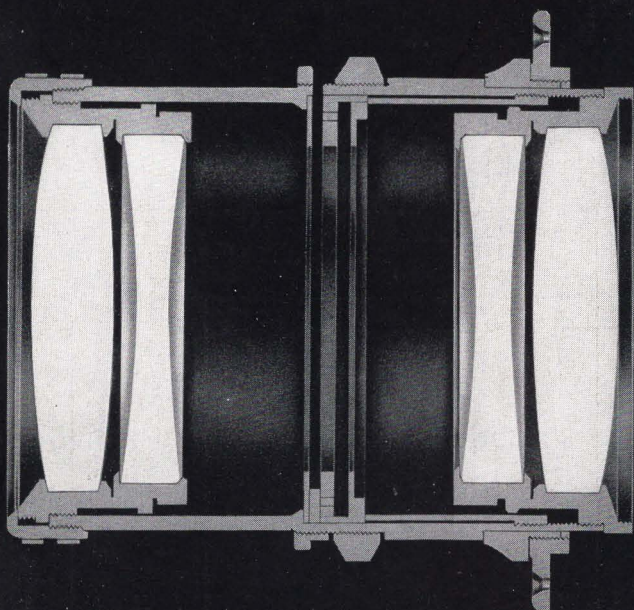


THE LENS FOR THE
GRAPHIC ARTS



GOERZ

**RED
DOT**

ARTAR



Our name is your guarantee!



HERE'S WHAT YOU GET WHEN YOU BUY A GOERZ RED DOT ARTAR!

PRECISE COLOR REGISTER

The GOERZ RED DOT ARTAR has been designed to meet the exacting requirements of the Graphic Arts. It offers the utmost in performance in line, continuous-tone, black-and-white or color. The GOERZ RED DOT ARTAR is an apochromatic lens which means the highest degree of color correction over the entire spectrum has been attained. In other words, color-separation negatives from either transparency or reflection copy made with different filters are of equal sharpness and are of exactly the same size.

MAXIMUM COVERING POWER

The new RED DOT ARTAR utilizes the latest developments in glass technology. Its symmetrical construction eliminates distortion, coma and lateral color, three of the most disturbing defects found in process lenses of inferior quality. The optical corrections incorporated in the excellent design of this lens and which are maintained in its meticulous manufacture have made the GOERZ RED DOT ARTAR widely known for its better and uniform covering power. The GOERZ RED DOT ARTAR produces negatives which are evenly illuminated and sharply defined—to the very limit of its rated covering power!

MINIMUM LOSS OF SUBJECT CONTRAST

GOERZ RED DOT ARTAR lenses are treated with an extra hard anti-reflection coating, which results in maximum light transmission. The GOERZ coating eliminates internal reflection and ghost images, thus producing a very crisp negative. Unparalleled accuracy and unequalled care exercised during the many stages of manufacture have produced in the GOERZ ARTAR a lens which for all practical purposes has no flare. Continuous-tone negatives made with the GOERZ RED DOT ARTAR gain additional highlight and shadow detail and retain the normal subject contrast.

HIGH RESOLUTION

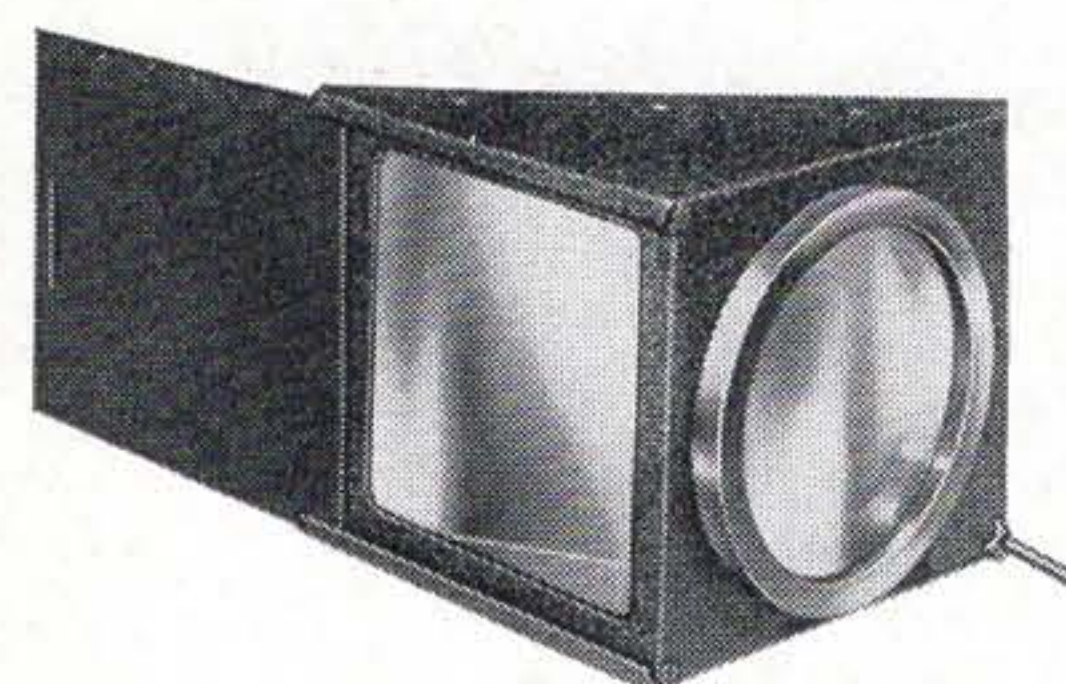
The resolution of the GOERZ RED DOT ARTAR is close to the theoretical limit and is uniform over its entire 46° field. This has been achieved by working to unimaginably close tolerances, both in controlling the optical glasses and manufacturing the lenses, as well as the precise hand-fitting into barrels.

RUGGED CONSTRUCTION

The GOERZ RED DOT ARTAR lens is mounted in an all-brass, hand-machined barrel with an oven-baked black finish. It can also be supplied in between-the-lens shutters. All moving parts are hand fitted. A slot in the center of the barrel is provided for the convenient insertion of gelatine filter holders or flash stops. A metal ring protects the slot from light and dust. The cap ring of the lens is detachable and the threads thus exposed screw directly into the GOERZ PRISM mount. A flash stop is supplied with the lens.

WIDE RANGE OF FOCAL LENGTHS

GOERZ RED DOT ARTAR lenses are made in 16 different focal lengths ranging from 4 to 70 inches. Special focal lengths can be made up to specification.



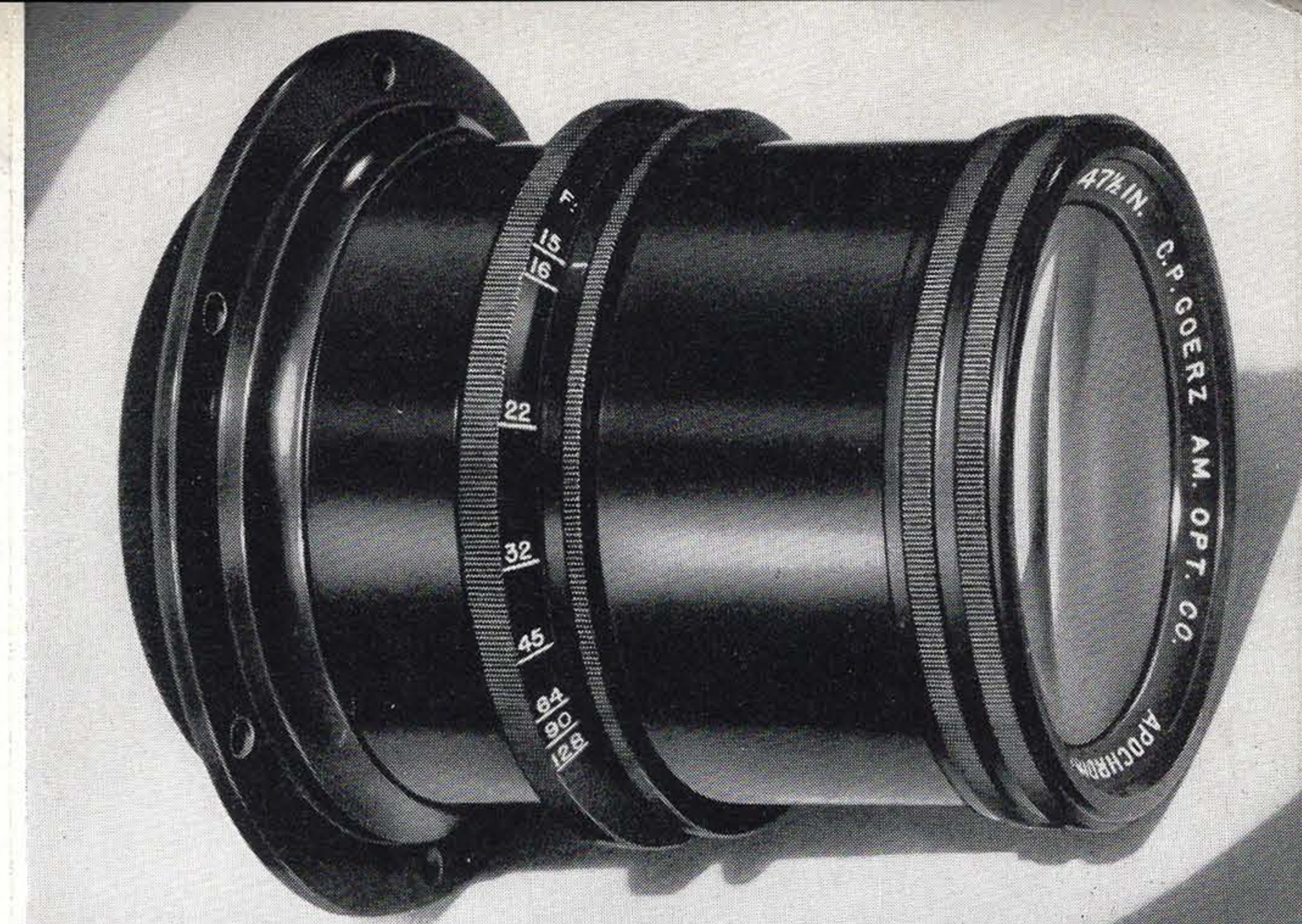
The GOERZ REVERSING PRISM

Goerz Prisms are noted for their accuracy, and are of the same high quality as the lenses with which they are to be used. We cannot guarantee the efficiency of Goerz Graphic Arts lenses if they are used with prisms of inferior quality.

A rotary mounting allows the setting of the face of the prism at any desired position, sideways, downward or upward and the substantial mounting assures a correct 90° deviation of the optical axis. The prism fits the thread on the front cell when the lens cap rings is unscrewed.

The sizes which we list for our various lenses will take care of the ordinary demands for reproduction work to same size and for reduction. Oversize prisms will not increase the angular field of the lens. When a prism is used the lens coverage will be 15% less.

Square Face Opening	Prism Fits These Goerz Artar Lenses
2 ³ / ₈	9 ¹ / ₂ ", 10 ³ / ₄ ", 12", 14"
2 ⁷ / ₈	16 ¹ / ₂ " and 19"
3 ¹ / ₄	24"
3 ³ / ₄	30" and 35"
5	42" and 47 ¹ / ₂ "



F Value	Focal Length Available	Film covered at various reductions			
		Inches	1 : 10	1 : 5	1 : 2
9.5	4		2 ¹ / ₄ x 3 ¹ / ₄	2 ¹ / ₂ x 3 ¹ / ₂	3 ¹ / ₄ x 4 ¹ / ₂
9.	6		3 ¹ / ₂ x 4 ¹ / ₂	3 ¹ / ₄ x 5 ¹ / ₂	4 x 6
9.	8 ¹ / ₄		4 ¹ / ₄ x 6 ¹ / ₂	5 x 7	6 ¹ / ₂ x 8 ¹ / ₂
9.	9 ¹ / ₂		5 ¹ / ₂ x 7 ¹ / ₂	6 x 8	7 x 10
9.5	10 ³ / ₄		6 ¹ / ₂ x 8 ¹ / ₂	7 x 9	9 x 12
9.	12		7 x 9	8 x 10	10 x 12
9.	14		8 x 10	9 x 12	11 x 14
9.5	16 ¹ / ₂		10 x 12	10 x 14	12 x 18
11.	19		11 x 14	12 x 15	16 x 20
11.	24		14 x 17	16 x 20	20 x 24
12.5	30		18 x 22	18 x 24	24 x 30
12.5	35		20 x 24	22 x 28	28 x 36
14.	42		24 x 30	25 x 32	30 x 40
15.	47 ¹ / ₂		28 x 36	30 x 35	36 x 45
16.	70		42 x 48	48 x 56	48 x 64

WHAT YOU SHOULD KNOW ABOUT THE GOERZ RED DOT ARTAR!

ALL GOERZ RED DOT ARTAR lenses are made up to the same standard of quality. *Every* GOERZ RED DOT ARTAR lens is a "HAND-PICKED" lens. Since 1899 we have guaranteed uniform quality in every Goerz Lens.

The RED DOT series of the GOERZ ARTAR contains the latest improvements of the basic ARTAR lens which the majority of workers in the Graphic Arts field have preferred for over 35 years. The RED DOT is the answer to the modern trend toward color reproductions. Its inherent characteristic also make it the *preferred lens* for line and halftone work.

When you choose a GOERZ RED DOT ARTAR lens for your work, *you can be sure of prompt service in the United States in our modern factory at Inwood, L. I., N. Y. There will be no long delays due to shipping lenses out of the country, or customs proceedings on their return to the U.S.*

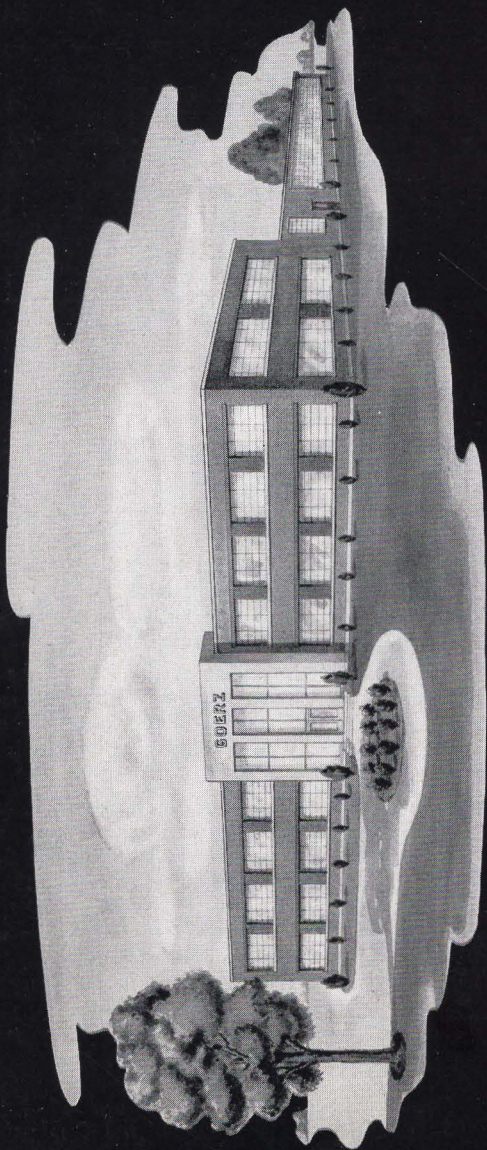
Never take the individual lens elements apart. This will invariably disturb the optical quality of the lens necessitating factory readjustment. Unscrew the complete front or rear assembly only for occasional cleaning.

TABLE OF APPROXIMATE OBJECT AND IMAGE DISTANCES FOR THE GOERZ APOCHROMAT ARTAR

FOCAL LENGTH OF LENS																		
⁰ / ₀ Re- duction	Distances	4"	6"	8 ¹ / ₄ "	9 ¹ / ₂ "	10 ³ / ₄ "	12"	14"	16 ¹ / ₂ "	19"	24"	30"	35"	42"	47 ¹ / ₂ "	70"	Distances	En- large- ment
100 ⁰ / ₀	Lens to Copyboard	8.	12.	16.5	19.	21.5	24.	28.	33.	38.	48.	60.	70.	84.	95.	140.	Lens to Film Lens to Copyboard Copyboard to Film	Same Size
	Lens to Film	8.	12.	16.5	19.	21.5	24.	28.	33.	38.	48.	60.	70.	84.	95.	140.		
	Copyboard to Film	16.	24.	33.	38.	43.	48.	56.	66.	76.	96.	120.	140.	168.	190.	280.		
50 ⁰ / ₀	Lens to Copyboard	12.	18.	24.7	28.5	32.2	36.	42.	49.5	57.	72.	90.	105.	126.	142.5	210.	Lens to Film Lens to Copyboard Copyboard to Film	2 x
	Lens to Film	6.	9.	12.3	14.2	16.1	18.	21.	24.7	28.5	36.	45.	52.5	63.	71.2	105.		
	Copyboard to Film	18.	27.	37.1	42.7	48.3	54.	63.	74.2	85.5	108.	135.	157.5	189.	213.7	315.		
33 ¹ / ₃ ⁰ / ₀	Lens to Copyboard	16.	24.	33.	38.	43.	48.	56.	66.	76.	96.	120.	140.	168.	190.	280.	Lens to Film Lens to Copyboard Copyboard to Film	3 x
	Lens to Film	5.3	8.	11.	12.6	14.3	16.	18.6	22.	25.3	32.	40.	46.6	56.	63.3	93.3		
	Copyboard to Film	21.3	32.	44.	50.6	57.3	64.	74.6	88.	101.3	128.	160.	186.6	224.	253.3	373.3		
20 ⁰ / ₀	Lens to Copyboard	24.	36.	49.5	57.	64.5	72.	84.	99.	114.	144.	180.	210.	252.	285.	420.	Lens to Film Lens to Copyboard Copyboard to Film	5 x
	Lens to Film	4.8	7.2	9.9	11.4	12.9	14.4	16.8	19.8	22.8	28.8	36.	42.	50.4	57.	84.		
	Copyboard to Film	28.8	43.2	59.4	68.4	77.4	86.4	100.8	118.8	136.8	172.8	216.	252.	302.4	342.	504.		
10 ⁰ / ₀	Lens to Copyboard	44.	66.	90.7	104.5	118.2	132.	154.	181.5	209.	264.	330.	385.	462.	522.5	770.	Lens to Film Lens to Copyboard Copyboard to Film	10 x
	Lens to Film	4.4	6.6	9.1	10.5	11.8	13.2	15.4	18.1	20.9	26.4	33.	38.5	46.2	52.2	77.		
	Copyboard to Film	48.4	72.6	99.8	115.	130.0	145.2	169.4	199.6	229.9	290.4	363.	423.5	508.2	574.7	847.		

What make lens shall I use? This is a vital consideration for the camera owner of today. Your lens is the first and most important tool for quality reproduction! That is why so much research and quality production go into the manufacture of every Goerz Lens.

The combined experience of our engineers and the fine craftsmanship of our lensmakers make it possible for us to produce a lens which is the undisputed choice of the Graphic Arts Industry.



C. P. GOERZ AMERICAN OPTICAL CO., INWOOD 96, L. I., N. Y.
Makers of Precision Photo Lenses in USA since 1899