



BOLEX TECHNICAL AND SALES BULLETIN

PAILLARD Incorporated, 100 Sixth Avenue, New York 13, New York

PAN CINOR LENSES FOR 16mm CAMERAS

Three PAN CINOR zoom type lenses are available for 16mm cameras; the PAN CINOR 70, PAN CINOR 85, and PAN CINOR 100.

The qualities that all these lenses have in common can be summarized as follows:

- 1) Reliable in use due to the precision machining and resistance of the material, made possible by the particularly simple and original conception of the optical formula.
- 2) Constant brightness and focus while zooming.
- 3) Excellent image sharpness at all focal lengths even at maximum diaphragm openings producing the best possible image on black and white or color films. This high definition has never been attained until now.

Specifications

Lens	Focal length	Aperture	Minimum aperture	Minimum focusing distance	Weight	Length	
						without sunshade	with shade
PC 85	17 to 85mm	f/2	f/16	6'	2¼ lbs.	6¼"	7¼"
PC 70	17.5 to 70mm	f/2.4	f/22	7'	2½ lbs.	6½"	7¾"
PC 100	25 to 100mm	f/3.4	f/22	7'	2½ lbs.	7¼"	8½"

Viewfinder

The PAN CINOR Lenses are supplied with their own reflex viewfinders permitting accurate, parallax free viewing at all distances and focal length settings. The brightness of the viewing image does not change when stopping down the lens diaphragm and therefore the Pan Cinor finder is ideal under all lighting conditions and should be used even when the lenses are mounted on the Bolex reflex type cameras.

The Pan Cinor 70 and 100 permit viewing only, while focusing must be done on the groundglass of the camera or by measuring the filming distance.

The PAN CINOR 85 viewfinder includes also a split image rangefinder for accurate focusing at all distances. Focusing with the rangefinder is most accurate with the lens set at the 85mm telephoto position.

The optical design of the Pan Cinor viewfinder is such that a clear view can be obtained regardless of the filmmaker's eyesight and therefore an eyepiece adjustment or installation of a special adapter lens should not be necessary, and is not possible.

It is also not possible to add an extension to the viewfinder since this would require changing the entire optical construction.

Areas Covered

Distance	Pan Cinor 85		Pan Cinor 70		Pan Cinor 100	
	at 17mm	at 85mm	at 17.5mm	at 70mm	at 25mm	at 100mm
20'	120" x 87"	24" x 15"	118" x 85"	29" x 21½"	83" x 60"	20" x 15"
10'	58" x 42"	11½" x 8½"	56" x 40"	13½" x 10"	39" x 29"	9½" x 7"
7'	39" x 28"	8" x 5½"	38" x 27½"	9" x 6¾"	26½" x 19"	6½" x 4¾"
6'	33" x 22"	6½" x 4"				

Close-up filming

For close-up filming, two close-up lenses are available. They are mounted in front of the Pan Cinor lenses and permit covering the following areas:

Close-up Lens #3 (Engraved 2M—6f)

Lens	Distance subject to filmplane	AREA COVERED	
		at shortest focal length	at longest focal length
PAN CINOR 85	max. 6½' min. 39"	38" x 27" 16½" x 12"	7½" x 5½" 3¼" x 2¼"
PAN CINOR 70	max. 6½' min. 43"	36" x 26" 18" x 13"	9" x 6½" 4½" x 3¼"
PAN CINOR 100	max. 6½' min. 43"	26" x 19" 12" x 8½"	6½" x 4¾" 3" x 2¼"

Close-up Lens #4 (Engraved 1M—3f)

Lens	Distance subject to filmplane	AREA COVERED	
		at shortest focal length	at longest focal length
PAN CINOR 85	max. 44" min. 30"	21" x 15" 11½" x 8½"	4¼" x 3" 2¼" x 1½"
PAN CINOR 70	max. 44" min. 31"	18" x 13" 12" x 8½"	4½" x 3¼" 3" x 2¼"
PAN CINOR 100	max. 44" min. 31"	12" x 8½" 8" x 5¾"	3" x 2¼" 2" x 1½"

Extension tubes should not be used with Pan Cinor lenses.

Filters

All PAN CINOR lenses take standard Series VIII filters. The filter drops directly into the front of the lens and is held in place with the sun-shade supplied with each Pan Cinor. A filter adapter is therefore not necessary unless two filters, or one filter and a close-up lens are to be used together.

Filming with PAN CINOR Lenses

The PAN CINOR lenses include a wide range of focal lengths and can therefore frequently be used for general motion picture work instead of 3 regular fixed focal length lenses. There are no zoom type lenses made however which include both an extreme wide angle, such as the Switar or Cinor 10mm, as well as an extreme telephoto such as the Yvar 150mm. Furthermore, zoom type lenses are not available with extreme large apertures such as the Switar f/1.4 or Cinor f/1.4 and f/0.95. Pan Cinor lenses are larger and heavier than regular lenses but cameras equipped with a Pan Cinor lens can be used handheld, especially when the lens is set at short focal lengths. When used in the telephoto position, or while zooming a tripod is recommended for best results.

PAN CINOR lenses should always be focused accurately for the distance from the subject to the filmplane since the depth of field is shallow in the telephoto position. Once the distance is set, a stationary subject remains in focus when zooming with the Pan Cinor. With subjects moving towards or away from the camera, the depth of field chart, supplied with each Pan Cinor, should be consulted and the focusing ring set at a distance at which the moving subject remains within the depth of field.