

Modern Classic SLRs Series :
Nikon F & F2 Shared Resources: Medical Nikkor 200mm f5.6 Auto



200mm f/5.6 Medical-Nikkor Auto

Incorporating a ringlight unit around its front element, the Medical-Nikkor is ideal for close-up work in the field of medicine, and has numerous other applications in science and industries.

It consists of a prime lens, a set of six auxiliary lenses and an AC or a battery power source for operating the lighting units.

The lens offers a choice of eleven different magnification ratios in combination with the six auxiliary lenses. (The prime lens alone gives the reproduction ratio of 1/1 5X and the auxiliary lenses, attached singly or in varied combinations, provide a range of magnification ratios from 1/8X to 3X).

The Medical-Nikkor is self-compensating, eliminating all bothersome calculations for setting the diaphragm in relation to film speed and reproduction ratio. All that is required of the photographer is to set the lens for the ASA speed of the film used, attach the auxiliary lens or lenses in accordance with the desired magnification ratio, focus by moving the camera toward or away from the subject and release the shutter.

The automatic lens diaphragm stops down to correct aperture at the moment of exposure. Two illumination units are built into the lens: an electronic ringlight and pilot lamps.

Black & white	Color	1/15	1/8	1/6	1/4	1/3	1/2	2/3	1	1.5	2	3
4 (7)	8 (10)											
5 (8)	10 (11)											
6.4 (9)	12 (12)											
8 (10)	16 (13)											
10 (11)	20 (14)											
12 (12)	25 (15)											
16 (13)	32 (16)											
20 (14)	40 (17)											
25 (15)	50 (18)											
32 (16)	64 (19)											
40 (17)	80 (20)											
50 (18)	100 (21)											
64 (19)	125 (22)											
80 (20)	160 (23)											
100 (21)	200 (24)											
125 (22)	250 (25)											
160 (23)	320 (26)											
200 (24)	400 (27)											
250 (25)	500 (28)											
320 (26)	650 (29)											
400 (27)	800 (30)											
500 (28)												
650 (29)												
800 (30)												

The range of film speed that can be used varies with the chosen magnification ratio.

The ringlight surrounds the front element of the lens to produce even and shadowless illumination. It may be removed from the lens for servicing and for providing special lighting angles. The color temperature of 6000° K permits the use of daylight color film. The flash duration is 1/500 second. The Medical-Nikkor ringlight synchronizes with the Nikon F2 at the shutter speed of 1/60 second, with the Nikon F at 1/30 second, and the Nikkormat at 1/60 second.

Positioned behind the ringlight are four incandescent bulbs that comprise the pilot lamps. These facilitate precise focusing in the dark. The lens also incorporates a device for printing an identification number (1 to 39) or magnification ratio (1/15X to 3X) in the lower right-hand corner of each frame by making use of a small fraction of the ringlight output or "leak" flash.

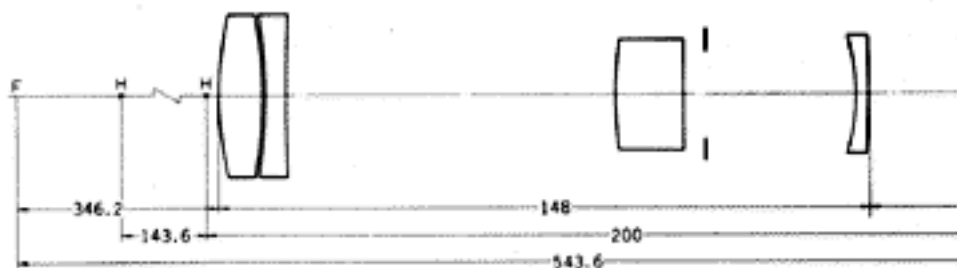
Reproduction ratio	Combination of lenses	Distance of subject from front surface of lens (inch) (mm)		Subject (inch x inch)
1/15X	Master lens	10' 11.89"	3,350	14.17 x 21.26
1/8X	1/8X + Master lens	5' 10.08"	1,780	7.56 x 11.34
1/6X	1/6X + Master lens	4' 4.64"	1,337	5.67 x 8.50
1/4X	1/4X + Master lens	2' 11.04"	890	3.78 x 5.677
1/3X	1/4X + 1/6X + Master lens	2' 1.0"	635	2.72 x 4.06
1/2X	1/2X + Master lens	1' 5.32"	440	1.89 x 2.83
2/3X	1/2X + 1/4X + Master lens	1' 0.72"	323	1.38 x 2.09
1X	1X + Master lens	8.66"	220	0.94 x 1.42
1.5X	1X + 1/2X + Master lens	5.98"	152	0.67 x 0.98
2X	2X + Master lens	4.17"	106	0.47 x 0.71
3X	2X + 1X + Master lens	2.76"	70	0.33 x 0.50

Film speed ASA (DIN) Marking	Black & white	Color
A	32 (16) or lower	64 (19) or lower
B	40 (17) – 200 (24)	80 (20) – 400 (27)
C	250 (25) or higher	500 (28) or higher

Caution: The camera is provided with a body receiving an electric shock when using the Nik safety cover on the camera accessory shoe so that hand will not touch the synch contact near 1

These figures serve as references, key numbers or as a guide to "right-side-up" projection. The intensity of the "leak" flash can be adjusted in three steps as indicated by "A," "B" and "G" on the Identification Number/Reproduction Ratio Adjuster. When an unnumbered negative is required, the imprinting device can be blocked off by setting the adjuster to "D".

The Photomic series finders function solely as a viewfinder when used with the Medical Nikkor. The self-compensating feature of the lens diaphragm eliminates the need for exposure metering.



Focal length: 200mm

Maximum aperture: 1:5.6

Lens construction: 4 elements in 4 groups

Picture angle: 12°20'

Aperture scale: f/5.6 - f/45

Aperture diaphragm: Fully automatic

Attachment size: 38mm (P=0.75)

Dimensions: 80mm dia. X 176mm length, (3 5/32 in. X 6-15/16 in.)

Weight: 670g (23.60z)

Accessories:

38mm screw-in front cap,

rear captype F,

safety camera shoe cover,

6 auxiliary ienses: 1 /8X, 1/6X, 1/4X, 1/2X, 1X, 2X,

AC power unit, DC power unit,

synch cord, 1.5m power source cord, 1.6m power source cord,

leather compartment case,

2.5V light bulb.

