

Budget-priced 28-70mm f/2.8 Tokina

What you should know:

Constant aperture 28-70mm f/2.8 lenses have been much prized, by professionals requiring the largest possible apertures for shooting with slow, fine-grained color-slide film in poor light or when using high speeds. The prices of such lenses, made by leading camera makers, have been astronomical: Canon's costs about \$1,000, Nikon's runs \$1,400 (street prices). The new Tokina, at \$299 (street price), costs just a fraction as much and is \$50 less than the present 28–70mm f/2.6-2.8 Tokina.

Hands on: Massive (thanks to constant f/2.8 aperture), solidly constructed, well-finished satin black lens. Exceptionally large focal-length and metric scales in white and footage scales in yellow. Heavily-rubber-ribbed, smooth-turning, manual focusing, and zoom rings. Quick-shift between autofocus and manual focusing possible by pulling back or pushing forward on the manual-focusing ring when it's turned to the five-foot distance setting. With 35mm SLRs having separate AF/M switches set them to AF. There are three white IR-index lines on the lens barrel opposite the manual focusing ring, for 28-, 50-, and 70mm. 271/2-inch closest focus may not be sufficient for head shots.

In the lab: SQF data indicate very good performance at 28and 50mm focal lengths, and good performance at 70mm. Noticeable barrel distortion (1.69 percent) was seen at 28mm, and noticeable pincushion (1.28 percent and 1.50 percent) were measured at 50and 70mm, respectively. At 28mm, exposure at the film plane was accurate, but with underexposure of 1/5 stop from f/2.8 to f/8, $\frac{1}{3}$ -stop from f/11 to f/16, $\frac{1}{2}$ -f-stop at f/22, and ²/₃-stop at f/32. At 70mm, exposure again was judged very accurate with underexposure of ½5 stop at maximum aperture due to light falloff, less than ½10-stop from f/4 to f/16, ½3-stop at f/22 and ½-stop at f/32.

At the closest 28mm focusing distance of 263/4 inches (1:20.8), center sharpness was excellent at every aperture. Corner sharpness was poor at f/2.8, acceptable at f/4, good at f/5.6, excellent from f/8 to f/16, and good at f/22. Optimum performance was at f/11. At the closest 50mm focusing distance of 26 inches (1:11.2), center sharpness was acceptable from f/2.8 to f/8, good at f/11, and very good from f/16 to f/22. Corner sharpness was poor at f/2.8, very good at f/4, excellent from f/5.6 to f/16, and very good at f/22. Optimum performance was at f/16. At the closest 70mm focusing distance of $25\frac{1}{4}$ inches (1:8.2), center sharpness was poor from f/2.8to f/8, acceptable at f/11, very good from f/16 to f/22. Corner sharpness was poor at f/2.8, good at f/4, very good at f/5.6, excellent from f/8 to f/16, and very good at f/22. Optimum performance at this focal length was at f/16.

In the field: Test slides were very sharp and contrasty from center to corner at every aperture and focal length. Flare, very well controlled at 28mm, showed slightly at all apertures at 50mm, and was present in moderate amounts from f/16 to f/32 at 70mm. Light falloff was gone by f/5.6 at 28mm, and by f/4 at 50-, and 70mm.

Conclusion: Fine for general photography, action, and low-light shooting, even at full aperture. Close-focusing isn't its strong point, though, and optically it falls slightly short of its far pricier competitors.

8.0 11.0

16.0



SPECIFICATIONS

28–70mm (27.23–68.02mm tested), f/2.8 (f/2.73 tested), 16 elements in 12 groups. Focusing ring turns 70 degrees clockwise. Zoom ring turns 60 degrees counterclockwise. Focal lengths marked at 28-, 35-, 50-, and 70mm. Diagonal View Angle: 75–34 degrees. Weight: 1 lb 10½6 oz. Filter size: 77mm. Mounts: Canon AF, Minolta AF, Nikon D AF, and Pentax AF. Included: Lenshood and protective lens pouch. List price: \$549. Street price: Approximately \$300.

SUBJECTIVE QUALITY FACTOR

¥A+	А	B+	В	C+ C	D	F
@28mm						
MAG	5	6	8	12	17	22
Size	4x6	5x7	8x10	11x14	16x20	20x24
2.8	95.8	95.1	92.6	85.2	74.2	65.8
4.0	96.0	95.4	93.1	86.3	76.1	68.2
5.6	95.9	95.2	92.8	85.7	74.9	66.7
8.0	95.7	95.0	92.5	85.2	73.9	65.2
11.0	95.9	95.2	92.9	86.2	75.3	66.3
16.0	95.8	95.2	92.9	86.2	75.1	66.0
22.0	95.5	94.8	92.3	84.8	72.7	62.6
@50mm						
MAG	5	6	8	12	17	22
Size	4x6	5x7	8x10	11x14	16x20	20x24
2.8	95.4	94.6	91.6	82.4	70.6	63.3
4.0	95.2	94.4	91.3	81.9	69.3	61.8
5.6	96.3	95.7	93.5	87.1	77.6	70.9
8.0	96.6	96.1	94.2	88.7	80.2	73.9
11.0	96.6	96.1	94.2	88.6	80.0	73.3
16.0	96.6	96.1	94.2	88.7	80.1	73.0
22.0	96.4	95.8	93.8	87.8	78.2	70.1
@70mm						
MAG	5	6	8	12	17	22
Size	4x6	5x7	8x10	11x14	16x20	20x24
2.8	95.3	94.5	91.5	82.4	70.5	63.4
4.0	95.4	94.6	91.6	82.6	70.8	63.7

86.7

87.0

88.5

77.8 78.3