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Practical tips from A to Z

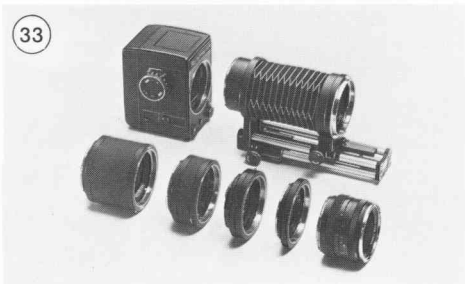
10 Macrophotography

Extension tubes and bellows extend the optical possibilities into the sphere of macrophotography → fig. 33.

The bellows and extension tubes can be used together with the electronically controlled automatic exposure mechanism remaining fully operational.

The SLX extension tubes are available in lengths of 9, 17, 34 and 68 mm – all with double Rollei bayonet mount to permit them to be used in any combination, with a maximum extension of 5.04 in (128 mm) when all four tubes are used.

The SLX bellows offers extensions of 2.64 to 8.03 in (67 to 204 mm). The special compendium is a valuable accessory for such photographs which usually utilise difficult lighting techniques.

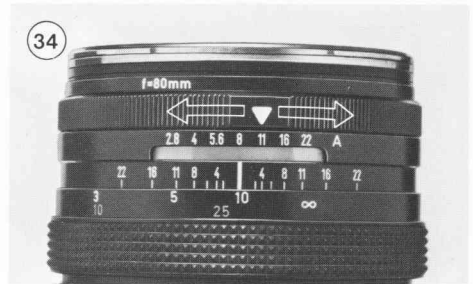


11 Manual aperture selection

This is used when, for example, the required depth of field for flash pictures necessitates a specific aperture, for intentional over- or under-exposure, when working with a pre-released mirror, and in every case when working outside the range of the automatic exposure control → fig. 34.

12 Memory hold

A substitute object (e. g. grey card) is measured, the metering key held pressed down and the subject of the photograph exposed with the measured value fixed in this way.



13 Multiple exposure control unit ME 1

is available as an accessory and permits multiple exposures (without moving the mirror and transporting the film) for sequence photographs of technical processes and operational cycles, sport scenes, animal photographs etc. The unit is connected with the universal plug connection. The interval between exposures can be set either to any arbitrary duration or over a range from 0.1 to 1.5 sec and the number of exposures per frame can be selected between 1 and 10.

14 Polaroid back

is included in the range of accessories and can be used instead of the standard camera back. This back is intended for Polaroid films size $3\frac{1}{4} \times 4\frac{1}{4}$ " (8.3 x 10.8 cm). A separate set of instructions contains all the necessary information.

15 Rapid release

For sports scenes, animal photographs and »action« snapshots, the fastest possible release is especially important if the subject is to be captured at the crucial moment. In order to reduce the time between release and shutter opening, the light measurement and/or the mirror movement are undertaken in advance.

With advance light measurement:

Switch on automatic exposure control, press metering key and keep pressed in. Depress release button completely at the moment of exposure.

With advance light measurement and mirror pre-release:

Carry out light measurement as normal and set measured stop manually. Pre-release mirror with cable release, then release shutter with appropriate pushbutton.

16 Release of the shutter

is possible using left or right hand release button, cable release, special release, remote release or multiple exposure control unit. All these release possibilities are constantly available for use and can also be used in alternation or in combination. Switching off the release circuit (with the central switch set to 0) prevents unintentional release.

17 Remote release

Electronic remote shutter releases are available as accessories with 16 ft or 33 ft (5 m or 10 m) cables, connected to the universal plug connection. These remote releases also allow mirror pre-releasing. The multiple exposure control unit ME 1 can likewise be used as a remote shutter release.

Practical tips from A to Z

18 Setting limits

The diagrams show the working ranges of the interchangeable lenses with the available apertures and shutter speeds. At the same time, the diagrams show the limits of the setting ranges.

Explanation of symbols



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



Manual setting range without automatic exposure control.



Setting B; measuring range is exceeded.



ASA/DIN sensibility ranges, intermediate values should be rounded off towards a longer time or larger aperture.

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

Examples

of reading off the shutter speed and aperture from the diagrams. Prior light measurement with the camera and the intended lens serves as the basis for determining the brightness of the subject.

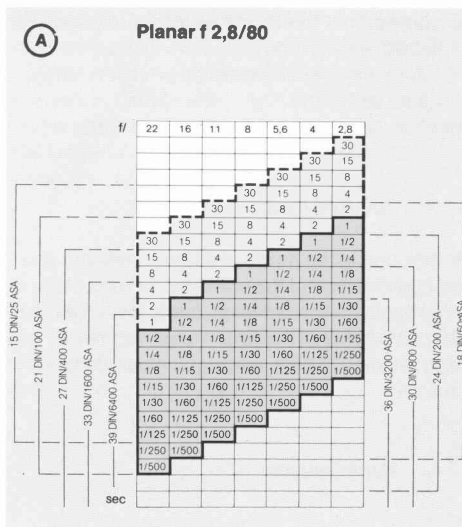


Diagram A:

Planar 2.8/80mm, 200 ASA/24 DIN film and $1/60$ sec are selected, $f/8$ is measured. Look up $1/60$ sec under the vertical column $f/8$. On the relevant line, $1/a$ to $1/500$ sec lie in the blue automatic sector. Directly above these speeds, the corresponding apertures 2.8 to 22 can be read off.

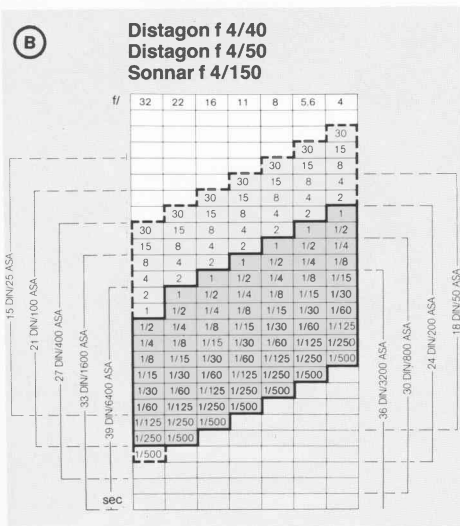


Diagram B:

Sonnar 4/150 mm, 25 ASA/15 DIN film and 1 sec are selected, the required depth of field needs f/32. The camera meter reading indicates f/4. Look up 1 sec under column f/4; on this line, f/32 lies in the white sector. The adjoining value of 30 sec is doubled, exposure for 60 sec* is made with setting B.

* The reciprocity effect necessitates a further extension of the exposure depending on the film type.

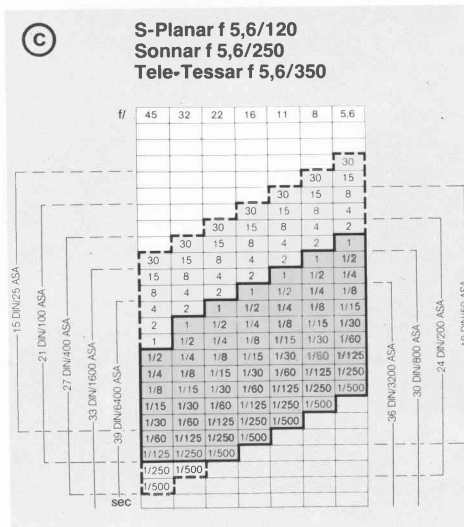


Diagram C:

S-Planar 5.6/120mm, 64 ASA/19 DIN film and f/45 are required for a close-up. 1/8 sec is selected, f/8 is measured. Look up 1/8 sec in column f/8 and, going horizontally, 4 sec is given as shutter speed in the light blue manual sector under f/45.

Facts and figures

Type

6 x 6 cm automatic motor-driven single-lens reflex system camera with electronic control by an integrated process control computer; through-the-lens metering and automatic exposure control according to pre-set shutter speed; automatic film loading and take-up.

Features

Rollei bayonet mount with automatic contact for SLX interchangeable lenses; exchangeable camera backs, viewfinder attachments and focusing screens; pre-loadable quick-change film cartridges for 12/24 6 x 6 cm exposures with 6 x 6 back or for 16/34 4.5 x 6 cm exposures with 4.5 x 6 back on 120/220 roll film; self-zeroing reversible frame counter with multiple indication, film type indication; 2 non-bouncing electrical contact releases, wire release thread; hot shoe with center synchronizing contact, locking synchronizing cable contact, X synchronization 30 to $1/500$ sec; film gauge, interchangeable plug-in battery unit, 3-function central switch, motor-driven film transport for single or continuous exposures, picture frequency up to 1.5 sec; 14-pole universal plug connection for special remote release cable or control and ancillary equipment, rapid tripod coupling, $1/4''$ and $3/8''$ tripod threads, rotatable carrying holders.

Exposure metering system

3 large-area spectral sensitivity-corrected Silicon photo-electric cells behind swing-back mirror, integrated mean light metering with electronic extraneous light compensation during the releasing process, measuring range for 100 ASA/21 DIN film with 80 mm lens f/2.8 exposure value 3–18/3.2–100,000 asb/1–33,000 cd/m², automatic aperture setting by meter reading processing in the process control computer and linear motor drive of the diaphragm in the lens; automatic indication of incorrect exposure and measuring limits by 2 LED's, combination meter key for locking meter readings and indication of incorrect exposure/measuring limits, additional measuring limit indication in the shutter speed setting knob; adjustable film speeds 25–6400 ASA/15–39 DIN.

Viewfinder system

Removable folding focusing hood with exchangeable 3.3 x viewing magnifier, sports frame finder for f = 150, 250 and 350 mm; exchangeable for 45° prism finder, 90° prism finder or rigid magnifying focusing hood with focusing eyepiece, visual viewing image magnification 1.1 x with f = 80 mm and folding focusing hood; exchangeable focusing screen with split-image range finder, microprism screen and quadratic graticule; depth-of-field preview with combination meter key, pre-releasable swing-back mirror with partially transparent multiple coating and pneumatic mirror damper.

Power supply

Quick-change plug-in battery unit with automatic contact and safety interlock, chargeable 8x 1.2V sintered nickel-cadmium battery with M 0.8 A / 250 V overload fuse; automatic voltage check on each exposure, manual voltage check with combination meter key; battery capacity up to 1,000 exposures.

110–220 V 50/60 Hz rapid charger with automatic rapid charging limitation, indicators for rapid and normal charging, rapid charging time up to approx. 1 hour according to charging condition.

Interchangeable lenses

Rollei bayonet lens mount with interlock in camera body, integrated electronically controlled central shutter for $1/500$ –30 sec and B, 10-pole contact strip for pulse transfer for aperture and shutter drive; infinite automatic exposure control with aperture indication, switchable to manual aperture selection in $1/3$ click stops; depth-of-field scale, distance scale in m and ft, infra-red index; lenses of 40–250 mm focal length with 2 front bayonet lens mounts for filter, lens hood and compendium.

Dimensions

approx. 138x85x104 mm / 138x110x110 mm
(5.43x3.35x4.09 in / 5.43x4.33x4.33 in)

overall, without lens;

approx. 138x85x153 mm / 138x110x153 mm
(5.43x3.35x6.02 in / 5.43x4.33x6.02 in)

overall with 80 mm lens f/2.8.

Weight

approx. 1,275 g (45.0 oz) without lens; approx.
1,875 g (66.1 oz) with 80 mm lens f/2.8.

Technical modifications and inclusion of accessories reserved.

Problem location table

Symptom	Possible cause
Film does not advance to frame 1	curl in film leader, slack not taken up
Lens does not indicate aperture setting	automatic exposure control switched off
	lens not locked
	battery discharged
	faulty fuse
Battery prematurely discharged	operating temperature too low
Focusing hood will not close	viewing magnifier still raised
	frame finder in operating position
Focusing screen has no viewing image	mirror pre-released
	rotary shutter speed knob not engaged in place
Viewing image unsharp	focusing screen in wrong position or not locked in place
	photographer has farsighted or nearsighted vision
Light measurement not adjustable	preset speed too fast or too slow
	incorrect film selected and/or extremely unfavorable lighting conditions
Light measurement produces a different result with a different focal length	new measurement takes into account altered brightness distribution in the selected view
Release not possible, but no error in previous light measurement	battery warning indicator not observed; electronics switched off as residual voltage would not be adequate
Camera switches off during continuous exposure	battery voltage inadequate
Camera switches off during loading or transport of film due to fuse burning out	film base too brittle, e. g. after storing in refrigerator or in extreme cold
	improper film alignment
	film incorrectly loaded, film motion symbol not noted
Incorrect exposure	exposure light changes after mirror pre-release
	strong incidence of extraneous light in focusing hood (especially with fluorescent lamps)
Underexposure	with mirror pre-release exposed automatically
Frame counter stops at 15 or 16	film length incorrectly set: 220 instead of 120
220 film wound up after 12 exposures	film length incorrectly set: 120 instead of 220
1–2 frames remain unexposed at the film end	film not wound on far enough on loading

Problem location table

Solution	Comments
release once more	wind film leader tightly by hand when loading
set aperture ring to »A«	
allow lens to engage firmly in place	
recharge or exchange battery	
replace fuse	
regulate temperature of battery or recharge it	use interchangeable batteries and external battery connection
fold down viewing magnifier	
unfold frame finder	
release shutter	repeat light measurement
allow rotary knob to engage	
insert screen correctly, press holding frame tight	screen with matt side downward
use corrective viewing magnifier	available in +2.5 to -2.5 diopters
change preset speed	
insert another type of film, use neutral density filter, artificial light or flash	perhaps choose a lens with a range of smaller apertures
not necessary	different angle of view produces different frame and different brightness distribution
change or recharge battery	
change or recharge battery	use battery with maximum possible charge
regulate temperature of film (and camera), replace fuse	carry loaded film cartridges and replacement batteries with you
replace fuse (use only type 0.8 V / 250 A)	note symbol in film cartridge
work in changing exposure light without pre-release so that automatic exposure control remains effective	
swing up viewing magnifier, avoid direct incidence of light on focusing screen, close focusing hood in bright lighting conditions	
after mirror pre-release, always work with manual aperture setting	
set film length to 120	
set film length to 220	
wind on film until arrow on paper leader aligns with index	

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