

# MINOX<sup>®</sup> BL



Owner's Manual



Before you start reading the Manual, please fold out this and the last page, so that you can see at a glance which particular dial, window or other part of your Minox BL is being mentioned in the text.

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## Technical Information

**Minox BL Models:**  
10.420 Minox BL, chrome finish  
10.440 Minox BL "Private Eye", black finish  
**Negative size:** 8 x 11 mm  
**Film:** Minox films in daylight loading 15-exposure or 36-exposure cartridges.  
**Film advance:** By telescopic (push-pull) rapid wind, coupled with shutter cocking. Film advance operates only after shutter has been released.  
**Film pressure plate:** 750 grams pressure. Filmgate opens during film advance and when camera back is opened.  
**Shutter:** Sliding double-blade shutter with escapement; exposure range 1/1000 to 1/2 sec. and "B" for longer exposures.  
**Exposure Meters:** Built-in shutter-coupled CdS meter (match needle system); film sensitivity range ASA 12/12 DIN to ASA 400/27 DIN.  
**Measuring range:** LV 5-15; with gray filter: LV 7-16. All exposure times from 1/2 to 1/1000 sec. for all film sensitivities are measurable and can be set with the matching needle; additionally the meter signals - when LV exceeds 14 - that gray filter must be used for brilliant subjects and faster films. Shutter dial has index mark for 1 second exposure (approximately LV 4).

**Battery for CdS meter:** Mallory PX 675, Varta 7001 or equivalent.  
**Battery test:** By reverse actuation of filter slide; test check mark in exposure meter field.  
**Lens:** 15 mm 13.5 4-element objective, coated, always at fully-opened aperture. Focusing range: 8 inches to infinity (∞).  
**Filters:** UV filter used as lens window. Built-in neutral density (gray) filter, movable. Other filters available as slip-on filters.  
**Sun shade:** Built-in.  
**Viewfinder:** Luminous frame finder with automatic parallax compensation.  
**Exposure counter:** Counts down from 36 to 0; distinctive, dark scale from 15 to 0 for short films.  
**Flash contact:** Standard PC type.  
**Flash Synchronization:** X for all speeds up to 1/250 sec. with electronic flash units; up to 1/30 sec. with flash bulbs and cubes.  
**Length (closed):** 3 1/4"  
**Length (open):** 4 1/4"  
**Width:** 1 1/4"  
**Height:** 1 1/4"  
**Weight:** Camera only, 2 1/4 oz.  
Camera with battery and film, 3 oz.

33

Snaplock for back cover Film compartments Sliding back cover Film speed dial



Toothed film transport wheel Serial number Viewfinder eyepiece Battery



Meter button Flash post  
Meter field with black indicator needle and red matching pointer CdS meter cell window  
Shutter speed dial Sliding lever for gray filter and battery test  
Exposure counter Viewfinder (front window)  
Distance scale Shutter release button Lens window

## Contents

<b>The Minox BL Camera</b>		<b>Battery replacement</b>	23
Opening the camera	2	Flash pictures	24
The "three eyes"	3	Eveready case	26
Hold it steady	4	Care of the Minox BL	27
Taking the picture	5		
Telescopic rapid wind	6	<b>Minox Accessories</b>	
Set the film speed	9	Films	28
Coupled CdS exposure meter and shutter	10	Flash Units	28
Gray (neutral density) filter	13	Slip-on Filters	28
Battery test	14	Tripod	30
Distance setting	15	Finder Attachment	30
Extreme close-ups - Measuring chain	16	Tele-Photography	31
No F-stop setting	17	Copying	31
Viewfinder	18	Projection	32
Exposure counter	19	Home Darkroom	32
Loading with film	20		
Un-loading	22	<b>Technical Information</b>	33



**For Projection**

*Minox HP 24:* Automatic magazine projector for Minox 30x30 mm color slides. Minox 35 mm f/2.7 Minogon lens. 24 V 150 W Halogen lamp. Blower-cooled. Push-button control for focusing and slide change, with 10 ft extension cord. Socket for tape recorder synchronization.

*Minox HP 24 Autofocus:* Same as above, but additionally has automatic critical focus control after focusing first slide.

*MINOTACT (Not illustrated):* Semi-automatic magazine projector for Minox 30x30 mm color slides. 35 mm f/2.7 Minostar lens. 12 V 100 W lamp. Other Slide Accessories: Minox 30x30 mm slide mounts; Minox slide magazines; Minox transparency viewer/magnifier with film cutter; Minox projector cases.

**For the Home Darkroom**

*Minox Daylight Developing Tank:* For convenient development of black-and-white films without a darkroom; simple operation. See picture, next to enlarger.

*Minox Enlarger Model II:* Brings out the critical sharpness of Minox black-and-white negatives. Other Darkroom Aids: Minox Ultra-Fine Grain Developer; Minox Negative Wallets; Minox Negative Viewer.



**Opening the camera**

For picture-taking pull the Minox BL open as far as it will go.

While the camera is closed, the viewfinder and lens windows are protected within the housing, and the shutter release is locked. If, after opening the camera and looking through the viewfinder, you decide not to take a picture, simply close the camera again. This "pre-view" feature saves film: the film advance can operate only after you have pressed the shutter release button.



**Tripod:**

*Minox Camera Clamp:* Attaches the Minox (any model) to a tripod, such as the Minox pocket tripod.

*Minox Pocket Tripod:* Solid three-legged stand with adjustable swivel head and cable release. When not in use, the legs slide all into one for greatest compactness - slightly larger than a pencil.



**Finder Attachment**

*Minox Right Angle Mirror:* For candid snapshots "around the corner". Fits all Minox camera models. Earlier mirror attachments cannot be used on the Minox BL.



**Hold it s-t-e-a-d-y**

Hold your Minox firmly, yet relaxed, with both hands. Keep your thumbs on the underside of the camera, other fingers on top, so that the three windows are unobstructed.



These illustrations show the most practical way of holding your Minox for horizontal and vertical shots.

If you cover the lens window during exposure, your picture will show a partial or complete shadow. If you cover the window of the CdS cell during measuring, the measurement will be wrong.

You have the best hold when both hands are steadied against your face and you let your fingers press the camera ends down against the thumbs - as if to bend the camera. Your Minox BL can, of course, remain in its everyday case for picture-taking. Simply fold the hinged section of the case all the way up against the underside. (See page 26.)

**Congratulations**

With your new Minox BL you are embarking on a wonderful, un-burdened kind of picture-taking. Your exceptionally small and precise camera can go with you wherever you go, to give you lots of pleasure.

It's easy to get good pictures with the Minox BL and this little book will show you the way. The most important pointers are given, briefly, in bold print. If you want to know more, simply

read on. And, before making any important pictures - of a trip or some special event - it's always a good idea to shoot a cartridge of film outdoors, and with flash indoors. This will give you practice in camera operation and provide a check on your outfit. But NOW - why not get acquainted with the ease and pleasure of picture-taking with your Minox - the camera that never stays at home.

**For Tele-Photography**

*Minox Binocular Attachment:* Permits taking photographs of distant subjects through binoculars; fits all Minox camera models.



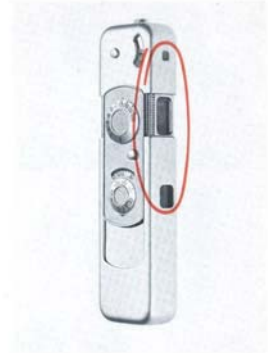
**For Copying**

All Minox models are excellently suited for the copying of letters, documents, sheet music and similar written or printed originals. The Minox adjustable copy-stand and other accessories are available through your Minox dealer. Please ask for special folder.

**The "three eyes"**

The front of the Minox BL contains (top to bottom in the illustration) the CdS cell window of the exposure meter, the viewfinder and lens windows. These three windows must not be obstructed (watch your fingers!). Sharpness and brilliance of your pictures depends to an important degree on a spotlessly clean lens window.

If the CdS cell is covered during measuring, you'll get a wrong exposure indication. You can spot smudges on the lens window easily if you slide the gray filter (see page 13) into place as a dark background. If necessary, clean the window gently with a soft (dry) handkerchief or cotton swab on a stick. Silicon-treated eyeglass tissues are not suited for this purpose. By the way: The lens window is a UV filter which prevents unsharpness caused by strong ultraviolet rays in the mountains or at the ocean.



## Minox Accessories

### Films

Minox film is available in many different types for every purpose. Your Minox dealer will be glad to suggest the proper film for specific purposes.

### Flash Units

**Minox C 4 Flash Unit:** Extremely compact; for use with flash cubes. Connects automatically without external cable. See picture on page 24.

**Minox ME-2 Computer Flash Unit:** Self-contained electronic flash unit which automatically adjusts flash duration to the film used, and to the brightness and distance of the subject. Automation may be switched off. (See page 25.)

### Slip-On Filters

Your Minox BL has a built-in UV filter (page 3) and gray filter (page 13). In addition, the following slip-on filters are available in a complete set with filter case. The CdS exposure meter cell automatically adjust for correct exposure with filters.

**Minox Skylight-Filter (R 3):** Eliminates bluish cast in color slides under noonday sky. No exposure correction.

**Minox Color Correcting Filter R 6:** Eliminates bluish cast under blue sky in the shade. Exposure factor 1.5x.

**Minox Green Filter:** For black-and-white outdoor pictures. Brings out clouds; lightens greens. Exposure factor 2x.

**Filter Case:** Plastic case for three Minox slip-on filters.

28



Circle in lens window indicates that the Minox is ready for the next picture

### Telescopic rapid wind

After you have taken a picture, 'close' the camera. Then, for the next picture, you pull it open again. With this "push-pull", the film is advanced for the next picture, the shutter re-cocked and the exposure counter moved to the next number — all automatically! However, this occurs only if, before closing your Minox, you actually look a picture or otherwise released the shutter. Just be sure to close and open the camera all the way every time.

The small circle in the lens window tells you that the shutter is wound ready for the next picture. The circle disappears after you have released the shutter: Your signal that you must "push-pull" before taking the next picture. If you don't want to take a picture after opening the camera, simply close it until the next picture opportunity comes along. But, if you're in a hurry to take pictures in quick succession: One-two, One-two, One-two! Go ahead — your Minox can take it.

6



### Eveready case

The flat spring clip of the chain snaps into the D-ring of the locking disk. Before inserting the camera, turn the locking disk on the outside of the case to vertical position. With the lens window to the front and dial side up, slide the camera into the case and, using the external ring in the manner of a screwdriver, turn the locking disk one-quarter turn to the right while holding the camera firmly against the inside of the lock. With the camera locked in, the slot of the locking disk is in horizontal position.

To unlock the camera, turn the locking disk one-quarter turn to the left.

Attach the fastening ring of the measuring chain to a button, belt loop or buttonhole to protect your Minox BL against loss.

### Belt case (not illustrated)

A practical belt case, made of fine black leather, is available as an accessory. It holds the camera without chain and fits snugly on your trouser belt, keeping all your pockets free for other important things.

26



6

### Taking the picture

When you have framed your picture in the luminous rectangle of the viewfinder, hold the camera steady and squeeze the shutter release button gently.

The shutter release requires only very light pressure and, to avoid jarring the camera, place your index finger close to the release button even before taking the picture and "roll" it onto the button when you are ready to shoot, while holding your breath. Take the camera from your eye only after you've heard the soft clicking of the shutter.

5

### Care of the Minox BL

**Lens window:** When reloading, check the lens for smudges or fingerprints and, if necessary, clean carefully.

**Housing:** Clean the outside of the camera housing occasionally with a soft rubber eraser — no liquids!

**Film compartment:** When reloading, blow out the empty film compartments; dust particles may scratch the film.

Should salt water ever get into the camera, it can corrode the mechanism. You may perhaps save the camera with this radical treatment: Open the camera and camera back and place in warm tap water; let it cool; remove, shake out water; dry the camera at once near a heater and rush it to our Service Department with the notation: Salt Water Damage.

### Hot weather precautions

All films are sensitive to high temperatures before and after exposure. Do not store your Minox films or your loaded Minox BL in the glove compartment or on the rear window shelf of your car, nor in other places where the film may be affected by excessive heat.

27



Clean lens window with cotton swab or with a clean linen cloth wrapped around a match or wood stick.



7

adjusts flash duration to the brightness and distance of the subject. You merely set the film speed dial of the ME-2 for the film which you are using; the electronic automation of the ME-2 does the rest.

The automation may be switched off; the ME-2 then operates as a normal electronic flash unit with a Guide Number of 52 for ASA 50 film, or (metric) 16 for 18 DIN.

For flash shots with the ME-2, set the shutter speed dial of your Minox BL at 1/250 sec or longer.

You may use the ME-2 as a fill-in flash for outdoor daylight pictures when the regular exposure (without flash) would be 1/250 sec. or longer. At shorter exposure times (e.g. 1/500), the flash is not synchronized with the Minox shutter.

25







#### Flash pictures

The flash contact of the Minox is of the standard PC type, and you may use almost any kind of flash unit with your Minox BL. Just remember to set the shutter speed dial correctly:  
For electronic flash - to 1/250 sec or slower; for flash bulbs or cubes - to 1/30 sec or slower. Ask your dealer for one of the highly efficient, compact Minox flash units; their styling matches the camera and they fit snugly onto your Minox BL; they connect automatically.  
If you already own a B/C flash unit, Cube Flasher or ME-1 Electronic Flash, you can also use it with the Minox BL.

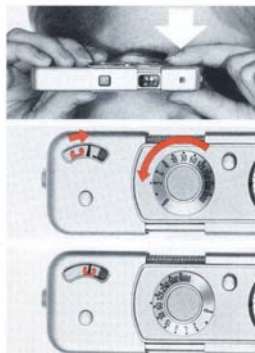
#### Minox Cube Flasher C 4

This extremely small 1 1/4 oz flash unit plugs right into your Minox BL and uses convenient 4-shot flash cubes. (Illustration at left.) Complete instructions are supplied with the unit.

#### Minox ME-2 Computerized Electronic Flash Unit

The Minox ME-2 is a self-contained computerized electronic flash unit which automatically

24



#### Coupled CdS exposure meter and shutter

The built-in CdS exposure meter of your Minox BL is coupled to the shutter speed dial. Thus, setting the correct exposure is a simple matter: Look at the scene through the viewfinder and, at the same time, hold down the meter button for two or three seconds. (Make sure that you don't cover the CdS cell window!) Release the meter button before you take the camera from your eye; this locks the meter needle at the measured position. Now turn the shutter speed dial (the red matching pointer moves with it) until the red pointer brackets the black indicator needle. This automatically sets the shutter speed for correct exposure.

Don't worry if the shutter speed dial happens to be set between the engraved numbers: The shutter of the Minox BL is matched with the exposure meter to cover an infinite speed range from 1/2 to 1/1000 sec.

#### Gray Zone in meter field

If - after you have released the meter button - the black indicator needle is in the gray zone of the meter field, this is a signal that even 1/1000 sec. would result in overexposure, and the gray (neutral density) filter must be used to adjust the exposure. Slide the gray filter in front of the lens

10

#### Un-loading

Watch the exposure counter! After the final exposure, "push-pull" and release the shutter twice. (The exposure counter then stands at the red dot between 0 and 36.)

Open the camera back. With slight tapping of the camera, the cartridge will drop into your hand; or it may be lifted out by its bridge.

As the exposure counter now stands at the (red dot) loading position for 36-exposure cartridges, you can insert a fresh 36-exposure film without further adjustments.

If the next film is in a 15-exposure cartridge, set the exposure counter to the red line between 20 and 15 before inserting the film (see page 20). Place the exposed cartridge in a film box or wrap it in dark paper until it is developed.

22

The CdS meter in your Minox BL gives you exposure measurements over a wide range of picture-taking conditions. Please remember to keep the cell window unobstructed by a finger, hat brim, strands of hair, etc. Otherwise you'll get faulty measurements.

Exposure should always be adjusted to the most important parts of a scene. The CdS cell of the BL exposure meter is designed for "center-weighted" measuring with more attention to the center of the picture area than to the edges or corners. Therefore, during exposure measurement (while you hold the meter button down) aim the center of the viewfinder at the most important area of the picture, even if it should be located along the edge of the picture when you make the actual exposure.

If you want to use a faster or slower shutter speed than the meter reading indicates after you have matched the red pointer to the indicator needle, you can, of course, turn the shutter speed dial to any other position. To cut the measured exposure time in half (e.g. from 1/125 to 1/250), turn the shutter speed dial one step to the left; to double the exposure time (e.g. from 1/125 to 1/60), turn one step to the right.

12

#### Set the film speed

Turn the dial on the underside of the camera to the ASA number of the film which you are using. This sets the exposure meter for the sensitivity of the film. The ASA number is shown on every Minox film package or on the film instruction sheet (DIN numbers do not apply in English-speaking countries).

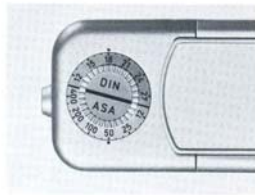
Inadvertent setting of too high an ASA number results in under-exposures; too low, in over-exposures.

#### ASA dial settings

The ASA dial of your Minox BL shows the values listed below in bold type; the intermediate values are indicated by dots on the dial.

12	25	50	100	200
16	32	64	125	250
20	40	80	160	320
25	50	100	200	400

9



Film speed dial on underside of camera (shown set at ASA 50/18 DIN)

#### Battery replacement

To insure continuous functioning of the CdS exposure meter, make it a practice to replace the battery annually. You can test the condition of the battery at any time. (See page 14.) To replace the battery, open the camera as you would for film loading. Remove the old battery by pulling up the red portion on the flexible strip of the battery chamber. Insert fresh battery (Mallory PX 675, Varta 7001, or equivalent), making sure that the + and - markings of the battery match the corresponding symbols on the inside of the sliding camera cover.

Before inserting, wipe both sides of the battery with a dry cloth to remove any possible fingerprints or smudges which might impair good contact.

An exhausted battery should be removed from the camera immediately. Keep mercury batteries away from children and do not incinerate. Always remove the battery from the camera before you store your Minox BL for an extended period.

23

(see page 13) and take a new exposure measurement; with the filter in place a possible 1/2000 sec. - which is beyond the Minox speed scale - automatically becomes 1/500 sec., for example.

#### Longer exposures

At shutter speeds from about 1/30 or slower, use a tripod or other firm support to avoid blurred results; for indoor shots, use flash. (See page 30.)

#### Shutter setting at 'B'

Under unfavorable light conditions, when exposures of longer than 1/2 second may be necessary, such longer exposures can be obtained with the shutter dial set at 'B'. At this setting the shutter opens when you press the shutter release button and remains open until you let the release go.

#### Index mark for 1 sec. exposure

If the exposure measurement - after matching the red pointer to the indicator needle - shows a shutter dial setting at the index mark between 'B' and 2 (1/2 sec.), the required exposure is 1 second: Set the dial at 'B' and hold the shutter release button pressed down for one second.

11

The exposure counter now stands at '36' or '15' depending on the original film loading setting.

Set the ASA/DIN dial for the correct film speed.



Indicated exposure: 1 second. Set shutter speed dial to 'B' - expose for one second.

Match needle stops at 'B' before you can match the red pointer to the indicator needle, the necessary exposure is longer than one second and cannot be shown by the built-in meter.



On very rare occasions the film cartridge may not drop flush into the camera so that the back cover cannot be closed. (This is not your fault nor a defect!) It may occur if the take-up core of the film cartridge happens to rest exactly on the teeth of the transport wheel in the film compartment of the camera. Remedy: Lift out the film cartridge and, with your fingertip, turn the triple-tooth transport wheel in the camera film compartment slightly further clockwise; then re-insert the film and close the camera back cover.

21



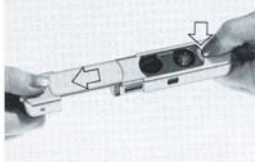
#### Loading with film

Always load – or unload – the Minox in subdued light, or in the shade; if there is no other shade, turn your back towards the sun.

Set counter to "loading" position: While holding down the shutter release button, 'push-pull' the camera until the exposure counter is set for loading position.

For 36-exposure cartridges: set to red dot between 0 and 36 (illustration at near left).

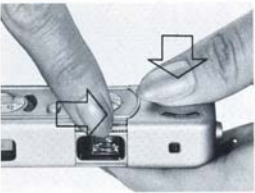
For 15-exposure cartridges: set to red line between 20 and 15 (illustration at far left).



Open camera back: Pull camera out. Press down on crescent-shaped snaplock on underside of camera and slide open the back cover all the way until both film compartments are free.

Insert cartridge: Drop the cartridge into film compartments and close the back cover until it snaps shut. 'Push-pull' and release shutter twice.

20



#### Battery test

With normal use, the battery supplied with your Minox BL to power the CdS exposure meter, lasts more than a year. It is advisable, however, to check the condition of the battery from time to time, as follows: Turn the shutter speed dial until a small black check area is visible at the edge of the meter field. Then push the ridged sliding lever above the viewfinder in the direction of the meter cell window while you hold down the meter button. During this battery test, the black indicator needle should move into the black check area (or to the right of it). Otherwise, remove the battery immediately (see page 23) and replace it with a fresh one.

If you cannot obtain a fresh battery immediately, you can nevertheless continue to take pictures with your Minox BL as its shutter operation is not dependent on the meter battery. It is also a good practice to remove the battery before you store the camera for extended periods.

14



#### Viewfinder

The bright luminous frame within the viewfinder shows you the exact picture area that will appear on your film.

The viewfinder image is automatically corrected, at all distances, to be identical with the film image. (Parallax Compensation). At extremely close distance (8-10 in.), the film image is slightly smaller than the viewfinder image – by about one frame-line width on all sides within the luminous rectangle.

18



#### Extreme close-ups – Measuring Chain

At distances of 2 feet or less, the range of sharpness becomes small; close distances must be set carefully on the distance scale. Use your Minox camera chain for measuring: With the chain held taut and at right angles from camera to subject, the chain beads indicate distances of 8, 10, 12 and 18 inches; the full length chain measures 24 inches.

After measuring, set the distance on the distance dial of the camera. To take the picture, hold the chain at the appropriate bead and extend it once more to the subject to re-establish the correct distance; then S-T-A-Y at that distance, lower the chain and release the shutter.

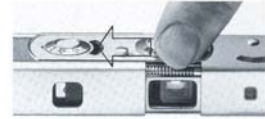
When using a measuring tape or rule instead of the chain, measure the distance from the front of the camera.

For occasions when you may want to use your Minox BL camera without the eveready case, your dealer can supply a safety/measuring chain which locks directly into the corresponding socket of your camera.

16

#### Gray (neutral density) filter

For very bright scenes – beach in brilliant sun, snow, light-colored buildings, etc. – and for faster films, the meter indicator needle of your Minox BL may stand in the gray zone of the meter field: A signal that 1/1000 sec. would be too long an exposure. To adjust the exposure under such conditions, simply push the ridged sliding lever above the viewfinder all the way towards the lens window to move the gray filter into place. Take a new exposure measurement and turn the shutter speed dial to match the brackets of the red follow pointer with the black indicator needle.



The gray filter increases the required exposure by about 4 times and the CdS meter takes this into consideration in the filtered measurement. Thus, a possible 1/2000 sec., for example – which is beyond the Minox shutter speed scale – automatically becomes 1/500 sec.

13

#### Exposure counter

The numbers and scale lines of the Minox BL exposure counter indicate how many more exposures you can still make on the film. Before you insert a new film cartridge, the counter must be set to a definite loading position. (See p. 20.)



All Minox films are available in 36-exposure cartridges, some also in 15-exposure cartridges. 15-exposure cartridges are used only within the dark counter scale with white numerals.

19

#### Distance setting

The distance scale is calibrated from infinity ( $\infty$ ) to 8 inches. To set, rotate the dial until the desired distance is at the black dot in the middle of the small bracket. The bracket indicates the range of sharpness at each setting. Example: With the scale set at the red dot (12 ft.) you have a universal snapshot setting with sharpness from infinity ( $\infty$ ) to 8 ft.



Snapshot setting; range of sharpness from 8 ft to Infinity  $\infty$ .

For landscapes with no important foreground closer than 12 ft., use the infinity ( $\infty$ ) setting. The following "standard" settings are also useful: With scale set at 6 ft., you get sharpness from 4 ft. to 11 1/2 ft. – With scale set midway between 3 ft. and 6 ft., sharpness extends from 3-6 ft., fine for medium close-ups of people. For subjects closer than 2 feet, always use the measuring chain (see following page).

15

#### No F-stop setting

The aperture (f-stop) of the highly corrected Minox 15 mm f/3.5 four-element lens always operates "wide open" – there is no f-stop scale.

This is another great Minox advantage: The lens of your Minox BL has a great range of sharpness (see Distance Setting) and always works at its full f/3.5 opening!

Exposure is controlled solely by the shutter speeds which – because of the large lens opening – are always relatively short.

17