ZEISS HIGH-PERFORMANCE FOR YOUR Linhof CAMERA LENSES

Marries .

Important facts you should know about

The "speed" of large apertures combined with high image quality even at full opening are the distinctive advantages of these lenses for the demanding photographer.

ZEISS lenses

for LINHOF cameras

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To the world's foremost photographers, the name ZEISS has, for generations, been synonymous with superb quality, with the finest achievements of the lens maker's art. High resolving power and superior image quality are widely known characteristics of ZEISS lenses. But, more important, these properties must be at the photographer's command without the necessity of stopping down from the full aperture.

Why is this so important? Simply because this rare combination of features in ZEISS lenses – especially for large negative formats – so obviously gives a tremendous advantage to the photographer who wants to keep ahead of today's demand for spontaneous, fast shooting – particularly in color photography!

What about the shallower depth of field resulting from the use of the widest aperture, especially in longer focal lengths? Must one not sacrifice the exposure advantages of the large opening when greater depth of field is essential? That is the crucial question.

The answer lies in the combination of these superb lenses with the LINHOF camera! By appropriate adjustment of the camera's swing back, the skilled photographer can achieve greatly extended depth of field without stopping down the lens; the resulting critical focus in depth, thanks to the precise response of the camera, meets the most exacting photographic requirements of the day.

The skillful photographer who masters this "intelligent" focusing technique need no longer stop down unnecessarily; he attains expert control in any assignment. The large format camera becomes a pliant instrument: You can "shoot" with it in color, and especially interiors with short exposure times under existing illumination. The proof is in your photographs!

The ZEISS BIOGON, with its enormous 90° angle, yields in a large format photograph the compelling "wide screen" effect which meets the "viewing habits" of modern times and, what's more, it may be used wide open even for this purpose.

Complementing the optical advances of the ZEISS SONNAR and BIOGON, these large radically new mounts were designed to assure highest precision in manufacture and the necessary lasting stability under constant use. Front and rear lens elements are built into a single mount which contains and protects the optical components as well as the shutter.



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PLANAR f/2.8, 100 mm.

PLANAR f/3.5, 135 mm.

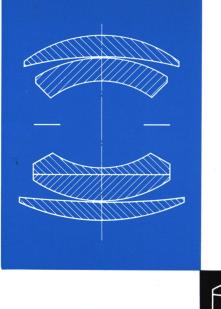
$2^{1/4} \times 3^{1/4}$ in. 4×5 in.

in M-X synchronized Compur shutters with speeds 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/200, 1/400 sec, T, and B

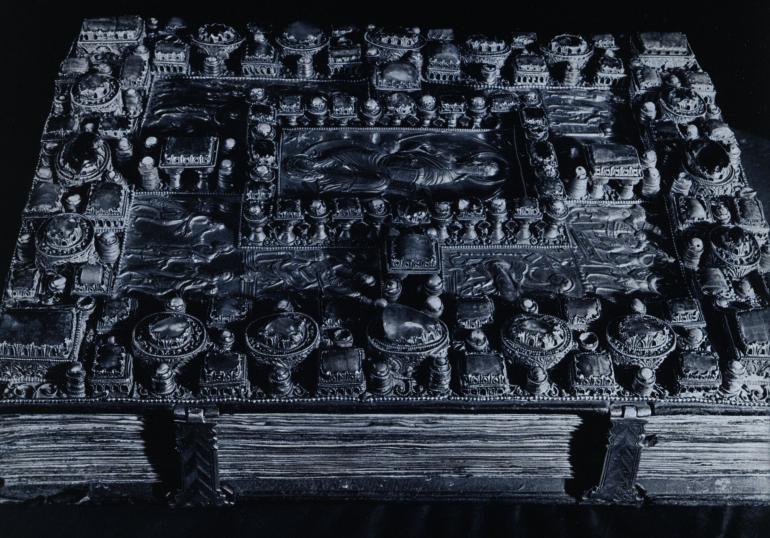
Gauss type of five lenses in four groups, with excellent correction even at full aperture. Used as the standard lens wherever highest demands are made on sharpness and reproduction of minute detail.

The uniform sharpness of the PLANAR over the entire field, even at full aperture, is fascinating. At the same time, its large relative opening permits the use of filters without impairing the mobility of the larger camera. Thus, this impressive scene of the swinging cranes was photographed in full action despite the $6 \times$ exposure factor of an orange filter. The mood of the moment was found full pictorial expression.

Construction of hydro-electric power station.







TESSAR f/3.5, 105 mm.

 $2^{1/4} \times 3^{1/4}$ in.

in M-X synchronized Compur shutters with speeds 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250, 1/500 sec, B

TESSAR f/4.5, 150 mm.

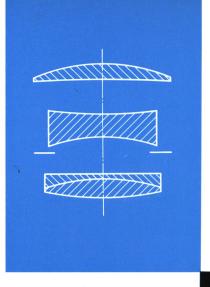
4×5 in.

in M-X synchronized Compur shutters with speeds 1, $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{25}$, $\frac{1}{50}$, $\frac{1}{100}$, $\frac{1}{200}$, $\frac{1}{400}$ sec, T, and B

The classic four-lenser in an improved design to meet the highest demands on image quality.

This magnificent subject reproduced with the brilliance so typical of the TESSAR illustrates the depiction of minutest details characteristic for this lens. The swing back technique of the LINHOF SUPER TECHNIKA produced the required greater depth of field. Modern ultra fine grain emulsions graphically demonstrate the high resolving power of this lens.

Volume from the 9th Century (Codex aureus), Bavarian State Library, Munich.





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The broad view, full of color and motion, is the intrinsic domain of the BIOGON-here are its grand and exclusive opportunities!

Sweeping perspectives are characteristic of the wide-angle lens generally, but the BIOGON goes even beyond. Its large aperture and superb image quality capture even teeming motion in the wide view brilliantly.

This sparkling illustration proves the point! You can almost taste the salt spray on your lips, feel the breeze! Here is the "wide screen" view typical for the new trend of large format photography in advertising, industrial and illustrative photography. Here is the quality to satisfy the demands of the best in graphic arts!



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SONNAR f/4.8, 180 mm.

$2^{1/4} \times 3^{1/4}$ in.

in M-X synchronized Compur shutters with speeds 1, 1/2, 1/5, 1/10, 1/25, 1/50, 1/100, 1/250, 1/500 sec, B

SONNAR f/5.6, 250 mm.

4×5 in.

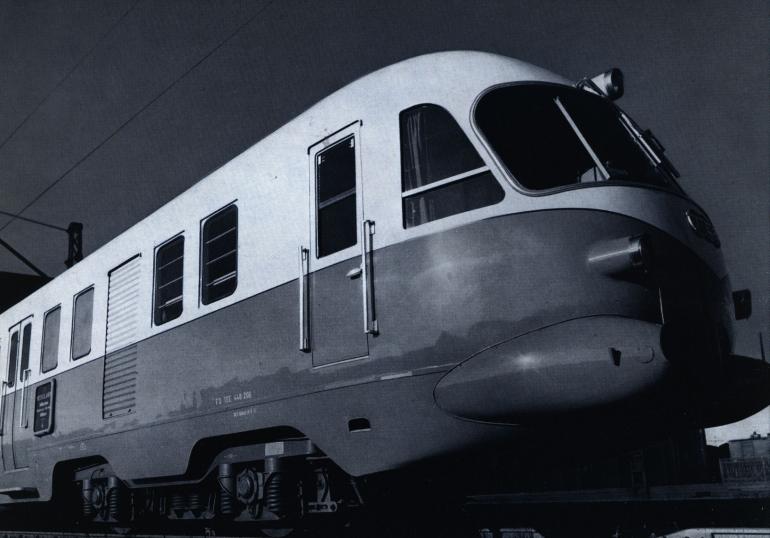
in M-X synchronized Compur shutters with speeds 1, $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{25}$, $\frac{1}{50}$, $\frac{1}{100}$, $\frac{1}{200}$, $\frac{1}{400}$ sec, T, and B

Three component tele lens with five elements, yielding excellent image quality even at full aperture. Stopping down serves practically only to extend the depth of field. Approximately $2 \times$ magnification compared with standard lens. Used extensively for distant views, sports, portraits, architecture, nature and advertising photography.

Interior photography on large formats with long focal length is no longer a problem, thanks to the precise rangefinder coupling of the LINHOF SUPER TECHNIKA. Here – with highly sensitive emulsions – the proverbial "ZEISS sharpness" of the SONNAR always permits its use at full aperture. As in this photograph of a scantily lighted stage, the SONNAR permits shortest exposure times with the camera hand-held.

Stage photo taken during a performance of "The Inspector".





BIOGON f/4.5, 53 mm.

$2^{1/4} \times 3^{1/4}$ in.

BIOGON f/4.5, 75 mm.

4×5 in.

in M-X synchronized Compur shutters with speeds 1, $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{10}$, $\frac{1}{25}$, $\frac{1}{50}$, $\frac{1}{100}$, $\frac{1}{250}$, $\frac{1}{500}$ sec, B

Extreme wide-angle lens of large aperture with eight elements in five components. Despite the large 90° angle, the image quality is excellent even at full aperture. Indispensable wherever space limitations enforce shorter camera distances, as in industrial and architectural photography; or for widescreen panoramic effects.

The impressive pictorialism of the BIOGON yields extraordinary perspective effects with the camera hand-held. Extreme angle of view, large aperture and depth of field unite in this unique lens to afford the photographer a wide choice of artistic expression. — In this illustration, the low camera position exaggerates the perspective while an orange filter creates "atmosphere".

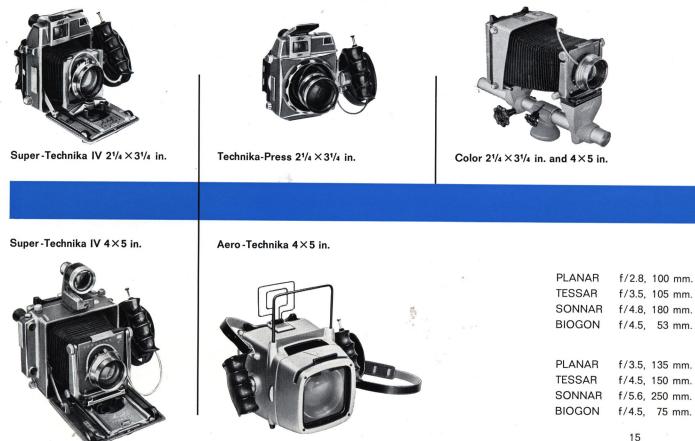
Trans-Europ-Express "Mediolanum" (Munich-Milan).



n N	Objective	Aperture range	Focal length mm.	Useful diameter of circle in mm.	Maximum displ objective for ho Vertical mm.	Contraction of the second second	Slip-on diameter for filter in mm.	Screw-in filter thread size	For LINHOF camera
	$2^{1/4} \times 3^{1/4}$ in.								
	PLANAR	2.8-22	100	120	± 12	± 9	60	M 58×0.75	SUPER-TECHNIKA IV $2^{1/4} \times 3^{1/4}$ in. TECHNIKA-PRESS, COLOR $2^{1/4} \times 3^{1/4}$ in.
	TESSAR	3.5-22	105	120	± 12	± 9	42	M 40.5×0.5	SUPER-TECHNIKA IV $2^{1/4} \times 3^{1/4}$ in. COLOR $2^{1/4} \times 3^{1/4}$ in.
	SONNAR	4.8-32	180	140	± 26	± 20	70	M 67×0.75	SUPER-TECHNIKA IV $2^{1/4} \times 3^{1/4}$ in. TECHNIKA-PRESS, COLOR $2^{1/4} \times 3^{1/4}$ in.
	BIOGON	4.5-22	53	115	± 9	± 6	70	M 67×0.75	SUPER-TECHNIKA IV $2^{1}/4 \times 3^{1}/4$ in. TECHNIKA-PRESS, COLOR $2^{1}/4 \times 3^{1}/4$ in.
	4×5 in.								т
	PLANAR	3.5-32	135	170	± 13	± 10	60	M 58×0.75	SUPER-TECHNIKA IV 4×5 in. AERO-TECHNIKA, COLOR 4×5 in. and 2 ¹ /4×3 ¹ /4 in.
	TESSAR	4.5-32	150	165	± 9	± 7	51	M 49×0.75	SUPER-TECHNIKA IV 4×5 in. SUPER-TECHNIKA $2^{1}/4 \times 3^{1}/4$ in. COLOR 4×5 in. and $2^{1}/4 \times 3^{1}/4$ in.
	SONNAR	5.6-45	250	185	± 22	± 19	80	M 77×0.75	SUPER-TECHNIKA IV 4×5 in. AERO-TECHNIKA, COLOR 4×5 in. and $2^{\frac{1}{4}} \times 3^{\frac{1}{4}}$ in.
	BIOGON	4.5-32	75	165	± 9	± 7	100	M 95×1.00	SUPER-TECHNIKA IV 4×5 in. AERO-TECHNIKA, COLOR 4×5 in. and 21/4×31/4 in.
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* For vertical format interchange the values.

ZEISS Lenses for the following LINHOF models:



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CARL ZEISS, Oberkochen/Wurttemberg

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Printed in West Germany Author: Dr. Sauer W VII/62 Too