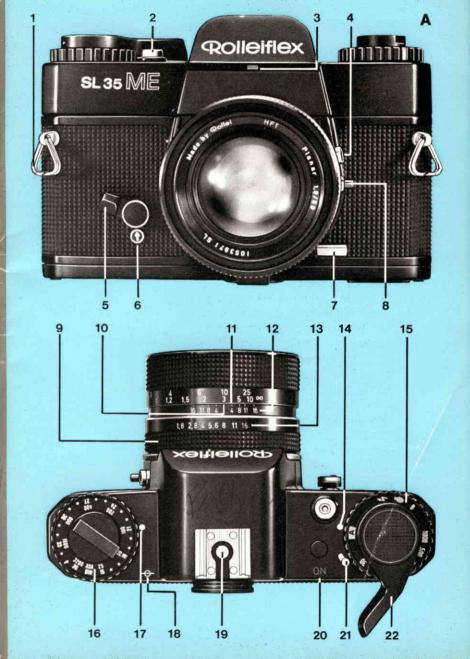
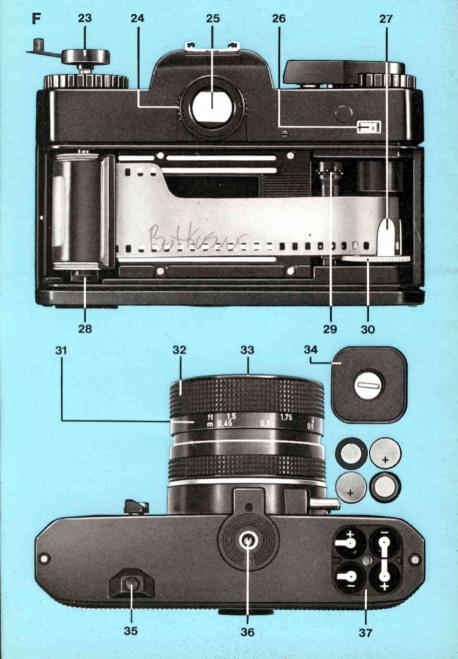
# Rollei SL35 ME

in der Praxis
in practical use
dans la pratique
nell'uso pratico
en la práctica
in de praktijk



Inhalt	Seite	Contents	Page
Einzelteile und Funktion Film einlegen Filmempfindlichkeit einstelle Batterie einlegen Belichten mit Zeitautomatik Belichten ohne Zeitautomati Entfernung einstellen Die Aufnahme Film entnehmen Objektiv wechseln Nahaufnahmen Sachgemäße Pflege Abhilfe bei Bedienungsfehler Daten und Zahlen	4 en	Controls and compone Loading the film speed Inserting the batteries Exposure with automati Exposure without autom Focusing The exposure Unloading the film Changing the lens Close-ups Care of the camera Handling faults and ret Facts and figures	24 24 24 25 25 25 26 25 26 28 30 32 33 34 34 34 35 26 26 36 36 36 36 36 36 36 36 36 36 36 36 36
Contenu	Page	Indice	Pagina
Eléments et fonctions Chargement du film Réglage de la sensibilité Mise en place des piles Exposer avec automatisme Exposer sans automatisme Exposer sans automatisme Réglage de la distance La prise de vue Déchargement du film Changement d'objectif Photos de sujets rapprochés Entretien Caractéristiques techniques Incidents et remèdes		Parti e funzioni Caricamento dell'appar Regolazione della sens Introduzione delle pile Esposizione in automat Esposizione senza l'aut Messa a fuoco La ripresa Prelievo della pellicola Cambio di obiettivo Riprese ravvicinate Cura e manutenzione Dati tecnici Difetti e remedi	ecchio 66 ibilità 66 67 ismo 68 omatismo 72 74 78 78 78 78 78 78 78 79 79
ndice	Página	Inhoud	Bladzijde
Componentes y funciones Colocación de la película Ajustar la sensibilidad Colocación de la pilas Esposición con automática Esposición sin automática Enfoque La fotografía Retirar la película Cambio del objetivo Fotografías a corta distancia Los cuidados idóneos Datos y valores numéricos Corregir errores de maneio	88 88 89 93 95 97 99 99 100	Onderdelen en funktie Film inleggen Filmgevoeligheid instel Batterijen inzetten Belichten met de autom Belichten zonder de aut Afstand instellen De opname Film uitnemen Objectief verwisselen Opnamen van dichtbij Onderhoud Verhelpen van bedienin Terchnische gegevens	





## Controls and components

- 1 Neck strap lug
- Measuring / releasing button with cable release socket,
   1st step = memory measurement and operational check
   2nd step = releasing
- 3 Aperture scale port
- 4 Flash cable terminal, X or FP selectable
- 5 Self-timer tension lever
- 6 Self-timer start button
- 7 Stop down pin
- 8 Locking button of bayonet mount (red)
- 9 Aperture ring
- 10 Aperture and distance index
- 11 Infrared index
- 12 Depth of field scale
- 13 Aperture scale
- 14 Shutter speed index
- 15 Shutter speed dial with symbols: "A" = Automatic,
  - f = X-terminal for electronic flash,
  - Q = FP-terminal for flash bulb
- 16 Film speed setting disc with ASA/DIN scale
- 17 Film speed index
- 18 Film plane index mark
- 19 Hot shoe, X or FP selectable
- 20 "ON" mark, visible with camera switched on
- 21 Main switch with red signal, in "ON" position, also main switch
- 22 Rapid film advantage lever in ready position, also main switch

(See also page 128)

- 23 Rewind knob with crank
- 24 Eyepiece mask
- 25 Viewfinder eyepiece
- 26 Frame counter
- 27 Film holding clip
- 28 Film chamber
- 29 Transport sprocket
- 30 Take-up spool
- 31 Distance scale in feet and meters
- 32 Focusing ring
- 33 Filter or lens hood thread
- 34 Battery compartment cover
- 35 Rewind release
- 36 Tripod bush 1/4"
- 37 Battery compartment
- 38+ Red dot on camera bayonet
- 39+ Red dot on lens bayonet
- 40 \* Instantaneous exposure range
- 41 \* Time exposure range
- 42 \* LED red signal
- 43 \* LED green signal
- 44\* Top red mark = shutter speed limit and overexposure indication
- 45 \* Exposure meter pointer
- 46 \* Shutter speed scale
- 47\* Bottom red mark = shutter speed limit and underexposure indication

<sup>+ =</sup> not illustrated

 $<sup>* = \</sup>rightarrow Fig. B$ 

## Loading the film (do not load in direct sunlight)

Pull out rewind knob 23 until camera back springs open. Fix end of film leader under one of the holding clips 27. Pull the cassette across the film track and insert it in the film chamber 28 (knob 23 must be pulled out again as far as it will go, and now be pushed down into the camera again to its original position if necessary rotate slightly while pushing). The take-up spool 30 must be rotated by turning the milled ring until the perforations at both edges of the film are engaged by the teeth on the transport sprocket 29. Now close the camera back and press firmly until it locks with a click. Alternately operate the rapid film advance lever 22 and the shutter release button 2 until number "1"appears in the frame counter 26 below the index.

As soon as a number is visible in the frame counter window 26 this indicates that there is a film in the camera: loading control. If the frame counter moves on, the film has been advanced: film advance control.

## Setting the film speed

The film speed in ASA or DIN is given on the film packing or in the accompanying instructions for use. Pull up the setting disc 16 and turn until the film speed required is engaged against index 17.

## Inserting the batteries

Undo screw on cover 34 by turning anti-clockwise with a coin. Wipe the new batteries on both sides with a cloth to remove any oxide deposit. Insert four new batteries in accordance with Fig. F in battery compartment 37; only hold them by the edges, do not touch the front or back. Engage cover 34 and tighten screw without using force.

Suitable battery types: silver oxide batteries 1.5 V, e. g. Mallory MS 76 H, Varta 7301 or equivalent batteries of other makes.

After inserting the batteries move rapid film advance lever 22 to ready position to switch on the meter and the releasing. Take up first step on button 2; green signal 43 (or red signal 42)  $\rightarrow$  Fig. B indicates sufficient battery voltage. This voltage indication also takes place automatically each time a picture is taken.

Battery life is 1 to 2 years; a yearly battery change is recommended. New batteries are obtainable from all photographic dealers. During extended idle periods keep the battery outside the camera; before refitting clean as described above. Always remove spent batteries. In very cold weather first warm up the battery to body temperature and insert it immediately before use.

Important: Batteries should always be renewed in sets of four, never singly!

# **Exposure with automatic control**

Engage shutter speed dial 15 with green symbol "A" against index 14. Move rapid film advance lever 22 fully anticlockwise and allow to spring back: camera is now switched on, mark "ON" and red signal on main switch 21 become visible. Open eyepiece mask 24 by turning clockwise.

**Important:** The meter is only operative with the automatic shutter control switched on in setting "A" and is inoperative on  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$  and  $\frac{1}{2}$  and  $\frac{1}{2}$  sec sittings.

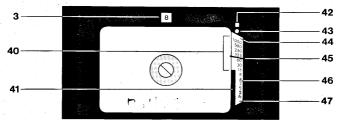


Fig. B

#### Open aperture measurement

only with lenses for Rollei SL 35 M/SL 35 ME and lenses for Rollei SL 35/SL 350 with aperture simulator: **do not** depress stop down pin **7**.

## Working aperture measurement

with all other lenses and when using adapters, extension tubes or bellows: depress the stop down pin 7.

An incorrect position of the stop down pin is indicated by the red signal 42 (when button 2 is pressed down to its first step), the meter is then switched off.

#### Aperture preselection

according to brightness, film speed and subject: e. g. f/11–16 for bright daylight in summer, pictures on the beach and in mountains, or for high-speed and very high-speed films from 200–3200 ASA; f/8–16 for subjects with considerable depth of field; f/2.8–5.6 for fast mowing subjects and sporting events; f/1.8–2.8 for restricted depth of field; f/4–8 for slow to medium speed films from 25–160 ASA; f/1.8–4 for weak available light, interiors, mist and rain.

#### Checking meter pointer position

The meter pointer 45 indicates the shutter speed automatically set at the preselected aperture. This shutter speed can be altered by turning aperture ring 9; for hand-held shots it must be between  $^{1}/_{15}$  and  $^{1}/_{1000}$  sec in the instantaneaus exposure range 40 above the black bar.

If even after selecting the widest aperture the pointer remains in the time exposure range 41 between  $^{1}/_{15}$  and 4 sec, hand-held shots are no longer possible; the picture must be taken with the camera supported or preferably from a tripod.

The black figures on the scale **46** are fractions of a second, the lowest three figures, however, representing full seconds.

The top red mark **44** (above  $^{1}/_{1000}$  sec) is a warning against overexposure; selecting a smaller aperture will restore the pointer to the permissible measuring range. The bottom red mark **47** (below 4 sec) is a warning against underexposure, permissible exposure conditions are restored by selecting a larger aperture.

## Checking light conditions

Press button 2 down to its first step: green signal 43 = sufficient light, red signal 42 = insufficient light.

The apertures selected are reflected through port 3 and are visible above the viewfinder image, when Rollei lenses have been fitted directly into the camera bayonet. With Rollei wide angle lenses having focal lengths of 15, 16 and 18 mm; when using adapters, extension tubes or bellows as well as with lenses of other makes the apertures can only be read off outside. from the lens mount itself.

#### Note:

Under average lighting conditions, the exposure measurement will set the correct shutter speed. Correction is advisible with backlight shots or with very high contrast subjects: after exposure measurement, retain first pressure on shutter release, then approach the subject with the camera until the main subject fills the finder view. Set the aperture, then return to the original viewpoint for the shot itself – or take a reading from an object similar to the main subject (if necessary the back of your own hand), of normal brigthness range and under the same conditions. Read the aperture, then take the picture with the setting obtained.

#### **Exposure with fixed shutter speeds**

e. g. for very rapid movements, sports events etc.: rotate aperture ring until meter pointer shows the desired speed. Keep this

time on memory: depress button 2 half-way until green signal appears, frame the subject and then press release button fully down.

Note: In order to avoid unnecessary battery drain during long idle periods, the exposure meter should be switched off: switch off meter switch 21 with rapid film advance lever, thus masking the red "ON" signal.

# **Exposure without automatic control**

#### **Exposures with flash**

According to the type of flash used set the required flash symbol to index 14 with the shutter speed dial 15: for electronic flash units use the flash symbol  $\frac{1}{6}$ , for units with flash bulbs type AG, XM5 B, M 3 etc. the bulb symbol  $\frac{1}{9}$ ; in both cases the shutter speed is  $\frac{1}{40}$  sec. Fit flash unit either into hot shoe 19 or attach with a bracket to tripod bush 36.

For flash units with center contact (no cord) connection can be made directly with the camera using the hot shoe 19.

For flash units without center contact plug the flash cord into terminal 4.

The aperture to be set is obtained from the subject distance and the flash guide number (see instruction manual for flash unit).

#### Exposures with manual speed selection

for setting fixed speeds are also possible by switching off the speed automation:

First of all measure the exposure as usual in "A" setting, note preselected aperture and shutter speed set. This shutter speed/aperture combination can be altered in steps with shutter speed dial **15** and aperture ring **9** until the required speed is obtained. When doing so, one aperture click stop also corresponds to one shutter click stop: e. g. f/8 to  $11 = \frac{1}{125}$  to  $\frac{1}{60}$  sec.

**Important:** Make certain that the available light does not alter between measurement and exposure – if this is the case repeat the measurement!

Use of manual shutter speed selection:

Shots which require a sufficiently fast shutter speed to capture movement (snapshot, sport, traffic, children, animals etc.) or where camera shake is to be avoided (shots from moving vehicle, train, ship, aircraft, on mountain tours etc.).

## Exposure in the case of battery failure

Determine correct exposure with separate exposure meter or second camera, in an emergency estimate or take from the film instruction leaflet. Set aperture and shutter speed with ring 9 and dial 15.

# Important after all shots without automatic control

Reset shutter speed dial to "A" to be ready for further exposure using the automatic control.

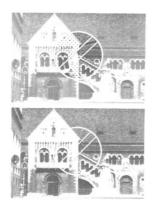




Fig. C Fig. D

## **Focusing**

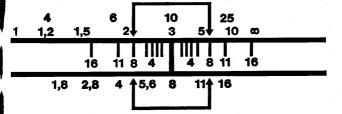
Look through the viewfinder and sight the subject if possible on a vertical or horizontal edge or line so that it runs exactly through the center of the finder. By turning the focusing ring 32 the line which appears distorted in the central diagonal split image rangefinder is straightened  $\rightarrow$  Fig. C. The correct distance has now been found whereby the unsharp line on the ground glass screen and in the microprism spot is sharply defined at the same time.

The distance set can be seen on scale 31 against index 10.

Subjects without straight lines or edges can be focused with the microprism spot or on the ground glass screen  $\rightarrow$  Fig. **D.** Spectacle wearers may use a correction lens made up by any optician (lens mount Order No. 977 210).

#### With infrared film

(of maximum sensitivity at a wavelength of 800 nm) first focus as described above. Then read the distance against the index 10, mount the infrared filter and reset the distance read against the infrared index 11.



#### Aperture and depth of field

Preselect the aperture by turning the aperture ring 9. The f-number required must be opposite the index 10. The setting of the aperture depends on the depth of field required: The smaller the f-number the larger the lens aperture and the smaller the depth of field.

The depth of field can also be checked on the ground glass screen in the viewfinder: by pressing the stop down pin 7 the diaphragm is stopped down to the preselected value and thus makes it possible to adjust the sharpness to the requirements to the desired part of the photograph. When the stop down pin 7 is pressed again the diaphragm springs back to full aperture and is automatically stopped down to the preselected value when the shutter is released.

Reading from the depth of field scale: here the aperture marks (corresponding to the preset lens aperture on the scale 12, to each side of the index 10), point to the depth of field zone on the focusing ring 32 (circle of confusion  $z=50~\mu$  / 0.002 in; further stopping down is necessary for utmost sharpness).

Example in Fig. E: 50 mm lens f/1.8, stopped down to f/8 and focused to 10 ft, depth of field from approx. 7 ft to 18 ft.

Reading from tables: Exact values for all lenses are given in the Rollei depth of field table "35 mm SLR".

#### The exposure

Frame center of picture or important picture area in the view-finder and press button 2 fully down (green signal in view-finder = correct automatic exposure, red signal = danger of underexposure).

The mirror swings up, the diaphragm closes down to the preset lens aperture and the focal plane shutter travels at the controlled shutter speed. Then the mirror returns immediately to its position and the diaphragm springs back to full lens aperture.

When the diaphragm stop down pin 7 is pressed in, the diaphragm always remains at the set value after releasing and tensioning (indicated by the red signal, using lenses with aperture simulator).

When the shutter has been released the camera must be tensioned for the next exposure. When doing this always swing the rapid advance lever 22 through as far as it will go.

#### Exposures with self timer

Press lever 5 upwards as far as it will go.

On pushing the start button 6 in the direction indicated by the arrow, about 6 sec elapse before automatic exposure; during this time the lever returns to its initial position.

Time exposures (shutter setting "B") are **not** possible with the self timer.

#### **Exposures with filter**

Screw filter into lens thread 33 without the use of force. The through-the-lens light metering system means that the filter factor is adjusted automatically.

Further details are given in the filter table in the Rollei publication "Accessories 35 mm SLR".

## **Exposures with lens hood**

are recommended at all times: the lens is protected from direct light sources, water splashes and raindrops, and picture brilliance and sharpness are improved.

According to lens focal length the following hoods are used:

rectangular lens hood for 25 mm focal length,

folding lens hood for 35-50 mm (with slightly reduced effect up to 135 mm) focal length,

screw-in lens hood for 85–135 mm focal length, extending lens hood for 200 mm focal length.

The mark on the rectangular lens hood must be in alignment with the index 10.

Simultaneous use of filter and lens hood is possible. For further details see the Rollei publication "Accessoires 35 mm SLR".

## **Exposures with lenses of other makes**

When metering cover up port 3 to avoid under exposure by stray light (especially with low light and/or lenses with chrome finish).

# Unloading the film

By pressing the release 35, unlock the rewind locking mechanism and turn the rewind crank 23 in the direction of the arrow until the frame counter 26 has reached its initial position and a slight resistance is felt (film has detached itself from the take-up spool). Only now open the camera back by pulling up the rewind knob 23 and remove the film cassette.

## Changing the lens

Before removing or attaching the lens be sure that the diaphragm stop down pin 7 is not pressed in.

Push in the locking button 8, release the lens from the camera bayonet by turning anti-clockwise. Fully open diaphragm of interchangeable lens and insert so that the red dots are in alignment, then lock by turning clockwise until engagement.

## Close-ups

#### Extension tubes and bellows

These are attached to the camera as already described with changing lenses. In the same way, the lens is attached to the front bayonet.

The tubes can be used in combination, or attached to the bellows focusing device.

M 42 intermediate adapter, Rollei retro-adapter, microscope adapter and macro-lens adapter  $\rightarrow$  Rollei publication "Accessories 35 mm SLR".

Measure the exposure **only** with pressed-in stop down pin **7** (working aperture measurement). The index **18** indicates the position of the film plane.

#### Care of the camera

and accessories maintains their value and reliablity for many years.

## Cleaning

of the camera should be done regularly at appropriate intervals according to use: dust the camera and accessories inside and outside with a soft sable brush and a rubber blower. Clean the outer parts with a soft dry cloth, glass surfaces with lens cleaning tissue. Never polish the mirror and never touch the inside components or the rubber blinds of the focal plane shutter with the fingers. Clean the everrady case, holdall case and lens cases by blowing and brushing out.

#### Rollei Service

with many approved workshops throughout the world provide servicing in all countries:

These Rollei dealers and the specialists trained at our factory will take expert care of your camera and provide help and advice on all questions of photography.

#### Serial number

Every camera carries on its base a serial number. Every lens also has its number. We advice you to make a note of these numbers so that you can establish your ownership in the case of loss or a misunderstanding.

# Handling faults and remedies

· lending reality and		L		
Fault	Possible cause			
Meter pointer does not respond	Rapid winding lever still in rest position			
	Preselected aperture outside indicator range	1		
	Batteries exhausted, not inserted or wrongly inserted, battery voltage indication ignored	-		
	Stop down pin depressed			
	Lens incorrectly fitted	П		
Meter needle remains in top or bottom red area	Preselected aperture outside indicator range	П		
Shutter does not release	Winding lever only partly tensioned			
	Self timer lever only partly tensioned			
Picture underexposed or partly exposed	Electronic flash used with $Q$ setting			
	FP flash bulbs used with $\rlap/z$ setting			
	Flash terminal not set	1		
Picture underexposed	Wrong exposure measurement	Г		
	Stray light entry through viewfinder eyepiece in strong sidelight	1		
Picture under-	Automatic control not switched on	П		
or overexposed	Measuring limit ignored	(		
Whole film under- or overexposed	Wrong film speed set	1		
Whole film unexposed	Film not advanced due to faulty loading or because torn	1		
Image partly or completely unsharp	Subject movement: exposure time too long for moving subject			
	Camera shake: exposure time too long for hand held shot			
Rewind knob does not	Film wrongly loaded			
turn, frame counter inoperative	Film torn			
Rewind release fails to engage, considerable resistance during film advance	Excessive exploitation of film length, Film entirely wound off	[ n		

Remedy	Notes		
Pull out rapid winding lever into ready position	→ page 25		
Select larger or smaller aperture	→ page 26		
Change or (correctly) fit batteries; note battery voltage indication	→ page 25		
Press in stop down pin only with working aperture measurement	→ page 26		
Fully open lens diaphragm before inserting	→ page 34		
Preselect smaller or larger arperture	→ page 26		
Fully tension rapid winding lever	→ page 24		
Fully tension lever	→ page 32		
Use electronic flash with $ t $ position only	0 terminal fires too early → page 28		
Use FP flash bulb with 9 position only	<ul> <li>         ‡ terminal fires too late         → page 28     </li> </ul>		
Set shutter speed dial to ${\it t}$ or ${\it Q}$ position	→ page 28		
Measure brightness of main subject	→ page 27		
Use eyepiece cup especially when wearing spectacles	→ page 30		
Engage shutter speed dial on "A"	→ page 25		
Observe measuring limit in viewfinder	→ page 26 and 27		
Set film speed correctly	→ page 24		
Load film correctly, advance smoothly but not too fast	Film advance control → page 24		
or Preselect larger aperture to permit faster shutter speed	→ page 26		
Preselect larger aperture or support camera or use tripod, note time exposure indication	→ page 26 and 27		
Load film correctly	→ page 24		
Remove torn piece of film, trim new leader and re-thread	→ page 24		
Do not use force to advance film, keep rewind release pressed in and rewind film somewhat, then finish lever stroke	If film is torn out of cartridge: open back in total darkness only, rewind film by hand and wrap up lightproof		

## Facts and figures

**Type:** 24 x 36 mm single lens reflex camera with automatic speed control and manual override operating by aperture preselection and exposure measurement through the lens at full aperture.

**Equipment:** Rollei bayonet mount for interchangeable lenses, accessory shoe with center contact, rapid film loading system, focal plane shutter with rubber blinds, rapid winding and release lock, double exposure and blank frame lock, self-locking stop down pin, backlight correction button integrated in shutter release, self timer with starting button, cable release thread, forward-counting self-zeroing exposure counter with film loading and film rewind control, 1/4" tripod bush, carrying strap eyelets.

**Exposure measurement:** Through-the-lens system with silicon photo diode, center-weighted full field measurement; according to lens type open aperture measurement or working aperture measurement. Film speed setting from 25–3200 ASA/15–36 DIN, measuring range with 100 ASA / 21 DIN film 1–16,000 cd/m² with 50 mm f/1.8 lens; automatic electronic shutter control with aperture preselection, powered by 4 x 1.5 V silver oxide batteries in camera base, switched on by rapid winding lever and shutter speed dial, double switch-on indication.

Viewfinder system: Pentaprism, instant return mirror. Focusing screen with diagonal focus indicator, microprism ring and ground glass screen with Fresnel lens. Aperture indication, shutter speed indication, top and bottom setting range limit indication, time exposure warning mark; LED green signal as automatic and memory measurement indication, LED red signal as setting range limit and indication of aperture stop down pin position; battery voltage check indication.

Viewfinder eyepiece with mask and fitting for eyepiece cup and correction lens, Laterally correct and parallax-free finder image.

Focal plane shutter: Automatically controlled shutter speeds 1/1000-4 sec, mechanically set shutter speed 1/1000-1/30 sec and B;

selectable X and FP flash synchronization at  $^{1}/_{40}$  sec for hot shoe and flash cord terminal.

**Dimensions:** approx. 146 x 92 x 99 mm /  $5^{3}/_{4}$  x  $3^{5}/_{8}$  x  $3^{7}/_{8}$  in. with 50 mm f/1.8 lens.

Weight: approx.  $895 \text{ g} / 31^5/8 \text{ oz.}$  with 50 mm f/1.8 lens.

Interchangeable lenses: see page 40.

#### Accessories:

Lens hoods;

Rectangular / Type A for 25 mm f/2.8 lens – Screw-in / Type B for 35 mm f/1.4 lens – Screw-in / Type C for 85 mm f/1.4 lens – Screw-in / Type D for 85 mm f/2.8 and 135 mm f/4 lenses – Folding / Type E for 35 mm f/2.8, 50 mm f/1.4 and 50 mm f/1.8 lenses; with slightly reduced effect also for 85 mm f/2.8 and 135 mm f/4 lenses

Filters medium yellow, green, orange, light red, UV, R 1.5, neutral density – 2, neutral density – 3, infrared; polarizing filter, soft focus attachment.

Rollei retroadapter, adapter for extreme close-up lenses, microscope adapter, M 42 / Pentax Praktica thread adapter.

Set of extension tubes 7.8-15-30-50 mm with aperture automation, bellows with aperture automation.

Eyepiece cup, correction lens mount, lens and camera body caps, eveready case, combination case, lens case, carrying strap with non-slip shoulder pad.

Technical modifications and inclusion of accessories reserved.

						.i
Interchangeable lenses	Distagon *	F-Distagon *	Distagon *	Distagon °	Distagon *	
Maximum aperture	3.5	2.8	4	2.8	1.4	2
Focal length	15 mm	16 mm	18 mm	25 mm	35 mm	1 3
Aperture range	3.5–22	2.8–16	4–22	2.8–22	1.4–16	. 2
Angular field diagonal	109°	180°	99°	<b>80</b> °	61°	6
Angular field horizontal	99°	141°	88°	70°	53°	5
Angular field vertical	76°	<b>89</b> °	66°	50°	37°	3
No. of elements	13	8	10	8	9	5
No. of components	12	7	9	7 ,	8	5
Nearest focus	0.16 m 6 <sup>1</sup> / <sub>4</sub> "	0.3 m 12″	0.3 m 12″	0.25 m 10″	0.26 m 11"	0
Filter thread	**	**	-	E 49	E 67	E
Lens hood type +	- '	-		Α	В	E
Length overall	104 mm 4 <sup>1</sup> / <sub>8</sub> "	68 mm 2 <sup>11</sup> / <sub>16</sub> "	61 mm 2 <sup>3</sup> / <sub>8</sub> "	64 mm 2 <sup>1</sup> / <sub>2</sub> "	85 mm 3 <sup>5</sup> /16"	5 2
Diameter	84 mm 3 <sup>5</sup> / <sub>16</sub> "	70 mm 2 <sup>3</sup> / <sub>4</sub> "	70 mm 2 <sup>3</sup> / <sub>4</sub> "	62 mm 2 <sup>7</sup> /16"	70 mm 2 <sup>3</sup> / <sub>4</sub> "	6 2
Weight approx. g/oz	760 23 <sup>13</sup> / <sub>16</sub>	345 12 <sup>3</sup> / <sub>16</sub>	300 10 <sup>5</sup> / <sub>8</sub>	310 10 <sup>15</sup> / <sub>16</sub>	470 16 <sup>9</sup> /16	2 7 <sup>3</sup>
					1	

<sup>\*)</sup> Made by Carl Zeiss, Oberkochen, West Germany °) Made by Rollei under licence from Carl Zeiss; Reg. Trade Mark: Rollei-HFT®

•							
Distagon °	Planar *	Planar °	Planar *	Sonnar °	Sonnar °	Tele- Tessar °	Tele- Tessar °
2.8	1.4	1.8	1.4	2.8	2.8	4	4
35 m <b>m</b>	50 mm	50 mm	85 mm	85 mm	135 mm	135 mm	200 mm
2.8– <b>22</b>	<b>1.4</b> –16	1.8–16	1.4–16	2.8–22	2.8–22	4–32	4–32
610	46°	45°	29°	29°	18°	19°	13°
52°	39°	38°	24°	24°	15°	16°	11°
36°	27°	26°	16°	16°	10°	10°	7°
5	7	7	6	4	4	4	6
5	6	6	5	4	4	4	5
0.4 <b>m</b> 1′5″	0.45 m 1′5″	0.45 m 1′5″	1 m 3′5″	1 m 3′5″	1.6 m 5′5″	1.6 m 5′5″	2.5 m 8′
∃49	E 49	E 49	E 67	E 49	E 55	E 49	E 67
Ē	E	E	C	D+E	**	D+E	**
53 mm 2 <sup>1</sup> /16″	47 mm 1 <sup>7</sup> /8"	47 mm 1 <sup>7</sup> /8"	72 mm 2 <sup>13</sup> /16"	52 mm 2 <sup>1</sup> / <sub>16</sub> "	98 mm 3 <sup>7</sup> /8"	98 mm 3 <sup>7</sup> /8"	134 mm 5 <sup>1</sup> / <sub>4</sub> "
62 mm ? <sup>7</sup> /16"	62 mm 2 <sup>7</sup> /16"	62 mm 2 <sup>7</sup> /16"	70 mm 2 <sup>3</sup> / <sub>4</sub> "	62 mm 2 <sup>7</sup> / <sub>16</sub> "	62 mm 2 <sup>7</sup> / <sub>16</sub> "	62 mm 2 <sup>7</sup> /16"	76 mm 3″
?10 <sup>13</sup> /8	230 8 <sup>7</sup> / <sub>16</sub>	185 6 <sup>1</sup> / <sub>2</sub>	535 18 <sup>7</sup> /8	195 6 <sup>7</sup> /8	450 15 <sup>7</sup> /s	375 13 <sup>3</sup> / <sub>16</sub>	580 20 <sup>7</sup> /16

i) See also page 39 ') built-in