

FRANKE & HEIDECKE - BRAUNSCHWEIG



Rolleinar Lenses 1 and 2

Designed for: Close-ups at distances of less than 32 $(35\frac{1}{2})^*$ in.

Application: Each set comprises two matched lenses, one each for finder and taking lens: Set 1 covers the range from $39^{1/2}$ — $17^{3}/_{4}$ ($18\frac{1}{2}$)* in.; set 2 from $19^{3}/_{4}$ — $12^{1}/_{8}$ ($12\frac{1}{2}$)* in.

Focusing is accomplished as usual on the ground glass screen. In connection with a small lens aperture both sets 2 and 1, or both Rolleinars of set 2, may be used one on top of the other for special purposes. Focusing is then done on the adapter ground glass screen.

The depth of field being rather limited at close range, considerable stopping down is advisable with Rolleinar lenses. The depth of field table indicates the most advantageous stops for the $2\frac{1}{4} \times 2\frac{1}{4}$ - and $1 \times 1\frac{1}{2}$ -inch size.

The advantage of a large reproduction should not mislead to indiscriminate shortening of the camera-to-subject distance with close-ups, as this practice would entail danger of distortion. It is less great with objects having a shallow depth of field. For the same reason portrait heads should, if possible, not be taken at distances closer than 40 in.

Rolleinar Lenses require no increase of exposure.

For Use: Fasten one Rolleinar each of the same set in front of both Rollei-Lenses.

* Figures given in parenthesis apply to a focal length of 80 mm. Apart from these, readings supplied by tables on page 3 are for all practical purposes applicable to both the 75 mm and 80 mm focal lengths.

How to Fasten Lens Accessories

Insert bayonet and turn to the right until it snap-locks.

2

Focal Length and Focusing-Range with Rolleinar Lenses

| Rolleinar Lenses | | 1 | 2 | 2+1 | 2+2 |
|-------------------------------|------------|--------------------------|---|--------------|--------------|
| Focal Length | 75(80)* mm | 71 (76) * mm | 68 (72) * mm | 65 (69) * mm | 63 (66) * mm |
| Focusing-Range (in inches) | | the second second second | $\frac{19^{8/4} - 12^{1/8}}{(19^{8/4} - 12^{1/2})^*}$ | 13-97/8 | 97/8-77/8 |

Field-Size and Scale of Reproduction

| Focused Distance | 31 1/2 in. | 19 ⁸ /4 in. | 13 in. | 97/8in. | 7 ⁷ /8 in. | |
|------------------------------------|------------------------|---|---|-------------------------------------|---------------------------------------|--|
| Field- 21/4 x 21 4 Size | 22 x 22 | 13 ⁸ /4 x 13 ⁸ /4 | 9 ¹ / ₂ x 9 ¹ / ₂ | 6 ¹ /4×6 ¹ /4 | 4 ³ /4 × 4 ³ /4 | |
| (in Rollei- inches) kin | 9 x 12 ¹ /2 | 5 ¹ /2×7 ⁷ /8 | 37/8 x 51/2 | 2 ⁸ /4×3 ¹ /2 | 2×2 ³ /4 | |
| Scale of Repro- duction approx. | 1:10 | 1:6.5 | 1 : 4.3 | 1:2.9 | 1:2.2 | |

Depth of Field with Rolleinar Lenses

| Rolleinar | | 1 abit es | | o in eas | 2 | 2+1 | 2+2 | | |
|----------------------------|------------|--|--|---|--|--|--|----------|-----------|
| Focus Dista (in inc | nce | 3] 1/2 23 1/2 19 | | 19 8/4 | 153/4 | 11 8/4 | 77/8 | f / Stop | |
| Depth of Field (in inches) | from to | 29 ^{1/2} 33 ^{1/} 2 | 22 ^{1/2} 74 ^{8/4} | 187/8 201/2 | | | | 5.6 | |
| | from to | 28 ⁸ /4 34 ^{1/4} | 2214 251/4 | 1884 207/8 | 15 ^{1/8} 16 ^{1/2} | 11 ⁸ /8 12 ¹ /8 | | 8 | Rolleikin |
| | from to | 28 35 ⁸ /4 | 21 ⁵ /8 26 | 18 ¹ /8 21 ¹ /4 | 15 16 ⁷ /8 | 11 ¹ /4 12 ³ /8 | 7 ⁵ /8 8 ¹ /8 | 11 | |
| | from to | 26 ⁸ /4 38 ¹ /4 | 20 ^{7/8} 27 ^{1/4} | 17 ^s /4 22 | 14 ⁵ /8 17 ¹ /4 | 11 12 ^{5/8} | 7 ¹ / ₂ 8 ¹ / ₄ | 16 | |
| | from to | 25 ¹ /4 41 ³ /4 | 20 28 ^{8/} 4 | 16 ^{7/8} 23 ¹ / ₄ | 141/4 181/8 | 10 ³ /4 13 | 7 ⁸ /8 8 ³ /8 | 22 | 21/4×21.4 |

Distances are measured from iens board to subject. Permissible circle of confusion = approx. $^{1/1000}$ of the focal length of 75 and 80 mm respectively.

* see note page 2



Rolleipar Lenses 1 and 2

Designed for: Correction of parallax when using Rolleinar lenses.

Application: Due to the narrow separation of the lenses, parallax (= the discrepancy between finder image and negative) is very small with Rollei-Cameras and has been fully corrected within the normal focusing range from

 ∞ — 32 (35½)* in. For close-ups below 32 (35½)* in., this will be accomplished by Rolleipar lenses.

The numbers 1 and 2 correspond to Rolleinar Sets 1 and 2.

For Use: Fasten Rolleipar lens in front of the Rolleinar finder lens. The marking (red dot or engraved double-arrow) must be on top. * see note page 2

Proper Order of Lens Accessories

Finder Lens:

Taking Lens:

- 1. Rolleinar Lens
- 2 Rolleipar Lens
- 1. Rolleinar Lens
- 2. Duto Soft Focus Lens
- 3. Filter or Bernotar



Rollei Filters

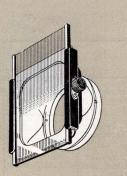
Designed for: Correction of color rendition (color sensitivity) of the film: Filters render their own color lighter and the one complementary to it darker in the print.

For Use: Fasten filter in front of taking lens. Increase exposure as indicated by filter factor.

Table of Rollei Filters

| D. II. 1 511 | Contraction Contraction | Filter Factor | | |
|---------------------|--|----------------------------|---------|--|
| Rollei Filter | Use | Ortho | Pan | |
| Sport Filter | For sports and short exposures. A very light yellow filter (see below). | 2x | 1.5x | |
| Light yellow | Landscapes, snow, clouds. Renders | 3× | 2x | |
| Medium yellow | yellow and green lighter, blue darker. | 4x | 3x | |
| Light green | Landscapes, snow, clouds. Renders green lighter, red (complexion) and blue darker. For pan emulsions. Hazy distant views. Renders yellow- red lighter, blue darker, distant objects clearer. Hazy distant views. Renders red lighter, blue-green darker. Gives stronger effects than Orange Filter. Portraits with artificial light. Renders | | 2x | |
| Green | light yellow filter (see below). Landscapes, snow, clouds. Renders yellow and green lighter, blue darker. Landscapes, snow, clouds. Renders green lighter, red (complexion) and blue darker. For pan emulsions. Hazy distant views. Renders yellow-red lighter, blue darker, distant objects clearer. Hazy distant views. Renders red lighter, blue-green darker. Gives stronger effects than Orange Filter. Portraits with artificial light. Renders red darker. For ultra-pan emulsions. High altitudes above 6000 feet. Seascapes. Eliminates ultra-violet rays which impair definition. Special filter for infra-red emulsions. Transmits dark red above 700 m pand infra-red. UV-Filter, especially designed fo long distance of blue and cuts aerial haze in distance shots. | 4x | 3x | |
| Orange | red lighter, blue darker, distant | | 6-8× | |
| Light red | lighter, blue-green darker. Gives | | 6 – 10x | |
| Light blue | Portraits with artificial light. Renders red darker. For ultra-pan emulsions. | | 1.5x | |
| UV | High altitudes above 6000 feet. Sea- scapes. Eliminates ultra-violet rays which impair definition. | 1.5× | 1.5x | |
| Infra-Red | Special filter for infra-red emulsions. Transmits dark red above 700 m μ and infra-red. | *) | | |
| H 1 | | No increase of exposure | | |
| Graduated Filter | A yellow filter of gradually increa- sing density, for filtering the sky only in landscapes. | Expose for the landscap | | |

*) Exposure depends on the type of emulsion used and must be determined by tests.







Graduated Filter

Designed for: Filtering the sky only, reducing the contrast between the bright sky and darker landscape.

Application: The filter is effective only in conjunction with the lens hood. First, fasten both accessories in front of the finder lens and then adjust the filter in such a way that its graduated part starts at the horizon. Both accessories are thereupon transferred to the taking lens. Expose for the landscape which is not affected by the filter.

For Use: Slip filter mount over the rim of the lens hood (the graduated part toward the top) and, after proper adjustment, lock filter in position by tightening screw.

Lens Hood

Designed for: Protection of the lens from extraneous light and to shield it from rain, snow or spray at watersports events.

For Use: Fasten lens hood to the outer bayonet rim of the taking lens.

Bernotar

Designed for: Elimination of glare from reflecting surfaces.

Application: When photographing reflecting objects (glass, water, polish) obliquely at less than 30 — 37 degrees, unwanted reflections may be subdued or entirely eliminated by a rotating adjustment of the polarizing screen. Change direction of view of camera laterally, if necessary. Required increase of exposure: approx. 3×.

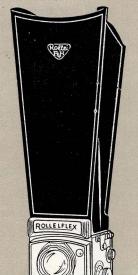
For Use: Fasten Bernotar (1) with adapter ring (2) in front of finder lens. Rotate Bernotar until desired effect is obtained and transfer it in the same position (note white markings) to the bayonet mount of the taking lens.

Extension Hood

Designed for: Extending the focusing hood to the normal viewing level.

For Use: Slip extension hood over the opened focusing hood, rounded edge with "breath-guard" toward the operator.







Duto-Rollei Soft Focus Lens 0 and 1

Designed for: Softening of super-critical definition, producing of striking, fluffy halo-effects, especially with backlighted subjects.

Application: The Duto Lens consists of a concentrically grooved, plane-parallel disc of glass. While rays of light stri-

king the disc between the grooves pass through in a straight line and form the sharp "basic image", they are deflected at the grooves proper. This gently diffuses the highlight areas of the picture, creating the soft focus effect. It differs greatly from "lack of definition" by its three-dimensional, artistic halo-effect added to a perfectly sharp basic image.

Duto 0 poducing a weak soft focus effect recommends it chiefly for backlighted subjects, strong contrasts of light and shiny, glittering objects.

Duto 1 produces a stronger soft focus effect, giving best results in the presence of weaker lighting effects mostly encountered with side-lighting.

Chief Field of Application: Portraiture. Best suited for contrasty, highlighted subjects. Avoid flat lighting.

Stopping-down decreases the soft focus effect. The general rule is: Full aperture with Duto 0; at the most f:5,6 with Duto 1. Speed and focal length remain unaffected. Generous exposures tend to increase the soft focus effect.

The ground glass image indicates full focused sharpness when using Duto Lenses. If desired, the Duto effect may be previewed at any time on the ground glass screen by simply placing the Duto in front of the finder lens.

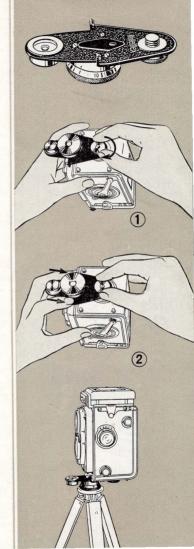
For Use: Fasten Duto in front of taking lens.

Panorama Head

Designed for: Taking of panoramic views composed of 10 individual pictures.

For use:

- Screw panorama head at first only lightly into tripod socket.
- Match pins and sockets of panorama head and camera, then press together.
- 3. Tighten screw firmly.
- 4. Screw in tripod.
- Level off horizontally by centering bubble of spirit level.
- For partial panoramic views start at the left, as the panorama head may be turned clockwise only.
- For each successive exposure turn camera to the next clickstop number engraved on the base of the panorama head. 10 exposures give a panoramic view of 360°. Lateral overlapping of pictures ensures perfect joints.



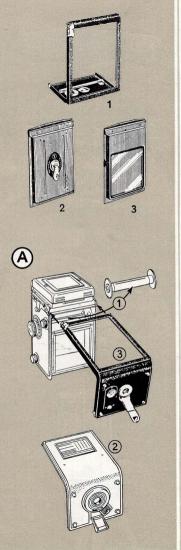


Plate-Adapter

Designed for: Single $2^{1/4} \times 2^{1/4}$ inchexposures on $2^{1/2} \times 3^{1/2}$ inch-plates or sheet-film. A desirable facility for the use of special emulsions, immediate or individual processing and such special tasks as studies of portraiture, trick-photography, reproductions, technical tests etc.

The outfit consists of:

- 1. Special Adapter Back
- 2. Single Plate Holders
- 3. Focusing-Screen Holder

All parts, including cut-film sheaths, are available separately. Focusing is done as usual on the reflex focusing-screen and only in special cases (f. e. when using two Rolleinars combined, or utilizing the picture area to the fullest extent) on the adapter focusing-screen.

A. Attaching the Adapter Back

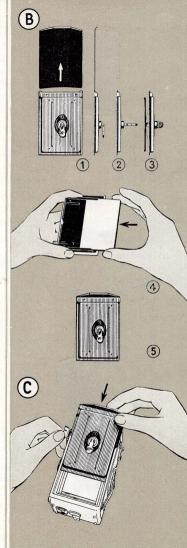
- 1. Remove take-up spool from camera.
- 2. Take off camera back.
- Attach adapter back (without holder!)

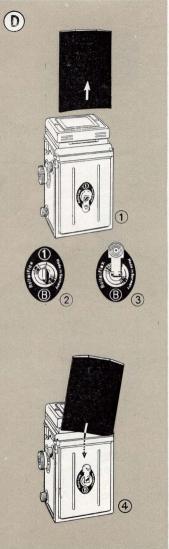
- **B.** Loading the Plate-Holder
- 1. Withdraw slide.
- 2. Lift up locking lever on back of holder and
- let it slip inside after a quarterturn. Spring action pushes out plate-carrier.
- 4. Slide plate into carrier.
- Retract lever, lock by a quarterturn and fold down (the number remaining visible). Close holder by reinserting slide.

Note: Conserve plush-strip by always removing slide from empty holders before storing away.

C. Inserting the Plate-Holder

Swing catch out of way and slide holder down the lateral grooves of the adapter back. The catch locks holder against unintentional removal.





D. Exposure

- 1. Withdraw slide.
- Lift up lever and let it slip inside after a quarter-turn. The plate moves into the focal plane by spring action.
- After the exposure, retract lever first, then fold upward after a quarter-turn. The letter "B" indicates that the plate has been exposed.
- 4. Only now reinsert slide.

Note: Always keep red window at the bottom of the adapter closed. (It has no function to fulfil.)

E. Focusing-Screen Holder

- 1. Insert the closed holder.
- Withdraw slide. Spring action presses focusing screen automatically into the focal plane.
- 3. Reinsert slide first, and then remove holder.

Rolleikin-Attachment with Rewind

Designed for: Taking up to 36 exposures $1 \times 1^{1/2}$ in. on 35 mm.-film. Ideal for series of pictures and color photography on miniature film.

The attachment consists of:

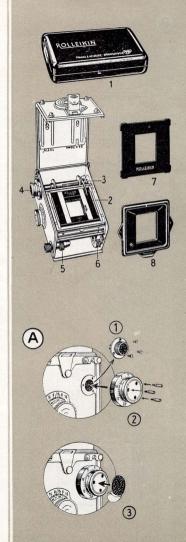
- 1. Metal Case
- 2. Film Guide Frame
- 3. Take-up Spool
- 4. Release-Knob with Exposure Counter
- 5. Extension-Spindle for Rewind-Knob
- 6. Intermediate-Knob
- 7. Focusing Screen Mask
- 8. Direct View Finder Mask

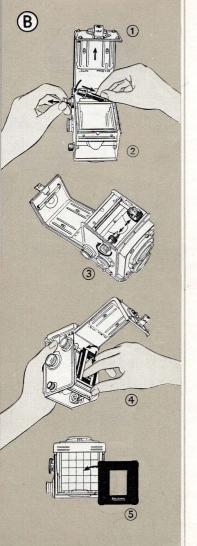
Fits all cameras with serial numbers of 1 100 000 and higher. A new camera back (for 35mm and $2^{1}/4 \times 2^{1}/4$ in.) is required for serial numbers from 1 100 000 to 1 157 000. The previous model Rolleikin-Attachment continues to be available for serial numbers from 200 000 to 1 100 000.

A. Installing the Release-Knob

(The release-knob accepts 35 mm and No. 120- (B 2)film. Your dealer will gladly take care of the fitting for you.)

- 1. Remove the top film-knob by unscrewing the 3 counter-sunk screws.
- Fasten release-knob tightly by means of the three screws supplied.
- 3. Remove protective lining from gummed insert and paste it on the release-knob.





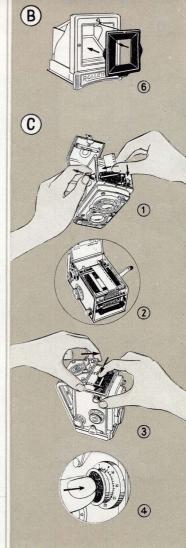
B. Assembling the Rolleikin

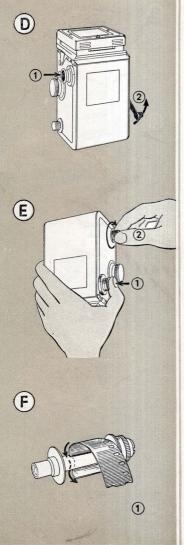
- Adjust film pressure plate by a sliding movement, pressing down at the same time, thereby bringing the inscription "24× 36 mm. (1×1¹/₂ in)" into view.
- 2. Pull release-knob, fit-in take-up spool on the right and insert completely.
- 3. Rewind-Parts: Screw extensionspindle on rewind-knob by rotating the latter. Snap intermediate-knob over opposite spool bearing pin, (slipping the metal tongue between the rollers of the film-feed when using a Rolleiflex).
- 4. Inserting the film guide frame: Press spring actuated clamp-bar at a flat angle (as shown) against the bottom of the film gate and insert completely. To remove: Push frame downward (against the clamp-bar) and lift out.
- 5. Place focusing screen mask into the focusing hood in such a manner that the lettering "Rolleikin" is legible when in use.

 Snap direct view finder mask on the two snap-fasteners of the focusing hood front.

C. Loading

- 1. Open camera back, pull rewindknob, fit-in film cartridge on the left and then insert fully.
- Introduce film-lead (which in the Automatic Rolleiflex — first passes through the film-feed rollers) into the double slit of the take-up spool, letting it touch on the right. Tighten up by giving spool a short turn.
- Make sure the mouth of the cartridge points straight ahead in line with the tightened film lead, then close back.
- Press-and-release release-knob until the red dots of the Rolleikin counter face each other. (Disregard counter for No. 120-[B 2-] Film completely.)
- To set counter for the first exposure: Advance counter dial to No. 1 by actuating filmtransport three times. (see page 16.)





D. Filmtransport

- 1. Press-and-release release-knob before actuating filmtransport. The exposure counter advances automatically to the next number.
- 2. Advance film as usual to the stop.

E. Rewinding

- 1. After the last exposure has been made, rewind film by keeping release-knob pressed down.
- 2. simultaneously rotating rewindknob clockwise.

F. Note

1. The rewind also permits the removal of only partially exposed films. In order to prevent the film lead from slipping into the cartridge when rewinding, be sure to thread the film backward, i.e. against the winding direction into the double-slit of the take-up spool when loading.

When reloading a partially exposed cartridge, advance film two frames beyond the last exposure (skipping one frame for safety).

2. Always adjust film pressure plate (see B1) in accordance with the type of film used, in order to ensure perfect registry.

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