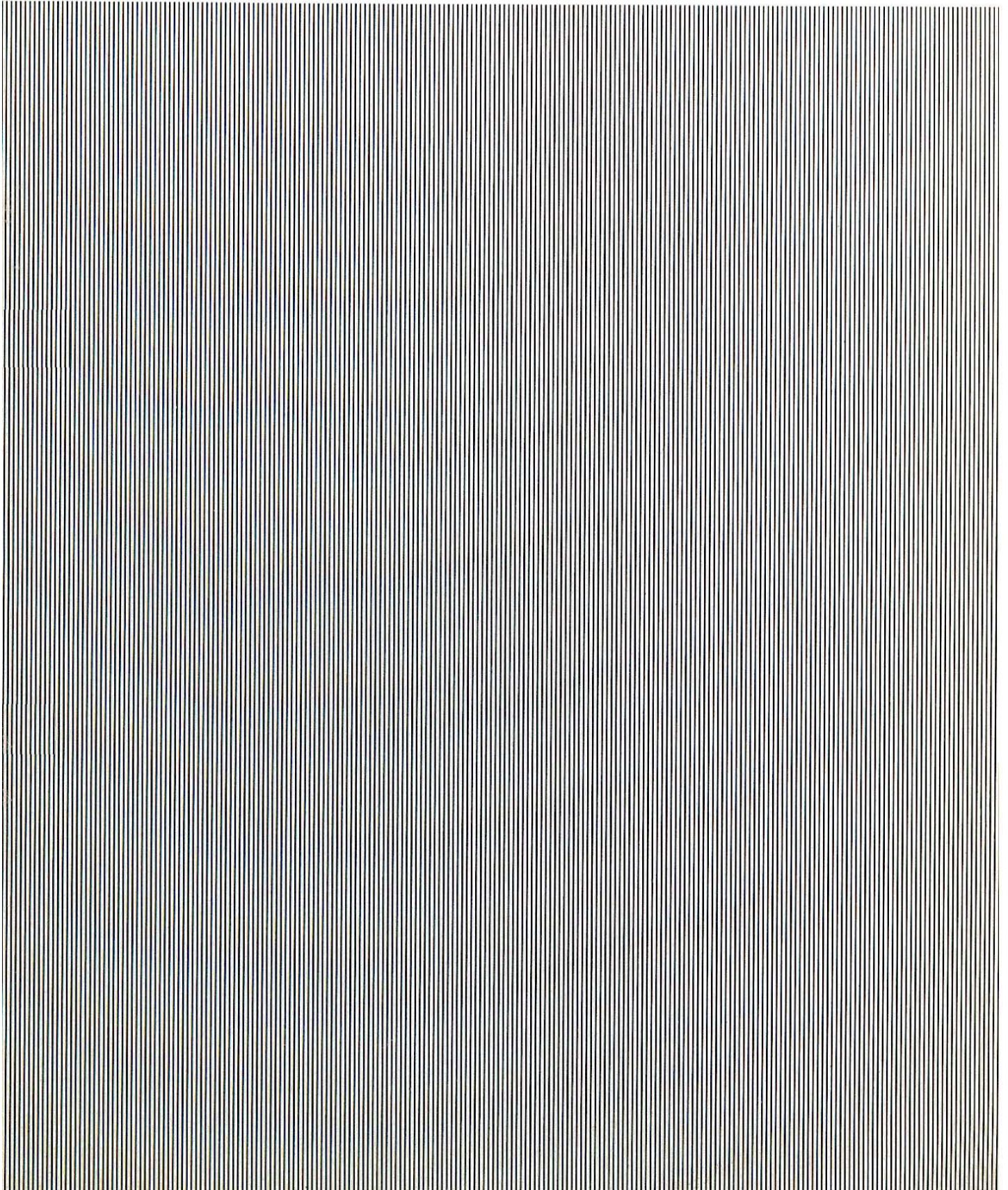


Cine-Nikkor



Cine-Nikkor lenses are special Nikkor lenses designed for use with 16mm cine cameras fitted with the popular C mount for lens interchangeability. In addition to providing full coverage for cine applications, these lenses are also suitable for use on small industrial television cameras (again, C mount fitted).using a 1" vidicon tube. The optical requirements for the 16mm film format are demanding when we consider that the frame size is small and the image must be greatly enlarged (i.e., during projection) to be acceptable for viewing. When 16mm cine cameras are used for critical measurement and analytical research applications in industry (as the growing trend indicates), the necessity for high resolution becomes even more apparent. And, of course, the common use of color emulsions demands that the optics be fully corrected for the best possible color balance and image sharpness.

Industrial closed-circuit television applications have also become more demanding with the remarkable increases in the resolution of vidicon tubes; gone are the days when low resolution lenses would suffice. Now users are seeking the best possible image quality by selecting lenses of higher resolution than the system itself. Cine-Nikkor lenses suitable for either cine or television camera mounting are available in six focal lengths ranging from wide-angle to telephoto. Each is fully corrected for the highest resolution and color balance under the widest range of operating conditions. The basic lens characteristics are listed in Table 1.

LENS TYPE	LENS	MAX. APERTURE
Wideangle	6.5mm	f/1.8
	10mm	f/1.8
	13mm	f/1.8
Normal	25mm	f/1.4
Telephoto	50mm	f/1.8
	100mm	f/2.8

Table 1 Cine-Nikkor Lenses

Lens Barrel Construction

Cine-Nikkor lenses combine top optical quality with the fullest ease of operation. Each lens barrel is finished in satin-smooth black, with figures, indicators, etc. in white for maximum legibility. The mount portion of each lens is specially rotatable to enable positioning of the barrel for maximum ease of viewing the various markings during operation. The aperture control ring is provided with click-stop positions at each of the standard f-numbers across the full operation range of the ring. The control rings of all lens models are located in similar positions, while the outer diameters (and attachment sizes, too) are identical, all to further facilitate operation when using a variety of focal lengths. Two types of lens caps (either snap-on or screw-in) ensure fullest lens protection.

Mounting on the Cine/Television Camera

Cine-Nikkor lenses are fitted with the popular C mount used on most 16mm cine cameras and 1"-vidicon-equipped television cameras capable of accepting interchangeable lenses. To mount, simply screw into the threaded body (or lens turret) until secure. To adjust the barrel for easy viewing of the various control markings, push the barrel toward the base ring and rotate the barrel to the desired position.

F-C Lens Mount Adapter

Cine-Nikkor lenses are available in focal lengths to 100mm. When longer focal lengths are desired, regular Nikkor lenses with F mount can be used via the F-C lens mount adapter. To mount on the camera, simply connect the lens and adapter together and screw the assembly into the camera's C mount.

Other Applications

The Cine-Nikkor lenses are corrected for top performance with a small format size. Thus, Cine-Nikkor lenses are fully suited to almost any photographic application meeting these requirements.

Accessory Hoods for Cine-Nikkor Lenses

A standard accessory hood (screw-in type) is available for all Cine-Nikkor lenses. To ensure proper image protection with lenses of longer focal length, two or three lens hoods can be screwed together and then mounted on the front of the lens. When two or three lenses are mounted together on a turret-equipped camera, hood combinations may be limited to prevent image cut-off; these combinations are detailed in Table 2 for a three-lens turret.

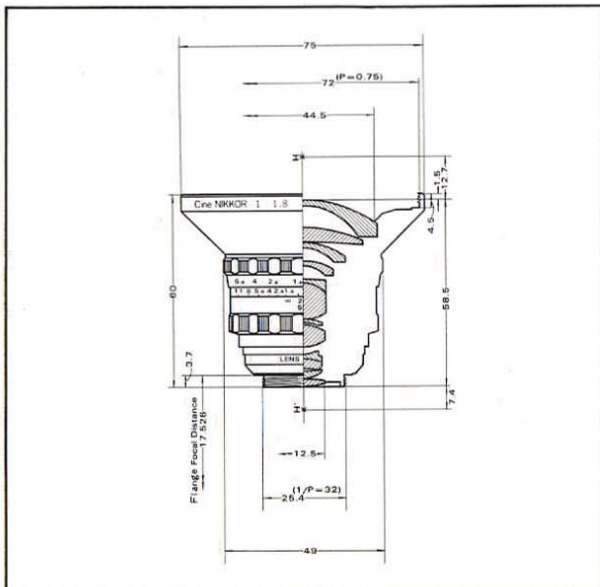
Basic Lens	No. of Hoods When Used Alone	Other Lens Mounted (Without Hood)					
		6.5mm	10mm	13mm	25mm	50mm	100mm
6.5mm f/1.8	None	—	None	None	None	None	Do Not Combine
10mm f/1.8	None	None	—	None	None	None	Do Not Combine
13mm f/1.8	None	None	None	—	None	None	Do Not Combine
25mm f/1.4	One	None	None	None	—	One	Do Not Combine
50mm f/1.8	Three	None	None	None	Two	—	Three
100mm f/2.8	Two	Do Not Combine				One	—

Table 2 Lens/Hoods Combinations

Cine-Nikkor 6.5mm f/1.8



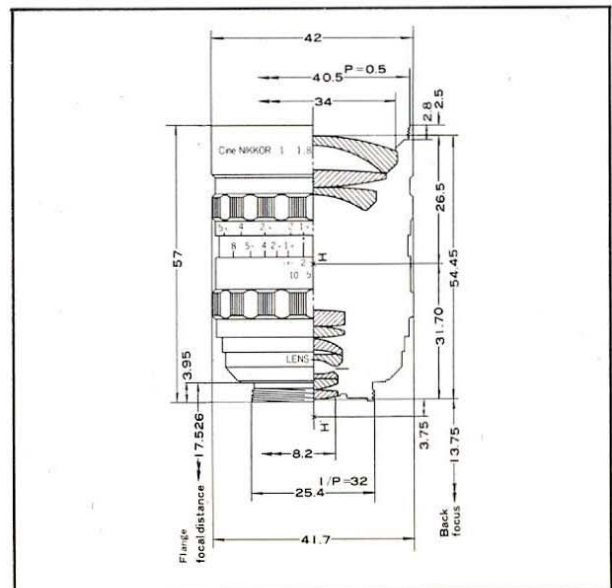
Focal length	6.5mm
Maximum aperture ratio	1:1.8
Minimum f/stop	f/16
Lens construction	12 elements in 10 groups
Correction wavelength range	400 ~ 700nm
Picture angle	88° (101° when used with 1" vidicon)
Vignetting	0% (at f/2.4)
Distance scale	Graduated in meters and feet from 0.15m (0.5 ft) to infinity (∞)
Aperture scale	f/1.8 ~ f/16; depth-of-field indicators provided
Image size	16mm cine film and 1" vidicon format coverage
Weight	270g
Diameter	75mm
Length	58.5mm
Rear mount size	C mount (25.4mm; 1/P = 32)
Attachment size	72mm (P = 0.75mm)



Cine-Nikkor 10mm f/1.8



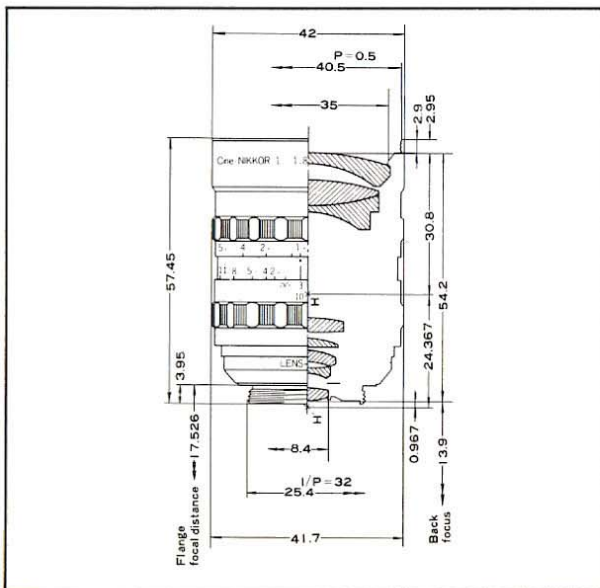
Focal length	10mm
Maximum aperture ratio	1:1.8
Minimum f/stop	f/22
Lens construction	10 elements in 9 groups
Correction wavelength range	400 ~ 700nm
Picture angle	64°30' (74° when used with 1" vidicon)
Vignetting	0% (at f/2.6)
Distance scale	Graduated in meters and feet from 0.3m (1 ft.) to infinity (∞)
Aperture scale	f/1.8 ~ f/22; depth-of-field indicators provided
Image size	16mm cine film and 1" vidicon format coverage
Weight	145g
Diameter	42mm
Length	57mm
Rear mount size	C mount (25.4mm; 1/P = 32)
Attachment size	40.5mm (P = 0.5mm)



Cine-Nikkor 13mm f/1.8



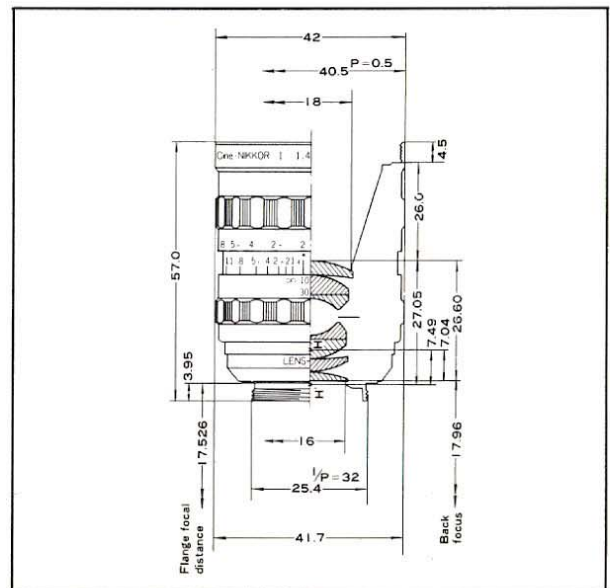
Focal length	13mm
Maximum aperture ratio	1:1.8
Minimum f/stop	f/22
Lens construction	8 elements in 7 groups
Correction wavelength range	400 ~ 700nm
Picture angle	51°40' (60° when used with 1" vidicon)
Vignetting	0% (at f/2.5)
Distance scale	Graduated in meters and feet from 0.3m (1 ft.) to infinity (∞)
Aperture scale	f/1.8 ~ f/22; depth-of-field indicators provided
Image size	16mm cine film and 1" vidicon format coverage
Weight	150g
Diameter	42mm
Length	57.45mm
Rear mount size	C mount (25.4mm; 1/P = 32)
Attachment size	40.5mm (P = 0.5mm)



Cine-Nikkor 25mm f/1.4



Focal length	25mm
Maximum aperture ratio	1:1.4
Minimum f/stop	f/22
Lens construction	7 elements in 5 groups
Correction wavelength range	400 ~ 700nm
Picture angle	28° (33°22' when used with 1" vidicon)
Vignetting	0% (at f/2.8)
Distance scale	Graduated in meters and feet from 0.6m (2 ft.) to infinity (∞)
Aperture scale	f/1.4 ~ f/22; depth-of-field indicators provided
Image size	16mm cine film and 1" vidicon format coverage
Weight	140g
Diameter	42mm
Length	57mm
Rear mount size	C mount (25.4mm; 1/P = 32)
Attachment size	40.5mm (P = 0.5mm)



The equipment shown in this leaflet represents the latest available at the time of this printing. Designs and specifications are subject to change without notice.



NIPPON KOGAKU K.K.

Fuji Bldg., 2-3, 3-chome, Marunouchi,
Chiyoda-ku, Tokyo 100, Japan
☎ (03) 214-5311 Telex: J22601 (NIKON)

NIPPON KOGAKU (U.S.A.) INC.

623 Stewart Avenue, Garden City, New York 11530, U.S.A.
☎ (516) 248-4120 Telex: 096-7756 (NKUSA GRCY)

NIKON EUROPE B.V.

Freeport Bldg., Schiphol-Centrum, The Netherlands
☎ (020) 156633 Telex: 13328 (NIKON NL)

NIKON AG

Kaspar-Fenner-Strasse 6, 8700 Küsnacht/ZH, Switzerland
☎ (01) 909261 Telex: 53208 (NIKON CH)

NIKON G.m.b.H.

4000 Düsseldorf 30, Uerdinger Strasse 96-102, West Germany
☎ (0211) 451061 Telex: 8584019 (NIKO D)

Printed in Japan

8231-01 KEC 603-1/1