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Practical tips

1 Battery capacity

The battery pack contains special Nickel/Cadmium batteries with sintered electrodes, which are characterized by their high reliability and ability to be rapidly recharged. As with all batteries, the useful capacity reduces as the temperature falls. After charging, possible capacities are as follows:

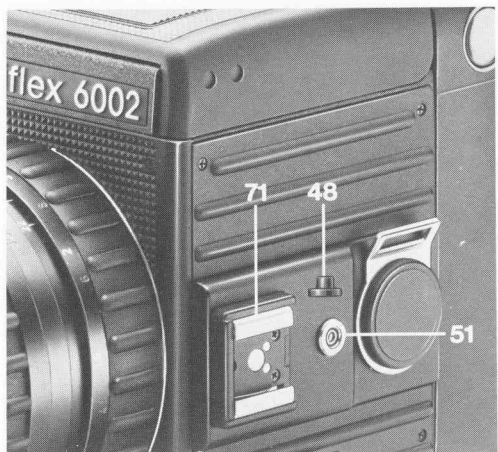
at battery temperature	per range
+20°C (+68°F)	up to 600 exposures.
-10°C (+14°F)	up to 50 exposures.

Using up the full capacity at low temperatures will require a prior rapid-charging period followed by normal charging for about three hours in order to recharge the battery fully.

In extreme cold (temperatures below -10°C) it is best to carry the battery pack separately from the camera and close to the body to keep it warm and then insert it shortly before use. In this situation, use of the external battery connection is recommended (available as an accessory). In extreme cases (photography in polar regions, refrigerated premises, low-temperature laboratories) the camera must also be kept warm or insulated.

2 Shutter release

The shutter release can be actuated by means of the left- or right-hand release button or the cable remote release, the IR remote release or multiple-exposure control unit ME 1, the multiple-exposure handpiece MRC 120 or the timer. All these methods can be used at any time, as alter-



natives or in combination. Unintentional shutter release can be prevented by switching off the release circuit (with the central switch at »off«).

3 Automatic exposure control

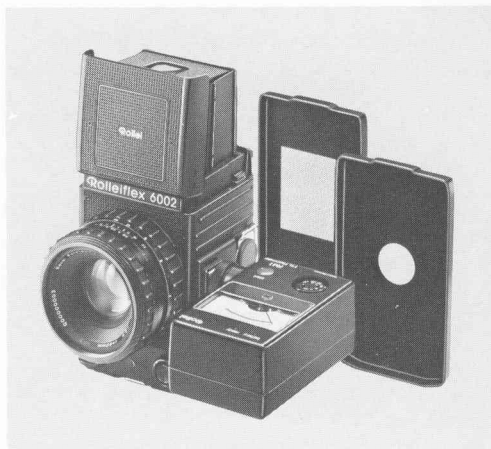
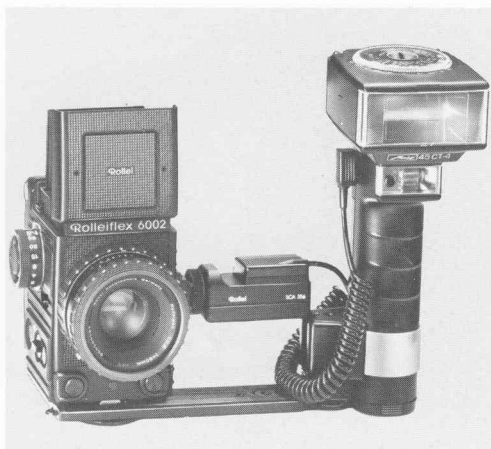
During the shutter release, the metering system determines the aperture required for the pre-set shutter speed and adjusts it almost simultaneously by means of the microprocessor-controlled linear motor in the lens.

A prior measurement using the test button is particularly recommended in difficult lighting conditions in order to check the automatic aperture (e. g. for the available depth of field).

4 Flash synchronization

The Rolleiflex 6002 is X-synchronized for all shutter speeds up to 1/500 sec. The aperture is set *manually* according to the guide number and the distance. However, the automatic aperture control can also be used when employing flash for fill-in lighting in bright daylight or artificial light.

Flash units with a centre contact can be fitted and brought into contact with hot shoe 71. The electrical contact 51 has a 3 mm standard socket. The cap 48 is inserted to protect the socket from dust when not in use. The two contacts are connected in parallel.



In order to be able to use the TTL flash metering system, with all its technical advantages, it is recommended to use flash systems that are compatible with the Rolleiflex 6002. With the Metz C70 system adapter, the Metz 45 CT 5 and 60 CT 2 flash units can be used. The SCA 356 automatic flash offered by Rollei makes it possible for the system to use all the automatic flash units of well-known manufacturers who supply the SCA 300 system.

When automatic flash units are used the flash output is automatically controlled. Through a built-in sensor, the light reflected from the film surface at the moment of exposure is measured and the duration of the flash is regulated according to the film speed. The precise exposure obtained in this way guarantees the best possible flash pictures.

For the correct flash exposure, the appropriate DIN/ASA setting on the system adapter should be observed.

The green LED in the viewfinder indicates the sufficient exposure of the film and when the flash is ready.

If the green LED glows steadily again after an exposure, this means that the film was sufficiently exposed and that the flash is available again for immediate use.

If the green LED flashes on and off after an exposure, this means that the film was sufficiently exposed. When the flashing changes to a continuous light, the flash is ready again.

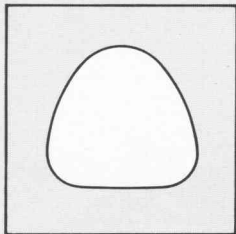
If a great deal of energy was required for the flash photograph, a dark interval may occur between the flashing and the steady glow of the LED.

If the energy available from the flash unit is not enough for sufficient exposure of the film with the set aperture, the »flash-ready« indicator in the viewfinder will not flash. The exposure should then be repeated with a greater aperture.

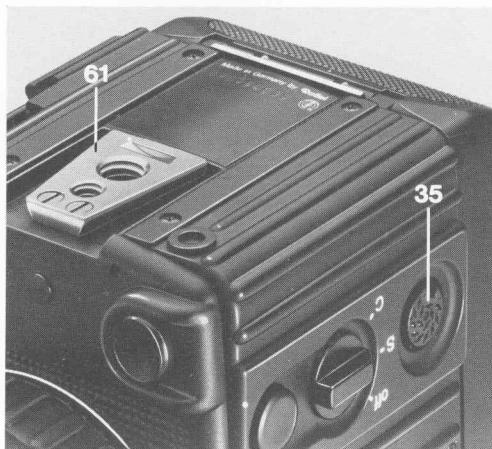
The Rollei TTL flashmeter FM 1 provides the photographer with a new type of precision instrument enabling exact flash exposure metering of the camera using professional studio flash equipment or standard flash units. Connection to the camera is done via the hot shoe. A sensor built into the camera body measures the light reflected from the film plane and relays these readings to the measuring electronics of the flashmeter. A highly sensitive display instrument then informs the user in EV values whether the exposure was correct. In the event of an incorrect flash exposure, the light value can be adjusted accordingly via the aperture or the flash power.

The measuring field for centre-weighted exposure metering

Focusing screen



Field measured in exposure metering



5 Remote release

Electrical remote release units are available as accessories, with leads 0.4 m, 5 m or 10 m long. These units are connected via socket 35. The remote release facility also enables the mirror pre-release to be operated remotely → practical tip 16.

The infrared remote release set allows individual and sequential exposures to be made without lead from a distance of up to 60 m. In addition, a special connection in the infrared transmitter enables a second Rolleiflex to be triggered at the same time as manual shutter release on the first camera.

The ME 1 multiple-exposure control unit can also be used as a remote release. The multiple exposure handpiece MRC 120 (with 0.4 m lead) can similarly be used for this purpose.

The timer gives intervals between exposures over an unusually large range, from 1 sec up to 59 hr. 59 min. It can trigger between 1 and 999 exposures.

6 Time exposures

The cable release socket is made usable by unscrewing a cap. The camera has a 1/4" and a 3/8" bush for a tripod attachment. The quick tripod coupling 61 fits the Rollei quick-release tripod clamp and allows rapid alternation between hand-held and tripod photography. For time exposures (> 30 sec), the shutter is set to »B« and operated as follows: press the release button and, keeping it in, set the central switch to »off«, then let the button out. To complete the exposure, set the central switch to »S« and press the release button again to close the shutter.

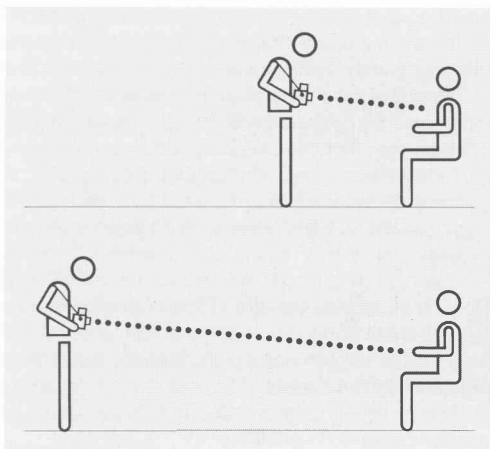
7 Light contrast

It is well known that determining the correct exposure becomes more difficult as the film gradation gets steeper and as the light contrast in the selected image increases. Excessive contrast can often be avoided by fill-in flash, masking the highlights, softer lighting, altering the direction of view or the camera position, changing the type of film, compensating in development etc. If the light contrast is still too high for the film, it must be decided whether light areas, shadows or middle tones are more important for the purpose of the photograph.

The exposure is measured by means of the three large Silicon cells as shown in the top left illustration.

Simulated reading

e. g. with the Kodak grey card (used according to their instructions) is strongly recommended in these circumstances and provides an average value for the best compromise, with optimum reproduction of the middle tones in the image.



Close-up reading

Close-up reading is also used in difficult lighting conditions. The subject is metered by the camera from a close-up position and the indicated aperture is read off. The photograph is then taken from the intended position, with this aperture value being set manually → illustration above. Alternatively, the memory function can be used as described on page 18 or in practical tip 11.

8 Macrophotography

Extension tubes, retroadapter and bellows extend the optical possibilities into the macro range. In this connection, combinations of extension tubes can be used as desired; extension tubes can also be combined with the bellows unit. In all these cases the electronically controlled automatic aperture facility is retained.

The extension tubes are available in lengths of 9, 17, 34 and 68 mm — all with the double Rollei bayonet, enabling them to be combined as desired. With all four tubes fitted, a maximum extension of 128 mm is available. The bellows offers an infinitely variable extension between 67 and 204 mm. Using the retroadapter, the retro-focus position is also possible with the corresponding lenses. The compendium is a valuable supplementary unit for these photographs, which usually involve difficult lighting techniques.



The automatic flash units already mentioned are clearly ideal for macrophotography on account of the precise built-in flash metering, even at the shortest camera-to-subject distances.

9 Manual aperture selection

This is used when the desired depth of field requires a particular aperture, and also with flash photography, when over- or under-exposure is required, when working with a pre-released mirror and always when working outside the range of the automatic aperture control → illustration above.

10 Multiple exposures

Multiple exposures are easily carried out via the MRC 120 multiple exposure handpiece. The MRC 120 is also suitable for single exposures and operating the mirror pre-release facility.

With the ME 1 multiple-exposure control unit, the interval between exposures can be preset between 0.1 and 1.5 sec or to any required time. Between 1 and 10 individual images can be selected in a multiple-exposure sequence.

11 Memory function

A substitute subject – e. g. the grey card or the most important part of the actual subject viewed close up – is metered with the test button pressed. The photograph is taken from the original position with this »memory value« for the aperture. The memory function can also be used in close-up metering as in tip 7.

12 Checking the depth of field

If a given depth of field is required for a particular photograph, the aperture automatically set is determined by pressing the test button; the shutter speed knob is then adjusted until the required aperture is indicated on the lens. The depth of field can then be best judged on the focusing screen using the viewing magnifier.

13 Rapid charging

For rapid charging of the NiCd battery pack a quick-action charger is available as an accessory to ensure an easy and reliable power supply for the camera. The following points should be observed during rapid charging:

As with the standard charger, first set the mains voltage selector to the appropriate voltage, then fit the connection lead into the socket and connect to the mains supply.

Insert the battery pack in charger with the battery contact sockets lined up with the pins in the charger. The quick-action charger automatically controls the whole charging process, which consists of a continuous normal charge and an additional rapid charge that depends on the state of charge and temperature of the battery. Two indicator lamps on the charger show the type of charge: green = normal charge and red = rapid charge. The total charging time depends on the condition of the battery (the number of exposures made, self-discharge) and amounts to about one hour after normal discharge. After 10 to 15 minutes enough power is available for about 100 exposures. When the red light on the charger goes out, the rapid charge is completed and sufficient charge capacity has been reached for up to 600 exposures at temperatures of around 20° C.

After rapid charging stops, normal charging continues and the battery is fully charged after a total charging time of approximately 3 hours. Exceeding this charging time occasionally will not damage the battery, but frequent over-

charging should be avoided. It is recommended to use a timeswitch between the mains cable and the mains when recharging.

The ambient temperature during rapid charging should be between +5° C and around +35° C. If the battery has become very hot due to external circumstances, rapid charging is delayed by the built-in temperature cut-off and will only begin when the battery has cooled down sufficiently.

Note: the quick-action charger can also be used with 12 V car batteries: Insert the connection lead (accessory) into the charger socket and the cigarette lighter socket of the car.

The charging time is about 14 hours; only normal charging is possible.

14 Rapid release

For sports scenes, animal photography and action shots, it is especially important to have the fastest possible shutter release so as to catch the subject at the crucial moment. Thus, since the time between release and mirror movement must be made as short as possible, the light metering and mirror movement are carried out beforehand.

Rapid release with the memory function

Switch on the automatic aperture control, press the test button and hold it in. Press the release button just short of the release point and press fully in at the instant the exposure is required.

Rapid release with mirror pre-release

Carry out light measurement as usual, read off the corresponding aperture and set this value manually (after switching off the automatic aperture control). Pre-release the mirror. Press the release button fully as soon as the desired view of the subject is obtained. The sports viewfinder is used here to monitor the subject, since the mirror is hinged up.

15 Continuous operation

Set the central switch to »C«. Press the shutter release — after the appropriate metering — and hold in. The camera re-measures, exposes the film and winds it on repeatedly, until the release button is let out again. The sequence of pictures is taken at approx. 1.5 exposures per second (with a correspondingly short exposure time). If the button is held in for the entire film length, the film will automatically be wound up after the last exposure. For this, it is best to use newly loaded type 120 or, best of all, 220 film. The memory function can also be used with continuous exposures, i. e. all the photographs are exposed with the aperture value that is stored by pressing the test button.

16 Mirror pre-release

For vibration-free exposures, particularly when using long focal lengths or in close-up photography, the mirror pre-release facility is only possible using the RC 120 remote release lead (art. No. 208 985) available as an accessory. Connect the release lead to socket 35 (the spot above the connection socket marks the correct inserting position of the plug), measure the exposure, read off the aperture, then switch off the automatic aperture control and set the measured aperture *manually*. Briefly press button »mirror«, and the mirror will swing up. Now take the picture.

Please note: with the mirror pre-released, the light meter will not give a usable aperture indication, since the measuring cells are fitted behind the swinging mirror and in this raised position only measure the light coming in through the viewfinder. It is also important to remember that the mirror pre-release cannot be reset and that a photograph must subsequently be taken with the mirror raised.

17 Interchangeable lenses

The Rolleiflex 6002 professional camera system is rounded off perfectly by a selection of top-performance interchangeable lenses, optimally suited to the needs of today's demanding photographer. Two ranges are available:

First of all there the three Rolleigon lenses. Rollei works in close cooperation with other established partners of proven capability who have acquired comprehensive know-how in the design of exceptional quality lenses. These lenses are therefore known for their good ratio of price to performance, plus a high standard of quality throughout all stages of manufacture. The Rolleigon lens range encompasses focal lengths f 4/50 mm, f 2.8/80 mm and f 4/150 mm. The f 2.8/80 mm and f 4/150 mm lenses are provided with an E 67 filter thread mount. The Rolleigon f 4/50 mm has an E 77 thread mount. With the adapter ring available from Rollei's accessory programme, Rollei filters and lens hoods with bayonet size VI can also be used (only in combination with the Rolleigon f 2.8/80 mm and Rolleigon f 4/150 mm). Apart from these inexpensive Rolleigon lenses, there is also a complete range of Carl Zeiss and Schneider Kreuznach lenses. The Carl Zeiss lens range encompasses focal lengths from 40 to 500 mm which can be extended to 1000 mm by means of the teleconverter. For the standard focal length, the Planar f 2.8/80 mm is used. The Distagon f 4/50 mm and f 3.5/60, as well as the Sonnar f 4/150 mm and f 5.6/250 mm may be used as standard interchangeable lenses. All these lenses have the same outer bayonet size VI for filters and lens hoods.

Interchangeable lenses for special areas of photography are: the Distagon f 4/40 mm as a wide-angle lens with an angle of view of approx. 90°, the S-Planar f 5.6/120 mm with special correction for close-up work, the Tele-Tessar f 5.6/350 mm and f 8/500 mm as high-performance telephoto lenses for sports, aerial and long-range photography, the Variogon 75–150 mm and 140 – 280 mm from Schneider Kreuznach as high-performance zoom lenses and the Schneider PCS Super-Angulon f 4.5/55 mm as a special shift lens with perspective correction for architectural photography and for extended depth of field in accordance with the Scheimpflug principle.

The most important accessories

A highly versatile accessory programme is available, expressly designed to widen the range of applications open to the user of a Rolleiflex 6002. This programme not only serves to optimize handling of the camera, it even makes it possible for certain special photographic results to be achieved at all. The entire accessory range of the Rolleiflex 6006 can of course also be used on the Rolleiflex 6002, with the exception of the interchangeable magazines.

A full summary of the camera system, including all accessory components, is given on pages 36-37.

Interchangeable backs

The interchangeable backs allow the use of 120 and 220 roll film in the 6x6 cm or 4.5x6 cm format. The Polaroid magazine with drawslide can be interchanged with the standard camera back and takes Polaroid film in the 8.3x10.8 cm (3 1/4 x 4 1/4") format. Effects of different settings and lighting on the instant-picture results of Polaroid films can be checked prior to taking the actual photograph.

Interchangeable finders

Four interchangeable finders, as well as six different bright focusing screens, ensure the ideal subject image is obtained in any photographic situation.

The *standard folding viewfinder hood* for waist-level viewing is fitted with an interchangeable viewing magnifier (+3 to -3 dioptres, visual magnification is 3.3 x). A sports framefinder is integrated and can accommodate an additional attachable framefinder for other focal lengths.

Two rotatable 45° and 90° *prism heads* give an upright, right-reading viewfinder image. They click into four positions, each turned through an angle of 90° and therefore offer comfortable viewing even if the photographer is situated unfavourably to the subject.

Designed for waist-level subject viewing, the rigid *magnifying head* is equipped with a focusing eyepiece offering a magnification of 2.5 x and dioptre adjustment from +0.6 to -2.1 dioptre values.

The eyecup may be removed as desired. This finder is specially suitable for close-up and macrophotography.

Bright matt screen with central wedge and microprism ring

Universal matt focusing screen with split-image wedge and microprism ring. The wedge provides most exact focusing on vertical lines, the microprism by the disappearance of shimmering image detail. The microstructured matt screen permits sharp focusing over the whole image area.

Fine ground glass screen

Fine matt ground glass screen for most exact focusing, especially in macrophotography, at all apertures and with more powerful focusing magnifiers. Particularly suited to creative photography where focusing aids can be obstructive to the photographer.

Bright matt screen

Screen with fine microstructure for full-area

focusing and unobstructed composition, also suitable for small-aperture lenses and for depth-of-field monitoring.

Bright matt screen with split-image wedge

Universal screen for best sharpness assessment with split-image wedge and matt screen. The wedge permits most exact focusing on vertical lines, for instance in architectural shots.

Bright matt screen with micropism spot

Universal screen for rapid shooting with micropism and matt area to permit exact focusing even in poor light. Sharpest focus marked by shimmer-free image.

Bright matt screen with clear spot

Special matt focusing screen for macrophotography and photo-micrography, with clear spot and graticule. Clear spot permits parallax-free aerial image focusing at very small apertures, for instance through a microscope. Graticule facilitates checking of the reproduction scale.

Extension bellows unit

The extension bellows unit is equipped with rack-and-pinion drive and focusing rack. Locking screws hold the bellows unit at the set extension required, which can also be read off a separate scale. Mounting to a tripod is done via a 1/4" or 3/8" tripod bushing. All automatic functions of the camera are maintained and transmitted when using the bellows unit.

Extension tubes

Extension tubes are available in lengths of 9, 17, 34 and 68 mm and may be used singly or in combination, or with the bellows unit and the retroadapter. All automatic functions of the camera are maintained.

Retroadapter

With the retroadapter, the range of applications in close-up photography open to the user of the Rolleiflex 6002 is widened considerably. This adapter allows lenses with focal lengths between 50 and 120 mm to be effectively used in reverse position, whilst maintaining and fully transmitting all automatic functions. One example of the advantages of the retroadapter: used in combination with the bellows unit and the reversed Planar f 2.8/80 mm lens, the photographer is given a reproduction scale from 1.8:1 to 3.5:1.

ME 1 multiple-exposure control unit

This electronic control unit enables multiple exposures to be taken (without moving the mirror or advancing the film), e. g. for timed shots of technical processes, movement sequences in sports photography, etc.

The ME 1 unit is linked to the camera via connection socket; it takes one to ten automatic multiple exposures in one sequence and the intervals between exposures can be adjusted from 0.1 to 1.5 sec or preset to any required time.

Timer

The timer is a multi-purpose timeswitch unit that can be used to make any desired number of exposures at preselected intervals. The timer makes exposures at intervals in an exceptionally large range (from 1 second to 59 hours, 59 minutes). It can trigger between 1 and 999 exposures.

The selected programme of exposures and time interval is permanently displayed. The number of exposures still to be made or the time used up in the interval can be read from an illuminated display. A programme already running can be cut short, and additional exposures can be made within the interval time.

The quartz-controlled time intervals are maintained with extreme accuracy and, with maximum deviations of 1/20,000 sec, they meet the highest scientific requirements.

Infrared remote control set

The infrared remote control set enables shutter release without lead for single shots or time exposures up to a clear distance of 60 m. A special circuit within the transmitter even allows a second Rolleiflex to be triggered at the same time the shutter of the first camera is released manually. Both the transmitter and receiver are lightweight, compact units and easy to operate. Power supply for the receiver is conveniently provided by the camera's battery pack.

Visual monitoring signals inform the user about the mode of transmitting and receiving, as well as about the opened shutter during time expo-

sure. A whole new range of interesting and hardly imaginable possibilities is now open to the photographic enthusiast – from the candid snapshot through a hidden camera to a documentary of camera-shy wildlife from a safe distance.

Rollei SCA 356 dedicated flash interface module

The Rollei SCA 356 flash module is the interface to all dedicated flash units of leading makes using the SCA 300 system. The dedicated functions are connected by simply mounting the flash unit with the SCA adapter in the camera's hot shoe. This ensures correct dedicated inputs for perfect flash exposures.

Rollei FM 1 flashmeter

This high precision photometer enables accurate internal flash metering with studio flash equipment or normal flash units on the camera. The FM 1 flashmeter is connected to the camera via the hot shoe. During the exposure, a sensor built into the camera body measures the light reflected from the film plane or the metering backplate and relays this information to the metering electronics of the flashmeter. A highly sensitive display instrument will then tell the user in EV factors whether the flash power was correct to achieve a perfect exposure. If the flash output was incorrect, corresponding adjustment to the EV value can be made by altering the aperture or flash power. Metering backplates available as accessories for spot or integral measurement can be used instead of the camera back.

Adapter ring E 67/bayonet size VI

Rolleigon f 2.8/80 mm and f 4/150 mm lenses for the Rolleiflex 6002 are provided with the standard E 67 screw thread for filter attachment and allow the use of all conventional filters and lens hoods. If however original Rollei filters and lens hoods with bayonet size VI are to be used on Rolleigon lenses, this is made possible with the aid of the adapter ring. The ring is also needed if the Rolleigon f 2.8/80 mm lens is used with the retroadapter.

Pistol grip

The pistol grip is provided with electronic release and is mounted to the camera via a quickscrew fitting. The wrist strap may be fitted either on the left-hand or right-hand side of the grip as required. With the aid of the extension side mounting kit, the pistol grip can be attached to the left or to the right of the camera. The pistol takes further grip accessories in combination with the side mounting kit and can be extended into a universal flash unit attachment system.

Quick tripod coupling

This coupling is for rapid mounting of the camera on a tripod. The quick coupling can remain on the tripod.

Summaries and tables

Setting limits

The step diagrams illustrated on page 35 show the working ranges of the interchangeable lenses in terms of the available apertures and shutter speeds. They present the important factors graphically and at the same time show the limits of the setting ranges.

The examples of reading off the shutter speed and aperture are given as step diagrams.

Interchangeable lenses	Full aperture	Focal length mm	Aperture range	Angle of view	Range setting from	Elements/components	Length	Weight
Rolleigon HFT	f/4	50	4-32	75° / 57°	0.5 m (20 in)	8/8	86 mm (3.39 in)	715 g (25.2 oz)
Rolleigon HFT	f/2.8	80	2.8-22	52° / 38°	0.9 m (3 ft)	6/5	63 mm (2.48 in)	570 g (20.11 oz)
Rolleigon HFT	f/4	150	4-32	29° / 21°	1.4 m (4.6 ft)	5/4	99 mm (3.9 in)	760 g (26.8 oz)
Distagon HFT	f/4	40	4-32	88° / 69°	0.5 m (20 in)	10/9	126 mm (5 in)	1475 g (52.03 oz)
Distagon HFT	f/4	50	4-32	75° / 57°	0.5 m (20 in)	7/7	96 mm (3.78 in)	840 g (29.63 oz)
PCS-Super Angulon ¹⁾	f/4.5	55	4.5-32	70° / 85°	0.5 m (20 in)	10/8	155 mm (6.1 in)	1650 g (58.20 oz)
Distagon HFT	f/3.5	60	3.5-22	67° / 49°	0.6 m (1.97 ft)	7/7	83 mm (3.27 in)	770 g (27.16 oz)
Planar HFT	f/2.8	80	2.8-22	52° / 38°	0.9 m (3 ft)	7/5	63 mm (2.48 in)	590 g (20.81 oz)
S-Planar HFT	f/5.6	120	5.6-45	36° / 26°	0.95 m (3.1 ft)	6/4	100 mm (3.94 in)	810 g (28.57 oz)
Varioagon ¹⁾	f/4.5	75-150	4.5-32	55° / 29°	1.8 m (5.9 ft)	15/13	180 mm (7.09 in)	1800 g (63.49 oz)
Varioagon ¹⁾	f/5.6	140-280	5.6-45	32° / 16°	2.5 m (8.2 ft)	17/14	238 mm (9.37 in)	1750 g (61.7 oz)
Sonnar HFT	f/4	150	4-32	29° / 21°	1.4 m (4.6 ft)	5/3	102 mm (4.02 in)	890 g (31.39 oz)
Sonnar HFT	f/5.6	250	5.6-45	18° / 13°	2.5 m (8.2 ft)	4/3	170 mm (6.7 in)	1150 g (40.57 oz)
Tele-Tessar HFT	f/5.6	350	5.6-45	13° / 9°	5 m (16.4 ft)	4/4	227 mm (8.94 in)	1650 g (58.2 oz)
Tele-Tessar HFT	f/8	500	8-64	9° / 6°	8.5 m (27.89 ft)	5/3	316 mm (12.44 in)	1995 g (70.37 oz)

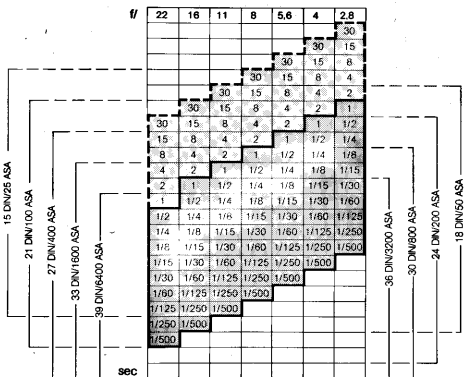
¹⁾ Lenses from Schneider Kreuznach.

Lenses with the inscription »made by Rollei« are made by Rollei Fototechnic GmbH under licence from Carl Zeiss, Oberkochen, W. Germany.
(Rollei-HFT® = is a registered trade mark)

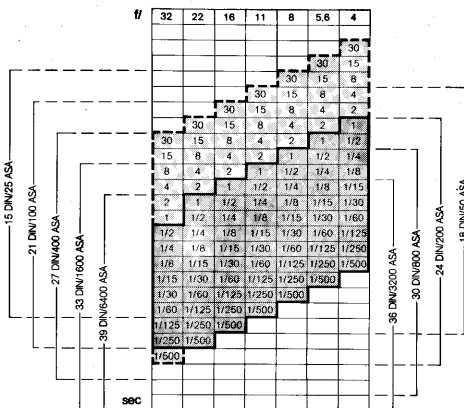
The Rolleiflex 6002 System

760 020	Rolleiflex 6002 with standard Rolleigon f 2.8/80 mm HFT lens	207 066	FM 1 TTL flashmeter
979 370	Distagon f 4/40 mm HFT	207 075	Backplate for spot metering
979 280	Distagon f 4/50 mm HFT	207 074	Backplate for integral metering
979 285	Distagon f 3.5/60 mm HFT	1)	Metz C70 dedicated flash interface module
979 050	Rolleigon f 4/50 mm HFT	2)	Dedicated Metz 45 CT 5 or 60 CT 2 flash unit
979 080	Rolleigon f 2.8/80 mm HFT	3)	Compact or handle type flash units (SCA 300 system) by Agfa, Braun, Cullmann, Metz, Osram and Regula
979 150	Rolleigon f 4/150 mm HFT	207 065	Rollei SCA 356 dedicated flash interface module
979 290	Planar f 2.8/80 mm HFT	971 010	Carrying strap
979 310	S-Planar f 5.6/120 mm HFT	760 097	Magnifying head
979 320	Sonnar f 4/150 mm HFT	760 096	Prism head, 90° eyepiece
979 330	Sonnar f 5.6/250 mm HFT	760 095	Prism head, 45° eyepiece
979 340	Tele-Tessar f 5.6/350 mm HFT	4)	Underwater housing (available from Ocean-Optics 6100 Darmstadt, West Germany)
979 345	Tele-Tessar f 8/500 mm HFT	208 992	FRC 1 foot-operated remote control
979 350	Variogon f 5.6/140–280 mm HFT	207 045	Infrared remote control set
979 355	Variogon f 4.5/75–150 mm HFT	207 041	Timer
979 270	PCS Super-Angulon f 4.5/55 mm	208 988	ME 1 multi-exposure control unit
979 225	2x Teleconverter	208 942	MRC 120 remote release
206 030	Filter, medium yellow (–1.5 EV)	208 985	RC 120 remote release
206 060	Filter, light red (–2 to –3.5 EV)	560 180	Bright matt screen with central split-image wedge and microprism ring
206 110	Zeiss Softlar I soft-focus attachment	560 100	Bright matt screen with clear spot
206 160	Filter, circularly polarizing (–1.5 EV)	560 050	Bright matt screen with split-image wedge
977 050	24x36 mm Slide copying stage	560 060	Bright matt screen with microprism spot
977 040	6x6 cm Slide copying stage	560 040	Bright matt screen
977 020	Adapter ring E 67 / bayonet size VI	560 030	Fine ground glass screen
209 410	Lens coupling ring	760 030	6x6 cm / 120 film back
975 000	Filter, medium yellow (–1.5 EV) for Distagon f 4/40 mm lens	760 031	6x6 cm / 220 film back
206 120	Zeiss Softlar II soft-focus attachment	760 032	4.5x6 cm / 120 film back
206 070	Filter, infrared	760 033	4.5x6 cm / 220 film back
206 040	Filter, green (–1.5 EV)	760 090	Polaroid magazine
206 050	Filter, orange (–1.5 to –3 EV)	972 050	Leather case for camera
206 080	Filter, R 1.5 colour compensating	208 700	Quick tripod coupling
206 150	Filter, UV	270 031	Flash extension kit I
208 950	Quick focusing lever	207 032	Flash extension kit II
206 105	Gelatine filter holder for Distagon f 4/40 mm	760 075	Spare film insert
977 020	Micrometer focusing drive	208 945	Pistol grip
977 290	Extension bellows unit	208 946	Extension side mounting kit for pistol grip
740 021	9 mm Extension tube	208 947	Dedicated flash extension kit for Metz handle type flash units
740 022	17 mm Extension tube	207 033	Quick tripod coupling component
740 023	34 mm Extension tube	208 953	NiCd power pack (spare)
740 024	68 mm Extension tube	740 045	Standard charger
974 550	Bellows lens hood	740 030	Quick-action charger
206 010	Lens hood, size VI, for Distagon f 4/50 and f 3.5/60 mm lenses	208 955	Car battery cable
206 020	Lens hood, size VI, for Planar and Sonnar 80–250 mm lenses	208 956	External battery lead
740 028	Retroadapter	970 965	Leather holdall case
206 100	Gelatine filter holder, size VI	972 482	Aluminium case
977 000	SL 66 extension bellows unit		
208 975	Front lens cap, size VI		

**Rolleigon f 2.8/80
Planar f 2.8/80**



**Distagon f 4/40
Rolleigon f 4/50
Distagon f 4/50
PCS-Angulon f 4.5/55
Distagon f 3.5/60
Rolleigon f 4/150
Sonnar f 4/150
Variogon f 4.5/75-150**



Planar f 2.8/80 mm or Rolleigon f 2.8/80 mm, 24 DIN film and 1/60 sec. are selected; the aperture measured is f 8.

Find 1/60 sec. in the vertical f 8 column. On the same horizontal line, 1/8 to 1/500 sec. lie in the dark grey (automatic control) zone. Vertically above these speeds the corresponding apertures f 2.8 to f 22 can be read off.

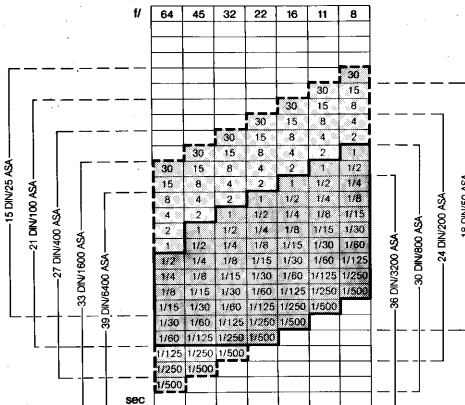
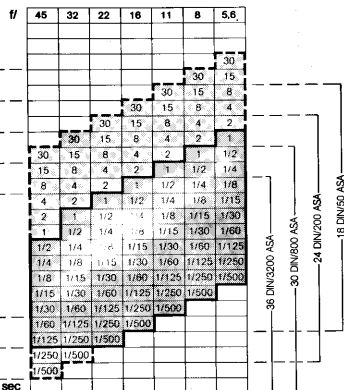
Sonnar 4/150 mm or Rolleigon 4/150 mm, 15 DIN film and 1 sec. are selected; aperture f 32 is necessary for the depth of field required. The measured value indicated on the camera is f 4.

Find 1 sec. in the f 4 column: in this horizontal line, f 32 is in the white zone. The adjoining time of 30 sec. is doubled, and a 60 sec. exposure is used with the »B« * setting.

* Reciprocity failure at low light intensity requires a further increase in exposure according to the film type.

S-Planar f 5.6/120
Sonnar f 5.6/250
Varioagon f 5.6/140—280
Tele-Tessar f 5.6/350

Tele-Tessar f 8/500



S-Planar f 5.6/120 mm, 18 DIN film and aperture f 45 are required for a close-up photograph. 1/8 sec. is selected, f 8 is measured. Horizontal extension from 1/8 sec. in the f 8 column produces a shutter speed of 4 sec. in the light grey (manual) zone under f 45.

1/60 With automatic exposure control, but range can also be used manually.

4 Manual setting range without automatic aperture control.

»B« setting; measuring range is exceeded.

21 DIN DIN/ASA sensitivity ranges: intermediate values should be rounded off towards a longer exposure time or wider aperture

The speed of 1 sec. is not included in the automatic range for technical reasons.



206 030



206 060



206 110



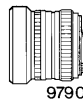
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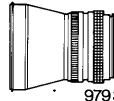
977 050



977 040



979 050



979 370



206 040



206 070



206 120



975 000



209 410



740 020



979 080



979 280



206 050



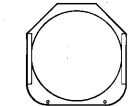
206 080



206 150



208 950



206 105



979 150



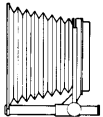
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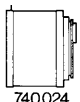
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979 290



974 550



740 024



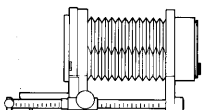
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740 022



740 021



977 290



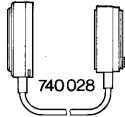
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206 010



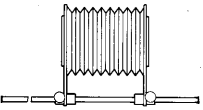
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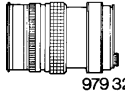
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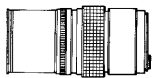
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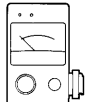
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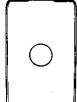
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979 330



207 066



207 075



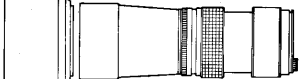
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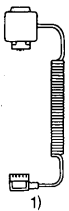
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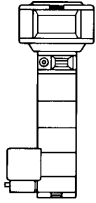
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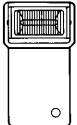
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1)



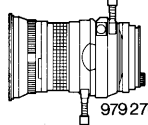
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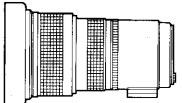
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207 065



979 270



979 355



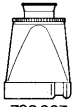
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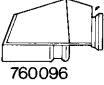
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971010



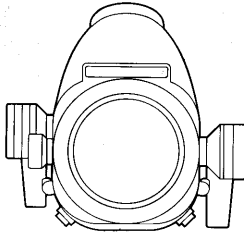
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760096



760095



4)



560180



560100



560050



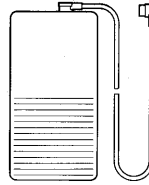
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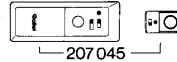
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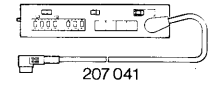
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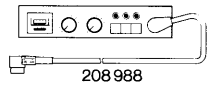
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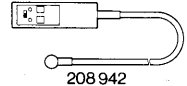
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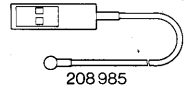
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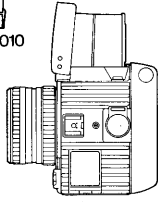
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208942



208985



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760030



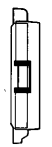
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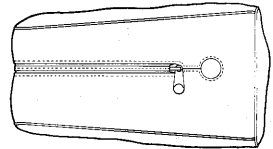
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760033



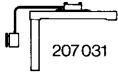
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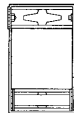
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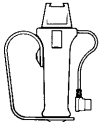
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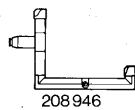
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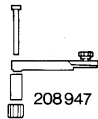
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208945



208946



208947



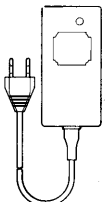
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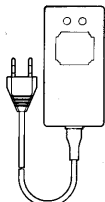
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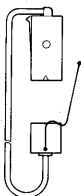
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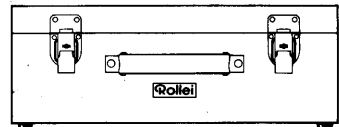
740030



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208956



972482

Troubleshooting guide

Problem
Film does not advance to frame 1
No aperture indication on the lens
Battery discharges prematurely
Viewfinder hood will not close
No viewing image on the focusing screen
Viewfinder image blurred
No adjustment available from light meter
Light meter produces a different result with a different focal length

Cause

Tight and loose coils in film leader

Automatic aperture control switched off

Lens not engaged

Battery discharged, battery defective

Fuse blown, operating switch on 0

Working temperature too low, battery defective due to improper care

Magnifier still raised

Framefinder in operating position

Mirror pre-released

Rotary shutter speed knob not set

Focusing screen in wrong position or not locked in place

Defective eyesight

Shutter speed set too fast or too slow

Unsuitable film chosen and/or very unfavourable lighting conditions

New measurement allows for the change in brightness distribution in the image frame

Remedy

Release once more. If necessary, wind film tightly by hand when loading

Set aperture ring to »A«

See that lens is firmly engaged

Recharge or change battery

Replace fuse, set operating switch to S or C

Warm or recharge battery: use interchangeable batteries and/or an external battery connection

Fold magnifier down

Fold framefinder out

Release the shutter and repeat light measurement if necessary

Engage shutter speed knob

Insert screen properly, (matt side downwards), press frame in firmly

Use correcting magnifier (+2.5 to -2.5 diopres available)

Choose another speed

Load with a different type of film; use a grey filter, artificial light or flash; if necessary fit a lens with a wider aperture range

No action necessary (changing the angle of view alters the image frame and produces a different brightness distribution)

Troubleshooting guide

Problem	Cause
Release not possible, but no error in prior light measurement	Battery warning indicator not observed, electronics switched off due to inadequate voltage
Camera switches off during continuous exposure	Battery voltage insufficient
Camera switches off during film winding-on or transport due to fuse blowing	Film base too brittle, e. g. after storage in refrigerator or in extreme cold
	Film wound on one-sided
	Film incorrectly loaded, film direction symbol not observed
Incorrectly exposed picture	Light changed after mirror pre-release
	High level of stray light entering through finder hood (especially with fluorescent lighting)
Picture underexposed	Taken using automatic exposure after mirror pre-release
Blurred picture	Film used with wrong back
Counter stops at 15 or 16	120 film used in 220 back
220 film will not wind up fully	220 film used in 120 back
1 or 2 frames not exposed at end of film	Film not wound on far enough when loaded

Remedy

Change or recharge battery

Use battery with maximum possible charge

Keep film (and camera) warm, replace fuse, carry charged batteries on your person

Replace fuse

(use only type 0.8 A/250 V)

Keep film even and parallel when loading, observe direction symbol in cartridge

In changing light do not use pre-release, then automatic aperture control operates right up to shutter release

Raise viewing magnifier, avoid direct light incidence; in difficult lighting conditions, close finder hood

Always set aperture manually after mirror pre-release

Only use camera with appropriate back

Release twice, to wind the film up fully. Blurring can be expected due to distortion of the flat film surface

Release about 20 times to transport film

Wind film on till arrow points to marker

Care of the camera

The Rolleiflex 6002 requires the same care as any valuable piece of equipment that is expected to be reliable over a long period. To clean, please use the following proven methods:

Remove dust with a soft camel-hair brush or air blower. If it is necessary to clean the outer surfaces of the lenses, breathe on them and then polish them with lens cleaning paper. For protection against static, breathe on them and allow the moisture to evaporate.

Take special care in cleaning the focusing screen: the rough lower surface should only be treated with a soft brush or air blower. Protect this side carefully from dirt and fingerprints.

Protect the camera from the long-term harmful effects of steam or damp.

The high humidity in tropical or subtropical areas can damage the metal parts by corrosion and the glass surfaces by fungal attack. Whenever possible, dry the camera frequently in the fresh air and sun. Keep the magazine and film guiding surfaces clean (particles of gelatine rubbed off the film are a breeding ground for fungus). When the camera is not used for long periods, store it in an airtight container with silica gel cartridges. Protect the camera particularly carefully from any kind of dirt.

Technical data

Camera type

Automatic motorized single-lens reflex camera with electronic control by integral microprocessor, TTL exposure metering (automatic aperture control), TTL automatic flash control and interchangeable backs.

Picture format

6x6 cm and 4.5x6 cm.

Film types

120 and 220 roll film for 12/24 pictures (6x6 cm) or 16/32 pictures (4.5x6 cm), Polaroid pack film for 8 pictures (6x6 cm).

Film speed

Adjustable on the camera: 15–39 DIN/
25–6400 ASA.

Exposure metering

Centre-weighted integral metering system by means of 3 large-area silicon photocells behind the swinging mirror. Electronic stray light compensation during the shutter release process. Automatic, switchable to manual aperture selection with 1/3 stop intervals. Combination test button for storing measured values.

Measuring range

Light values 3–18/3.2–100,000 asb/1–33,000 cd/m² using 21 DIN/100 ASA film with f 2.8/80 mm lens.

Shutter

Electronically controlled leaf shutter, 1/500–30 sec and B, operating through two integral linear motors.

Interchangeable lenses

Rollei bayonet engaging with camera body and 10-pin contact strip for pulse transfer for aperture and shutter drive. Rolleigon f 4/50, f 2.8/80 and f 4/150 mm lenses. Zeiss lenses from 40 to 500 mm, extending to 1000 mm by use of double tele-converter. Special Shift/Scheimpflug f 4.5/55 and Vario 75–150/140–280 mm lenses from Schneider Kreuznach, with full automatic aperture control, including use with bellows, retroadapter and extension tubes.

Release

2 microswitches at the front of the camera. Remote release connection.

Film transport

Motorized for individual exposures or continuous operation. Exposure frequency to 1.5 frames /sec.

Multiple exposure

Using the multiple-exposure handpiece MRC 120 or the multiple-exposure control unit ME 1 (up to 10 exposures per second with ME 1).

Reflex mirror

Swinging mirror with partially transparent multi-layer coating and pneumatic damping; can be pre-released.

USA Patent No. 3.780.635	25. 12. 72
USA Patent No. 3.792.485	12. 02. 74
USA Patent No. 1.104.656	01. 08. 78
USA Patent No. 3.967.298	29. 06. 76
USA Patent No. 4.162.439	24. 06. 79
USA Patent No. 3.724.350	03. 04. 73
GB Patent No. 1.433.814	25. 08. 76
Canada Patented	20. 12. 77
GB Patent No. 1.432.111	11. 08. 74
USA Patent No. 3.883.886	13. 05. 75
USA Patent No. 3.911.459	07. 10. 75

Viewfinder system

Standard folding viewfinder hood. Interchangeable with 45° prism head, 90° prism head or rigid magnifying head. Six interchangeable focusing screens.

Flash synchronization

1/500–30 sec. Accessory shoe with centre synchronizing contact and contacts for TTL automatic flash control in combination with automatic flash units and special adapter Rollei SCA 356 or Metz C 70, as well as Rollei FM 1 flashmeter.

Automatic flash

TTL flash measurement at the film surface by additional silicon photocells with viewfinder information on flash readiness and light output.

Power supply

Rapidly rechargeable sintered NiCd batteries (charge time up to 1 hour with the quick-action charger) for approx. 600 exposures (in normal room temperature).

Interchangeable backs

For 6x6/120 film, 6x6/220 film, 4.5x6/120 film, 4.5x6/220 film. Rapid loading by means of pre-loadable film cartridges. Automatic film threading and wind-up when connected to camera. Self-resetting frame counter. Film type indicator.

Polaroid magazine for film pack (8 exposures 6x6 cm).

Connections

14-pin universal socket for special remote release cable or control and accessory equipment. Cable release connection. Quick tripod coupling. 1/4" and 3/8" tripod bushes.

Working temperature range

From -20°C to +60°C. Special-duty versions for temperature extremes can be manufactured by Rollei Fototechnic GmbH on request.

Dimensions

108 x 112 x 138 mm / 4.2 x 4.4 x 5.4 in without lens.
153.5 x 112 x 138 mm / 6 x 4.4 x 5.4 in with f 2.8/80 mm lens.

Weight

Approx. 1230 g / 430 oz without lens; approx. 1800 g / 630 oz with f 2.8/80 mm lens.

