



Sigma

A fast, light, constant-aperture zoom

Hands on: More compact and lighter-weight than most in its class, the lens is finished in Sigma's familiar matte black "pro" surface. Its generously sized outer manual-focusing ring is surfaced in ribbed rubber for a satisfying grip. The ring also doubles as a switch for engaging a push/pull manual/auto-focus clutch. When engaged, the clutch conveniently lets you manually focus (albeit stiffly) when the lens is in the AF mode. A disadvantage: the MF ring turns during auto-focusing, which can be awkward when the lens is supported from below.

The zoom ring is amply sized, and has ribbed rubber surfacing. Except as noted, focus and zoom actions are smooth and well-damped. Barrel markings include feet/meter distance scales (both in legible white type and recessed within a window), depth-of-field scale for apertures f/11 through f/32, an infrared focusing mark, and focal-length indications for 28-, 35-, 50-, and 70mm. The zoom's main manual/AF switch is placed close to the camera body, similar to Canon AF lenses.

In the lab: SQF data at the tested focal lengths indicates very good imaging performance at all apertures. Barrel distortion was noticeable at 28mm (1.5 percent), with noticeable pincushion distortion (2.0 percent) at 50mm, and considerable pincushion distortion (2.47 percent) at 70mm. At 28mm, exposure was accurate at the film plane, with 1/5-stop underexposure from f/2.8 to f/8, 1/3-stop underexposure at f/11 and f/16, 1/2-stop underexposure at f/22, and 2/3-stop underexposure at f/32. At 70mm, exposure was very accurate, with 2/5-stop underexposure at maximum

aperture due to light falloff, less than 1/10-stop underexposure from f/4-16, 1/3-stop underexposure at f/22, and 1/2-stop underexposure at f/32.

At the 28mm close-focusing distance of 15 1/4 inches (1:9.4), center sharpness was excellent from f/2.8-16, very good at f/22, and good at f/32. Corner sharpness was acceptable from f/2.8-5.6, good at f/8, excellent at f/11, very good at f/16, good at f/22 and poor at f/32. Optimum performance was at f/11. At the 50mm close-focusing distance of 14 1/2 inches (1:5.1), center sharpness was acceptable at f/2.8, excellent from f/4-22, and poor at f/32. Corner sharpness was poor at f/2.8, acceptable at f/4, excellent from f/5.6-22, and acceptable at f/32. Optimum performance was at f/16. At the 70mm close focusing distance of 14 1/2 inches (1:3.9), center sharpness was poor from f/2.8-4, acceptable at f/5.6, good at f/8, very good at f/11, excellent at f/16 and f/22, and acceptable at f/32. Corner sharpness was poor from f/2.8-4, acceptable at f/5.6, good from f/8-16, acceptable at f/22, and poor at f/32. Optimum performance was at f/16.

In the field: Test slides were very sharp and contrasty from center to edge at every aperture and focal length. Light falloff was gone by f/5.6 at 28mm, and by f/4 at 50- and 70mm. Flare was very well controlled at 28mm; noticeable at 50mm (all apertures), and moderate at 70mm from f/16-32. AF timing was fast, but somewhat noisy.

Conclusion: Costing less than 1/3 of similar optics, this high-speed bargain is suitable for most uses, except (due to distortion at 70mm) architecture. 🌀

Sigma 28-70mm f/2.8 EX DF AF



SPECIFICATIONS

28-70mm (28.91-68.93mm tested), f/2.8 (f/2.85 tested), 15 elements in 12 groups. Focusing turns 80 degrees counterclockwise. Zoom ring turns 70 degrees counterclockwise. Focal lengths marked at 28-, 35-, 50-, and 70mm. **Diagonal View Angle:** 75-34 degrees. **Weight:** 1lb 6 1/8 oz. Filter size: 77mm. **Mounts:** Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. **Lenshood:** Included. **Case:** Included. **List price:** \$651. **Street price:** Approx. \$300.

SUBJECTIVE QUALITY FACTOR

QAF	A+	A	B+	B	C+	C	D	F
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@28mm								
MAG	5	6	8	12	17	22		
Size	4x6	5x7	8x10	11x14	16x20	20x24		
2.8	97.2	96.8	95.3	91.3	84.4	78.2		
4.0	97.0	96.5	95.0	90.6	83.1	76.4		
5.6	97.0	96.6	95.0	90.6	83.4	77.0		
8.0	97.0	96.6	95.0	90.6	83.2	76.5		
11.0	96.8	96.3	94.6	89.8	81.7	74.6		
16.0	96.4	95.8	93.8	88.1	78.8	70.6		
22.0	95.5	94.8	92.3	84.8	72.6	62.2		
32.0	93.9	93.0	89.5	79.1	61.8	48.3		

@50mm								
MAG	5	6	8	12	17	22		
Size	4x6	5x7	8x10	11x14	16x20	20x24		
2.8	96.4	95.9	93.7	87.4	78.5	72.3		
4.0	96.9	96.4	94.6	89.3	81.7	76.1		
5.6	97.0	96.6	94.9	89.9	82.9	77.9		
8.0	97.2	96.8	95.2	90.8	84.1	79.1		
11.0	97.4	97.0	95.5	91.4	85.3	80.6		
16.0	97.1	96.7	95.1	90.5	83.5	77.9		
22.0	96.3	95.7	93.6	87.5	77.7	69.3		
32.0	94.7	93.9	90.7	81.4	66.2	53.7		

@70mm								
MAG	5	6	8	12	17	22		
Size	4x6	5x7	8x10	11x14	16x20	20x24		
2.8	96.2	95.5	93.1	85.9	75.5	67.9		
4.0	96.7	96.2	94.1	88.1	79.5	73.2		
5.6	96.9	96.4	94.5	89.0	81.3	75.8		
8.0	97.1	96.7	95.0	90.1	83.0	77.4		
11.0	97.3	96.9	95.4	91.2	84.6	78.8		
16.0	97.3	96.9	95.4	91.1	84.5	78.6		
22.0	96.6	96.0	94.1	88.4	78.9	70.3		
32.0	94.9	94.1	91.0	81.9	66.5	53.3		