a knurled knob (1) which has to be unscrewed and then depressed, whereby the rear lid of the camera opens.

3. Preparing the camera for film loading

a) Roll film 6X9 cm, size of pictures 6X6 cm.

Inside the camera there is an empty spool which must be placed in the upper spool-space. If it is not there, proceed in the following way:

Pull out the rewind knob (2) in the direction of its axis and turn it a little to the left; the knob has to remain in the pulled out position. Put the empty spool (3) into the upper spool space (4), so that the longitudinal slot (5) on one side of the spool is turned towards the rewind knob. Press the spool gently in the direction of its axis with the thumb of your left hand, so that the solid spool pin (6) snaps into the round aperture provided on the left-hand side of the spool. Continue holding up the left-hand face of the spool and while doing so, turn first the rewind knob to the left till it snaps in. Further, rotate the knob to the right till the carrier pin plug (7) fits into the longitudinal notch on the spool front. If the spool is correctly inserted, the rewind knob can be solely rotated to the right (clockwise).

The transmission lever (8) must be set to such a position that the number ⁶⁰80 on its label is positioned normally, (the number 45 is upside down). When setting up the transmission lever, depress to the very stop the push-button provided on the inner side of the apparatus, in the lower spool space (the centre pin of the changing-over lever), and turn the lever so that its pin faces the appropriate aperture (9). When carrying out the adjustment the transmission lever must never be handled forcibly (set out of its position by lifting from the apparatus exterior) since its deformation would result in setting the apparatus out of function for the sizes of 6X6 cm and 24X36 mm. Analogically, when the push-button is not depressed sufficiently, the transmission lever pin would rub against and damage the coating and the transmission lever would be set out of position. When releasing the push-button the pin fits into the aperture in the cover and locks the position of the lever; the latter must bear against the camera.

4.

If the transmission has been set correctly, the measuring sprocket (10) must be easily rotatable in either direction. In the case of incorrect transmission adjustment the measuring sprocket must be turned back till the strong resistance disappears. The checking has to be carried out whenever the position of the lever has been changed.

Note : Incorrect transmission adjustment would result in the following defect: After being loaded, the film will slip across the measuring sprocket and the apparatus will not be set ready for the exposure. The whole film can then be rewound without any locking-in-position of the control-knob and releasing of the release lever has taken place. In such a case it would be necessary to take the film out of the apparatus in the dark chamber, rewind it and after carrying out correct transmission adjustment to load the film anew following the respective instructions.

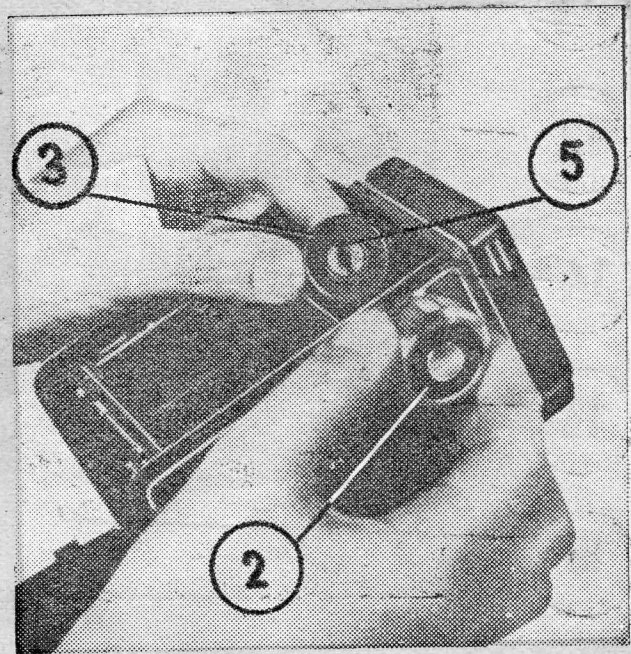
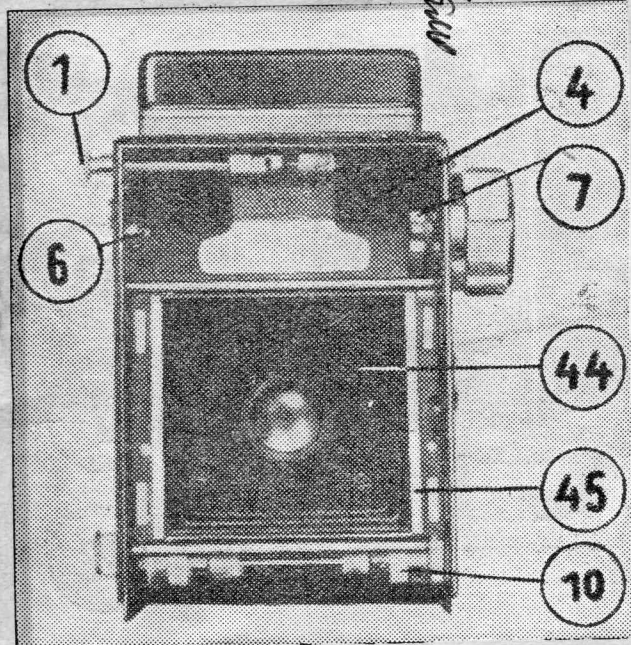
b) Roll film 6X9 cm, pictures 4.5X6 cm in size.

Put the empty spool into the upper spool space. Insert a mask 4.5X6 cm in size into the image window (44). When inserting the mask care should be taken that the flap on the mask side fits into the notch provided on the apparatus body. Push the mask into the image window so that the former does not project above the guiding surfaces (45) of the latter.

The transmission lever (8) must be so adjusted that „45“ is normally legible („60“ is upside down).

If it is required to mask off the size of 4.5X6 cm entirely in the viewfinder an appropriate mask has to be placed into the viewfinder space, i. e. upon the groundglass.

Prav



5

c) 35 mm film, size of exposures 24X35 mm.

For the purpose of photographing on 35 mm cine film, a special 35 mm spool (33) has to be placed into the upper spool space, analogically as the spool for the B2 film 6X9 cm. The left-hand pin with the driver (carrier) – (12) has to be screwed into the lower spool space, onto the thread of the reverse-rewinding turn knob (11); the extension pivot is then slid onto the solid right-hand pin (13). A guide for 35 mm film (14) has to be inserted into the image window, so that the contact surfaces of the guide correctly bear against the contact surfaces of the apparatus body.

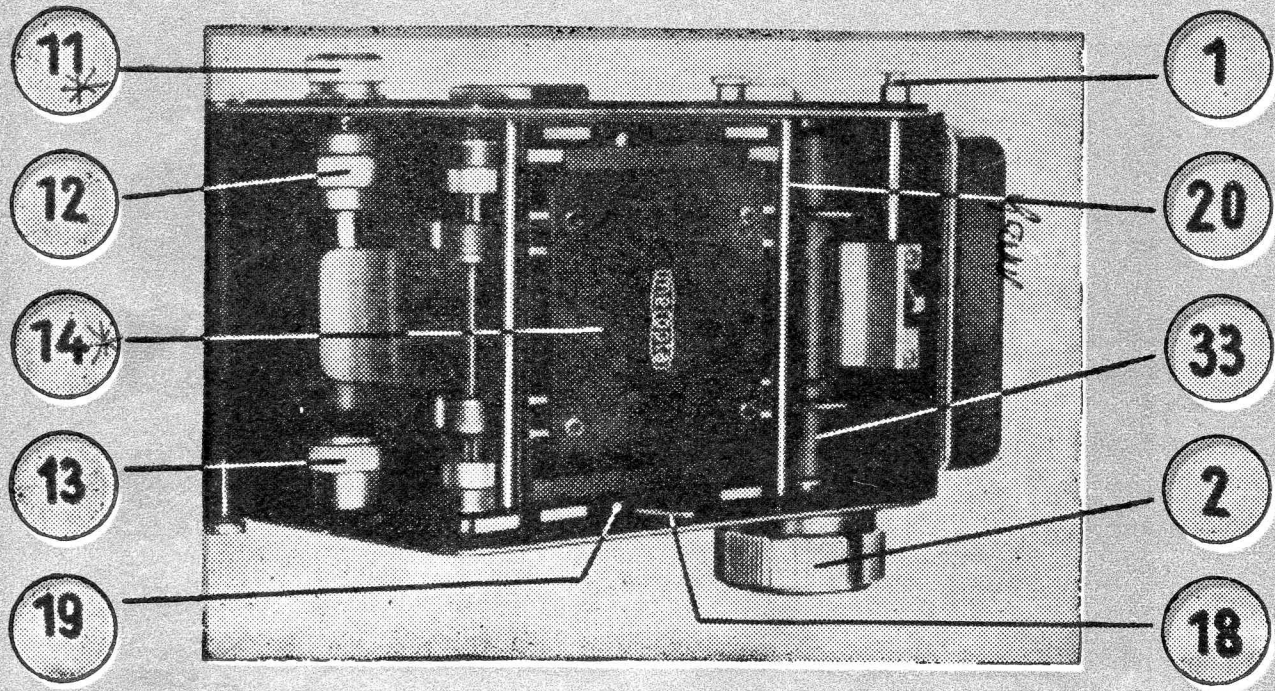
After the guide has been pressed in, it must push back the lever which is fitted on the right-hand side of the image window. If inserted in an incorrect manner, the guide would deflect the lever towards the wall, without pushing it back to the required position, and, after the tenth film-frame has been exposed, the counter would not return automatically to the number „1“, whereby the exposing of further shots would be rendered impossible. From the 12th exposure the film could be rewound freely.

When inserting the guide the latter has to be held by touching its opposite edges; the tiltable pressure plate must never be seized. If it is required entirely to mask off the size of 24X36 mm in the viewfinder, a masking frame 24X36 mm has to be placed into the viewfinder space, directly upon the groundglass. According to the position of the mask in the viewfinder, i. e. whether there is the marking 1 m or 7 m on the lower side of the mask, the viewfinder parallax is corrected for a distance of 1 m or 7 m.

The transmission lever has to be so adjusted that „60“ on its label can be read normally (not upside down).

d) 35 mm film, size of pictures 24X24 mm:

The make-ready of the apparatus is identical to that for the size of 24X36 mm. The masking frame 24X24 mm has still to be inserted into the guide for the 35 mm film (14), this having to be done in such a way that one side of the mask has to be slid underneath the shim provided on the bottom side of



6

the guide, the mask is then bent slightly and the other side inserted under the other shim. The transmission lever has to be so adjusted that the number „45“ reads normally on its label.

4. Film loading

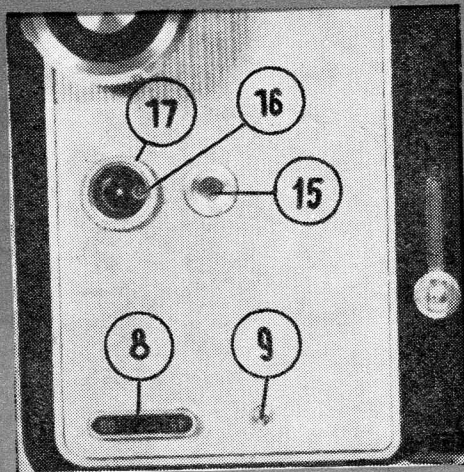
In order to attain a correct adjustment of the film for the beginning, make sure — prior to loading the film — that the position of the two counters (15, 16) is correct. The number „0“ has to appear in their windows. If the main counter (15) does not satisfy this condition, turn slightly the measuring sprocket (10) in the direction of the film advance, till the counter restores its zero position. The auxiliary counter (16) has to be set with its window to zero by turning the knurled turn-knob (17).

a) Roll film 6X9 cm, size of pictures 6X6 cm:

The film roll is loaded into the apparatus in daylight. Push out the reverse rewinding turnknob (11), slide the spool with the film onto the solid spool pivot and release the aforesaid turnknob (11), so that its spool pin snaps into the spool aperture.

The film covering (backing) paper is always pasted over with a band which can be easily torn-off. Wind off about 15 cm of the covering paper. With the film loaded in a correct way the covering (backing) paper must show the side on which inscriptions and figures are printed. The shaped end of the backing paper has to be slid into the longer longitudinal slit of the empty spool. By rotating the rewind knob (2) clockwise, the film backing paper is wound onto the upper spool until the triangular marks (◀▶) on the backing paper margins are positioned opposite white circular marks (19) beside the film guide. Care should be taken that the backing paper is correctly wound onto the upper spool.

Close the rear lid of the apparatus with both thumbs till it snaps in, and lock in position the knurled knob (1) by screwing it in so that it cannot be depressed. In this way it is impossible to open the apparatus by accidental depressing of the knob.



b) Roll film 6X9 cm, size 4.5X6 cm

The film loading is analogous to that for the picture size of 6X6 cm, the only difference being that the film backing paper is wound onto the upper spool till the triangular marks (◀▶) on the paper margins are positioned in the axis of the spool onto which the film is wound. Turning the spool further by a quarter of a revolution the marks disappear and the film band is correctly set for the pictures 4.5X6 cm in size.

7.

c) 35 mm film

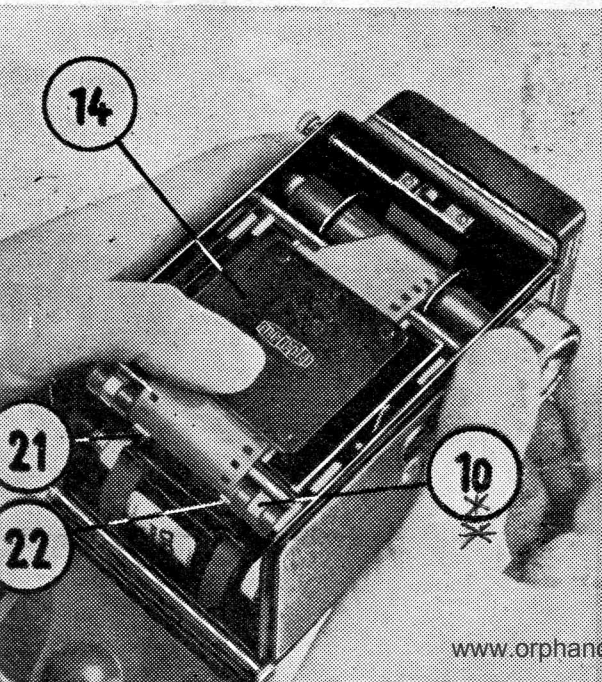
The film is loaded into the apparatus in standard cartridges. Pull out the reverse rewinding turnknob (11) and set the cartridge with the spool onto the left-hand extension pivot with carrier (12) so, that the points of the latter entirely fit into the hole of the core of the spool with the film enclosed in the cartridge. Place the other end of the spool, projecting from the cartridge, onto the solid right-hand extension pivot (13); lock the cartridge in the lower spool space by slowly releasing the reverse rewinding turnknob.

Pull approx. 10 cm of the film from the magazine. Slip the film first under the left-hand roller (21) and than under the right-hand one (22), lead it across the measuring sprocket (10) and insert it under the guide pressure plate (14). Fit the film end into the slit of the special spool (35 mm) and effect one revolution (approx.) of the rewind knob so as to ensure that the film end does not slip out from the slit in the spool and simultaneously to attain that the film is moderately tightened.

If it is not required to rewind the film in the apparatus back into the cartridge, it is superfluous to place the extension into the lower spool space. In such a case put the cartridge with the film loosely into the lower spool space and load the film in the known manner as described above.

5. Adjustment of the film for making the first shot.

Rotate the rewind knob (2) up to the click-stop. Number „1“ appears in the window of the main counter (15) and the film is made ready for the first exposure.

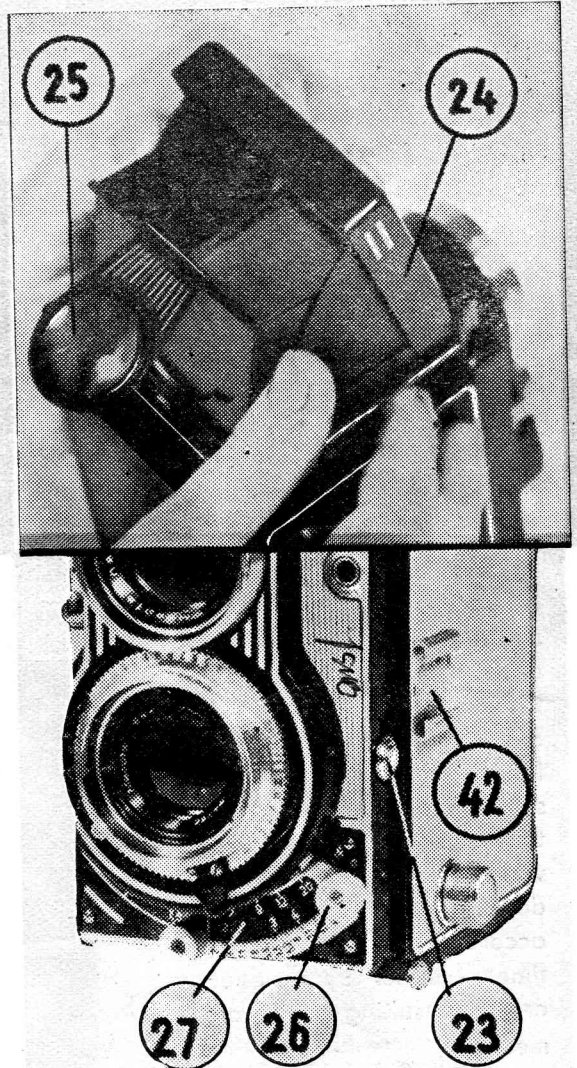


6. Making the apparatus ready for photographing

a) Focussing

In order to attain speedy focussing, the focussing lever (26) is provided with snaps for near, medium and infinite distance; if required, these snaps can be set out of action. A sliding knob (23) is provided on the left-hand side of the front cover for this purpose. When this knob is shifted from the top to the lower position the snapping-in of the focussing lever is thrown out of action and the latter can then be moved continuously.

Open the viewfinder by tilting off its protective lid (24). Set the magnifier (25) above the ground-glass, put your eye close to the magnifier and by moving the focussing lever (26) with the forefinger and thumb of your left hand, perform the focussing of the image. If the image seen on the ground-glass is sharp, the image on the film is perfectly sharp, too. When objects in motion are to be photographed which cannot be focussed beforehand on the ground-glass screen, the focussing distance is estimated. According to the estimated distance the focussing lever is set on the distance scale (27) against the number corresponding to the estimated value. The scale numbers indicate the distance either in metres (lower figures), or in feet (upper numbers). An object at an infinite distance is marked with the sign ∞ or with the abbreviation INF (i. e. infinity).



Thus e. g. if the focussing lever notch is set against the number „2“, the photographed object, placed at a distance of 2 m from the taking lens front glass is correctly focussed.

b) Stopping down the lens

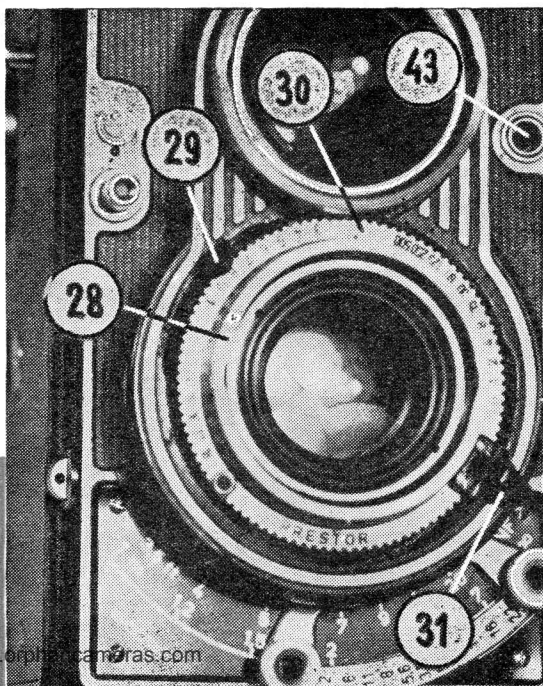
The amount of light which is allowed to pass through the lens can be varied by stopping down the latter. The respective scale carries the following stop numbers: 3.5, 4, 5.6, 8, 11, 16, 22; the stop number 3.5 corresponds to the fully open lens aperture; on the other hand, when set to the number 22, only a small amount of light passes through the lens. These stop numbers have been chosen so that stopping down to the next higher number always results in halving the amount of light passing through the lens at the preceding step. This dependence however, does not, hold good between the values 3.5 and 4.

c) Exposure time adjustment

The shutter is provided with figures which indicate the „speed“ of the shutter, i. e. the time during which it is opened, i. e. the length of exposure time.

The indicated figures are as follows 1, 2, 4, 8, 15, 30, 60, 125, 250, 500. The figure „1“ indicates one second, the figure 2 corresponds to $\frac{1}{2}$ second, the figure 8 to $\frac{1}{8}$ second, the figure 125 to $\frac{1}{125}$ second, etc. In addition to these figures there is the letter „B“ on the shutter, for making time exposures. Beginners should use the exposure time $\frac{1}{125}$ second when making shots „from the hand“ (i. e. without tripod), so as to attain stability and to avoid vibration of the taken picture. Only expert photographers can use the exposure time of $\frac{1}{30}$ sec. or longer.

By turning the external knurled (milled) ring (30) of the shutter, the figure of the chosen exposure time is set to face the mark on the mount. The exposure time length (the speed of the shutter) is selected according to the stop number, or, vice versa, the suitable stopping down of the lens is selected according to the exposure time – either by experience or by consulting an exposure meter.



d) Manipulation with the scale of „light values“

The Prestor shutter is also provided with a scale of the so called „light-values“. These are the red numbers 3 to 18 on the shutter timing ring. The timing ring and the stopping down ring are so arranged that they can be firmly interconnected. In this way, when changing the exposure time, the suitable stop is automatically adjusted or vice versa. The correct exposure time adjustment is thus substantially simplified. It is merely necessary to set on the shutter the light value, which – for the given conditions of light and sensitivity of the photographic material applied – can be ascertained by consulting a dependable exposure meter or an exposure chart. The adjustment to the appropriate „light value“ has to be carried out in the following way: pull the stop lever (29) gently in the direction away from the shutter and by operating the lever (31) on the shutter timing ring set the indicated light value against the tip of the stop lever (29). When rotating – after the light value has been adjusted – the lever on the timing ring, the appropriate exposure time is simultaneously set so as to correspond to the selected stop number or, vice versa, the appropriate stop number to correspond to the selected exposure time.

As long as the conditions of light do not change, i. e. as long as the same „light value“ holds good, the adjusted connection (combination) of time exposure and stopping down need not be altered either. Depending on the shots to be taken, the „speed“ of the shutter is then changed according to the speed of the moving object which is being photographed (and the stopping down need not be worried about, (or, in order to attain the necessary sharpness depth, it is only necessary to adjust the stop without worrying about the speed of the shutter, i. e. about exposure time. Hence, the adjustment is to be carried out in such a way, that the lever (31) on the timing ring is rotated till the required speed is placed opposite the mark ▲, or the tip of the stop lever (29) is positioned opposite the required stop number.

It can happen that the lever on the timing ring cannot be rotated any farther in one or the other direction so that the required time- or stop adjustment cannot be attained. This is a sign warning that such an adjustment would not correspond any longer to the given conditions of light and that an under or over-exposed negative would be obtained.

If we have an exposure aid on which the light-values are not indicated, the exposure elements on the shutter have to be set in this way: Pull off slightly the stop lever (29) and by operating lever 31 on the timing ring set the determined speed of the shutter opposite the triangular mark ▲. Then, set the stop lever tip (also by pulling the lever gently off), opposite the determined stop number. In this way, mutual dependance between the exposure time and the stopping down has been attained, corresponding to the given conditions of light, and, consequently, also the appropriate „light value“ has been found, which can be used for further manipulation with the shutter, as long as the exposure influencing conditions have not changed.

Hence, also in this case it is possible to adjust the exposure time and the stop of the shutter separately. It is only necessary to interrupt – by pulling the stop lever (29) in the direction away from the shutter – the mutual interconnection of the timing ring and the stop ring.

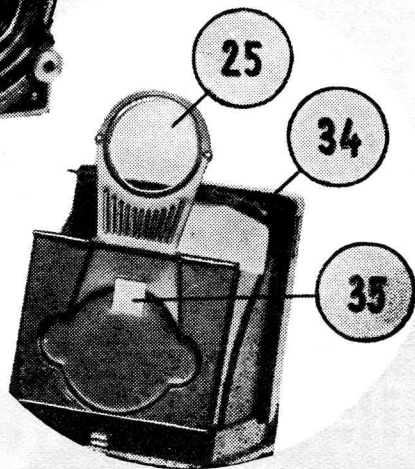
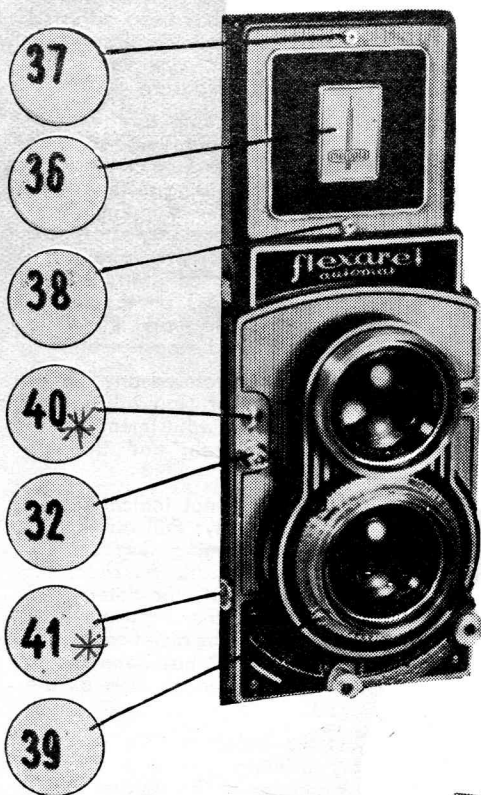
flexaret VII

7. Photographing

After having carried out the focussing procedure as well as the stopping down and time exposure adjustment, you can proceed to make the exposure proper, since the shutter has already been cocked automatically by rewinding the film. Hold the apparatus firmly with both hands and, at the convenient moment, depress with the forefinger of your right hand and without jerking the instrument, the camera release lever (32) up to the stop.

When taking the snapshot, observe the image of the photographed object on the groundglass, upon which the appropriate masking frame has been

placed, depending on for which size of pictures the camera has been made ready. In the case of pictures 24X36 mm in size made on a 35 mm cine film, the image of the photographed object can be placed – without using any mask – within the limits of the rectangle marked on the groundglass screen. When using cine film and making the exposure in horizontal position, a 24X36 mm viewfinder is used to advantage; this viewfinder has to be slid into the side of the apparatus. The viewfinder is supplied as an extra accessory item.



me opta

8. Exposures made from eye-level

In some cases it is advantageous to use the direct vision (D. V.) viewfinder (eye-level finder), e. g. when taking rapid sporting snapshots, when working with an 35 mm cine film or when taking horizontally-orientated shots. Depress the flap of the viewfinder lid (34) to horizontal position above the groundglass, swing off the focussing magnifier (25) to vertical position, put your eye close to the square cut-out (35) of the viewfinder rear part and observe the object to be photographed. When using a 35 mm film with pictures of 24X36 mm in size, only the inner tiltable part of the viewfinder lid (36) is swung off.

If employing the D. V. (direct-vision) viewfinder when photographing with picture size of 4.5X6 cm or 24X24 mm, the appropriate mask has to be set on the front wall of the light shaft. The notch provided on one side of the mask has to be slid upon the upper pin (37) of the shaft front wall, the mask has to be bent slightly and the notch on the other side of the mask slid onto the lower pin (38).

9. Exposing with flexible wire release

If it is required to use a wire release, the latter has to be screwed into the thread of the camera release (32). It is recommended, however, to utilize the wire (cable) release only when making time exposures.

10. Exposures made with application of automatic release — "V" — **"X" MARK ON LENS**

The shutter is provided with a device for automatic release. By setting the red knob (39) on the shutter to the position marked "V" the automatic release mechanism is made ready for action. ~~IN~~ depressing the camera release lever, the exposure takes place after about six seconds. The automatic release can be applied for all exposure times from 1 to 1/500 second, except for the „B“ position.

When applying the automatic release, the camera must be attached to a tripod or placed on a suitable support. If it is not required to apply the automatic release when making the next exposure, the knob marked red must be set to the basic position marked X. **NOTE!**

11. Time exposures

These exposures cannot be made by holding the camera. For time exposures the camera must be screwed onto a tripod. The bottom side of the camera is provided with a tripod nut with a 3/8" thread. It is convenient to use the wire release for exposures of this kind.

Set the milled ring of the shutter (30) with the letter „B“ opposite the mark. When depressing the camera release lever or the wire release, the shutter is opened and remains open as long as the release is kept depressed. The shutter can be locked in the open position with the aid of the locking mechanism knob (40), so that the release lever need not be kept depressed manually when making long time exposures. The procedure to be followed for this purpose is as:

Depress the camera release lever and shift the knob (40) downwards to the red. Then, even when the release is not kept depressed manually, the shutter remains open. After the required exposure time has elapsed, close the shutter by shifting the knob (40) upwards again. The locking mechanism cannot be used when exposing with the aid of the wire release!!!

12. Repeated exposures without rewinding of the film

Repeated exposure without rewinding of the film is required when using the camera for trick shots, or, frequently enough, when making exposures with flashlight, and, due to a reason whatsoever, the latter fails to ignite and the direct light is of very low intensity. When repeating the exposure, cock the shutter knob (41), and then set the latter to its initial position where it is interlocked. Simultaneously with cocking of the shutter the camera release is unlocked. In this way it is possible to cock and to release the shutter several times in succession, without rewinding the film. The shutter can be cocked either by the camera release lever or by the flexible release. RELEASED

Note: If the knob (41) fails to return to its initial position, an undesirable opening of the shutter takes place at any further cocking so that the exposing is effected already during the cocking. This fault is eliminated by correct setting and locking of the knob (41) in its initial position.

13. Further exposures

The locking of the rewind knob is automatically released after the exposure has been made by depressing the release lever, and the knob can again be rotated the stop. In this way the camera is made ready for a further exposure and the number of the next exposed frame is automatically indicated by the counter. Since the shutter is cocked simultaneously with the rewinding of the film, the latter procedure has to be performed directly before taking the shot.

If using a 35 mm film or if making pictures 4.5x6 cm in size on a roll film, more than 12 exposures are obtained. By inserting a guide for a 35 mm film, or a 4.5x6 cm mask into the camera, as soon as the eleventh exposure-frame has been reached, the main exposure-counter (17) is automatically set to number „1“, and indicates further exposures by numbers 2, 3, 4 to 11. Hence, the main counter indicates individual exposure units. Tens of exposures are recorded by an additional counter 18, which – as soon as the main counter has returned to number „1“ – has to be adjusted by turning the milled knob clockwise.

In the window of the additional counter the number 1, 2, 3 or 4 appears. If, for instance, the number „2“ is shown in the window of the additional counter, whilst the main counter window reads „7“, the 27th exposure is being made. If the milled knob 17 of the counter is, accidentally, turned round by more than one number, it can be turned back.

When photographing pictures 6x6 cm in size on a roll film, the additional counter has to be set to the initial position „0“ and not handled any more in any way.

Note: When rewinding a 35 mm film from a cartridge it can happen that – by fault of the cartridge employed – a noticeable resistance is felt. If a film has to be rewound reliably, it is prohibitive to apply force since tearing of the film would. Whenever a higher resistance is felt when rewinding a film, loosen the film in the cartridge by turning the reverse winding knob (11) anticlockwise. These measures have to be taken especially when the film is approaching its end, i. e. when the film spool diameter is small!

14. Locking of the camera release lever

If the film has been rewound for the next exposure, (the shutter having been cocked simultaneously), but the next exposure cannot be made instantaneously, the release lever can be locked against undesirable depressing by shifting the locking knob (40) downwards to the red dot.

15. Closing of the viewfinder

By swinging down the covering lid of the viewfinder (24), the whole viewfinder is automatically closed and the lid snaps in. The focussing magnifier and the flap of the viewfinder lid (34) must be in their basic (initial) positions.

16. Taking out of the exposed film

a) Roll film 6X9 cm

After the 12th picture 6X6 cm in size has been exposed, the rewind knob can be rotated continuously without any stop, and a red dot which appears in the main counter window, signals that the complete film has been exposed. By turning the rewind knob approx. five-times round, the end of the film backing paper is safely rewound.

After having exposed the sixteenth picture of the 4.5X6 cm size, the end of the backing paper cannot be rewound in the usual manner, i. e. by continuous rotation of the rewind knob, which is always blocked after the length of the paper, corresponding to one frame has been rewound. The rewinding of the end of the backing paper is carried out in the same way as usual in the case of individual exposures, i. e. about five blank exposures are still made.

If — in the case of pictures 4.5X6 cm in size — the end of the backing paper is required to be rewound by continuous rotation of the rewind knob, the knob (41) for cocking of the shutter has to be held in the upper limit position, the release lever has to be depressed and locked in position by the knob (40) and approx. five continuous revolutions of the rewind knob have to be made. When the end of the backing paper has been rewound, open the back lid of the camera and pull out the rewind knob in the direction of its axis; by the pressure of the appropriate pressure spring the film roll is lifted and can be easily taken out of the camera.

b) 35 mm film

After the last film frame has been exposed, a perceptible resistance is felt when turning the rewind knob. In order to avoid damage of the film (which is firmly clamped on the spool in the magazine) the knob turning has to be discontinued and the film rewound back into the cartridge. With the thumb of your left hand depress the push-button located in the middle of the rewind knob and hold it depressed.

By turning the reverse motion knob (11) clockwise, the film is rewound back into the original magazine. The aforesaid knob has to be rotated till a sudden decrease of the resistance is felt or an audible unthreading (slipping out) of the beginning of the film from the upper spool is heard. Perform one further revolution with the knob, release the push-button in the rewind knob centre and open the rear cover (back lid) of the camera; the last procedure can be carried out in daylight, in the shadow of your own body. Pull out a little the reverse motion knob (11) and take out the cartridge with the exposed film.

17. Depth of focus

Every lens reproduces sharply not only the objects located in the focussing plane, but also such objects which are situated in front of and behind this plane. This phenomenon is called „Depth of focus“; it is the greater the more the lens is stopped down.

The Flexaret VII camera is equipped with a depth-of-focus scale engraved on the focussing lever proper (26). This is very convenient since it is possible – after having focussed – to read off immediately the two distances within which the photographed objects will be sharply reproduced at application of the chosen stopping down. The scale is counted for the greatest unsharpness (the so-called range of confusion) 0.05 mm.

Example: After having focussed, the notch of the focussing lever faces the number „2“ of the metre-distance scale (27). If, for instance, the lens is stopped down to the stop number „8“, the distance of approx. 1.8 to 2.3 m is read in the distance scale opposite the two numbers „8“ of the depth-of-focus scale on either side of the centre notch.

If it is required to determine the depth of focus of the employed lens, more exactly, the following table, counted for the greatest unsharpness of 0.05 mm, has to be consulted:

Table showing the depth of field when using a Belar f 3.5, F = 80 mm lens, the distance scale being indicated in metres.

Distance in m	Stop number						
	3.5	4	5.6	8	11	16	22
1	0.98- 1.02	0.97- 1.03	0.96- 1.06	0.95- 1.06	0.93- 1.08	0.90- 1.12	0.87- 1.18
1.2	1.17- 1.24	1.16- 1.24	1.15- 1.26	1.12- 1.32	1.06- 1.39	1.01- 1.48	1.01- 1.48
1.5	1.45- 1.56	1.44- 1.57	1.41- 1.60	1.38- 1.64	1.34- 1.70	1.28- 1.82	1.22- 1.97
2	1.90- 2.11	1.89- 2.13	1.85- 2.18	1.79- 3.66	1.72- 2.39	1.62- 2.62	1.52- 2.97
3	2.78- 3.26	2.75- 3.30	2.66- 3.44	2.54- 3.66	2.41- 4.00	2.21- 4.72	2.01- 6.03
4	3.62- 4.48	3.57- 4.56	3.42- 4.83	3.22- 5.30	3.00- 6.04	2.70- 7.87	2.41-12.43
7	5.89- 8.64	5.76- 8.94	5.38-10.06	4.89-12.38	4.40-17.45	3.77-∞	3.22-∞
20	12.93-∞	12.31-∞	10.67-∞	8.90-∞	7.38-∞	5.74-∞	4.54-∞
∞	36.31-∞	31.78-∞	22.72-∞	15.92-∞	11.60-∞	8.00-∞	5.83-∞

18. Flashlight exposures

The shutter is provided with a device of synchronous ignition of flashlight (flashlight synchronizer). When making flashlight exposures the flashlight cable plug has to be inserted into the contact (43) of the synchronizing device on the camera front wall. Both kinds of flashlight can be used; it is, however, necessary to set the knob marked in red (39) on the shutter either towards the mark „X“ or „M“ and to use the suitable shutter speed.

The table which follows indicates the „X“ and „M“ adjustment on the shutter and the shutter speeds which can be applied for various sorts and marks of flashlights.

Flash lamp	Typ	Position of the red knob and shutter speed	
		M	X
Osram	X 0 F 1 F 2		1 to 1/30 sec.
	XP		1 to 1/60 sec.
General Electric Westinghouse	SM		1 to 1/125 sec.
Wabash-Sylvania	SF		
Philips	PF 3	1/60 and 1/125 sec.	1 to 1/30 sec.
	PF 14 PF 25 PF 60	1/60 to 1/500 sec.	1 to 1/30 sec.
Osram	0 1 2		
General Electric Westinghouse	No. 5 No. 11 No. 22		
Wabash-Sylvania	Press 25 Press 40 Press 50 No. 0 No. 2		
Philips	PF 100		
General Electric	No. 50	1/30 and 1/60 sec.	1 to 1/8 sec.
Wabash-Sylvania	No. 3		

Electronic flashlight devices – All makes and types 1 to 1/500 sec.

The flashighting made with the aid of automatic release, when the knob marked in red is positioned so as to face the letter „V“, is possible in the case of electronic flashlights at all speeds of the shutter; in the case of photoflash lamps only the shutter speeds, indicated in Table for the „X“ adjustment may be applied.

17.

19. Notation of the type and sensitivity of the loaded film

Below the table of filter factors the back lid of the camera incorporates an indicator of the type and sensitivity of the film with which the camera is loaded. On the indicator external ring there are dots of different colours with triangular marks. For instance, the two red dots indicate inverse colour material, the red dot and the black dot signify negative colour material, whilst the two black dots designate the black-and-white negative material. The two scales, provided on the inner black ring of the indicator referred to, indicate the sensitivity of the material in tenths of DIN and in ASA values.

In the middle there is a window where the numbers 60 or 35, indicating the size of the film used, appear automatically. The setting of the sensitivity type of the loaded film is carried out by rotating the black ring to the left till the film sensitivity number faces the triangular mark.

20. Table of the elongation factors when using MEOPTA filters

If a correction colour filter is used, the exposure time must usually be extended. In order to facilitate the change of the exposure time when applying correction filters, a table of elongation factors is provided on the camera back lid; the table indicates how many times the normal exposure time has to be elongated. The Table is compiled for the following types of films:

Ortho = orthochromatic film

Ortho-pan = normal panchromatic film

Pan = panchromatic film with increased sensitivity red colour

For every type of material there are two values specified in the Table. The first column indicates the elongation factor proper by which the normal exposure time has to be multiplied whilst in the second column there are the numbers which have to be subtracted from the „light values“, holding good for exposure without application of filters.

For example: An Ortho pan film and a GGR 1 (yellow-green) filter is used; the exposure time determined by an exposure meter or indicated in an exposure-time chart is $\frac{1}{25}$ sec., with the lens stopped down to „8“. Looking up the GGR 1 filter and the Ortho-pan film in the chart, the elongation factor is $2 \times \frac{1}{125}$, i. e. $\frac{1}{60}$ sec., or, at the given exposure time of $\frac{1}{125}$ sec. the diaphragm aperture has to be adjusted to 5.6 (instead of to „8“). If it is worked with light values, it will be ascertained that for the given case, without application of a filter, the light value 13 is applicable; when using a GGR 1 filter the number 1 has to be subtracted from this value, i. e. the light value has to be adjusted to 12.

If a value of 0.5 – 1.5 – 2.5 or 3.5 has to be subtracted according to the indications in the chart, the lever must be set to the intermediate value i. e. to the tooth followed by a whole (integer) number.

21. Handling

A photographic camera is an apparatus which must be handled with attention and care. Before loading a new film it is recommended to dust the camera interior with a hair brush. The lenses have to be cleaned (not too often) with a clean, washed, soft piece of cloth. The lens surfaces are freed from dust with a soft hair brush. Shocks, humidity and chemical vapours have an adverse influence on the camera.

COLOUR FILTERS AND THEIR APPLICATION

Type of filter	Colour and density	Application	Exposure prolongation with material		
			Ortho	Ortho-panchro	Panchro
G 1	Yellow-bright	Universal filter for accentuating contrasts. Improves reproduction of summer clouds, brightens tanned complexion	2X	1,5X	1,5X
G 2	Yellow-medium	Filter for correct transfer of colours onto ortho-material. For photographing landscapes, snow and clouds	3X	2X	2X
G 3	Yellow-dark (orange)	For photographing hazy horizons, accentuates vivid colours of nature. National costumes, reproduction of colour paintings	4X	3X	3X
GGR 1	Yellow-green	For correct transfer of colours onto ortho- and panchro-material. Pictures of landscapes with clouds, flowers, national costumes, snow	3X	2X	2X
GR 1	Green	For correct transfer of colours onto panchro-material in daylight. Eliminates fading of lips on portrait exposures	4X	3X	3X
B 1	Bright-blue	For correct transfer of colours onto panchro-material in artificial light. Eliminates fading of lips on portrait exposures	-	-	2X
R 1	Bright-red	For photography hazy horizons. Mood pictures onto panchro-material	-	10X	6X
UV	Almost colourless	Essential for photography in mountains and altitudes of 2000 m above sea level; for photography at the seaside to dampen the effect of ultraviolet rays. In lowlands, in winter with sunlit snow	1,5X	1X	1X
UVO	Colourless	Similar effect as the UV - applied with colour material	1,5X	1X	1X
N 1	Bright-grey	For intercepting a part of light, e. g. when using high sensitive films, at too high illumination of photographed objects, at undesirable sharpness depth produced by stopping down of the lens etc. The filter allows to pass 50 % of light	2X	2X	2X
N 2	Grey-medium	Analogue application as with the N 1 filter. It allows to pass 25 % of light	4X	4X	4X

19.

Special Accessories

a) **An eveready leather case** with a strap for carrying in the hand or over the shoulder.

b) **A set of colour filters B 36**

To facilitate correct transfer of light – which is seen, around us in various colours – to the neutral black-and-white scale of the sensitive material and for special-type exposures, eleven different types of filters are supplied by the Meopta Nat. Corpor. They are made from optical glass, coloured in the mass, precisely ground and polished. They are specified in the appropriate table which comprises examples of their application. The elongation factors are indicated approximately only since the sensibilization grade of the material sensitivity cannot be reliably determined. It is recommended, therefore, to verify these factors in connection with the material with which it is intended to work.

Analogically as the sunshade, also these correction filters are fixed by means of a special-type bayonet lock into the inside diameter of the external mount of the taking lens. The insertion procedure of filters is analogical to that of the sunshade.

c) **Flexpar B 36 adapter lenses**

1. Flexpar 1 – 0.5 m

For photographing of objects within a distance of 1 m to 50 cm from the front glass of the lens (i. e. of the objective).

2. Flexpar 0.5 – 0.33 m

For photographing of objects within a distance of 50 cm to 30 cm from the front glass of the objective.

The Flexpar adapter lenses are a pair of identical lenses; one of them, in the higher mount, is completed with a ground and polished wedge which limits the parallax of the viewfinder lens objective. Therefore, this lens is always set onto the viewfinder objective, whilst the other one, having the same marking, is set onto the taking objective. The mounts of the adapter lenses are provided with the same bayonet lock (by means of which the mount is perfectly fixed) as the filters and are, therefore, set on in the same way as the latter ones.

d) **Optical viewfinder 24 X 36 mm**

e) **A small-sized bag for sunshade and filters**

f) **The sunshade B 40** for slipping on the lower taking lens (objective).

When photographing against the sunlight the sunshade prevents direct sunrays from entering the objective, thus eliminating the formation of reflections.

The sunshade is fixed onto the external mount of the taking lens with the aid of a bayonet lock.

When setting on the sunshade, the latter has to be positioned so that its red mark faces (points to) the red mark fitted on the external mount of the taking lens. In this position it has to be slipped onto the lens mount to the stop and by slight rotation it is secured in position so that it cannot come loose.



21.

Defects, their probable causes and recommended remedies

Defect:

The camera release lever cannot be released although the rewind knob is blocked.

Cause:

When handling the camera the locking knob (40) has been shifted downwards.

Remedy:

The locking knob which safeguards the release against undesirable depressing, has to be shifted upwards.

PAGE 11

Defect:

Complete number of shots has not been exposed on the film. The end of the film is blank.

Cause:

Incorrect loading of the film. Before closing the back lid the triangular marks on the film backing paper have not been set correctly according to instructions.

Remedy:

Follow the instructions when loading the film!

Defect:

When rewinding a 35 mm film, a strong resistance is felt. Danger of tearing the film.

Cause:

Increased friction of the film, especially at its end, when some types of bakelite cartridges are employed.

Remedy:

Loosen the film in the cartridge by turning a little the reverse rewinding turnknob (11) - See Page No ~~47~~ 5.

Defect:

When photographing on a cine film, the counter fails automatically to return from „10“ to „1“ and after the 12th picture has been exposed, the cine film can be rewound freely.

Cause:

Faulty insertion of an adapter mask into the camera. When the adapter has been inserted, the lever on the right-hand side of the aperture has not been pushed in.

Remedy:

When inserting the adapter mask, follow the respective instructions (See Page *5) *#14*

Defect:

After the film has been loaded correctly, it can be rewound freely – no locking of the turnknob takes place, so that the adjustment for the first exposure is rendered impossible.

Cause:

Incorrect adjustment of the transmission for the required size of pictures. The sprockets are blocked and the film slips through.

Remedy:

Correct adjustment of the transmission according to the instructions. Check the adjustment by turning the measuring sprocket a little (10). See Page *7,

Defect:

Some or all exposures on the negative are black, although the beginning of the film – and sometimes also its end – are not exposed.

Cause:

When rewinding the film, the shutter opens and an exposure takes place. Also at independent cocking of the shutter its lamellas open.

Remedy:

Restore the initial position of the knob (41) for independent cocking of the shutter. In this position the knob is locked by a springy snap.

PAGE 11

flexaret VII



národní podnik Přerov

výrobní závod

HYNČICE U BROUMOVA

MTZ 412 2642 67

www.orphancameras.com