

NEW

**SUPER BALTAR<sup>®</sup>**

**PROFESSIONAL MOTION PICTURE**

**CAMERA LENSES**



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## NEW SUPER BALTAR PROFESSIONAL MOTION PICTURE CAMERA LENSES

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If you're in the business of making, buying, or using professional motion picture cameras, then you know the name Baltar. For 25 years, it has identified an unmatched quality in lenses. Now, Bausch & Lomb, maker of the Baltar, has produced an even finer series of lenses—the new Super Baltars.

Super Baltars are better for two important reasons. First, research has produced notable advances in the lens making art. Secondly, the new lenses benefit from recent marked improvements in glass technology. Here is a lens as nearly perfect optically and mechanically as a lens can be.

Super Baltars are ideal for motion picture and television production, and for specialized data collection photography. They are particularly useful in television applications because all the lenses have been designed with essentially the same angular rotation of iris diaphragm rings between F stops. This permits remote control actuation of iris diaphragms. In aerospace applications, the lenses have served in recording valuable data both on the ground and from the space vehicle in flight.

These lenses produce the results you expect in both black and white, and color. Images are crisp and clear. Coma and spherical aberration are negligible. There is no danger of reflection from air-glass surfaces or mounts.

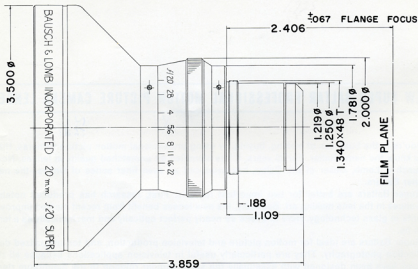
Super Baltar lenses put no limit on imagination or creativity. They are available in eight focal lengths: 20mm, 25mm, 35mm, 50mm, 3", 4", 6", and 9". They cover the formats most widely used in professional motion picture photography: 35mm and 70mm. And all lenses have both F and T aperture stops.

For maximum versatility, Super Baltars are supplied in barrel with iris diaphragm. This permits the lenses to be used on a variety of cameras simply by adapting the mount to fit any camera.

On the following pages you'll learn more about Super Baltar lenses. If you're interested in better professional motion picture photography, you'll be interested in Super Baltar lenses.

The performance data shown in this catalog were compiled from production lenses and are typical of the performance of Super Baltar Lenses. However, performance of individual lenses may vary from the data shown.

20mm.



MINIMUM FREE APERTURE  
FRONT 2.677  $\phi$  REAR .945  $\phi$



**SUPER BALTAR 20mm F/2.0 • Catalog No. 51-15-32**

Equivalent Focal Length.....	21mm	Format Size.....	16 x 22mm
Back Focal Length.....	33mm	$\frac{1}{2}$ Angular Coverage.....	32°
Front Focus.....	39mm	Transmission at F/2.0.....	74%

**Relative Illumination at F/2.0**

Angle	0°	5°	10°	15°	20°	25°	32°
%	100	95	85	75	62	50	30

**Photographic Resolution in Lines/mm**  
(Plus-X film developed in Microdol for 9 minutes at 68°F.)

Angle	0°	5°	10°	15°	20°	25°	30°	32°
F/2.0 Sagittal	75	66	47	40	45	54	41	18
Tangential	75	47	36	39	42	34	36	24
F/4.0 Sagittal	84	75	53	52	45	60	46	18
Tangential	84	59	41	35	47	39	39	27
F/8.0 Sagittal	84	83	82	81	70	67	64	35
Tangential	84	74	46	35	33	49	45	43

(Kodak High Contrast film developed in D-19 for 6 minutes at 68°F.)

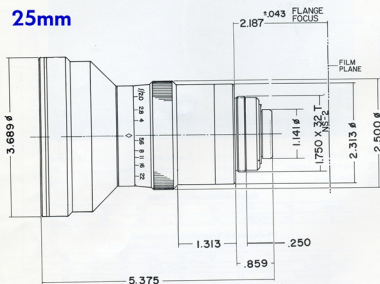
Angle	0°	5°	10°	15°	20°	25°	30°	32°
F/2.0 Sagittal	149	120	92	64	63	76	73	27
Tangential	149	94	65	62	59	69	71	47
F/4.0 Sagittal	169	169	132	116	79	86	63	27
Tangential	169	94	58	50	59	69	65	43
F/8.0 Sagittal	189	189	147	144	125	121	129	50
Tangential	189	133	123	62	59	69	127	85

**ORDERING INFORMATION**

Catalog No.	Description
51-15-32	20mm F/2.0 Super Baltar fixed focus lens in barrel with iris diaphragm.....



25mm



MINIMUM FREE APERTURE  
FRONT 3.071 $\phi$  REAR .799 $\phi$



**SUPER BALTAR 25mm F/2.0 • Catalog No. 51-15-33**

Equivalent Focal Length.....26mm	Format Size.....16 x 22mm
Back Focal Length.....34mm	$\frac{1}{2}$ Angular Coverage.....27 $\frac{1}{4}$ °
Front Focus.....-54mm	Transmission at F/2.0.....85%

**Relative Illumination at F/2.3**

Angle	0°	5°	10°	15°	20°	25°	27°	30°
%	100	97	91	79	69	54	40	21

**Photographic Resolution in Lines/mm**

(Plus-X film developed in Microdol for 7 minutes at 68°F without filter for high contrast.)

Angle	0°	5°	10°	15°	20°	25°	30°
F/2.0 Sagittal	67	53	52	41	31	30	26
Tangential	67	53	47	41	31	25	28
F/4.0 Sagittal	76	67	63	58	50	40	35
Tangential	76	75	61	56	40	31	34
F/8.0 Sagittal	76	76	75	69	50	40	35
Tangential	76	71	64	49	42	31	34

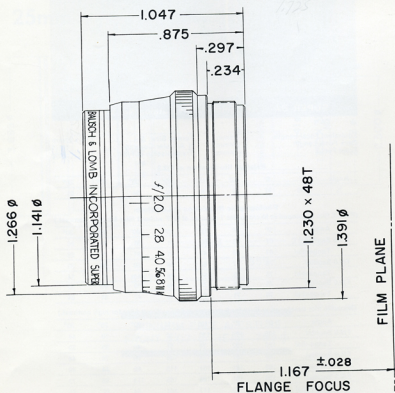
(Microfilm developed in D-19 for 6 minutes at 68°F without filter for high contrast.)

Angle	0°	5°	10°	15°	20°	25°	30°
F/2.0 Sagittal	120	120	110	100	71	70	44
Tangential	120	102	70	51	46	35	36
F/4.0 Sagittal	193	181	178	136	99	78	44
Tangential	193	181	151	113	62	44	49
F/8.0 Sagittal	193	181	168	165	113	83	73
Tangential	193	170	117	101	84	82	91

**ORDERING INFORMATION**

<b>Catalog No.</b>	<b>Description</b>
51-15-33	25mm F/2.0 Super Baltar fixed focus lens in barrel with iris diaphragm.....

35mm.



MINIMUM FREE APERTURE  
FRONT .689 $\phi$  REAR .551 $\phi$



**SUPER BALTAR 35mm F/2.0 • Catalog No. 51-15-34**

Equivalent Focal Length.....35mm  
Back Focal Length.....26mm  
Front Focus.....20mm

Format Size.....16 x 22mm  
½ Angular Coverage.....21°  
Transmission at F/2.0.....81%

**Relative Illumination at F/2.0**

Angle	0°	5°	10°	15°	21°
%	100	94	78	58	33

**Photographic Resolution in Lines/mm**  
(Plus-X film developed in Microdol for 9 minutes at 68°F.)

Angle	0°	5°	10°	15°	21°
F/2.0 Sagittal	86	67	53	41	45
Tangential	86	85	59	51	42
F/4.0 Sagittal	96	85	53	41	45
Tangential	96	85	66	43	42
F/8.0 Sagittal	96	96	75	52	50
Tangential	96	95	74	64	60

(Kodak High Contrast film developed in D-19 for 6 minutes at 68°F.)

Angle	0°	5°	10°	15°	21°
F/2.0 Sagittal	171	170	106	66	70
Tangential	171	170	118	114	96
F/4.0 Sagittal	190	215	168	83	50
Tangential	190	170	133	128	101
F/8.0 Sagittal	171	170	136	133	128
Tangential	171	139	148	128	113

**ORDERING INFORMATION**

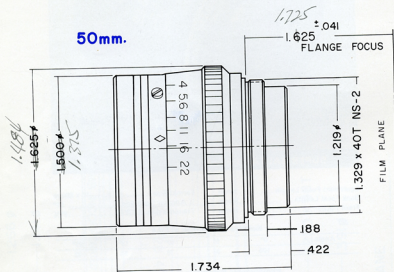
Catalog  
No.

51-15-34

Description

35mm F/2.0 Super Baltar fixed focus lens in barrel with  
iris diaphragm.....

50mm.



MINIMUM FREE APERTURE  
FRONT 1.157  $\phi$  REAR .772  $\phi$



**SUPER BALTAR 50mm F/2.0 • Catalog No. 51-15-35**

Equivalent Focal Length.....53mm  
Back Focal Length.....33mm  
Front Focus.....21mm

Format Size.....16 x 22mm  
% Angular Coverage.....14.5°  
Transmission at F/2.0.....88%

**Relative Illumination at F/2.0**

Angle	0°	5°	10°	13°	16°
%	100	94	65	52	38

**Photographic Resolution in Lines/mm**

(Plus-X film developed in Microdol for 7 minutes at 68°F.)

Angle	0°	5°	10°	13°	16°
F/2.0 Sagittal	85	57	57	63	50
Tangential	85	60	60	61	38
F/4.0 Sagittal	85	91	67	53	50
Tangential	85	75	66	44	38
F/8.0 Sagittal	96	91	71	53	50
Tangential	96	95	66	61	38

(Microfilm film developed in D-19 for 6 minutes at 68°F.)

Angle	0°	5°	10°	13°	16°
F/2.0 Sagittal	239	220	203	180	109
Tangential	239	172	232	185	198
F/4.0 Sagittal	239	238	211	216	126
Tangential	239	212	207	208	70
F/8.0 Sagittal	239	238	210	158	126
Tangential	239	238	207	152	70

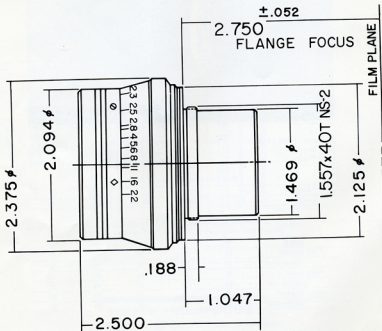
**ORDERING INFORMATION**

Catalog  
No.

Description

51-15-35 50mm F/2.0 Super Baltar fixed focus lens in barrel with  
iris diaphragm .....

3 in.



MINIMUM FREE APERTURE  
FRONT 1.646  $\phi$  REAR 1.098  $\phi$





**SUPER BALTAR 3" F/2.0 • Catalog No. 51-15-43**

Equivalent Focal Length.....75mm  
 Back Focal Length.....47mm  
 Front Focal.....29mm

Format Size.....16 x 22mm  
 $\frac{1}{2}$  Angular Coverage.....10°  
 Transmission at F/2.0.....90%

**Relative Illumination at F/2.0**

Angle	0°	5°	10°	12.5°
%	100	97	67	54

**Photographic Resolution in Lines/mm**  
 (Plus-X film developed in Microdol for 7 minutes at 68°F.)

Angle	0°	5°	10°	12.5°
F/2.0 Sagittal	71	63	50	49
Tangential	71	62	55	56
F/4.0 Sagittal	89	85	66	61
Tangential	89	94	78	76
F/8.0 Sagittal	114	113	79	67
Tangential	114	100	92	56

(Microfilm film developed in D-19 for 6 minutes at 68°F.)

Angle	0°	5°	10°	12.5°
F/2.0 Sagittal	159	136	138	100
Tangential	159	145	124	102
F/4.0 Sagittal	201	201	160	112
Tangential	201	201	166	136
F/8.0 Sagittal	159	181	179	156
Tangential	159	179	154	149

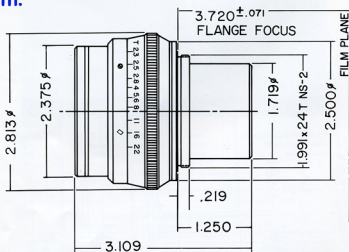
**ORDERING INFORMATION**

Catalog  
 No.

Description

51-15-43 3" F/2.0 Super Baltar fixed focus lens in barrel with  
 iris diaphragm.....

4in.



MINIMUM FREE APERTURE  
FRONT 2.000  $\phi$  REAR 1.425  $\phi$



**SUPER BALTAR 4" F/2.0 • Catalog No. 51-15-44**

Equivalent Focal Length.....100mm  
Back Focal Length.....64mm  
Front Focus.....42mm

Format Size.....16 x 22mm  
% Angular Coverage.....7.5°  
Transmission at F/2.0.....72%

**Relative Illumination at F/2.0**

Angle	0°	5°	10°
%	100	94	68

**Photographic Resolution in Lines/mm**  
(Plus-X film developed in Microdol for 7 minutes at 68°F.)

Angle	0°	2.5°	5°	7.5°	10°
F/2.3 Sagittal	68	68	48	47	46
Tangential	68	53	43	42	41
F/4.0 Sagittal	87	75	75	60	42
Tangential	87	87	87	67	66
F/8.0 Sagittal	97	97	97	87	59
Tangential	87	87	97	97	95

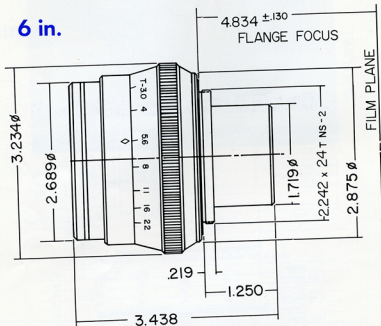
(Kodak High Resolution film developed in D-19 for 6 minutes at 68°F.)

Angle	0°	2.5°	5°	7.5°	10°
F/2.3 Sagittal	152	120	60	120	66
Tangential	152	76	67	106	105
F/4.0 Sagittal	214	214	193	134	95
Tangential	214	171	152	133	105
F/8.0 Sagittal	171	171	193	171	151
Tangential	171	171	193	171	169

**ORDERING INFORMATION**

Catalog No.	Description
51-15-44	4" F/2.0 Super Baltar fixed focus lens in barrel with iris diaphragm.....

6 in.



MINIMUM FREE APERTURE  
FRONT 2.142  $\phi$  REAR 1.346  $\phi$



**SUPER BALTAR 6" F/2.8 • Catalog No. 51-15-46**

Equivalent Focal Length.....152mm  
Back Focal Length.....93mm  
Front Focus.....105mm

Format Size.....23 x 52.5mm  
% Angular Coverage.....11°  
Transmission at F/2.8.....85%

**Relative Illumination at F/2.8**

Angle	0°	5°	6°	8°	11°
%	100	76	70	61	43

**Photographic Resolution in Lines/mm**  
(Plus-X film developed in Microdol for 7 minutes at 68°F.)

Angle	0°	5°	8°	11°
F/2.8 Sagittal	50	50	46	47
Tangential	50	53	43	36
F/4.0 Sagittal	60	56	44	47
Tangential	60	59	43	39
F/8.0 Sagittal	79	70	63	54
Tangential	79	63	58	46

(Kodak High Resolution film developed in D-19 for 6 minutes at 68°F.)

Angle	0°	5°	8°	11°
F/2.8 Sagittal	126	100	89	78
Tangential	126	100	79	67
F/4.0 Sagittal	141	107	94	86
Tangential	141	113	79	67
F/8.0 Sagittal	159	133	133	112
Tangential	159	120	94	64

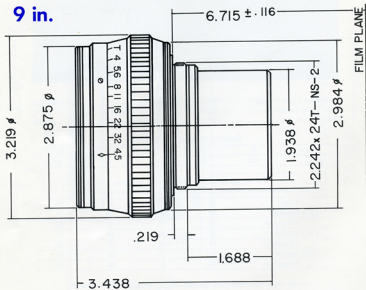
**ORDERING INFORMATION**

Catalog  
No.

51-15-46

Description

6" F/2.8 Super Baltar fixed focus lens in barrel with  
iris diaphragm.....



MINIMUM FREE APERTURE  
FRONT 2.252  $\phi$  REAR 1.496  $\phi$



**SUPER BALTAR 9" F/4.0 • Catalog No. 51-15-49**

Equivalent Focal Length.....	229mm	Format Size.....	2.25 x 2.25"
Back Focal Length.....	133mm	1/2° Angular Coverage.....	12°
Front Focus.....	244mm	Transmission at F/4.0.....	88%

**Relative Illumination at F/4.0**

Angle	0°	5°	8°	12°
%	100	87	70	46

**Photographic Resolution in Lines/mm**

(Plus-X film developed in Microdol for 7 minutes at 68°F.)

Angle	0°	5°	8°	12°
F/4.0 Sagittal	66	46	44	27
Tangential	66	26	23	11
F/8.0 Sagittal	84	55	49	36
Tangential	84	31	26	21

(Kodak High Resolution film developed in D-19 for 6 minutes at 68°F.)


Angle	0°	5°	8°	12°
F/4.0 Sagittal	119	79	66	30
Tangential	119	42	35	15
F/8.0 Sagittal	132	118	84	65
Tangential	132	64	52	34

**ORDERING INFORMATION**

Catalog No.	Description
51-15-49	9" F/4.0 Super Baltar fixed focus lens in barrel with iris diaphragm.....



**NEW SUPER BALTAR PROFESSIONAL MOTION PICTURE CAMERA LENSES**

**BAUSCH & LOMB**  ROCHESTER, NEW YORK 14602

# Bausch & Lomb

## SUPER BALTAR PROFESSIONAL MOTION PICTURE CAMERA LENSES

Catalog No.	Description	Suggested List Price
51-15-32	20mm F/2.0 Super Baltar Lens	\$ 617.40*
51-15-33	25mm F/2.0 Super Baltar Lens	431.20†
51-15-34	35mm F/2.0 Super Baltar Lens	234.00
51-15-35	50mm F/2.0 Super Baltar Lens	220.00
51-15-43	3" F/2.0 Super Baltar Lens....	238.00
51-15-44	4" F/2.0 Super Baltar Lens....	325.00
51-15-46	6" F/2.8 Super Baltar Lens....	285.00
51-15-49	9" F/4.0 Super Baltar Lens....	400.00

\*Price includes Federal Excise Tax of \$40.40

†Price includes Federal Excise Tax of \$28.20

Prices are subject to change without notice.

Delivery: All lenses normally available in small quantities for delivery within 30 days after receipt of order.

Photochromatic Lenses (Photochromatic Lenses)

(Photochromatic Lenses developed in 10 minutes at 50°F.)

Angle	5°	10°	15°	20°	25°	30°	35°
F/2.0 Super	75	80	85	90	95	98	99
Transmittance	25	27	28	29	30	31	32
F/2.8 Super	90	92	94	96	97	98	99
Transmittance	85	88	91	93	95	96	97
F/4.0 Super	95	96	97	98	99	99	99
Transmittance	90	92	94	95	96	97	98

(Shield High Contrast film developed in 10-15 minutes at 50°F.)

Angle	5°	10°	15°	20°	25°	30°	35°
F/2.0 Super	105	110	115	120	125	128	129
Transmittance	140	145	150	155	160	165	167
F/2.8 Super	100	105	110	115	120	125	127
Transmittance	130	135	140	145	150	155	157
F/4.0 Super	100	105	110	115	120	125	127
Transmittance	130	135	140	145	150	155	157

### GROSSING INFORMATION

51-15-32 20mm F/2.0 Super Baltar Lens (see lens in hand with the description)