

Minolta 24-105mm f/3.5-4.5D AF

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Amazingly compact, light, medium-range zoom has unique 24mm widest angle.

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Hands on: Solidly constructed and surprisingly small, this well-thought-out optic has two comfortably spaced, smooth-turning, rubberized grip-control rings. The rear, main ring, which has diagonal ribbing, controls zoom in an equally smooth manner, while the broad front ring, which has straight ribbing, governs manual focusing. The silk-screened zoom focal-length markings are satisfyingly large. The focusing scale, nicely inset underneath a plastic window, is marked in light yellow for feet and white for meters. The yellow, in fact, appears almost white, and we wish it were a deeper color to increase differentiation between the scales. A cosmetic chrome ring right behind the zoom sets off the lens barrel's satin black finish—a handsome-looking lens.



The lens has excellent balance when mounted on a camera body. Our left-hand first and index fingers fell naturally on the two control rings, providing easy operation.

In the lab: Lines-per-millimeter resolution readings indicated generally consistent results throughout the zoom range with excellent central or very good resolution, and good to excellent corners but with lower results both centrally and in the corners for 70 and 105mm at the seldom-used f/27 aperture. Distortion was low throughout: minimal barrel (0.45%) at 24mm; slight pin-cushion (0.75%) at 70mm, and slight pincushion (0.85%) at 105mm. Exposure at the film plane for 24mm and 105mm was extremely accurate at every aperture, except at maximum, which showed about 1/3 f-stop underexposure due to light falloff.

SPECIFICATIONS: 24-105mm (25.49-107.49mm tested), f/3.5-4.5 (f/3.7-4.7 tested), 12 elements in 11 groups.
Min aperture: f/22-27.
Focusing turns 60 degrees counterclockwise; min focus 1 ft 7 11/16 in. Zoom ring turns 50 degrees counterclockwise. Focal lengths marked at 24-, 35-, 50-, 70-, and 105mm.

View angle: Diag: 84-23 degrees.
Weight: 14 3/8 oz.
Filter size: 62mm.
Mount: Minolta D.
Lenshood: included.
List price: \$675.00.

At the closest focusing distance of 19 1/2 inches at 24mm (1:17), center sharpness was excellent at every aperture, corners were below average from f/3.5 to f/4, good at f/5.6, very good at f/8, excellent from f/11 to f/16, and very good at f/22. Optimum performance was at f/11. At closest focusing distance of 18 1/4 inches at 70mm (1:6.4), center sharpness was excellent at every aperture. Corner sharpness was below average from f/4 to f/5.6, acceptable at f/8, good at f/11, and very good from f/16 to f/27.

Optimum performance was at f/16. At closest focusing distance pf 18 1/4 inches at 105mm (1:5), center sharpness was excellent at every aperture. Corner sharpness was below average from f/4.5 to f/5.6, acceptable at f/8, good at f/11, and very good from f/16 to f/22. Optimum performance was at f/16.

In the field: Test slides were very sharp and contrasty from center to corners at all apertures and focal lengths, except at f/3.5 at 24mm and f/27 at 105mm, where corners were slightly soft. Light falloff was gone by f/5.6 at all focal lengths. Flare was very well-controlled at all apertures and focal lengths.

Conclusion: Minolta's optical engineers have miraculously produced a 24-105mm close-focusing zoom with an adequate aperture range; this lens is actually smaller and lighter than previous "compact" 24-85mm lenses. Operationally and in construction the lens proved excellent. Its optical performance is fine. We recommend avoiding f/27 and suggest f/11 to f/16 for best center to corner close focusing sharpness.