

# Fast, wide, close-focusing, and sharp

**WHAT YOU SHOULD KNOW:** This DG-designated lens, which replaces the non-DG version (tested August 1998), is optimized for digital SLRs. Optical improvements include a new 11-element, 10-group design (up from 10 elements in nine groups), to improve correction for lateral chromatic aberration and distortion, and the addition of Super Multi Layer (SML) coating to reduce ghosting and reflections from digital sensors. Mechanical changes include an f/45 aperture setting for Canon-, Sigma-, and Minolta-mount lenses (Nikons and Pentaxes stop down to f/32, which is really sufficient).

**HANDS ON:** Average in size and weight for a 105mm macro, all scales are legible and in white-on-black except for the light-orange manual-focus magnification scale. The 1.5-inch-wide manual-focus collar turns with a smooth, well-damped action. In AF mode, our Canon-mount test lens auto-focused quickly and smoothly, with average noise. The depth-of-field scale on the distance-ring cover glass lists only one aperture (f/32), and isn't very useful. The focus limiter found on the non-DG is an excellent feature, with its close (12.3–13.6 inches) and normal (15.8 inches to infinity) focus ranges. When shooting in macro range, it improved speed and AF accuracy by preventing "hunting." The "limit" setting, used at more common focusing distances, can still get quite close in AF.

**IN THE LAB:** SQF data indicate excellent performance. There was minimal pincushion distortion (0.45%) and light falloff was undetectable by f/4. At the closest focusing distance of 12.25 inches (1:1), center sharpness was acceptable f/2.8–4, good f/5.6–8, very good f/11–16, good at f/22, and acceptable f/32–45. Corner sharpness was acceptable at f/2.8, good at f/4, very good at f/5.6, excellent f/8–16, very good at f/22, and acceptable f/32–45.

**CONCLUSION:** An outstanding macro lens that delivers creditable performance at life-size magnification as well as fine image quality at normal focusing distances. 🌀

## SPECIFICATIONS

- **105mm** (101.37mm tested), f/2.8 (f/2.90 tested),
- **11** elements in 10 groups.
- **Focusing** turns 260 degrees counterclockwise.
- **Diagonal view angle:** 23 degrees.
- **Weight:** 1.15 lb.
- **Filter size:** 58mm.
- **Mounts:** Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. Included: lenshood, softcase.
- **List price:** \$689.
- **Street price:** Approx. \$370.



## SUBJECTIVE QUALITY FACTOR

105mm

Size	5x7	8x10	11x14	16x20	20x24
2.8	97.2	95.4	94.3	89.8	84.1
4.0	97.5	96.7	94.8	91.1	86.3
5.6	97.6	96.9	95.1	91.7	87.4
8.0	97.8	97.1	95.5	92.5	88.8
11.0	97.9	97.2	95.6	92.7	89.1
16.0	97.3	96.5	94.5	90.6	85.6
22.0	96.3	95.2	92.4	86.3	78.2
32.0	95.5	94.3	90.8	82.1	70.5
45.0	95.8	94.6	91.3	83.4	72.6

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