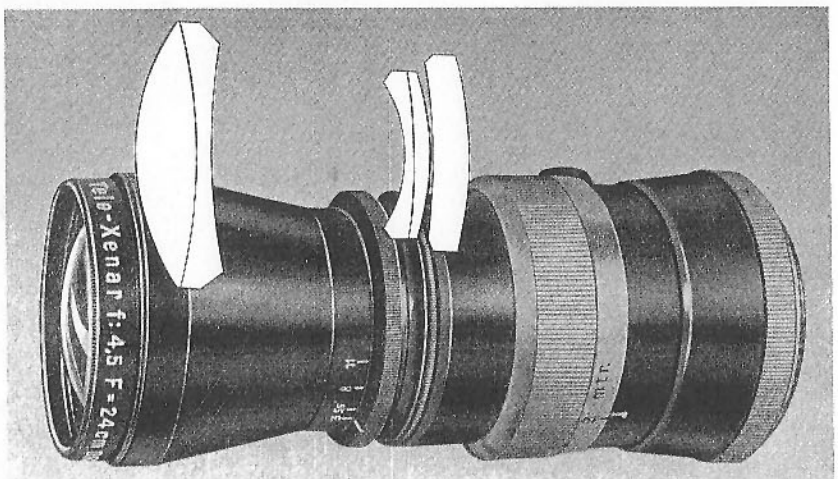
The F : 4,5 Tele-Xenar is a specially large-aperture telephoto-type lens with a fixed focal length. In design it is unsymmetrical, has five components, and is partially cemented. As with all true telephoto lenses, the back component is a negative, and cannot be used separately, though the front component — given a reduced aperture — can be used for special purposes such as reproducing a very small object on an enlarged scale.



SCHNEIDER TELE-XENAR F : 4,5

The F : 5,5 Tele-Xenar is also a fixed-focus telephoto-type lens in which the high quality of the Xenar lens has been retained. In spite of its low price, this lens has the great advantage of wide application on account of its simplicity in use. The design involves four components, divided into two cemented lenses in front and two cemented lenses behind. The considerable distortion introduced into some telephoto lenses has been reduced, by this particular design, to a level where it has no material importance.

To obtain a still greater focal length, both the F : 4,5 and F : 5,5 Tele-Xenar lenses may be modified by placing a supplementary lens over the rim of the back component lens. By stopping down to F : 9 or so, the result is a still larger-scale image with an image quality that is satisfactory for most purposes. (See further notes in the section "Supplementary lenses" on page 38 and 41.)

Taken with Tele-Xenar

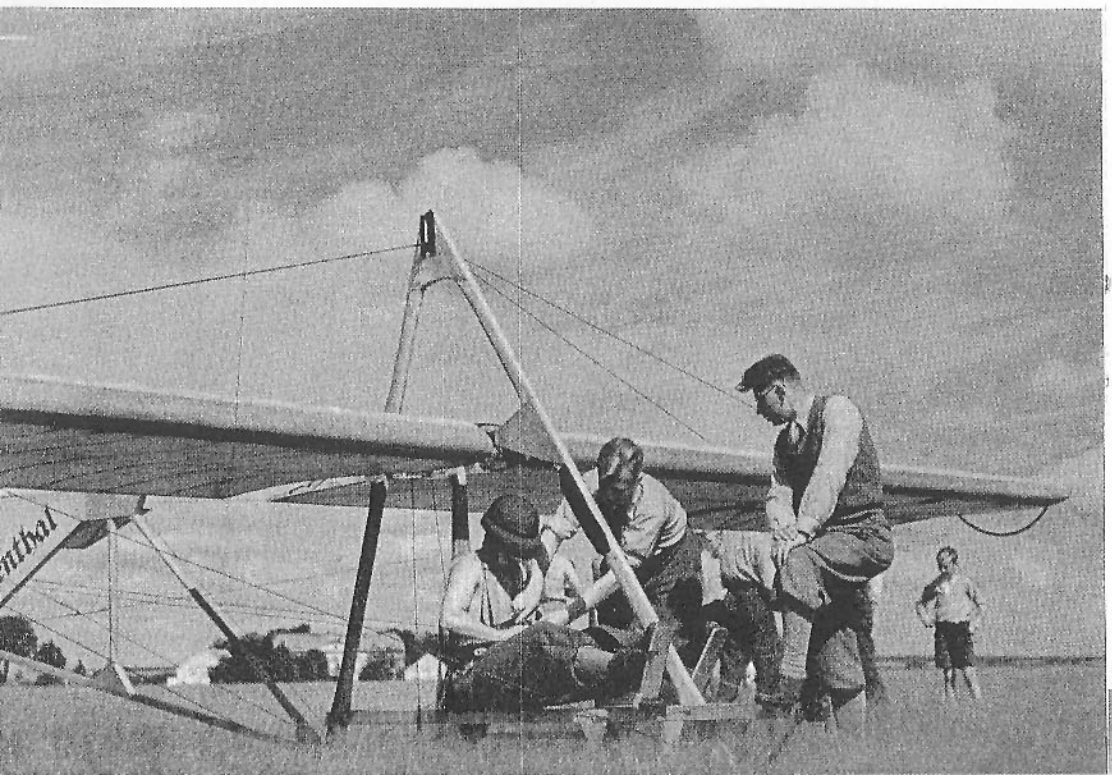
Aperture F :	Focal length in.	Focal length cm	For negative size	Circle of sharp definition at small stop	Size of shutter	Exterior diameter of shutter
4,5	$7\frac{1}{16}$	18	$2\frac{9}{16}\times1\frac{9}{16}$ to $3\frac{9}{16}\times2\frac{9}{16}$ in.	$4\frac{3}{4}$ in.	IS	$2\frac{11}{16}$ in.
4,5	$9\frac{7}{16}$	24	$2\frac{9}{16}\times1\frac{9}{16}$ to $4\frac{3}{4}\times3\frac{9}{16}$ in.	$6\frac{5}{16}$ in.	II/5	$3\frac{1}{16}$ in.
5,5	$7\frac{1}{16}$	18	$2\frac{9}{16}\times1\frac{9}{16}$ to $3\frac{9}{16}\times2\frac{9}{16}$ in.	$4\frac{3}{4}$ in.	0S	$2\frac{1}{4}$ in.
5,5	$9\frac{7}{16}$	24	$2\frac{9}{16}\times1\frac{9}{16}$ to $4\frac{3}{4}\times3\frac{9}{16}$ in.	$5\frac{15}{16}$ in.	IS	$2\frac{11}{16}$ in.
5,5	$10\frac{5}{8}$	27	$2\frac{9}{16}\times1\frac{9}{16}$ to $4\frac{3}{4}\times3\frac{9}{16}$ in.	$7\frac{1}{16}$ in.	II 4/2 and II/5	$3\frac{1}{16}$ in.
5,5	$11\frac{13}{16}$	30	$2\frac{3}{8}\times2\frac{3}{8}$ to $5\frac{7}{8}\times3\frac{15}{16}$ in.	$7\frac{1}{2}$ in.	II 6/2	$3\frac{1}{16}$ in.
5,5	$14\frac{3}{16}$	36	$2\frac{3}{8}\times2\frac{3}{8}$ to $7\frac{1}{16}\times5\frac{1}{8}$ in.	$9\frac{7}{16}$ in.	III/7	$3\frac{7}{16}$ in.

Exchange Table.

Tele-Xenar lenses F : 4,5 and 5,5 are exchangeable against the following Xenar and Radionar lenses provided that the shutter-size is the same:

Tele-Xenar Aperture F :	Tele-Xenar Focal length in.	Tele-Xenar Focal length cm	Is exchangeable	Xenar F : 3,5 Focal length	Xenar F : 4,5 Focal length	Radionar F : 4,5 Focal length	Size of shutter	Exterior diameter of shutter
4,5	$7\frac{1}{16}$	18	against	$4\frac{1}{8}$ in.	—	—	IS	$2\frac{11}{16}$ in.
5,5	$7\frac{1}{16}$	18	against	—	$4\frac{1}{8}$ in. $4\frac{3}{4}$ in.	$4\frac{1}{8}$ in. $4\frac{3}{4}$ in.	0S	$2\frac{1}{4}$ in.
4,5	$9\frac{7}{16}$	24	against	$5\frac{7}{8}$ in.	—	—	II/5	$3\frac{1}{16}$ in.
5,5	$9\frac{7}{16}$	24	against	$4\frac{1}{8}$ in.	$5\frac{5}{16}$ in. $5\frac{7}{8}$ in.	$5\frac{5}{16}$ in.	IS	$2\frac{11}{16}$ in.
5,5	$10\frac{5}{8}$	27	against	$5\frac{5}{16}$ in.	—	—	II 4/2	$3\frac{1}{16}$ in.
				$5\frac{1}{8}$ in.	$6\frac{1}{2}$ in.	—	II/5	
5,5	$11\frac{13}{16}$	30	against	—	$7\frac{1}{16}$ in.	—	II 6/2	$3\frac{1}{16}$ in.
5,5	$14\frac{3}{16}$	36	against	$6\frac{1}{2}$ in. $7\frac{1}{16}$ in.	$8\frac{1}{4}$ in.	—	III/7	$3\frac{7}{16}$ in.

Taken with Xenar



Exchange Table.

The following Xenar and Radionar lenses are exchangeable against Tele-Xenar lenses provided that the shutters have the same size:

Negative size $3\frac{1}{2}\times2\frac{3}{8}$ in. (6×9 cm)

Lens	Aperture F :	Focal length in.	Focal length cm		Aperture F :	Focal length in.	Focal length cm	Size of shutter	Exterior diameter of shutter
Xenar	3,5	$4\frac{1}{8}$	10,5	Exchangeable against Tele-Xenar	4,5	$7\frac{1}{16}$	18	IS	$2\frac{11}{16}$ in.
					5,5	$9\frac{7}{16}$	24		
Xenar	4,5	$4\frac{1}{8}$	10,5		5,5	$7\frac{1}{16}$	18	0S	$2\frac{1}{4}$ in.
Radionar	4,5	$4\frac{1}{8}$	10,5						
Xenar	4,5	$4\frac{3}{4}$	12						
Radionar	4,5	$4\frac{3}{4}$	12						

Negative size $4\frac{3}{4}\times3\frac{9}{16}$ in. (9×12 cm)

Xenar	3,5	$5\frac{5}{16}$	13,5	Exchangeable against Tele-Xenar	5,5	$10\frac{5}{8}$	27	II 4/2	$3\frac{1}{16}$ in.
Xenar	3,5	$5\frac{7}{8}$	15		4,5 5,5	$9\frac{7}{16}$ $10\frac{5}{8}$	24 27	II/5	$3\frac{1}{16}$ in.
Xenar	4,5	$5\frac{5}{16}$	13,5		5,5	$9\frac{7}{16}$	24	IS	$2\frac{11}{16}$ in.
Radionar	4,5	$5\frac{5}{16}$	13,5						
Xenar	4,5	$5\frac{7}{8}$	15						

Negative size $5\frac{7}{8}\times3\frac{15}{16}$ in. (10×15 cm)

Xenar	4,5	$6\frac{1}{2}$	16,5	Exchangeable against Tele-Xenar	5,5	$10\frac{5}{8}$	27	II/5	$3\frac{1}{16}$ in.
Xenar	4,5	$7\frac{1}{16}$	18		5,5	$11\frac{13}{16}$	30	II 6/2	$3\frac{1}{16}$ in.

Negative size $7\frac{1}{16}\times5\frac{1}{8}$ in. (13×18 cm)

Xenar	3,5	$6\frac{1}{2}$	16,5	Exchangeable against Tele-Xenar	5,5	$14\frac{3}{16}$	36	III/7	$3\frac{7}{16}$ in.
Xenar	3,5	$7\frac{1}{16}$	18						
Xenar	4,5	$8\frac{1}{4}$	21						