



NIPPON KOGAKU K. K.

Tokyo, Japan

Printed in Japan

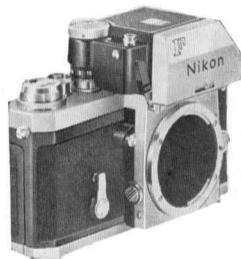
(71. 12. C) H-11

Nikon

EXTENSION RING

MODEL E₂

INSTRUCTIONS



Nikon Photomic FTn
camera



E₂ Ring



Nikkor Lens

Fig. 1

Nikon

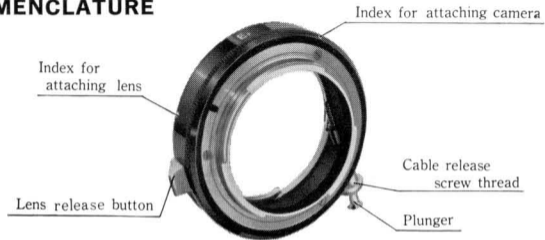
EXTENSION RING MODEL E₂

The Extension Ring Model E₂, inserted between a Nikon camera body and a NIKKOR lens, extends the lens-to-film distance, enabling us to take picture at larger reproduction ratios than when the close-up attachment lens or lenses only are used on the lens.

It is equipped with a plunger which, as long as depressed with a finger or by means of a cable release, fully opens the aperture diaphragm.

As soon as the finger is raised, the diaphragm will be stopped down to the pre-selected aperture.

NOMENCLATURE



SPECIFICATIONS

Camera to be used:	Nikon F, F2 or Nikkormat camera
Lens to be used:	NIKKOR interchangeable lenses
Extension:	14mm
Reproduction ratio:	With NIKKOR Auto 50mm f/2 1/3.7x - 1/2.7x
Weight:	approx. 2.3oz (65g)

USING

- To attach the Extension Ring onto the camera body, line up the white dot with black one on the front of the camera (white dot in case of the black-finished Nikon F or F2 camera) and turn the ring counterclockwise until the ring clicks into position. Then, attach the lens to the ring, lining up the black dot (or white dot on the telephoto lens) with the white dot on the front edge of the ring, and turning the lens counterclockwise until the lens clicks into position with its f-number scale index turned about 40° aside from the top.
- To remove the lens from the ring, depress the release button on the ring toward the camera body and turn the lens clockwise.

- In focusing, fully open the aperture diaphragm by depressing the plunger on the ring with ring finger. (Fig. 3) When the camera is fixed on a tripod or the like, the plunger can be depressed with ring finger or cable release. (Fig. 4)
 - Two or three E₂ Rings inserted together between the camera and lens permit photographing still closer subjects at higher magnifications. For connecting the rings to each other, the lock button on the rings is serviceable in the same way as for attaching the ring directly to the camera. For full opening of the aperture, use the plunger on the ring nearest to the lens.
- The E₂ Ring can be used with Extension Ring Set K and/or close-up attachment lens.



Fig. 3

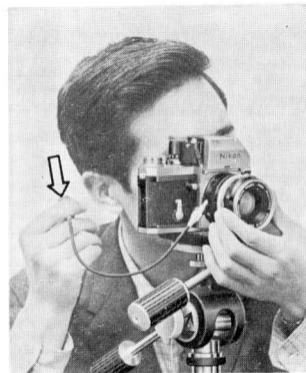


Fig. 4

- The E₂ Ring may be used with the Bellows Focusing Attachment. (Fig. 5)

When the lens is attached on the Bellows in the reversed position with the Macro Adapter (BR2 Ring), the Extension Ring attached on the rear of the lens not only permits the use of the plunger but also serves as a hood for the lens. (Fig. 6)

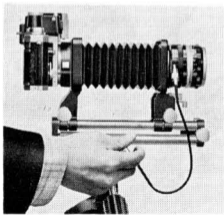


Fig. 5

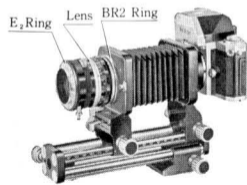


Fig. 6

IMPORTANT!

Since the depth of field in the close-up photography becomes extremely shallow, the lens aperture should be stopped down sufficiently, and accordingly a slower shutter speed should be used.

Support the camera on a tripod and use the cable release for shutter releasing to avoid camera movement as far as possible.

The use of four or more E₂ Rings is not recommended because of the image deterioration, difficulty in illumination and possible viewfield vignetting.

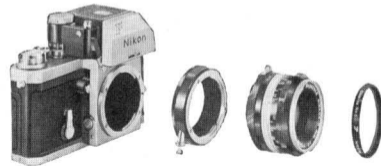


Fig. 7

REPRODUCTION RATIO

Place a scale at the position of the subject to be photographed. Divide 36mm (this is the lengthwise side of the viewfinder field) by the reading on the image of the scale extending the whole lengthwise side of the viewfield in mm.

For example, if the 180mm scale image is covered by the lengthwise side of the viewfield, the reproduction ratio will be $36/180=1/5$.

In the Nikkormat camera, however, owing to its smaller viewfield size, the reproduction ratio thus obtained should be reduced to a value multiplied by 0.9.

EXPOSURE DETERMINATION

- When using Nikon F2 Photomic, Nikon Photomic FT_N or Nikkormat FT_N

In this case, since the meter measures the light actually passing through the taking lens, it is not necessary to consider the exposure

factor, depending upon the magnification increase which is caused by inserting E₂ ring. Determine the exposure with the lens stopped down to the taking aperture manually—the stop-down method.

- When using Nikon F Photomic, Nikon Exposure Meter or other individual meters.

The exposure factor must be considered which is generally given by the following formula:

$$\text{Exposure factor} = (1 + \text{Magnification})^2$$

The exposure factor differs, however, according to the interchangeable lens to be used. The tables on the supplement should be referred to find the correct exposure factor for each NIKKOR lens.

Refer to the accompanied tables for the subject distance, reproduction ratios and exposure factors when using the ring or rings in conjunction with the normal or telephoto NIKKOR lens with or without additional use of the close-up attachment lens No.1 or No.2.

Table 1

NIKKOR Auto 24/2.8, 28/2, 28/3.5, 35/1.4			Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Lens Type	Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
24mm f/2.8	1 E ₂ Ring	1/1.7×—1/1.4×	1.6×2.4—1.4×2.1 (4.1×6.2—3.5×5.2)	5.3—5.2 (13.5—13.1)	1.5—1.6
	2 E ₂ Rings	1.2—1.3	0.83×1.2—0.75×1.1 (2.1×3.1—1.9×2.8)	5.1—5.1 (12.9—13.0)	2.1—2.2
	3 E ₂ Rings	1.8—1.9	0.55×0.83—0.51×0.75 (1.4×2.1—1.3×1.9)	5.4—5.4 (13.6—13.8)	2.8—2.9
28mm f/2	1 E ₂ Ring	1/2.0—1/1.6	1.9×2.9—1.5×2.3 (4.9×7.4—3.8×5.7)	6.5—5.9 (16.4—15.1)	1.5—1.6
	2 E ₂ Rings	1.0—1.1	0.96×1.4—0.85×1.3 (2.5×3.7—2.2×3.2)	5.9—5.7 (14.9—14.5)	2.0—2.2
	3 E ₂ Rings	1.5—1.6	0.64×0.96—0.58×0.88 (1.6×2.5—1.5×2.2)	6.0—6.0 (15.3—15.1)	2.6—2.8
28mm f/3.5	1 E ₂ Ring	1/2—1/1.8	1.9×2.9—1.7×2.6 (4.9×7.4—4.4×6.6)	6.0—5.8 (15.1—14.6)	1.7—1.8
	2 E ₂ Rings	1—1	1.0×1.5—0.91×1.3 (2.5×3.7—2.3×3.4)	5.4—5.4 (13.6—13.6)	2.6—2.7
	3 E ₂ Rings	1.5—1.5	0.63×0.98—0.63×0.95 (1.6×2.5—1.6×2.4)	5.5—5.6 (14.0—14.1)	3.6—3.7
35mm f/1.4	1 E ₂ Ring	1/2.6—1/1.7	2.4×3.6—1.8×2.5 (6.2×9.1—4.7×6.3)	8.0—6.7 (20.3—17.1)	1.3—1.4
	2 E ₂ Rings	1/1.3—1.0	1.2×1.8—1.0×1.5 (3.1×4.5—2.5×3.7)	6.6—6.3 (17.0—16.0)	1.6—1.8
	3 E ₂ Rings	1.2—1.4	0.80×1.2—0.72×1.1 (2.1×3.0—1.9×2.8)	6.7—6.4 (16.9—16.3)	2.0—2.1

Table 2

NIKKOR Auto 35/2, 35/2.8, 180/2.8			Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Lens Type	Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
35mm f/2	1 E ₂ Ring	1/2.6—1/1.8	2.4×3.7—1.7×2.5 (6.2×9.3—4.2×6.4)	7.7—6.9 (19.6—17.4)	1.5—1.8
	2 E ₂ Rings	1/1.3—1	1.2×1.8—0.98×1.5 (3.1×4.6—2.5×3.8)	6.5—6.4 (16.4—16.2)	2.2—2.5
	3 E ₂ Rings	1.2—1.3	0.83×1.2—0.71×1.1 (2.1×3.1—1.8×2.7)	6.4—6.5 (16.3—16.5)	2.9—3.3
35mm f/2.8	1 E ₂ Ring	1/2.6—1/1.8	2.4×3.7—1.7×2.5 (6.2×9.3—4.3×6.4)	7.6—6.7 (19.2—16.9)	1.6—2.0
	2 E ₂ Rings	1/1.3—1/1.1	1.2×1.8—0.98×1.5 (3.1×4.6—2.5×3.8)	6.3—6.2 (15.9—15.7)	2.4—2.8
	3 E ₂ Rings	1.2—1.3	0.83×1.2—0.71×1.1 (2.1×3.1—1.8×2.7)	6.2—6.3 (15.8—16.0)	3.3—3.8
180mmf/2.8	1 E ₂ Ring	1/12.9—1/5.0	12.1×18.2—4.7×7.1 (30.8×46.2—12.0×18.0)	105—49.0 (266—125)	1.3—1.8
	2 E ₂ Rings	1/6.4—1/3.6	6.1×9.1—3.4×5.1 (15.4×23.1—8.7×12.9)	59.6—39.6 (152—101)	1.6—2.1
	3 E ₂ Rings	1/4.3—1/2.8	4.0×6.1—2.7×4.0 (10.2×15.4—6.8×10.1)	44.9—34.6 (114—87.9)	1.9—2.5

Table 3

NIKOR Auto 50mm f/1.4		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
1 E ₂ Ring	1/3.7—1/2.7	3.5×5.2—2.5×3.8 (8.8×13.3—6.4×9.6)	11.6—9.8 (29.4—24.7)	1.3—1.5
☉ + Close-up Lens NO. 0	1/3.3—1/2.5	3.1×4.7—2.3×3.5 (7.8×11.8—5.9×8.8)	10.8—9.4 (27.4—23.7)	
☉ + NO. 1	1/2.9—1/2.3	2.8×4.1—2.1×3.2 (7.0×10.5—5.4×8.2)	10.2—9.0 (25.9—22.9)	
☉ + NO. 2	1/2.4—1/2	2.3×3.4—1.9×2.8 (5.8×8.7—4.7×7.0)	9.2—8.5 (23.4—21.4)	
2 E ₂ Rings	1/1.8—1/1.6	1.7×2.6—1.5×2.2 (4.4×6.6—3.7×5.6)	8.4—8.0 (21.2—20.3)	1.7—1.9
☉ + Close-up Lens NO. 0	1/1.7—1/1.5	1.7×2.5—1.4×2.1 (4.2×6.3—3.5×5.3)	8.2—7.9 (20.8—20.0)	
☉ + NO. 1	1/1.6—1/1.4	1.6×2.3—1.3×2.0 (4.0×5.9—3.4×5.1)	8.1—7.8 (20.5—19.8)	
☉ + NO. 2	1/1.5—1/1.3	1.4×2.1—1.2×1.9 (3.6×5.3—3.1×4.7)	7.8—7.6 (19.8—19.3)	
3 E ₂ Rings	1/1.2—1/1.1	1.1×1.7—1.0×1.5 (2.9×4.4—2.6×3.9)	7.7—7.6 (19.5—19.3)	2.1—2.3
☉ + Close-up Lens NO. 0	1/1.2—1/1.1	1.1×1.7—0.98×1.5 (2.8×4.3—2.5×3.8)	7.7—7.6 (19.4—19.2)	
☉ + NO. 1	1/1.1—1	1.1×1.6—0.98×1.5 (2.8×4.1—2.5×3.7)	7.6—7.6 (19.3—19.2)	
☉ + NO. 2	1/1.1—1	1.0×1.5—0.91×1.4 (2.6×3.9—2.3×3.5)	7.5—7.5 (19.0—18.9)	

Table 4

NIKOR Auto 50mm f/2		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
1 E ₂ Ring	1/3.7—1/2.7	3.5×5.3—2.5×3.8 (8.8×13.3—6.4×9.6)	11.8—10.0 (30.0—25.3)	1.5—1.8
☉ + Close-up Lens NO. 0	1/3.2—1/2.4	3.1×4.6—2.3×3.4 (7.8×11.6—5.8×8.7)	10.8—9.5 (27.6—24.0)	
☉ + NO. 1	1/2.9—1/2.2	2.7×4.1—2.1×3.1 (6.9×10.3—5.3×8.0)	10.1—9.1 (25.8—23.0)	
☉ + NO. 2	1/2.3—1/1.9	2.2×3.3—1.8×2.7 (5.6×8.4—4.5×6.8)	9.1—8.4 (23.0—21.2)	
2 E ₂ Rings	1/1.8—1/1.5	1.7×2.6—1.5×2.2 (4.4×6.6—3.7×5.6)	8.6—8.2 (21.8—20.8)	2.2—2.4
☉ + Close-up Lens NO. 0	1/1.7—1/1.5	1.6×2.4—1.4×2.0 (4.1×6.2—3.5×5.2)	8.4—8.1 (21.2—20.4)	
☉ + NO. 1	1/1.6—1/1.4	1.5×2.3—1.3×2.0 (3.9×5.8—3.3×5.0)	8.2—7.9 (20.7—20.1)	
☉ + NO. 2	1/1.4—1/1.2	1.3×2.0—1.2×1.8 (3.4×5.1—3.0×4.5)	7.8—7.6 (19.7—19.3)	
3 E ₂ Rings	1/1.2—1/1.1	1.1×1.7—1.0×1.5 (2.9×4.4—2.6×3.9)	7.9—7.9 (20.1—19.9)	2.9—3.2
☉ + Close-up Lens NO. 0	1/1.2—1	1.1×1.7—0.98×1.5 (2.8×4.2—2.5×3.8)	7.8—7.8 (19.8—19.7)	
☉ + NO. 1	1/1.1—1	1.1×1.6—0.94×1.4 (2.7×4.0—2.4×3.6)	7.7—7.7 (19.6—19.5)	
☉ + NO. 2	1—1.1	0.98×1.5—0.87×1.3 (2.5×3.7—2.2×3.3)	7.5—7.5 (19.1—19.1)	

Table 5

NIKKOR Auto 55mm f/1.2		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
1 E ₂ Ring	1/4-1/2.8	3.7×5.6-2.6×3.9 (9.5×14.3-6.6×9.9)	12.9-10.5 (32.7-26.6)	1.4-1.5
⊕ Close-up Lens NO. 0	1/3.4-1/2.5	3.3×4.9-2.4×3.5 (8.3×12.4-6.0×9.0)	11.8-16.0 (30.0-25.3)	
⊕ NO. 1	1/3-1/2.3	2.9×4.3-2.2×3.2 (7.3×10.9-5.5×8.2)	11.0-9.6 (28.0-24.3)	
⊕ NO. 2	1/2.5-1/1.9	2.3×3.5-1.9×2.8 (5.9×8.8-4.7×7.0)	9.8-8.9 (24.9-22.6)	
2 E ₂ Rings	1/2-1/1.6	1.8×2.8-1.5×2.3 (4.6×7.1-3.9×5.9)	9.1-8.6 (23.1-21.8)	1.8-2
⊕ Close-up Lens NO. 0	1/1.8-1/1.5	1.7×2.6-1.5×2.2 (4.4×6.6-3.7×5.5)	8.9-8.4 (22.5-21.4)	
⊕ NO. 1	1/1.7-1/1.5	1.7×2.4-1.4×2.1 (4.2×6.2-3.5×5.3)	8.7-8.3 (22.0-21.1)	
⊕ NO. 2	1/1.5-1/1.3	1.5×2.2-1.3×1.9 (3.7×5.5-3.2×4.7)	8.3-8.0 (21.0-20.4)	
3 E ₂ Rings	1/1.3-1/1.2	1.3×1.9-1.1×1.7 (3.2×4.8-2.8×4.2)	8.2-8.1 (20.9-20.5)	2.2-2.5
⊕ Close-up Lens NO. 0	1/1.3-1/1.1	1.2×1.8-1.1×1.6 (3.0×4.5-2.7×4.0)	8.2-8.0 (20.7-20.4)	
⊕ NO. 1	1/1.2-1/1.1	1.1×1.7-1.0×1.5 (2.9×4.4-2.6×3.9)	8.1-8.0 (20.5-20.3)	
⊕ NO. 2	1.1-1	1.1×1.6-0.94×1.4 (2.7×4.0-2.4×3.6)	7.9-7.9 (20.0-20.0)	

Table 6

NIKKOR Auto 85mm f/1.8		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
1 E ₂ Ring	1/6.1-1/3.7	5.7×8.6-3.5×5.3 (14.6×21.9-9.0×13.5)	27.1-19.6 (68.9-50.0)	1.5-1.8
⊕ Close-up Lens NO. 0	1/4.3-1/3	4.1×6.6-2.8×4.2 (10.4×15.6-7.1×10.7)	21.0-16.8 (53.0-42.6)	
⊕ NO. 1	1/3.3-1/2.4	3.1×4.7-2.3×3.5 (8.0×12.0-5.9×8.8)	17.3-14.9 (43.9-37.7)	
⊕ NO. 2	1/2.3-1/1.8	2.2×3.3-1.7×2.6 (5.5×8.3-4.4×6.5)	13.5-12.4 (34.3-31.6)	
2 E ₂ Rings	1/3-1/2.3	2.9×4.3-2.2×3.3 (7.3×10.9-5.6×8.3)	17.5-15.5 (44.5-39.3)	2-2.3
⊕ Close-up Lens NO. 0	1/2.5-1/2	2.4×3.5-1.9×2.8 (6.0×9.0-4.7×7.1)	15.4-14.1 (39.2-35.8)	
⊕ NO. 1	1/2.1-1/1.7	2.0×3.0-1.6×2.4 (5.1×7.6-4.1×6.2)	14.0-13.1 (35.5-33.2)	
⊕ NO. 2	1/1.6-1/1.4	1.5×2.3-1.3×1.9 (3.9×5.8-3.3×4.9)	12.0-11.6 (30.6-29.5)	
3 E ₂ Rings	1/2-1/1.7	1.9×2.9-1.6×2.4 (4.9×7.3-4.0×6.0)	14.7-13.9 (37.3-35.2)	2.6-3
⊕ Close-up Lens NO. 0	1/1.8-1/1.5	1.7×2.5-1.4×2.1 (4.2×6.3-3.5×5.3)	13.6-13.0 (34.5-33.1)	
⊕ NO. 1	1/1.5-1/1.3	1.5×2.2-1.3×1.9 (3.7×5.5-3.2×4.8)	12.8-12.4 (32.4-31.5)	
⊕ NO. 2	1/1.2-1/1.1	1.2×1.8-1.0×1.5 (3.0×4.5-2.6×3.9)	11.5-11.4 (29.2-28.9)	

Table 7

NIKOR Auto 105mm f/2.5		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film Distance in (cm)	Exposure Factor
1 E ₂ Ring	1/7.5-1/4.1	7.1×11-3.9×5.9 (18.0×27.0-9.9×14.9)	38.4-25.0 (97.5-63.3)	1.5-2
☞ + Close-up Lens NO. 0	1/4.6-1/3	4.4×6.5-2.8×4.3 (11.1×16.6-7.2×10.8)	26.6-20.9 (67.5-53.0)	
☞ + NO. 1	1/3.2-1/2.3	3.1×4.6-2.2×3.3 (7.8×11.7-5.6×8.4)	20.5-17.5 (51.9-44.5)	
☞ + NO. 2	1/2.1-1/1.6	2.0×3.0-1.5×2.3 (5.0×7.5-3.9×5.8)	15.0-14.0 (38.0-35.4)	
2 E ₂ Rings	1/3.8-1/2.7	3.5×5.3-2.5×3.8 (9.0×13.5-6.4×9.6)	23.5-19.4 (59.5-49.2)	2.1-2.6
☞ + Close-up Lens NO. 0	1/2.8-1/2.1	2.6×3.9-2.0×3.0 (6.7×10.0-5.0×7.6)	20.0-17.9 (51.0-45.5)	
☞ + NO. 1	1/2.2-1/1.7	2.0×3.1-1.6×2.4 (5.2×7.8-4.1×6.2)	17.1-15.9 (43.4-40.3)	
☞ + NO. 2	1/1.5-1/1.3	1.5×2.2-1.2×1.8 (3.7×5.5-3.0×4.6)	13.8-13.4 (35.0-33.9)	
3 E ₂ Rings	1/2.5-1/2	2.4×3.5-1.9×2.8 (6.0×9.0-4.7×7.1)	18.8-17.0 (47.8-43.3)	2.8-3.4
☞ + Close-up Lens NO. 0	1/2-1/1.6	1.9×2.8-1.5×2.3 (4.8×7.2-3.9×5.8)	17.6-16.6 (44.7-42.2)	
☞ + NO. 1	1/1.6-1/1.4	1.5×2.3-1.3×1.9 (3.9×5.9-3.3×4.9)	15.7-15.1 (39.8-38.4)	
☞ + NO. 2	1/1.2-1	1.1×1.7-0.98×1.5 (2.9×4.4-2.5×3.7)	13.3-13.1 (33.7-33.4)	

Table 8

NIKOR Auto 135mm f/2.8		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film Distance in (cm)	Exposure Factor
1 E ₂ Ring	1/9.6-1/4.7	9.1×13.6-4.4×6.6 (23.1×34.7-11.2×16.8)	62.2-36.5 (158-92.4)	1.3-1.7
☞ + Close-up Lens NO. 0	1/4.8-1/3	4.5×6.7-2.9×4.3 (11.5×17.0-7.3×11.0)	34.3-26.3 (87.0-66.6)	
☞ + NO. 1	1/3.1-1/2.2	3.0×4.5-2.1×3.1 (7.5×11.2-5.3×8.0)	24.6-21.1 (62.5-53.6)	
☞ + NO. 2	1/1.9-1/1.5	1.8×2.6-1.4×2.1 (4.5×6.7-3.5×5.3)	17.3-16.3 (44.0-41.4)	
2 E ₂ Rings	1/4.8-1/3.1	4.6×6.9-3.0×4.5 (11.6×17.4-7.5×11.3)	37.3-27.9 (94.5-73.3)	1.7-2.2
☞ + Close-up Lens NO. 0	1/3.1-1/2.3	3.0×4.5-2.1×3.2 (7.5×11.2-5.4×8.2)	26.5-23.0 (67.4-58.3)	
☞ + NO. 1	1/2.3-1/1.7	2.1×3.2-1.7×2.5 (5.4×8.1-4.2×6.3)	21.2-19.5 (54.0-49.6)	
☞ + NO. 2	1/1.5-1/1.2	1.4×2.1-1.1×1.7 (3.5×5.3-2.9×4.4)	16.4-15.9 (41.5-40.4)	
3 E ₂ Rings	1/3.2-1/2.4	3.0×4.6-2.2×3.3 (7.7×11.6-5.7×8.5)	29.2-25.4 (74.1-64.3)	2.1-2.6
☞ + Close-up Lens NO. 0	1/2.3-1/1.8	2.2×3.3-1.7×2.6 (5.5×8.3-4.3×6.5)	23.1-21.2 (58.7-53.9)	
☞ + NO. 1	1/1.8-1/1.4	1.7×2.5-1.4×2.0 (4.3×6.4-3.5×5.2)	19.6-18.7 (49.8-47.5)	
☞ + NO. 2	1/1.2-1	1.1×1.7-0.98×1.5 (2.9×4.4-2.5×3.7)	15.9-15.7 (40.4-40.0)	

Table 9

NIKOR Auto 200mm f/4		Left figures: Lens being set at ∞ Right figures: Lens being set at the closest focused distance		
Close-up Attachments	Reproduction Ratio	Subject Area in (cm)	Subject-to-film in Distance (cm)	Exposure Factor
1 E ₂ Ring	1/14 - 1/6.6	13.5 × 20.2 - 6.2 × 9.3 (34.3 × 51.4 - 15.8 × 23.7)	1.34 - 74.4 (341 - 189)	1.4 - 2
☉ + Close-up Lens NO. 0	1/4.4 - 1/3	4.1 × 6.2 - 2.9 × 4.3 (10.5 × 15.8 - 7.3 × 10.9)	47.3 - 39.3 (120 - 93.8)	
☉ + NO. 1	1/2.5 - 1/1.9	2.4 × 3.5 - 1.8 × 2.7 (6.0 × 9.0 - 4.6 × 6.9)	30.8 - 28.4 (78.2 - 72.1)	
☉ + NO. 2	1/1.4 - 1/1.1	1.3 × 1.9 - 1.1 × 1.6 (3.3 × 4.9 - 2.7 × 4.0)	20.8 - 20.5 (53.0 - 52.1)	
2 E ₂ Rings	1/7.1 - 1/4.5	6.7 × 10.1 - 4.3 × 6.4 (17.1 × 25.7 - 10.8 × 16.2)	78.8 - 58.7 (200 - 149)	1.9 - 2.5
☉ + Close-up Lens NO. 0	1/3.2 - 1/2.4	3.0 × 4.5 - 2.3 × 3.4 (7.6 × 11.4 - 5.8 × 8.6)	40.2 - 35.8 (102 - 91.0)	
☉ + NO. 1	1/2 - 1/1.6	1.9 × 3.0 - 1.5 × 2.2 (4.7 × 7.1 - 3.8 × 5.7)	28.6 - 27.3 (72.7 - 69.2)	
☉ + NO. 2	1/1.2 - 1	1.1 × 1.6 - 0.91 × 1.4 (2.8 × 4.1 - 2.3 × 3.5)	20.6 - 20.5 (52.2 - 52.1)	
3 E ₂ Rings	1/4.8 - 1/3.4	4.5 × 6.7 - 3.2 × 4.8 (11.4 × 17.1 - 8.2 × 12.3)	60.7 - 50.8 (154 - 129)	2.4 - 3.2
☉ + Close-up Lens NO. 0	1/2.5 - 1/2	2.4 × 3.5 - 1.9 × 2.8 (6.0 × 8.9 - 4.8 × 7.1)	36.3 - 33.8 (92.2 - 85.8)	
☉ + NO. 1	1/1.6 - 1/1.4	1.5 × 2.3 - 1.3 × 1.9 (3.9 × 5.9 - 3.3 × 4.9)	27.4 - 26.6 (69.6 - 67.6)	
☉ + NO. 2	1 - 1.2	0.94 × 1.4 - 0.79 × 1.2 (2.4 × 3.6 - 2.0 × 3.1)	20.5 - 20.6 (52.0 - 52.3)	