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Nikon

Nikkor Auto 105mm f/2.5

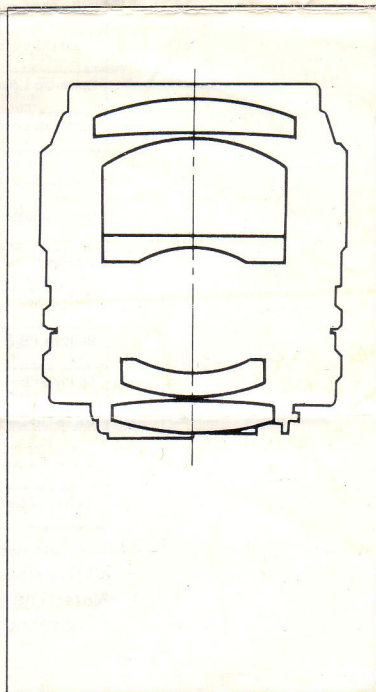
The Nikkor Auto 105mm f/2.5 is a medium telephoto lens of modified Gauss-type construction. Its 105mm focal length and reduced depth of field make this lens particularly suitable for portrait photography in which faithful reproduction of perspective is desired and a slightly out-of-focus background is preferred. In addition, the multi-layer anti-reflection coating on air-to-glass surfaces minimizes flare and ghost, makes for contrast improvement and gives natural color rendition with color films. Automatic diaphragm control guarantees the brightest possible image for viewing and focusing and the lens coupling prong connects the lens with the Photomic and Nikkormat thru-the-lens meters for full-aperture exposure measurement.

Due to its compactness and relatively high speed, the Auto Nikkor 105mm f/2.5 is an excellent choice for shooting theatrical productions or other available light assignments.

Specifications

Focal length/aperture	105mm f/2.5
Picture angle	23°20'
Lens construction	5 elements in 4 groups
Diaphragm	Automatic; stops down to f/32
Meter coupling prong	Provided
Focusing range	∞ to 3.5 ft (1m)
Attachment size	52mm screw-in (P = 0.75mm)
Dimensions	66mmφ x 78mm
Weight	435g

The lens comes with a snap-on lens hood.



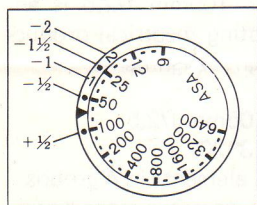
Nikon

Recommended Focusing Screens

Eighteen different interchangeable focusing screens are available for Nikon F and F2 cameras to suit any type of lens or picture-taking situation. Those which are recommended for use with the 105mm f/2.5 lens are listed in the table below.

Camera	Screen	A/L	B	C	D	E	G1	G2	G3	G4	H1	H2	H3	H4	J	K	M	P
F		o	o			o		o			Δ+1/2	o+1/2			o	o		o
F2		o	o			o		o			Δ+1/2	o+1/2			o	o		o

o Especially Recommended Δ Acceptable



Note: A certain combination of the lens and the focusing screen gives a slight influence over exposure metering. For accurate exposure determination necessary correction in f-stops is given by the table above. +1/2 means exposure should be increased by 1/2 stop; -1/2 for 1/2 stop decrease, and so on. With Nikon F2 Photomic and Nikon F with Photomic FTN finder, this is done by setting the film speed next to the +1/2 or -1/2 mark engraved on the film speed index ring. For example, if you are using ASA 100 film and the screen is type H1 in the Nikon F2, lift and turn the ring so that number 100 appears opposite the +1/2 mark as shown in the illustration.

Photographic Ranges with Close-Up Attachments

(in.)

Close-up attachment	Lens in normal position			Lens in reverse position		
	Repro. ratio	Subject field	Focused distance	Repro. ratio	Subject field	Focused distance
E2 Ring	1/7.5–1/3.9	7.1x10.6–3.7x5.6	38.6–23.9			
K Ring Set	1/18–1/1.8	17.1x25.7–1.7x2.5	82.1–16.2			
Bellows PB-3	1/3.2–1.4	3.0x4.5–0.70x1.1	21.4x15.7	1/5.3–1.2	5.0x7.6–0.77x1.1	29.8–15.5
Bellows PB-4, PB-5	1/2.4–1.8	2.3x3.5–0.53x0.80	18.9x16.7	1/3.5–1.6	3.3x5.0–0.58x0.87	22.8–16.3
Close-Up Lens No. 0	1/13–1/5.0	12.7x19.1–4.7x7.1	60.3–27.4			
Close-Up Lens No. 1	1/6.4–1/3.5	6.1x9.1–3.3x5.0	31.5–20.9			
Close-Up Lens No. 2	1/3.2–1/2.2	3.0x4.6–2.1x3.2	18.3–15.2			

(cm)

Close-up attachment	Lens in normal position			Lens in reverse position		
	Repro. ratio	Subject field	Focused distance	Repro. ratio	Subject field	Focused distance
E2 Ring	1/7.5–1/3.9	18.0x27.0–9.5x14.2	98.1–60.8			
K Ring Set	1/18–1/1.8	43.4x65.2–4.3x6.4	209–41.2			
Bellows PB-3	1/3.2–1.4	7.6x11.5–1.8x2.7	54.6–39.9	1/5.3–1.2	12.8x19.3–2.0x2.9	75.8–39.4
Bellows PB-4, PB-5	1/2.4–1.8	5.9x8.8–1.4x2.0	47.9–42.4	1/3.5–1.6	8.5x12.7–1.5x2.2	58.0–41.5
Close-Up Lens No. 0	1/13–1/5.0	32.3x48.4–12.0x18.0	153–69.5			
Close-Up Lens No. 1	1/6.4–1/3.5	15.4x23.1–8.4x12.6	80.0–53.0			
Close-Up Lens No. 2	1/3.2–1/2.2	7.7x11.6–5.3x8.0	46.4–38.6			

* The left-hand figures are for the K1 Ring used alone and the right-hand ones for all five rings used together.

Note: The Slide-Copying Adapters PS-4 and PS-5, and Repo-Copy Outfit Model PF-2 cannot be used.

Accessories

- 52mm snap-on front cap
- Rear cap with F-mount
- Snap-on lens hood
- Screw-in lens hood
- Plastic lens case
- Leather lens case
- Soft leather case

Lens Care

- * Always keep the lens surfaces clean, as dust or smudges can interfere with the sharpness of the image. Use lens tissue or a soft brush to remove dust, never cloth or ordinary tissue. Stubborn smudges should be wiped with lens tissue moistened with alcohol or lens cleaner.
- * To protect the lens surface from dirt or damage, the use of a UV filter at all times is recommended. The lens hood also helps to protect the lens.
- * Keep the lens cap in place whenever the lens is not in use.
- * Attach both the front and rear caps when the lens is stored separately.

Depth of field

Focused distance	Depth of field										Repro. ratio
	f/2.5	2.8	4	5.6	8	11	16	22	32	(ft)	
3.5	3'5-11/16" -3'6-1/4"	3'5-11/16" -3'6-1/4"	3'5-9/16" -3'6-3/8"	3'5-3/8" -3'6-9/16"	3'5-3/16" -3'6-13/16"	3'4-7/8" -3'7-3/16"	3'4-7/16" -3'7-1/16"	3'3-13/16" -3'9-7/16"	3'3" -3'9-9/16"	3'3" -3'9-9/16"	1/8.3
4	3'11-5/8" -4'1-5/8"	3'11-9/16" -4'1-3/8"	3'11-7/16" -4'9/16"	3'11-3/16" -4'3/4"	3'10-7/8" -4'1-1/8"	3'10-7/8" -4'1-5/8"	3'9-7/8" -4'2-5/16"	3'9-1/16" -4'3-3/8"	3'9-1/16" -4'4-15/16"	3'9-1/16" -4'4-15/16"	1/9.8
4.5	4'5-1/2" -4'6-7/16"	4'5-7/16" -4'6-1/2"	4'5-1/4" -4'6-11/16"	4'4-15/16" -4'7"	4'4-9/16" -4'7-7/16"	4'4" -4'8-1/8"	4'3-1/4" -4'9-1/16"	4'2-3/16" -4'10-1/2"	4'1-13/16" -5'5/8"	4'1-13/16" -5'5/8"	1/11
5	4'11-3/8" -5'9-1/16"	4'11-5/16" -5'5/8"	4'11-1/16" -5'7/8"	4'10-11/16" -5'1-5/16"	4'10-3/16" -5'1-7/8"	4'9-1/2" -5'2-11/16"	4'8-9/16" -5'3-15/16"	4'7-1/4" -5'5-3/4"	4'5-1/2" -5'8-1/2"	4'5-1/2" -5'8-1/2"	1/13
5.5	5'5-1/4" -5'5-1/16"	5'5-3/16" -5'6-3/4"	5'4-7/8" -5'7-1/8"	5'4-7/8" -5'7-3/8"	5'3-13/16" -5'5-5/16"	5'2-15/16" -5'9-9/8"	5'1-3/4" -5'10-7/8"	5'3-1/8" -5'1-1/8"	5'3-1/8" -5'4-11/16"	5'3-1/8" -5'4-11/16"	1/14
6	5'11-1/8" -6'1-13/16"	5'11" -6'1-5/16"	5'10-5/8" -6'1-3/8"	5'10-1/16" -6'1-5/16"	5'9-3/8" -6'2-13/16"	5'8-5/16" -6'4-1/16"	5'8-5/16" -6'5-15/16"	5'5-1/16" -6'8-3/4"	5'2-5/8" -7'1-1/8"	5'2-5/8" -7'1-1/8"	1/16
6.5	6'4-15/16" -6'7"	6'4-13/16" -6'7-1/8"	6'4-3/8" -6'7-5/8"	6'3-3/4" -6'8-3/8"	6'2-7/8" -6'9-3/8"	6'1-5/8" -6'10-7/8"	6" -7'1-1/8"	5'9-13/16" -7'4-9/16"	5'7" -7'9-7/8"	5'7" -7'9-7/8"	1/17
7	6'10-13/16" -7'1-3/16"	6'10-5/8" -7'1-5/16"	6'10-1/8" -7'1-15/16"	6'9-3/8" -7'2-3/4"	6'8-5/16" -7"	6'6-15/16" -7'5-3/4"	6'5-1/16" -7'8-7/16"	6'2-1/2" -8'1-2"	5'11-1/4" -8'7"	5'11-1/4" -8'7"	1/19
8	7'10-7/16" -8'1-9/16"	7'10-3/16" -8'1-13/16"	7'9-1/2" -8'2-9/16"	7'8-1/2" -8'3-11/16"	7'7-3/16" -8'5-5/16"	7'5-5/16" -8'7-3/4"	7'2-7/8" -8'11-3/8"	7'1-5/8" -9'5-1/16"	6'9-1/2" -10'2"	6'9-1/2" -10'2"	1/21
9	8'10" -9'2-1/16"	8'9-3/4" -9'2-5/16"	8'8-13/16" -9'3-5/16"	8'7-9/16" -9'4-13/16"	8'5-7/8" -9'5-15/16"	8'5-7/8" -9'10-1/16"	8'7/16" -10'3"	8'7-7/16" -10'10"	8'1-5/8" -11'11"	8'1-5/8" -11'11"	1/24
10	9'9-1/2" -10'3"	9'9-3/16" -10'3"	9'8-1/16" -10'4"	9'6-1/2" -10'6"	9'4-7/16" -10'9"	9'1-9/16" -11'1"	8'9-13/16" -11'7"	8'4-15/16" -12'5"	7'10-13/16" -13'9"	7'10-13/16" -13'9"	1/27
12	11'8" -12'4"	11'8" -12'4"	11'6" -12'6"	11'4" -12'9"	11'1" -13'1"	10'9" -13'7"	10'4" -14'5"	9'9-1/16" -15'8"	9'1-1/2" -16'5"	9'1-1/2" -16'5"	1/33
15	14'8" -15'6"	14'8" -15'6"	14'3" -15'10"	14" -16'2"	13'7" -16'9"	13'1" -17'7"	11'7" -19'1"	11'1" -21'5"	10'8" -26'1"	10'8" -26'1"	1/42
20	19'2" -20'11"	19'1" -21'1"	18'8" -21'8"	18'2" -22'3"	17'6" -23'4"	16'8" -25"	15'7" -29"	14'4" -33'7"	12'10" -41'7"	12'10" -41'7"	1/56
30	28'1" -32'2"	27'11" -32'6"	27'1" -33'7"	26'1" -35'5"	24'9" -38'3"	23" -43'3"	21" -51"	18'9" -78"	16'3" -240"	16'3" -240"	1/85
60	52'10" -69'6"	52" -71"	49'3" -76'9"	45'11" -87'11"	41'10" -107"	37'2" -158"	32'2" -200"	27'1" -250"	22'1" -300"	22'1" -300"	1/172
∞	4'35-∞	3'84-∞	2'72-∞	1'92-∞	1'36-∞	98'6-∞	68'5-∞	48'7-∞	34'6-∞	34'6-∞	1/∞

Focused distance	Depth of field										Repro. ratio
	f/2.5	2.8	4	5.6	8	11	16	22	32	(m)	
1	0.994-1.01	0.994-1.01	0.991-1.01	0.988-1.01	0.983-1.02	0.976-1.03	0.966-1.04	0.953-1.05	0.934-1.08	0.934-1.08	1/7.7
1.1	1.09-1.11	1.09-1.11	1.09-1.11	1.08-1.12	1.08-1.12	1.07-1.13	1.06-1.15	1.04-1.17	1.02-1.20	1.02-1.20	1/8.7
1.2	1.19-1.21	1.19-1.21	1.19-1.21	1.18-1.22	1.17-1.23	1.16-1.24	1.14-1.26	1.13-1.28	1.10-1.32	1.10-1.32	1/9.6
1.3	1.29-1.31	1.29-1.31	1.28-1.32	1.28-1.32	1.27-1.33	1.26-1.35	1.24-1.37	1.21-1.40	1.18-1.45	1.18-1.45	1/11
1.4	1.39-1.41	1.39-1.41	1.38-1.42	1.37-1.43	1.36-1.44	1.35-1.46	1.33-1.48	1.30-1.52	1.26-1.58	1.26-1.58	1/12
1.5	1.49-1.51	1.48-1.52	1.48-1.52	1.47-1.53	1.46-1.55	1.44-1.57	1.42-1.60	1.38-1.64	1.34-1.71	1.34-1.71	1/13
1.7	1.68-1.72	1.68-1.72	1.67-1.73	1.66-1.74	1.64-1.76	1.62-1.79	1.59-1.83	1.55-1.89	1.50-1.98	1.50-1.98	1/14
2	1.97-2.03	1.97-2.03	1.96-2.04	1.94-2.06	1.92-2.09	1.89-2.13	1.85-2.19	1.79-2.27	1.72-2.41	1.72-2.41	1/17
2.5	2.46-2.54	2.45-2.55	2.43-2.57	2.41-2.60	2.37-2.64	2.32-2.71	2.26-2.81	2.17-2.96	2.06-3.21	2.06-3.21	1/22
3	2.94-3.06	2.93-3.07	2.90-3.10	2.87-3.15	2.81-3.21	2.74-3.31	2.65-3.46	2.53-3.70	2.38-4.11	2.38-4.11	1/27
4	3.89-4.12	3.88-4.13	3.83-4.19	3.76-4.27	3.67-4.40	3.55-4.59	3.39-4.89	3.19-5.40	2.95-6.34	2.95-6.34	1/36
5	4.83-5.19	4.81-5.21	4.73-5.31	4.63-5.44	4.49-5.65	4.31-5.98	4.07-6.51	3.79-7.45	3.45-9.38	3.45-9.38	1/46
7	6.66-7.38	6.62-7.43	6.47-7.62	6.28-7.92	6.02-8.37	5.69-9.12	5.29-10.4	4.81-13.1	4.26-20.8	4.26-20.8	1/65
10	9.31-10.8	9.23-10.9	8.95-11.3	8.58-12.0	8.10-13.1	7.51-15.0	6.81-19.1	6.03-30.7	5.19-247	5.19-247	1/94
20	17.4-23.5	17.1-24.1	16.2-26.3	15.0-30.2	13.6-38.4	12.0-62.4	10.3-64.8	8.57-∞	6.95-∞	6.95-∞	1/189
∞	1'32-∞	1'17-∞	8'29-∞	5'8.6-∞	4'1.5-∞	2'9.4-∞	2'0.9-∞	1'4.8-∞	1'0.5-∞	1'0.5-∞	1/∞