

BOLEX TECHNICAL BULLETIN

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

BOLEX ANAMORPHIC LENSES (SYSTEM MOELLER)

General Information:

The Bolex Anamorphic lenses are considered the best and most practical wide-screen lenses on the market because of their following outstanding features:

- 1. They are high quality lenses losing none of the quality of the basic lens. Bolex wide-screen films are, therefore, as sharp as regular 8 or 16mm films.
- 2. There is absolutely no distortion and, therefore, they are excellent for distance scenes as well as close-ups.
- 3. There is no loss of light; therefore, the diaphragm of the basic taking lens is set as for regular 8 or 16mm movies.
- 4. Versatility of changing lenses is maintained since the Anamorphic lenses can be used in front of different local length lenses.
- 5. The Anamorphic lenses are in a focusing mount for sharper pictures at all distances. Together with telephoto lenses, sharp and distortion free close-ups are possible.
- 6. Mounting of the Anamorphic lens is convenient and makes it easy to change lenses without removing the Anamorphot.
- 7. The same Anamorphic lens is used for projection.
- 8. The expansion factor is 1.5 resulting in a 2.1 picture ratio. The projected picture is twice as wide as high. This picture ratio is very pleasing and very practical for filming and for projecting. Bolex Anamorphic movies can be projected on regular flat wall or tripod screens. Picture brightness is satisfactory even in large auditoriums using regular 16mm projectors.

Bolex Anamorphic Lenses for 16mm



Bolex Anamorphic lenses for 16mm are available in two kits; one for the H-16 Reflex cameras, the second for all the other H-16 cameras equipped with either the Octameter or the Preview finder. (Cameras equipped with trifocal viewfinder have to be equipped with either the Octameter or Preview finder.) The Anamorphic lens is the same in each kit, only the brackets are different. Each item is engraved accordingly.

Bolex wide-screen movies can be taken with the following basic lenses:

- a. Switar 16mm F-1.8. Practical only on the H-16 Reflex cameras since the Octameter or Preview finder cannot be matched for this combination. The exact area covered, however, can be seen on the groundglass. The Anamorphic lens must be moved directly in front of the Switar 16mm lens to avoid cut off corners.
- b. All Kern-Paillard and Som Berthiot standard 1" lenses. Remove sunshades where possible. The finder is set at the 16 position.
- c. The Switar50mm f/1.4 after removing the sunshade. Viewfinder is set at 35.
- d. The Tele-Cinor 75mm f/2.5 after removing sunshade. It is necessary to remove the knurled screw in front of one of the studs of the brackets to allow the Anamorphic lens to be moved forward as much as is necessary. Finder is set at 50.
- e. Many other standard and telephoto lenses with a front lens diameter of less than 30mm and a length of less than 2 1/8". A film test should be made with such lenses. Since the Pan Cinors are longer and larger in diameter, it is not possible to combine the Anamorphic lens with zoom-type lenses.

The Anamorphic lens is moved as close as possible in front of the basic lens, yet without hampering the operation of the diaphragm or focusing ring. The distance between the two lenses is not critical except for the Switar 16mm. Focusing is done on both the basic and Anamorphic lens. On the H-16 Reflex cameras, accurate focusing and viewing can be done through the lens, but the image will be compressed to the standard 16mm frame and will not show the wide 2:1 picture ratio which is seen through the Octameter or Preview finder. The Anamorphic lens does not change the optical characteristics, such as the depth of field, of the basic lens. At close distances, and with telephoto lenses, focusing must be accurate and is most conveniently done with Reflex cameras. On other cameras, it is recommended to measure the distance (from the film plane). The Bolex Anamorphic lenses can be used with other 16mm amateur and professional cameras, but Paillard does not make the necessary brackets.

Table of Field Sizes

Focal Length of Basic Lens

Distance	<u>16mm</u>	25 or 26mm	<u>50mm</u>	75mm
3½'	20" x 40"	11½" x 23"	5½" x 11"	$6\frac{1}{2}$ " x $3\frac{1}{4}$ "
5'	28" x 56"	16½" x 33"	$8\frac{1}{4}$ " x $16\frac{1}{2}$ "	5½" x 11"
10'	55" x 110"	33" x 66"	16½" x 33"	11½" x 23"
30'	14' x 28'	$8\frac{1}{4}$ ' x $16\frac{1}{2}$ '	$4\frac{1}{4}$ ' x $8\frac{1}{2}$ '	2'10" x 5'8"
50'	23' x 46'	14' x 28'	7' x 14'	4'10" x 9'8"

<u>Filters</u>: There are 3 possibilities a) The filter slot provides the best and most convenient way of using filters. b) Glass filters could also be used in a filter adapter in front of the basic 25 and 50mm lens. c) A Kodak $2\frac{1}{2}$ " (63.5mm) adapter will slip over the front of the Anamorphic lens and will take Series VIII filters.

Sunshade: A Tiffen Series VIII deluxe square sunshade fits into the Kodak 2½ filter adapter. The shade, however, will cut part of the field of the viewfinder.

Specifications of the 16mm Bolex Anamorphic lenses:

Focusing range: 3½' to infinity

Front Diameter: 21"

Rear lens diameter: 11 "

Length of lens: 22"

Weight of lens incl. brackets: 1 lb. 4 oz.

Prices:

RX kit including camera brackets and viewfinder mask for H-16 Reflex and H-16 Rex:

Code ANASE No. 170 Price: \$189.00

Standard kit including camera brackets and viewfinder mask for H-16 Supreme and H-16T.

Code ANASU No. 172 Price: \$189.00