



EXAKTA

Varex

24 x 36 mm

EXAKTA *Varex*

The EXAKTA Varex is the result of fifteen years of consistent development of the Kine-Exakta, the first single-lens reflex camera $1\frac{1}{2} \times 1$ in. Its focussing system has opened up a new era in miniature photography and met with general approval in all parts of the world.

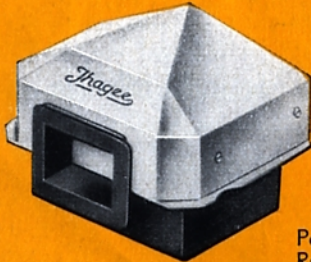
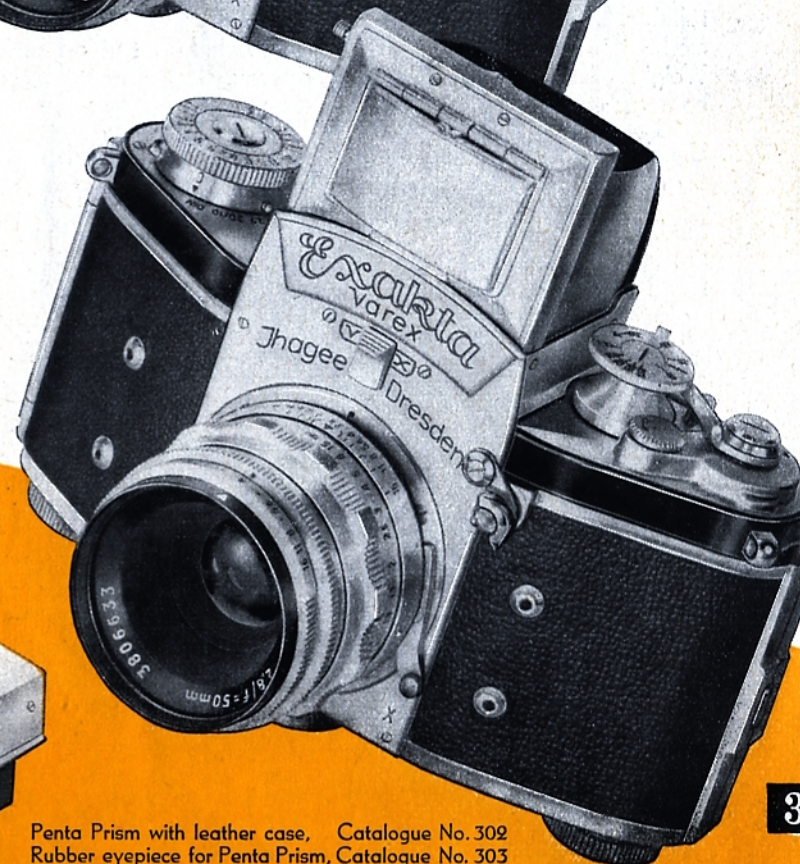
The single-lens reflex camera EXAKTA Varex $1\frac{1}{2} \times 1$ in.

is the camera that any photographer will find suitable for his purposes. Focussing on its ground glass screen means: that the beginner as well as the master will easily accomplish even the most difficult task. The brilliant, upright, coloured, and considerably enlarged finder-image will never fail to arouse and promote the imagination for new compositions. It permits critical focussing and control of the varying extent of depth of field effected by stopping down. All this is a matter of seconds, sometimes merely of a single glance. A very decisive fact is that this finder-image is projected by the taking lens itself. What you see in the ground glass you will get in the final picture. There is no divergence in frame (parallax), no matter how long or short the focal length of the lens, how much the camera extension is increased for close-up work, whether you are taking micro-pictures or astro-photos or connecting your camera to one of many scientific instruments. You need no extra finders, rangefinders, or tables. Consequently, working with the EXAKTA Varex not only produces accurate results, but is inexpensive, too.

The two-system camera EXAKTA Varex $1\frac{1}{2} \times 1$ in.

is the first camera of its kind featuring two main focussing systems for viewing and adjusting the image, the Finder Hood and the Penta Prism. They are interchangeable in a moment, each system being employed where it promises the best results.

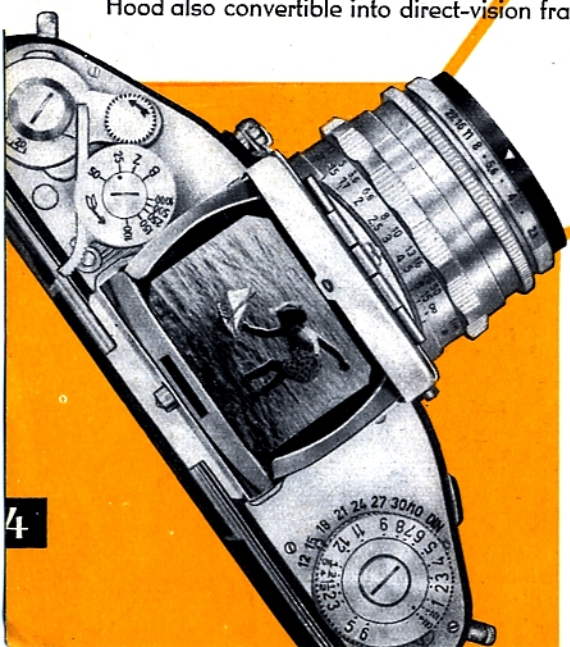
In every case, however, the taking lens projects the finder image which is perfectly identical with the future photo. Used with the Finder Hood the EXAKTA Varex already masters the majority of photographic tasks. Both eyes can easily control the greatly magnified, upright, but side-reversed ground-glass image. The camera may be held at chestlevel (looking down on to ground-glass screen), over the head (turning camera upside-down and looking up into the Finder Hood), and, for vertical pictures, at eye-level, when working at a right angle to the subject. Fields of application: portraiture, children, animals, plants, macro-photography, tripod pictures, technical work in the studio (copy work, still-life, photomicrography, etc.). Hence, the Finder Hood will mainly be used for subjects without considerable movement and for those lying far below eye-level. Equipped with the Penta Prism the EXAKTA Varex becomes a "speed camera" for "speed shots"! Laterally correct reflex image for vertical pictures. Direct eye-level viewing of the subject. Direction of eye and camera always identical. The image in the finder moves in the same direction as the subject, a most important factor when following rapidly moving subjects in the finder. Fields of application for Penta Prism: speed shots of any description (snapshots, press work, sports, stage and variety shows, technical speed studies, etc.).



Penta Prism with leather case, Catalogue No. 302
Rubber eyepiece for Penta Prism, Catalogue No. 303
(with mount for corrective glass)

Further outstanding features of the EXAKTA Varex:

1. Interchangeable trade-marked lenses (see pages 6, 7 and 12) with bayonet fitting, helical focussing mount, depth of field scale, and diaphragm pre-setting device. For special purposes, there are wide-angle and tele-lenses with focal lengths from 35 to 500 mm., and with the ultra-speed of $f/1.5$. All lenses have anti-reflex coating.
2. Focal-plane shutter for automatic release, from $1/1000$ th sec. to 12 secs. and time exposures of any desired length (T and B). Self-release with 13 secs. delayed action for the speeds from $1/1000$ th sec. to 6 secs. Shutter-locking device to prevent unintentional releasing.
3. Negative material: Perforated 35 mm. cine film. Negative size: 24×36 mm. ($1\frac{1}{2} \times 1$ in.). Rigid film track: Film transport from cartridge to cartridge, or rewinding (both controllable from outside). Film counter up to 36 exposures. Film-cutting device. Film transport coupled with shutter winding, no inadvertent double exposures. Film marking ring.
4. Die-cast aluminium camera body and film plane in one piece, hence sturdy and reliable. Leather covering. Uncovered metal parts chromed or enamelled. Hinged, exchangeable camera back with secure bolt. Large tripod socket with broad base. Weight of the EXAKTA Varex: approx. 950 grams. Measurements of closed camera: approx. $15 \times 9.5 \times 7.5$ cm.
5. Synchronized connection for regular and electronic flash units (details on pages 6 and 7).
6. Finder Hood with two magnifiers: Total enlargement of the reflex image about 6 times. With Penta Prism the total enlargement is a little more than 4 times. Finder Hood also convertible into direct-vision frame finder. – Additional focussing systems for special purposes: Lens magnifier (see pages 8 and 9), and Stereo Attachment (see pages 10 and 11).
7. Reflex image always in true natural colours and with precisely the same outline as the future picture – a great facility in colour photography.
8. Accessories for the most important special spheres of photography, e. g. macro and micro pictures, copy work, transparencies, and medical photography. Please refer to the following pages for details.



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Special lenses will help where the standard lens is not sufficient. Details with regard to optical equipment will be found on page 12.

The ultra speed of the 75 mm. $f/1.5$ night-lens ensures sufficient exposure even under adverse lighting conditions for theatre and variety stage work. This night-lens which is more than five times as fast as an $f/3.5$ lens, permits taking successful shots even in illuminated thoroughfares of the nocturnal city.

Long-focus lenses (Tele-lenses) act like a telescope, reproducing an enlarged image of the subject. Though the angle of view becomes smaller than that produced by the standard lens, the photographed subject within the reduced area is larger. Hence, tele-lenses

are useful for landscapes, architecture, animal pictures (see adjoining illustration), snapshots, and, to great advantage in perspective, for portraits.

Wide-Angle lenses showing a wider angle of view than the standard lens, reproduce the increased field smaller on the film. They are useful where the camera-to-subject distance is restricted, for interiors, architecture, copy work, etc.

All EXAKTA Varex special lenses sit into the bayonet mount of the camera body. The lenses themselves are fitted with a helical focussing mount for critical focussing which is always obtained by the finder image, no matter whether the Finder Hood or the Penta Prism is being used. There is no need whatever for additional finders.

Flashlight enables the up-to-date press photographer, the professional, and the amateur, to overcome all difficulties arising from unfavorable lighting conditions. Short exposure times and medium aperture in dark rooms are only possible if flashlight is used. Therefore, the EXAKTA Varex has been fitted with synchronized contact sockets for the two most up-to-date flashlight systems:

1. **The flash-bulb synchronization (M)** releases shutter and flash-bulb simultaneously. The EXAKTA Flashgun, consisting of batteryholder, reflector, and flash-lamp with spring locking device suited for all sizes and all bases of flash-bulbs, is available under Cat. No. 148; also to be loaded with a Solenoid.
2. **The electronic flash synchronization (X)** permits using the EXAKTA Varex in connection with the well-known electronic flash units. Effective exposure time according to type of flash: $1/250$ to $1/5000$ sec. Consequently, electronic flash is used for high-speed shots (sports, artistics, machinery, etc.). Shutter speed: $1/50$ sec! Impossible to imagine a more versatile camera for the modern photographer than the EXAKTA Varex fitted with a reliable electronic flash unit!

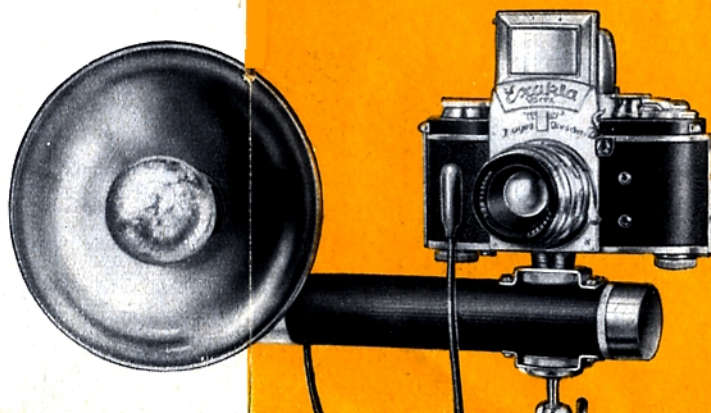


Picture: Erich Ccoper, Dresden

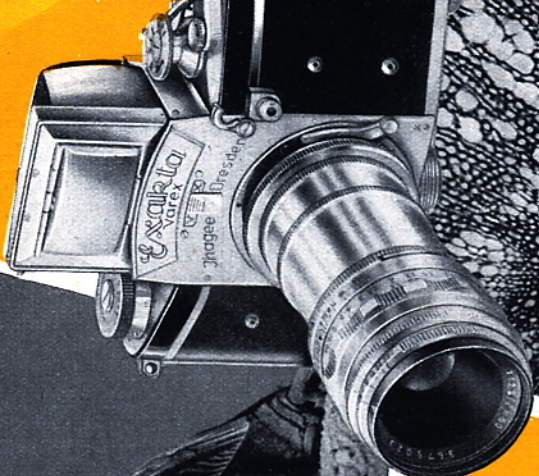


Picture: Richard Peter jun., Dresden

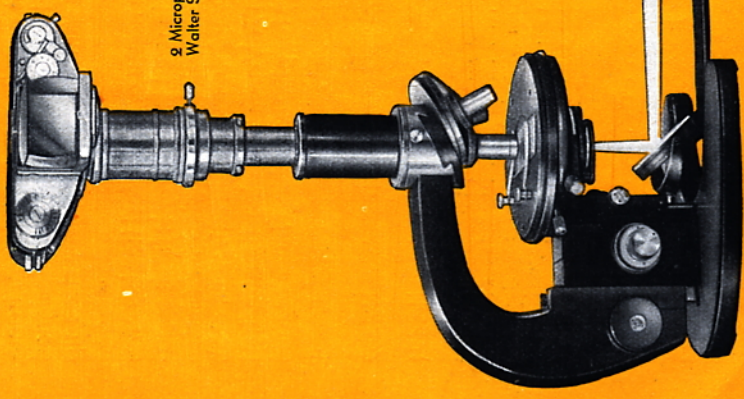
EXAKTA Flashgun Cat.-No. 148



1 pair of Bayonet Ring and 3 Extension Tube (5, 15 and 30 mm) complete set only available
Cat. No. 139/141-14
Two-in One Adapter Ring, Cat. No. 146



9 Micropictures: Walter Seyfarth, Eisenach



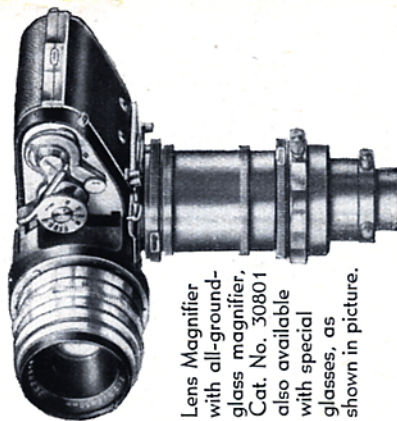
Microscope Attachment in case, available in two different types
1: With hinge-like detaching device Cat. No. 147
2: In Rapid-Exchange Mount Cat. No. 153

For close-up pictures (Macro photography) the increase of camera extension is effected by bayonet rings and extension tubes, which are inserted between the EXAKTA Varex and its lens. They permit reducing the lens-to-subject distance to such an extent that photographs of even the tiniest objects can be taken up to natural size and, if required, also enlarged. There is no uncertain determination of sharpness: for even in the case of shortest lens-to-subject distances the image is focussed on the reflex screen. The EXAKTA Varex is perfectly free from parallax, there is no divergence of outline which can become so annoying when taking close-ups. For frequent and especially economical photographing of extremely small objects we recommend the use of the Bellows Attachment (see pages 10 and 11).

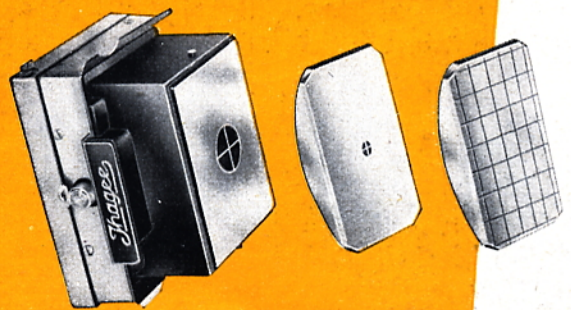
Micro pictures require the use of the "Microscope Attachment" which connects the EXAKTA Varex with any microscope. The camera lens must be removed, for the ocular and lens of the microscope only are used, in its place. Here again, coverage, sharpness, depth of field and, when taking living subjects, the favorable moment for exposure are observed in the finder screen.

Advanced requirements with regard to precision focussing in macro and micro photography can easily be fulfilled by using the Lens Magnifier. It is inserted in place of the Finder Hood or the Penta Prism in the EXAKTA Varex and permits employing one of the highly-corrected standard or special lenses of the camera for focussing, with the result that a greatly enlarged, overall sharp, image, altogether free from distortion, appears on the reflex screen.

An additional focussing help: Special glasses. In magnifier photography (= macro exposures on a scale of 1:1 or larger) and micro photography, focussing directly on the clear, bright air image, instead of through the ground glass, will often be preferred. For this purpose there are special glasses with clear glass spot, or without any ground-glass surface at all (all with hairline cross). The glasses are easily exchangeable in the Penta Prism, in case of the Finder Hood, however, it is advisable to purchase a complete additional finder.



Lens Magnifier with all-ground-glass magnifier, Cat. No. 30801 also available with special glasses, as shown in picture.



Finder-hood complete with ground-glass magnifier with clear spot, 3 mm. Ø: No. 30103, 10 mm. Ø: No. 30104, or with all-clear glass magnifier: No. 30102. Ground-glass magnifier for Penta Prism and Lens Magnifier, with clear spot, 3 mm. Ø: No. 30203, 10 mm. Ø: No. 30204, or with clear-glass base: No. 30202. (Special types of magnifiers with etched division lines [centimeters, millimeters, squares, etc.] can be delivered on order.)

The Distance Meter for the Penta Prism and the Lens Magnifier functions according to the principle of the split-image range-finder and permits rapid, precise, and absolutely sharp adjustment of the image – most important with adverse lighting conditions or feeble eyesight. Incorrect focussing moves two halves of the image away from each other, whereas, when properly focussed, the two vertical or horizontal lines, as the case may be, exactly meet.

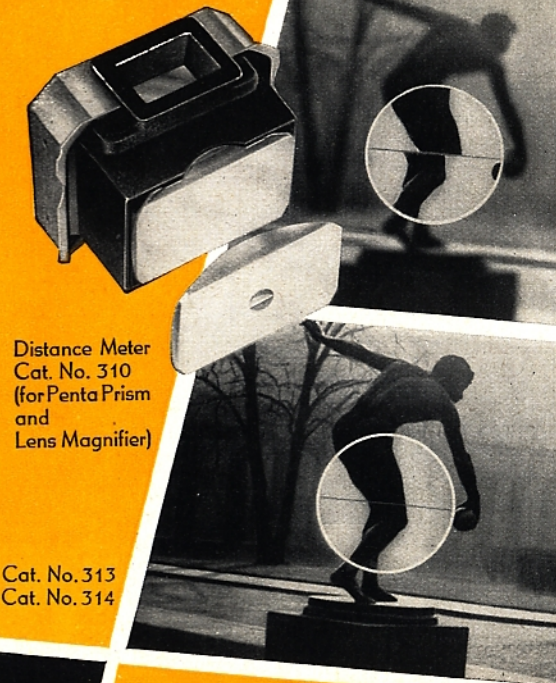
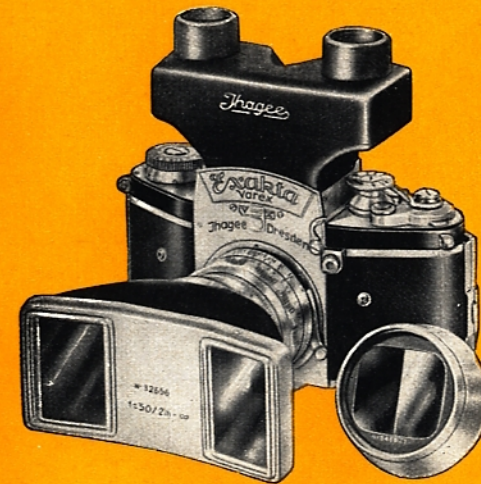
For Stereo (three-dimensional) Photography with the Stereo Attachments an additional focussing system, the Stereoscopic Viewfinder, has been designed. The stereo attachments, corresponding to the 50 mm. focal length, can be screwed to the standard lenses of the EXAKTA Varex: the larger attachment, with 65 mm. base, is used for exposure distances ranging between infinity and 2 meters, while the smaller attachment, with 12 mm. base, is for distances between 2 meters and 0.2 meters. In order to be able to pre-judge the effect of the future stereo-photo, you insert the stereo-viewfinder into your EXAKTA Varex, and you will have a three-dimensional image on the screen. When not on the camera, the stereo viewfinder may be used to view the finished transparencies.

The versatility of the EXAKTA Varex has been greatly enhanced by the "Vielzweck". It consists of a number of standardized parts which can be employed separately or in various combinations for many important spheres of photography. The Bellows Attachment has proved most economical for close-up and lens magnifier exposures. The Transparency Copy Equipment permits copying 35 mm. transparencies with the camera lens. The Copying Stand was, in the first place, designed for making reproductions, but it also serves as a sturdy table tripod for close-up and lens-magnifier work, for micro-photos, etc.

A special assembly of "Vielzweck" parts, under the name of "Kolpofot" has become renowned in medical photography: The "Kolpofot" is used for electronic flash exposures of minute objects, preferably in motion, and is excellently adapted for photographing cavities of the human and animal body (vagina, mouth, throat, nose etc.). With the help of the Endoscope Adapter the EXAKTA Varex can also be attached to medical instruments of examination (endoscopes) for photographing inner organs (e. g. bladder, bronchi, etc.).

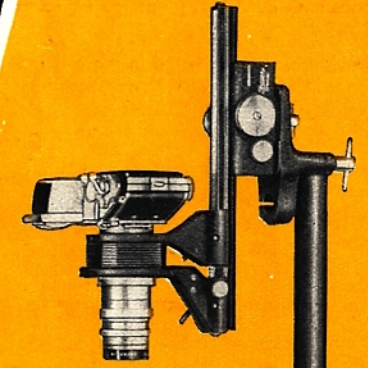
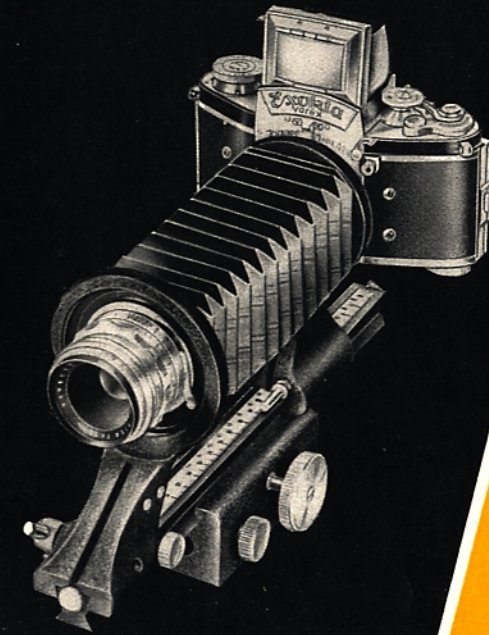
Special EXAKTA Varex Accessories

- Everready Leather Case** protects the camera without impairing its operative speed Catalogue No. 307
- Giant Release Button** increasing release knob surface facilitates releasing the shutter when wearing gloves. Catalogue No. 151
- Lens Hoods** protect lens against frontal and side stray light.
for 42 mm. lens front mount. Catalogue No. 206
for 51 mm. lens front mount. Catalogue No. 208
- Colour Filters** yellow light, medium, dark; orange light; green light, dark; red; blue; ultra-violet for 42 mm. lens front mount Catalogue No. 205
for 51 mm. lens front mount Catalogue No. 207
When ordering specify colour and density!
- Soft Focus Discs** for artistic soft-focus pictures
for 42 mm. lens front mount Catalogue No. 210
for 51 mm. lens front mount Catalogue No. 211
- Polarizing Filters** suppress annoying reflection from highly polished surfaces
for 42 mm. lens front mount Catalogue No. 214
for 51 mm. lens front mount Catalogue No. 215

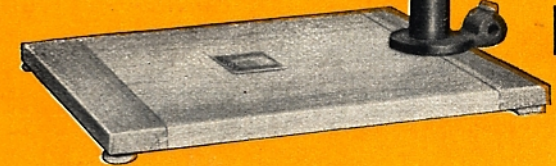


Distance Meter
Cat. No. 310
(for Penta Prism
and
Lens Magnifier)

Large Stereo Attachment (65 mm. base) Cat. No. 313
Small Stereo Attachment (12 mm. base) Cat. No. 314



Left:
Bellows Attachment complete
Cat. No. 155.10
Right:
Copying Stand with Focussing
Slide Cat. No. 155.01
(and Bellows Attachment
Cat. No. 155.02)



Optical Equipment of the EXAKTA Varex 1 $\frac{1}{2}$ ×1 in.

The EXAKTA Varex is delivered complete with Finder Hood and one of the following standard lenses. The Penta Prism must be ordered separately as an accessory!

Lens	Focal Length	Angle of Field	Lens front mount	Catalogue No.
f/2.8 Standard-Lens AD	5.0 cm.	45°	51 mm.	501
f/2 Standard-Lens AD	5.8 cm.	40°	51 mm.	504
f/1.9 Standard-Lens PD	5.8 cm.	40°	51 mm.	403

Table of EXAKTA Varex Supplementary Lenses

Lens	Focal Length	Angle of Field	Lens front mount	Catalogue No.
f/2.8 Flektogon AD	3.5 cm.	62°	51 mm.	527
f/1.5 Nigh-Lens PD	7.5 cm.	32°	60 mm.	422
f/2.8 Biometar PD	8.0 cm.	30°	51 mm.	428
f/2.8 Trioplan PD	10.0 cm.	24°	51 mm.	410
f/4 Long-Focus-Lens PD	13.5 cm.	18°	51 mm.	423
f/5.5 Tele-Megor PD	18.0 cm.	14°	51 mm.	412
f/5.5 Tele-Megor PD	25.0 cm.	10°	60 mm.	414
f/5.5 Tele-Megor PD	40.0 cm.	6°	85 mm.	415
f/8 Long-Distance Lens	50.0 cm.	5°	80 mm.	120

All lenses are factory-coated!

PD = pre-set diaphragm lens

AD = Automatic pre-set diaphragm lens

For prices and delivery terms please apply to our Export Department who will answer all questions concerning EXAKTA Cameras by return mail free of charge.

Should you be interested in more detailed information on EXAKTA Varex Accessories, we shall be pleased to furnish you with additional brochures. - Kindly write and tell us what you would like to have.

Special Brochures:

Macrophotography/Photomicrography
Flash Technique
The Lens Magnifier
The Distance Meter

The Ihagee "Vielzweck"
The Ihagee "Kolpofot"
Endoscopic Photography



Cover Picture: Eberhard Buschmann, Dresden



IHAGEE KAMERAWERK AG DRESDEN A16