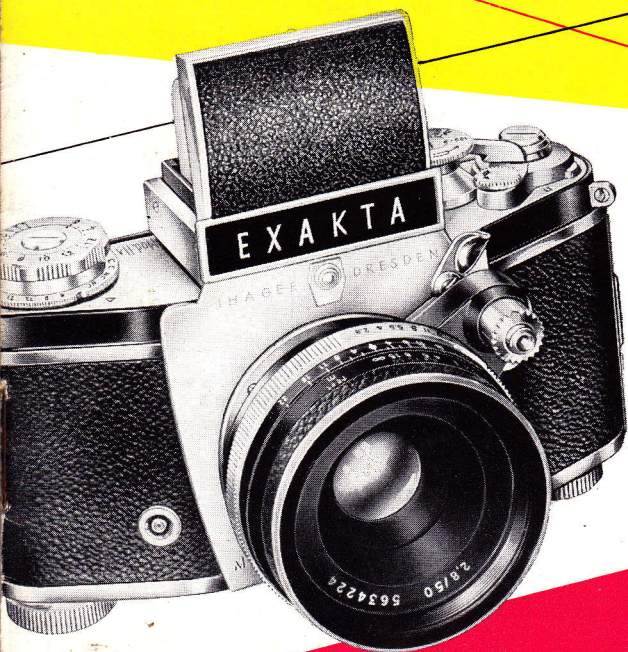


EXAKTA *Varex*

*Assured Success
for everyman*



Assured Success for everyman

He who forms a friendship with an EXAKTA Varex paves the way to photographic success, not only the beginner making his first snapshots, but true equally of the expert, whether using the instrument for recording personal occasions, or indeed for any of the many difficult tasks confronting the professional photographer. It is with an ever increasing versatility that the EXAKTA Varex can be adapted to all requirements. It is a lifetime possession of he who buys it due primarily to this amazing versatility—an advantage of the “additive” principle of design which cannot be too highly valued.

When we are asked why the beginner and professional alike acclaim EXAKTA we may only answer that it is due to the extremely simple ground-glass screen focusing. A glance at the reflex image, simple control setting, the advantage of actually seeing depth of field, and ability to compose the picture, ensure that technique and aesthetic approach are as one. It will be seen from the start that your first trial exposures will automatically improve compositionally, thus resulting in greater pleasure.

All this is achieved with the aid of EXAKTA Varex and one is virtually guaranteed success due to the construction which allows the single lens to provide both screen and actual picture image, thus there is no difference between the reflex screen image and the actual resulting picture. “Freedom from parallax” a technical term used by the professional, and an advantage of the single lens reflex camera which is of particular value for close-up work when using either special lenses or other accessories. Without expensive auxiliary optical equipment, focusing is at all times controlled by the accurate and decisive screen image. Therefore, one should remember the great economy when working with EXAKTA Varex.

The logo for EXAKTA Varex is enclosed in a white, hand-drawn style rounded rectangle. The word "EXAKTA" is written in a bold, white, sans-serif, all-caps font. Below it, the word "Varex" is written in a white, elegant, cursive script font.

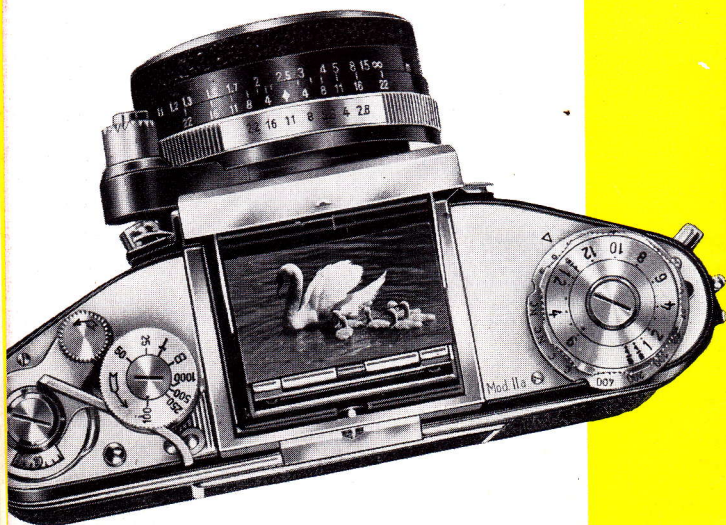
EXAKTA
Varex

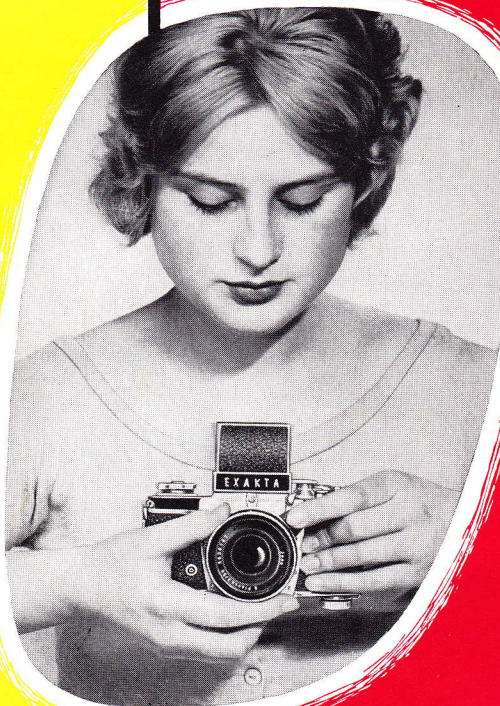


Simple in operation, versatile in application

Praise is due to the reflex finder of the EXAKTA Varex, the basic incorporated design of this classic reflex camera. Considered individually it has many unique features and advantages:

- Opening and shutting the Finder-Hood by a single touch of a finger.
- Ground-glass focusing screen for magnification of the reflex image and supplementary magnifier, thus giving a total of six times magnification. This ensures fast accurate pin-point focusing and simplifies pictorial composition.
- Upright reflex screen image critically sharp and uniformly bright right to the corners, and, of course, in natural colour. The latter feature being of particular advantage when taking colour photographs.
- Screen image may be viewed comfortably (with both eyes) in any one of three positions: downward direction for normal waist level shooting position; directly up when shooting with camera held overhead, or sideways when taking vertical shots and above all unobstrusive photos "round-the-corner". The reflex finder may be used for almost all subjects at eye level or where there is little subject movement, e. g. portraits, children, animals, plants, small objects (down to extreme close-ups), technical work at home or in the studio, or particularly when the camera is by necessity used in conjunction with a tripod as is the case when photographing still life, reproductions, micro-photographs, etc.
- The Finder-Hood is instantly interchangeable with other focusing systems!





Normal holding position of the EXAKTA Varex with reflex finder at chest or eye level. Vertical or "unobserved" position at right angles to actual subject.



The Finder-Hood is interchangeable in one simple operation and can be replaced at the EXAKTA Varex with several systems, by the Penta Prism (see pages 6/7) or by the Lens Magnifier (see pages 22/23).

At each of the three focusing systems the ground-glass screen is interchangeable, so that, if desired, the Distance Meter, an advantageous Split image range finder (see pages 6/7), or one of the special lenses (see pages 22/23) are available.

An ideal fast action camera

This is the EXAKTA Varex with the second chief focusing system "Penta Prism". It is true that in the reflex finder you see the reflex image upright, but laterally reversed. Generally, it is of little significance since only rapidly moving subjects are more easily controlled with a laterally correct reflex screen image. For this purpose the Finder-Hood can be interchanged with the Penta Prism. Thus you will realize that the manner in which EXAKTA Varex can be adapted to suit your particular requirements is of primary importance.

- Horizontal and vertical photographs with the Penta Prism are shown upright and laterally correct on the ground-glass screen, magnified more than four times, the direction of viewing being the same as the position occupied by the subject.
- As the reflex screen image moves in the same direction as the subject easy panning with the camera is possible when shooting fast moving subjects, i. e. motor cars, racing cyclists, speed boats, etc.
- Undoubtedly the Penta Prism is best suited for all speed photographs, whether snapshots, Press work, sports, theatre photography, technical motion studies, etc.
- A rubber rotating eye-piece for eliminating disturbing stray light with provision for inserting eyesight correcting lenses (important for persons with weak visual power).
- And, of course, when using the Penta Prism, there are all the conveniences of the ground-glass reflex focusing free from parallax.

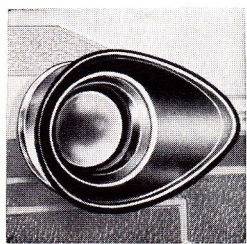
Distance Meter in the Reflex Camera

Finder-Hood, Penta Prism, and Lens Magnifier illustrated in this print (see pages 22/23) permit the use of the Distance Meter working on the split image range finder principle. Pin-point accuracy of focusing—under poor lighting conditions, or as an aid for defective sight too—according to the measuring field. Partial images out of alignment = incorrect focusing, partial images in exact co-incidence = correct focusing.

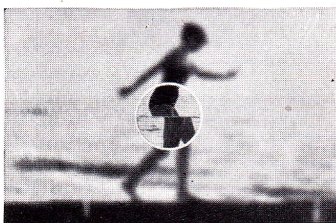
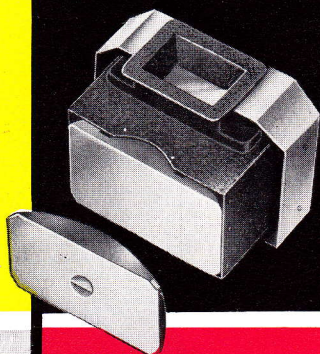




Normal eye level
viewing of
EXAKTA Varex
with Penta Prism.



Eye-piece eliminating disturbing
stray light.



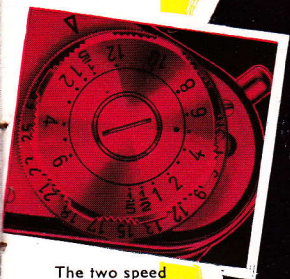
The Distance Meter works with
its measuring field like a split
image range finder, while the
remaining ground-glass surface
permits normal focusing and
controlling the image.



Focal plane shutter with extensive shutter speed range

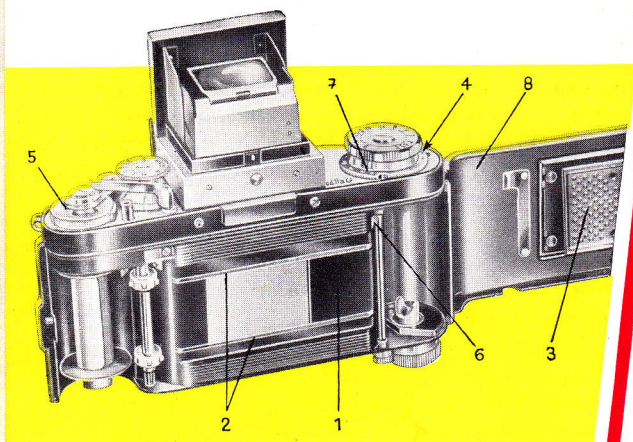
The success of a photograph depends to a large extent on the efficiency of the camera shutter. EXAKTA Varex, therefore, incorporates a focal plane shutter mechanism which is unequalled. The reliability and wide adjustable shutter speed range are the result of specialisation over decades.

- Two clearly marked speed control knobs adjustable to automatic exposures from $\frac{1}{10000}$ th sec. to 12 seconds. Provision for the briefest possible exposure or accurate timing running into many seconds.
- T. & B. settings for long exposures.
- Silent running slow speed control mechanism with built-in self timer for exposures from $\frac{1}{10000}$ th sec. to 6 seconds.
- Shutter transport lever coupled with film transport eliminating accidental double exposures or non-exposed frames even when shooting in rapid succession.
- Ideally positioned shutter release button direct in camera body with provision for cable release and built-in safety catch.
- Shock resistant and proofed against normal temperature variations, so providing accurate exposure times.
- Threefold flash synchronisation (see also page 14).



The two speed setting knobs may be handled easily and quickly.





The film track is of great importance

It is absolutely essential that the film is correctly positioned, and lying perfectly flat along the film track, also the film transport is easily, but positively controlled. Please note below the features that EXAKTA Varex offers.

- Sensitive material perforated miniature cine film (black and white, or colour) negative size 24×36 mm.
- Aluminium camera body and film guides (1) die cast in one piece ensuring strength with utmost accuracy.
- Highest possible finish to film track (2) and pressure plate (3) ensuring perfect positioning of film.
- Film loading from cartridge to cartridge or normal rewind after exposure by means of external control (4).
- Frame counter (5) up to 36 exposures.
- Film cutting device (6) operable with camera closed for removing any number of exposed frames when required.
- Film speed indicator (7) to assist your memory.
- Film transport coupled with shutter winding mechanism so eliminating unexposed or accidentally double exposed frames. Deliberate double exposure possible for trick effects if required.
- Hinged removable and interchangeable back (8) with securing pin.
- Extremely simple film loading without involved procedure.

General specification of the EXAKTA Varex in brief as follows: Convenient body shape. Extremely durable covering. External metal parts enamelled or chrome plated. Sturdy tripod socket with broad base. Neck strap eyelets. Weight approximately 2 lbs. $1\frac{1}{2}$ ozs., dimensions with finder-hood closed approximately $6\frac{1}{2} \times 3\frac{3}{4} \times 3$ inches.

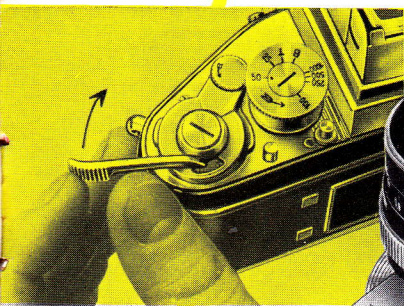
Constantly ready for action

The EXAKTA Varex progressing with time becomes ever faster in use, in keeping with modern photographic "taking" technique.

- Lens instantly ready for use.
- Clearly defined and critically sharp focusing image with the Penta Prism even with really fast moving objects. Distance Meter may be employed under bad or adverse lighting conditions, or as a direct aid when eyesight is poor.
- Automatic film transport, coupled with shutter setting lever. One exposure possible every two seconds.
- Camera shutter release actuating in addition the automatic pre-set diaphragm and frame counter device.

And in addition what follows:

With all the lenses of EXAKTA Varex (with the exception of the extreme tele-lens) the smaller diaphragm necessary for picture-taking can be pre-selected. For controlling the subject and critical focusing, however, one uses the full lens aperture with the clearest reflex image. Immediately only before exposing, the diaphragm is stopped down: At the objectives with pre-set diaphragm turn the diaphragm ring in one simple operation as far as the stop, thus having stopped the diaphragm down to the opening pre-selected, with the objectives with "fully-automatic pre-set or automatic diaphragm" stopping down is done fully-automatically, before releasing the shutter. That accelerates the taking process enormously and, moreover, you cannot forget the important stopping down of the diaphragm! It is understood that all fully-automatic objectives can be transposed for normal stopping down, too, so that the diaphragm-aperture, e. g. before employing longer exposure times, can be set by hand.



Short-cocking shutter of the EXAKTA Varex.



Lenses for the connoisseur

The EXAKTA Varex is fitted only with world renowned trade marked lenses. In response to modern demands they are not only optically perfect, but mechanically supreme, and will meet with the wishes of the most highly discerning photographer in definition, resolving power, colour correction, focal length, angle of field, and working aperture.

- All lenses fully anastigmatic construction.
- Bayonet mounting: standard lens interchangeable by one simple operation, which may be replaced by special long or short focus lenses or of ultra high speed if required.
- Precision helical focusing mount, allowing near focusing (at standard lenses down to 0,5 m., at the Domiron 2/50 down to 0,34 m.).
- Depth of field-scale for immediate reading the depth of field.
- All the lens surfaces hard coated.
- Maximum up-to-date diaphragm-mechanisms with fully-automatic function (see page 11).

The EXAKTA Varex IIa is available with any of the following lenses

Lens	Diaphragm design*)	Focal length	Angle of field (Standard value)	Lens from mount
Domiplan f 2.8	FAD	50 mm.	45°	42 mm.
Jena T f 2.8	FAD	50 mm.	45°	51 mm.
Jena Pancolar f 2	FAD	50 mm.	45°	51 mm.
Domiron f 2	FAD	50 mm.	45°	57 mm.

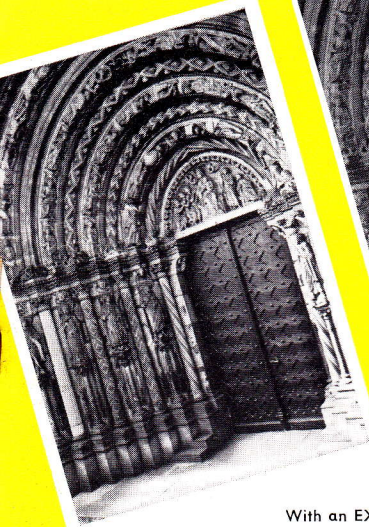
Special lenses for the EXAKTA VAREX

Lens	Diaphragm design*)	Focal length	Angle of field (Standard value)	Lens from mount
Flektogon f 4	FAD	25 mm.	82°	80 mm.
Flektogon f 2.8	FAD	35 mm.	62°	51 mm.
Meyer Wide Angle f 4.5	PD	35 mm.	62°	51 mm.
Night-Lens Jena B f 1.5	PD	75 mm.	32°	60 mm.
Jena Bm f 2.8	FAD	80 mm.	30°	51 mm.
Trioplan N f 2.8	FAD	100 mm.	25°	57 mm.
Jena Bm f 2.8	FAD	120 mm.	21°	70 mm.
Jena S f 4	PD	135 mm.	18°	51 mm.
Primotar f 3.5	PD	135 mm.	18°	57 mm.
Jena S f 2.8	PD	180 mm.	14°	80 mm.
Tele-Megor f 5.5	PD	180 mm.	14°	51 mm.
Primotar f 3.5	PD	180 mm.	14°	70 mm.
Tele-Megor f 5.5	PD	250 mm.	10°	60 mm.
Jena S f 4	PD	300 mm.	8°	80 mm.
Tele-Megor f 4.5	PD	300 mm.	8°	85 mm.
Tele-Megor f 5.5	PD	400 mm.	6°	85 mm.
Jena Tele-Lens f 8		500 mm.	5°	80 mm.
Jena Catoptric Lens f 4		500 mm.	5°	
Jena Catoptric Lens f 5.6		1000 mm.	2.5°	

*) FAD = Fully Automatic Diaphragm
PD = Pre-set Diaphragm (see page 11)

50 mm. focal length.

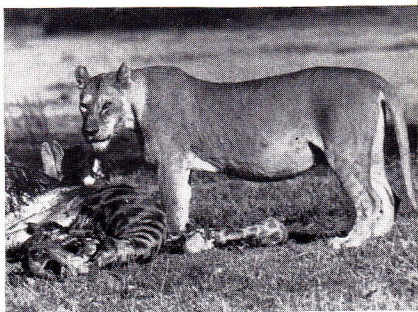
35 mm. focal length.



With an EXAKTA Varex you can take pictures using the standard reflex screen image at all times, irrespective of the focal length of lens in use, or distance from camera to subject. At no time it is necessary to resort to special finders, or supplementary focusing devices.

Wide Angle Lenses: Short focal length, wide angle of field, large area covered with comparative small picture detail. Necessary for photographing architecture, interiors, etc.

Long Focus Lenses: Long focus, narrow angle of field, therefore, smaller area covered, but larger picture detail. "Brings near distant objects in the same manner as does a telescope." Useful when photographing certain landscapes, architectural detail, animals, candid shots, sports, and on account of perspective particularly good for portraiture.



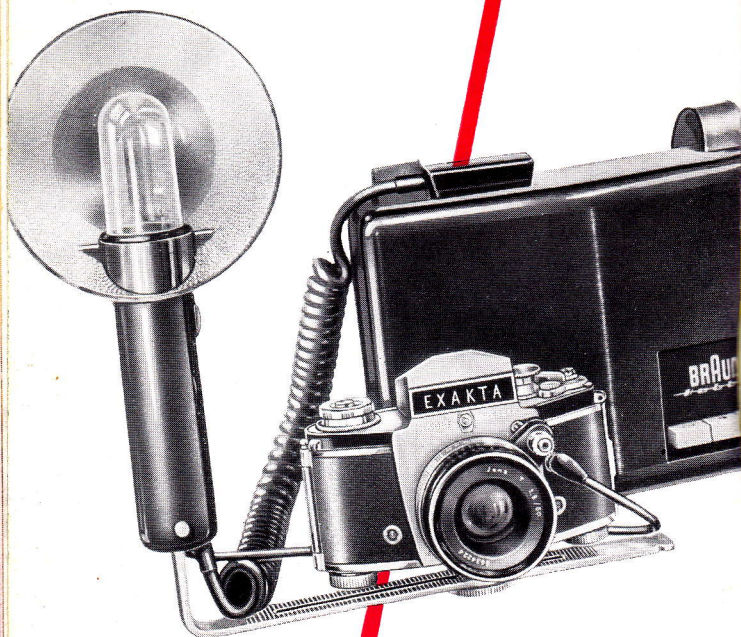
The Ultra Highspeed "Night lens" 75 mm. f 1.5: Extremely wide aperture makes it possible to take pictures with very brief exposures and the minimum amount of lighting, e. g. in the theatre, circus, cabaret, or general night scenes, and "available" light photography.



Some interesting details concerning flash and your EXAKTA

For a very long period EXAKTA Varex and earlier models have made possible the use of synchronized Flashlight as a most important additional or secondary source of illumination. Well balanced and correctly placed Flash bulbs can produce on monochrome or colour the same degree of quality as is associated with normal incandescent lighting. Moreover, the brief but intense light output is of great advantage for sports and action shots, snapshots of every description, and other work of more specialized nature. The EXAKTA Varex is fully synchronized for all forms of Flashlight.

- Three synchronisations, F., M., & X. are coupled with the focal plane shutter.
- F-synchronisation for the small and inexpensive short duration Flash bulbs (e. g. RFT X 1, Osram XM 1, XM 5, Philips PF 1, PF 5). Shutter speed $\frac{1}{25}$ th second.
- M-full synchronisation for flash bulbs of long duration, employing short shutter speeds ($\frac{1}{1000}$ th sec., $\frac{1}{500}$ th sec., etc.).
- X-synchronisation for Electronic Flash Units, shutter speed $\frac{1}{50}$ th sec., as well as for using the "open flash technique" with all commercial flash bulbs (shutter speed $\frac{1}{5}$ th sec. or longer).
- Simultaneous employment of flash-tubes and flash-bulbs: If desired, an Electronic Flash Unit at the X-contact and, simultaneously, a flash-bulb can be ignited at the M- or F-contact.





Focusing screen control for close-up work

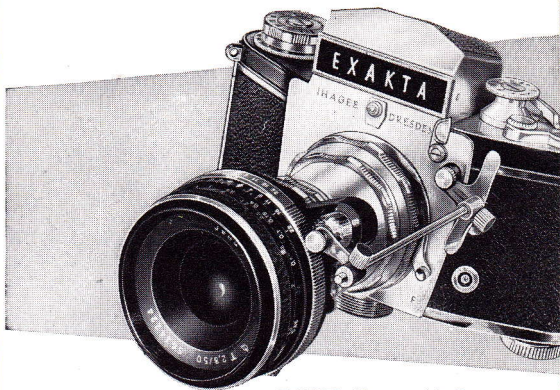
With the EXAKTA Varex it is possible to photograph the exciting "field" of minute objects. The interchangeability of lenses allows the use of additional mechanical extensions and fortunately our camera, we know, does not have the complex problem of parallax. Just as with all other photographs the ground-glass screen image is decisive, showing clearly the exact marginal area as well as sharpness and depth of field. Expensive optical close-up devices are, therefore, completely unnecessary. You will be surprised at the simplicity and yet thorough reliability in taking close-up photographs of very small detail using only the EXAKTA Varex in conjunction with.

- Mechanical extension increase between lens and camera to extend the overall focusing distance.
- Simplest method: Bayonet adapter rings and tubes (see illustration).
- By varying combinations all desired working distances may be covered to a point where actual magnification of the subject commences.
- Extension increases as follows: Two-in-one Ring 5 mm., Pair of adapter rings (screwed together) 10 mm., and to be employed between the two bayonet rings three tubes of 5, 15, and 30 mm. respectively.
- Ihagee Autocouple extension release for utilising the Automatic Diaphragms, especially important when taking close-ups.
- Reflex finder-hood for small, low positioned objects, animals, "growing" plants and flowers, etc. Penta Prism for elevated subject matter, blossom on branches, etc.
- When employing a tripod, focusing is facilitated by use of the Swing angle attachment with its Focusing slide. Camera may be instantly turned from horizontal to vertical position without removal from bracket.
- Used in conjunction with Bellows attachment the equipment is particularly suitable for close-ups. The bellows extension is constantly variable from 3.5 to 22 cm. allowing a fast and uninterrupted scale of reproduction. For focusing at infinity we recommend the special lens with sunk mount.
- For close-ups from the hand the Miniature Bellows Attachment easy to transport: Bellows extension from 3.5 to 12.5 cm. Automatic lens diaphragm to be set in action with Autocouple extension release. For focusing from infinity there is a special lens.

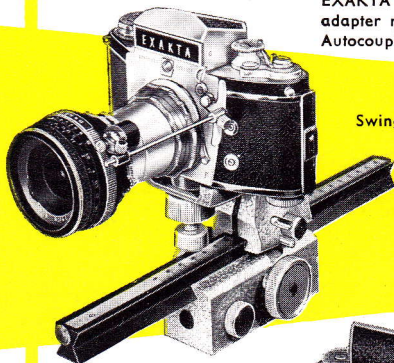


Bayonet adapter rings and tubes.
One set comprises pair of adapter
rings 5, 15, and 30 mm.

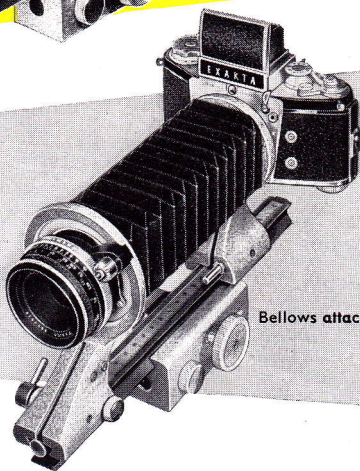
Two-in-one ring.



EXAKTA Varex with Bayonet adapter rings, tubes, and Ihagee Autocouple extension release.



Swing angle attachment.



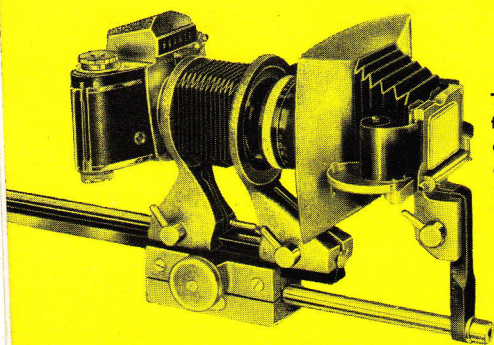
Bellows attachment.



Miniature Bellows attachment.

Extended working range with specialized accessories

The demands of the photographer are ever increasing and the execution of his tasks is made ever simpler by the judicious use of approved Ihagee EXAKTA accessories. The Ihagee "Vielzweck" was constructed on the unit principle and you may complete this equipment section by section. Designed for use individually or combined. We have already shown you the Swing angle attachment and the Bellows attachment on preceding pages. Here you become acquainted with the Copying Stand, the Repro Attachment, and the Transparency copy equipment, and on page 20 with the use of the Ihagee "VIELZWECK" for Photomicrography.

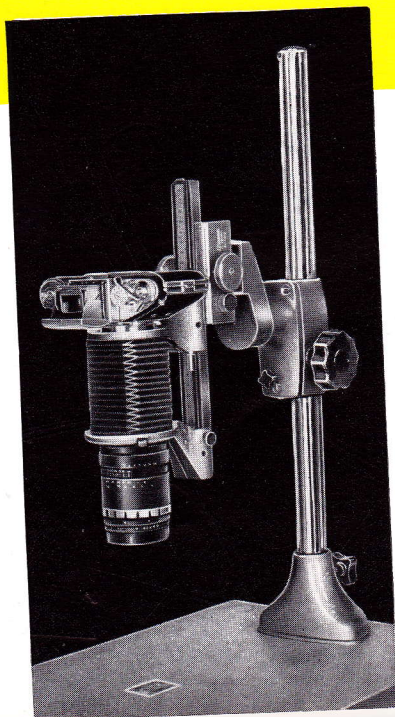


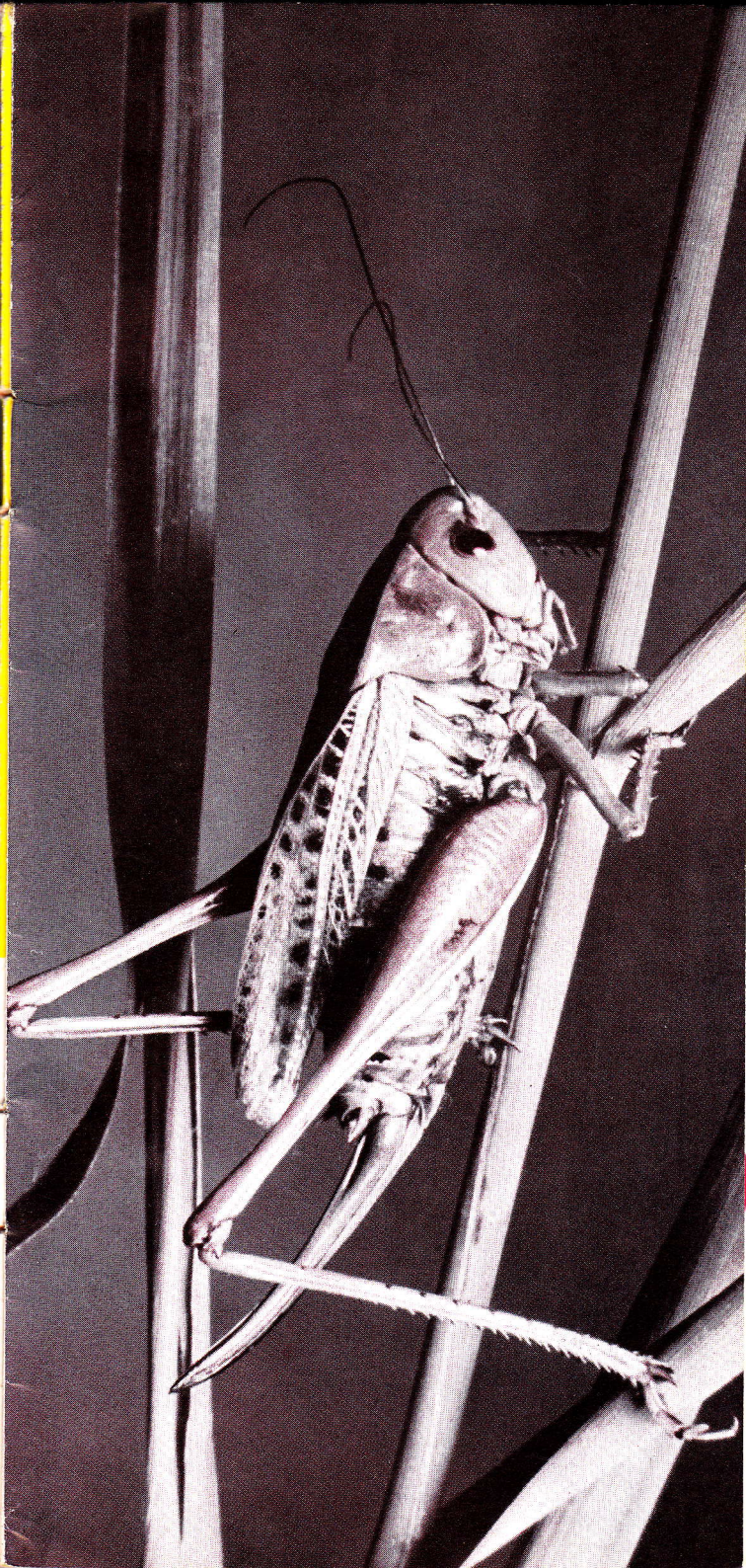
Transparencies

from monochrome and colour transparencies or duplicate negatives are made optically with the Transparency copy equipment in conjunction with the Bellows attachment.

Reproductions

are made without trouble with Repro Attachment 61 (with Bellows Attachment) or Copying Stand 61 for direct fixing the camera (extension increase with Bayonet Adapter Rings and Tubes), both of them with metal column and wooden baseboard 35×50 cm. (for objects up to DIN A 4). If desired, can be delivered with Lighting-equipment 61.





Scientific photography

EXAKTA Varex is the complete answer in all fields of photography ranging from Photomicrography to Astro work in the Observatory. This versatile camera remains always true to its principles—at all times focusing and observation of the screen image guarantees perfect results, completely free from parallax error.

Micro-Photographs

Two possibilities for connecting microscope to camera exist, both allow immediate suspension of photographic work for direct micro observations.

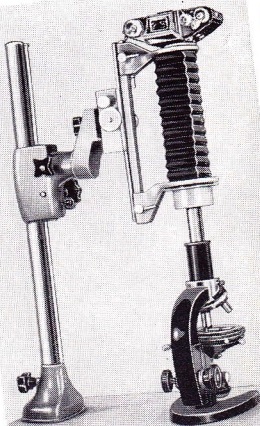
- **Micro Attachment:** Camera is pushed direct over the microscope, but can be removed with the aid of the bayonet in one simple operation.
- **Repro Attachment 61:** No mechanical connection between microscope and camera equipment. Scale of reproduction is adjusted by means of the bellows.

Medical photography

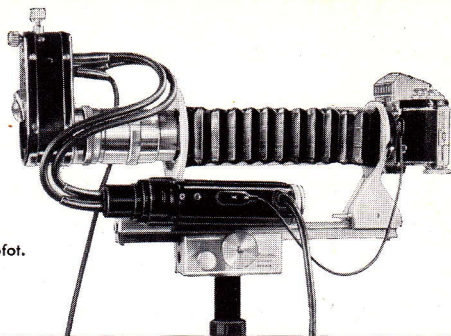
- For close-ups covering small areas of a patient's body, there is the Kolpofot. With the aid of Electronic flash needle sharp pictures of cavity areas (vagina, mouth, and pharyngeal gland) as well as eyes, ears, etc. Equipment: Bellows attachment and special lens, Jena S f 4/135 mm. with diaphragm scaled to f 45. Central Flash Unit ZB 3.
- For interior photos of human organs (e. g. bladder, etc.) Endoscope adapters for use in conjunction with camera and controlling instrument, the Endoscope.

Micro Attachment.

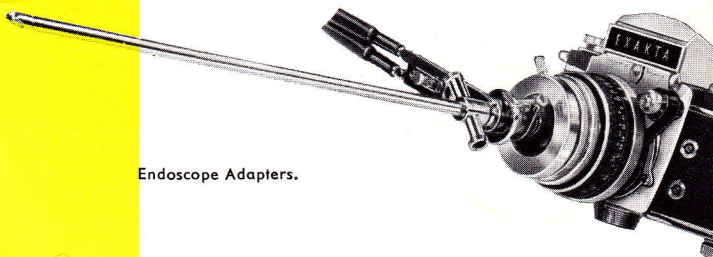
Repro Attachment 61
for micro photos.



Thagee Kolpofot.



Endoscope Adapters.

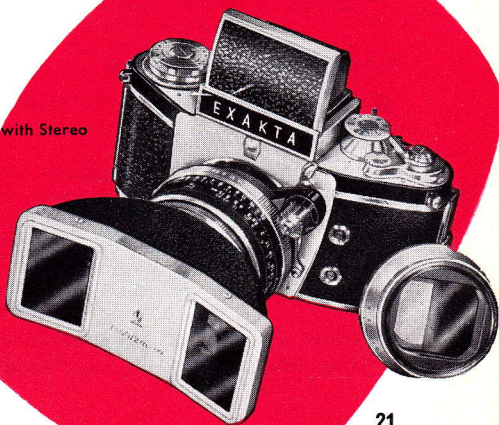


Stereo photographs

With the EXAKTA you can also take three-dimensional pictures. For this purpose there are two Stereo attachments, which can be used in connection with the standard lenses Primotar, Jena T, and Jena Pancolar registered on page 12.

- Large Stereo Attachment for pictures from infinity (∞) down to 2 m. distance.
- Small Stereo Attachment for pictures from 2 m. down to 0.15 m. distance (for working distances from 0.15 m. up to 0.50 m. three additional lenses correspondingly graduated can be delivered).

EXAKTA Varex with Stereo Attachments

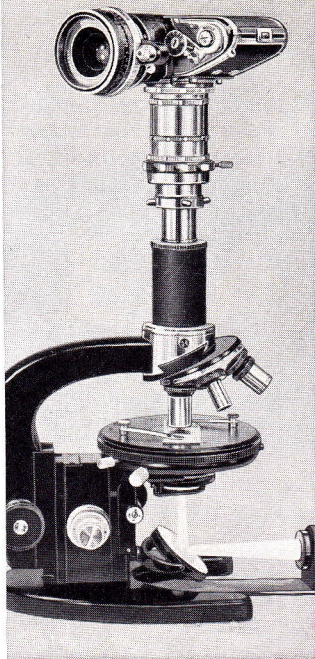


Important focusing aids

- For micro-photos and close-ups, a special focusing system, the Lens Magnifier. One of the highly corrected EXAKTA Varex standard lenses or a special objective is used simply as a magnifying lens. This ensures a magnified reflex screen image, uniformly sharp and completely free from distortion.
- When shooting close-ups a well corrected supplementary top lens is available for the Lens Magnifier.
- Focusing on fine detail in photomicrography and extreme macrophotography is sometimes difficult due to the grain of the reflex screen: therefore, there are available ground-glass screens with clear centre spot (diameter of 3 or 10 mm.) or glasses entirely clear overall. Focusing with hair-line cross is achieved in accordance with the clear aerial image. Special focusing screens can be inserted into all the three focusing systems illustrated in this prospectus. (Screens are also available with divisions of measurement and other line-systems.)
- For picture takings where the lens-curvature troubles (e. g. reproductions, architectures, etc.), you can use in all the three focusing systems a plane ground-glass (available with subsidiary lines, too).
- For facilitating the choice of the suitable long-focus lens, take for all the three focusing systems a ground-glass screen with limited frames for focal lengths of 135, 180, and 300 mm. (The marked limitations suppose a normal lens with focal length of 50 mm.)
- The Lens reversal Ring is recommended for extreme macrophotographs, when the magnification is more than 1.5 times: for allowing the ultimate in definition, the back lens of the objective is turned upon the subject.

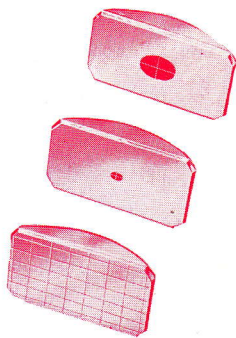
Essential Requirements are:

- Leather Ever Ready Case for protecting and holding the camera.
- Lens Hood for protection against stray light as well as rain or snow.
- Giant Shutter Release Button enlarging the front area of the release knob as an aid when wearing gloves or fingers numb with cold.
- Tripod plate for equalizing weight distribution when using Extensions or long focus lenses on the tripod.

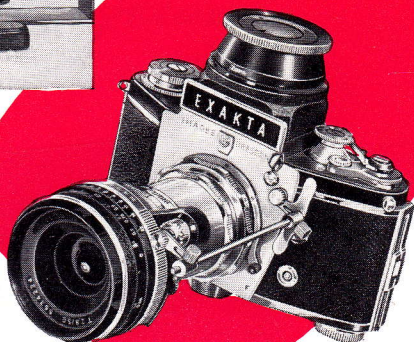


Lens Magnifier in the photomicrography.

Close-ups with Lens Magnifier (with top lens).



Special lenses for micro and extreme macro pictures.



Exact determination of exposure time

in macrophotography and photomicrography is often somewhat problematic. Therefore, for these spheres of work the "Ihagee Macro-Micro-Photometer" was created, which measures the light effective in the camera. It can be used for all the micro- and stationary macro-pictures as well as for optical copying. Special prospectus with pleasure at your disposal without charge.

Special Literature

available in English:

- "EXAKTA MANUAL" by Werner Wurst
- "Modern EXAKTA guide and reference book" by Charles Abel, A. R. P. S. and Dr. Kenneth S. Tydings, S.-P. E.
- "EXAKTA Guide" by W. D. Emanuel, A. R. P. S.
- "35 mm. Photography with an EXAKTA" by K. L. Allinson, A. R. P. S.
- "EXAKTA Handbook" by K. L. Allinson, A. R. P. S.
- "EXAKTA Equipment" by Jacob Deschin

available in German:

- "EXAKTA Kleinbild-Fotografie" by Werner Wurst

We thank you for your kind interest in our EXAKTA
Varex and beg you to let us have details, should
you want any further particulars or special litera-
ture. Your local photographic Dealer will gladly
demonstrate this versatile camera without obli-
gation.



IHAGEE
KAMERAWERK A. G.
DRESDEN A 16
G E R M A N Y