Rolleiflex SLX

The up-dated professional system

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Rolleiflex SLX

System SLR camera $2^1/_4 \times 2^1/_4$ in/6 x 6 cm with electronic control of all camera functions, interchangeable lenses with "linear motors" for shutter and aperture selection, interchangeable hoods and focusing screens as well as pre-loaded rapid change film holders.

Automatic aperture selection after presetting shutter speed. Selected aperture visible on the lens.

Electronically controlled exposure time with between-the-lens shutter $^1/_{500}$ to 30 sec., B.

Through-the-lens light metering by silicon photo elements, centre weighted average light reading over the image area behind the mirror.

Electronic compensation for extraneous light originating through the view finder.

Rapid change of film by preloaded film holders. No need to reposition take up spool.

Motorised film transport with automatic stop at first frame.

Motorised film transport after every exposure (single exposure or multi-exposures).

Frame sequencing time approx. 0.7 sec. (i. e. 3 frames every 2 seconds).

Automatic spooling off after the last exposure.

Power supply by interchangeable power pack incorporating rapid charge sinter cell Ni Cad batteries, rechargeable in approx. 1 hour using rapid charger. Capacity: approx. 1000 exposures, e. g. 80 rolls 120 film.

Hinged mirror, electric pre-release of mirror, pneumatic mirror damper.

Camera is designed for high-speed-multi-exposures of up to 10 exposures within 1 second on one frame. Preselectable intervals.

Rolleiflex SLX.
The design concept of the future.

For a number of years 35 mm cameras have been developed for amateurs and middle format cameras for primarily professional users in what appears to be quite a contrary degree of features and comfort – apparently under the force of certain regularity.

If TTL light metering, aperture or shutter speed priority, motor drive, shutter speeds in the long time range, etc. are an obvious „must" for some time already for 35 mm cameras, a technical progress for the professional application of the tool „camera" in the middle format only seems to have taken place very limited.

Apparently an extensive display of operating elements were considered identical with the ability to „get into the upper circles of photography". Possibly, because the great photographers of previous years achieved their outstanding performances with a maximum of manual ability? It is certainly permissible to state at this stage that a large number of those photographs which we still admire today did not result from the cameras used but were made in spite of devices in many aspects rather circumstantial. Good photographs are not made by the camera but by the creative phantasy of the person behind the camera. By the talent to condense relations, colours and shapes into the tight rectangle of a view finder. To see things and to hold them at the right moment.

Under the provisions to supplement the high quality characteristics of a middle format camera with all meaningful features of a high standard 35 mm camera, Rollei has developed the Rolleiflex SLX. And since this camera could not have been constructed on existing technique anyhow, taking the objections into consideration, the SLX contains constructional solutions which will certainly be the guideline for some time to come for what will be developed in the camera field in the future.

When the Rolleiflex SLX was developed the Rollei designers and technicians were set a major and complex task. The goal was to create a 6x6 camera which was both completely different and better than all the rest. It was to embody all that the medium format photographer had wanted for years – an accurate, practical and versatile camera with automatic exposure and film transport facilities. For this development work Rollei provided the full armoury of progressive camera technology and the latest electronics. In many cases, completely new technical ground had to be broken. For example, the solution found by Rollei for the drive for the shutter-speed and aperture mechanism was a linear motor – never before used in camera manufacture – placed inside the lens between the rim and the barrel.

When the Rolleiflex SLX appeared on the market, connoisseurs and experts were of the same opinion: this instrument was built with the camera technology of the future. Indications of this were not only the linear motors, but the integrated motorised film transport, plus the additional feature of a 14-terminal external outlet. This latter paved the way for the application of modern electronics and new technologies in the development of new kinds of ancillary equipment, and thereby a camera system of the future with limitless possibilities of extension. It was thus more than just a new camera that was developed, but an unconventional and fascinating instrument, a fully electronic, medium-format camera system in a class of its own, an undisputed fact which is borne out by the verdict of the technical press.

In this brochure we introduce the Rolleiflex SLX professional system with its new features. The fact that we did not have to make any modifications to the camera itself we consider to be firm evidence of the correctness of its future-oriented design concept.

The SLX is the most advanced Camera on the Market today.

The View Finder System.

On the bright focusing screen one sees the subject, the right way up in original size. A split image range finder, micro prism ring and the grid lines are all aids to the focusing, alignment and orientation. In addition to the focusing screen LED's give indication of over- or under-exposure and warn of low battery charge.
The universal view finder hood is interchangeable with a prism finder or a magnifying hood. Naturally the screens too are interchangeable.

The Optical System.

The proven Zeiss lens construction, manufactured in Rollei-HFT quality has been maintained. The electrically controlled function of the aperture mechanism and the central shutter system is new and has been developed by Rollei solely for the SLX lenses: The aperture as well as the shutter is operated by integrated linear motors. As a standard lens range the focal lengths 50 mm Distagon, 80 mm Planar, 150 mm Sonnar and 250 mm Sonnar are available. The lens programme is supplemented by a 40 mm Distagon f/4, 120 mm S-Planar f/5.6 and 350 mm Tele-Tessar f/5.6.

The Power Pack.

For the power supply of the motor drive, the automatic exposure and the speed/aperture function a compact power pack is used. A rapid recharge NC battery which contains a spare fuse. After rapid charging of one hour approximately 1000 exposures are available. LED control indicates in the view finder when the power reserve is down to 40 exposures. At a voltage drop below the safety mark all camera functions are automatically switched off.

Switch it on, select the Shutter Speed – focus and shoot – focus and shoot . . .

The Film Loading System.

Pre-loadable film holders provide film changing in seconds. Inexpensive pre-loaded film inserts which do not even require the changing over of the take-up spool. A newly inserted film holder is automatically wound to frame one after pressing the release. After the twelfth or twentyfourth exposure the trailing end is automatically wound off.

The Automatic.

With regard to the difference of opinion between shutter speed priority or aperture priority, Rollei after careful anylysis of professional photographic requirements have chosen a shutter speed priority system. The shutter speed ranges from 30 seconds to $^{1}/_{500}$ second.

Main Switch.

All camera functions are switched on and off by a knurled rotating main switch. In addition on the same switch one sets either for single or continuous exposures.


Rolleiflex SLX
Planar 1:2.8 f=80mm

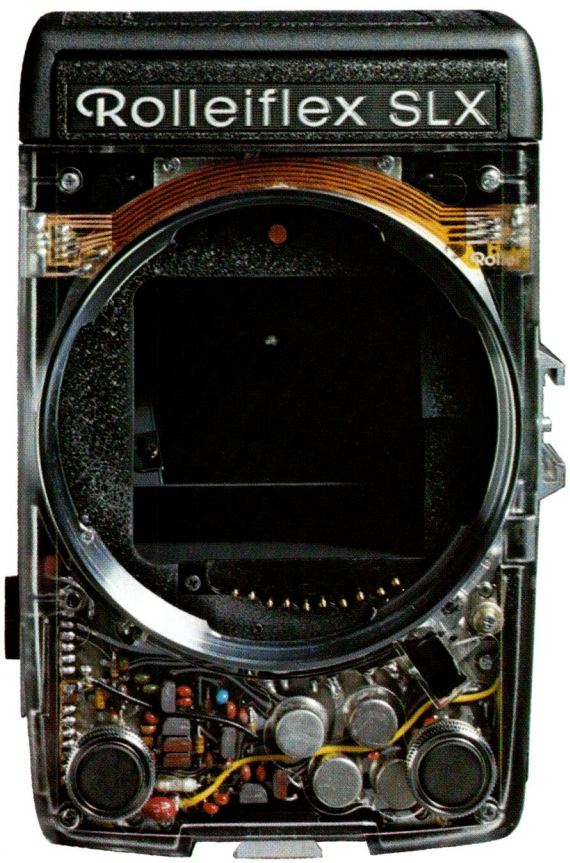
. . . and this is Rollei's Solution for all other operating Functions: Electronics instead of Mechanics.

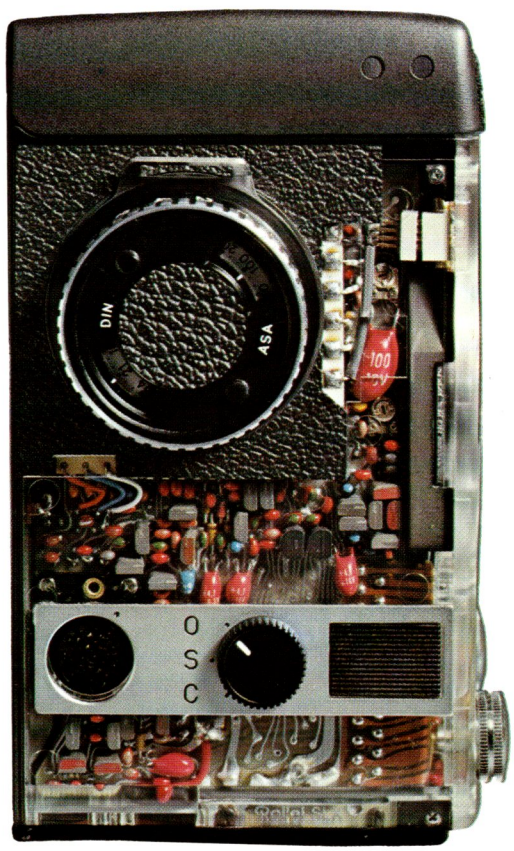
Linear Motor I for the control of the shutter speeds instead of a mechanical retard and gear assembly.
Linear Motor II for the control of the aperture function instead of mechanical operation.
IC Chip as central part of a computer for the control of the automatic functions of mirror pre-release, light metering, extraneous light compensation and film transport instead of separate manual operation of these camera functions.

14-terminal electric socket for remote control by cable or radio and multi exposure control system.
Release by choice on the right or the left side of the front of the camera (we have also thought of left-handed people).
Aperture preview key for selective adjustment of exposure time, battery check, under/over exposure indication, measuring limit indication or control of the aperture.

10-terminal hard gold plated contacts for aperture and shutter functions instead of levers and rods which are easily damaged.

In addition a hot shoe with centre contact or Rollei locking synchro cable connection. Remote cable release socket. Obvious items like speed insertion, quick release for camera bayonet and carrying strap connections. With regard to the applications of this camera we have refrained from building in a selftimer.





According to Aristotle „ . . . the Total is more than the Sum of its Parts".

A system camera of the category of an SLX has a lot in common with, for instance, a high efficiency automobile. It is not so much the question, which separate details and achievements went into it, but it is much more important that all the details add up to one durable, efficient system. In today's view the SLX meets all requirements somebody would demand who wants to concentrate on the result of his work, the picture – free from operational efforts. Not because he is not always in a position to grasp technical correlations and to operate separate functions, but rather that he masters the necessary control operations with absolute certainty so that few controls are sufficient for him to supervise the proper functioning of his camera.

In this connection it is, according to Rollei's opinion, a crucial step forward that by changing from mechanics to electronics the maintenance problems were reduced to a minimum. The wear of electric and electronic control and supervision instruments is much less than that of equally precise mechanical components. By using modules, in case of a necessary repair, service times are reduced significantly.

The simple presentation of the operating sequence of the control functions and of the computer operating sequences inside the camera, in parallel thereto, should illustrate here the thrill and value of the Rolleiflex SLX.

After switching the main switch on to either continuous or single exposure, the LED display on top of the focusing screen will indicate a possible critical low voltage condition of the power pack – as long as it does not light up

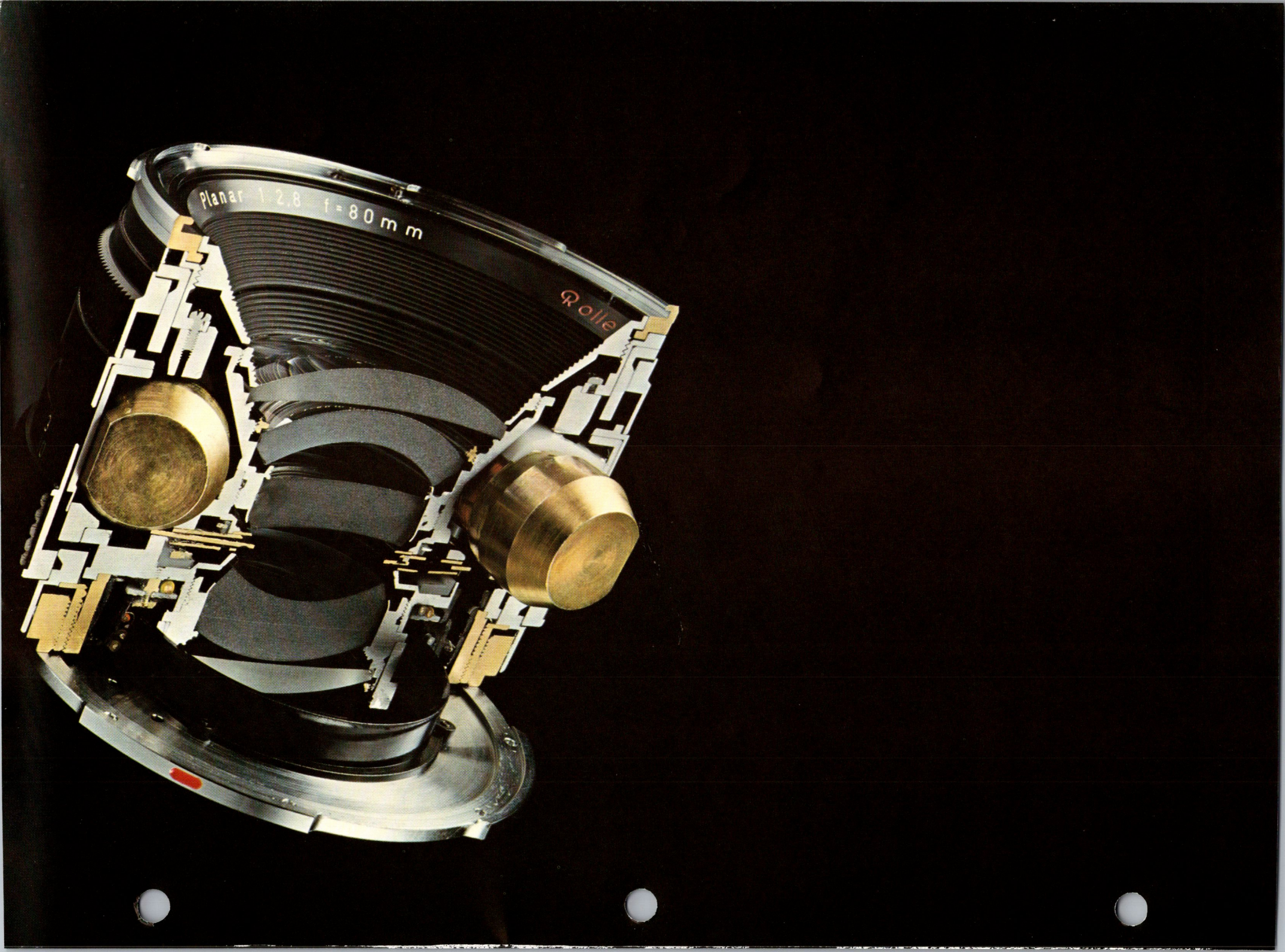
Following this Argument the Rolleiflex SLX System is more than the Addition of separate Features.

one may forget about the power supply. The next step is the preselection of a shutter speed suitable for the relevant situation. The upper LED on the right side of the view finder will tell you if there is no corresponding available aperture that will prevent overexposure (too high a shutter speed has been selected). The lower LED will indicate that the maximum available aperture is not sufficient to prevent under-exposure (too low a shutter speed has been selected). When pressing the aperture preview key you will perceive on the aperture scales on the lens the information at which aperture the lens will stop down at the time of operation at the speed selected. This is necessary of course to give indication of what depth of field is available.

When pressing the release, three silicon elements measure the extraneous light coming through the view finder and store this information in the computer, immediately after this the mirror is released and the silicon elements then measure the light coming through the lens. The extraneous light value is now corrected which gives the base light computation for the automatic aperture selection.

This means that the aperture control, in conjunction with the preselected speed, takes place only at the exact point of exposure. As far as the camera is concerned, therefore, all prerequisits are met to give maximum accuracy of measurement at the decisive point of exposure. After the exposure the hinged mirror is reset to its original position and the motor drive transports the film in readiness for the next exposure.

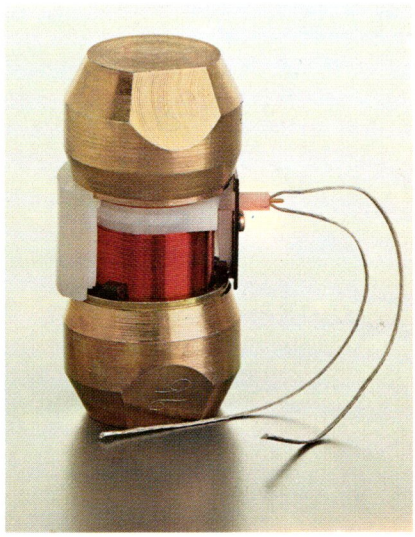
To enable corrective measures to be used in exceptional circumstances when it is obvious that the automatic operation is inferior to the photographer's experience, the automatic may be switched off and both shutter speed and aperture set manually.


Planar 1:2,8 f=80mm
Rollei

It is not important what is available – but that whatever is necessary – is available.

With this point in mind, the interchangeable lens system for the Rolleiflex SLX was developed. All lenses from 40 mm to 350 mm focal lengths have the same electronic features for exposure and aperture control. All lenses are coupled with the camera automatic in the speed selection range of 30 seconds to $^{1}/_{500}$ second. The optical side of the system is founded upon the experience in construction of world famous lenses. As long as the definition achieved by Zeiss lenses is greater than the sharpness of definition available on today's film emulsions, it is not necessary to embark on the risk of new and complex development in lens design.

As standard focal length the 80 mm Planar f/2.8 in Rollei-HFT quality is used. As standard interchangeable lenses there are available: The 50 mm Distagon f/4 HFT, the 150 mm Sonnar f/4 HFT and the 250 mm Sonnar f/5.6 HFT, all of them with the same filter mount, with the same external bayonet for sunshade. As interchangeable lenses for special exposure characteristics there are: the 40 mm Distagon f/4 as wide angle lens with approximately 90° coverage, the 120 mm S-Planar f/5.6 with special correction for close-up range and the 350 mm Tele-Tessar f/5.6 as a powerful tele lens for spots and airial photography.



The focal lengths 40 mm, 120 mm and 350 mm are of original Carl Zeiss construction, which are being assembled at the Rollei plant in Braunschweig together with the lens electronics.

To further extend the close-up range of the lenses, extension rings and bellows will be available, which will retain the automatic operation of the lenses in exactly the same manner as with direct coupling to the camera body.

We at Rollei believe that a compact optical programme which meets 99% of the photographer's needs, is more justifiable than an exotic range of focal lengths developed mainly for publicity purposes. The cost of developing an excessively wide range of lenses in exotic focal lengths would never be recovered and an overall cost calculation on the range would have to be made to the detriment of the few useful standard lenses. For better understanding: The development cost of an SLX lens up to production stage amounts to approximately £ 200 000 or $ 400 000.

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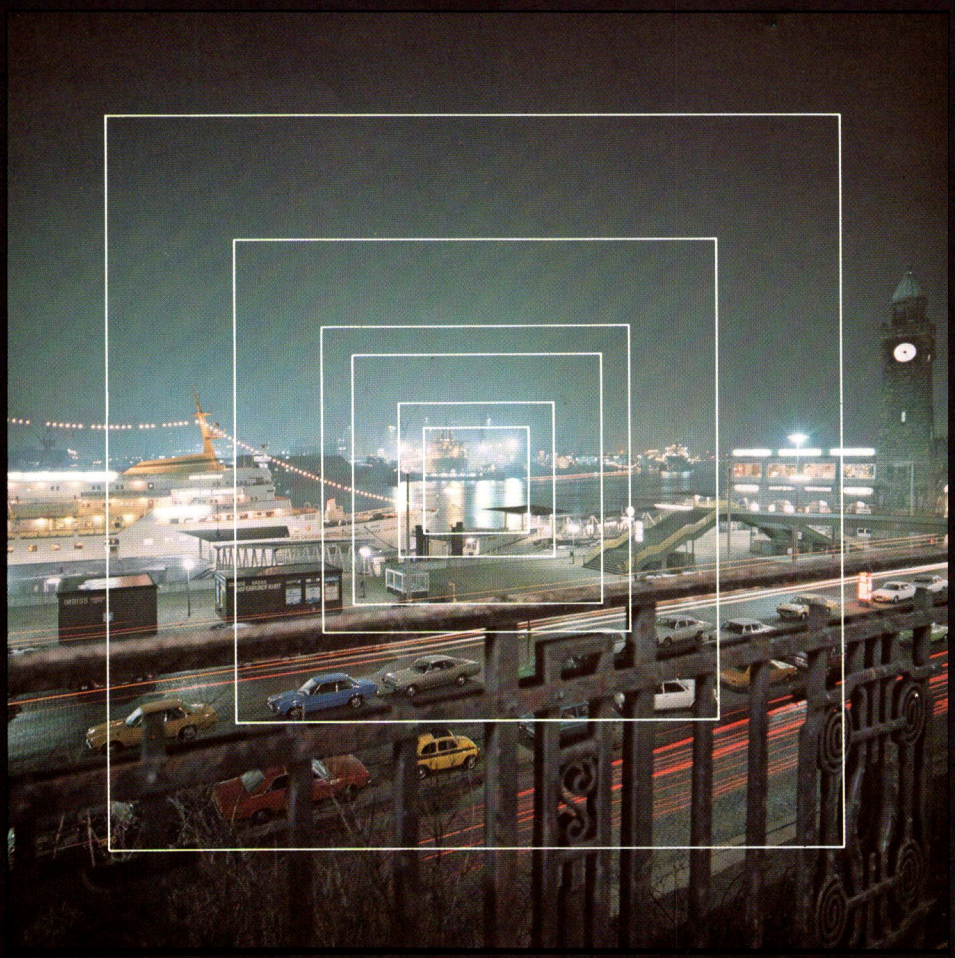
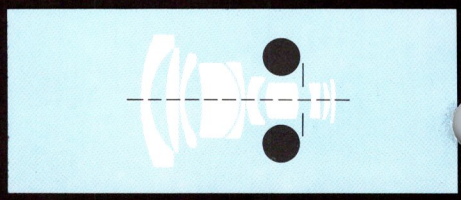
7 Focal Lengths for the Rolleiflex SLX. 7 Possibilities for individual creative Photography.

The interchangeable lenses have an automatic aperture operation which may be switched off and an integrated central electronic system.
Constantly variable apertures in automatic operation, graduated in $\frac{1}{3}$ stops in manual operation.
The relay of the control pulses for operation of aperture and shutter is also maintained when using bellows and/or extension tubes.



40 mm Distagon f/4 Carl Zeiss

Aperture range f/	4–32
Angle of view diagonal	88°
horizontal	69°
Elements/components	10/9
Focus	∞-0.5 m/20 in
Maximum diameter	102 mm/4 in
Length	126 mm/5 in
Weight	1475 g/51.12 oz
Filter size (Rollei bayonet)	VIII



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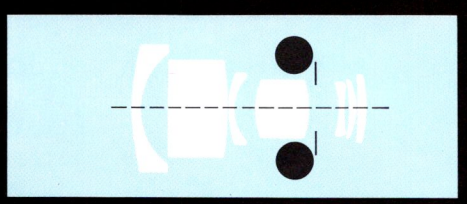
50 mm Distagon f/4 Rollei-HFT®

Aperture range f/	4–32
Angle of view diagonal	75°
horizontal	57°
Elements/components	7/7
Focus	∞-0.5 m/20 in
Maximum diameter	81.5 mm/3.20 in
Length	96 mm/3.78 in
Weight	840 g/29.63 oz
Filter size (Rollei bayonet)	VI



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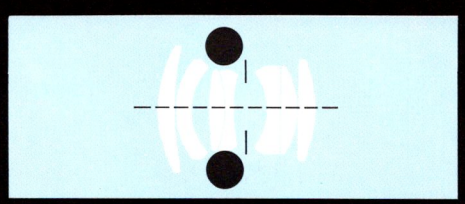
80 mm Planar* f/2.8 Rollei-HFT®

Aperture range f/	2.8–22
Angle of view diagonal	52°
horizontal	38°
Elements/components	7/5
Focus	∞-0.9 m/3 ft
Maximum diameter	81.5 mm/3.20 in
Length	63 mm/2.48 in
Weight	590 g/20.81 oz
Filter size (Rollei bayonet)	VI



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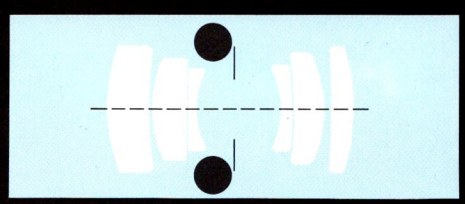
120 mm S-Planar f/5.6 Carl Zeiss

Aperture range f/	5.6–45
Angle of view diagonal	36°
horizontal	26°
Elements/components	6/4
Focus	∞-0.95 m/3.1 ft
Maximum diameter	81.5 mm/3.20 in
Length	100 mm/3.94 in
Weight	810 g/29.28 oz
Filter size (Rollei bayonet)	VI



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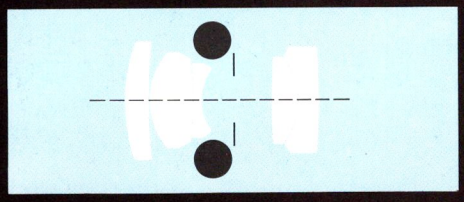
150 mm Sonnar* f/4 Rollei-HFT®

Aperture range f/	4–32
Angle of view diagonal	29°
horizontal	21°
Elements/components	5/3
Focus	∞-1.4 m/4.9 ft
Maximum diameter	81.5mm/3.20in
Length	102 mm/4.01 in
Weight	890 g/31.39 oz
Filter size (Rollei bayonet)	VI



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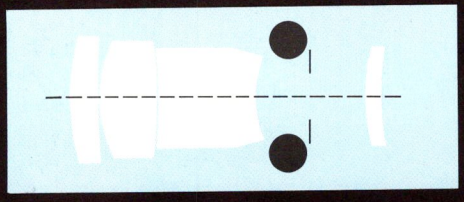
250 mm Sonnar* f/5.6 Rollei-HFT®

Aperture range f/	5.6–45
Angle of view diagonal	18°
horizontal	13°
Elements/components	4/3
Focus	∞-2.5 m/8.2 ft
Maximum diameter	81.5mm/3.20in
Length	168 mm/6.61 in
Weight	1150 g/42.33 oz
Filter size (Rollei bayonet)	VI



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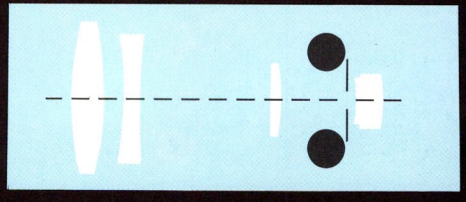
350 mm Tele-Tesar f/5.6 Carl Zeiss

Aperture range f/	5.6–45
Angle of view diagonal	13°
horizontal	9°
Elements/components	4/4
Focus	∞-5 m/16.4 ft
Maximum diameter	90 mm/3.54 in
Length	227 mm/8.94 in
Weight	1650g/58.20oz
Filter size	M 86 x 1



* Made by Rollei under licence from Carl Zeiss, Oberkochen, West Germany
Rollei-HFT® Registred Trade Mark

The optical Equipment of the Rolleiflex SLX. Focal lengths selected by Experience; proved Zeiss Developments, new, safe Electronics.

Creativity is the Job of the Photographer, Technique is the Job of the Rolleiflex SLX.

Besides the large format of exposure the large bright focusing screen is certainly a reason for the medium format cameras being preferably used by many professionals and serious amateurs.

On the focusing screen the photographer composes the picture, there he sees his imagination converted with all essential details: colour, shape, illumination, depth of focus, expression and movement.

This is the reason why with the SLX the focusing screen had to remain the central part of the camera. What is seen here remains the most important element. Measurement by control elements, indication of exposure time or aperture as well as warning indicators are of less importance.

They are all there with the SLX, but they remain inconspicuous, until they are needed.

Without effort and quite incidentally the photographer can read aperture and distance at the lens being informed at the same time of the selected exposure time by the shutter speed selector.

Two red, bright clear LED's warn directly on the right side of the focusing screen of exposure errors.

While the photographer remains free for his actual task, the electronics of the Rolleiflex SLX control all camera functions.

Concentration of the subject, that is the job of the photographer. Technical function and the control thereof – that is the job of the Rolleiflex SLX.

A third LED indicates reduced battery voltage. The operation is then only secured for 40 exposures – recharge is needed.

The Rapid Battery Charging System of the SLX may at this time be considered as the most modern, most efficient of its Kind.

The SLX is completely "electrified": All camera functions are supplied with energy from one interchangeable power pack. The power pack consists of special Nickel Cadmium batteries with Sinter electrodes and provides, therefore, rapid charging and maintenance free and very favourable behaviour at low temperatures.

The power pack capacity has been planned to adequately cope with all professional requirements – at normal temperature between 32° and 122° F/ 0° and 35° C. Approximately 1000 exposures can be made, sufficient for 40/80 120/220 films. When longer sessions are required, extra interchangeable power packs are available: After only one hour's charge the previously exhausted power pack provides approximately 1000 further exposures, so that practically uninterrupted work is assured.

Supplied with the camera is the rapid charger, a fully automatic charging device which switches from rapid charging to normal charging depending on the state of charge of the power pack and the temperature. Two indicator lamps on the charger indicate the mode of charge operating – green lamp is normal charging – red lamp is rapid charging. The function of the charger has been arranged so that with some exhaustion levels in the power pack, a 10–15 minute charge is sufficient to provide approximately 100 exposures.

Four Finder Systems – six focusing screens. An ideal (or an individual) Subject Impression for any Requirement.

Standard folding focusing hood (A)
For vertical view of image in the view finder; with interchangeable magnifier (+ 3 to – 3 dioptres) magnification x $2^1/_2$.

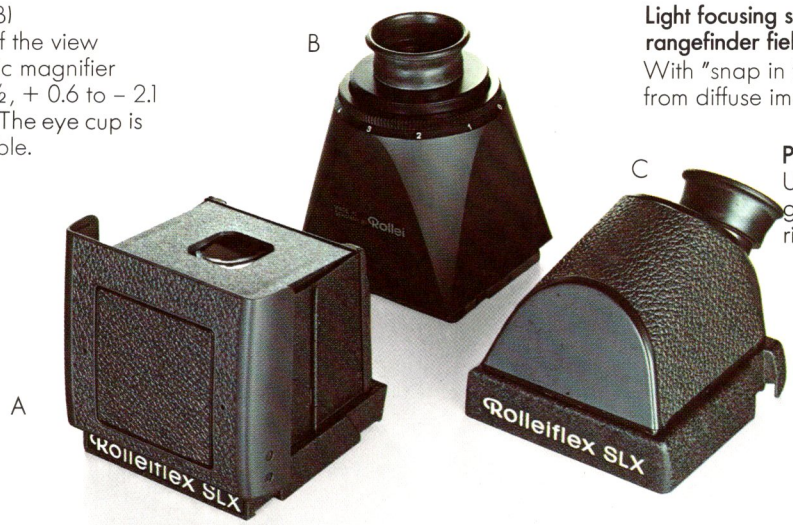
Rigid magnifying hood (B)
Increases the contrast of the view finder image, achromatic magnifier with magnification x $2^1/_2$, + 0.6 to – 2.1 dioptres eye correction. The eye cup is collapsible and removable.

Rotating Prism Finder (C)
With 45° or 90° angle of view, erect and laterally correct image. 4 lockable viewing positions at 90° graduations. Eye cup is collapsible and removable.

Light focusing screen with split image rangefinder, micro prism ring and engraved grid formation (standard equipment). Precise focusing also in bad light conditions (1).

Light focusing screen with central grid rangefinder field (2)
With "snap in focus": precise change from diffuse image to sharp definition.

Plain focusing screen (3)
Usage primarily in portrait photography. Without central mircro prism ring to minimise distraction

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Light focusing screen with central split image range finder wedge (4)
For exact and quick control of depth of field particularly useful for architecture

Light focusing screen with clear spot (5)
Specially developed for close-up and macro photography. With additonal cross hair and millimetre indication in the clear spot

Ground glass focusing screen (6)
Polished matt surface without additional markings, particularly suitable for control of depth in close-up and macro photography

Rapid "software" handling. Change battery in 1 sec, change film in 6 sec, load film in 60 sec.

The dynamic precision of the Rolleiflex SLX shows itself in these constantly recurring routine tasks. Every professional knows what this means in practice: the camera is ready for the next series of shots in a matter of seconds, before the model's smile dies or a laboriously prepared flower arrangement begins to droop. A big plus in portrait photography and, of course, in news reporting where literally every second counts. The SLX beats any miniature camera when it comes to changing films!

This extreme speed is made possible by the use of film holders that can be carried preloaded. By this means there is no problem when switching over from black-and-white to colour material and vice versa. The magazines come in 1-, 3- and 5-packs, each in the right-sized wallet. All in all, the ideal solution to an old problem.

The interchangeable battery was developed by Rollei as a plug-in power-pack and permits ultra-rapid exchange of the spent battery with a freshly charged replacement. Although a fully charged power pack will give you approximately 1,000 exposures.

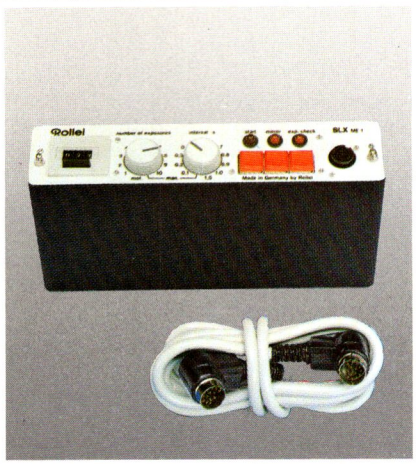
The SLX was, however, designed for the rigours of professional work. This often means very long series of exposures in order to obtain this maximum economic benefit from costly large-scale sets or high studio rentals and heavily booked models. Two interchangeable power packs, one supplying the camera and the other being continuously recharged, ensure a practically uninterrupted supply of power.

The rapid charging unit is part of the SLX range. It is fully automatic and switches over from rapid to normal charging on its own. Two indicator lamps show the method of charging selected. The practical design of the charging function is such that a charging time of 15 minutes is sufficient for a further 100 exposures.

In spite of the extreme speed, safety is again paramount. The power pack contains at the same time the fuse for the entire power system. There is a replacement fuse in the integral reserve compartment to meet all eventualities.

Speed and safety – Rollei precision down to the last detail.

Rollei ME 1 Multi exposure control unit. A great breakthrough in photography.



Equipped with the latest electronics, this control unit expands still further the already wide range of photographic functions of the SLX. With it, new, and previously unattainable areas of application are open to the photographer.

The new ME 1, used in conjunction with the SLX, enables you for the first time to take remote-controlled multi exposures in a sequence of ten shots at intervals of 0.1–1.5 sec without flash! (Standard flash appliances are inadequate for this purpose as they take too long to recharge.) And in special cases it is even possible to alter the time interval during a multiple exposure sequence.

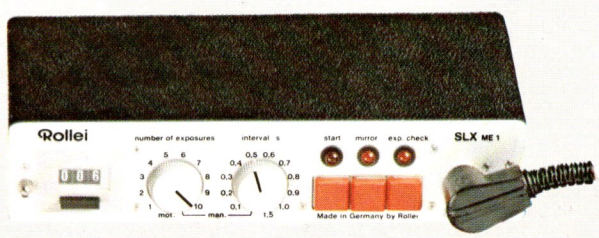
One further point: if the number of exposures is set to "1", the unit will function as a remote-control facility. It can then be used to meter, expose and transport single shots from a distance of up to 10 m/33 ft.

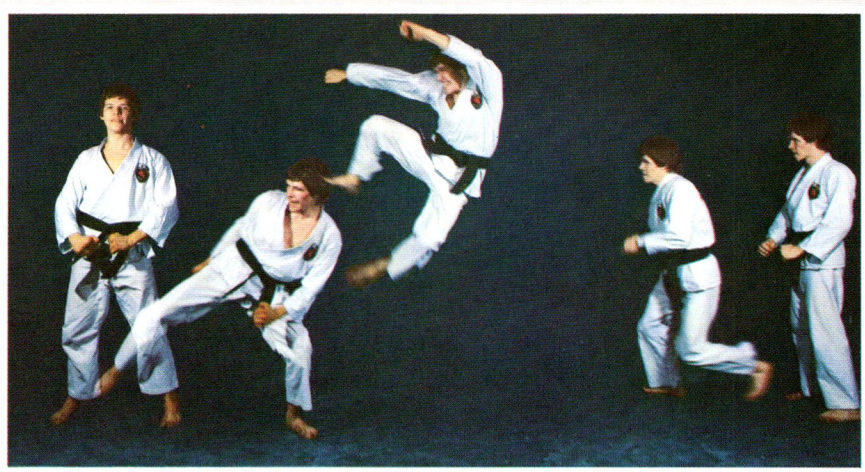
The phase photo of the Taekwon-Do fighter was taken with these two Rollei units. It required a conventional photographic studio with the usual sources of artificial light, plus some setting-up and a few polaroid pictures beforehand.

All the controls are visible from above: On the far left the automatic frame counter, then two knobs for the number of exposures and interval time, next to these three buttons with LED display for shutter release, mirror retraction and exposure control.

The SLX and ME 1 are connected by a 2 m/6 ½ ft long remote-control cable. A 10 m/33 ft long remote-control cable is also available as an accessory. A strap is supplied for easy carrying of the ME 1.

Our phase photo can only demonstrate one of the many possibilities of this electronic control unit. There are a host of others: for example, phase shots of gymnastics, ballet scenes in the theatre, motion studies in indoor sport, children and animals at play, machinery in various operating positions etc. We are certain that photographers will have many other uses for the ME 1.





A must for studio work.
Polaroid adapter, 4.5 x 6 cm back.

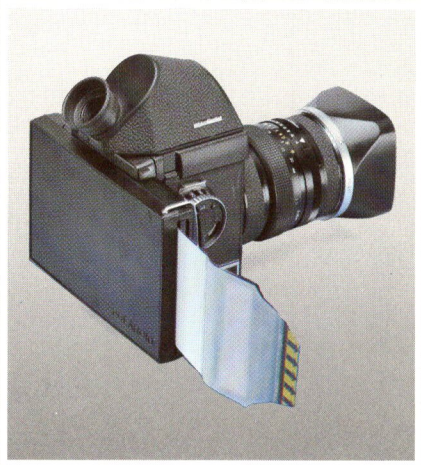
An important accessory which many SLX owners have been waiting for is now available. It is interchangeable with the standard back and takes commercially available polaroid material.

The polaroid adapter takes pack film formats 8.3 x 10.8 cm / 3¼ x 4¼" and gives eight 6 x 6 cm / 2¼ x 2¼" pictures. It was specially developed for the Rolleiflex SLX from original drawings and incorporating original parts by the Polaroid Corp., Cambridge/Mass., USA.

Polaroid film types 107, 667 and 665 (with negative) can be used for black-and-white exposures, depending on the intended application. The film types 108 and 668 are available as suitable colour material.

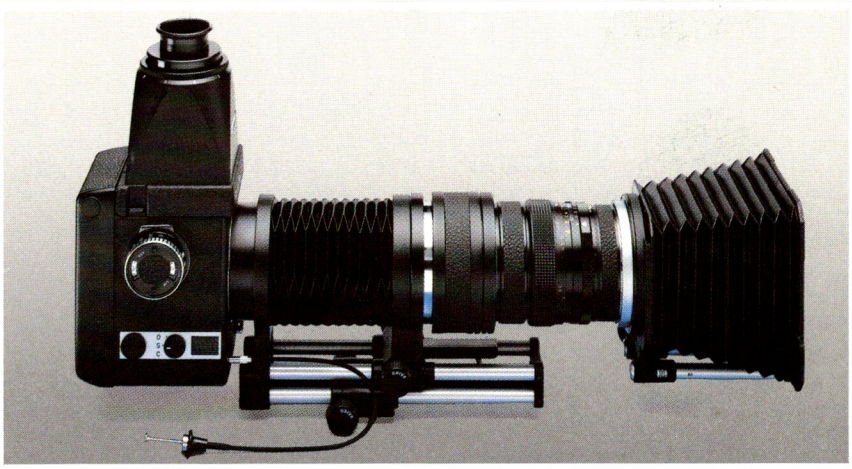
Polaroid exposures are now used for many applications: all aspects of black-and-white or colour instant picture photography; for example, press photos, photos of accidents, passport and driving licence photos, rush quotations with illustration, motion studies and exposures with instant analysis, initial and stage rehearsals and generally for particularly difficult or costly exposures where instant picture control yields optimum results.

A new feature of interest to many SLX customers: The interchangeable back in 4.5 x 6 cm / 1¾ x 2¼" horizontal format. This can also be fitted in place of the standard back. With it, 16 exposures can be taken on 120 rollfilm – 220 rollfilm provides as many as 34 exposures (because of the extra length). In this way, the Rolleiflex SLX practically equals the capacity of the 36 exposure-miniature film. The 4.5 x 6 cm back also comes with two masks to cover the focusing screen and the picture gate in the camera body.



Rolleiflex SLX for macro and table-top. The close-up accessories.

Extension tubes and bellows unit bring the camera's optical capabilities well into the macro range. Any of the extension rings can be paired up, and they can also be combined with the bellows unit. The electronically controlled automatic aperture setting function is of course maintained in full.



The precise light metering system of the Rolleiflex SLX ensures optimum exposure for even the most difficult macro shots.

SLX extension tubes are supplied in lengths of 9, 17, 34 and 68 mm – all with double Rollei bayonet to permit use in any combination and giving a maximum extension of 128 mm with all 4 tubes fitted. The SLX bellows unit provides extensions of 67 to 204 mm.

The extending bellows sunshade is an invaluable aid in complex lighting technology and provides efficient screening of all extraneous light sources. Markings for the lenses from 50 to 250 mm focal length show the unvignetted position.

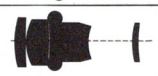
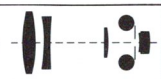
Rolleiflex SLX.
Practical additions to its system.

Many of the accessories in the Rolleiflex SL 66 range also fit the Rolleiflex SLX: lens hoods for 50 mm and for 80 – 250 mm focal length; mid-yellow, green, orange, bright red, infrared, R 1.5 filters and the Zeiss Softar I, II soft-focus lenses for filter size VI. Mid-yellow filters are available for filter sizes VII and VIII. The filter foil holder for the SL 66 is also compatible with the SLX.
A new item in the SLX range of accessories is the circular polarisation filter which was designed to suit the special light metering system.

In conjunction with the 90° prism finder, the pistol grip with electronic release forms an ideal combination for news photos. A further item from the SL 66 range of accessories is the tripod quick release clamp for ultra-fast removal and reattachment of the camera exactly in its former position.

A practical, wide strap attached to the rotatable carrying eyelets of the camera enables it to be carried without effort even after hours of use. The handy case really lives up to its name: with the front section folded down all controls are accessible, and the rear section can also be folded back for rapid film change. There is a sturdy aluminium case with variable compartments to take your choice of SLX equipment.

Lens Table

	Aperture range	Angular field diagonal/ horizontal	Components/ elements	Focusing m/ft	Max. diameter approx. mm/in	Length approx. mm/in	Weight approx. g/oz	Filter size (Rollei bayonet)
40 mm Distagon f/4 	4–32	88°/69°	10/9	∞–0.5/1.64	104/4.01	126/4.96	1475/51.1	VIII
50 mm Distagon* f/4 	4–32	75°/57°	7/7	∞–0.5/1.64	81.5/3.21	96/3.78	840/29.6	VI
80 mm Planar* f/2.8 	2.8–22	52°/38°	7/5	∞–0.9–2.95	81.5/3.21	63/2.48	590/20.8	VI
120 mm S-Planar f/5.6 	5.6–45	36°/26°	6/4	∞–0.95/3.12	81.5/3.21	100/3.94	810/29.3	VI
150 mm Sonnar* f/4 	4–32	29°/21°	5/3	∞–1.4/4.59	81.5/3.21	102/4.01	890/31.4	VI
250 mm Sonnar* f/5.6 	5.6–45	18°/13°	4/3	∞–2.5/8.20	81.5/3.21	170/6.61	1150/42.3	VI
350 mm Tele-Tessar f/5.6 	5.6–45	13°/9°	4/4	∞–5/16.40	90/3.54	227/8.94	1650/58.2	M 86 x 1

*) Made by Rollei under licence from Carl Zeiss, Oberkochen, West Germany
Rollei-HFT® Reg. Trade Mark.

Lens shades for f/50 mm, f/80–f/250 mm; filter size VI: medium-yellow, green, orange, light red, infra red, R 1.5.

Polarizing filter, filter foil holder; filter size VIII: medium yellow; soft-focus lens size VI: Zeiss Softar I, II.

Magnifying hood, interchangeable magnifiers for folding focusing hood + 0,5 / + 1,5 / + 2,5 / – 1,5 / – 2,5 dptr., rotating 45° and 90° prism finder, sports frame finder f/150, 250 and f/350 mm.

Light focusing screens with central split image range finder wedge, with grid, with wedge, with clear spot, without central micro prism ring; ground glass focusing screen.

Pistol grip with electric release hand grip with cable release.

Fast focus lever, remote control cable 5 m, remote control cable 10 m, multi exposure control device.

Extension tubes 9 mm, 17 mm, 34 mm, 68 mm; bellows unit, extending sunshade.

Rapid change film holders in plastic case, spare plastic case, housing cover, front lens cap, rear lens cap.

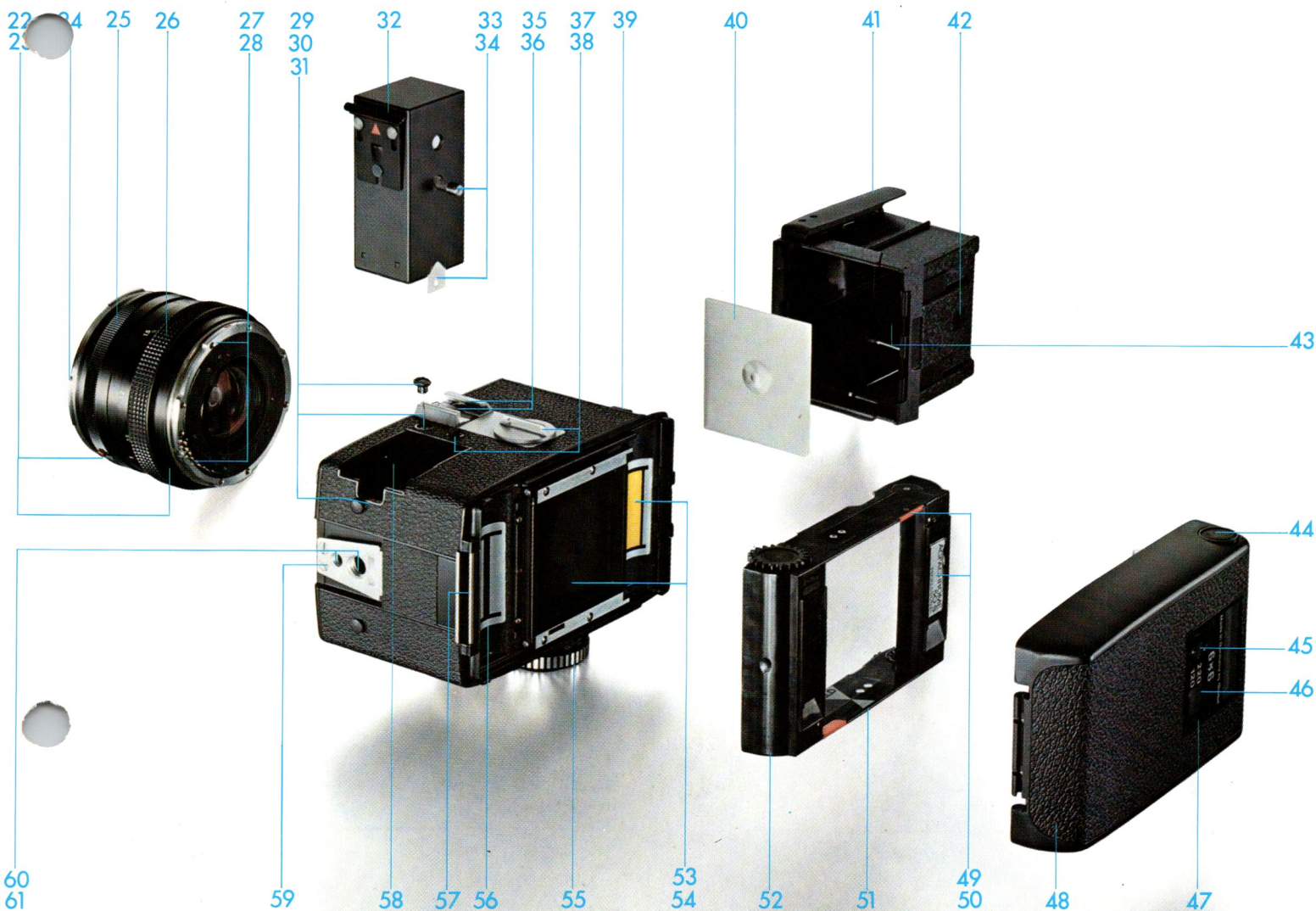
Everready case, aluminium case, special neck strap, tripod quick release clamp.

Polaroid adapter, NiCad battery in plastic case, spare plastic case, rapid charger with mains cable.

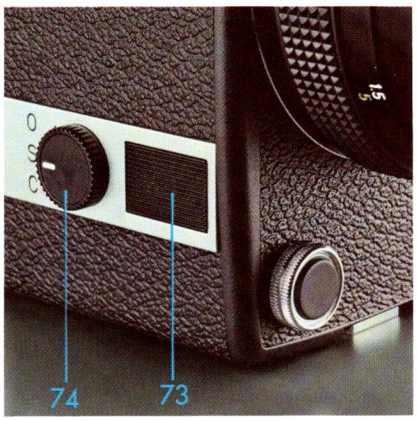
Individual Parts and Functions.

1 Release button for camera back, right
2 Window for indication of film type
3 Camera back latch
4 Film transport wheel
5 Symbol for film positioning
6 Neck strap holder, right
7 Shutter speed index, also red marker for indication of limiting values
8 Red LED for warning of under exposure
9 Interchangeable magnifier
10 Collapsible view finder hood cover
11 Mounting for finder mask f/150 and f/250 mm
12 Collapsible frame finder f/80 mm
13 Release knob for collapsible frame finder
14 Hinged frame with focusing screen
15 Red LED for battery voltage control
16 Fuse
17 Power pack, externally rechargeable
18 Red LED for warning of over exposure
19 Red locating point on camera bayonet
20 Pointer for aperture automatic
21 Aperture scale
22 Release knob for aperture ring
23 Interchangeable lens
24 Lens bayonet for filters and lens hood, etc.
25 Setting ring for selecting automatic and manual aperture
26 Focusing ring with m and ft indications
27 Lens bayonet mount
28 Electrical contacts for transmission of control signals to lens
29 Cover for synchron contact cable
30 X-synchronized cable contact for normal and Rollei plug fitting
31 Red indicator for power pack release
32 Locking latch for power pack
33 Spare fuse
34 Slide for spare fuse
35 Hot shoe for flash and other accessories
36 X-synchronized centre contact
37 Neck strap holder, left
38 Locking release for Rollei synchro cable
39 Release lock for view finder hood, magnifier hood or prism finder

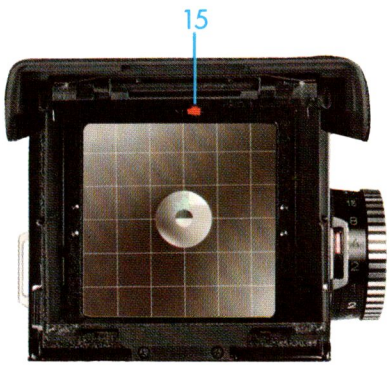
40 Focusing screen
41 Removable view finder hood
42 Rear diopter for frame finder
43 Magnifier holder
44 Release button for camera back, left
45 Rotary knob for setting frame counter
46 Index for frame counter
47 Frame counter
48 Exchangeable camera back
49 Film spool holding latch
50 Film tab holding slot
51 Index for start sign on film leader
52 Film holder
53 Locating for feed spool with symbol ⊢⊣
54 Film indicator window
55 Shutter speed selector knob
56 Location for take-up spool with symbol ⊢⊣
57 Camera back hinge
58 Compartment for power pack
59 Tripod plate for quick release
60 Tripod thread $^1/_4$"
61 Tripod thread $^3/_8$"
62 Window indicating automatic aperture by pointer or red zone at manual setting
63 Index tor automatic aperture and manual aperture selection
64 Depth of field scale
65 Red locating mark on lens bayonet
66 Focus index
67 Camera bayonet
68 Lens lock release
69 Shutter release button, left, removable
70 Shutter release button, right, removable
71 Electrical contacts for transmission of control pulses from camera computer
72 Cable release thread
73 Aperture preview key, depth of field control and battery tester
74 Main switch for multi exposure, single exposure, off = C-S-O
75 External and remote control outlet
76 Protective cap for control outlet
77 Hinged mirror
78 Film speed dial
79 Take-up spool
80 Hinge release button
81 Film feeler
82 Film pressure plate



Use and Operation.



Battery Test
Lock power pack 17 into compartment 58. Fold view finder hood 41 upwards and push aperture preview key 73. At sufficient battery voltage the LED 15 will not illuminate, if it does light up red the power pack needs recharging (see "Battery charging"). This control operates automatically during each exposure.



In case the battery voltage is insufficient for proper functioning, the camera will automatically switch off through an electronic voltage control circuit.

Battery Charging
Select appropriate mains voltage (100–240 volt AC. 50/60 Hertz) with voltage selector on rapid charger; the charger must **not** be used on DC.

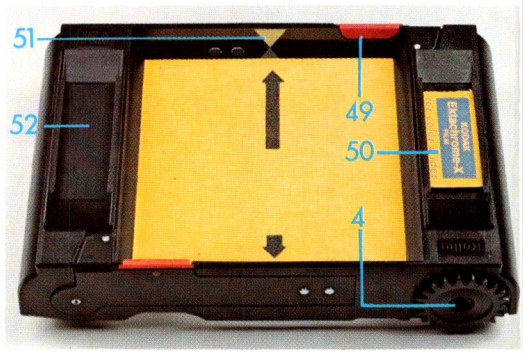
Press locking latch 32 upwards and remove power pack 17 from camera. Insert power pack into rapid charger, connect charger to mains via mains cable.

The rapid charger automatically controls the complete charging process, consisting of a constantly applied normal charge and an additional rapid charge based on the condition and temperature of the power pack. Two indicator lights show the type of charging on the rapid charger: Green = normal charging and red = rapid charging.

The total charge time is dependent on the state of the power pack (number of exposures, self-discharge) and amounts to approximately one hour after normal discharge. After 10 to 15 minutes charging there is sufficient power available for approximately 100 exposures. When the red indicator light on the charger goes out the rapid charge cycle is completed and the power pack is sufficiently charged for approximately 1000 exposures.

With the rapid charging switched off the normal charging continues. The power pack is charged to a maximum after a total charging time of approximately 3 hours. Occasionally exceeding this charging time by a few hours does no harm, but frequent repetition of overcharging should be avoided.

The ambient temperature at rapid charging should be between 32° and 122° F/0° and 35° C. If the power pack is heated by external influences rapid charging will only commence after a cooling off period (delay by built in temperature control circuit).



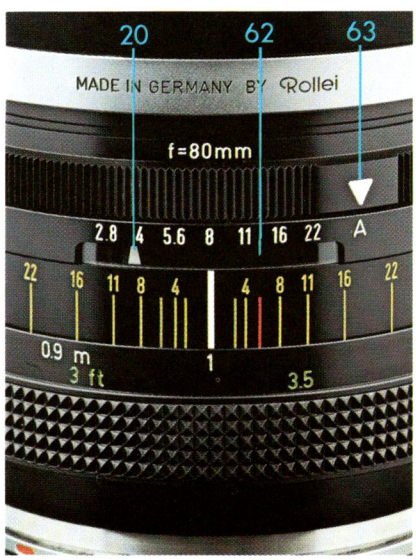
Loading of Film Holders
Press the release buttons 1 and 44, open camera back 48 and remove film holder 52.
Pull the red holding latch 49 outwards, insert film according to symbol 5 (leader paper black side inwards) let the red holding latch snap back into place. Insert leader paper into empty take up spool and wind the film by means of the film transport wheel 4 until the start sign on the leader paper is corresponding to index 51. Insert information tab from film box, as film type indication, into film tab holder slot 50 (tab must be inserted on the full film spool). According to requirement preload further film holders in the same way, and store in the plastic box provided.

Inserting the Film Holder

Open the camera back, insert the loaded holder so that the full spool corresponds with symbol ⊏⊐ and the empty take up spool with symbol ⊢. Close the camera back until the clips engage. Set the index 46 with rotary knob 45 in accordance with loaded film to 120 or 220. Rotate the film speed dial 78 to the correct film speed. Briefly press the shutter release button 69 or 70: Film is transported automatically to frame one, frame counter 47 will now show "1". Note: Press release button again if the number "1" does not appear (which is sometimes possible with some makes of film).

Selection of Shutter Speed

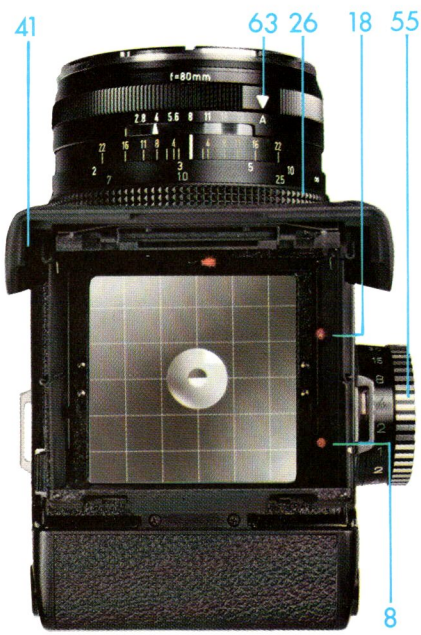
With automatic aperture selection: Rotate index 63 to "A", adjust desired speed with the shutter speed selector 55 to index 7. Fractions of seconds are white, full seconds and "B" are green. Intermediary speeds are not permissible.
Red marker in white index field 7 indicates that the selected shutter speed exceeds the operating range of the automatic; turn the shutter speed selector 55 until red marker disappears.



With manual aperture selection: Press button 22 and adjust setting ring 25 with index 63 onto desired aperture, aperture indicator 20 and window 62 are now covered by a red blank. Select suitable shutter speed and aperture either with separate hand light meter, or by previously briefly switching to aperture automatic as described above (possibly after relevant light conversion).

Focusing the Image and framing the Subject

Focus by turning the focusing ring 26; for interchanging the lenses press the lens lock release 68 upwards. Open the hinged view finder cover 41, then fold collapsible view finder hood 10 with magnifying lens 9 upwards.
If needed press collapsible frame finder 12 inwards which means the image would be viewed through diopter 42. Press possible additional view finder (for f/150 mm and f/250 mm) onto mountings 11.



Light Metering

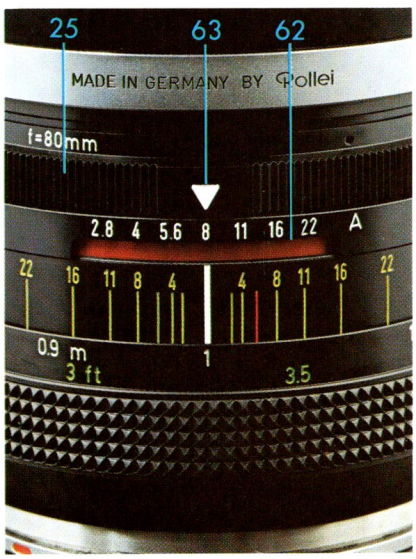
Switch on aperture automatic and press aperture preview key 73. The required aperture at the preselected shutter speed and selected film speed is now determined by an extremely fast light metering system and is adjusted continually, pointer 20 will indicate same in window 62.

At the same time warning indications are made by the red LED's in the view finder: The lower LED 8 indicates that the lens may not be opened automatically any further (danger of under exposure) – the upper LED 18 indicates that the lens may not be closed down any further (danger of over exposure).

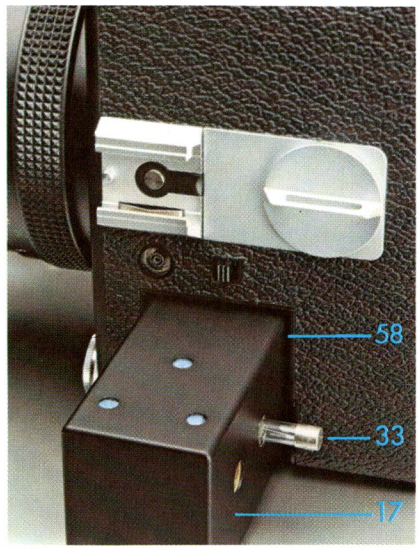
If the measuring range as such is surpassed both diodes illuminate at the same time. The positioning of the diodes also indicates the correct way to turn the shutter speed knob 55 for correction: Correct the preselected shutter speed by turning knob 55 (towards the illuminated diode), until both LED's are extinguished.

The preselected shutter speed is now within the measuring range. The following optimum exposure is now made with this speed and the approximate aperture automatically selected.

Exposure
With shutter speed priority
Press release button 69 or 70: Exposure is made automatically with preselected speed and corresponding aperture (measured and adjusted at the moment of release).



The indication of the limit of the measuring range is also working at the exposure and permits therefore the following exposures to be corrected should light conditions alter between measuring and release.
Without shutter speed priority
Release as above: Exposure made at preselected speed and aperture.



Changing Power Pack
Press latch 32 upwards and remove the exhausted power pack 17. Insert charged power pack with locking latch 32 down into compartment 58; press home locking latch until firmly engaged.

Interchanging Lenses
Push release 68 upwards, remove lens from camera bayonet by turning anticlockwise. Insert alternative lens with the red locating mark 65 to red locating point 19 and turn clockwise until lock is secured.

Changing the View Finder Hood
Open the hinged view finder hood, press both release locks 39 and slide it towards the front of the camera.
Push either the magnifying hood or prism finder in until locked.

Changing the Focusing Screen
After removing the finder hood pull both release knobs 13 simultaneously backwards and fold frame 14 upwards. Remove focusing screen 40. Insert interchangeable focusing screen (with mat side underneath) between flaps and holding springs. Close frame, pull slightly backwards to ensure locking on both sides.

Changing the Viewing Magnifier
Remove the hinged view finder hood, push the viewing magnifier 9 at the front edge inwards, and remove from the magnifier holder 43. Insert the interchangeable magnifier from the inside, below the magnifier holder. Interchangeable magnifiers are available as accessory from + 2.5 to – 3 diopters for eyesight correction.

Exchange of Fuse
Remove power pack, remove fuse 16 from clips. Open slide 34 and release spare fuse 33. Further spare fuses (M 1 A/250 V) are also available from electrical stores.

Changing Camera Back
Open camera back and remove film holder. Push knob 80 in the direction of the arrow, fold camera back downwards and remove from hinge 57. Insert exchange camera back or polaroid adapter onto hinge and at the same time push knob 80 with direction of arrow.

The Technical ABC.

The technical ABC
Lists interesting details of the various camera elements and gives practical hints for use.

Automatic Exposure Control
The measuring system determines the necessary aperture for the preselected speed during the release process and adjusts the aperture practically simultaneously via the computer controlled linear motor in the lens.
A pre-measuring with the aperture pre-view key is particularly to be advised under difficult light conditions to supervise the automatically controlled aperture.

Battery Capacity
The power pack contains special Nicad batteries with sinter electrodes, known for being trouble-free, for their rapid charge and their favourable behaviour at low temperature. The useable capacity decreases (like with all batteries) with a decrease of temperature; after completed rapid charge there is the possibility of:

at battery temperature
a) + 76° F / + 20° C
b) + 14° F / – 10° C

per battery charge
a) approx. 1000 exposures
b) approx. 50 exposures

A complete use of the battery at low temperatures requires a previous rapid charge and normal charge of a total of approx. 3 hours to charge the battery to a maximum.

At severe cold of below + 14° F / – 10° C the power pack is carried separately from the camera and inserted into the camera well tempered. In extreme cases (exposures in the Polar regions, refrigerating chambers or laboratories etc.) the camera must also be tempered resp. insulated.

Combined Measuring Key
For indication of under-or-over-exposure or limits of the measuring range, battery voltage control, memory reading and depth of field control through stop down to the either automatically or manually selected aperture.

Computer
A computer within the camera controls the functions of aperture adjustment, shutter speed, film transport, frame counter, movement and pre-release of mirror, exposure error indication, indication of measuring limits, battery voltage control, extraneous light compensation, film feeding, film take-up etc. The integrated circuit of the computer contains approx. 500 transistor functions in microelectronic mode on a silicion chip.

Control of Depth of Field
If the depth of field is predetermined for a certain exposure, the automatically selected aperture is ascertained by pushing the aperture preview key and the shutter speed selector is turned until the required aperture is indicated at the lens. During this process the depth of field may be judged on the focusing screen. With this method, the camera must be kept aimed onto the same object.

Determination of Memory Reading
A substitute subject (i. e. grey scale) is measured, the aperture preview key is held down and the actual subject is exposed with the reading thus obtained.

Exposure
possible as required:
left or right release button, hand release or remote release in remote control outlet, multi exposure control device in remote control outlet. All these exposure possibilities remain constantly in use and may be used either alternately or combined.

When the release button is removed a contact becomes visible which can be also used for exposure by means of a pointed object (i. e. ball pen).

Exposure Error Indicator
Two red LED's on the right side of the focusing screen alert of exposure errors, in case the automatic exposure control is unable to select a suitable aperture for the pre-selected shutter speed and the adjusted film speed, or in case the light intensity is outside the measuring range. At over-exposure the upper LED lights up, at under-exposure the lower one – when both LED's are illuminated this is an indication that the measuring range has been exceeded.

Exposure Release Lock
Switching off the release circuit by means of the main switch or removal of both release buttons prevents accidental exposure.

External and Remote Control Outlet
14-terminal electric socket for accessories and control devices (e. g. hand release, remote release, timer, radio control, light barrier etc.). When not in use the socket is covered by a cap for dust protection.

Extraneous Light Compensation
Extraneous light penetrating through the open view finder hood is taken into consideration when measuring the light and compensated in an intensity ratio of extraneous light: measuring light = approx. 20:1.

This compensation is active when viewing the image through prism finder, rigid magnifying hood and folding focusing hood with the focusing magnifier turned upwards (!).

If the image is viewed through the folding focusing hood without focusing magnifier, a direct light (for instance sun light, artificial light, powerful lamps etc.) onto the focusing screen should be avoided.

The folding focusing hood must remain closed at low shutter speeds or when exposures are controlled remotely.

Film Transport
by means of a rapid controlled electro motor automatically and immediately after every exposure. Transport of the film to exposure No. 1 and winding of the film end after the 12th resp. 24th exposure happens also automatically.

Flashlight
The camera is X-synchronized at all shutter speeds up to $^1/_{500}$ sec. The hot-shoe will take flash guns with centre contact. The cable contact has a 3 mm standard socket with a latch for Rollei synchro plugs. Dust protection by inserted locking cap when not in use.

Frame Counter
adjustable to 12 exposures 6 x 6 cm/ 2 ¼ x 2 ¼ in. roll film 120 or to 24 exposures 6 x 6 cm/2 ¼ x 2 ¼ in. roll film 220. Automatic resetting to zero when camera back opened. Frame counter indicator "0" = no film inserted, "white wedge" = film not transported to frame 1, "red area" = film trailer.

Interchangeable Film Holders
are stored in the available plastic case. When shooting rapid exposure series the holders are exchanged only and unloaded later. Loading and unloading of the holder should take place as usual at dimmed light or at least in the shadow of ones body.

The film tab inserted in the tab slot is to remind one of the film type in use. If the same film is used constantly the film tabs are inserted at both sides of the holder.

Interchangeable Lenses
are scheduled to be available with focal lengths of 40, 50, 80, 120, 150, 250 and 350 mm; further focal lengths are under preparation.

All interchangeable lenses have an aperture automation which may be switched off and an integrated electronically controlled between-the-lens-shutter. A 10-terminal electric board transmits the control pulses for aperture and shutter operation to two installed linear motors; this also applies when a bellows unit and/or extension tubes are used.

Light Focusing Screen
The square grid has a distance of 9.5 mm which determines the picture area for 4,5 x 6 cm / 1 ¾ x 2 ¼ in. vertical or horizontal frame resp. for 4 x 4 cm format by the intersection of lines.

Long Time Exposures
When removed both release buttons reveal a cable release thread. For tripod connection there is a $^1/_4$" and a $^3/_8$" thread. The tripod quick release at the camera base fits the Rollei tripod quick fastening and enables a speedy change between hand-held shots and exposures made with a tripod.

For extremely long exposures (T) the shutter is opened through normal release and held open for the desired exposure time through switching off the camera (main switch on "0"). After the exposure the camera is switched on again and released once more until the film transport is completed.

Main Switch
In position "0" the camera is switched off and the release blocked. In position "S" one shot is exposed at the time and the film transported forward to the next frame.

In position "C" the camera exposes and transports the film continuously until the release button is released.

When pressing the release button over the whole length of the film, the film is taken up automatically after the 12th resp. 24th exposure. The fastest possible exposure sequence (at corresponding fast shutter speed) is approx. 0,7 exposures/sec.

Measuring Characteristic
The spectral sensitivity of the measuring system has been extensively adjusted to the spectral sensitivity of commonly used colour and black/white films: the swivel mirror consists of special filter glass and corrects the measuring light on the photo elements.

Measuring Range
at 21 DIN/100 ASA film with f/2.8 lens exposure value 3–18 = 3,2–100.000 asb = 1–33.000 cd/m^2. The measuring range is exceeded when both LED's light up.

Metering System
Three silicon photo elements are located in the reflex carrier behind the partially transparent mirror and measure the light integrally centre-weighted with the emphasis on the lower half of the image.

Mirror Pre-Release
for vibrationfree exposure especially when using long focal lengths and/or extension tubes – bellows unit combination: The enclosed remote release is connected to the remote control outlet. The exposure is determined with the aperture preview key and the measured aperture adjusted manually. The keys for the mirror pre-release and for the shutter release are operated one after another.

Note: The mirror pre-release may not be set back, the release process must be carried out completely. The mirror pre-release is only meaningful at manual operation; no measuring result is achieved at automatic operation.

Multi Exposure Control Device
is available as accessory and enables multi exposures (without movement of mirror and without film transport) for e. g. reconciliation of technical processes and motion studies, sports scenes, animals etc.

The device is connected to the universal socket, exposure sequence may be adjusted either at optional length or from 20 to 500 ms. Between 1 and 10 exposures can be selected.

The device may be used at shutter speeds from $^1/_{500}$ to 30 sec., however, it is advised to use short speeds ($^1/_{500}$ – $^1/_{125}$ sec.).

Polaroid Adapter
This is available as accessory and may be exchanged against the standard camera back. The adapter may be used for Polaroid film types 107, 667 and 665 (with negative) for b/w and 108 and 668 for color. A separate instruction booklet contains all necessary details.

Remote Release
As accessory electrical remote releases with 5 m or 10 m cables are available to be connected to the remote control outlet. The remote release also enables the → mirror pre-release.

Sequence Shots
held by hand demand as short a shutter speed as possible ($^1/_{500}$ or $^1/_{250}$ sec.) to avoid possible camera shake.
For sequence shots roll film 220 is the most favourable. Preloaded film holders with the same film enable several exposure series of 24 frames each in quick sequence.

The use of spare power packs secures constantly sufficient power supply at very long exposure series.

Shutter Speeds
are selected electronically by the camera from $^1/_{500}$ – 30 sec. (incl. B). The mechanical adjustment of the speed is done by a between-the-lens-shutter in the lens, operated directly by a linear motor.

Data – Figures – Accessories.

Type:
Automatic motor-driven single lens reflex system camera $2\frac{1}{4} \times 2\frac{1}{4}$ in/6 x 6 cm with electronic control by integrated computer; through the lens metering and automatic diaphragm with shutter speed pre-selection; automatic film feeding and winding.

Features:
Rollei-bayonet with automatic contacts for SLX interchangeable lenses; exchangeable camera backs, prism finders and focusing screens; pre-loadable film holders for 12/24 exposures $2\frac{1}{4} \times 2\frac{1}{4}$ in/ 6 x 6 cm on roll film 120/220, automatically reset reversible frame counter with multi indicator, film indicator; 2 electric contact releases with cable release thread without point of resistance; hot shoe with synchro centre contact, lockable synchro cable contact, X-synchronisation 30–$\frac{1}{500}$ sec.; tracing of film length, interchangeable power-pack, 3-function main switch, motorized film transport for single frames and sequence shots, exposure frequency up to 0,7 sec; 14-terminal external and remote control outlet for special release cables or control devices and accessories, tripod quick release clamp, tripod thread $\frac{1}{4}$" and $\frac{3}{8}$", rotating neck strap holders.

Exposure Meter System:
3 large silicon photo elements corrected for spectral sensibility located behind the return mirror, centre weighted integral metering with electronic compensation for extraneous light during the release process, measuring range at 21 DIN/100 ASA film with 80 mm/f/2.8 lens exposure value 3–18/ 3.2–100.000 asb/1–33.000 cd/m^2, automatic diaphragm through computer processing of readings and aperture operation in the lens controlled by linear motor; automatic indication of under/over exposure and of measuring limits by 2 LED's, aperture preview key for determination of memory reading and manual under/over exposure indication and indication of measuring limits, additional indication of measuring limits in shutter speed selector; film speed adjustable on 15–39 DIN/25–6400 ASA.

Viewfinder System:
Removeable folding focusing hood with exchangeable viewing magnifier x 3,3, sports frame finder for f/80 mm with mounting for sports frame finder f/150 mm and f/250 mm; interchangeable against 45° prism finder or rigid magnifier focusing hood with adjustable eyepiece, visual magnification of viewfinder image at f/80 mm and folding focusing hood x 1,25; interchangeable light focusing screen with split image range finder, micro prism grid and square bar raster; control of depth of field by depth of field control key, pre-releasable return mirror with partially transparent multicoating and pneumatic mirror damper.

Power Supply:
Rapid change power pack with automatic contacts and safety catch, rechargeable sinter NiCad batteries 8 x 1.2 V with overload fuse M 1 A – 250 V; automatic voltage control at every exposure, manual voltage control through aperture pre-view key. Battery capacity for approx. 1000 exposures (76° F / 20° C).

Rapid charger 100–240 V A. C. 50/60 Hz with automatic rapid charge limit, control indication for rapid charge and normal charge, rapid charge period depending on battery condition, up to approx. 1 hour.

Interchangeable Lenses:
Rollei-bayonet with locking system inside the camera body, integrated electronically controlled between-the-lens-shutter $\frac{1}{500}$–30 sec. and B, 10-terminal electric board for transmission of control pulses for aperture and shutter operation; continuously variable automatic diaphragm with aperture indication, reversible to manual aperture selection in $\frac{1}{3}$ aperture settings; depth of field scale, focusing scale in m and ft, infra red index, front bayonet for filters, lens shade and compendium.

Dimensions:
approx. 5.4 x 3.3 x 4.1 in/5.4 x 4.3 x 4.3 in, 138 x 85 x 104 mm/138 x 110 x 110 mm overall, without lens;
approx. 5.4 x 3.3 x 6.4 in/5.4 x 4.3 x 6.4 in, 138 x 85 x 162 mm/138 x 110 x 162 mm overall, with 80 mm lens f/2.8.

Weight:
approx. 1250 g/44 oz without lens,
approx. 1800 g/63 oz with 80 mm lens f/2.8.