Rollei
fototechnic

Rollei Fototechnic GmbH
Salzdahlumer Straße 196
Postfach 32 45
3300 Braunschweig

**E** 989065/09-86/GG
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# Rolleiflex 3001
# User's manual


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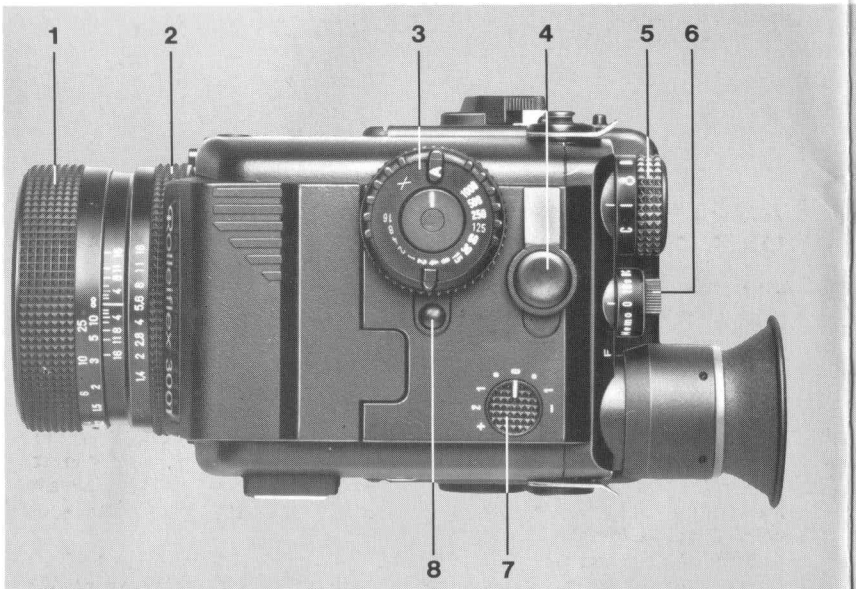


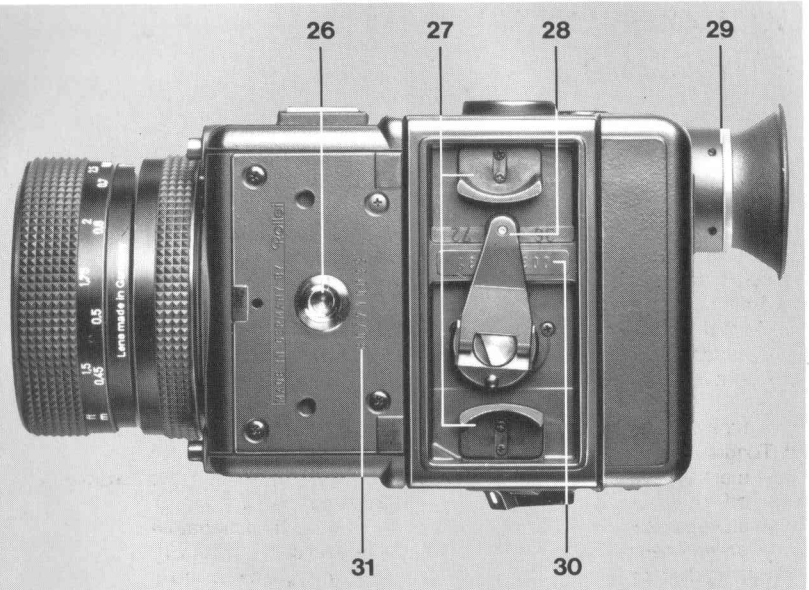


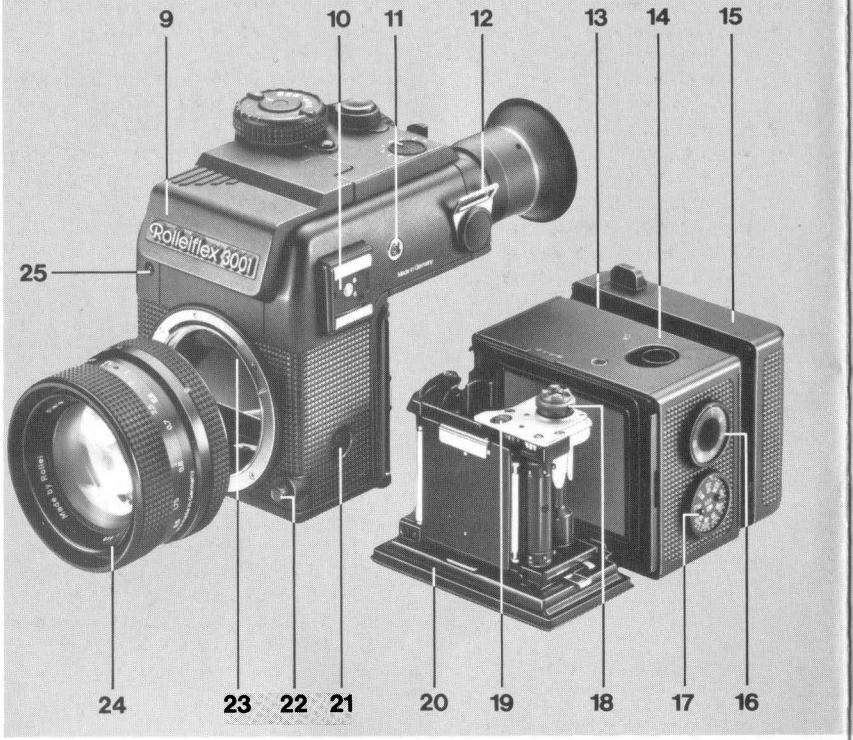


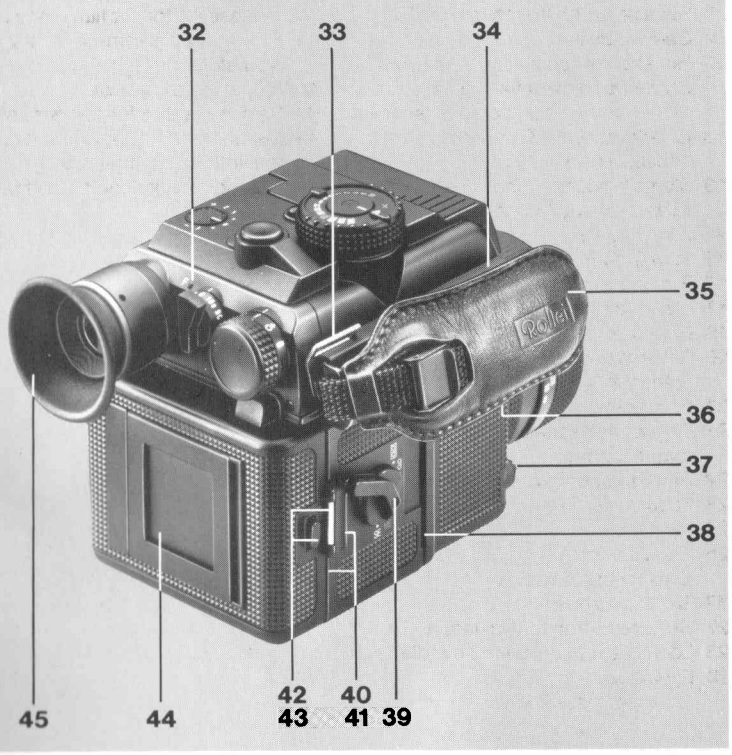

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# Introduction

When you chose the Rolleiflex 3001 you chose a camera which, together with its sister model, the Rolleiflex 3003, is one of the most professional 35 mm SLR cameras on the market today. As you begin to use the camera, you will learn to appreciate a number of features offered by virtually no other model:

- Interchangeable magazine. With this magazine, you can change film at any time without losing a single picture; from standard to high-speed film, from transparency to negative stock, from colour to black and white.
- Built-in high-performance motor. The camera is ready to shoot automatically, or it can be used to make fascinating series exposures at 3 frames per second.
- Two complete lens ranges with top-quality lenses from Zeiss, Schneider and Rolleinar, from super wide-angle and telephoto to zoom and shift.
- A comprehensive range of accessories. These accessories open up for you the whole world of creative photographic composition.

These operating instructions are intended to help you to get the best out of your camera. They should therefore be carefully observed at all times.

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# A word about the operating instructions

These operating instructions provide the user with the technical knowledge needed to get the best out of the technology offered by this camera.

To begin with, all the important components and functions are introduced.

Then everything the user needs to know about the Rolleiflex 3001 is described and illustrated in detail. The various operations are explained in order – from the preparation of the camera for use through to the removal of the exposed film.

The next section contains a set of practical tips. Additional information to acquire a better understanding of the camera functions is provided in the form of hints for special photographic situations.

In the event of operating faults – which even occur with the experienced photographer when taking a shot in a hurry or after a long period without using the camera – the troubleshooting guide will help you to trace the cause and find a suitable remedy in the shortest possible time.

The component numbers in the text and the illustrations always refer to the same part. Most of them are given on the pull-out chart. It is recommended that you read these instructions with the chart folded out.

Because the operating instructions go with the camera, they have been produced in pocket-size format so that they can be conveniently carried about. We recommend that you keep them handy whenever you use the camera – minor operating problems can usually be solved on the spot by consulting the manual. Besides, companions and colleagues will certainly want to have a look at it.

# Contents





# IMPORTANT SAFETY INSTRUCTIONS

When using your photographic equipment, basic safety precautions should always be followed, including the following:

Read and understand all instructions before using.

Close supervision is necessary when any appliance is used by or near children. Do not leave appliance unattended while in use.

Care must be taken as burns can occur from touching hot parts.

Do not operate appliance with a damaged cord or if the appliance has been dropped or damaged – until it has been examined by a qualified serviceman.

Position the cord so that it will not be tripped over, be pulled, or contact hot surfaces.

If an extension cord is necessary, a cord with a current rating at least equal to that of the appliance should be used. Cords rated for less amperage than the appliance may overheat.

Always unplug appliance from electrical outlet before cleaning and servicing and when not in use. Never yank cord to pull plug from outlet. Grasp plug and pull to disconnect.

Let appliance cool completely before putting away. Loop cord loosely around appliance when storing.

To protect against the risk of electric shock, do not immerse this appliance in water or other liquids.

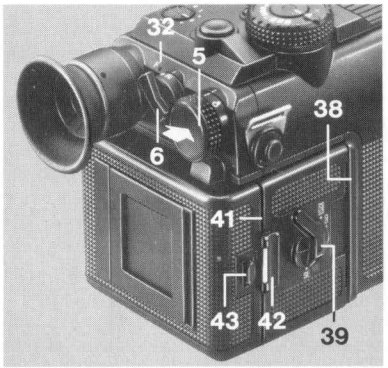
To avoid the risk of electric shock, do not disassemble this appliance, but take it to a qualified serviceman when some service or repair work is required. Incorrect reassembly can cause electric shock when the appliance is used subsequently.

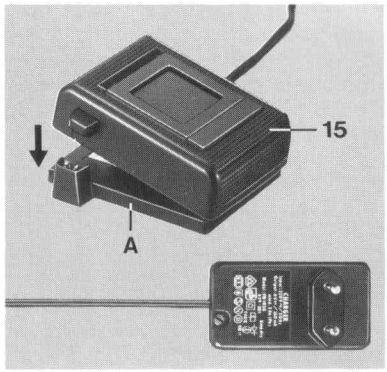
The use of accessory attachments not recommended by the manufacturer may cause a risk of fire, electric shock or injury to persons.

Connect this appliance to a grounded outlet.

# KEEP THESE INSTRUCTIONS SAFE

# Handling and use




The individual operations are described in sequence, from checking the power supply to removing the exposed film. Special cases which do not occur so frequently in routine camera use are dealt with in the »Practical tips«.

**Checking the power supply**
Remove magazine drawslide 42 from masking slot 38 and insert in storage compartment 41. Press in main switch 5 and set to »I«. Turn magazine switch 39 to the »ME« or »SE« position and set toggle switch 6 briefly to »BC«. If function indicator »F« 32 lights up, the power pack is sufficiently charged; if it remains dark, the power pack has to be recharged[1].

**Charging the power pack**
with the standard 3001 charger: push release button 43 forward and down as shown by the arrow, remove the power pack and press firmly onto the contact plate of the charger A supplied (with contacts touching). Plug into the mains (220 V/50 Hz).

After about 14 hours, the power pack is fully charged. A shorter charging time can be used (as and when required), but in that case no information on capacity can be given.

Overcharging by about 2 – 3 hours does no damage to the batteries; longer and/or frequent overcharging reduces their life.

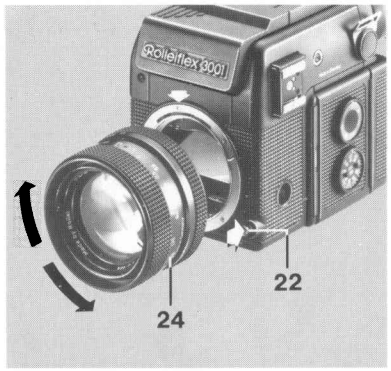
After charging, the unit should be unplugged and the power pack removed from the charger.

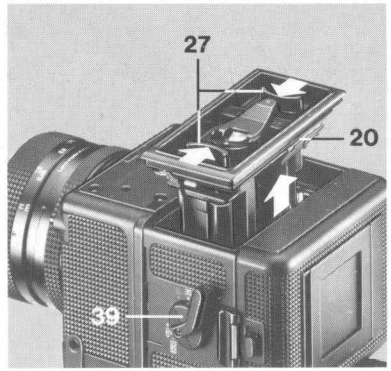
A constant source of power is especially important for the Rolleiflex 3001, since the camera cannot be operated manually. Thus it is recommended that you always have a second power pack at the ready as a replacement.
**Since all batteries gradually lose their charge even when not in use, the power pack should be recharged approximately every three months.**

[1]) Due to the technology of the batteries, this test is only quite accurate *prior* to using the camera. Following one or more exposures, the test can indicate »empty batteries«, i. e. the function indicator »F« does not light up. Several minutes should then be allowed to pass before carrying out the test again.








**Power pack capacity**
This is naturally reduced at low temperatures, as with all batteries. When fully charged, up to 1000 exposures can be made at a battery temperature betweeen 20° C and 25° C. At –10° C, the capacity is reduced to about 200 exposures.

In severe cold (below –10° C) the power pack should be carried separately from the camera; it should be kept warm and only attached to the camera shortly before use. It is strongly recommended that you keep a fully charged replacement power pack with you at all times.

Power can be also supplied to the camera by using a cable and a connector. In this way, the power pack can be kept warm in a trouser pocket.

In extreme situations (photography in Polar regions, cold stores, refrigeration laboratories), the camera must also be kept at a suitable temperature or insulated.

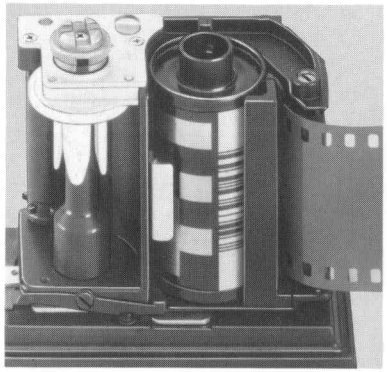
**Fitting the lens**
Briefly press release button 22 and remove the dust cap from the camera body by turning anticlockwise. Take both dust caps from the lens. Place the red spot on the lens bayonet against the red spot on the camera bayonet, insert the lens 24 fully and engage by turning clockwise.

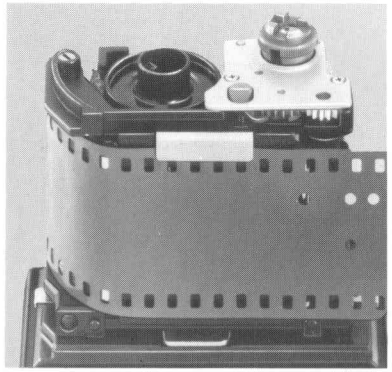
To remove the lens, press red button 22 again and withdraw the lens by turning anticlockwise.

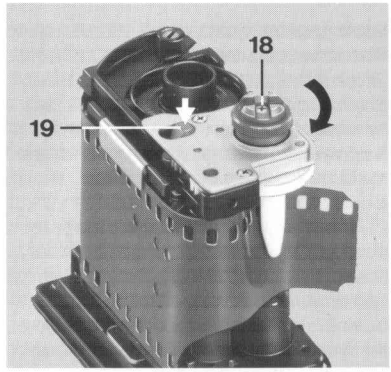
**Loading the film magazine**
All makes of film currently available on the world market can be used in any lengths. Bulk stock prewound in cartridges can also be used on this camera.

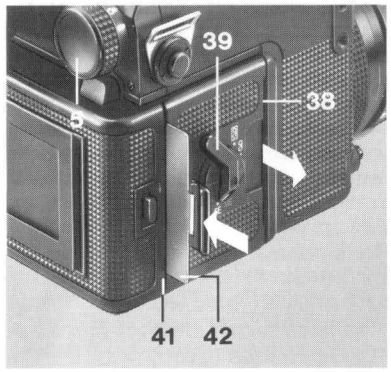
When a film is being loaded, the magazine can remain attached to the camera and the drawslide can be left in the masking slot.

**Taking out the film insert:** set magazine switch 39 to ⋐ , press the two release buttons 27 together and thus withdraw film insert 20.







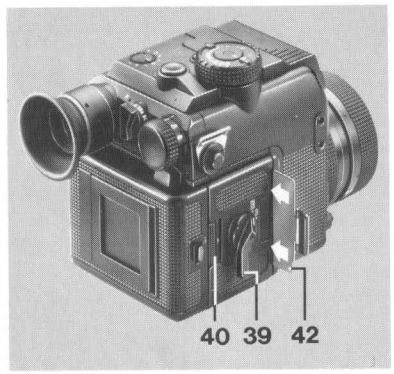

**Loading the film:** fit the flim cartridge into the insert (picture above) and pull out about 8 cm of film leader. The picture above right shows how the film is to be threaded – over the black pressure plate but *under* the shiny retaining strip. Pass the film over the sprocket roll and clamp behind one of the white clips (picture right). Turn the grey transport wheel 18 clockwise as far as it will go. If the wheel is impeded, press red release button 19 briefly and turn transport wheel 18 again as far as it will go.

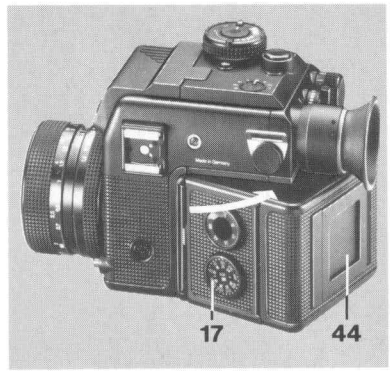
Fit the loaded film insert into the magazine and press in firmly to engage. Take magazine drawslide 42 out of its masking slot 38 and put it into storage compartment 41. The forward- pointing grip of the drawslide locks the release button of the magazine.

Set magazine switch 39 to »SE« and main switch 5 to »I«. Press release button 9 and set dial 3 to 1/1000 sec. to avoid long exposure times occurring in poor light conditions. Press the shutter release button repeatedly until frame counter 16 shows »1«.
Turn dial 3 back to »A«.








**Frame counter**
The frame counter only operates when there is a film in the magazine. It shows the number of frames that have been exposed and moved on using the »SE« setting. The indicator also works with extra-long film up to 72 exposures.

In case of doubt, film transport can be checked by observing the rotating blank film-carrier spindle (on the underside of the film insert).
**Multiple exposures within one frame are not indicated by the frame counter.**

**Changing the magazine**
The drawslide must be pushed in before the magazine can be detached. For this purpose set the magazine switch 39 to ⚷ .

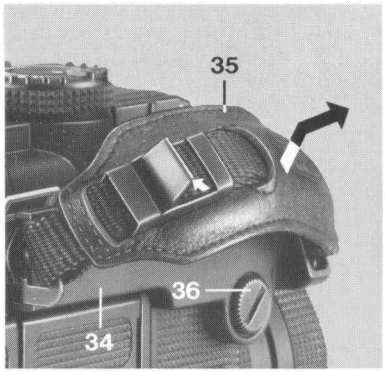
Make sure that the drawslide 42 is put in perfectly *straight* with its front corners at the same level, and that it is also pushed in completely to prevent any light entering! Next set magazine switch 39 to ⚷ , press release button 40 forward, hinge the magazine out and then remove it.

To attach the magazine, carry out this procedure in reverse: hook into the holder, then press firmly against the camera. Always put the drawslide into the storage compartment.

Each of the interchangeable magazines has its own frame counter and DIN/ASA adjustment. Removal is prevented as soon as the drawslide is pulled out and the magazine switch is no longer in the ⚷ position.
**The magazine will generally be removed together with the power pack, which will then be fitted to the new magazine.**

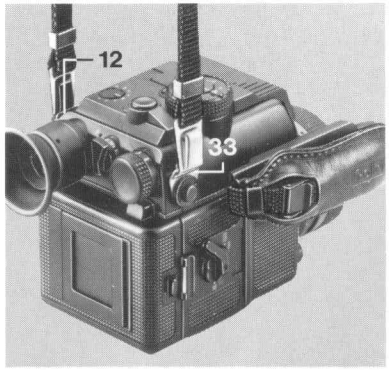
**Setting the film speed**
Switch dial 17 to the DIN/ASA value of the loaded film. For continuous exposure correction, it can be set to a different value. In this case, the entire film will be slightly over- or under-exposed.

To remind the user which film is loaded, standard memo holders 44 and 13 are fitted on the power pack and the magazine back – they will accept the tear-off strip from the film box. This is particularly useful when using several different magazines with different film stock.




**Adjusting the loop handgrip**
Loosen the strap as shown in the picture and adjust loop handgrip 35 so that the camera can be held securely with the right hand alone.

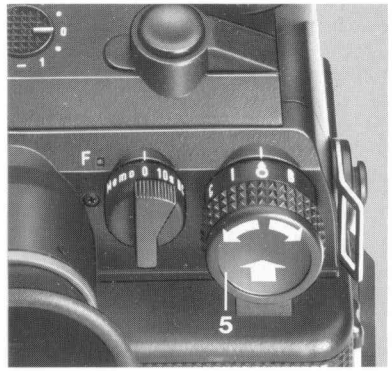
To remove the handgrip, e. g. for long periods of tripod photography, loosen retaining screw 36 with a coin, lift and remove support 34.




**Attaching the carrying strap**
Hook the strap into eyelets 33 and 12. The loop handgrip can still be left on the camera. To detach the strap, press the hooks together. The carrying strap can be individually adjusted for length. A carrying strap with a wider shoulder-piece is available as an accessory.








**Setting the main switch**
By pressing in and turning, main switch 5 can be set to

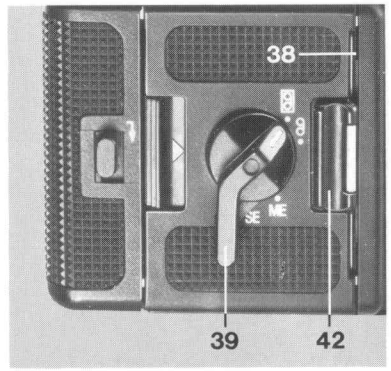
C = Continuous exposure; film exposure and transport will continue as long as the shutter release button is depressed.

I = Individual exposure; when the shutter release button is depressed fully, one exposure is made, then the film is moved on one frame.

○ = »Off« setting, which switches off all the functions that depend on the electrical power supply.

B = Time exposure; duration as required, so long as the shutter release button is held fully depressed.

The switch turns to lock in one of the four positions: intermediate settings are not possible.



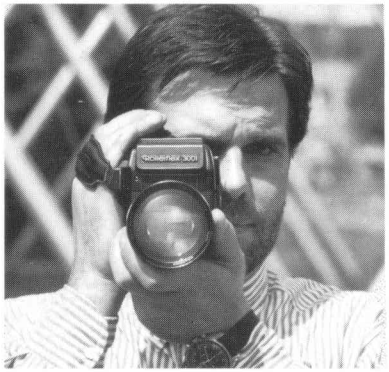

**Setting the magazine switch**
Switch 39 has four positions with the following functions:

⊡ = for removing the magazine (with or without power pack), operable when drawslide 42 is in masking slot 38.

⊡ = for removal of the film insert (empty or with rewound film), operable independently of the magazine drawslide.

ME = for multiple exposures (without film transport), operable with the drawslide pulled out. In position ME, the masking slot for the drawslide and the film insert are locked.

SE = for single exposures (with film transport), operable with the drawslide pulled out. In position SE, the masking slot for the drawslide and the film insert are locked.



**Holding the camera**
While there are as many ways of holding the camera as there are photographers, the method shown in the picture is recommended as being the most comfortable:

The right hand holds the camera from below through the loop handgrip and thus can easily operate the control dial and the shutter release. The left hand is free for focusing and aperture adjustment, and can also switch between working and open aperture metering.

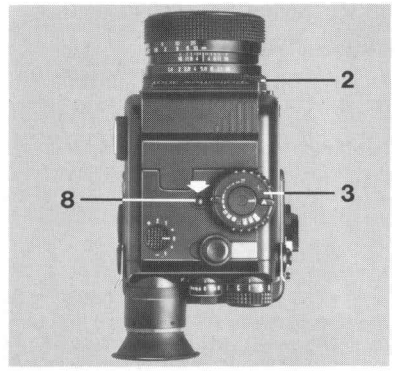

**Focusing**
Focusing is carried out by turning focusing ring 1 on the lens to obtain the sharpest image in the viewfinder:

Both microprism areas A are then glitterfree. Lines crossing the oblique splitimage area B are not distorted. Also, the focusing screen gives a sharp image.

Lines and edges are best focused with the split-image rangefinder, while undelineated regions are best focused with the microprisms. The focusing screen also enables you to judge the depth of field.








**Setting the shutter speed**
Press release button 8 and turn dial 3 as required to

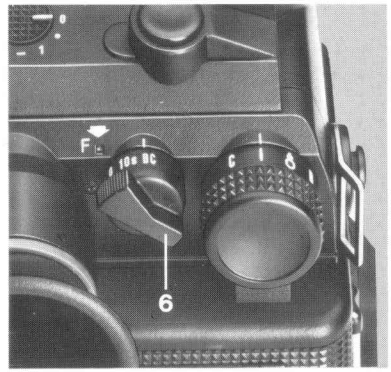
A = Automatic, marked in white; the shutter speed is controlled automatically between 1/1000 s and 16 s according to the aperture selected.

X = X-synchronization at 1/100 s, marked in red, for use with connected flash units.

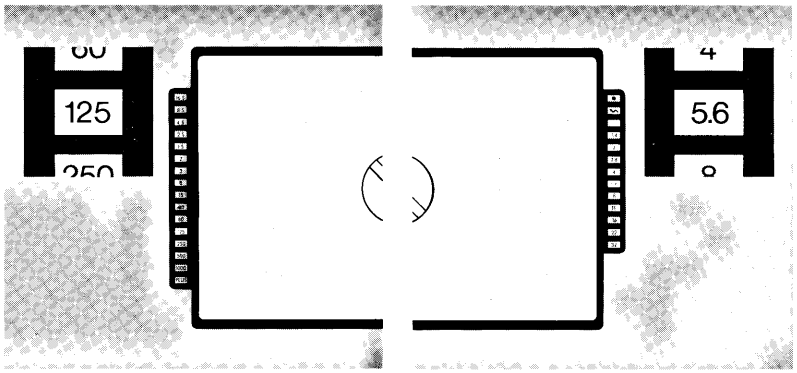
1000 – 2 = choice of shutter speeds from 1/1000 s to 1/2 s in half steps, marked in white; the appropriate aperture is followed up manually.

1 – 16 = choice of shutter speeds from 1 s to 16 s in half steps, marked in green, with manual aperture follow-up.

In positions A and X the shutter dial is locked; when set to speeds 1/1000 s – 16 s, it can be turned freely.




**Function indicator »F«**
This facility enables the photographer to monitor the progress of important functions and warns of operating faults.
*It lights up briefly* for satisfactory film transport, beginning when the film is moved on to the *second* frame.
*It glows continuously* when the shutter release is pressed after the end of the film has been reached; the shutter cannot then be released.
*It glows continuously* when the shutter release is pressed without previously switching to ME or SE; the shutter release is then locked.
*It glows continuously* when »Memo« is switched on without switching to ME or SE.
*It lights up* for the »B.C.« setting of the toggle switch 6 when there is adequate power supply.
*It does not light up* for the same toggle switch setting if power supply is inadequate.




**Exposure metering in the automatic mode**
Set dial 3 to »A«. Set the required aperture using the control ring 2. Do not use intermediate aperture values.

Depress the shutter release to the first stop and hold:

The shutter speed that has been metered and automatically set lights up on the *left-hand side* of the viewfinder.

If two adjacent speeds light up, the automatic system takes the intermediate value. By choosing a different aperture, a longer or shorter exposure time can be set.

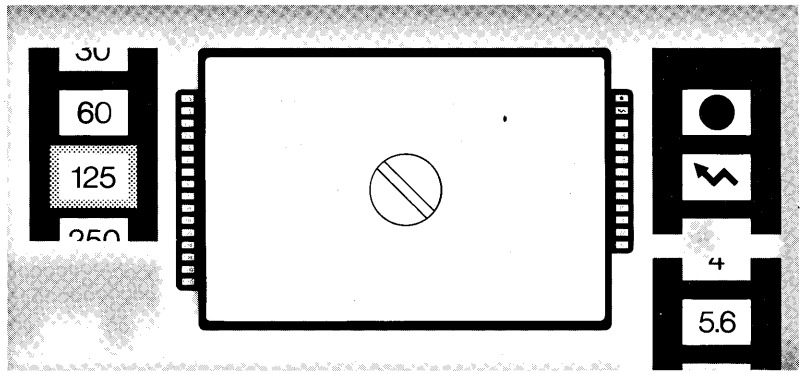
If *all* the speeds light up, there is a danger of over- or under-exposure; correction is required by increasing or decreasing the aperture.

If all the speed indicators continue to glow, you can use a lens with a wider aperture or a lens which can be stopped down further. Other alternatives are to use a faster or slower film or, finally (if the subject of the photograph allows) provide extra light by flash, reflectors or lamps.

On the *right-hand side* of the viewfinder, the selected aperture lights up; no intermediate values are indicated here.
**With older lenses or adapters without the contact step for picking up the maximum lens aperture, the whole range lights up instead of the selected aperture. However, the automatic exposure metering system continues to operate.**
With even older lenses and adapters only intended for working-aperture metering, all the speed *and* all the aperture values light up; you then switch to working-aperture metering using button 37.
The automatic exposure system remains fully operational. If a working aperture measurement is taken using lenses designed for open-aperture metering, the measured values may differ by up to 1/2 an exposure value.








**Exposure metering in the manual mode**
Switch to open-aperture metering. Select the required shutter speed using dial 3 and set an average aperture value.
Depress the shutter release to the first stop. The selected aperture lights up on the right-hand side of the viewfinder. On left-hand side, the *selected* shutter speed glows steadily, while the *metered* speed flashes on and off.

Now adjust the aperture so that the flashing speed value approaches the constantly glowing value and then goes out. At this point, exposure balance is achieved. If exposure balance cannot be achieved, select a faster or slower speed. In special cases, exposure balance can be obtained manually with the toggle switch 6 in the B. C. position, since the camera is also switched on in the B. C. position. This can be done without touching the shutter release.
**Please make sure that the B. C. position is switched off when the camera is not in use. It uses up power!**
When making an exposure correction for single exposures, the flashing and steadily glowing speed values can be deliberately kept different.

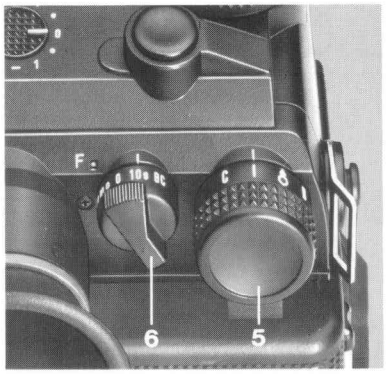
**Exposure correction**
Setting disc 7 permits exposure correction of between –1 and +2 exposure values. It can be used for single exposures or for longer series, e. g. in shooting against the light or when deliberately under- or over-exposing.

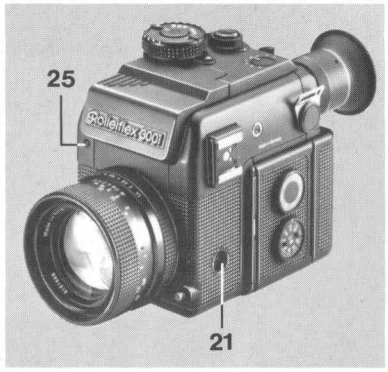
When this facility is in use, a red monitoring light glows in the top right-hand section of the viewfinder.

To return to normal exposure, it is important to turn disc 7 back to 0. When this is done, the red light goes out.

**Measured value storage**
Take a reading on the most important part of the subject (pressing the release to the first stop) and then set toggle switch 6 to »Memo«. The measured value is stored until the switch is put back to 0 – even when you let go of the shutter release.

In the viewfinder you can recognize the »Memo« setting by the stored unchanging shutter speed indication, even when the shutter release is not depressed, whereas the selected aperture does *not* light up.




**Shutter release**
**Directly on the camera:** press the release button fully in past the first (audible) stop.

**Using the auto release:** set toggle switch 6 to »10 s«. Depress the shutter release button completely. During the time delay of approximately 10 s (starting when you let go of the shutter release), red indicator 25 glows.

In the automatic mode, light metering continues during this time delay and determines the shutter speed just before the actual instant of shutter release.

The auto release is used with advantage when shooting with long focal lengths from a tripod, as well as for macro work and reprophotography, to prevent movement caused by pressing the shutter release.

During the time delay, the auto release can still be switched off – first set the main switch 5 to »0«, then set the toggle switch 6 to »0«.

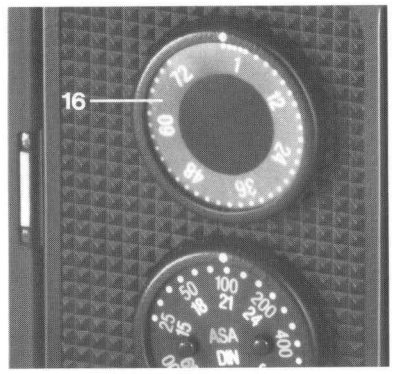
**Using the cable remote release:** this replaces the former mechanical cable release (not applicable) and provides a gentle, vibration-free shutter release action. This accessory is especially recommended for time exposures in the macro range and for reprophotography. It has two function indicators; the green indicator lights up during the exposure, the red during film transport. It is available with a short 50 cm cable or a 10 m length of cable. It is also available as a foot-operated release, but without function indicators. It is connected to the camera through socket 21.

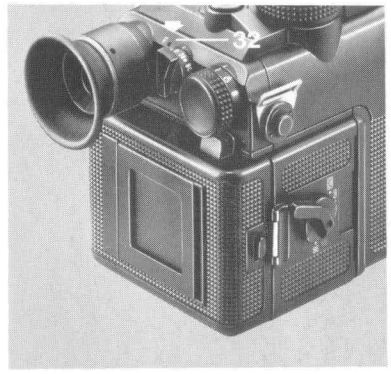
**Using the infrared remote release:** for cableless release for single or series exposures from a distance of up to 60 m. Using a special connection in the transmitter, a second Rolleiflex 3001 can be operated either simultaneously or independently of the first camera. The power supply is derived from the camera. Monitoring lights indicate transmission and reception and when the shutter is open during time exposures.

With the infrared remote release, many photographs which were scarcely possible until now can be taken with little








difficulty – e.g. the candid snapshot taken with a hidden camera or documentary photographs of shy wildlife from a safe distance.

**Using the timer:** the Rollei timer is a versatile electronic timeswitch that enables the camera to take any chosen number of photographs at preset intervals.

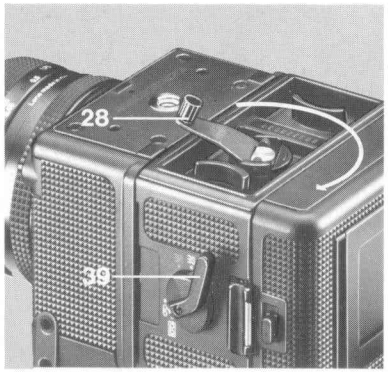
It sets intervals between exposures in the exceptionally wide range of 1 second – 59 hours 59 minutes, and can make between 1 and 999 exposures.

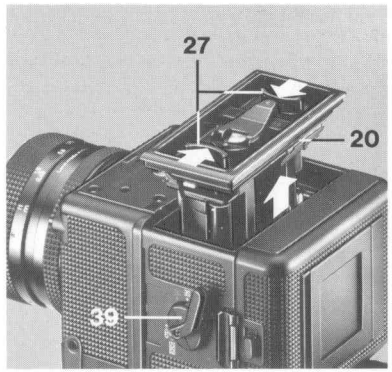
The selected programme of the number of exposures and the interval between them is constantly displayed, while the number of exposures remaining or the elapsed interval time can be read from an illuminated display. A programme already under way can be ended prematurely. Unprogrammed exposures can be made in the interval periods.

The quartz-controlled interval times are maintained with extreme accuracy.

**After shutter release,** the built-in motor moves the film on, so that the camera is immediately ready to shoot again. The number of frames exposed is shown on frame counter 16.

**After the last frame** with the magazine attached, the motor disengages and function indicator »F« 32 glows steadily. If you have several magazines, replace the used magazine, otherwise the exposed film is ready to be rewound.




**Rewinding the film**
During this operation, the magazine can remain attached to the camera and the drawslide can be left in its storage compartment.

Set magazine switch 39 to ∃ . Flip out handle 28 and engage with one of the two catches by turning steadily in the direction of the arrow. Then continue to turn in the same direction until you have wound past the end of the film (where there will be some resistance) and the film is fully (!) rewound into its cartridge. Fold the handle back and press in firmly.

Press the two release buttons 27 together, pull out film insert 20 and remove the film cartridge.

Then put the film insert back and lock, unless loading a new film immediately.

**For long intervals between camera use,** the camera should be switched off.



# Practical tips

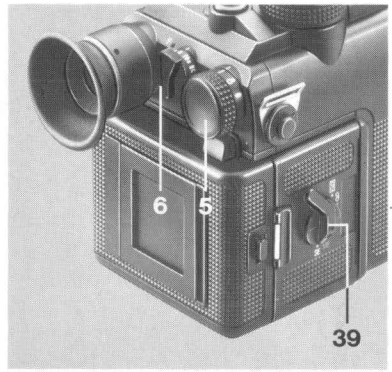
**1 Time exposure**
For long exposure times (over 16 s): set main switch 5 to B, hold the shutter release fully down, put switch 6 to »Memo« and then let go of the shutter release. The shutter will remain open until the toggle switch is returned to 0.

**2 Series exposures**
With fast-moving subjects, first meter the exposure and choose an aperture so that a very fast shutter speed is obtained. Set main switch 5 to C and keep the shutter release fully depressed. The camera will then continue to photograph and move the film as long as the shutter release is depressed. If it is held down for the entire length of the film, the series is ended by the automatic transport stop.

A plentiful supply of film and preloaded magazines is recommended. For professional work, replacement power packs are also recommended. High-speed films allow short exposure times and small apertures for the best possible depth of field.

In poor light conditions, the shutter speed should be set manually or stored, using toggle switch 6, since there will not be enough time left between the shots for exposure metering.

**3 Multiple exposures**
With magazine switch 39 in the »ME« position, the film transport system is disengaged, and several exposures can be made in the same film frame. For this operation, the main switch is usually kept on »I« but »B« can also be used, while »C« can be used for continuous shutter release.

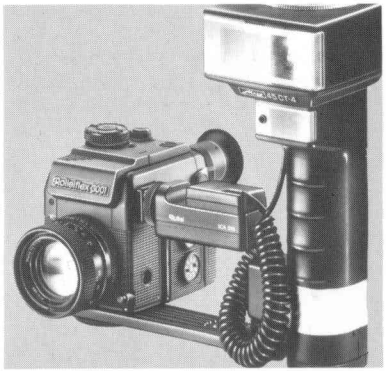


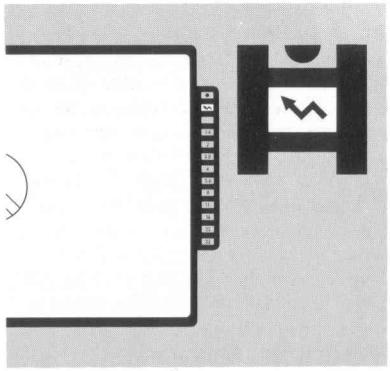

**Set the magazine switch back to »SE« before (!) the last exposure of a multiple-exposure sequence, so that the film transport is re-engaged for the next normally exposed photograph.**
Interesting and creative photographic effects can be achieved with multiple exposures. But this facility is also useful for documentary phased photographs of sports activities and the technical analysis of movement.
A well-developed picture concept and appropriate trials are indispensable. The following may serve as basic rules: a stationary background is a great advantage – the individual exposure times are accumulative – multiple exposures with flash capture the fastest movements.

**Use of flash units**
With automatic flash:

This requires the Rollei SCA 356 automatic flash adapter and an automatic flash unit offering the SCA 300 system made by Agfa, Braun, Cullmann, Metz, Osram or Regula. The Metz C 70 adapter is used with Metz 45 CT 5 and 60 CT 2 flash units.

The automatic flash is connected via the adapter to the hot shoe of the camera.





The control dial is set to »A«: any aperture within the working range of the flash can be used. The camera automatically sets the correct synchronous speed and meters the flash output at the film surface through the lens using a dedicated sensor. Further information will be found in the operating instructions for the flash unit concerned.

The green flash symbol lights up in the viewfinder to indicate that the flash is ready for use. At the same time, the X-synchronous speed of 1/100 s is set automatically. The green flash symbol also serves as a monitoring signal for the correct exposure. If it glows steadily or intermittently after the flash, the photograph was adequately exposed. If it goes out for a few seconds after the flash is fired, the photograph was under-exposed – retake the picture with a larger aperture!

Test firings of the flash without any film in the camera to determine the flash output in advance lead to metering errors. Reason: the film surface has different reflection properties from the film pressure plate.

**It is the best to carry out the test firings with a film loaded and the magazine switch in the »ME« position (then only one frame is lost).**

With standard flash units:

Set control dial 3 to »X« (1/100 s synchronous speed) or to any desired shutter speed between 1/100 s and 16 s (also synchronized). Flash units with a suitable foot can be fitted to hot shoe 10; flash units with a cable can be connected via socket 11. A flash bracket can be supplied to allow compact flash units to be mounted upright on the hot shoe. This bracket uses the centre contact.



# Interchangeable elements

**Interchangeable lenses**

The professional Rolleiflex 3001 system uses top-class lenses. The photographer has a choice of two different lens ranges:

The superlative Carl Zeiss lenses are logically the ideal companion to any professional camera system. The lenses manufactured by Schneider Kreuznach are also in this category. Germany's world-wide reputation in precision optics is largely based on the designs produced by these two companies. The Carl Zeiss range consists mainly of lenses with extremely large apertures, but also includes some special lenses. These lenses are distinguished by supreme image reproduction, high light intensity and contrast as well as exceptional colour brilliance and colour reproduction. This is achieved by the introduction of new optical components, the selection of the highest-quality glass and the HFT multicoating. Some of these lenses are manufactured under licence by Rollei Fototechnic GmbH.

The Rolleinar lens range has been created as an alternative to the above two ranges. A practical selection of sensibly spaced focal lengths offers the demanding photographer the whole spectrum of creative photographic composition. The rigorous quality control procedures employed by Rollei Fototechnic GmbH guarantee excellent value for money. All lenses are provided with an effective multicoating to reduce flare. Rollei produce the Rolleinar range in cooperation with leading lens manufacturers with the necessary experience and know-how in the design of top-quality lenses.

Finally, the camera also takes other types of lenses with an M 42 or M 39 thread or other thread. All such lenses can be used with the automatic exposure system.

The tables on pages 30 and 31 contain all the necessary data on the Carl Zeiss and Rolleinar lenses.

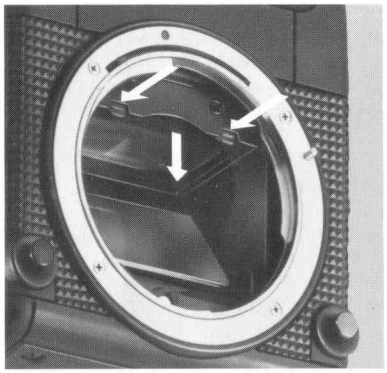
**Interchangeable magazines**

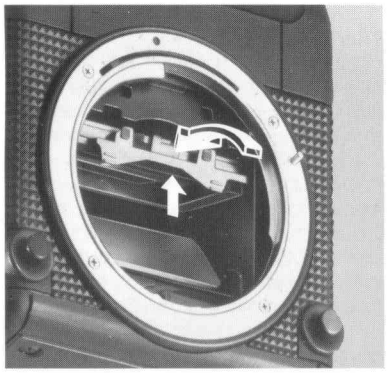
The interchangeable magazines allow the fastest possible change between colour and black-and-white film stock or between films of different speeds, or from a newly completed film to the next pre-loaded magazine.

Besides the standard magazine, other interchangeable magazines are available.

The Polaroid magazine. A Polaroid magazine for use with the following types of film: 665, 667, 668 and 669. The Polaroid magazine and its power supply are attached to the camera just as easily as the standard magazine. The attachment of the Polaroid magazine does not interfere with viewing through the telescopic finder. Optical compensation for the somewhat longer film distance in the Polaroid magazine is achieved by means of a plane-parallel glass plate. The full focusing range of the lenses is maintained. Two 24×36 mm photographs can be taken in one Polaroid frame. A fixed metal drawslide masks the film so that the magazine can be changed without losing a picture.

The Type 250 long-film magazine. The long-film magazine allows up to 250 photographs to be taken without changing the film. It accepts type 250 film cassettes containing up to 10 m of bulk film stock. All the camera functions still operate without restriction when the long-film magazine is used. The magazine is equipped with an





additional shutter release for more convenient handling. Long-film magazines are especially useful in conjunction with the motor drive in sports and documentary photography and generally for any application involving high film consumption.

**Interchangeable focusing screens**
To replace: remove the lens, press both retaining tabs, pull the frame lightly down and remove. When doing this, avoid touching the mirror or the ground-glass screen.

Insert the replacement focusing screen (always supplied in its frame), with the matt side upwards and engage by pressing gently.
**Always hold focusing screens by the frame. Do not clean with chemicals. Also do not rub, so as not to damage the delicate surface. Remove dust with a soft brush.**

The following interchangeable screens are available:

Clear focusing screen with oblique split-image rangefinder and microprism grid, matt-surfaced; universal type for basic equipment, high focusing accuracy on vertical and horizontal lines.

Clear focusing screen with horizontal split-image rangefinder and microprism grid, matt-surfaced; for maximum focusing accuracy on vertical lines.

Clear focusing screen with microprism grid, matt-surfaced; for precise focusing in poor light conditions.

Clear focusing screen with cross-hairs, matt-surfaced; for ideal subject composition and for aligning the camera in architectural photography and reprophotography.

Clear focusing screen with clear spot and scale, matt-surfaced – the scale makes it possible to determine magnification in macrophotography and microphotography.

Clear focusing screen with reference grid for architectural photography, repro-photography and macrophotography.

Clear focusing screen for endoscopy – special screen with clear zone and cross-hairs.



# The main accessories

Sensible accessories broaden the range of the Rolleiflex 3001 and greatly facilitate its operation so that certain special assignments are now possible for the first time with this type of camera. Naturally, the whole range of accessories available for the Rolleiflex SL 2000 F and the Rolleiflex 3003 can be used with the Rolleiflex 3001.

The table on pages 28 and 29 shows the whole camera system together with the available accessories.

**The pistol handgrip system**
The pistol handgrip offers a very convenient and, above all, exceptionally safe way of holding the Rolleiflex 3001. The shutter release is built in. For slow shutter speeds, the camera can be held as steady as a movie camera.

Using additional accessories, the handgrip can be converted into a universal flash holder.

**The bellows**
The bellows unit is recommended for photography in the close-up and macro ranges. For automatic exposure control, it is necessary to switch the camera to working-aperture metering.

**The microscope adapter**
The microscope adapter connects the Rolleiflex 3001 to commercially available microscopes. Automatic exposure control is maintained by pressing the working-aperture button.

**Extension tubes**
Four extension tubes (50, 30, 15 and 7.8 mm) can be used singly or in any desired combination to permit close-up photography with various magnifications depending on the focal length of the lens.

All the extension tubes transmit the aperture control function. For automatic exposure control, the camera must be switched to the working aperture.

**The magnifier adapter**
With the magnifier adapter, all commonly available magnifying lenses (Luminars, Photars) can be used on the Rolleiflex 3001. The M 42×1 adapter is also required.

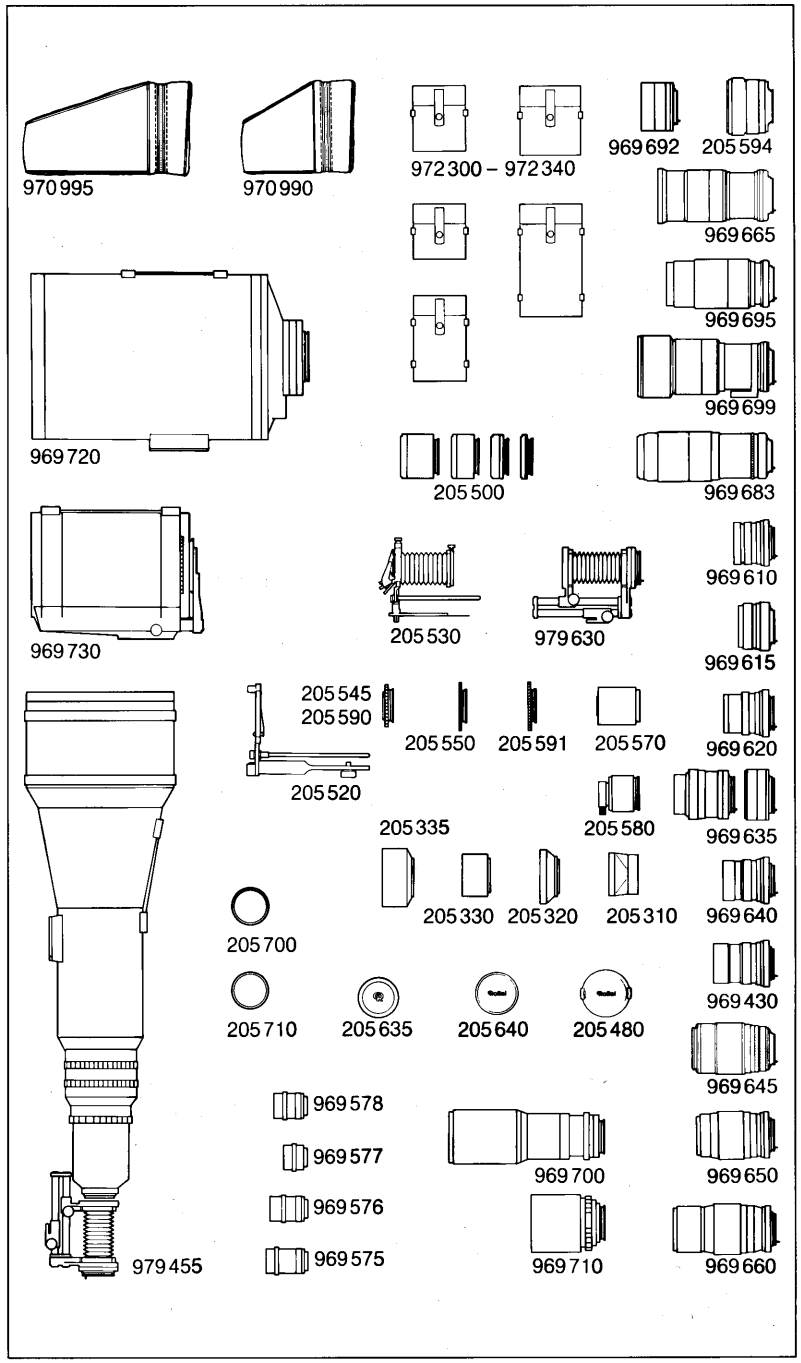
**The 35/66 adapter**
This adapter permits the unrestricted use of SL 66 lenses on the Rolleiflex 3001. It can be fitted with all SL 66 focal lengths from 30 to 1000 mm.

Using this adapter, lenses designed for the professional 6×6 format can also be used very effectively in the 24×36 format. Since only the central area of the 6×6 lens is actually used in the miniature format, the overall quality and brilliance of the resulting picture are superb. The automatic exposure control of the camera will operate in the working-aperture mode.

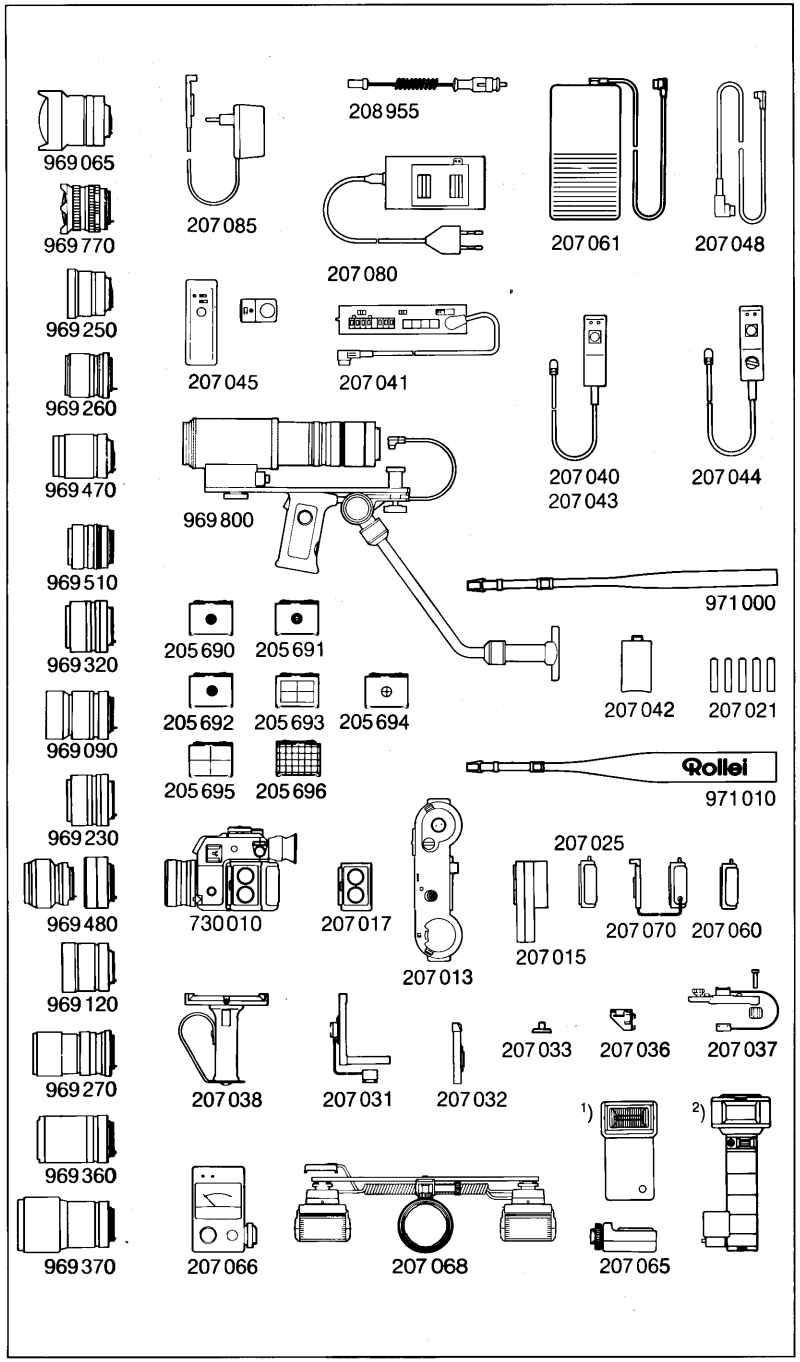
**Rollei SCA 356 flash adapter**
The Rollei SCA 356 allows all reputable makes of flash unit offering the SCA 300 system to be connected into the electronics of the camera. The connection is made by plugging the flash unit with the SCA adapter into the hot shoe of the camera. This provides the transmission of the necessary data for automatic flash operation and so guarantees the best possible flash photographs.

# The Rolleiflex 3001 System

| | |
|---|---|
| 730 010 | Rolleiflex 3001 with standard lens Planar f 1.8/50 mm |
| 969 065 | Distagon f 3.5/15 mm |
| 969 770 | F-Distagon f 2.8/16 mm |
| 969 250 | Distagon f 4/18 mm |
| 969 260 | Distagon f 2.8/25 mm |
| 969 470 | Distagon f 2/28 mm |
| 969 510 | PC-Curtagon f 4/35 mm |
| 969 320 | Distagon f 2.8/35 mm |
| 969 090 | Distagon f 1.4/35 mm |
| 969 230 | Planar f 1.4/50 mm |
| 969 480 | Makro-Planar, f 2.8/60 mm HFT with 30 mm extension tube |
| 969 120 | Planar f 1.4/85 mm |
| 969 270 | Sonnar f 2.8/135 mm |
| 969 360 | Tele-Tessar f 4/135 mm |
| 969 370 | Tele-Tessar f 4/200 mm |
| 969 692 | Doubling teleconverter |
| 205 594 | 35/66 adapter |
| 969 665 | HFT-Rolleinar f 3.2–4.5/28–105 mm, Macro |
| 969 695 | HFT-Rolleinar f 4/80–200 mm, Zoom |
| 969 699 | HFT-Rolleinar f 2.8/80–200 mm, Zoom |
| 969 683 | HFT-Rolleinar f 4–5.6/50–250 mm, Macro |
| 969 600 | F-Rolleinar MC f 3.5/14 mm |
| 969 610 | Rolleinar MC f 4/21 mm |
| 969 615 | HFT-Rolleinar f 2.8/28 mm |
| 969 620 | Rolleinar MC f 2.8/35 mm |
| 969 635 | Rolleinar f 3.5/50 mm, Macro with 25 mm extension tube |
| 969 640 | Rolleinar MC f 2.8/85 mm |
| 969 430 | Rolleinar MC f 2.8/105 mm |
| 969 645 | HFT-Rolleinar Macro f 2.8/105 mm |
| 969 650 | Rolleinar MC f 2.8/135 mm |
| 969 660 | Rolleinar MC f 3.5/200 mm |
| 969 700 | Rolleinar MC f 5.6/400 mm |
| 969 710 | Reflex Rolleinar f 8/500 mm |
| 969 720 | Mirotar f 5.6/1000 mm |
| 969 730 | Mirotar f 4.5/500 mm |
| 979 455 | Tele-Tessar f 8/1000 mm |
| 969 575 | Luminar f 2.5/16 mm |
| 969 576 | Luminar f 3.5/25 mm |
| 969 577 | Luminar f 4/40 mm |
| 969 578 | Luminar f 4.5/63 mm |
| 971 000 | Spare carrying strap |
| 971 010 | Wide carrying strap |
| 970 995 | Leather bag for lenses with focal lengths up to 135 mm |
| 970 990 | Leather bag for lenses up to 50 mm focal length, except Distagon f 1.4/35 mm |
| 972 300 – 972 340 | Lens cases for Carl Zeiss lenses |
| 205 635 | Rear lens cover |
| 205 480 | Front lens cover E 49 |
| 205 640 | Body cover |
| 205 500 | Automatic extension tube set |
| 979 630 | Bellows unit |
| 205 530 | Slide copying attachment |
| 205 520 | Macro tripod |
| 205 545 | Reverse-mounting adapter E 49 |
| 205 590 | Reverse-mounting adapter E 55 |
| 205 550 | M 39×1 adapter |
| 205 591 | M 42×1 adapter |
| 205 570 | Adapter for magnifying lenses |
| 205 580 | Microscope adapter |
| 205 310 | Lens hood for Distagon f 2.8/25 mm |
| 205 320 | Folding lens hood for Distagon f 2.8/35 mm and Planars f 1.4 and f 1.8/50 mm |
| 205 330 | Lens hood for Tele-Tessar f 4/135 mm |
| 205 335 | Lens hood for HFT-Rolleinar 50–200 mm, Zoom |
| 205 700 | Close-focus lens I |
| 205 710 | Close-focus lens II |
| 207 085 | Standard charger for Rolleiflex 3001 |
| 208 955 | Car battery connection lead |
| 207 080 | Quick-action charger |
| 207 061 | FRC 1 foot-operated remote release |
| 207 048 | Extension cable 10 m for Timer |
| 207 045 | IR remote release kit |
| 207 041 | Timer |
| 207 040 | Remote release handpiece, 0.5 m |
| 207 043 | Remote release handpiece, 10 m |
| 207 044 | ME 2000 hand release |
| 969 800 | NVS 100 night vision unit |
| 207 036 | Flash bracket |
| 207 021 | NC battery set |
| | Interchangeable focusing screens: |
| 205 690 | Oblique split-image and microprism grid |
| 205 691 | Horizontal split-image and microprism grid |
| 205 692 | Microprism grid |
| 205 693 | Cross-hairs |
| 205 694 | Clear spot |
| 205 695 | Endoscopy |
| 205 696 | Reference grid |
| 207 042 | Spare magazine drawslide |
| 207 017 | 36/72 interchangeable magazine |
| 207 013 | 250 long-film magazine |
| 207 015 | Polaroid magazine |
| 207 025 | Interchangeable power pack |
| 207 070 | External battery connector |
| 207 060 | External power supply connector |
| 207 038 | Pistol grip |
| 207 031 | Flash extension piece I |
| 207 032 | Flash extension piece II |
| 207 033 | Attachment for quick tripod coupling |
| 207 037 | Extension piece for Metz 45 CT 5 or 60 CT 2 automatic flash units |
| 207 066 | FM 1 TTL Flashmeter |
| 207 065 | Rollei SCA 356 automatic flash adapter |
| [1] | Flash guns or compact flash units (SCA 300 system) made by Agfa, Braun, Cullmann, Metz, Osram and Regula. |
| [2] | Metz automatic flash guns. |





# Carl Zeiss interchangeable lenses



| Lens | Elements/ components | Aperture range | Angle of view | focuses down to | Filter size | max. ∅ | max. length | Weight in g. |
|---|---|---|---|---|---|---|---|---|
| Distagon f 3.5/15 mm HFT | 13/12 | 3.5–22 | 110° | 0.16 m | Revolver with 4 Filters | 83 mm | 94 mm | 620 |
| F-Distagon f 2.8/16 mm HFT | 8/7 | 2.8–16 | 180° | 0.30 m | Revolver with 4 Filters | 70 mm | 68 mm | 343 |
| Distagon f 4/18 mm HFT | 10/9*) | 4–22 | 100° | 0.30 m | 70 mm slip-on filter | 70 mm | 52 mm | 350 |
| Distagon f 2.8/25 mm Rollei HFT | 8/7 | 2.8–22 | 80° | 0.25 m | E 49 | 62 mm | 64 mm | 310 |
| Distagon f 2/28 mm HFT | 9/8*) | 2–22 | 74° | 0.24 m | E 55 | 63 mm | 83 mm | 530 |
| Distagon f 1.4/35 mm HFT | 9/8*) | 1.4–16 | 61° | 0.30 m | E 67 | 70 mm | 85 mm | 471 |
| Distagon f 2.8/35 mm Rollei HFT | 5/5 | 2.8–22 | 61° | 0.40 m | E 49 | 62 mm | 53 mm | 210 |
| PC Curtagon f 4/35 mm HFT, Schneider Kreuznach | 7/6 | 4–22 | 64°/78° | 0.30 m | E 49 | 63 mm | 56 mm | 290 |
| Planar f 1.4/50 mm Rollei HFT | 7/6 | 1.4–16 | 46° | 0.45 m | E 49 | 62 mm | 50 mm | 230 |
| Planar f 1.8/50 mm Rollei HFT | 7/6 | 1.8–16 | 45° | 0.45 m | E 49 | 62 mm | 47 mm | 185 |
| Makro-Planar f 2.8/60 mm HFT (with 30 mm extension tube) | 6/4 | 2.8–22 | 39° | 0.27 m (1:1 with ET) | E 55 | 68 mm | 70 mm | 570 |
| Planar f 1.4/85 mm HFT | 6/5 | 1.4–16 | 29° | 1.00 m | E 67 | 70 mm | 72 mm | 537 |
| Sonnar f 2.8/135 mm Rollei HFT | 4/4 | 2.8–32 | 18° | 1.60 m | E 55 | 63 mm | 98 mm | 450 |
| Tele-Tessar f 4/135 mm Rollei HFT | 4/4 | 4–32 | 18° | 1.60 m | E 49 | 62 mm | 96 mm | 370 |
| Tele-Tessar f 4/200 mm Rollei HFT | 6/5 | 4–32 | 13° | 2.50 m | E 67 | 76 mm | 134 mm | 750 |
| Mirotar f 4.5/500 mm HFT | 5/5 | 4.5/8/11 Grey filter | 5° | 3.50 m | Filter-slide | 193 mm | 235 mm | 4,500 |
| Mirotar f 5.6/1000 mm HFT | 5/5 | 5.6/8/11 Grey filter | 2.5° | 12.00 m | Filter-slide | 250 mm | 420 mm | 16,500 |
| Tele-Tessar f 8/1000 mm | 4/4 | 8–64 | 2.5° | 14.5 m | Size VI | 218 mm | 825 mm | 8,800 |
| Luminar f 2.5/16 mm | 5/4 | 2.5–10 | – | $\beta$ 8–14:1**) | – | 28 mm | 42 mm | 100 |
| Luminar f 3.5/25 mm | 4/3 | 3.5–14 | – | $\beta$ 4–8:1**) | – | 28 mm | 36 mm | 91 |
| Luminar f 4.5/40 mm | 3/3 | 4.5–25 | – | $\beta$ 2–4:1**) | – | 28 mm | 29 mm | 67 |
| Luminar f 4.5/63 mm | 3/3 | 4.5–36 | – | $\beta$ 1–3:1**) | – | 28 mm | 30 mm | 74 |

*) floating elements **) with bellows unit ET = extension tube

# Rolleinar interchangeable lenses

| Lens | Elements/ components | Aperture range | Angle of view | focuses down to | Filter size | max. ∅ | max. length | Weight in g. |
|---|---|---|---|---|---|---|---|---|
| F-Rolleinar-MC f 3.5/14 mm | 10/7 | 3.5–16 | 180° | 0.30 m | built-in | 64 mm | 56 mm | 320 |
| Rolleinar-MC f 4/21 mm | 9/8 | 4–16 | 90° | 0.45 m | E 58 | 63 mm | 56 mm | 245 |
| HFT-Rolleinar f 2.8/28 mm | 8/7 | 2.8–22 | 75° | 0.30 m | E 52 | 63 mm | 40 mm | 200 |
| Rolleinar-MC f 2.8/35 mm | 7/5 | 2.8–16 | 63° | 0.40 m | E 52 | 63 mm | 60 mm | 235 |
| Rolleinar f 3.5/50 mm, Macro (with 25 mm extension tube) | 5/4 | 3.5–22 | 47° | 0.22 m to $\beta$ 1:1 with ET | E 49 | 64.5 mm | 52 mm | 205 |
| Rolleinar-MC f 2.8/85 mm incl. lens hood | 4/4 | 2.8–16 | 28° | 0.85 m | E 52 | 63 mm | 64 mm | 270 |
| HFT-Rolleinar Macro, f 2.8/105 mm, incl. lens hood | 6/6 | 2.8–32 | 23° | 0.35 m to $\beta$ 1:1 | E 55 | 72 mm | 103 mm | 650 |
| Rolleinar-MC f 2.8/105 mm incl. lens hood | 4/4 | 2.8–16 | 23° | 1.2 m | E 52 | 63 mm | 69 mm | 305 |
| Rolleinar-MC f 2.8/135 mm incl. lens hood | 4/4 | 2.8–22 | 18° | 1.5 m | E 52 | 66 mm | 97 mm | 505 |
| Rolleinar-MC f 3.5/200 mm incl. lens hood | 4/4 | 3.5–22 | 13° | 2.3 m | E 58 | 71 mm | 147 mm | 590 |
| Rolleinar-MC f 5.6/400 mm incl. lens hood | 8/5 | 5.6–22 | 6° | 4 m | E 72 | 78 mm | 216 mm | 950 |
| Reflex-Rolleinar-MC f 8/500 mm incl. lens hood | 7/2 | 8 | 5° | 1.5 m | E 33.5 | 78 mm | 95 mm | 500 |
| HFT-Rolleinar f 3.2–4.5/28–105 mm, Macro | 15/12 | 3.2–22 | 75°–23° | 0.25 m to $\beta$ 1:4 | E 67 | 70 mm | 112.5 mm | 686 |
| HFT-Rolleinar f 4–5.6/50–250 mm, Macro | 14/11 | 4–22 | 47°–10° | 1.8 m to $\beta$ 1:1.4 | E 55 | 68 mm | 179 mm | 720 |
| HFT-Rolleinar f 2.8/80–200 mm, Zoom | 17/11 | 2.8–32 | 30°–12° | 1.8 m | E 77 | 81 mm | 174.5 mm | 1080 |
| HFT-Rolleinar f 4/80–200 mm, Zoom | 13/9 | 4–32 | 30°–12° | 1.0 m | E 58 | 68 mm | 141 mm | 655 |
| Doubling teleconverter | 7/5 | – | – | – | – | 62 mm | 48 mm | 221 |

# Troubleshooting guide

| Problem | Cause | Remedy |
|---|---|---|
| The shutter is not released, indicator F glows steadily | SE or ME not switched on | Set magazine switch to SE or ME |
| | Memo switched on without setting to ME or SE | |
| | End of film reached | Change film or magazine |
| | Power supply interrupted during (time) exposure | Change or recharge power pack: then switch briefly to ME and again to SE. If necessary, rewind last frame |
| No shutter release, indicator F does not light up | Auto release still in action | Set main switch to 0, then toggle switch to 0 |
| | Power pack totally discharged | Change or recharge power pack |
| Shutter speeds light up, aperture indicators do not | Memo in operation | Switch off memo |
| All shutter speeds light up | Warning signal indicating danger of faulty exposure | Choose another aperture; if necessary use flash or a different film |
| All aperture values light up | Lens or adapter without coded contact step | Light metering and automatic control continue to function |
| All speeds and all apertures light up | Old working-aperture lens or adapter | Switch to working-aperture metering |
| On B.C. setting, indicator F does not light up | Power pack discharged | Recharge power pack |
| Impossible to switch to [3] position | Drawslide pulled out | Push drawslide into masking slot |
| Impossible to switch to to SE or ME position | Drawslide not pulled out | Pull out drawslide and insert in storage compartment |
| Film insert jammed | Film not completely rewound | Rewind film completely (!) into cartridge |
| Photograph incorrectly exposed in spite of automatic exposure control | Film speed incorrectly set | Observe the film manufacturer's directions; use the memo holder |
| | Exposure correction not switched off | Set correction switch to 0, observe the warning signal in the viewfinder |
| Image lacks sharpness | Focusing error | Focus precisely |
| Flash photograph incorrectly exposed | Control dial not set to X, or exposure time too short (does not apply to automatic flash units) | Turn to X, select shutter speed of 1/100 s or slower |
| Power pack capacity inadequate | Charged for too short a time or too unevenly | Charge power pack for 14 hours, and every 3 months when not in use |

**Care of the camera**

The Rolleiflex 3001 requires the same care as any other valuable piece of equipment from which you expect long-term reliability. Please use the following proven methods of cleaning.

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 with lens-cleaning paper. For protection against static, breathe on them and allow the moisture to evaporate.

Take special care when cleaning the focusing screen: the roughened lower surface should only be treated with a soft brush or air blower. Protect this side carefully against dirt and fingermarks. Protect the camera from the long-term damaging effects of steam and damp.

The high humidity in tropical and sub-tropical regions can cause the corrosion of metal parts and fungal attacks on glass surfaces. Whenever possible, dry the camera frequently in the fresh air and sun. Keep the magazine and the film-guide surfaces clean (particles of gelatine rubbed off the film are breeding ground for fungus). When not in use for long periods, the camera should be stored in an airtight container with silica gel cartridges. Take particular care to protect the camera from any kind of dirt.

# Technical data

**Camera type**
35 mm single-lens reflex camera with interchangeable film magazine and a built-in motor drive. Highly integrated analog/digital circuitry, central process control and monitoring of all metering and driving functions.

**Picture format**
24 × 36 mm

**Film types**
Type 135 35 mm cartridges for 12, 20, 24, 36 or 72 photographs, also sheet film and bulk film stock.

**Film speed**
Set on the magazine: 15 – 39 DIN (25 – 6400 ASA).

**Exposure metering**
TTL, centre-weighted integral metering, using open or working aperture.
Exposure correction from –1 to +2 EV steps.

**Metering range**
Exposure values 1 – 18 with 21 DIN/100 ASA with aperture f 1.4.

**Shutter**
Vertical-travel, metal-foil focal-plane shutter. Electronically controlled.
Automatic selection of shutter speed with aperture priority, or manual exposure balance (follow-up system).
Shutter speeds: 1/1000 s to 16 s, set automatically or manually.
Time exposure B. Flash synchronization speeds 1/100 s to 16 s.
X = 1/100 s.

**Interchangeable lenses**
Rollei QBM bayonet locking with aperture simulator, Zeiss lenses with focal lengths from 15 to 1000 mm, Rolleinar lenses with focal lengths from 14 to 500 mm and also zoom lenses.

**Shutter release**
Microswitch on the top of the camera. Auto release, electronically controlled.

**Film transport**
Built-in high-performance motor, single exposures or continous exposure at approx. 3 frames per second.

**Multiple exposure**
Using the switch on the magazine.

**Reflex mirror**
Hard-coated damped swinging mirror.

**Viewfinder system**
Telescopic finder with rubber eyecup. Seven interchangeable focusing screens; can be changed without tools.





**Viewfinder information**
Set aperture indicated by means of self-luminous numbers (LEDs). Shutter speeds indicated by means of self-luminous numbers (LEDs). Indication that shutter speed range is exceeded. »Flash ready« and under-exposure indicated when automatic flash is in use. Memory function. Indication that exposure correction is in use.

**Flash synchronization**
1/100 s. Accessory shoe with synchronizing centre contact and contacts for automatic flash units with Rollei SCA 356 or Metz C 70 adapter.

**Automatic flash**
TTL flash metering in the film plane using additional photodiodes with »flash ready« and exposure monitors in the viewfinder. Automatic setting of synchronizing speed in the »A« mode.

**Power supply**
Quick-change power pack with soldered-in NiCd batteries. Interchangeable with external power supply. Charger for normal charging, time 14 hours.

**Interchangeable magazines**
With drawslide, for quick change of partly exposed films. For 12-, 20-, 24-, 36- or 72-exposure 35 mm films and also sheet film. Exopsed film can also be removed with the magazine attached. The magazine interlocks to prevent operating errors. Facility for single and multiple exposures. Film speed can be set between 15 and 39 DIN (25–6400 ASA). Frame counter only operates when the magazine is loaded. Memo holder for tear-off tab from the film box.
Polaroid magazine for Polaroid film pack (two pictures 24×36). Long-film magazine for 250 exposures.

**Connections**
Multi-pin socket for electrical remote release cable, timer, infrared remote control. 1/4" tripod bush.

**Dimensions**
89 × 111 × 159 mm with f 1.8/50 mm lens.

**Weight**
Approximately 1185 g with f 1.8/50 mm lens.