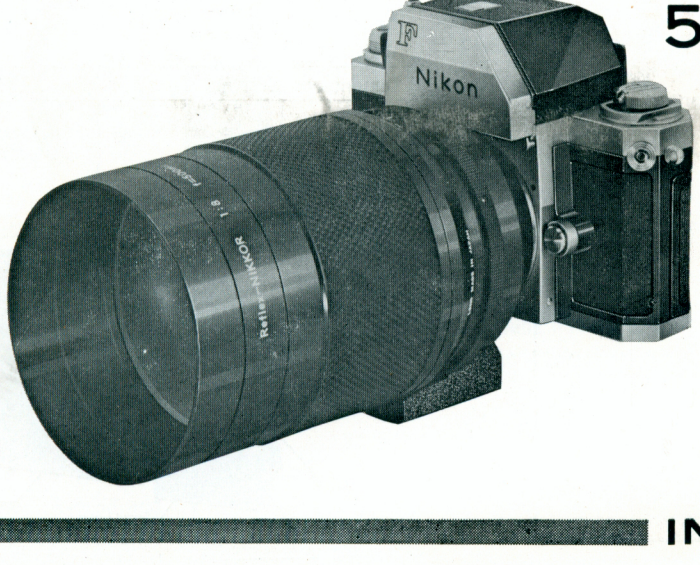
CATADIOPTRIC SYSTEM

REFLEX-NIKKOR

500mm f/8



INSTRUCTIONS

Features

- This catadioptric long focus lens is designed to be used on the Nikon F mount cameras.
- The lens system consists of three groups and the front two groups move for focusing up to 4m by turning the distance ring.
- Deep depth-of-field can be obtained as the brightness of the lens is f/8.
- Being of small size and of light weight for its long focal length, the lens is conveniently carried, permitting hand-held use, and suited for sports, theater, landscape, and animal photography.

Optical construction

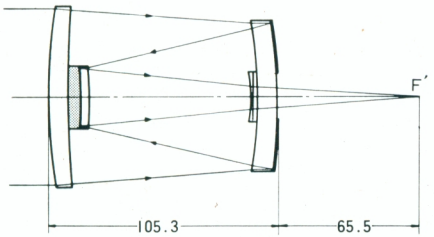


Fig. 1

Specifications

Focal length	500mm
Max. aperture ratio	1 : 8
Picture angle	5°
Optical construction	3 groups, 5 elements
Aperture	No aperture diaphragm
Closest focus distance	4m (13ft)
Attachment size	88mm (P=0.75mm)
Weight	1000g
Dimensions of lens	93(dia.)×158mm W/hood)

※ J, B and E type viewfinder screens are recommendable.

Nomenclature

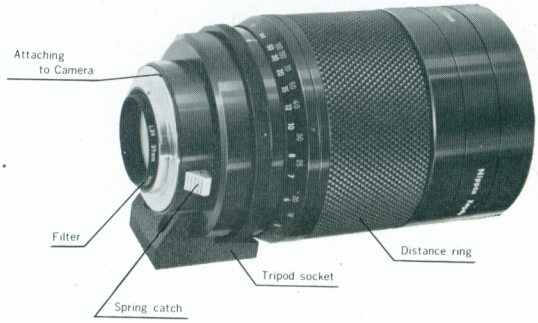


Fig. 2

Complete Equipment

- Front cap: Slip-on (exclusively used)
- Hood: Screw-in (exclusively used)
- Filter: 39mm (P = 1mm), screw-in
  5 filters (L39, Y52, 056, R60, ND)
- Rear cap: Nikon F mount
- Leather case

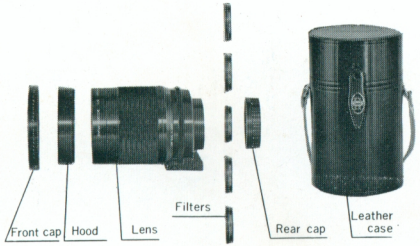


Fig. 3

◆ Hood

The hood serves not only to prevent injurious extraneous light, but also to protect the front glass.
It is recommended to attach the hood at all times.

◆ Filter

ND, Yellow, Orange and Red, are tucked into compartments inside of the leather case lid and UV is supplied with the lens. These filters are specially designed to eliminate focus shift, when used interchangeably.

A filter must always be in position, at the rear of the lens, when the lens is mounted on the camera and ready to be used. When no correction is desired, the UV filter should be in position.
L39 and ND filters can be used also for color photography; the others, however, are used exclusively for black-and-white photography.

(Table 1)

Denomination	Type	Exposure Factor ( )=equivalent f-number	
		Daylight	Tungsten light
UV	L39	1 (8)	1 (8)
Yellow	Y52	2 (11)	1.4 (9.5)
Orange	056	3.5 (15)	2 (11)
Red	R60	6 (20)	5 (18)
ND	Refer to Table 2		

Aperture

The lens has no aperture diaphragm, because of catadioptric type. To decrease the transmission of light in this lens system, an ND filter is supplied with the lens, which gives the brightness corresponding to one of the following f-number.

(Table 2)

Denomination	Equivalent f-number
ND 2.5×	12.5
ND 3.2×	14
ND 4×	16
ND 5×	18
ND 6.3×	20

Note that depth-of-field cannot be adjusted in this catadioptric system.

Tripod socket

A tripod is to be attached to the tripod socket (Fig. 4) on the side of the lens and not on the camera bottom to hold the balance.

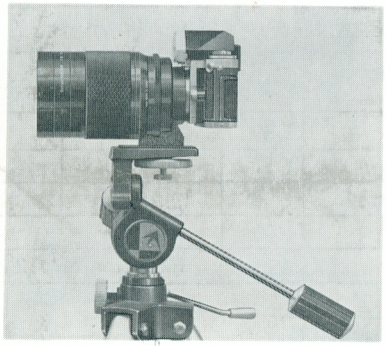


Fig. 4

Exposure measurement

In using Nikon F Photomic-T, T_N, FT_N, Nikkormat FT or FT_N camera (each provided with through the lens system meter), apply the stop-down measuring method.

Nikon F Photomic Finder is not recommended because of vignette by the lens barrel.

Camera turning

For convenience in changing the position of the camera to horizontal or vertical, when using the lens with a tripod, the lens is provided with a fluted spring catch.

Depressing this catch will enable the camera to be rotated 90 degrees, at which point it will click into lock position. (Fig. 5)

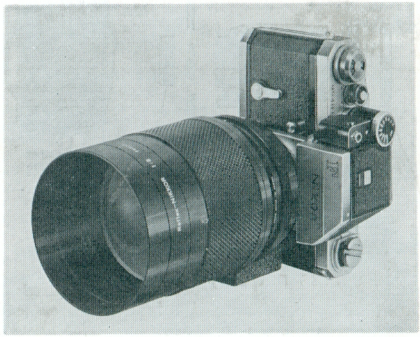


Fig. 5

NIPPON KOGAKU K.K.

Tokyo, Japan

printed in Japan (69.10. A) H-3