APO-TELE-XENAR 텩 5.6/250, 5.6/400, 9/600, 12/800

Cutting from the entire brochure www.schneiderkreuznach.com/pdf/foto/large format lenses.pdf (2,5MB)

For pictures with long focal lengths on cameras without a large bellows extension

While in studio photography, the most important domain of the large format, very long focal lengths are neither necessary nor useful, they are often used in landscape, nature, industrial, and architectural photography. Portrait photography, too, is an important area of application. The newly calculated, extremely compact, light Apo-Tele-Xenar lenses, optimized in performance with new types of glass and through elaborate computer programs, are bringing some fresh air, as well as a contemporary level of quality, into the area of large-format telephoto photography.

Apochromatic correction and high contrast make for brilliant long distance photographs without color fringes, which otherwise are especially clearly visible at long focal lengths, since the lateral chromatic aberration without apochromatic correction is approximately proportional to the focal length. The short flange focal distance (the distance from the lens board to the focusing screen) resulting from the telephoto (barlow) design of the lens makes possible a focal length which is 30% to 40% longer than the maximum camera extension normally allows. The fact that the angle of view had to be smaller than in other large-format lenses - as the price, so to speak, for the compactness achieved - is not a limitation, there are still reserves for movements.



Since more than 30 years baseboard cameras have discarted as news cameras, and since for that reason no new large-format telephoto lenses were developed, really high-quality telephoto lenses have been lacking. The longfocal-length copying lenses adapted to the telephoto area require long bellows extensions corresponding to their focal length; these are only possible in connection with monorail cameras with especially made extra long monorails. But precisely because the baseboard camera and other camera types, trimmed down to the desired compactness and lightness for mobile use are preferred in landscape, industrial, and architectural photography, the new Apo-Tele-Xenars meet the long-felt wishes of many outdoor professionals.





Anyone getting into large format photography for the first time often has problems in imagining the pictorial effect of the much longer focal lengths there. Particularly with telephoto lenses, there are often unrealistic ideas, because, e.g., a 300 mm focal length for a 35 mm camera is quite a "long tube", but for a format of $8 \times 10^{"}$ or 18×24 cm it is nothing more than the normal focal length. At the same time, the conversion is quite simple. Because of the different lengths of the sides, the relevant variable is always the diagonal of the image, e.g., 43 mm with a 35 mm film, and 154 mm with 4x5". The proportion of the format diagonals yields the conversion factor; in the example given, it is $154:43 \approx 3.6$. Hence, the normal focal length of a 35 mm film corresponds in format 4x5'' to a focal length of $3.6 \cdot 50$ mm = 180 mm. Conversely, a focal length of 300 mm in format 4x5" corresponds in a 35 mm film to 300 mm: $3.6 \approx 85$ mm. On page 21, there is a table which gives you all the conversion factors for all of the usual large formats.



Tom Wolf (Germany): "The newly designed series Apo-Tele-Xenar is impressive because of its compactness and outstanding imaging power"

5.6/250 + Copal 1

16 17



5.6/400 + Copal 3



9/600 + Copal 3



12/800 (rear component)

The Apo-Tele-Xenars 9/600 and 12/800 are modular, with an interchangeable rear component. They share the same front element, so that only the other rear component is required in addition to have both focal lengths available.

