

THEATRE DESIGN PRO

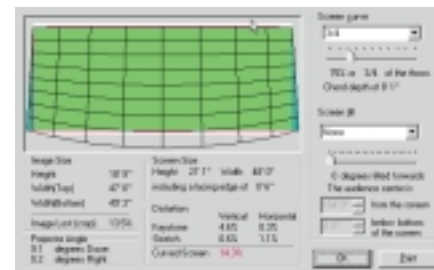
Lens Type	Masked Size	Focal Length	Schneider Lens
35mm Wide Screen (1.85)	20' 1" x 35' 10"	27.81mm	Not Selected
35mm Cinemascope	18' 9" x 47' 0"	42.50mm	ES SC-IA 2.0/42.5

Schneider's THEATRE DESIGN PRO software permits rapid evaluation of the complex and often conflicting demands of modern theatre installations. Because of the very sophisticated mathematical lens modelings used in THEATRE DESIGN PRO it provides a level of accuracy that is simply not possible with other methods.

THEATRE DESIGN PRO is the only cinema lens selection tool that calculates whole projects at once. A Win95/WinNT program, it allows the designer to interactively analyze

all theatre dimensions and projection spatial relationships. It displays lens combinations that maximize screen utilization and provide the best use of screen masking. THEATRE DESIGN PRO will produce printout of lenses and fully dimensioned screen drawing, with an easy-to-understand 2-axis keystoneing and distortion grid.

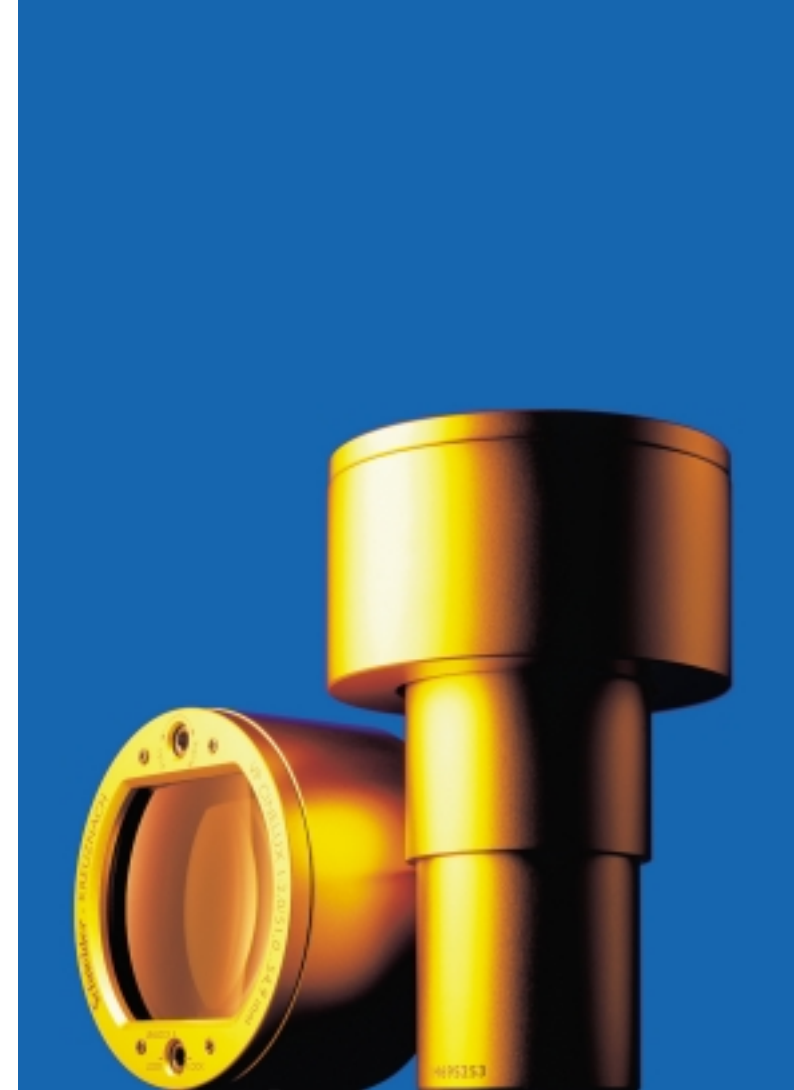
A list of appropriate Schneider Cinema Projection Lenses along with their specifications, is also printed for each theatre.



Schneider Optics
285 Oser Avenue
Hauppauge, NY 11788
U.S.A.
Phone: 631.761.5000 /
1.800.645.7239
Fax: 631.761.5090
www.schneideroptics.com
E-mail: info@schneideroptics.com

Jos. Schneider
Optische Werke GmbH
Ringstraße 132
D-55543 Bad Kreuznach
Germany
Phone: 06 71/6 01-280
Phone: 06 71/6 01-108
www.schneiderkreuznach.com
E-mail: kino@schneiderkreuznach.com

Century Precision Optics
11049 Magnolia Bl
H. Hollywood, CA 91601
U.S.A.
Phone: 818.766.3715 /
1.800.228.1254
Fax: 818.505.9865
www.centuryoptics.com
E-mail: info@centuryoptics.com



VP-CINELUX 1:2.0 (Variable Prime)

Schneider projection lenses have been selected for use in the finest theatres worldwide, because they meet the highest standards of performance demanded by today's large screens and stadium seating cinemas. To continue to address the needs of today's multiplex designers, Schneider has developed the first series of Variable Prime projection lenses.

The Variable Prime VP-CINELUX series consists of 13 lenses that have the unique property of adjustable focal length. With their 7% range of picture size adjustment, the image they project can be precisely sized to fit the screen. These lenses are correctly called Variable Prime lenses. They are not zoom lenses, so they don't have the performance com-

promises and light-loss associated with zooms. They are all fast F/2 lenses, projecting large quantities of light and producing bright, uniformly illuminated, high-resolution images even on the largest of screens.

Modern stadium theatres with very large screens have the potential to provide a powerful cinematic experience. By matching lens focal length precisely to screen size, all available light and image are put on the screen, and not wasted in the masking. Variable Prime VP-CINELUX projection lenses deliver correctly-sized images with the high performance in resolution, contrast, and screen brightness that you have come to expect from all Schneider lenses.

Ident.-Nr.: 33318

VP-CINELUX 1:2.0

The new Variable Prime VP-CINELUX is the only adjustable focal length lens series available for 35mm film projection. They have none of the image and resolution compromises that are inherent in the old-style magnifiers or other adapters. Schneider Variable Primes are available in overlapping focal lengths ranging from 28.9 to 63.7mm, all at F/2.0.

Even using the extremely wide-angle 28.9mm, this F/2.0 lens system's illumination is uniform from corner to corner, allowing virtually all of the light from today's larger lamphouses to be transferred to the the biggest of screens.

In today's theatres it is not an uncommon for 10% or more of the image to be lost to cropping. This results in a loss of light level and reduced image quality. A correctly sized image with little or no cropping will be substantially brighter and sharper than an over-enlarged and cropped image.

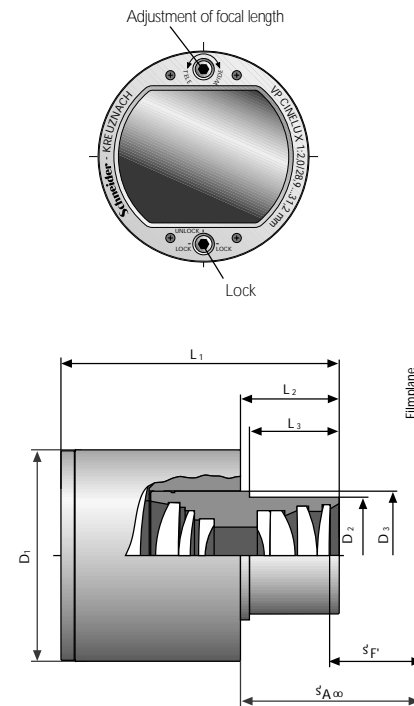
It is unfortunate, though not uncommon, for a larger, shorter-lived (and more expensive) bulb to be used to get sufficient screen brightness, only to waste that light with a poorly designed lens or incorrect focal length. A Schneider Variable Prime VP-CINELUX, set

at exactly the correct image size to fill the screen, is a more cost effective solution than a larger sized lamp. It also improves image quality, which a lamp can't do.

With the 13 new Schneider Variable Prime lenses, you can achieve precisely the required lens focal length in the range from 28.9mm to 61.1mm.

VP-CINELUX lenses are equipped with a robust and secure focal length micro-adjustment and locking mechanism. Focal length adjustments and locking are done with a 3mm metric ball-head tool supplied with each lens. Because the focal length adjustment and lock mechanisms can only be operated with this tool, these lenses are less likely to be subject to unauthorized adjustments. While preventing tampering, this method of focal length adjustment also offers easy front access with the lens mounted in the projector. This allows rapid last-minute image size adjustments to accommodate masking or screen changes.

The high standard of image quality built into these lenses is outstanding, and is easily verified by both scientific and practical testing.



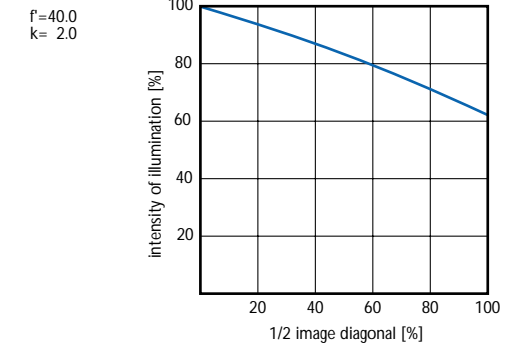
Focal length [mm]		Relative aperture		Diameter [mm]			Length [mm]			Flange focal distance [mm]	Back focal distance [mm]	Order number
f'	k	D ₁	D ₂	D ₃	L ₁	L ₂	L ₃	s'A _∞	s'F'			
28.9...31.2			39.0		102.2	42.2		72.4...72.6	30.59...30.36		25577	
30.8...33.3			39.0		102	42		72.4...72.7	30.64...30.91		25578	
33.3...35.9			39.0		102	42		72.5...72.8	32.36...32.05		25579	
35.8...38.6			39.0	43.0	113.6	53.6	40	84.1...84.4	33.17...33.53		25580	
38.3...41.3			39.0	43.0	107	47	40	81.5...82.0	39.31...39.72		25581	
41.1...44.3			39.0	43.0	109.8	49.8	40	84.3...84.7	36.66...37.13		25582	
43.4...46.9	2.0	70.65	40.0		98.5	38.5		69.7...70.2	34.33...33.80		25583	
46.2...49.8			40.0		98	38		74.4...73.0	37.03...36.43		25584	
48.5...52.3			40.0		98	38		74.5...75.2	39.02...38.36		25585	
51.0...54.9			39.0		99.8	39.8		71.6...72.3	35.00...34.27		25586	
53.7...58.0			39.0	43.0	93	33	30	65.2...66.0	36.38...35.57		25611	
56.4...60.8			39.0	43.0	91	31	30	65.3...66.2	38.82...37.92		25612	
59.2...63.7			39.0	43.0	94.5	34.5	30	68.4...69.4	38.86...37.88		25632	

VP-CINELUX 1:2.0

Optical performance VP-CINELUX 1:2.0/ 38.3...41.3mm

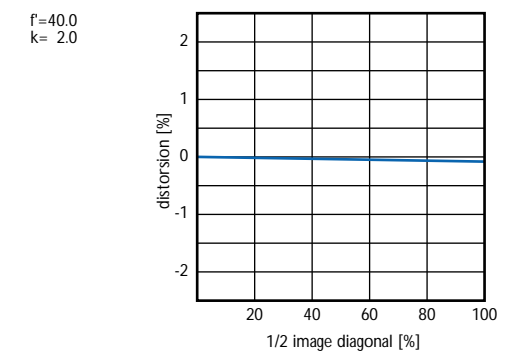
Relative illumination

The graph at the right clearly shows the very slight light loss of this wide-angle design from the center of the field to the outermost edges of the image.



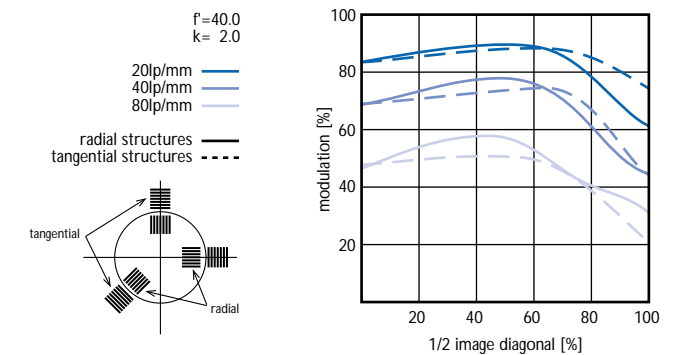
Distorsion

The lens has a distorsion over the entire image field of less than 0.2%, and hence for all practical purposes is distorsion free.



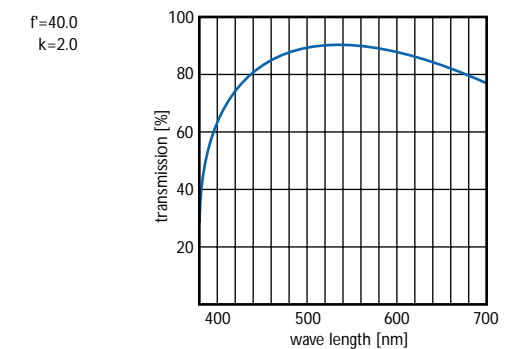
Modulation transfer function (MTF)

This graph shows the modulation transfer function for the spatial frequencies of 20, 40, and 80 line pairs per millimeter on the film. Also presented are the radial and tangential structures.



Transmission

Our know-how makes possible the live-like reproduction of the chromatic adaptations and nuances of color which are especially important in the cinema. The most modern multi-coating processes guarantee a high transmission and minimal scatter.



All values are based on a film format of 1:1.85 (11.33x20.96mm) at an average focal length setting.