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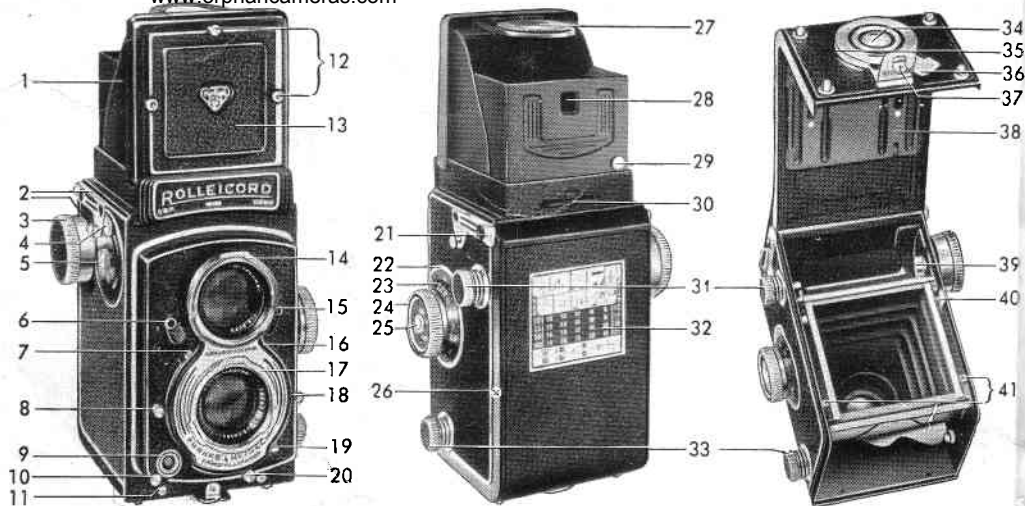


**Rolleicord**

Va

[www.butkus.us](http://www.butkus.us)

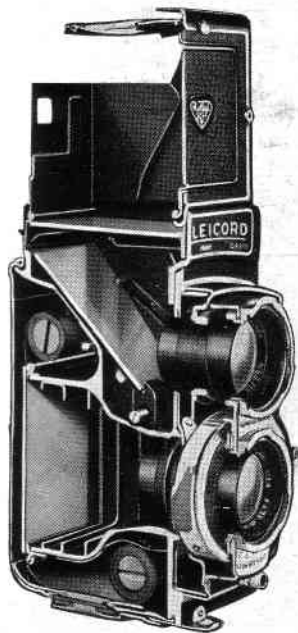
**I N P R A C T I C A L U S E**



**DESCRIPTION OF CAMERA (detailed explanation → page)**

- |   |   |                                      |  |
|---|---|--------------------------------------|--|
| 1 Focusing hood → 14                        | 5 Locking screw or thumb screw for counter mechanism → 15, 22 | 7 Peep window for shutter speed → 12 | 10 Locking device for flash cord plug → 15                                 |
| 2 Hook for neck strap → 11, 12              | 6 Synchro lever (tension lever for self-timer) → 15, 22       | 8 Shutter setting → 12               | 11 Tripod socket for holding Rolleiflex, pistol grip or panorama head → 25 |
| 3 Film winding knob → 11, 12                |   | 9 Flash cable socket → 15            |  |
| 4 Interchangeable counter mechanism → 9, 11 |   |                                      |  |

- |   |      |  |      |
|---|------|--|------|
| 12 Pin-socket for direct view finder mask                           | → 9  | 27 Focusing magnifier                            | → 14 |
| 13 Direct view finder flap  | → 14 | 28 Rear sight for direct view finder             | → 14 |
| 14 Double bayonet mount for Rolleiflash* or Rolleinar*              | → 24 | 29 Release button for direct view finder flap    | → 14 |
| 15 Double exposure prevention and release lever                     | → 15 | 30 Retaining device for ground glass mask        | → 9  |
| 16 Indicator window for shutter speed and diaphragm                 | → 12 | 31 Take-up spool knob                            | → 10 |
| 17 Double bayonet mount for optical accessories* and lens hood*     | → 24 | 32 Light value exposure table                    | → 18 |
| 18 Shutter speed control lever                                      | → 12 | 33 Film spool knob (and Rolleikin rewind knob)   | → 10 |
| 19 Socket for cable release or body release                         |      | 34 Tripod socket                                 | → 27 |
| 20 Shutter tensioning and release lever                             | → 14 | 35 Fastening groove for Rolleifix or pistol grip | → 25 |
| 21 Back hinge with safety lock                                      | → 10 | 36 Locking lever for back lock clip              | → 10 |
| 22 Depth of field scale   | → 20 | 37 Back lock clip                                | → 10 |
| 23 Focusing scale   | → 20 | 38 Adjustable film pressure plate                | → 10 |
| 24 Focusing knob  |      | 39 Winding key of take-up spool                  | → 10 |
| 25 Film speed reminder dial   | → 11 | 40 Locking lever for film counter gears          | → 7  |
| 26 Focal or film plane (focusing distances measured from this line) |      | 41 Indicator marks for starting No 120 roll film |      |



\* Bayonet size I

The Rolleicord is really simple and quite easy to use, but you will find it well to read the instructions first. If you're in a hurry to get started, take a quick look at the illustrations on pages 9 through 15. You will then be familiar with the most important operational details. Later, at your leisure, you can read the instructions more carefully.

FRANKE & HEIDECHE . BRAUNSCHEWIG

### **To Locate Important Paragraphs Quickly:**

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- 12, 13 Exposure value  
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objects and shutter  
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- 21 Depth of field
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## A Brief Rolleicord-Anatomy

---

In the Rolleicord two separate cameras are joined in a twin-camera with a common sturdy die-cast body: the bottom half is the

**taking-camera**, in which the film is exposed, and the upper half is the

**viewing-camera**, which is designed on the mirror-reflex principle. Its special task is to make the effects of focusing visible and to supply a control image essentially similar to that of the prospective picture.

The image forming rays are transmitted by the fully open viewing lens, projected on to the focusing screen via the mirror and the result is a right-side-up focusing image, in the full size of the original picture. This viewing image is visible at all times and every detail of composition and framing may be watched even during exposure. The focusing screen is ruled vertically and horizontally across the center making it possible to detect errors such as lines which converge that should be parallel or a slanting horizon, in time to notice and correct them. It is easy to straighten or level the camera by means of the lines on the focusing screen.

Above all, the focusing screen provides the means for **focusing** the camera. This is accomplished by rotating the focusing knob. Both lenses, which are inflexibly coupled to each other by means of a sturdy common front plate, are thereby adjusted simultaneously: a sharp viewing image, therefore, guarantees an equally sharp picture. Focusing the front lens panel throughout the range from  $\infty$  (Infinity) — 35½ inches (distances measured from the focal or film plane to the subject) is accomplished by one full turn of the focusing knob. The special design of the focusing mechanism (a double cam-drive based on the principle of Archimedes' spiral) insures uniform movement of the lens panel in both directions without play or backlash. Tied in with the movement of the lenses is a simple sliding mechanism, located beneath the ground glass, providing completely automatic **parallax compensation**. Consequently, the final picture is always framed exactly as originally viewed on the focusing screen.

The focusing hood, which is designed for one-hand operation, is kept in both open and closed positions

by spring tension. It is equipped with a magnifier offering approximately 2.5 times magnification for critical focusing. Since the Rolleicord is equipped with a fast viewing lens and an optically prepared focusing screen, the viewing image is extremely bright and clear and focusing can be done very critically.

After focusing the camera, the front flap of the focusing hood may be folded back: the focusing hood is thereby converted to an open frame type **view finder**, through which it is possible to view the subject in natural size and to follow action easily.

Since the two **lenses** are of identical focal length ( $f = 75$  mm, picture angle [across diagonal],  $56^\circ$ ) it follows that the images in both sections of the camera will always be critically focused on the same portion of the subject simultaneously. The Schneider Xenar f:3.5 taking lens, is a four glass construction with two cemented elements (modified Taylor-type) and features outstanding correction for black and white and color pictures, while the three-element viewing-lens f:3.2 meets with the special requirements for best ground glass focusing. Both lenses are treated with abrasion resistant coating. The bayonet receptacles circling the mounts are intended for attaching the lens hood and supplementary optical accessories, which in this way will be held in optically correct position and form a solid unit with the camera.

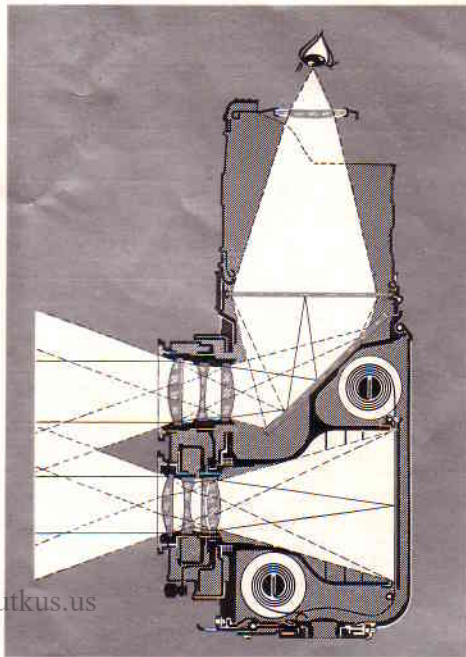
The **Synchro-Compur shutter** is a between-the-lens shutter with evenly spaced speed settings from  $1/500$  sec. to 1 sec. It has a single tensioning and release lever and is fully synchronized for electronic flash and flash bulbs to  $1/500$  sec. The Synchro-lever, which is also used for tensioning the self-timer mechanism, adjusts the shutter to either X or M synchronization.

The **exposure value scale** and **shutter speed-diaphragm coupling** simplify the pre-selection of shutter speed and diaphragm opening by permitting a quick change to the desired combination. Normally, the inter-coupled speed and diaphragm settings are changed by moving only the speed lever. They can, however, be adjusted individually, if desired.

The removable **back** is attached to the camera by means of two hinges with locking device and at the bottom it contains the tripod socket and the safety back lock. The adjustable film pressure plate can be set for No. 120 (B II 8) film (with paper backing), or for 35 mm film (without paper backing) when used in conjunction with the Rolleikin attachment. In both cases a film channel is created with a width that corresponds to the thickness of the film being used. Thus the film will be properly held in the focal plane and will slide through without undue friction when advanced.

The **film winding mechanism** (for roll film) is equipped with a **double exposure prevention device**. Turning the film winding knob until it stops (film lock) will advance the film one full frame and at the same time cause the next number to appear in the exposure counter window. Now the shutter can be tensioned. After release, the operation of the inter-lock is reversed so that the shutter is locked until the film has been properly advanced to the next frame. In this way double exposures or blanks are neatly avoided. In special cases — when using the Rolleikin or Plate Back — the double exposure prevention lock must be released or else the shutter would be permanently locked. If engaged after the exposure, the lock will furthermore serve as an effective shutter release guard. Intentional double or multiple exposures (trick shots) on roll film are also possible through temporary release of the lock.

Proper starting of the film when loading the camera is easily accomplished. Immediately after inserting the film it is advanced as far as the double arrow or line mark on the paper backing. Closing the back at this point depresses the sliding lever and engages the film measuring mechanism. The knob can now be turned only the correct amount to the stop. The number in the film counter window will automatically advance from 0 to 1, when the film is ready for the first exposure.





*Number and format of pictures according to your choice*

Type of film	Accessory device	Number of exposures	Picture format
B II 8 — 120 roll film.	—	12	2 <sup>1</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>4</sub> " (6 x 6)
	16 exp. kit	16	1 <sup>5</sup> / <sub>8</sub> x 1 <sup>5</sup> / <sub>8</sub> " (4 x 4)
		16	1 <sup>5</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>8</sub> " (4 x 5.5)
	24 exp. kit	24	1 x 1 <sup>1</sup> / <sub>2</sub> " (24 x 36 mm)
		24	1 <sup>1</sup> / <sub>8</sub> x 1 <sup>5</sup> / <sub>8</sub> " (28 x 40 mm)
35 mm film	Rolleikin	20, 36	1 x 1 <sup>1</sup> / <sub>2</sub> " (24 x 36 mm)
Plates and sheet film 6.5 x 9	Plate adapter	1	2 <sup>1</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>4</sub> " (6 x 6)

When loading the camera, the **film speed reminder** is set according to the speed of the film being used (8 to 800 ASA and 10 to 30° DIN) thus always showing which type of film is in the camera. This is especially valuable when frequent changes of film material are made.

After the last exposure, the film counter mechanism disengages automatically and the winding knob turns freely, permitting the full winding up of the completely exposed film. The last sign visible in the exposure counter window is a center-dotted circle to indicate that all the film has been exposed. Opening the back will cause the counter dial to return to 0.

With the interchangeable counter mechanism, the Rolleicord Va offers a practical, logical and versatile solution to the choice of picture formats. Standard equipment is the 12-exposure counter mechanism for the usual 12—2 1/4 x 2 1/4" picture operation on B II 8 — 120 film. The change to a five format camera is accomplished by the accessory kits 16-exposure counter mechanism 4 x 4, 4 x 5.5 cm and 24-exposure counter mechanism 24 x 36, 28 x 40 mm. Each kit contains a counter dial, which converts the film-wind mechanism to 16 or 24 picture operation, together with the necessary masks for film plane, ground glass and direct view finder. Even when the camera is loaded, you can freely choose between the formats 4 x 4 and 4 x 5.5 cm as well as between 24 x 36 and 28 x 40 mm. For all who like versatility, or do not object to economy, the Rolleicord Va offers all the advantages inherent in the film-saving choice of formats.

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## Ever-Ready Case

**To Open:** lift the top by grasping the snap catch buttons at the rear and fold forward and down ①.

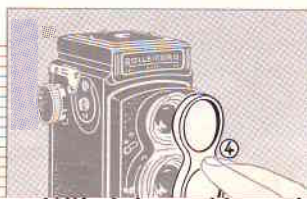
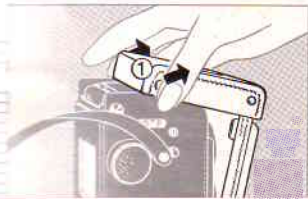
**Removal of Camera from Case:** pull up the clips on the side walls of the case ②, spread the case apart, lift the camera forward and out ③.

**For Cameras with Rolleikin 3.5 Counter Knob:** straighten out the five metal tabs, which hold the leather insert on the inside of the case, with a knife and then push out the now superfluous disc.

## Lens Cap

**To Remove Lens Cap:** lift the lower part and then remove cap.

**Attaching Lens Cap:** by slight pressure.



## Back

**To Open:** swing aside in direction of arrow the back locking lever at the bottom of the camera ①, lift the clip ②, open back, using the clip as a handle.

**To Close:** with the flat of the hand push the back closed, fold down the clip and return locking lever to full forward position.

**To Detach** (when exchanging for plate adapter back): open back wide and swing locking lever on the left hand back hinge upwards ③. Remove back from hinge on this side ④.

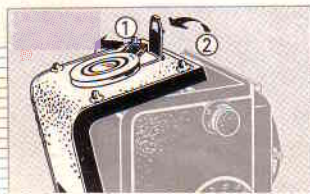
**To Attach:** fit back first to right hand hinge, then to left hand (slotted) hinge, and lock.

## Loading of camera

**To adjust film pressure plate** (using the 120 [B II 8]-film the inscription  $2\frac{1}{4} \times 2\frac{1}{4}$ " must be visible): press the plate against the back and push it up until it stops. When released, it must spring forward completely into the normal plane ⑤.

**To insert film spools** ⑥: fit spool on right side (winding knob side) first and pull out holding knob. Push spool down on the left so that knob may snap back into place fully. The slotted end of the empty spool is inserted on the right side to engage the winding knob.

Break and remove seal of full roll of film, pull up backing paper to the take-up spool, colored side



outwards, and insert the tapered end into the long slot of the take-up spool ⑦. Wind film tightly, using lefthand thumb as a brake, until the **triangular marks** (or double arrows) on backing paper are in line with the **red indicator dots** on either side of the film aperture. ⑧ — Stop! Close the back. Engage double exposure prevention lock.

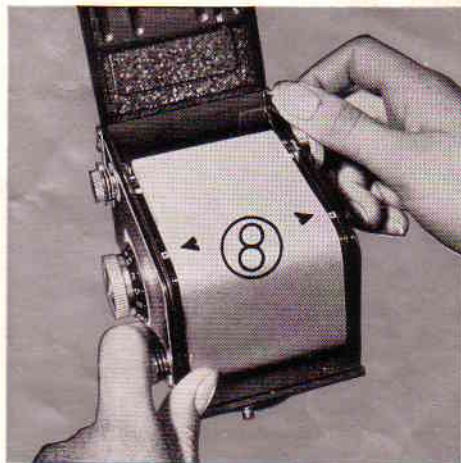
Turn winding knob until it stops ⑨: Film counter advances to No. 1, the shutter can be tensioned.

**Setting the Film Reminder:** Press knob in center of disc and turn to desired value. The dots between the figures correspond to intermediate film speeds.

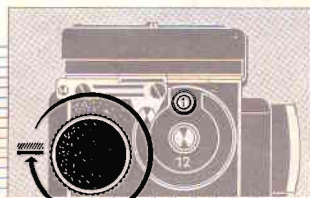
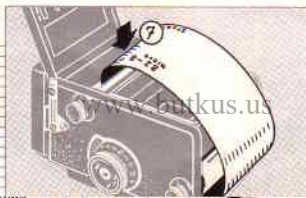
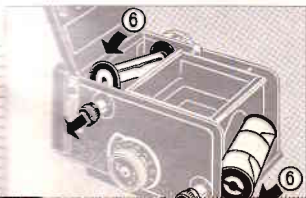
Attention :

**When using the plate adapter:** remove empty spool, but keep it for use with the next roll of film.

**Exchanging the counter mechanism** (page 9): open **camera back** before attempting to remove and install counter mechanism!



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## Advancing Film

Turn winding knob until it stops. The shutter tensioning and release lever thereby remains in "rest" position.

## Removal of the Film

After the last exposure: wind up the film completely. Open back in shady spot, pull out take-up spool knob and lift film out from left side ①. Fold under a good portion of the backing paper ② (for easy opening when developing) and seal with tape ③. Put the exposed film back into the light-proof protective cover of the original package!

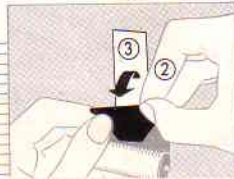
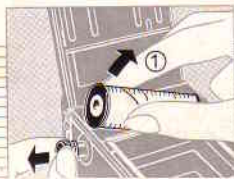
Never change film in direct sunlight! Utilize, at least, the shadow of your own body. Protect open camera against dust and dirt and clean from time to time with a soft camel's hair brush.

## Exposure value - Shutter speed - Diaphragm Setting

**Setting Exposure Value:** Release diaphragm lever, by pressing it in direction of the lens centre, and move up or down ④, until the red dot indicates desired exposure value. (If the exposure value is still not reached: re-engage diaphragm lever and move back a short distance; repeat original procedure.)

**Speed-diaphragm-selection:** Adjust shutter speed lever ⑤, until the desired speed-stop combination appears in the indicator window. (Choosing speed and diaphragm: → pages 19 and 20.)

**Special Case:** Selecting speed and diaphragm separately: release diaphragm lever, adjust speed lever **first** ⑤ and **then** diaphragm lever ④.



③

②



## Exposure Value

The exposure value provides the basic setting of the camera to the desired exposure (→ page 16), automatic coupling keeps exposure constant.

Midpoint light values can be used. Setting scale to next lower number doubles exposure.

## Duration of Exposure

The Shutter Speed must be chosen to suit the subject movement (→ page 19).  $\frac{1}{60}$ th sec. is the speed most commonly used, minimizing camera movement in snapshots.

Consider the figures as fractions of seconds (for example 30 =  $\frac{1}{30}$  sec.). Shutter speeds have click stops, intermediate settings between engraved values are not possible: Whatever the speed-diaphragm combination, the speed value must always appear in the center of the peep window.

The letter "B" permits time exposures of any duration (→ page 14).



## Diaphragm

Stopping down increases depth-of-field (→ page 20).

Settings of full as well as intermediate stop values are possible (click stops between the figures). Intermediate values on the diaphragm scale are obtained when working with intermediate exposure value settings. The dot to one side of f:3.5 indicates f:4.

Closing down the diaphragm to the next full value cuts the effective light passing through exactly in half. To maintain exposure constant would require doubling the time shutter is open — this automatically takes place because of the coupling, exposure value remains the same.

Time exposure by hand		Automatic, shutter timed exposures								
B	1	1/2	1/4	1/8	1/15	1/30	1/60	1/125	1/250	1/500 sec.
Tripod shots		Hand held shots								



### **Focusing Hood**

**To Open:** lift the rear edge of the focusing hood; cover-spring tension keeps it open ①.

**To Close:** fold down focusing hood ②.

### **Focusing Magnifier**

**To Raise:** push the direct view finder flap inwards ③ — the magnifier springs into position.

**To Close:** push magnifier down ④.

**Use of Magnifier:** use magnifier as close to the eye as possible.

### **Direct View Finder**

**To Open:** push the direct view finder flap inwards until it locks into place ③.

**To Close:** release the flap by means of the button on the back of the focusing hood ⑤ — it will spring back into place.

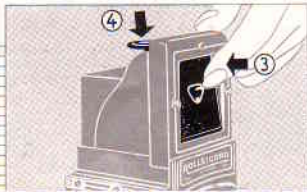
### **Tensioning and Releasing**

**Tensioning:** move lever to the right as far as it will go and then back to original position ⑥.

**Releasing:** gently move lever to left until shutter click is heard ⑦. The shutter automatically opens for the desired time.

**Time exposure "B":** Move shutter lever to left, holding there for required time ⑦. Releasing the lever closes the shutter.

The shutter and self-timer may be left cocked even when the camera is laid away for short periods of time without weakening the power of the springs.



## Self-timer

Cock shutter ⑥. — set Synchro lever to "V" ⑧. — release ⑦. Shutter opening is delayed by approximately 10 sec. All speeds from  $1/500$  to 1 sec. may be used.

## Double Exposure Prevention Lock

**To Engage Lock:** set lever to upper position ⑩. For use with roll film only.

**To Disengage Lock:** move lever downwards. Watch red mark as a warning signal: "Beware of unwanted double exposure!" ⑪. For use with Rolleiikin, plate adapter or for intentional double exposures.

**Re-engage the Lock** after completing double or multiple exposure, **before** re-tensioning shutter.

## Flashlight Pictures

**To Connect Cord:** plug into flash contact socket, plug locks by itself.

**Choice of Contact:** According to flash-source (→ page 22) set Synchro lever to X or M (X contact can also be used with the self-timer) ⑨.

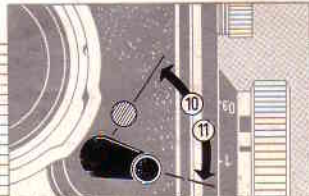
**To Release the Flash Cord Plug:** unlock by swinging locking lever and pull cord out.

## Changing Magnifier (if eye-sight requires)

For critical focusing without glasses, interchangeable magnifiers within the range from +3 to -3 diopters are obtainable (get doctor's prescription).

**To Remove:** take hold of magnifier by both surfaces, push it against the retaining spring (in direction of the hinge of the magnifier holder) and then lift it up and out.

**To Insert:** as above, reversing procedure.





## Exposure and Exposure Value

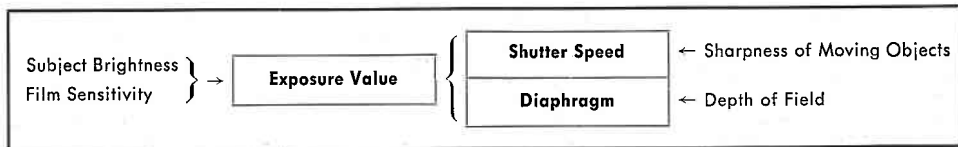
Exposure is adjusted in accordance with the prevailing illumination (more exactly: according to the brilliance of the light reflected by the subject) and the sensitivity of the film. The exposure value — formerly called the light value — serves as the measure of the correct exposure.

The exposure value regulates the correct combination of diaphragm and shutter speed within the permissible working range. The automatic coupling insures these settings and makes possible joint or simultaneous settings of both diaphragm and shutter. The practical advantage obtained is that one is immediately able to change from one speed or diaphragm stop to another, whether for motion stopping purposes or for depth-of-field differences, without bothering to

recalculate and without danger of changing the basic exposure.

The exposure value for the given light condition and the sensitivity of the film in use is read off from the exposure table (→ page 18) or from the exposure meter (Rolleilux) and then set on the scale of the camera (→ page 12). The table covers general light conditions and eliminates gross errors in exposure. Exact results however, especially in critical cases, can only be achieved with an electric exposure meter.

**When using filters,** exposure is extended according to the type and density of the filter. Accordingly minus values are supplied with the filters to be used for correcting the exposure values. The originally chosen exposure value is decreased by this correction value.



**Special Case: Time Exposure.** The exposure value is generally used only with the automatically timed shutter speeds  $1/500$  to 1 sec. Exposure values 8—4 permit the adjustment of the shutter speeds within a very limited range only, making it necessary to take time exposures of 2 and more seconds at "B" setting (→ table).

Exp. value	Diaphragm					
	22	16	11	8	5.6	4
8	2	1	1/2	1/4	1/8	1/15
7	4	2	1	1/2	1/4	1/8
6	8	4	2	1	1/2	1/4
5	15	8	4	2	1	1/2
4	30	15	8	4	2	1

sec.

In practical use, these time exposures can easily be calculated by doubling the exposure time for each smaller diaphragm opening. After reading "B" the exposure value indication will change when stopping the shutter further, but is no longer used in this range.

### Comparison Values Between DIN and ASA Speeds

°DIN	ASA	°DIN	ASA
10	8	22	125
11	10	23	160
12	12	24	200
13	16	25	250
14	20	26	320
15	25	27	400
16	32	28	500
17	40	29	650
18	50	30	800
19	64	31	1000
20	80	32	1300
21	100	33	1600

In special cases (flash, high filter compensating numbers over —3) the filter is compensated for by decreasing the film speed by 3° DIN for each full value (for example, when working with Neutral Density filter No. 4:  $-4 = 4 \cdot 3^\circ =$  requires setting the meter to 12° DIN less than the actual film speed).

A B C D E

ASA						DIN
12	12	11	10	9	8	12
50	14	13	12	11	10	18
200	16	15	14	13	12	24
800	18	17	16	15	14	30
	±0		-1		-2	
	-1		-2		-3	

### Explanations of the Picture Examples:

A: High mountains (snow) without foreground. Open beach. — B: Sport scenes. Bright streets and squares, open landscapes. — C: Landscapes with foreground. Groups in open air. — D: Groups in shade. Street scenes with shade. — E: Groups under trees, lightly shaded. Groups in glassroofed halls.

## The Exposure Table

**Subject brightness** is easily judged and classified by means of the five standard lighting conditions represented by two illustrations.

**Film speed** is indicated at the left by ASA figures and at the right by DIN values (→ table page 17).

**Exposure value** is found where brightness and film speed columns cross.

**Exposure value adjustment**, due to overcast sky or when sun is lower in the sky, is made by use of lower scale. Upper scale: full sunshine — lower scale: overcast sky. The length and intensity of your own body's shadow will give some idea of light conditions. The ability to estimate and choose the correct exposure values for various lighting conditions and time of day will soon come when you begin working on sunny and cloudy days.

**Example:** Color film 100 ASA (21° DIN), landscape with foreground, sunny noontime (shadows short, no light value adjustment): light value 13. Available diaphragm-speed combinations:  $\frac{1}{500}$ -f:4,  $\frac{1}{250}$ -f:5.6, etc. Same subject in the afternoon, longer shadows, would require adjusted value, perhaps  $13 - 1 = 12$ .

## Speed of Moving Subjects and Shutter Speeds

		Miles per hour approximately																
		3 mph		6 mph		12 mph		30 mph		60 mph		120 mph						
Example:		Pedestrians		Runners Moving air		Bicycles Windy		Light Athletics Stormy Surf		Automobiles Railway Trains Racing		Motor Racing						
<b>Distance (yards)</b>														<b>Distance (yards)</b>				
		<b>40</b>	$1/30$	$1/60$	$1/30$	$1/60$	$1/125$	$1/60$	$1/125$	$1/250$	$1/125$	$1/250$	$1/500$			$1/250$	$1/500$	<b>50</b>
		<b>15</b>	$1/30$	$1/60$	$1/125$	$1/60$	$1/125$	$1/250$	$1/125$	$1/250$	$1/500$	$1/250$	$1/500$			$1/500$	<b>25</b>	
		<b>8</b>	$1/60$	$1/125$	$1/250$	$1/125$	$1/250$	$1/500$	$1/250$	$1/500$	$1/500$	<b>12</b>						
		<b>4</b>	$1/125$	$1/250$	$1/500$	$1/250$	$1/500$	$1/500$	<b>6</b>									

**Moving Objects** require short shutter speeds in order to be reproduced sharply. For this purpose the table contains computed minimum values, depending on the factors: speed, distance and direction.

Taking distance: the yard column on the left stands for sufficient sharpness (f/1400), the yard column on the right for increased sharpness (f/2000). In spite

of these normally correct figures, it is often possible in actual photography to use longer shutter speeds. This is because the eye interprets slight unsharpness as giving an added impression of speed.

Long arrow = direction of movement.

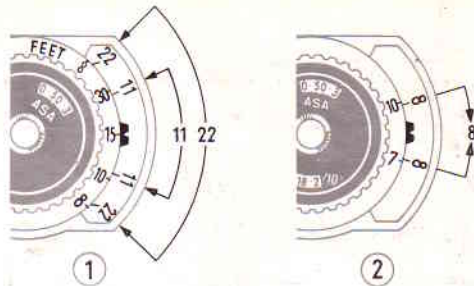
A short arrow = taking direction ( $\triangleright$  up to  $10^\circ$ ,  $\triangleright$  up to  $30^\circ$  and  $\blacktriangle$  up to  $90^\circ$  to the direction of movement).

## Depth of Field Indicator

Both before and behind the plane of sharp focus there is always a relatively sharp zone. The width or depth of this zone can be artfully increased. It increases in depth when either closing down the lens or moving back from the object on which you have focused. Therefore it is evident that if the subject requires an extended depth of field, it is necessary to change the diaphragm-shutter speed combination to one with a smaller stop or to move back with the camera.

**The Depth of Field Indicator** consists of the special diaphragm scale located next to the distance scale and the distance scale itself. Two stroke marks outline the zone covered by each diaphragm opening. The marks are located on either side of the distance indicator ▼, showing "before" and "behind" focus. Stop f:3.5 is represented by the white center area and f:5.6 by dots.

**To Use:** To find the limits of the depth of field, both before and behind the principal plane of focus, after focusing and after choosing the diaphragm opening. The beginning and end of the depth of field is read off on the distance scale. The sharp area lies between the distances bracketed by the marks extending from the diaphragm opening figure.



**1. Example:** focusing to 15 ft with diaphragm opening 11 gives a depth of field from 10 ft to 30 ft approx., focusing to 15 ft with diaphragm opening f:22 gives on the other hand a depth of field from 8 ft to ∞ approx. (Stopping down improves the depth of field.) Considerable stopping down necessitates greatly increased exposure time. To obtain depth of field with the largest possible diaphragm opening, a different method of focusing must be employed:

**2. Example:** the subject requires sharpness from 7 ft to 10 ft. (Other distances, if unknown, can be read directly off the scale after focusing separately to the limits required). Procedure: the focusing knob is turned until both footage value are located opposite identical diaphragm openings, and in this way the most favourable diaphragm opening is obtained, in this case f:8 (→ page 22).

## Depth of Field Table

(distances in feet)

Diaphragm		4	5.6	8	11	16	22	
Taking distance in feet	∞	141'—∞	86'—∞	61'—∞	43'—∞	31'4"—∞	21'6"—∞	15'7"—∞
	60'	42'—105'	35'—198'	30'3"—∞	25'—∞	20'7"—∞	15'10"—∞	12'4"—∞
	30'	24'9"—38'	22'3"—46'	20'2"—59'	17'8"—99'	15'4"—∞	12'6"—∞	10'3"—∞
	20'	17'6"—23'4"	16'3"—26'	15'1"—29'8"	13'8"—37'	12'2"—55'	10'4"—290'	8'9"—∞
	15'	13'7"—16'10"	12'9"—18'2"	12'1"—19'10"	11'2"—23'	10'—29'8"	8'10"—50'	7'8"—350'
	12'	11'1"—13'2"	10'6"—13'11"	10'—14'8"	9'5"—16'8"	8'8"—19'6"	7'8"—27'1"	6'10"—52'
	10'	9'4"—10'10"	9'—11'5"	8'7"—12'1"	8'2"—13'2"	7'7"—14'10"	6'10"—19'	6'1"—27'5"
	8'	7'7"—8'6"	7'5"—8'10"	7'2"—9'2"	6'10"—9'9"	6'6"—10'7"	6'—12'5"	5'5"—15'8"
	7'	6'8"—7'4"	6'6"—7'7"	6'5"—7'10"	6'1"—8'3"	5'9"—8'10"	5'5"—10'1"	5'—12'1"
	6'	5'9"—6'3"	5'8"—6'5"	5'6"—6'7"	5'4"—6'11"	5'2"—7'4"	4'9½"—8'1"	4'5½"—9'4"
	5'	4'10⅛"— 5'2"	4'9"—5'3"	4'7⅞"— 5'5"	4'6⅜"— 5'7"	4'4½"— 5'10"	4'1⅝"— 6'4"	3'10¾"— 7'1"
	4'	3'10¾"— 4'1¼"	3'10⅛"— 4'2"	3'9⅝"— 4'2⅞"	3'8⅜"— 4'4¼"	3'7¼"— 4'6"	3'5⅜"— 4'9⅝"	3'3⅝"— 5'2"
3.5'	3'5⅞"— 3'6⅞"	3'4⅝"— 3'7½"	3'4"— 3'8⅛"	3'3¼"— 3'9¼"	3'2⅝"— 3'10½"	3'1"— 4'⅞"	2'11⅜"— 4'4⅞"	
3'	2'11⅜"— 3'⅝"	2'11"— 3'1"	2'10½"— 3'1½"	2'10"— 3'2¼"	2'9⅜"— 3'3⅝"	2'8¼"— 3'4¾"	2'7⅞"— 3'6⅞"	
Diaphragm * 3.5		5.6	8	11	16	22		

If more critical definition is required — in order to insure perfect sharpness in giant enlargements — use lower diaphragm figures to indicate the depth-of-field available.

## Focusing for distant views

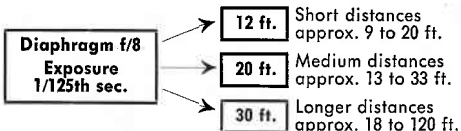
To obtain greatest depth-of-field on landscapes with foreground: turn focusing knob until  $\infty$  mark is opposite diaphragm stop figure on depth-of-field scale. The second diaphragm stop figure on depth-of-field scale then indicates closest point still in focus. Example:  $\infty$  at f:11 will give depth-of-field from  $\infty$  to approx. 12 ft.

## Tripod pictures with the Rollei

Length of the tripod's screw must not exceed  $\frac{3}{16}$ " (4.5 mm). If necessary, shorten screw or use washer of proper thickness to avoid damaging bottom of camera. A reducing bushing is available for use with smaller tripod screws. A practical accessory: Rolleifix permits instant mounting or demounting of camera to tripod.

## For Quick snapshots

Setting camera to certain distances providing required depth-of-field has been found very effective when shooting in a hurry. Use as follows:



## Flash Shots

Modern flash technique permits taking snapshots even under lighting conditions which do not allow instantaneous exposures with a hand-held camera.

The Synchro-Compur shutter is fully synchronized. It fires the fast electronic flash and the slower flash bulbs at exactly the right moment, permitting the use of short and shortest shutter speed in both instances. All there is to do is connecting the flash gun with the camera and setting the synchro lever to the proper position.

The X-synchronization, which also works with the self-timer, is the contact most widely used under normal conditions. When employing the recommended shutter speed it always utilizes the entire light output of the flash.

The correct exposure depends on the light output of the flash and the distance between flash and subject. Therefore, it cannot be determined with an exposure meter. Exact data regarding choice of proper contact, exposure time and diaphragm may be gathered from the material furnished by the lamp manufacturers. In accordance with the information obtained, shutter speed and diaphragm opening are set independently.

**Elektronic flash:**

Always use X-contact  
for all shutter speeds



**Flash bulbs:**

X-contact when using  
 $\frac{1}{30}$ th sec. or slower  
shutter speeds



M-contact for speeds  
(according to type of  
flash bulb) up to  $\frac{1}{500}$ th sec.

Use fresh batteries. Condenser or capacitor flashguns are more consistent since lamp ignition is somewhat less dependent on battery power (Rolleiflash). Be sure that the contacts of the battery and lamp sockets are clean. Handle flash cable with care, avoid kinking, otherwise there will be danger of short-circuit and premature flash ignition. (Note: the contact must not be connected to house current!) — Blue flash lamps, like electronic flash, simulate daylight and are intended for use with daylight color film. Flash as main light source: do not take weak room illumination into account, expose strictly according to flash output. To light up long rooms or to achieve special

illumination effects, one or two Rolleiflash comb. extension units may be connected to the Rolleiflash. — Flash as fill-in light: useful in brightening shadows whether due to insufficient illumination or to the fact that the picture is being taken "against-the-light", in full sunlight. The fill-in light must be kept at a lower intensity level than the main source of illumination, otherwise the strong flash will give an unnatural effect, not at all like daylight. Too strong a flash might even cause an apparent underexposure of the sky or the area not reached by the light. Use smaller lamps or keep them at greater distance.



**Code Protecting the Camera**

BEORD	Eveready Case
FORIM	Neck Strap
FOGUZ	Shoulder Pad for neck strap
BACAP	Lens Cap, chromium-plated
BEMET	Metal Eveready Case with desiccant cartridge
FODRY	Desiccant Cartridge

**The Optical Accessories**

BALUX	Bayonet size required: I Rolleilux, Combination Exposure Meter + Lens Hood
BAOBE	Lens Hood

**Supplementary Lens Sets with Parallax Correction**

BAUNE	Rolleinars 1 for close-ups from 39 <sup>1</sup> / <sub>2</sub> to 17 <sup>3</sup> / <sub>4</sub> "
BADOS	Rolleinars 2 for close-ups from 19 <sup>3</sup> / <sub>4</sub> to 12 <sup>1</sup> / <sub>8</sub> "
BATRE	Rolleinars 3 for close-ups from 12 <sup>1</sup> / <sub>2</sub> to 9 <sup>1</sup> / <sub>2</sub> "

**Rollei Filters with Filter Compensating Number**

For black-and-white films  
(pan emulsions)

Rollei-Filters:

BAIHE	Light yellow	— 1
BAIMI	Medium yellow	— 1.5
BALIN	Light green	— 1
BAEEN	Green	— 1.5
BAORA	Orange	— 1.5 to — 3
BAUBI	Light red	— 2 to — 3.5
BABLA	Light blue	— 0.5
BASKY	Ultra violet	— 0.5

**Code For Color Films**

BAHAZ	H 1-Filter (UV Filter for daylight color photography)	— 0
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Rollei Color Conversion Filters:  
To correct for excessive blue

BARIM	R 1	0
BARWO	R 2	— 0.5
BARFU	R 5	— 0.5
BAREL	R 11	— 1

To correct for excessive red

BAIMB	B 1	0
BAWOB	B 2	— 0.5
BAFUB	B 5	— 1
BAELB	B 11	— 1.5

For General Use:

Rollei-Filters:

BANEU	Neutral Density 2	— 2
BAITY	Neutral Density 4	— 4
BATAR	Rolleipol, Polarizing Screen	— 1.5

For infrared emulsions

BAFIR	Infrared Filter
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**Diffusion Discs**

BATNU	Rolleisoft 0
BATON	Rolleisoft 1

**Accessories**

Code	Containers for Lens Accessories
ETSET	Leather Case containing: 1 lens hood 2 filters
ETSOE	as above, without contents
ETCOM	Leather Case containing: 1 lens hood 2 sets of Rolleinar lenses (1 and 2) 5 black and white filters (your choice)
ETLEE	as above, without contents
ETSIX	Leather Case containing 6 color conversion filters
ETVER	as above, without contents

**Flash Attachment**

FLABA	Rolleiflash 2, Universal flash unit with 1 feet cord
FLOMB	Rolleiflash comb 2, supplementary flash unit, with 10 feet cord
BOFLA	Carrying Case for Rolleiflash or Rolleiflash comb
KATRI	10 Feet Cord for Rolleiflash
KACHT	32" Cord for Rolleiflash
COICO	Coiled Cord 1'3' for Rolleiflash
KAKUP	Connector for 2 cords

**Rollei Adapter Outfits****For Rollfilm:**

COBUP	16 Exposure Kit 1 <sup>5</sup> / <sub>8</sub> x 1 <sup>5</sup> / <sub>8</sub> " ; 1 <sup>5</sup> / <sub>8</sub> x 2 <sup>1</sup> / <sub>8</sub> " (4 x 4; 4 x 5.5 cm)
COBAN	24 Exposure Kit 1 x 1 <sup>1</sup> / <sub>2</sub> " ; 1 <sup>1</sup> / <sub>8</sub> x 1 <sup>5</sup> / <sub>8</sub> " (24 x 36; 28 x 40 mm)

Code	For Cut-film and Plates 2 <sup>1</sup> / <sub>2</sub> x 3 <sup>1</sup> / <sub>2</sub> " :
FOSET	Plate adapter outfit 2 <sup>1</sup> / <sub>4</sub> x 2 <sup>1</sup> / <sub>4</sub> " : 1 adapter back 3 slides 3 cut-film sheaths
FOAPT	Adapter Back
FOSLI	Slide
FOPLA	Cut-film Sheath
FOCAS	Leather Case for 2 Slides
FOFOC	Focusing Screen Slide

**For 35 mm Film:**

ROLKI	Rolleikin attachment for up to 36 exposures 1 x 1 <sup>1</sup> / <sub>2</sub> "
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**For Mounting the Camera**

FOFIX	Rolleifix Tripod Head for quick fastening
FOBUM	Rollei Pistol Grip with Rolleifix tripod head
FOHAN	Wrist Loop for Pistol Grip

Panorama Head for use with a tripod:  
with Continental tripod socket (3/8")  
with English tripod socket (1/4")

FOEAD	
FOENG	

**To Facilitate Focusing**

FOBIN	Binocular Extension Hood for undistracted close-up observation of the enlarged focusing image, using both eyes
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## **Finally, One Special Wish:**

Your camera deserves careful handling — dependable performance will be your reward.

Sparkling cleanliness, especially of all the optical parts, is a pre-requisite for maximum sharpness. The lenses have abrasion resistant antireflection coatings. For cleaning, use a camel's hair brush, wipe off fingerprints with a soft cloth or doeskin. When the camera is brought into a warm room, some condensation may form on the lenses. Do not wipe off, let moisture evaporate.

Do not forget that moisture, dust, sand, strong sunlight, a hard blow or fall can be harmful to a precision camera. If possible, always use the eveready case, for heavy duty operations the stronger and tightly closing metal eveready case. Carry camera around neck and when riding in your car, keep your camera in a safe spot, well protected against the hot sun and bumpy roads. In a nutshell: be kind to your Rolleicord!

And please remember: Franke & Heidecke always maintain their interest in the welfare of your camera. The Service Departments at the factory and the factory representatives in foreign countries will always gladly take care of any special technical problems that might come up during your photographic practice.