


FISHEYE NIKKOR

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7.5mm f5.6 ultra wide angle lens





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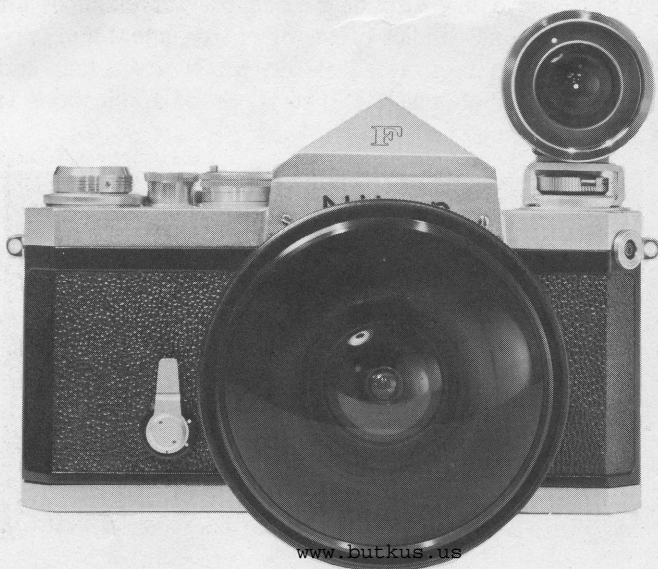
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FISHEYE NIKKOR LENS

7.5mm f5.6 180° coverage



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The idea of a lens with a 180° picture angle seems almost incredible, except that the Fisheye Nikkor achieves just that—and more—with amazing image resolution and color correction.

In fact, the term *picture angle* is not entirely applicable. For it is generally used to describe the angle subtended by the diagonal of the film (its longest proportion), whereas the coverage of the Fisheye Nikkor is in no way limited by the format of the film.

hemispherical coverage The Fisheye Nikkor actually 'sees' a full 180° hemisphere: everything in front, above, below, to either side — all around. And it records this hemisphere on the film as a circular image 23mm in diameter.

some of the applications Apart from the unusual, spectacular pictorial effects obtainable with this lens, its capabilities have found many valuable scientific and industrial applications. In meteorology, for example, it can be used to record cloud distribution patterns in

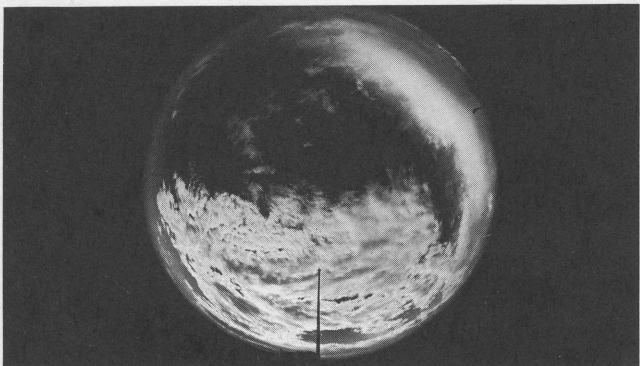
the entire sky canopy. It can also be used to measure zenith and azimuth angles of astronomical bodies.

In industry, the Fisheye has provided recorded observation of boiler interiors, oil lines, sewer conduits, cylinder bores, and other constricted enclosures which must be shown in their entirety.

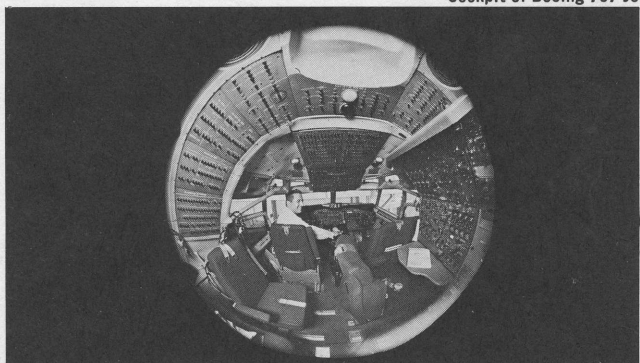
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The Fisheye has also been used for surveillance, for automatic time studies of customer movement and concentration in large retail stores, for sports action and architectural photos, etc. The scope of applications is almost unlimited.

Cloud study for meteorology



Cockpit of Boeing 707 Jet



fits Nikon F and Nikkormat FT The Fisheye Nikkor 7.5mm f5.6 can be used on both the Nikon F and Nikkormat FT. Because of the physical depth of this lens, the camera mirror must be locked in 'up' position, thus making the reflex finder inoperative. Instead, a 160° optical finder, furnished with the lens, is mounted on the camera, and used for viewing.

Note: When used with a Photomic-equipped Nikon F, the Photomic system must be removed.

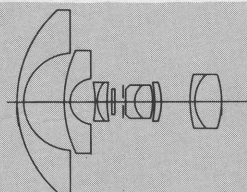
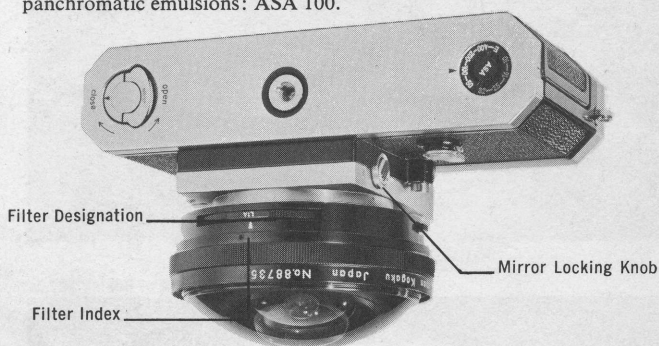
focusing There is no need nor provision for focusing because of the extreme depth-of-field of the lens (20 inches to infinity at full aperture). And because of its extreme angle, it cannot be used with a lens hood.

built-in filters The Fisheye Nikkor has 6 built-in filters mounted on a turret (see SPECIFICATIONS). The desired filter is brought into the optical path of the lens by rotating the external Filter Selector dial until the desired filter designation, engraved on the rim of the dial, appears opposite the pointer.

filter table

	Exposure Increase	
	Daylight	Tungsten
<i>Skylight (LIA)</i>	none	none
<i>Medium Yellow (Y48)</i>	1.7X	1.2X
<i>Deep Yellow (Y52)</i>	2X	1.5X
<i>Orange (O57)</i>	3X	2.5X
<i>Red (R60)</i>	6X	—
<i>Light Green (X0)</i>	2X	1.7X

NOTE: Filter LIA is for color or black & white film; the remainder are for black & white only. Filter factors are approximate (depending upon specific color sensitivity curve of film) but apply generally to panchromatic emulsions: ASA 100.



Fisheye Nikkor specifications

- focal length:* 7.5mm
- picture angle:* 180°
- construction:* 10 elements, 7 groups
- aperture scale:* f5.6 to f22 (click stops)
- mount:* bayonet (Nikon F)
- picture size:* 23mm in diameter
- focusing:* fixed
- depth-of-field:* 20 inches to infinity at full aperture
- filters:* six (see FILTER TABLE) built-in on rotating turret
- viewfinder:* optical; 160° angle
- dimensions:* length, 44.2mm (from front of camera); diameter, 82mm
- weight:* 12¼ oz. (350 g)

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