

Rodenstock 35mm f4 APO Sironar Digital HR

Rodenstock 35mm f4 APO Sironar Digital HR lens (Copal 0). The Rodenstock Apo-Sironar digital HR lens series was developed for special applications with extremely high resolution CCD chip backs with pixel sizes even smaller than 10 nm such as can only be realized with smaller digital camera formats. These lenses utilize every technological possibility to get as close as possible to the absolute limit of diffraction-determined resolution. Among other things, even the optical properties and the thickness of the CCD protective glass were taken into the equation of the optical correction.

The resolving power and lateral chromatic aberration have been optimized to ensure that the resulting lack of sharpness or the color fringes do not amount to any more than a tiny fraction of the pixel size (which can no longer be resolved). As a result, even when the digital photos taken with the lens are enlarged to a maximum on the screen, absolutely no color fringes are visible, unless color fringes are added by the pixel structure of a one-shot back used or due to interpolation.

The resolving power of the Apo-Sironar digital HR is not only a little better for the working apertures of 8 to 11 recommended for other high-performance lenses. You can rather see an increase in performance even with a higher aperture right up to the maximum f-stop 4. This increase is reflected in the very high brilliance and detail reproduction. To ensure that this fantastic quality is not impaired by diffraction, HR lenses should always be stopped down as little as possible. This means that the depth of field should be increased for motifs extended in depth by using an optimum lens tilt for an overall sharp focus. The advantageous larger apertures also reduce color noise in the shadows.