

MEDIUM AND LONG FOCAL LENGTHS

Apo-Digitar 4.0/60 N, 4.0/80 L, 4.5/90 N, 5.6/100 N, 5.6/120 N, 5.6/150 N, 5.6/180 T

For universal use with best possible sharpness and natural perspective



The vast majority of product images are shot diagonally from above. This entails the need for extensive adjustment in order to correct the perspective totally or residually which can only be accomplished with lenses where the image circle is larger than the diagonal of the image format. The subsequent rectification on the computer with the help of image processing software has more than one disadvantage: Firstly it is much more time consuming than simply adjusting the camera beforehand. Secondly it warps the proportions (see page 5). Thirdly it reduces sharpness because of the interpolation resulting from the recalculation of the pixels, and last but not least this very interpolation is responsible for the creation of visible reddish brown or blue color fringes.

Advertising and catalogue production in studios are still the main application for adjustable cameras with high resolution digital backs. One-shot chip sensors have extended this field of employment to include moving objects, i.e. people for fashion shots. The SCHNEIDER Apo-Digitar N lenses offer the necessary focal lengths for a perfectly natural perspective. They offer an outstanding clarity and sharpness over their entire image circle, big enough to allow wide parallel shifts for perspective corrections of converging lines and lens tilts or swings for depth of field control according to Scheimpflug's rule.

The large range of closely staggered focal lengths for this series guarantees the most suitable lens for the angle of view and the image circle diameter for all the current sensor sizes. Their apochromatic correction reduces color fringing which has more significance for digital than for conventional photography on film because of the pixel structure and interpolation that both enhance existing color fringes. The meticulous flattening of the field curvature of this range of lenses does justice to the advantage of the perfectly plane sensor surface. The recommended distance ranges from infinity up to an image scale of 1:3. Sharpness is still fine even at higher scales but you will probably find the macro lenses Apo-Digitar M to be slightly superior.



Strictly speaking the image circles are even larger

Some of these lenses actually have a larger image circle than specified on page 13. Because the quality decreases towards the edge – as it does with all lenses – full exploitation of the maximum range means that within those corners most distant from the optical axis reduced sharpness would limit the quality of the lens regardless of the resolution capacity of the sensor. Therefore we have specified smaller image circle diameters and angles of view as well as corresponding lens displacement values in the table which will guarantee the proverbial SCHNEIDER quality you expect. But it is good to know that should the background be beyond the depth of field anyway or should the concerning image corners be lacking in finely structured details as it is the case with blue skies, clouds, or homogeneous background carton, there is some more additional free room left for even larger parallel displacement (perspective control) and for tilt and swing (depth of field control according to Scheimpflug's rule).

STANDARD FOCAL LENGTHS



4.0/60 N
Schneider Electronic Shutter 0



4.0/80 L
Schneider Electronic Shutter 0



4.5/90 N
Schneider Electronic Shutter 0



5.6/100 N
Schneider Electronic Shutter 0



5.6/120 N
Schneider Electronic Shutter 0



5.6/150 N
Schneider Electronic Shutter 0



5.6/180 T
Schneider Electronic Shutter 0