

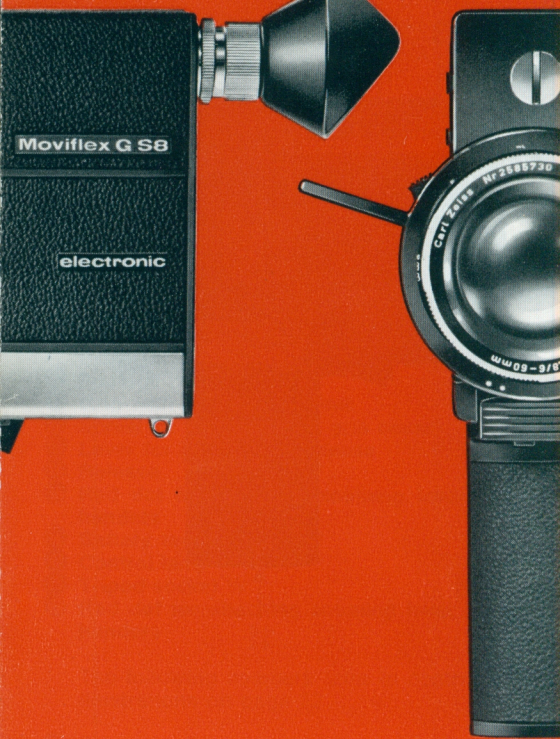


Instructions for use

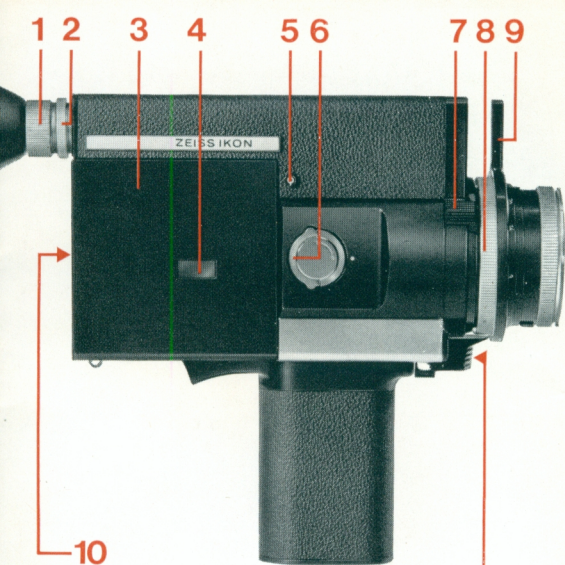
Moviflex G S8
electronic

movie camera for super 8 film

ZEISS IKON
VOIGTLÄNDER



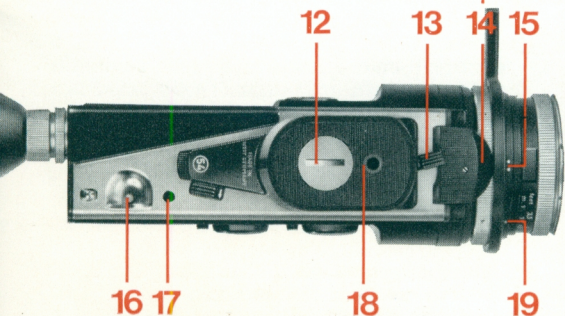
We recommend that you make yourself really familiar with handling the MOVIFLEX G S8 electronic before you insert the first film. It will be to your own advantage. These instructions will give you all the information you need. Fold out the inner cover pages when you are reading the text, so that you can always refer to the position of the relevant camera controls. Your photographic dealer and also the Photographic Advisory Service of ZEISS IKON—VOIGTLÄNDER Vertriebsgesellschaft mbH, 7 Stuttgart, Postfach 540, will be glad to give you free advice and information on all photographic questions.



Controls

- ① Adjustable viewfinder eyepiece
- ② Fixing ring
- ③ Camera door
- ④ Indicator window (loading control)
- ⑤ Marking of the film plane
- ⑥ Camera door locking mechanism
- ⑦ Lever for powered adjustment (zooming) of the focal length
- ⑧ Milled ring for manual adjustment of the focal length
- ⑨ Zooming lever for manual adjustment of the focal length (clamp on, if necessary)
- ⑩ Footage counter
- ⑪ Grip with removable cover
- ⑫ Screw for loosening the grip cover
- ⑬ Lever for locking the release
- ⑭ Release
- ⑮ Red dot for attaching zooming lever for left-handers
- ⑯ Battery testing key
- ⑰ Control lamp
- ⑱ Tripod socket 1/4"
- ⑲ Red dot for attaching zooming lever for right-handers

The following numbers refer to controls in the illustrations on page 22



- ⑳ Screw for fixing accessories (e.g.: angle mirror attachment with effects box)
- ㉑ Cable release connection for motion pictures
- ㉒ Cable release connection for single-frame pictures
- ㉓ Aperture indication and aperture setting
- ㉔ Aperture setting mark and reading index
- ㉕ Setting for number of frames per second
- ㉖ Setting mark
- ㉗ Focal length scale
- ㉘ High-speed button
- ㉙ Key for automatic aperture reversing
- ㉚ Eyelet for fastening the wrist strap and also the carrying strap
- ㉛ Milled ring for distance setting
- ㉜ Setting mark for distance and focal length
- ㉝ Distance scale in metres and feet

- 34 Slot for socket wrench for changeover to artificial light or attachment of additional light source with matching plug connection (Movilum)**

Preparations for shooting

The camera action, including the automatic aperture control system, will operate correctly only if a super-8 film cartridge or the demonstration blank, which is supplied, is inserted.

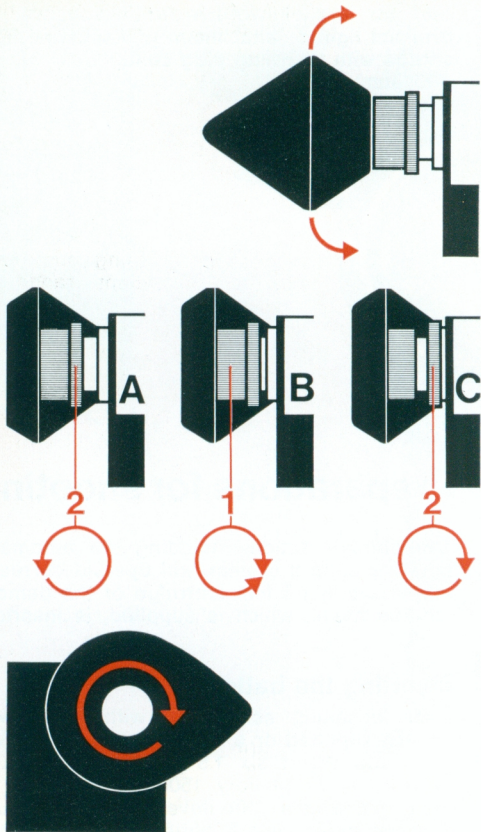
1 Inserting the batteries

After loosening screw (12) with the socket wrench supplied or a coin, remove grip cover (11). Now insert six 1.5 Penlight cells, e.g.: Pertrix 244 or Mallory 1500, as indicated in the grip and fasten the cover again. Make sure that the poles of the batteries are correctly positioned!

2 Testing the batteries

For exact testing, no light must be allowed to enter the lens. (Darken the lens with your hand or put on the lens cover.)

After pressing battery testing key (16), control lamp (17) must light up green. Otherwise, the batteries are dead and must be exchanged or they have been wrongly inserted.



3 Adjusting the viewfinder eyepiece

On purchase, the camera eyepiece is adjusted for normal eyesight.

If you wear spectacles and — with the eyecup folded back — wish to look through the viewfinder whilst wearing spectacles, there is no need to adjust the eyepiece.

Check the adjustment by pointing the camera towards a neutral background (self-coloured

wall, sky or similar). The contours of the fine focusing screen in the centre of the finder field must be sharply defined.

If the fine focusing screen is not sharply defined, proceed as follows:

- a) Fold back the eyecup and unscrew fixing ring (2) (loosen).
- b) Look through the viewfinder and now screw eyepiece (1) backwards and forwards until the fine focusing screen is sharply defined. (Adjustment range is ± 5 dptrs.)
- c) Fix this setting with ring (2). Now turn the eyecup **clockwise** (taking hold of the eyepiece direct on the inside of the rubber part) until the correct viewing position has been found.

Spectacle wearers use the eyecup folded back.

4 Changing the focal length

Adjustment of the focal length serves primarily the selection of the correct viewing image and only secondarily "travelling shots", i.e., focal length adjustment during shooting.

Both powered and manual adjustment are possible. The powered focal length adjustment system operates only when release (14) is pulled back to the first stop (pressure point). If the release cannot be moved, this indicates that the camera is locked against accidental operation. In this case, in order to set in operation press lever (13) to the right. Focal length adjustment is started by moving lever (7) up and down. According to how the camera is held, it can be used for both left and right-hand operation.

The set focal length can be read from scale (27) below setting mark (32).



Manual focal length adjustment is independent of the electric functions in the camera. It is effected either by turning milled ring (8) or with the aid of zooming lever (9) supplied with the camera. This zooming lever can be clamped over milled ring (8). A red dot matching system makes it possible for the lever to be used both by right and left-handers, if either one or two red dots which are on scale (27) and the lever are brought into coincidence.

If the lens is set to a longer focal length than 30 mm the camera should be mounted onto a tripod and a cable release should be used (see item 17).

Shooting by hand with a longer focal lens can easily result in blurred scenes.

Allowance must also be made for the change in the depth-of-field. It must be remembered that, for instance, at a focal length of 60 mm, ∞ setting and 2.8 aperture, the depth-of-field range does not start until 100 m. The enclosed booklet of tables provides the necessary information.

5 Snap-shot setting:

If you want to rid yourself of all the problems of focusing the subject, then we recommend a snap-shot setting, which is technically only possible through the extremely wide-angle of your camera. — Set the focal length scale (27) at **6 mm** and the milled ring (31) for the distance setting at **2 m**, then even with an open aperture (2.8) each subject between 85 cm and ∞ will be sharp.



out of focus



in focus

6 Setting the distance

Set the lens to the longest focal length ($f = 60$ mm), turn milled lens ring (31) until the subject has a sharp outline in the fine-focusing screen in the finder.

A good measuring accuracy is obtained, if this adjustment is made at the longest focal length ($f = 36$ mm).

The measured distance can be read from scale (33) at setting mark (32).

Focusing of the scene is retained over the entire focal length range from 6—60 mm, provided the camera station is maintained.

7 Setting the number of frames per second

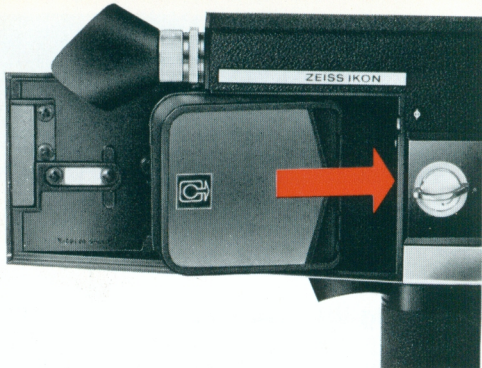
The standard frame frequency is 18 frames per second. If you want to film from moving objects, however, such as cars, trains, etc., set 24 fps at changeover switch (25) by turning the disc to setting mark (26). This also applies when filming sports events and fast moving subjects.

Slow motion effects with 54 fps see item 13.

8 Inserting the film

In your MOVIFLEX you can use super 8 film cartridges with a film speed from 11 to 25 DIN (13—25 DIN for artificial light film and 11—23 DIN for daylight film).

To insert the film cartridge, lift up locking bar (6) and turn to the right until it stops. Then



open camera door (3) and slip in the cartridge with the visible piece of film facing towards the lens until on exerting slight pressure it clicks audibly into place.

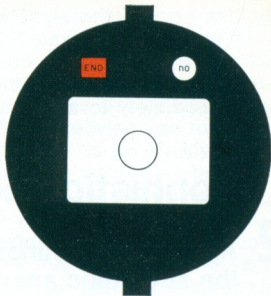
When closing locking bar (6) exert slight pressure on the housing door. Indicator window (4) enables you to check at all times the type of film loaded in the camera.

9 Footage counter (control 10)

It shows in metres and feet how much film is still left for shooting. When the film cartridge is removed, it automatically returns to its initial position.

Shooting

As soon as the cartridge has been inserted, the camera is ready for shooting. A feeler mechanism automatically registers the film speed and transmits the values to the electronic exposure control system and also signals to the "data centre" whether the loaded cartridge contains a daylight or artificial light film.



10 Releasing and aperture setting

Release (14) is provided with a pressure point, so that independent of the film run you can carry out powered aperture setting, powered zooming and, if desired, powered aperture fading (see under 11). The clearly visible pressure point thus enables you to avoid “jerking” the release key and, at the same time, allows you to manipulate a main automatic switch. During shooting, the aperture is automatically adjusted to the correct value when any change occurs in the lighting conditions. Through-the-lens metering ensures that the shooting light is always suitable for the angular field of the lens. In the case of extremely intense or poor lighting a yellow warning light appears in the viewfinder. It indicates that the range covered by the exposure control system has been exceeded. In this case, filming should be discontinued.

When lever (13) is pushed as far as possible to the left, it locks the release against accidental operation.

See under (17) for shooting with a self-timer.

11 End of film

A red light appears in the viewfinder when the last frame on the exposable part of the film

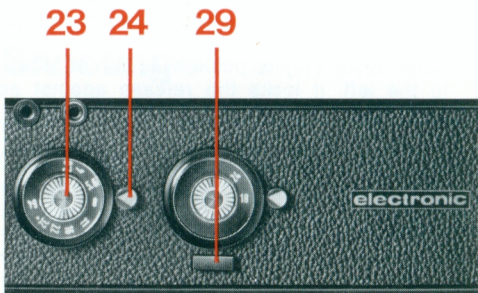
has passed the sight window. The end of the film is also indicated in footage counter (10) and through an acoustic signal. Unload the film cartridge from the camera and send it immediately to a processing agent.

Sophisticated shooting

12 Aperture adjustment and correction of the automatic aperture control system

You can set the desired f-stop by hand, in order to make any particular corrections to the automatic aperture setting. To do this, turn disc (23) to setting mark (24). During shooting, the disc must be held in place with one of your fingers. As soon as you lift your finger, the aperture is again controlled by the automatic system. Incorrect exposures need not be feared in the following sequences. (See under "Shooting with cable release", 17.)

Scene changes using fade-out and fade-in effects during shooting are power-assisted with the aid of key (29). If you press down key (29) towards the end of a setting, the diaphragm automatically closes down and the film scene is continuously darkened out. When the yellow light appears in the viewfinder, this indicates that the diaphragm is closed down (aperture 64). Now release key (29). At the beginning of the next scene (pull release [14]), the diaphragm automatically returns to the cor-



rect aperture and thus provides the desired change in scene. In order to make sure that the aperture does not open before the new scene, which can happen through unintentionally pressing the release dot or operating the release too slowly, we advise you to press button (29) again and then let go slowly when the film starts to run. You can keep the diaphragm closed as long as you wish by holding down key (29). If you want to obtain a particularly long darkened sequence, i. e., right through a wide aperture range, this is done under very bright light conditions by placing a neutral-grey filter in front of the lens. The length of the fading-in or fading-out is visible through the movement in aperture indication (23).

The automatic exposure system has standard calibration and under normal light conditions sets the correct aperture. When shooting low-contrast subjects on colour film or when filming under an overcast sky or, especially snow scenes, it is often advisable to open by one f-stop the aperture selected by automatic control (see the instructions given by the film manufacturer).

Adjust aperture disc (23) accordingly and hold back whilst shooting.

There are, however, special cases where it is advisable to film entirely without automatic aperture control, for instance, when the brightness of the important part of the picture deviates to a marked extent from the surrounding area (archway, indoor shots, dark objects in front of bright backgrounds, etc.). Approach the important part of the picture so closely (using focal length adjustment!) that only the light emitted from this area is measured by the automatic system. Now shoot the scene from the previously selected position without altering in any way the value determined by the automatic system. (Hold disc [23] in position or use a cable release — see under 15.)

13 Slow motion

The MOVIFLEX G S8 features a built-in slow motion gear operating at 54 fps (triple slow motion effect).

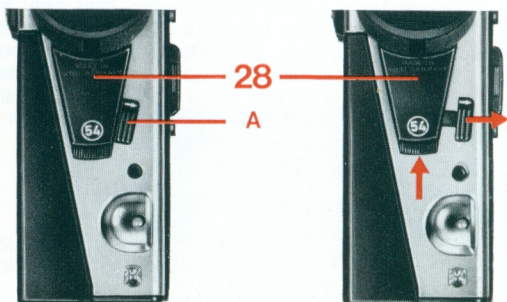
By operating high speed button (28) one can abruptly change from standard speed (18 fps or 24 fps) to slow motion. The electronically controlled exposure automatic adjusts itself synchronously to the altered picture frequency. As a result of the shorter exposure time the aperture opens by about 1 1/2 stops. In order to avoid overtaxing the automatic aperture control system on changing over to slow-motion (yellow light), the aperture should, whenever possible, not be under 5.6 during standard running of the film.

Example — Pole vaulting:

1. Start filming the run of the sportsman with 18 fps.
2. At the start of his actual jump depress quickly high speed button and cover entire jump in slow motion.
3. Release high speed button and cover descent with standard frequency.

An electronic control ascertains smooth passing from standard frequency to slow motion and vice versa. No disturbing jerk will occur. The slow motion effect enhances the substance of the films, particularly in the shooting of sporting events.

Sensible use of the high speed button will keep film consumption within reasonable limits.



54 Frames Per Second "Pre-programmed"

If desired you can "pre-program" the camera to 54 fps by depressing high speed button all the way down and then pulling out lever A. With the above setting the camera immediately runs at 54 fps when release button (14) is operated.

14 Aperture and depth of field

Every lens provides a sharp image for only a limited area in front of and behind the set distance.

f-stop 64 = small aperture — great depth of field

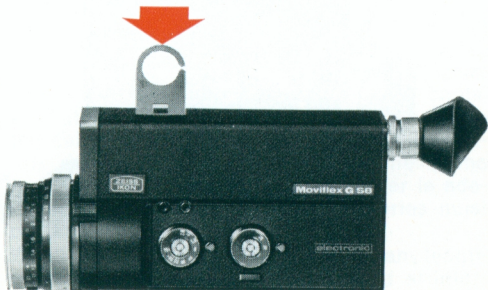
f-stop 2.8 = large aperture — small depth of field.

Exact data are given in the enclosed tables.

15 Filming with filters

The filters for the MOVIFLEX are provided with a bayonet mount having a diameter of 56 mm. These are the same filters as are also supplied for our single lens reflex CONTAREX camera.

Through-the-lens metering automatically allows for the filter factor, so that no exposure correction is required.



16 Filming with artificial light

If the subject you are filming is illuminated with artificial light, e.g., in the theatre, insert the socket wrench that is supplied with the camera into slot (34) until you feel it click into position. This instantly adjusts the automatic exposure control system in the camera in such a way that the loaded film will be correctly exposed with respect to both brightness and colour. The same applies when using commercial lighting equipment. Should you, however, possess a lighting unit (e.g.: ZEISS IKON—VOIGTLÄNDER MOVILUM) which is equipped with the standard socket base, insert this into slot (34). This effects the same change-over as the socket wrench.

When not in use, the socket wrench can be fitted in the ring of the wrist strap.



Please note!

When shooting the film with lamps which are not fixed with the aid of the socket base on the camera there is the danger that camera parts may be damaged by heat. The lamp must therefore be kept at an adequate distance from the camera.

17 Shooting with cable release

This equipment is normally used when filming from a tripod or making title shots. It allows you to film with free selection of the f-stop without the automatic system, although shooting with automatic aperture control, as may sometimes be desired, is also possible. When shooting with automatic aperture control, set release (14) at the pressure point and move lever (13) as far to the left as possible. The release key is thus locked in this position. Screw the cable release into socket (21). Filming with a self-timer is only possible with a cable release which is equipped with a device for fixed pressure.

As soon as release key (14) is used again for shooting, it automatically pushes lever (13) out from the locking position.

18 Single-frame filming

Only with cable release and without the automatic aperture control system. The release key must not be locked at the release dot position.

Connect the cable release in thread socket (22) which is marked with a red ring. The exposure time for a single frame is always $\frac{1}{36}$ second. Before taking any single-frame shots, the batteries must be checked as follows: press the cable release **briefly** and operate the battery checking button at the same time. If the green light appears, the battery power is adequate. Otherwise a new set of batteries must be inserted.

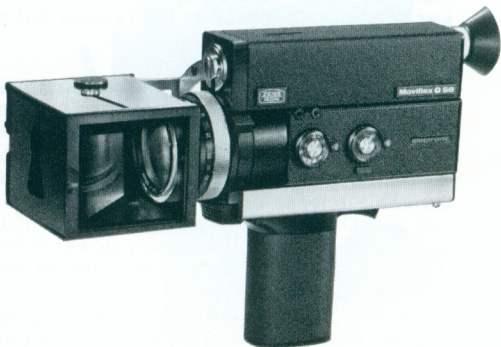
When taking single-frame shots over any length of time, this check must be repeated at inter-

vals. Single-frame shots with a motorized aperture setting are possible if the release is pushed before or between the shots as far as the release dot. The aperture corresponding to the lighting conditions will then be set automatically. When taking the shots, press the cable release only **briefly**. Even if the pressure is longer, only one frame will be exposed, although the motor continues to run.

9 Close-ups

If you want to shoot at distances closer than the distance setting allows, you can attach supplementary lenses in front of the ZEISS VARIO SONNAR with the specification $f = 1 \text{ m}$, $f = 0.5 \text{ m}$, $f = 0.35 \text{ m}$ and $f = 0.2 \text{ m}$. The shooting distances are given in the tables. Focusing is carried out with the built-in rangefinder. The values given refer to the film plane which is marked on the camera as control (5). The automatic exposure system is also fully reliable for close-up shots.

Owners of our CONTAREX camera can attach front lens to front lens the PLANAR 1:1.5/55 mm or SONNAR 1:2/85 mm with an adapter ring in front of the MOVIFLEX G S8 lens. With a lens setting of 60 mm you obtain a shooting scale up to 1:1 which is equivalent to a subject size of 4x5 mm. If you are interested, please send for further details.



Connection of additional equipment

Using screw (20), which can be unscrewed with the socket wrench or a coin but cannot be lost, additional equipment such as the ZEISS IKON—VOIGTLÄNDER angle mirror attachment with effects box, can be attached. This attachment permits filming at right-angles, especially tempting for candid shots as well as keyhole shots, etc.

Care of the camera

Clean the film guiding device from time to time. To do this, open housing door (3) and clean the film track with a soft brush. Remove any solid film residue with a wooden pin. Please use only a soft linen cloth to wipe the front surface of the lens. Remove any dust particles beforehand with a soft brush.

Occasional cleaning of the battery connections in the grip and the metallic ends of the batteries is also necessary.

If the camera is not to be used for a longer period, remove the batteries and store them separately in a cool, dry place.

Always remove discharged batteries **immediately** from the grip.

Series number

Each MOVIFLEX has a series number engraved on the underside of the housing door (number preceded by series letters).

We advise you to make a note of this number and also that on the lens so that you can prove ownership in the case of loss or a mistake.

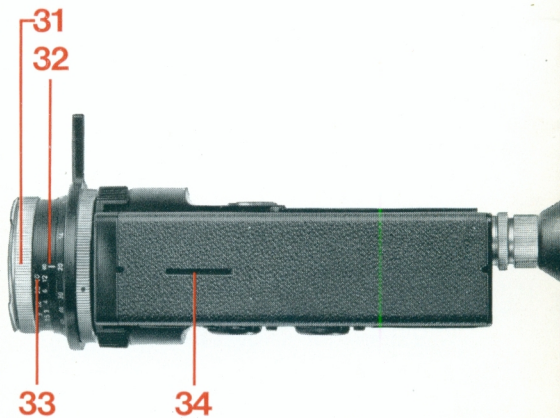
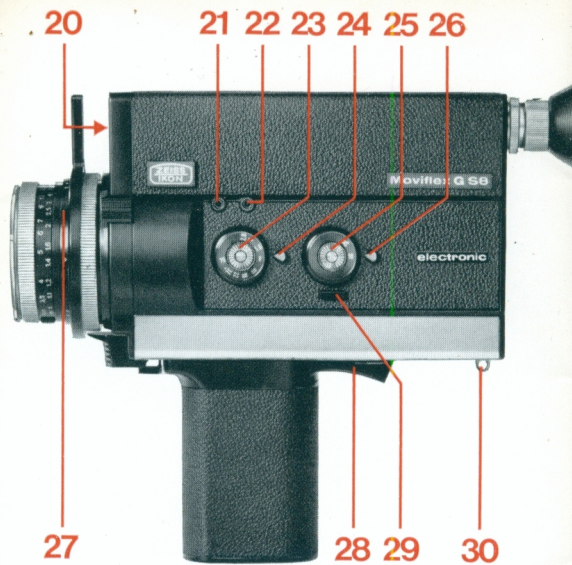
World-wide guarantee

ZEISS IKON—VOIGTLÄNDER offer a world-wide guarantee — a valuable service crossing borders. A guarantee booklet is supplied with each camera and the photographic dealer must confirm the date of purchase with his signature on the back cover. Take good care of this booklet in your own interest, as it contains the names of the repair agents throughout the world for ZEISS IKON—VOIGTLÄNDER products.

Accessories

Case for MOVIFLEX G S 8	23.3204
Universal case	23.3205
Lens hood (flexible) ϕ 56	35.0705
Supplementary lens $f = 1$ m, 1 dptr.	20.0843
Supplementary lens $f = 0.5$ m, 2 dptr.	20.0844
Supplementary lens $f = 0.35$ m, 3 dptr.	20.0845
Supplementary lens $f = 0.2$ m, 5 dptr.	20.0840
Colour filter yellow ϕ B 56	20.1061
Colour filter green ϕ B 56	20.1062
Colour filter orange ϕ B 56	20.1063
Colour filter red ϕ B 56	20.1064
Colour filter UV ϕ B 56	20.1065
Colour filter Skylight ϕ B 56	20.1068
Colour filter neutral ϕ B 56	20.1211
Polarization filter (CONTAPOL) ϕ B 56	20.1206
Carrying strap for camera without case with two-point suspension on tripod socket and eyelet	23.3403
Cable release	20.0281
Angle mirror attachment with effects box	35.1810
MOVILUM	
Lighting equipment for halogen lamps up to 650 W	35.1912
Adapter ring for connection of CONTAREX 55 and 85 mm lenses for close-ups	35.0214
MOVILUX D S 8 movie projector for super 8 and standard 8 film with P-PLANAR 1.2/18 mm	36.0091
with VARIO P-SONNAR 1.4/15–25 mm	36.0092
with VARIO-TALON 1.4/18–30 mm	36.0094
Case for MOVILUX D S 8	36.7702

Subject to alteration in line with technical progress.



Technical Dictionary

ASA

Film speed rating according to American standards.

Bayonet mount

Mechanism for attaching lenses to the camera and filters and lens hood to the latter with a rotation of 90 degrees instead of screwing on.

Automatic aperture control

Exposure meter automatically controls the aperture according to the prevailing light.

Frame frequency

Number of frames exposed per second when filming or shown during projection.

Aperture

Variable opening in the lens affecting exposure and depth of field.

Focal length ($f =$)

Lens characteristic which together with the distance determines the image size. The shorter the focal length, the smaller the subject but a larger field of coverage on the picture. Long focal lengths provide larger reproduction of subjects and thus less is included on the picture.

Exposure time (shutter speed)

The time during which the light is allowed to act on the light-sensitive layer of the film.

DIN number

Film speed rating according to German standards. The speed increases with +3 DIN representing a doubling of the speed and falls with -3 DIN representing a reduction by half in the speed.

Distance

Distance from film plane to subject.

Film plane

Plane in which lies the light-sensitive layer of the film.

Filter

A coloured glass screen which absorbs certain colours. When in front of a lens a filter makes the colours in black-and-white exposures appear lighter and darker. With colour exposures it eliminates the colour cast.

Through-the-lens metering

Exposure measurement through the lens.

Polarisation filter

Neutral grey filter which admits light only from one direction of vibration. Suitable for suppressing disturbing reflections.

Skylight filter

Slightly red-coloured filter which eliminates in colour exposure the blue cast at mid-day, during overcast weather and at greater distances.

UV filter

Filter which suppresses the ultra-violet rays (although invisible to us they do affect the film). These rays cause haziness and are prevalent in mountain regions and near the sea.

Vario lens

Lenses with which the image size can be adjusted without changing the shooting position.

Time-lapse exposures

A sequence of single-frame exposures with time interval which makes a long-lasting and scarcely perceptible movement visible, such as the opening of a flower.

5 Dptrs.

indicates 5 diopters. Diopters are the units of optical refraction. A lens with 5 diopters has a focal length of 20 cm and adjusts a lens set at infinity to 20 cm.

2.8/6—60 mm

Designation for a Vario lens with a speed of 2.8 and a focal range from 6 to 60 mm.

1:2.8

indicates the speed. The ratio of the lens diameter to focal length is 1:2.8.

englisch

GA/34.1009 Printed in West-Germany 0,5 0270/02-2 B
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ZEISS IKON VOIGTLÄNDER