

Wollensak

MASTERPIECE

STILL RAPTAR

LENS



PRICE LIST
SECTION II

DEALER

WOLLENSAK OPTICAL COMPANY

ROCHESTER 21, NEW YORK

NORMAN E. KUEGLER
SALES MANAGER
DEALERS, DISTRIBUTORS AND ADVERTISING

July 1953

To All Photographic Retailers:

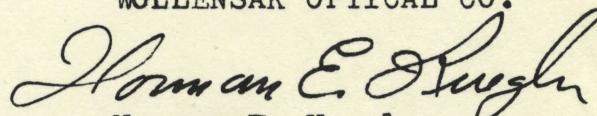
We are pleased to forward our new Illustrated Lens Catalog. This catalog has been considered and in work for over a year. It is believed you will agree with us that we have found the answer in cataloging a lens line.

The catalog is more than just a price list; it includes most of the basic information necessary to assist in selling a lens. The principal feature of the book is the manner in which it is sub-divided. Note that the lenses are in groups as to applications rather than just a series of lenses. Wherever a lens serves more than one requirement, it was listed again in that particular group. This grouping simplifies looking for the right lens or lenses for a specific job or application; it will automatically guide you in suggestive selling.

We are confident this new type of selling aid will make your lens sales come easier and faster.

Very truly yours

WOLLENSAK OPTICAL CO.



Norman E. Kuegler
Sales Manager

NEK:mr
Encl.

The Wollensak Optical Company

is proud to present their new Illustrated Price List on their complete photographic line.

It has long been desired that a lens price list be so prepared to facilitate the understanding and applications of the various lenses available.

This Price List is divided into two sections—Cine and Still Lenses. Section II (Still Lenses) is subdivided as to applications rather than just the listings of the different lenses.

For Press and General Photography

For Commercial and Industrial Work

For Enlarging

Lenses for Copying

Lenses for Portraiture

It is to be noted that various lenses depending upon their types and focal lengths are repeated under the different applications. For example: the Raptar Telephoto is generally used for Press and General Photography. However, because it can be used to make fine portraits it is also listed under Lenses for Portraiture.

This price list is more than just a listing of products. It is a selling tool giving complete lens data as to film size and fittings, and subdivided to suggest the right lens for different applications.

Raptars

For Press and General Photography

Series II, Wide Angle and Telephoto Lenses

For cameras having interchangeable lens boards

The heart of every camera, regardless of price, is the lens and shutter. For Masterpiece results there are few truly fine lenses like the Raptar Series II. These four element lenses are designed to produce a sharp image from corner to corner as well as in the center of the film . . . deliver high resolution **without the sacrifice of contrast**. They are fully color corrected and coated . . . excellent for full-color photography.

FOR ACTION, CANDID and PICTORIAL . . .

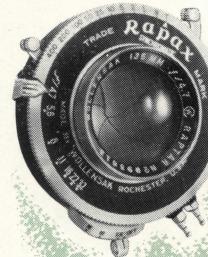
Ideal for news, feature photography, sports and other outdoor shots, the Raptar Series II lenses have adequate speed and excellent covering power. They can be fitted to popular press-type cameras. For synchronized flash, they should be mounted in Wollensak high-speed full synchronromatic Rapax Shutters.



Made with a Series II Lens



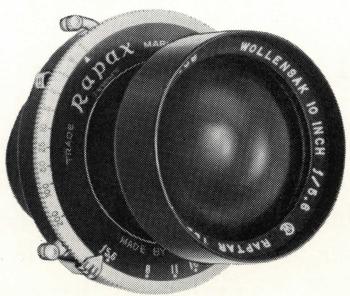
Made with a Series II Lens



135mm f/4.7
Raptar Series II in
Rapax Full-Sync. Shutter



162mm f/4.5
Raptar Series II
in Rapax X-Sync. Shutter



10" f/5.6 Raptar Telephoto
in Rapax Non-Sync. Shutter



Made with a Telephoto Lens

FOR NATURE and SPORTS

The Raptar Telephoto is essential for shooting news and sports events, travel photos, architectural and nature studies. Because of its long focus, Raptar Telephotos are also ideal lenses for portraiture. Also excellent for bringing background objects up to show true relation to foreground, enlarging dis-

tant objects when camera position cannot be changed. Raptar Wide Angles are necessary for wide coverage . . . group pictures, industrial photography, architectural shots indoors or out. Wide Angle Lenses cover up to 3.6 times area of a normal lens—valuable for any photographer.



15" f/5.6 Raptar Telephoto
in Alphax Non-Sync. Shutter



Made with a Telephoto Lens

RAPTOR Series II f/4.5 (Wocoted)

Catalog Number	Equiv. Focus		f	Film Size	Mounting	List With Tax
	Inch	mm				
410	3 1/2	90	4.5	2 1/4 x 3 1/4	In No. 1 Iris Diaph. Barrel	\$ 39.55
411	"	"	"	"	In No. 1 Rapax Non-Sync	55.62
412	"	"	"	"	In No. 1 Rapax X-Sync	61.62
413	"	"	"	"	In No. 1 Rapax Full-Sync	76.12
414	4	101	4.5	2 1/4 x 3 1/4	In No. 1 Iris Diaph. Barrel	40.68
415	"	"	"	"	In No. 1 Rapax Non-Sync	56.12
416	"	"	"	"	In No. 1 Rapax X-Sync	62.62
417	"	"	"	"	In No. 1 Rapax Full-Sync	78.12
418	4 1/2	114	4.5	2 1/4 x 3 1/4	In No. 2 Iris Diaph. Barrel	50.85
419	"	"	"	"	In No. 2 Rapax Non-Sync	65.27
420	"	"	"	"	In No. 2 Rapax X-Sync	71.27
421	"	"	"	"	In No. 2 Rapax Full-Sync	88.77
422	"	"	"	"	In No. 2 Alphax Non-Sync	61.77
423	"	"	"	"	In No. 2 Alphax Sync	66.77

No Federal Excise Tax applicable to the following items.

						List
424	5	127	4.5	3 1/4 x 4 1/4	In No. 2 Iris Diaph. Barrel	\$ 45.00
425	"	"	"	"	In No. 2 Rapax Non-Sync	61.50
426	"	"	"	"	In No. 2 Rapax X-Sync	67.50
427	"	"	"	"	In No. 2 Rapax Full-Sync	85.00
428	"	"	"	"	In No. 2 Alphax Non-Sync	58.00
429	"	"	"	"	In No. 2 Alphax Sync	63.00
430	5 3/8	135	4.5	4 x 5	In No. 3 Iris Diaph. Barrel	47.50
431	"	"	4.7	"	In No. 2 Rapax Non-Sync	62.50
432	"	"	"	"	In No. 2 Rapax X-Sync	69.50
433	"	"	"	"	In No. 2 Rapax Full-Sync	87.50
434	"	"	"	"	In No. 2 Alphax Non-Sync	60.00
435	"	"	"	"	In No. 2 Alphax Sync	65.00
436	6 3/8	162	4.5	4 x 5	In No. 4 Iris Diaph. Barrel	65.00
437	"	"	"	"	In No. 3 Rapax Non-Sync	87.50
438	"	"	"	"	In No. 3 Rapax X-Sync	95.00
439	"	"	"	"	In No. 3 Rapax Full-Sync	110.00
440	"	"	"	"	In No. 3 Alphax Non-Sync	87.50
441	"	"	"	"	In No. 3 Alphax Sync	97.50
442	7 1/2	190	4.5	5 x 7	In No. 5 Iris Diaph. Barrel	85.00
443	"	"	"	"	In No. 3 Alphax Non-Sync	110.00
444	"	"	"	"	In No. 3 Alphax Sync	120.00
445	8 1/4	210	4.5	5 x 8	In No. 6 Iris Diaph. Barrel	130.00
446	"	"	"	"	In No. 4 Alphax Non-Sync	147.50
447	"	"	"	"	In No. 4 Alphax Sync	155.00
448	9 1/2	241	4.5	6 1/2 x 8 1/2	In No. 6 Iris Diaph. Barrel	175.00
449	"	"	"	"	In No. 4 Alphax Non-Sync	189.00
450	"	"	"	"	In No. 4 Alphax Sync	195.00
451	11 7/8	302	4.5	8 x 10	In No. 7 Iris Diaph. Barrel	225.00
452	"	"	"	"	In No. 5 Alphax Non-Sync	240.00
453	"	"	"	"	In No. 5 Alphax Sync	248.00

NOTE: See Alphax Shutters for synchronization data.
Prices of Lenses in Shutters do not include cable releases.



101mm f/4.5 Raptar Series II
in Rapax Non-Sync. Shutter



127mm f/4.5 Raptar Series II
in Rapax X-Sync. Shutter



7 1/2" f/4.5 Raptar Series II
in Alphax Sync. Shutter

RAPTAR TELEPHOTO f/5.6 (Wocoted)



8" f/5.6 Raptar Telephoto
in Rapax Full-Sync. Shutter

Catalog Number	Equiv. Focus			Bellows Draw (flange focus) Required at Infinity	Film Size	Mounting	List
	Inch	mm	f				
510	8	202	5.6	5"	2 1/4 x 3 1/4 3 1/4 x 4 1/4	In No. 3 Iris Diaph. Barrel	\$ 97.50
511	"	"	"	"	"	In No. 2 Rapax Non-Sync	117.50
512	"	"	"	"	"	In No. 2 Rapax X-Sync	127.50
513	"	"	"	"	"	In No. 2 Rapax Full-Sync	145.00
514	"	"	"	"	"	In No. 2 Alphax Non-Sync	115.00
515	"	"	"	"	"	In No. 2 Alphax Sync	120.00
516	10	254	5.6	6 1/8"	3 1/4 x 4 1/4 4 x 5	In No. 4 Iris Diaph. Barrel	132.00
517	"	"	"	"	"	In No. 3 Rapax Non-Sync	155.00
518	"	"	"	"	"	In No. 3 Rapax X-Sync	165.00
519	"	"	"	"	"	In No. 3 Rapax Full-Sync	180.00
520	"	"	"	"	"	In No. 3 Alphax Non-Sync	155.00
521	"	"	"	"	"	In No. 3 Alphax Sync	168.00
522	15	380	5.6	9 5/8"	4 x 5 5 x 7	In No. 6 Iris Diaph. Barrel	195.00
523	"	"	"	"	"	In No. 4 Alphax Non-Sync	212.00
524	"	"	"	"	"	In No. 4 Alphax Sync	219.00

RAPTAR WIDE ANGLE f/6.8 (Wocoted)



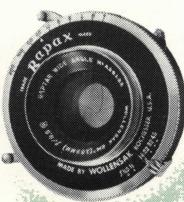
65mm f/6.8
Raptar Wide
Angle in Rapax
Full-Sync. Shutter



3 1/2" (90mm)
f/6.8 Raptar
Wide Angle in
Non-Sync. Shutter

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List With Tax
	Inch	mm	f				
550	2 1/8	65	6.8	3 1/4 x 4 1/4*	88.5°	In No. 1 Iris Diaph. Barrel	\$ 66.67
551	"	"	"	"	"	In No. 1 Rapax Non-Sync	82.03
552	"	"	"	"	"	In No. 1 Rapax X-Sync	88.53
553	"	"	"	"	"	In No. 1 Rapax Full-Sync	102.53
554	3 1/2	90	6.8	4 x 5	84°	In No. 1 Iris Diaph. Barrel	70.63
555	"	"	"	"	"	In No. 1 Rapax Non-Sync	84.92
556	"	"	"	"	"	In No. 1 Rapax X-Sync	91.92
557	"	"	"	"	"	In No. 1 Rapax Full-Sync	105.42
558	4 1/4	108	6.8	5 x 7	90°	In No. 2 Iris Diaph. Barrel	76.84
559	"	"	"	"	"	In No. 2 Rapax Non-Sync	96.76
560	"	"	"	"	"	In No. 2 Rapax X-Sync	104.76
561	"	"	"	"	"	In No. 2 Rapax Full-Sync	121.76
562	"	"	"	"	"	In No. 2 Alphax Non-Sync	94.26
563	"	"	"	"	"	In No. 2 Alphax Sync	98.76

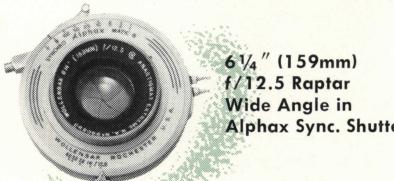
RAPTAR Series III WIDE ANGLE f/9.5 (Wocoted)



6 1/4" (159mm)
f/9.5 Raptar
Wide Angle in
Non-Sync. Shutter

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List
	Inch	mm	f				
575	6 1/4	159	9.5	8 x 10	90°	In No. 4 Iris Diaph. Barrel	\$ 103.00
576	"	"	"	"	"	In No. 3 Rapax Non-Sync	127.00
577	"	"	"	"	"	In No. 3 Rapax X-Sync	134.00
578	"	"	"	"	"	In No. 3 Rapax Full-Sync	153.00
579	"	"	"	"	"	In No. 3 Alphax Non-Sync	147.00
580	"	"	"	"	"	In No. 3 Alphax Sync	155.00

RAPTAR Series IIIa WIDE ANGLE f/12.5 (Wocoted)



6 1/4" (159mm)
f/12.5 Raptar
Wide Angle in
Alphax Sync. Shutter

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List
	Inch	mm	f				
590	6 1/4	159	12.5	8 x 10	90°	In No. 4 Iris Diaph. Barrel	\$ 75.00
591	"	"	"	"	"	In No. 3 Rapax Non-Sync	97.50
592	"	"	"	"	"	In No. 3 Rapax X-Sync	105.00
593	"	"	"	"	"	In No. 3 Rapax Full-Sync	125.00
594	"	"	"	"	"	In No. 3 Alphax Non-Sync	102.50
595	"	"	"	"	"	In No. 3 Alphax Sync	108.00

NOTE: See Alphax Shutters for synchronization data. Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to Raptar Telephoto f/5.6, Series III Wide Angle f/9.5 and Series IIIa Wide Angle f/12.5 Lenses (Wocoted)

Raptars

For Commercial and Industrial Work

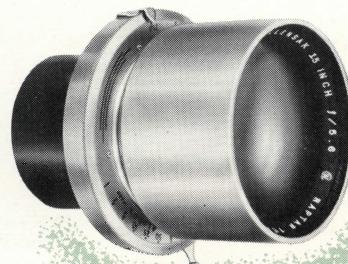
Series Ia, Series II, Telephoto and Wide Angle Lenses

For cameras having
interchangeable lens boards

For exceptionally large coverage, extreme adaptability and the versatility of three focal length lenses in one there is no finer lens than the Raptar Series I a Triple Convertible. Front and rear elements are complete corrected lenses. Used together they form a lens of normal focal lengths. Used separately, the focal lengths of either the front or rear elements are longer. Where true perspective, larger images, or telephoto effects are desired, you merely remove the front combination, or the rear combination, replacing it with the front. These double protar type lenses consist of two 4-element halves, each of which is color corrected and anastigmatic.



8 1/4" f/6.8 Raptar
Series Ia Convertible
in Rapax Non-Sync. Shutter



15" f/5.6
Raptar Telephoto in
Alphax Non-Sync. Shutter



Made with a Series Ia Lens

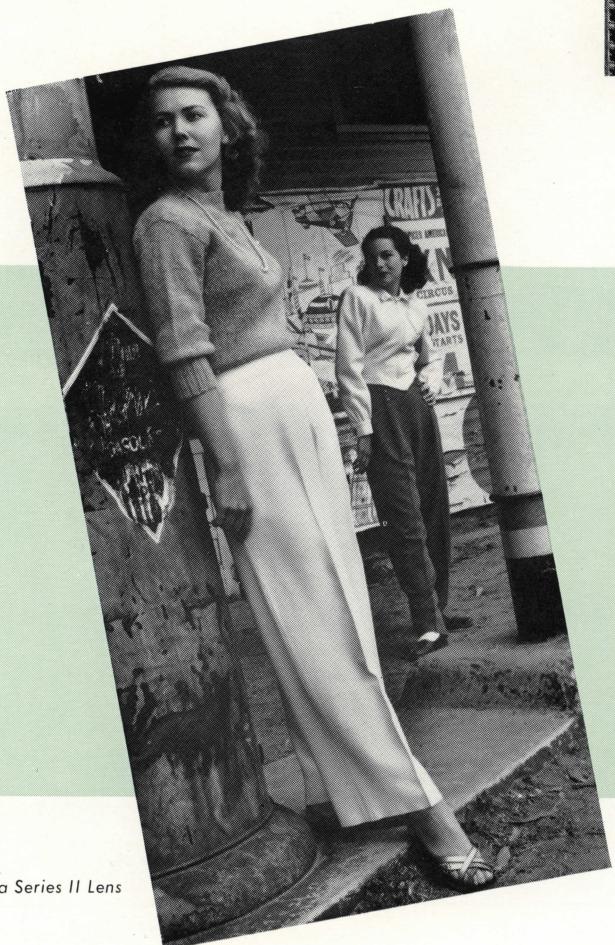
Triple Convertible lenses are recommended for taking landscapes, making industrial shots and architectural studies, and doing illustrative and commercial photography.

Longer focal length lenses in the Raptar Series II or the telephoto-type lenses also provide the true perspective essential for top quality commercial work.

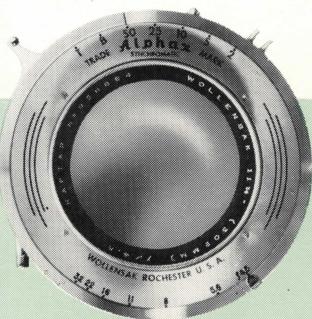
Where space is a factor it is essential that the commercial photographer use a Wide Angle lens to cover his assignment properly.



Made with a Telephoto Lens



Made with a Series II Lens



11 7/8" (302mm)
f/4.5 Raptar Series II in
Alphax-Sync. Shutter

3 1/2" (90mm)
f/6.8 Wide Angle
Raptar in Rapax
Non-Sync. Shutter



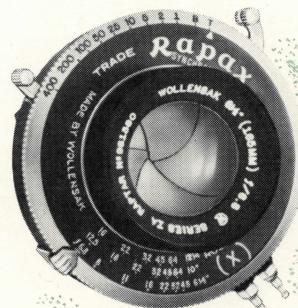
RAPTOR Series Ia CONVERTIBLE f/6.8 (Wocoted)

Catalog Number	Equiv. Focus Inch	Equiv. Focus mm	Front Focus Inch	Rear Focus Inch	Speed f	Film Size	Mounting	List
610	6½	165	12¾	10	6.8	4 x 5	In No. 2 Iris Diaph. Barrel	\$ 90.00
611	"	"	"	"	"	"	In No. 2 Rapax Non-Sync	110.00
612	"	"	"	"	"	"	In No. 2 Rapax X-Sync	120.00
613	"	"	"	"	"	"	In No. 2 Rapax Full-Sync	140.00
614	"	"	"	"	"	"	In No. 2 Alphax Non-Sync	120.00
615	"	"	"	"	"	"	In No. 2 Alphax Sync	125.00
616	8¼	210	15½	12¾	6.8	5 x 8	In No. 4 Iris Diaph. Barrel	120.00
617	"	"	"	"	"	"	In No. 3 Rapax Non-Sync	145.00
618	"	"	"	"	"	"	In No. 3 Rapax X-Sync	150.00
619	"	"	"	"	"	"	In No. 3 Rapax Full-Sync	165.00
620	"	"	"	"	"	"	In No. 3 Alphax Non-Sync	145.00
621	"	"	"	"	"	"	In No. 3 Alphax Sync	160.00
622	10	254	20	15½	6.8	6½ x 8½	In No. 4 Iris Diaph. Barrel	155.00
623	"	"	"	"	"	"	In No. 3 Rapax Non-Sync	180.00
624	"	"	"	"	"	"	In No. 3 Rapax X-Sync	190.00
625	"	"	"	"	"	"	In No. 3 Rapax Full-Sync	200.00
626	"	"	"	"	"	"	In No. 3 Alphax Non-Sync	180.00
627	"	"	"	"	"	"	In No. 3 Alphax Sync	190.00
628	13	330	25½	20	6.8	8 x 10	In No. 6 Iris Diaph. Barrel	200.00
629	"	"	"	"	"	"	In No. 4 Alphax Non-Sync	220.00
630	"	"	"	"	"	"	In No. 4 Alphax Sync	230.00

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.



6 1/2" f/6.8
Raptor Series Ia Convertible
in Rapax X-Sync. Shutter

RAPTOR Series II f/4.5 (Wocoted)

Catalog Number	Equiv. Focus		f	Film Size	Mounting	List
	Inch	mm				
436	6¾	162	4.5	4 x 5	In No. 4 Iris Diaph. Barrel	65.00
437	"	"	"	"	In No. 3 Rapax Non-Sync	87.50
438	"	"	"	"	In No. 3 Rapax X-Sync	95.00
439	"	"	"	"	In No. 3 Rapax Full-Sync	110.00
440	"	"	"	"	In No. 3 Alphax Non-Sync	87.50
441	"	"	"	"	In No. 3 Alphax Sync	97.50
442	7½	190	4.5	5 x 7	In No. 5 Iris Diaph. Barrel	85.00
443	"	"	"	"	In No. 3 Alphax Non-Sync	110.00
444	"	"	"	"	In No. 3 Alphax Sync	120.00
445	8¼	210	4.5	5 x 8	In No. 6 Iris Diaph. Barrel	130.00
446	"	"	"	"	In No. 4 Alphax Non-Sync	147.50
447	"	"	"	"	In No. 4 Alphax Sync	155.00
448	9½	241	4.5	6½ x 8½	In No. 6 Iris Diaph. Barrel	175.00
449	"	"	"	"	In No. 4 Alphax Non-Sync	189.00
450	"	"	"	"	In No. 4 Alphax Sync	195.00
451	11¾	302	4.5	8 x 10	In No. 7 Iris Diaph. Barrel	225.00
452	"	"	"	"	In No. 5 Alphax Non-Sync	240.00
453	"	"	"	"	In No. 5 Alphax Sync	248.00

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.



11 1/8" f/4.5
Raptor Series II in
Alphax Sync. Shutter

RAPTAR TELEPHOTO f/5.6 (Wocoted)



15" f/5.6 Raptar
Telephoto in Barrel

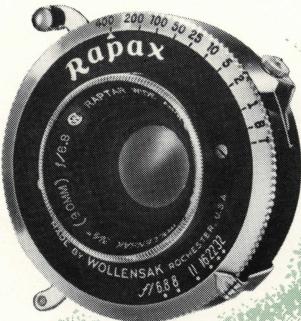
Catalog Number	Equiv. Focus			Bellows Draw (flange focus) Required at Infinity	Film Size	Mounting	List
	Inch	mm	f				
516	10	254	5.6	6 1/8"	3 1/4 x 4 1/4 4 x 5	In No. 4 Iris Diaph. Barrel	132.00
517	"	"	"	"	"	In No. 3 Rapax Non-Sync	155.00
518	"	"	"	"	"	In No. 3 Rapax X-Sync	165.00
519	"	"	"	"	"	In No. 3 Rapax Full-Sync	180.00
520	"	"	"	"	"	In No. 3 Alphax Non-Sync	155.00
521	"	"	"	"	"	In No. 3 Alphax Sync	168.00
522	15	380	5.6	9 5/16"	4 x 5 5 x 7	In No. 6 Iris Diaph. Barrel	195.00
523	"	"	"	"	"	In No. 4 Alphax Non-Sync	212.00
524	"	"	"	"	"	In No. 4 Alphax Sync	219.00

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.

RAPTAR WIDE ANGLE f/6.8 (Wocoted)



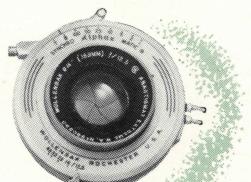
3 1/2" (90mm) f/6.8
Raptar Wide Angle
in Non-Sync. Rapax

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List With Tax
	Inch	mm	f				
554	3 1/2	90	6.8	4 x 5	84°	In No. 1 Iris Diaph. Barrel	70.63
555	"	"	"	"	"	In No. 1 Rapax Non-Sync	84.92
556	"	"	"	"	"	In No. 1 Rapax X-Sync	91.92
557	"	"	"	"	"	In No. 1 Rapax Full-Sync	105.42
558	4 1/4	108	6.8	5 x 7	90°	In No. 2 Iris Diaph. Barrel	76.84
559	"	"	"	"	"	In No. 2 Rapax Non-Sync	96.76
560	"	"	"	"	"	In No. 2 Rapax X-Sync	104.76
561	"	"	"	"	"	In No. 2 Rapax Full-Sync	121.76
562	"	"	"	"	"	In No. 2 Alphax Non-Sync	94.26
563	"	"	"	"	"	In No. 2 Alphax Sync	98.76

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

RAPTAR Series III WIDE ANGLE f/9.5 (Wocoted)



6 1/4" (159mm) f/9.5
Raptar Wide Angle in
Alphax Sync. Shutter

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List
	Inch	mm	f				
575	6 1/4	159	9.5	8 x 10	90°	In No. 4 Iris Diaph. Barrel	\$103.00
576	"	"	"	"	"	In No. 3 Rapax Non-Sync	127.00
577	"	"	"	"	"	In No. 3 Rapax X-Sync	134.00
578	"	"	"	"	"	In No. 3 Rapax Full-Sync	153.00
579	"	"	"	"	"	In No. 3 Alphax Non-Sync	147.00
580	"	"	"	"	"	In No. 3 Alphax Sync	155.00

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.

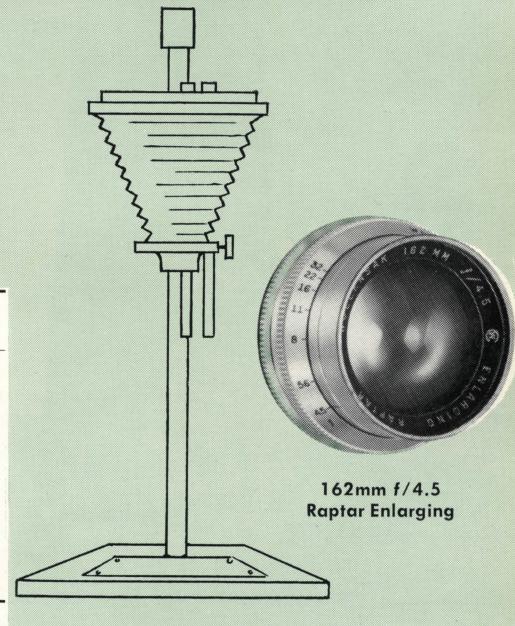
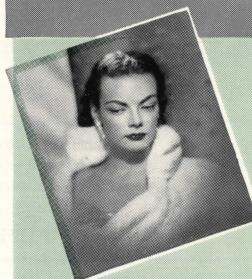
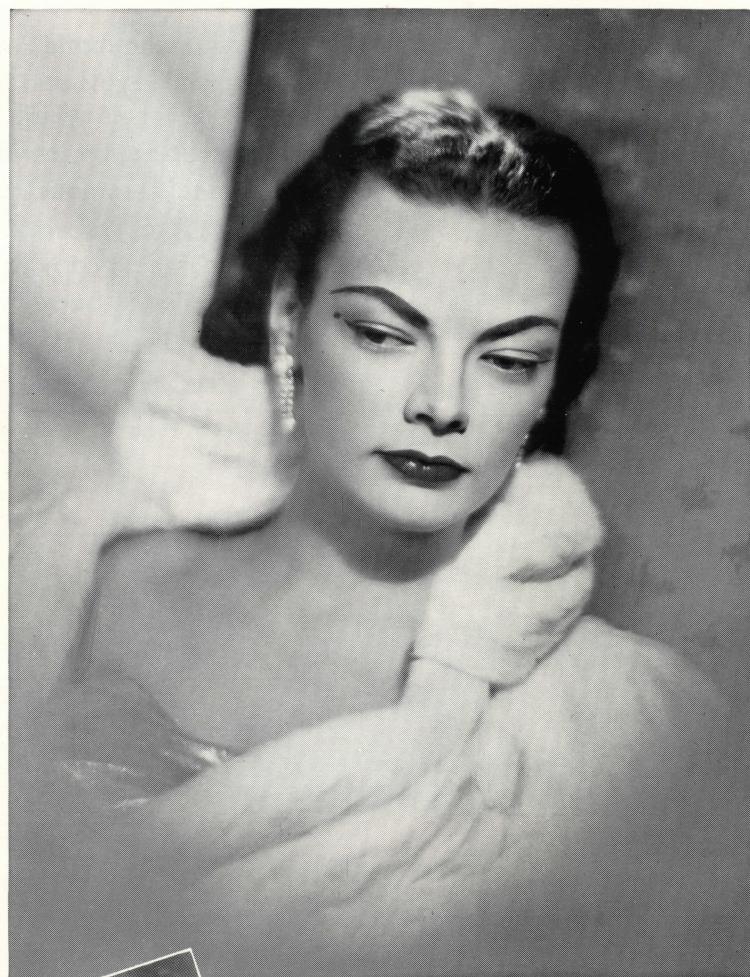
Raptars

For Enlarging

Professional and amateur photographers who want the finest in enlarging lenses . . . lenses that produce crisp, brilliant enlargements . . . lenses that capture all the tonal qualities and detail of the negative, will select a Wollensak Enlarging Raptar.

This series of Raptars is designed to do one specific job — make enlargements. So Enlarging Raptars are designed specifically for a flat field at a short range to project from a flat surface to a flat surface.

It also means that Enlarging Raptars are exceptionally well corrected for chromatic aberrations . . . important since enlarging lenses are usually focused by visual inspection of the projected image. Light should be distributed evenly over the entire print surface with corners as fully lighted as the center portion of the enlargement. Finally, it means Enlarging Raptars deliver high resolution without sacrifice of contrast . . . very necessary if over-all sharp enlargements are to be produced. Like all Raptar lenses they are Wocoted. Complete range of focal lengths from 2" to 11 7/8".



Number	Equiv. Focus Inch	mm	Film Size	Mounting	List
710	*2	50	1 1/4 x 1 5/8	In No. 1 Iris Diaph. Barrel	\$ 26.50
711	*3	75	2 1/4 x 2 1/4	In No. 1 Iris Diaph. Barrel	29.00
712	*3 1/2	90	2 1/4 x 3 1/4	In No. 1 Iris Diaph. Barrel	30.00
713	*4	101	2 1/4 x 3 1/4	In No. 1 Iris Diaph. Barrel	35.00
714	*5	127	3 1/4 x 4 1/4	In No. 2 Iris Diaph. Barrel	42.50
715	*5 3/8	135	4 x 5	In No. 3 Iris Diaph. Barrel	45.00
716	*6 3/8	162	4 x 5	In No. 4 Iris Diaph. Barrel	60.00
717	7 1/2	190	5 x 7	In No. 5 Iris Diaph. Barrel	82.50
718	8 1/4	210	5 x 8	In No. 6 Iris Diaph. Barrel	125.00
719	9 1/2	241	6 1/2 x 8 1/2	In No. 6 Iris Diaph. Barrel	160.00
720	11 7/8	302	8 x 10	In No. 7 Iris Diaph. Barrel	215.00

*Supplied with click stops.

No Federal Excise Tax applicable to the above items.



Lenses for Copying

The Raptar Apochromatic Process lenses are recommended for both critical copy work like line cuts and for the less critical copy work such as halftones. Also excellent for copying, enlarging and reducing because of their flat field, even illumination, chromatic correction and over-all covering power. The exceptional chromatic qualities of the Raptar Process lens make it ideal for four-color process work. Over-all sharpness with maximum resolution is maintained for all copy ratios.

When supplied in barrel mounting, the barrel is slotted to accept waterhouse stops.

Raptar Apochromatic Process f/10 Lenses (Wocoted)

Catalog Number	Equiv. Focus		Plates Covered for Reduction Inch	Plates Covered for Full-Size Copy Inch	Mounting	List
	Inch	mm				
650	10 1/4	260	6 1/2 x 8 1/2	10 x 12	In No. 3 Iris Diaph. Barrel	\$135.00
651	"	"	"	"	In No. 3 Rapax Non-Sync	160.00
652	"	"	"	"	In No. 3 Rapax X-Sync	165.00
653	"	"	"	"	In No. 3 Rapax Full-Sync	180.00
654	"	"	"	"	In No. 3 Alphax Non-Sync	160.00
655	"	"	"	"	In No. 3 Alphax Sync	170.00
656	14	355	8 x 10	11 x 14	In No. 4 Iris Diaph. Barrel	174.00
657	"	"	"	"	In No. 3 Rapax Non-Sync	192.00
658	"	"	"	"	In No. 3 Rapax X-Sync	200.00
659	"	"	"	"	In No. 3 Rapax Full-Sync	220.00
660	"	"	"	"	In No. 3 Alphax Non-Sync	200.00
661	"	"	"	"	In No. 3 Alphax Sync	215.00
662	16	406	10 x 12	12 x 15	In No. 5 Iris Diaph. Barrel	200.00
663	"	"	"	"	In No. 3 Alphax Non-Sync	230.00
664	"	"	"	"	In No. 3 Alphax Sync	240.00
665	19	482	12 x 15	14 x 17	In No. 6 Iris Diaph. Barrel	240.00
666	"	"	"	"	In No. 4 Alphax Non-Sync	260.00
667	"	"	"	"	In No. 4 Alphax Sync	265.00
668	25	635	16 x 20	20 x 24	In No. 7 Iris Diaph. Barrel	340.00
669	"	"	"	"	In No. 5 Alphax Non-Sync	360.00
670	"	"	"	"	In No. 5 Alphax Sync	365.00

NOTE: See Alphax Shutters for synchronization data.

Process Lenses supplied with slotted barrel and one waterhouse stop.

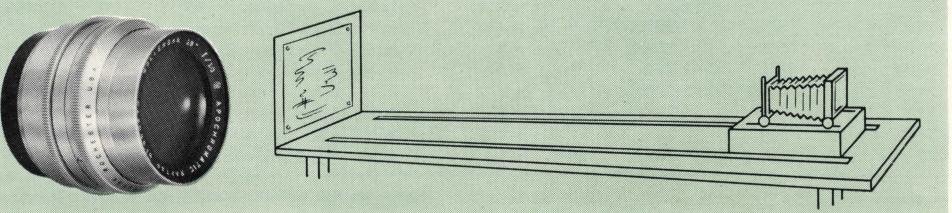
No Federal Excise Tax applicable to the above items.

Prisms for Process Lenses

Catalog Number	Size Inches	Description	List
690	2	Prisms.....	\$125.00
691	2 1/2	Prisms.....	135.00
692	3	Prisms.....	185.00
693	3 1/2	Prisms.....	235.00

Extra charge for fitting Prisms to lenses of other makes.

No Federal Excise Tax applicable to the above items.



19" f/10 Apochromatic Process Raptar

Lenses for Portraiture

• Veritar, Telephoto and Series II Lenses

For cameras having interchangeable lens boards

The **Portrait Veritar** permits camera artists to create portraits of the right degree of controllable softness or sharpness. At $f/6$ or $f/8$ there's color brilliancy and sparkle, as well as a general softness with a plastic roundness. Unessential wiry detail is suppressed. Stopped down the Veritar approaches the sharp performance of an anastigmat. Gone is guesswork. Negatives have the exact sharpness or softness of the image seen on the ground glass. Retouching is reduced to a minimum. Color corrected and Wocoted the Veritar comes in 10-inch and 14-inch focal lengths.

14" f/6
Veritar in Alphax
Sync. Shutter



For crisp, sharp portraiture some studios use the Series II Raptar . . . ideal where a sharp lens with anastigmatic qualities is needed. The $9\frac{1}{2}$ " lens should be used on split 5×7 film, the $11\frac{7}{8}$ " on a full 5×7 for heads and 8×10 for full figure work.



Made with a Series II Lens



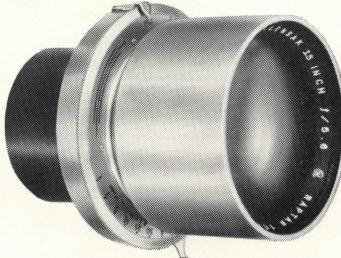
Made with a Veritar Lens

Because of their long focus and true perspective many photographers find Raptar Telephoto $f/5.6$ lenses well suited for portrait photography . . . especially for home portraiture where 4×5 press and view type cameras are used.

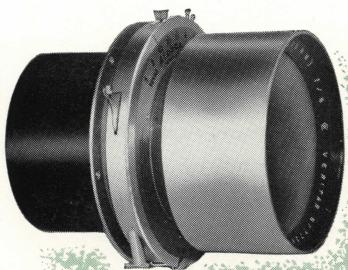
11 $\frac{7}{8}$ " (302mm) f/4.5
Raptar Series II in
Alphax Sync. Shutter



15" f/5.6 Raptar
Telephoto in Alphax
Non-Sync. Shutter



PORTRAIT VERITAR f/6 (Wocoted)



14" f/6 Veritar in
Alphax Sync. Shutter

Catalog Number	Equiv. Focus Inch	Equiv. Focus mm	Film Size	Mounting	List
475	10	254	5 x 7	In No. 6 Iris Diaph. Barrel	\$115.00
476	"	"	"	In No. 4 Alphax Non-Sync	145.00
477	"	"	"	In No. 4 Alphax Sync	160.00
478	14	356	8 x 10	In No. 8 Iris Diaph. Barrel	190.00
479	"	"	"	In No. 5 Alphax Non-Sync	198.00
480	"	"	"	In No. 5 Alphax Sync	205.00

NOTE: See Alphax Shutters for synchronization data.
Prices of Lenses in Shutters do not include cable releases.
No Federal Excise Tax applicable to the above items.

RAPTAR Series II f/4.5 (Wocoted)

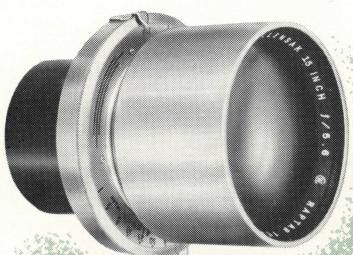


11 1/8" (302mm) f/4.5 Raptar
Series II in Alphax Sync. Shutter

Catalog Number	Equiv. Focus Inch	Equiv. Focus mm	f	Film Size	Mounting	List
448	9 1/2	241	4.5	6 1/2 x 8 1/2	In No. 6 Iris Diaph. Barrel	175.00
449	"	"	"	"	In No. 4 Alphax Non-Sync	189.00
450	"	"	"	"	In No. 4 Alphax Sync	195.00
451	11 1/8	302	4.5	8 x 10	In No. 7 Iris Diaph. Barrel	225.00
452	"	"	"	"	In No. 5 Alphax Non-Sync	240.00
453	"	"	"	"	In No. 5 Alphax Sync	248.00

NOTE: See Alphax Shutters for synchronization data.
Prices of Lenses in Shutters do not include cable releases.
No Federal Excise Tax applicable to the above items.

RAPTAR TELEPHOTO f/5.6 (Wocoted)



15" f/5.6
Raptar Telephoto in
Alphax Non-Sync. Shutter

Catalog Number	Equiv. Focus			Bellows Draw (flange focus) Required at Infinity		Film Size	Mounting	List
	Inch	mm	f					
510	8	202	5.6	5"	2 1/4 x 3 1/4 3 1/4 x 4 1/4	In No. 3 Iris Diaph. Barrel	\$ 97.50	
511	"	"	"	"	"	In No. 2 Rapax Non-Sync	117.50	
512	"	"	"	"	"	In No. 2 Rapax X-Sync	127.50	
513	"	"	"	"	"	In No. 2 Rapax Full-Sync	145.00	
514	"	"	"	"	"	In No. 2 Alphax Non-Sync	115.00	
515	"	"	"	"	"	In No. 2 Alphax Sync	120.00	
516	10	254	5.6	6 1/8"	3 1/4 x 4 1/4 4 x 5	In No. 4 Iris Diaph. Barrel	132.00	
517	"	"	"	"	"	In No. 3 Rapax Non-Sync	155.00	
518	"	"	"	"	"	In No. 3 Rapax X-Sync	165.00	
519	"	"	"	"	"	In No. 3 Rapax Full-Sync	180.00	
520	"	"	"	"	"	In No. 3 Alphax Non-Sync	155.00	
521	"	"	"	"	"	In No. 3 Alphax Sync	168.00	
522	15	380	5.6	9 5/16"	4 x 5 5 x 7	In No. 6 Iris Diaph. Barrel	195.00	
523	"	"	"	"	"	In No. 4 Alphax Non-Sync	212.00	
524	"	"	"	"	"	In No. 4 Alphax Sync	219.00	

NOTE: See Alphax Shutters for synchronization data.
Prices of Lenses in Shutters do not include cable releases.
No Federal Excise Tax applicable to the above items.

Wollensak **THERMO-SETTING CEMENT**



Thermo-setting cements were developed before and improved during the last war. These new adhesives hold lens elements firmly together, without harmful strain through quick and extreme temperature and humidity changes. They are entirely stable throughout the temperature range from -60°F to $+160^{\circ}\text{F}$, and in all humidity conditions.

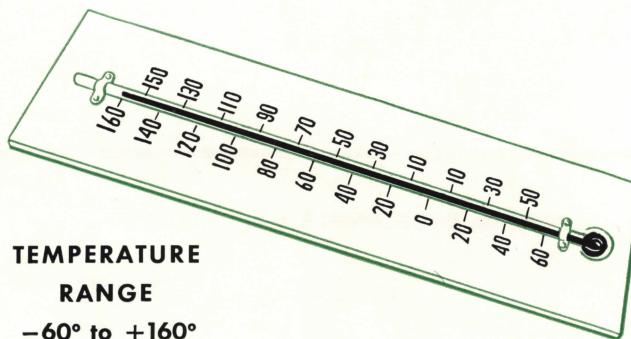


The widespread enjoyment of photography and the increase in travel by camera fans to all parts of the world convinced Wollensak that in order to maintain the high Raptar standards of lens performance **thermo-setting cement** must be used in all Wollensak lenses containing cemented lenses, whether for military or civilian use.

**THERMO-SETTING
CEMENT IS USED
IN ALL
WOLLENSAK
LENSSES
CONTAINING
CEMENTED
ELEMENTS.**

Even photo fans who stay at home in temperate climates are not free from extreme temperature variations. Imagine a camera locked in a closed car parked in the broiling sun on a cloudless sunny day . . . on the desert, near your mountain retreat, or city home. Here the temperature will go well over 100°F . The old type thermo-plastic cement, as its name implies, became fluid with the heat causing the cement to blister and the elements to separate. This is why Wollensak has changed to **thermo-setting cement!**

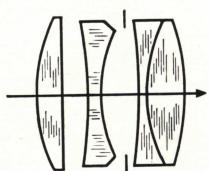
Now all Wollensak lenses whether for still cameras, movie cameras, or enlargers . . . wherever the optical elements are cemented together . . . are cemented with the best of the **thermo-setting cements**. Another Wollensak **first** that assures the highest quality in lens performance.



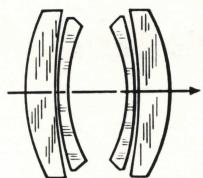
Wollensak

PHOTOGRAPHIC LENS CONSTRUCTIONS

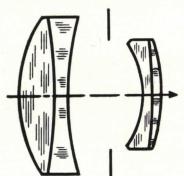
RAPTAR SERIES II f/4.5 LENSES



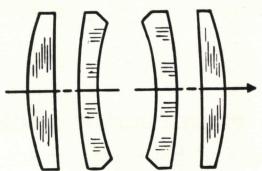
RAPTAR WIDE ANGLE f/12.5 LENSES



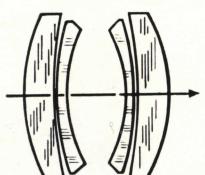
RAPTAR TELEPHOTO f/5.6 LENSES



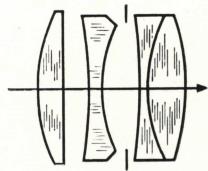
RAPTAR APOCHROMATIC PROCESS f/10 LENSES



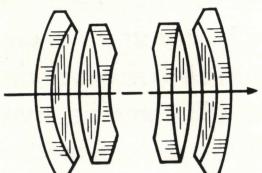
RAPTAR WIDE ANGLE f/6.8 LENSES



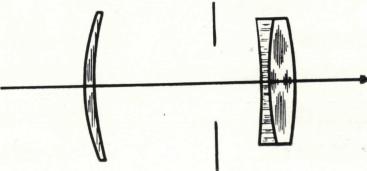
RAPTAR ENLARGING f/4.5 LENSES



RAPTAR WIDE ANGLE f/9.5 LENSES



VERITAR f/6 LENSES



CONFIDENTIAL DEALER PRICE LIST

Wollensak Lenses, Shutters and Accessories For Still Photography

Raptar Series II f/4.5 Lenses (Wocoted)

Catalog Number	Equiv. Focus		f	Film Size	Mounting	List With Tax	Dealer Net With Tax
	Inch	mm					
410	3½	90	4.5	2½ x 3¼	In No. 1 Iris Diaph. Barrel	\$ 39.55	\$ 27.30
411	"	"	"	"	In No. 1 Rapax Non-Sync	55.62	37.25
412	"	"	"	"	In No. 1 Rapax X-Sync	61.62	41.15
413	"	"	"	"	In No. 1 Rapax Full-Sync	76.12	50.57
414	4	101	4.5	2½ x 3¼	In No. 1 Iris Diaph. Barrel	40.68	28.08
415	"	"	"	"	In No. 1 Rapax Non-Sync	56.12	37.57
416	"	"	"	"	In No. 1 Rapax X-Sync	62.62	41.80
417	"	"	"	"	In No. 1 Rapax Full-Sync	78.12	51.87
418	4½	114	4.5	2½ x 3¼	In No. 2 Iris Diaph. Barrel	50.85	35.10
419	"	"	"	"	In No. 2 Rapax Non-Sync	65.27	43.75
420	"	"	"	"	In No. 2 Rapax X-Sync	71.27	47.65
421	"	"	"	"	In No. 2 Rapax Full-Sync	88.77	59.02
422	"	"	"	"	In No. 2 Alphax Non-Sync	61.77	41.47
423	"	"	"	"	In No. 2 Alphax Sync	66.77	44.72
No Federal Excise Tax applicable to the following items.						List	Dealer Net
424	5	127	4.5	3¼ x 4¼	In No. 2 Iris Diaph. Barrel	\$ 45.00	\$ 29.25
425	"	"	"	"	In No. 2 Rapax Non-Sync	61.50	39.98
426	"	"	"	"	In No. 2 Rapax X-Sync	67.50	43.88
427	"	"	"	"	In No. 2 Rapax Full-Sync	85.00	55.25
428	"	"	"	"	In No. 2 Alphax Non-Sync	58.00	37.70
429	"	"	"	"	In No. 2 Alphax Sync	63.00	40.95
430	5¾	135	4.5	4 x 5	In No. 3 Iris Diaph. Barrel	47.50	30.88
431	"	"	4.7	"	In No. 2 Rapax Non-Sync	62.50	40.63
432	"	"	"	"	In No. 2 Rapax X-Sync	69.50	45.18
433	"	"	"	"	In No. 2 Rapax Full-Sync	87.50	56.88
434	"	"	"	"	In No. 2 Alphax Non-Sync	60.00	39.00
435	"	"	"	"	In No. 2 Alphax Sync	65.00	42.25
436	6¾	162	4.5	4 x 5	In No. 4 Iris Diaph. Barrel	65.00	42.25
437	"	"	"	"	In No. 3 Rapax Non-Sync	87.50	56.88
438	"	"	"	"	In No. 3 Rapax X-Sync	95.00	61.75
439	"	"	"	"	In No. 3 Rapax Full-Sync	110.00	71.50
440	"	"	"	"	In No. 3 Alphax Non-Sync	87.50	56.88
441	"	"	"	"	In No. 3 Alphax Sync	97.50	63.38
442	7½	190	4.5	5 x 7	In No. 5 Iris Diaph. Barrel	85.00	55.25
443	"	"	"	"	In No. 3 Alphax Non-Sync	110.00	71.50
444	"	"	"	"	In No. 3 Alphax Sync	120.00	78.00
445	8¼	210	4.5	5 x 8	In No. 6 Iris Diaph. Barrel	130.00	84.50
446	"	"	"	"	In No. 4 Alphax Non-Sync	147.50	95.88
447	"	"	"	"	In No. 4 Alphax Sync	155.00	100.75
448	9½	241	4.5	6½ x 8½	In No. 6 Iris Diaph. Barrel	175.00	113.75
449	"	"	"	"	In No. 4 Alphax Non-Sync	189.00	122.85
450	"	"	"	"	In No. 4 Alphax Sync	195.00	126.75
451	11¾	302	4.5	8 x 10	In No. 7 Iris Diaph. Barrel	225.00	146.25
452	"	"	"	"	In No. 5 Alphax Non-Sync	240.00	156.00
453	"	"	"	"	In No. 5 Alphax Sync	248.00	161.20

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

Raptar Telephoto f/5.6 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Bellows Draw (flange focus) Required at Infinity	Film Size	Mounting	List	Dealer Net
	Inch	mm	f					
510	8	202	5.6	5"	2 1/4 x 3 1/4 3 1/4 x 4 1/4	In No. 3 Iris Diaph. Barrel	\$ 97.50	\$ 63.38
511	"	"	"	"	"	In No. 2 Rapax Non-Sync	117.50	76.38
512	"	"	"	"	"	In No. 2 Rapax X-Sync	127.50	82.88
513	"	"	"	"	"	In No. 2 Rapax Full-Sync	145.00	94.25
514	"	"	"	"	"	In No. 2 Alphax Non-Sync	115.00	74.75
515	"	"	"	"	"	In No. 2 Alphax Sync	120.00	78.00
516	10	254	5.6	6 1/8"	3 1/4 x 4 1/4 4 x 5	In No. 4 Iris Diaph. Barrel	132.00	85.80
517	"	"	"	"	"	In No. 3 Rapax Non-Sync	155.00	100.75
518	"	"	"	"	"	In No. 3 Rapax X-Sync	165.00	107.25
519	"	"	"	"	"	In No. 3 Rapax Full-Sync	180.00	117.00
520	"	"	"	"	"	In No. 3 Alphax Non-Sync	155.00	100.75
521	"	"	"	"	"	In No. 3 Alphax Sync	168.00	109.20
522	15	380	5.6	9 5/16"	4 x 5 5 x 7	In No. 6 Iris Diaph. Barrel	195.00	126.75
523	"	"	"	"	"	In No. 4 Alphax Non-Sync	212.00	137.80
524	"	"	"	"	"	In No. 4 Alphax Sync	219.00	142.35

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to Raptar Telephoto f/5.6 (Wocoted).

Raptar Wide Angle f/6.8 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List With Tax	Dealer Net With Tax
	Inch	mm	f					
550	2 1/16	65	6.8	3 1/4 x 4 1/4*	88.5°	In No. 1 Iris Diaph. Barrel	\$ 66.67	\$ 46.02
551	"	"	"	"	"	In No. 1 Rapax Non-Sync	82.03	55.26
552	"	"	"	"	"	In No. 1 Rapax X-Sync	88.53	59.48
553	"	"	"	"	"	In No. 1 Rapax Full-Sync	102.53	68.58
554	3 1/2	90	6.8	4 x 5	84°	In No. 1 Iris Diaph. Barrel	70.63	48.76
555	"	"	"	"	"	In No. 1 Rapax Non-Sync	84.92	57.27
556	"	"	"	"	"	In No. 1 Rapax X-Sync	91.92	61.82
557	"	"	"	"	"	In No. 1 Rapax Full-Sync	105.42	70.60
558	4 1/4	108	6.8	5 x 7	90°	In No. 2 Iris Diaph. Barrel	76.84	53.04
559	"	"	"	"	"	In No. 2 Rapax Non-Sync	96.76	65.26
560	"	"	"	"	"	In No. 2 Rapax X-Sync	104.76	70.46
561	"	"	"	"	"	In No. 2 Rapax Full-Sync	121.76	81.51
562	"	"	"	"	"	In No. 2 Alphax Non-Sync	94.26	63.64
563	"	"	"	"	"	In No. 2 Alphax Sync	98.76	66.56

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

*When used on 2 1/4 x 3 1/4 angle is 75°

Series III Raptar Wide Angle f/9.5 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List	Dealer Net
	Inch	mm	f					
575	6 1/4	159	9.5	8 x 10	90°	In No. 4 Iris Diaph. Barrel	\$ 103.00	\$ 66.95
576	"	"	"	"	"	In No. 3 Rapax Non-Sync	127.00	82.55
577	"	"	"	"	"	In No. 3 Rapax X-Sync	134.00	87.10
578	"	"	"	"	"	In No. 3 Rapax Full-Sync	153.00	99.45
579	"	"	"	"	"	In No. 3 Alphax Non-Sync	147.00	95.55
580	"	"	"	"	"	In No. 3 Alphax Sync	155.00	100.75

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to Series III Raptar Wide Angle f/9.5 Lenses (Wocoted).

Series IIIa Extreme Wide Angle f/12.5 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Film Size	Angle of View	Mounting	List	Dealer Net
	Inch	mm	f					
590	6 1/4	159	12.5	8 x 10	90°	In No. 4 Iris Diaph. Barrel	\$ 75.00	\$ 48.75
591	"	"	"	"	"	In No. 3 Rapax Non-Sync	97.50	63.38
592	"	"	"	"	"	In No. 3 Rapax X-Sync	105.00	68.25
593	"	"	"	"	"	In No. 3 Rapax Full-Sync	125.00	81.25
594	"	"	"	"	"	In No. 3 Alphax Non-Sync	102.50	66.63
595	"	"	"	"	"	In No. 3 Alphax Sync	108.00	70.20

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to Series IIIa Extreme Wide Angle f/12.5 Lenses (Wocoted).

Raptar Series Ia Convertible f/6.8 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Front Focus Inch	Rear Focus Inch	Speed f	Film Size	Mounting	List	Dealer Net
	Inch	mm								
610	6 1/2	165	12 3/4	10	6.8	4 x 5	In No. 2 Iris Diaph. Barrel	\$ 90.00	\$ 58.50	
611	"	"	"	"	"	"	In No. 2 Rapax Non-Sync	110.00	71.50	
612	"	"	"	"	"	"	In No. 2 Rapax X-Sync	120.00	78.00	
613	"	"	"	"	"	"	In No. 2 Rapax Full-Sync	140.00	91.00	
614	"	"	"	"	"	"	In No. 2 Alphax Non-Sync	120.00	78.00	
615	"	"	"	"	"	"	In No. 2 Alphax Sync	125.00	81.25	
616	8 1/4	210	15 1/2	12 3/4	6.8	5 x 8	In No. 4 Iris Diaph. Barrel	120.00	78.00	
617	"	"	"	"	"	"	In No. 3 Rapax Non-Sync	145.00	94.25	
618	"	"	"	"	"	"	In No. 3 Rapax X-Sync	150.00	97.50	
619	"	"	"	"	"	"	In No. 3 Rapax Full-Sync	165.00	107.25	
620	"	"	"	"	"	"	In No. 3 Alphax Non-Sync	145.00	94.25	
621	"	"	"	"	"	"	In No. 3 Alphax Sync	160.00	104.00	
622	10	254	20	15 1/2	6.8	6 1/2 x 8 1/2	In No. 4 Iris Diaph. Barrel	155.00	100.75	
623	"	"	"	"	"	"	In No. 3 Rapax Non-Sync	180.00	117.00	
624	"	"	"	"	"	"	In No. 3 Rapax X-Sync	190.00	123.50	
625	"	"	"	"	"	"	In No. 3 Rapax Full-Sync	200.00	130.00	
626	"	"	"	"	"	"	In No. 3 Alphax Non-Sync	180.00	117.00	
627	"	"	"	"	"	"	In No. 3 Alphax Sync	190.00	123.50	
628	13	330	25 1/2	20	6.8	8 x 10	In No. 6 Iris Diaph. Barrel	200.00	130.00	
629	"	"	"	"	"	"	In No. 4 Alphax Non-Sync	220.00	143.00	
630	"	"	"	"	"	"	In No. 4 Alphax Sync	230.00	149.50	

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.

Raptar Apochromatic Process f/10 Lenses (Wocoted)

Catalog Number	Equiv. Focus			Plates Covered for Reduction Inch	Plates Covered for Full-Size Copy Inch	Mounting	List	Dealer Net
	Inch	mm						
650	10 1/4	260	6 1/2 x 8 1/2	10 x 12	"	In No. 3 Iris Diaph. Barrel	\$ 135.00	\$ 90.00
651	"	"	"	"	"	In No. 3 Rapax Non-Sync	160.00	106.67
652	"	"	"	"	"	In No. 3 Rapax X-Sync	165.00	110.00
653	"	"	"	"	"	In No. 3 Rapax Full-Sync	180.00	120.00
654	"	"	"	"	"	In No. 3 Alphax Non-Sync	160.00	106.67
655	"	"	"	"	"	In No. 3 Alphax Sync	170.00	113.34
656	14	355	8 x 10	11 x 14	"	In No. 4 Iris Diaph. Barrel	174.00	116.00
657	"	"	"	"	"	In No. 3 Rapax Non-Sync	192.00	128.00
658	"	"	"	"	"	In No. 3 Rapax X-Sync	200.00	133.34
659	"	"	"	"	"	In No. 3 Rapax Full-Sync	220.00	146.67
660	"	"	"	"	"	In No. 3 Alphax Non-Sync	200.00	133.34
661	"	"	"	"	"	In No. 3 Alphax Sync	215.00	143.34
662	16	406	10 x 12	12 x 15	"	In No. 5 Iris Diaph. Barrel	200.00	133.34
663	"	"	"	"	"	In No. 3 Alphax Non-Sync	230.00	153.34
664	"	"	"	"	"	In No. 3 Alphax Sync	240.00	160.00
665	19	482	12 x 15	14 x 17	"	In No. 6 Iris Diaph. Barrel	240.00	160.00
666	"	"	"	"	"	In No. 4 Alphax Non-Sync	260.00	173.34
667	"	"	"	"	"	In No. 4 Alphax Sync	265.00	176.68
668	25	635	16 x 20	20 x 24	"	In No. 7 Iris Diaph. Barrel	340.00	226.68
669	"	"	"	"	"	In No. 5 Alphax Non-Sync	360.00	240.02
670	"	"	"	"	"	In No. 5 Alphax Sync	365.00	243.35

NOTE: See Alphax Shutters for synchronization data.

Process Lenses supplied with slotted barrel and one waterhouse stop.

No Federal Excise Tax applicable to the above items.

Prisms For Process Lenses

Catalog Number	Size Inches	Description	List	Dealer Net
690	2	Prisms.....	\$125.00	\$ 83.34
691	2½	Prisms.....	135.00	90.00
692	3	Prisms.....	185.00	123.34
693	3½	Prisms.....	235.00	156.67

Extra charge for fitting Prisms to lenses of other makes.

No Federal Excise Tax applicable to the above items.

Portrait Veritar f/6 Lenses (Wocoted)

Catalog Number	Equiv. Focus Inch	mm	Film Size	Mounting	List	Dealer Net
475	10	254	5 x 7	In No. 6 Iris Diaph. Barrel	\$115.00	\$ 74.75
476	"	"	"	In No. 4 Alphax Non-Sync	145.00	94.25
477	"	"	"	In No. 4 Alphax Sync	160.00	104.00
478	14	356	8 x 10	In No. 8 Iris Diaph. Barrel	190.00	123.50
479	"	"	"	In No. 5 Alphax Non-Sync	198.00	128.70
480	"	"	"	In No. 5 Alphax Sync	205.00	133.25

NOTE: See Alphax Shutters for synchronization data.

Prices of Lenses in Shutters do not include cable releases.

No Federal Excise Tax applicable to the above items.

Enlarging Lenses

Raptar Enlarging f/4.5 Lenses (Wocoted)

Number	Equiv. Focus Inch	mm	Film Size	Mounting	List	Dealer Net
710	*2	50	1¼ x 1½	In No. 1 Iris Diaph. Barrel	\$ 26.50	\$15.90
711	*3	75	2¼ x 2¼	In No. 1 Iris Diaph. Barrel	29.00	17.40
712	*3½	90	2¼ x 3¼	In No. 1 Iris Diaph. Barrel	30.00	18.00
713	*4	101	2¼ x 3¼	In No. 1 Iris Diaph. Barrel	35.00	21.00
714	*5	127	3¼ x 4¼	In No. 2 Iris Diaph. Barrel	42.50	25.50
715	*5½	135	4 x 5	In No. 3 Iris Diaph. Barrel	45.00	27.00
716	*6½	162	4 x 5	In No. 4 Iris Diaph. Barrel	60.00	36.00
717	7½	190	5 x 7	In No. 5 Iris Diaph. Barrel	82.50	49.50
718	8¼	210	5 x 8	In No. 6 Iris Diaph. Barrel	125.00	75.00
719	9½	241	6½ x 8½	In No. 6 Iris Diaph. Barrel	160.00	96.00
720	11½	302	8 x 10	In No. 7 Iris Diaph. Barrel	215.00	129.00

*Supplied with click stops.

No Federal Excise Tax applicable to the above items.

Wollensak Shutters

Rapax Shutters

Catalog Number	Size	Maximum Diaphragm Open.		Lens Mount Thread Diameter		Speeds	Flange Diameter		Type Shutter	*List	*Dealer Net
		Inch	mm	Front Inches	Rear Inches		Inside Inches	Outside Inches			
750	0	11/16"	17.2"	7/8"	7/8"	1/2 to 1/400 plus T & B	6 1/64"	12 1/64"	Rapax Non-Sync	\$25.00	\$16.67
751	0								Rapax X-Sync	36.50	24.33
752	1	25/32"	20"	3 1/42"	1 1/32"	1 to 1/400 plus T & B	1 3/16"	11 1/16"	Rapax Non-Sync	33.00	22.00
753	1	"	"	"	"	"	"	"	Rapax X-Sync	40.00	26.67
754	1								Rapax Full Sync	55.00	36.67
755	2	1"	25.4"	1 1/4"	1 1/4"	1 to 1/400 plus T & B	1 21/64"	1 7/8"	Rapax Non-Sync	37.50	25.00
756	2	"	"	"	"	"	"	"	Rapax X-Sync	43.50	29.00
757	2								Rapax Full Sync	62.50	41.67
758	3	1 13/64"	31"	1 35/64"	1 37/64"	1 to 1/200 plus T & B	1 43/64"	2 19/64"	Rapax Non-Sync	43.00	28.67
759	3	"	"	"	"	"	"	"	Rapax X-Sync	50.00	33.34
760	3								Rapax Full Sync	69.00	46.00

*No Federal Excise Tax on Shutters only.

Wollensak Shutters (Cont.)

Alphax Shutters

Cat. No.	Size	Maximum Diaphragm Open.		Lens Mount Thread Diameter		Flange Diameters		Type of Shutter Alphax	‡ Speeds	Synchronized Speeds With			*List	*Dealer Net
		Inch	mm	Front Inches	Rear Inches	Inside Inches	Outside Inches			Class M	Class F	Class X		
775	0	35/64	14	51/64	55/64	61/64	129/64	Non-Sync Sync	1/10 to 1/200 1/10 to 1/200	.....	.....	.....	\$13.00	\$ 8.67
776	0	35/64	14	51/64	55/64	61/64	129/64	.....	.....	.....	.....	.....	17.50	11.67
777	1	47/64	18.7	15/16	1 1/16	13/16	11 1/16	Non-Sync Sync	1/10 to 1/200 1/10 to 1/200	.....	.....	.....	14.00	9.33
778	1	47/64	18.7	15/16	1 1/16	13/16	11 1/16	.....	.....	.....	.....	.....	18.00	12.00
779	2	1	25.4	1 1/2	1 1/2	1 21/64	1 55/64	Non-Sync Sync	1 to 1/100 1 to 1/100	.....	.....	.....	35.00	23.33
780	2	1	25.4	1 1/2	1 1/2	1 21/64	1 55/64	.....	.....	.....	.....	.....	38.50	25.67
781	1 3/4	1 3/8	34.9	1 51/64	1 51/64	2	2 21/32	Non-Sync Sync	1 to 1/100 1 to 1/100	.....	.....	.....	53.00	35.34
782	1 3/4	1 3/8	34.9	1 51/64	1 51/64	2	2 21/32	.....	.....	.....	.....	.....	59.00	39.34
783	1 1/4	11 1/16	42.7	2 27/64	2 27/64	2 5/8	3 17/32	Non-Sync Sync	1 to 1/50 1 to 1/50	.....	.....	.....	51.00	34.00
784	1 1/4	11 1/16	42.7	2 27/64	2 27/64	2 5/8	3 17/32	.....	.....	.....	.....	.....	55.00	36.67
785	1 5/8	2 27/32	56.7	2 15/16	2 15/16	3 1/8	4 5/8	Non-Sync Sync	1/2 to 1/50 1/2 to 1/50	.....	.....	.....	58.00	38.67
786	1 5/8	2 27/32	56.7	2 15/16	2 15/16	3 1/8	4 5/8	.....	.....	.....	.....	.....	62.00	41.34

†Upon request numbers 3, 4, and 5 Alphax Shutters are available with press focus levers at an additional charge of \$10.00 to the list price of the shutter.

*No Federal Tax on Shutters only.

‡All shutters include time and bulb setting.

Accessories

Standard Flanges

Catalog Number	Thread Diam. Inches	*List	*Dealer Net
930	5/8 to 1	\$1.25	\$.81
931	1 1/16 to 2	2.00	1.30
932	2 1/16 to 2 1/2	3.00	1.95
933	2 1/16 to 3	3.50	2.28
934	3 1/16 to 3 1/2	4.00	2.60
935	3 3/16 to 4	5.00	3.25
936	4 1/16 to 4 1/2	6.00	3.90
937	4 5/16 to 5	7.50	4.88

Available for Wollensak Mountings only. For older Wollensak Lenses not listed in this Price List specify whether lens is in barrel or shutter, specify which shutter.

*No Federal Excise Tax on flanges and lens caps.

Lens Caps

Catalog Number	Inside Diam.	*List	*Dealer Net
950	1" and under	\$1.25	\$.81
951	2" and under	1.75	1.14
952	3" and under	2.25	1.46
953	4" and under	3.00	1.95
954	5" and under	3.50	2.28

*No Federal Excise Tax on flanges and lens caps.

Miscellaneous Accessories

Catalog Number	Description	List	Dealer Net
910	**Wocote Lens Cleaning Tissue (100 sheets 3 x 4 1/2).....	\$.35	\$.23
911	***Wocote Lens Cleaner, per bottle (2 oz.).....	.35	.23
912	Electrical connecting cords for Synchronmatic Rapax and Alphax Shutters.....	2.00	1.30
913	7" Cable Release.....	1.25	.81
914	12" Cable Release.....	2.25	1.46
915	20" Cable Release.....	3.00	1.95
916	32" Cable Release.....	4.50	2.93

**Packaged 12 per carton.

***Packaged 6 per carton.

No Federal Excise Tax applicable to the above items.

