

The ARRI-Guide

for Ground Glasses, Frameglow-, Format Masks and Exposed Negative Areas for ARRICAM, ARRIFLEX 535, 535B, 435, 235

ARRIFLEX 16SR 3 / Advanced and ARRIFLEX 416 Cameras

By K. Jacumet & J. Thieser

As of: April 2007

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	(N35)		1.33 / 1.33 SAFE (N16)	
	(N35)		1.37 (N16)	
1.70	(1400)		1.66 (\$16)	
Unive	ersal (N35 + DIN \$ 35)		1.66 (\$16)	
Omve	57 July 100 1 Dil 10 00 1		1.66 - TV 1.33 (S16)	
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	(DIN S35)		TV 1.78 (\$16)	
	(DIN \$35)		1.78 (\$16)	
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2. Glossary

In every production and distribution step, the size of the image is reduced to compensate for tolerances and avoid image distortions, which might occur at the edge of the image. The image sizes start at the largest possible image area and are gradually reduced according to the post production and distribution stage.

Exposed negative area (camera aperture)	Image area on the negative film which is exposed in various aspect ratios and sizes according to international standards.	DIN Super 35 (DIN S35)	
Scanned Area	Image area which is scanned by telecines or high resolution film scanners to convert to electronic data. The actually scanned area can usually be zoomed in size and shifted in position by the scanner.	ANSI Super 35 (ANSI S35)	
TV transmitted	Image area which is originally broadcasted but will not be entirely visible on home TV sets.		
Projected area	Image area which is projected on cinema screens according to respective international standards.		
TV safe action	Image area considered to be visible on every TV set.		
TV safe title	Image area inside the TV safe action area in which titles can be expected to be displayed in optimum quality at the TV screen.		

This format was originally developped in the 1950ties to use a maximum recording space of 24 mm width without a sound track. The format was standardized in an (DIN) industry norm.

To make even better use of the available negative space the width of the used picture area was enlarged to 24.9 mm without beeing part of any industry norm. Only as late as in the 1990ties this format was standardized in an ANSI norm.

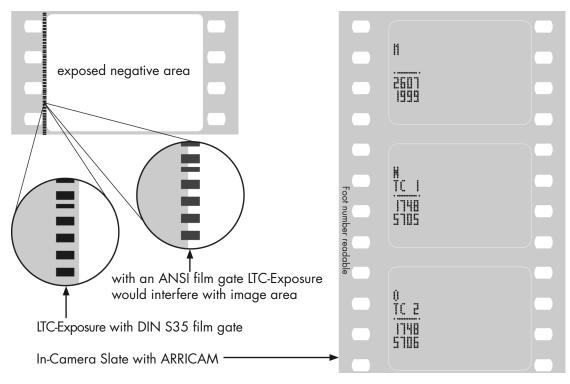


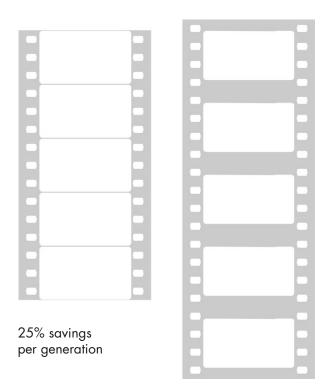
TC Exposure

The DIN S35 format was small enaugh to leave an unused space between the perforation and the image area on the film, which is used to record LTC with the ARRIFLEX 435 and ARRIFLEX 535/535B cameras. With the wider ANSI picture formats this space is no longer available, and subsequently the LTC can no longer be recorded without harming the picture. The ARRICAM cameras also support the ANSI standard, but employs a different recording method for TC with the In-Camera Slate System. Therefore in-camera slate recording in the ANSI format is possible with the ARRICAM cameras. See graphics

3-Perforation Filming

The 3-perforation format uses a pulldown and subsequently an image area that is only 3 perforation holes high, saving 25 % of raw stock, intermed positive, answer prints etc. also in the postproduction. This format is ideal when opting for the digital lab.







Specific to ARRI Ground Glasses, please note:

Camera aperture + unexposed safety viewing space Area on the ground glass which is larger than the actually exposed negative area to enable viewing of incoming objects e. g. microphones on top and bottom of the frame.

Maximum ground glass area

As Super 35 format covers the entire available space on 35 mm negative size, the ground glasses are designed to show an extra area all around the actual camera aperture to aid framing.

Extended viewing space

Additional area around the outer frame lines to check for incoming objects e.g. microphones. Parts of this additional area might not be visible on the negative.

Format Masks



Please Note:

This quoted format masks in the 35 mm ground glass drawings section represents the smallest aperture suitable for the respectively given ground glass. It is however possible to use format masks with larger apertures and to extract the required image format from the negative in post-production

Technical notes regarding this document:

In order to speed up download time all hatched areas on ground glasses have been replaced with a gray field which is similar to the appearance of the actual ground glass in the view finder.

In the PDF-file you may click on the drawings for further navigation!



1.37 (Academy)	
ARRICAM:	_
Glowmask ST:	_
Glowmask LT:	_
ARRIFLEX 235/435/535:	K2.44420.0

ARRICAM:	_	ARRICAM:	K2.54101.0
Glowmask ST:	_	Glowmask ST:	K2.54118.0
Glowmask LT:	_	Glowmask LT:	K2.54118.0
ARRIFLEX 235/435/535:	K2.44420.0	ARRIFLEX 235/435/535:	K2.44420.A
Glowmask 435/535:	K2.47004.3	Glowmask 435/535:	K2.47012.3

1.66

1.85	
ARRICAM:	K2.54103.0
Glowmask ST:	K2.54112.0
Glowmask LT:	K2.54112.0
ARRIFLEX 235/435/535:	K2.44420.B
Glowmask 435/535:	K2.47011.3

Scope (Factor 2) 2.3	5
ARRICAM:	K2.54084.0
Glowmask ST:	K2.54123.0
Glowmask LT:	K2.54123.0
ARRIFLEX 235/435/535:	K2.44420.C
Glowmask 435/535:	K2.47006.3

TV 1.33 Safe (R 3.6 mm)		
ARRICAM:	_	
Glowmask ST:	_	
Glowmask LT:	_	
ARRIFLEX 235/435/535:	K2.44420.D	
Glowmask 435/535:	K2.47013.S	

TV 1.33 safe (R 0.5 mm)		
ARRICAM:	K2.54100.0	
Glowmask ST:	K2.54117.0	
Glowmask LT:	K2.54117.0	
ARRIFLEX 235/435/535:	K2.41200.E	
Glowmask 435/535:	K2.47010.3	

1.85+1.37	
ARRICAM:	_
Glowmask ST:	_
Glowmask LT:	_
ARRIFLEX 235/435/535:	K2.44420.K
Glowmask 435/535:	K2.46435.3

1.85+1.37+TV 1.33	safe
ARRICAM:	K2.54059.0
Glowmask ST:	K2.54053.0
Glowmask LT:	K2.54053.0
ARRIFLEX 235/435/535:	K2.44420.L
Glowmask 435/535:	K2.47055.S

1.66+1.37	
ARRICAM:	_
Glowmask ST:	_
Glowmask LT:	_
ARRIFLEX 235/435/535:	K2.44420.N
Glowmask 435/535:	K2.47058.3

1.66+1.37+TV 1.33	safe
ARRICAM:	K2.54058.0
Glowmask ST:	K2.54052.0
Glowmask LT:	K2.54052.0
ARRIFLEX 235/435/535:	K2.44420.N
Glowmask 435/535:	K2.47057.S

1.66+TV 1.33 safe	
ARRICAM:	_
Glowmask ST:	_
Glowmask LT:	_
ARRIFLEX 235/435/535:	K2.44420.P
Glowmask 435/535:	K2.47016.S

1.85+TV 1.33 safe	
ARRICAM:	K2.54104.0
Glowmask ST:	K2.54120.0
Glowmask LT:	K2.54120.0
ARRIFLEX 235/435/535:	K2.44420.S
Glowmask 435/535:	K2.47015.S

	1.85+1.66	
	ARRICAM:	_
	Glowmask ST:	_
(Glowmask LT:	_
	ARRIFLEX 235/435/535:	K2.44420.
(Glowmask 435/535:	K2.47017.3

TV 1.78 trans	
ARRICAM:	K2.54102.0
Glowmask ST:	K2.54113.0
Glowmask LT:	K2.54113.0
ARRIFLEX 235/435/535:	K2.44420.X
Glowmask 435/535:	K2.47007.3

1.78+1.55+1.33 C	GG
ARRICAM:	K2.54086.0
Glowmask ST:	K2.54090.0
Glowmask LT:	K2.54090.0
ARRIFLEX 235/435/535	: K2.41200.D
Glowmask 435/535:	K2.47283.3

1.37+TV 1.33 safe

ARRICAM: K2.54000.0 K2.54051.0 Glowmask ST: Glowmask LT: K2.54051.0 ARRIFLEX 235/435/535: — Glowmask 435/535: -

3 P TV 1.33 safe/trans

K2.54062.0 ARRICAM: K2.54056.0 Glowmask ST: Glowmask LT: K2.54056.0 ARRIFLEX 235/435/535: — Glowmask 435/535: —

^{*)} not available any more

3.2 DIN S35 — Ground Glass Template



DIN \$35 Silent 1.33
ARRICAM:
Glowmask ST:

Glowmask LT: —
ARRIFLEX 235/435/535: K2.44420.E
Glowmask 435/535: K2.47005.3

DIN \$35 2.35 off center

ARRICAM: —
Glowmask ST: —
Glowmask LT: —
ARRIFLEX 235/435/535: K2.44420.F
Glowmask 435/535: K2.47018.3

DIN S35 1.85

ARRICAM: —
Glowmask ST: —
Glowmask LT: —

ARRIFLEX 235/435/535: K2.44420.G Glowmask 435/535: K2.47009.3 DIN \$35 2.35 + 1.85 common top

ARRICAM: —
Glowmask ST: —
Glowmask LT: —

ARRIFLEX 235/435/535: K2.44420.H Glowmask 435/535: K2.47172.3 DIN \$35 1.85+TV 1.33 safe

ARRICAM: —
Glowmask ST: —
Glowmask LT: —

ARRIFLEX 235/435/535: K2.44420.I Glowmask 435/535: K2.47059.3

DIN \$35 2.35 centric

ARRICAM: —
Glowmask ST: —
Glowmask LT: —
ADDIEUEX 225 (425 (525) K2 A4

ARRIFLEX 235/435/535: K2.44420.W Glowmask 435/535: K2.47035.3 DIN \$35 TV 1.78 safe

ARRICAM: —
Glowmask ST: —
Glowmask LT: —
ARRIFLEX 235/435/535: K2.44420.2
Glowmask 435/535: K2.47008.3

DIN \$35 TV 1.33 safe

ARRICAM: –
Glowmask ST: –
Glowmask LT: –

ARRIFLEX 235/435/535: K2.41200.F Glowmask 435/535: K2.47281.3

3.3 ANSI S35 Ground Glass Template



I S 35		

ARRICAM: K2.54083.0 Glowmask ST: K2.54119.0 Glowmask LT: K2.54119.0 ARRIFLEX 235/435/535: K2.47433.0 Glowmask 435/535: K2.47434.0

ANSI S35 TV 1.33 safe

ARRICAM: K2.54105.0 Glowmask ST: K2.54121.0 Glowmask IT: K2.54121.0 ARRIFLEX 235/435/535: K2.47413.0 Glowmask 435/535: K2.47425.0

ANSI S35 TV 1.78 trans

ARRICAM: K2.54106.0 Glowmask ST: K2.54122.0 Glowmask IT: K2.54122.0 ARRIFLEX 235/435/535: K2.47414.0 Glowmask 435/535: K2.47426.0

ANSI \$35 TV 1.78 + 1.33 trans

ARRICAM: K2.54060.0
Glowmask ST: K2.54054.0
Glowmask LT: K2.54054.0
ARRIFLEX 235/435/535: K2.47410.0
Glowmask 435/535: K2.47422.0

ANSI S35 TV 1.78 safe

ARRICAM: K2.54107.0 Glowmask ST: K2.54115.0 Glowmask LT: K2.54115.0 ARRIFLEX 235/435/535: K2.47415.0 Glowmask 435/535: K2.47427.0

ANSI \$35 1.78+1.55+1.33 CGG

ARRICAM: K2.54085.0 Glowmask ST: K2.54089.0 Glowmask LT: K2.54089.0 ARRIFLEX 235/435/535: K2.47419.0 Glowmask 435/535: K2.47431.0

ANSI S35 1.85

ARRICAM: K2.54108.0 Glowmask ST: K2.54114.0 Glowmask LT: K2.54114.0 ARRIFLEX 235/435/535: K2.47409.0 Glowmask 435/535: K2.47421.0

ANSI S35 2.35+1.85+TV 1.33 trans

ARRICAM: K2.54061.0
Glowmask ST: K2.54055.0
Glowmask LT: K2.54094.0
ARRIFLEX 235/435/535: K2.47411.0
Glowmask 435/535: K2.47423.0

ANSI S35 2.35 centric

ARRICAM: K2.54109.0 Glowmask ST: K2.54092.0 Glowmask LT: K2.54092.0 ARRIFLEX 235/435/535: K2.47416.0 Glowmask 435/535: K2.47428.0

ANSI \$35 2.35+1.85 1/4 offset

ARRICAM: K2.54110.0
Glowmask ST: K2.54088.0
Glowmask LT: K2.54096.0
ARRIFLEX 235/435/535: K2.47417.0
Glowmask 435/535: K2.47429.0

ANSI \$35 2.35+1.85 centric

ARRICAM: K2.54087.0 Glowmask ST: K2.54091.0 Glowmask LT: K2.54091.0 ARRIFLEX 235/435/535: K2.47420.0 Glowmask 435/535: K2.47432.0

ANSI \$35 2.35+1.85 common top

ARRICAM: K2.54111.0
Glowmask ST: K2.54116.0
Glowmask IT: K2.54095.0
ARRIFLEX 235/435/535: K2.47418.0
Glowmask 435/535: K2.47430.0

ANSI \$35 3 P TV 1.78+1.33 trans

ARRICAM: K2.54063.0 Glowmask ST: K2.54057.0 Glowmask IT: K2.54057.0 ARRIFLEX 235/435/535: K2.47412.0 Glowmask 435/535: K2.47424.0

Blank

ARRICAM: K2.54142.0 Glowmask ST: K2.54141.0 Glowmask LT: K2.54141.0 ARRIFLEX 235/435/535: K2.47397.0 Glowmask 435/535: K2.47169.0

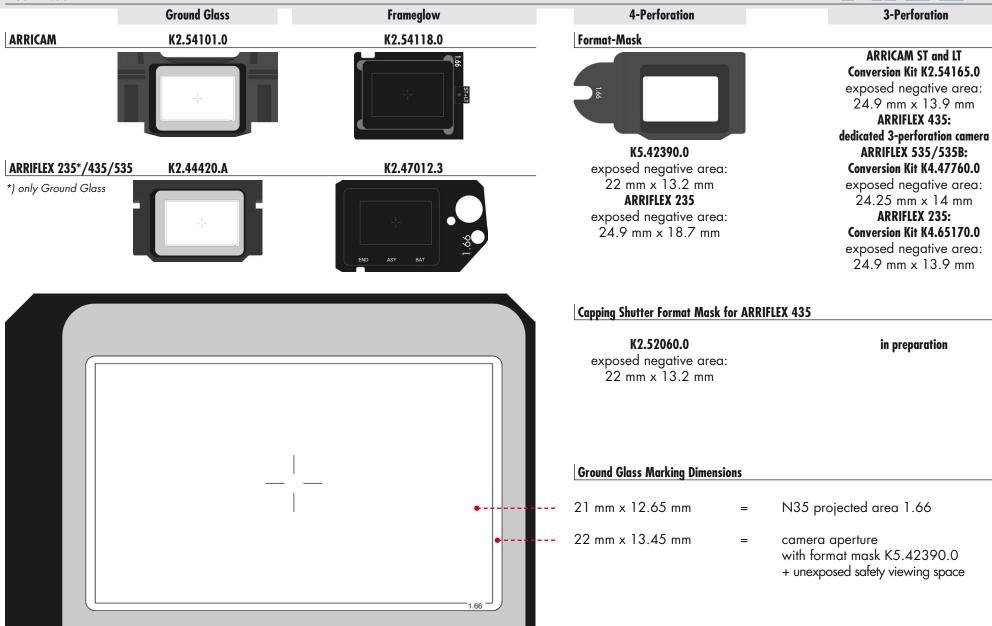


Ground Glass Frameglow **4-Perforation 3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5.42387.0 ARRIFLEX 235*/435/535 K2.44420.0 K2.47004.3 exposed negative area: 22 mm x 16 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52057.0 No 3-perforation exposed negative area: operation possible! 22 mm x 16 mm **Ground Glass Marking Dimensions** 21 mm x 15.2 mm N35 projected area 1.37 22 mm x 16 mm camera aperture with format mask K5.42387.0

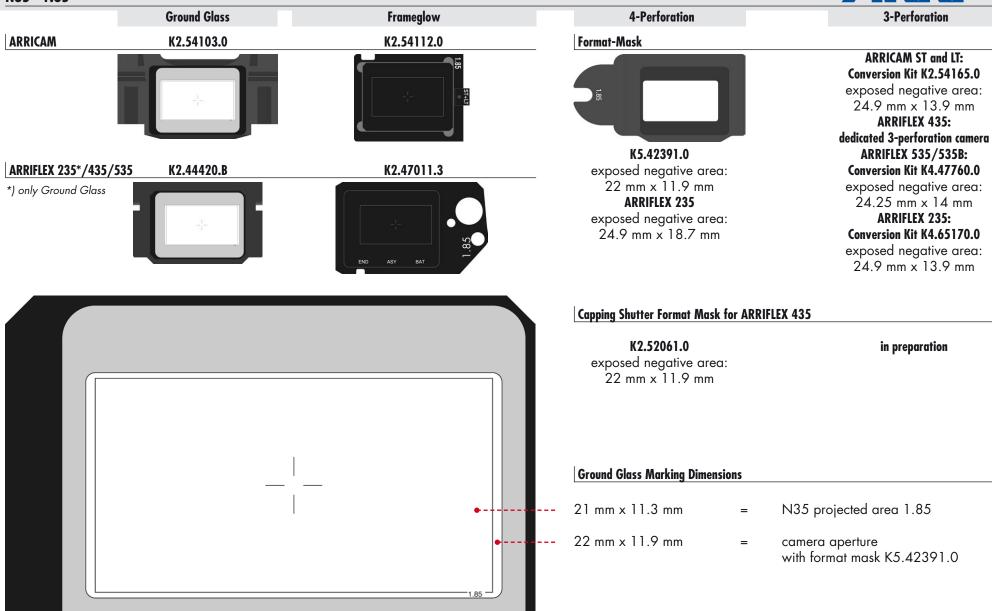
drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm

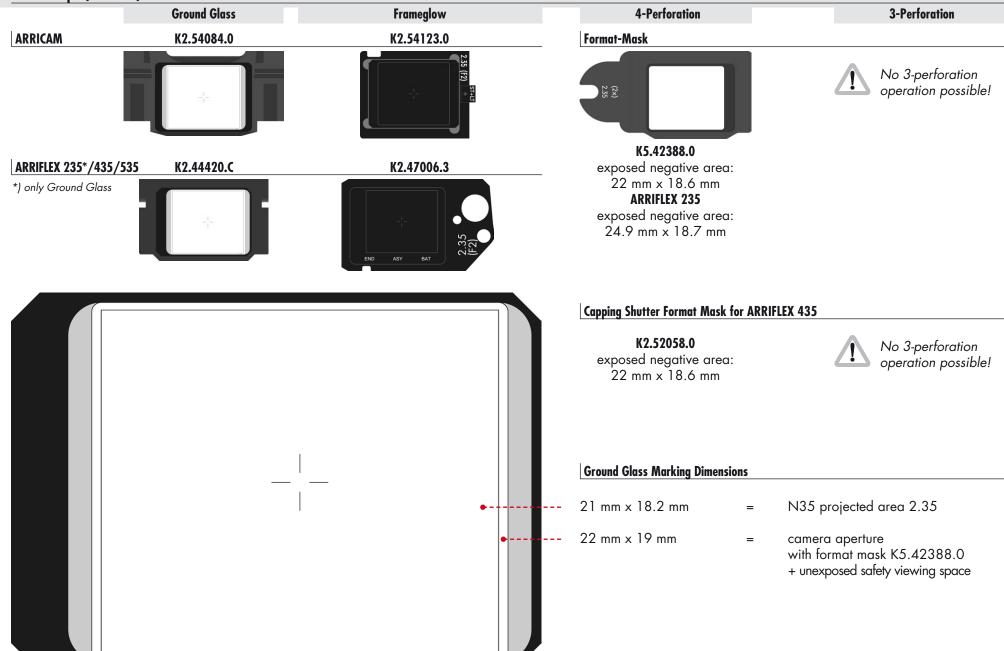








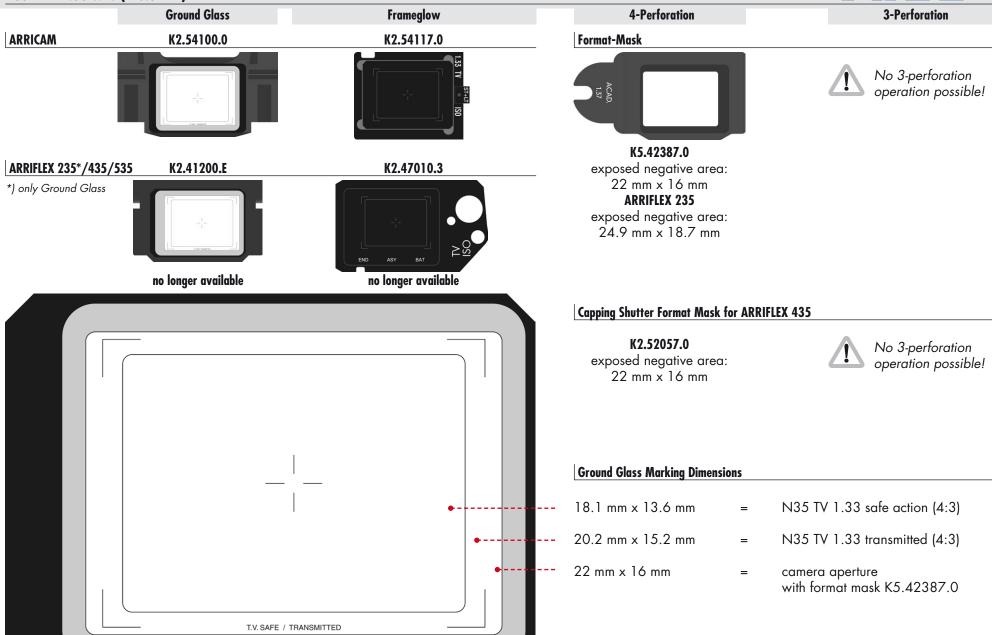






Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5.42387.0 ARRIFLEX 235*/435/535 K2.44420.D K2.47013.S exposed negative area: 22 mm x 16 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52057.0 No 3-perforation exposed negative area: operation possible! 22 mm x 16 mm **Ground Glass Marking Dimensions** 18.1 mm x 13.6 mm N35 TV 1.33 safe action (4:3) 20.2 mm x 15.2 mm N35 TV 1.33 transmitted (4:3) 22 mm x 16 mm camera aperture with format mask K5.42387.0





drawing scale 5:1



Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5.42387.0 ARRIFLEX 235*/435/535 K2.44420.K K2.46435.3 exposed negative area: 22 mm x 16 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52057.0 No 3-perforation exposed negative area: operation possible! 22 mm x 16 mm **Ground Glass Marking Dimensions** 21 mm x 11.3 mm N35 projected area 1.85 21 mm x 15.2 mm N35 projected area 1.37 22 mm x 16 mm camera aperture with format mask K5.42387.0



Ground Glass Frameglow ARRICAM K2.54059.0 K2.54053.0



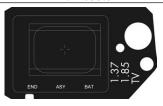
ARRIFLEX 235*/435/535

*) only Ground Glass



K2.44420.L

K2.47055.S



4-Perforation

3-Perforation

Format-Mask





No 3-perforation operation possible!

K5.42387.0

exposed negative area: 22 mm x 16 mm **ARRIFLEX 235**

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52057.0

exposed negative area: 22 mm x 16 mm



No 3-perforation operation possible!



R 3.6 mm for ARRIFLEX 435/535 ground glass and frameglow R 0.5 mm for ARRICAM ground glass and frameglow.

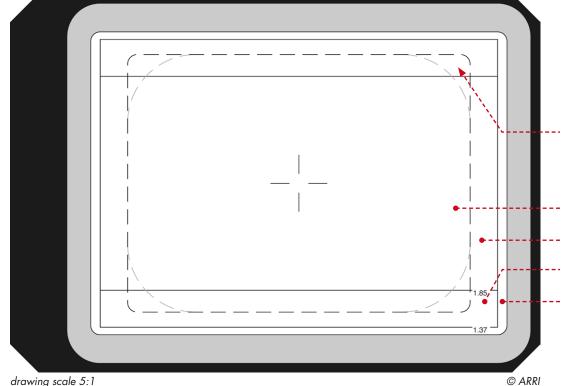
Ground Glass Marking Dimensions

18.1 mm x 13.6 mm N35 TV 1.33 safe action (4:3)

21 mm x 11.3 mm N35 projected area 1.85

21 mm x 15.2 mm N35 projected area 1.37

22 mm x 16 mm camera aperture with format mask K5.42387.0



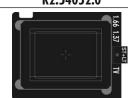


Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5.42387.0 ARRIFLEX 235*/435/535 K2.44420.M K2.47058.3 exposed negative area: 22 mm x 16 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52057.0 No 3-perforation exposed negative area: operation possible! 22 mm x 16 mm **Ground Glass Marking Dimensions** 21 mm x 12.65 mm N35 projected area 1.66 21 mm x 15.2 mm N35 projected area 1.37 22 mm x 16 mm camera aperture with format mask K5.42387.0



Ground Glass Frameglow ARRICAM K2.54058.0 K2.54052.0





ARRIFLEX 235*/435/535 K2.44420.N

*) only Ground Glass



K2.47057.S



4-Perforation

3-Perforation

Format-Mask





No 3-perforation operation possible!

K5.42387.0

exposed negative area: 22 mm x 16 mm **ARRIFLEX 235**

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52057.0

exposed negative area: 22 mm x 16 mm



No 3-perforation operation possible!



R 3.6 mm for ARRIFLEX 435/535 ground glass and frameglow R 0.5 mm for ARRICAM ground glass and frameglow.

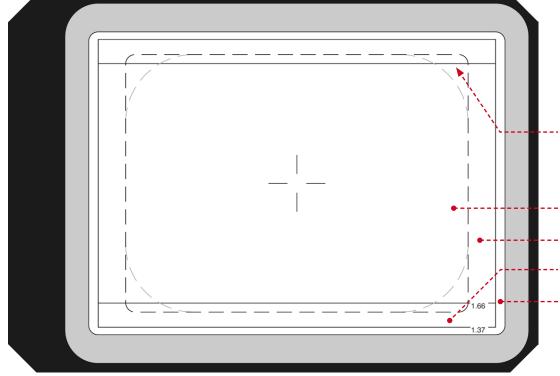
Ground Glass Marking Dimensions

18.1 mm x 13.6 mm N35 TV 1.33 safe action (4:3)

21 mm x 12.65 mm N35 projected area 1.66

21 mm x 15.2 mm N35 projected area 1.37

22 mm x 16 mm camera aperture with format mask K5.42387.0



drawing scale 5:1

© ARRI

tolerance for format markings on ground glass ±0.02 mm



N35 1.66 + TV 1.33 sa	fe				
	Ground Glass	Frameglow		4-Perforation	3-Perforation
ARRICAM			_	Format-Mask	
	N/A	N/A		ACAD. 1.37	No 3-perforation operation possible!
ADDIEUEV 005* /405 /505	VO 44400 B	VO 4703 / 6		K5.42387.0	
ARRIFLEX 235*/435/535	K2.44420.P	K2.47016.S	_	exposed negative area: 22 mm x 16 mm	
*) only Ground Glass		END ASY BAT		ARRIFLEX 235 exposed negative area: 24.9 mm x 18.7 mm	
				Capping Shutter Format Mask for ARI	RIFLEX 435
				K2.52057.0 exposed negative area: 22 mm x 16 mm	No 3-perforation operation possible!
				Ground Glass Marking Dimensions	
		-			
		•		18.1 mm x 13.6 mm =	N35 TV 1.33 safe action (4:3)
				21 mm x 12.65 mm =	N35 projected area 1.66
		1.66		22 mm x 16 mm =	camera aperture with format mask K5.42387.0



Ground Glass Frameglow
ARRICAM K2.54104.0 K2.54120.0



ARRIFLEX 235*/435/535 K2.44420.S K2.47015.S

*) only Ground Glass





4-Perforation

3-Perforation

Format-Mask





No 3-perforation operation possible!

K5.42387.0

exposed negative area: 22 mm x 16 mm ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52057.0

exposed negative area: 22 mm x 16 mm



No 3-perforation operation possible!



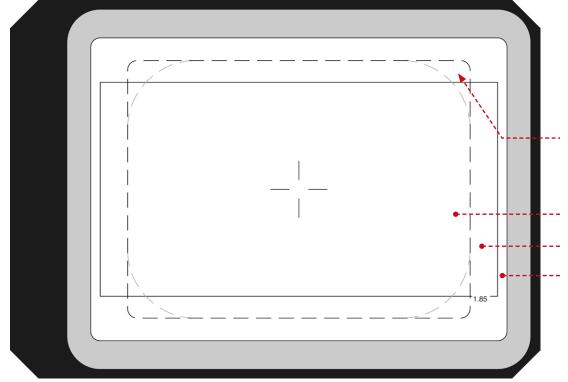
R 3.6 mm for ARRIFLEX 435/535 ground glass and frameglow R 0.5 mm for ARRICAM ground glass and frameglow.

Ground Glass Marking Dimensions

 $18.1 \text{ mm} \times 13.6 \text{ mm}$ = N35 TV 1.33 safe action (4:3)

21 mm x 11.3 mm = N35 projected area 1.85

22 mm x 16 mm = camera aperture with format mask K5.42387.0





Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask ARRICAM ST and LT: not available N/A N/A **ARRIFLEX 435:** dedicated 3-perforation camera **ARRIFLEX 535/535B:** K5.42390.0 Conversion Kit K4.47760.0 ARRIFLEX 235*/435/535 K2.47017.3 K2.44420.V exposed negative area: exposed negative area: 22 mm x 13.2 mm 24.25 mm x 14 mm *) only Ground Glass **ARRIFLEX 235 ARRIFLEX 235:** exposed negative area: Conversion Kit K4.65170.0 24.9 mm x 18.7 mm exposed negative area: 24.9 mm x 13.9 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52060.0 in preparation exposed negative area: 22 mm x 13.2 mm **Ground Glass Marking Dimensions** 21 mm x 11.3 mm N35 projected area 1.85 21 mm x 12.65 mm N35 projected area 1.66 22 mm x 13.45 mm camera aperture with format mask K5.42390.0 + unexposed safety viewing space

drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm



3-Perforation

Ground Glass Frameglow

K2.54102.0 K2.54113.0

ARRIFLEX 235*/435/535

*) only Ground Glass



K2.44420.X

K2.47007.3



4-Perforation

Format-Mask



K5.42390.0

exposed negative area: 22 mm x 13.2 mm ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm

ARRICAM ST and LT: Conversion Kit K2.54165.0

exposed negative area: 24.9 mm x 13.9 mm

ARRIFLEX 435:

dedicated 3-perforation camera ARRIFLEX 535/535B:

Conversion Kit K4.47760.0

exposed negative area: 24.25 mm x 14 mm

ARRIFLEX 235:

Conversion Kit K4.65170.0

exposed negative area: 24.9 mm x 13.9 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52060.0

exposed negative area: 22 mm x 13.2 mm

in preparation

Ground Glass Marking Dimensions

21 mm x 11.8 mm

N35 TV 1.78 transmitted (16:9)

22 mm x 13.45 mm

camera aperture with format mask K5.42390.0

+ unexposed safety viewing space

drawing scale 5:1

© ARRI

tolerance for format markings on ground glass ±0.02 mm

1.78 HDTV



3-Perforation

ARRICAM K2.54086.0 K2.54090.0



1.78 1.55 1.33

ARRIFLEX 235*/435/535

*) only Ground Glass



K2.41200.D

K2.47283.3



4-Perforation

Format-Mask



K5.42390.0

exposed negative area: 22 mm x 13.2 mm ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm

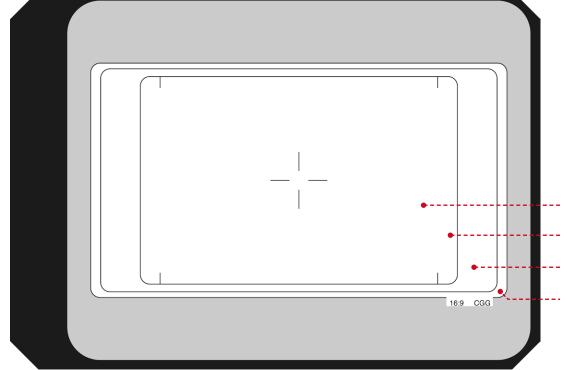
ARRICAM ST and LT: Conversion Kit K2.54165.0 exposed negative area: 24.9 mm x 13.9 mm

ARRIFLEX 435: not available ARRIFLEX 535/535B: not available ARRIFLEX 235: not available



not available

not available



Ground Glass Marking Dimensions

 $14.67 \text{ mm} \times 10.96 \text{ mm} = N35 1.33$

 $16.76 \text{ mm} \times 10.96 \text{ mm} = N35 1.55$

 $20.95 \text{ mm} \times 11.78 \text{ mm} = N35 1.78$

22 mm x 12.38 mm = extended viewing space

drawing scale 5:1

© ARRI

tolerance for format markings on ground glass ±0.02 mm



3-Perforation

ARRICAM K2.54000.0 K2.54051.0

N/A

ARRIFLEX 235*/435/535

*) only Ground Glass

N/A

Format-Mask



4-Perforation



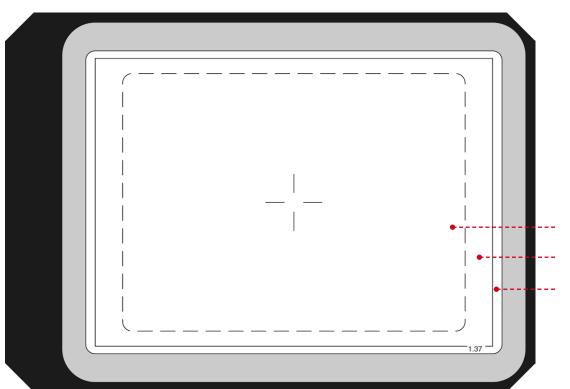
No 3-perforation operation possible!

K5.42387.0

exposed negative area: 22 mm x 16 mm

ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm



Capping Shutter Format Mask for ARRIFLEX 435

not available



No 3-perforation operation possible!

Ground Glass Marking Dimensions

 $18.1 \text{ mm} \times 13.6 \text{ mm} = N35 \text{ TV } 1.33 \text{ safe action } (4:3)$

 $21 \text{ mm} \times 15.2 \text{ mm}$ = N35 projected area 1.37

22 mm x 16 mm = camera aperture with format mask K5.42387.0

drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm

N35 3P TV 1.33 safe/trans



3-Perforation

Ground Glass Frameglow
K2.54062.0 K2.54056.0

ARRIFLEX 235*/435/535

*) only Ground Glass

drawing scale 5:1

N/A

4-Perforation

Format-Mask



No 4-perforation operation possible!

ARRICAM ST and LT Conversion Kit K2.54165.0

exposed negative area: 24.9 mm x 13.9 mm

ARRIFLEX 435: not available ARRIFLEX 535/535B: not available ARRIFLEX 235: not available



3P - T.V. SAFE / TRANSMITTED

Capping Shutter Format Mask for ARRIFLEX 435

No 4-perforation operation possible!

not available

Ground Glass Marking Dimensions

15.55 mm x 11.68 mm = N35 3 perforation TV 1.33 safe action (4:3)

17.27 mm x 12.98 mm = N35 3 perforation TV 1.33 transmitted (4:3)

22 mm x 13.9 mm = extended viewing space

N/A

© ARRI

tolerance for format markings on ground glass ±0.02 mm



Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5,42392,0 ARRIFLEX 235*/435/535 K2.47005.3 exposed negative area: K2.44420.E 24 mm x 18 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52062.0 No 3-perforation exposed negative area: operation possible! 24 mm x 18 mm **Ground Glass Marking Dimensions** 23.5 mm x 17.63 mm DIN S35 projected area 1.33 25 mm x 19 mm camera aperture with format mask K5.42392.0 + unexposed safety viewing space

drawing scale 5:1

drawing scale 5:1



Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask ARRICAM ST and LT: N/A N/A not available **ARRIFLEX 435:** dedicated 3-perforation camera K5,41477,0 **ARRIFLEX 535/535B:** ARRIFLEX 235*/435/535 K2.47018.3 K2.44420.F exposed negative area: Conversion Kit K4.47760.0 exposed negative area: 24 mm x 10.5 mm *) only Ground Glass 24.25 mm x 14 mm **ARRIFLEX 235** exposed negative area: **ARRIFLEX 235:** 24.9 mm x 18.7 mm Conversion Kit K4.65170.0 exposed negative area: 24.9 mm x 13.9 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52068.0 in preparation exposed negative area: 24 mm x 10.5 mm **Ground Glass Marking Dimensions** 23.5 mm x 10 mm DIN S35 projected area 2.35 25 mm x 11,5 mm camera aperture with format mask K5.41477.0 + unexposed safety viewing space shifted 1.35 mm up against center line



Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask ARRICAM ST and LT: N/A N/A not available S 35 **ARRIFLEX 435:** dedicated 3-perforation camera K5,44305.0 **ARRIFLEX 535/535B:** ARRIFLEX 235*/435/535 K2.44420.G K2.47009.3 exposed negative area: Conversion Kit K4.47760.0 exposed negative area: 24 mm x 13 mm *) only Ground Glass 24.25 mm x 14 mm **ARRIFLEX 235** exposed negative area: **ARRIFLEX 235:** 24.9 mm x 18.7 mm Conversion Kit K4.65170.0 exposed negative area: 24.9 mm x 13.9 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52064.0 in preparation exposed negative area: 24 mm x 13 mm **Ground Glass Marking Dimensions** 23.5 mm x 12.7 mm DIN S35 projected area 1.85 25 mm x 14,2 mm camera aperture with format mask K5.44305.0 + unexposed safety viewing space

drawing scale 5:1



1.00 (נ	ommon top			
	Ground Glass	Frameglow	4-Perforation	3-Perforation
ARRICAM			Format-Mask	
	N/A	N/A	S 3.5	ARRICAM ST and LT: not available ARRIFLEX 435:
			K5.44305.0	dedicated 3-perforation camera ARRIFLEX 535/535B:
ARRIFLEX 235*/435/535	K2.44420.H	K2.47172.3	exposed negative area:	Conversion Kit K4.47760.0
*) only Ground Glass		END ASY BAT S2 5.35	24 mm x 13 mm ARRIFLEX 235 exposed negative area: 24.9 mm x 18.7 mm	exposed negative area: 24.25 mm x 14 mm ARRIFLEX 235: Conversion Kit K4.65170.0 exposed negative area: 24.9 mm x 13.9 mm
			Capping Shutter Format Mask for ARRIFLEX	435
			K2.52064.0 exposed negative area: 24 mm x 13 mm	in preparation
	_ _		Ground Glass Marking Dimensions	
		•	23.5 mm x 10 mm = D	IN S35 projected area 2.35
	-		23.5 mm x 12.7 mm = D	IN S35 projected area 1.85
		1.85	W	amera aperture vith format mask K5.44305.0 unexposed safety viewing space



Ground Glass Frameglow **4-Perforation 3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! S 35 K5.41476.0 ARRIFLEX 235*/435/535 K2.44420.I K2.47059.3 exposed negative area: 24 mm x 14.4 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52067.0 No 3-perforation exposed negative area: operation possible! 24 mm x 14.4 mm **Ground Glass Marking Dimensions** 18.1 mm x 13.6 mm N35 TV 1.33 safe action (4:3) 23.5 mm x 12.7 mm DIN S35 projected area 1.85 25 mm x 16 mm camera aperture with format mask K5.41476.0 + unexposed safety viewing space



Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask ARRICAM ST and LT: N/A N/A not available **ARRIFLEX 435:** dedicated 3-perforation camera K5.42393.0 **ARRIFLEX 535/535B:** ARRIFLEX 235*/435/535 K2.47035.3 K2.44420.W exposed negative area: Conversion Kit K4.47760.0 exposed negative area: 24 mm x 10.5 mm *) only Ground Glass **ARRIFLEX 235** 24.25 mm x 14 mm exposed negative area: **ARRIFLEX 235:** 24.9 mm x 18.7 mm Conversion Kit K4.65170.0 exposed negative area: 24.9 mm x 13.9 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52063.0 in preparation exposed negative area: 24 mm x 10.5 mm **Ground Glass Marking Dimensions** 23.5 mm x 10 mm DIN S35 projected area 2.35 25 mm x 11,5 mm camera aperture with format mask K5.42393.0 + unexposed safety viewing space

drawing scale 5:1



	Ground Glass	Frameglow	4-Perforation	3-Perforation
RRICAM		•	Format-Mask	
	N/A	N/A	HDTV \$ 3.5	ARRICAM ST and LT not available ARRIFLEX 435:
RRIFLEX 235*/435/535	K2.44420.2	K2.47008.3	K5.41474.0 exposed negative area:	dedicated 3-perforation came ARRIFLEX 535/535B: Conversion Kit K4.47760.0
only Ground Glass		END ASY BAT	24 mm x 13.5 mm ARRIFLEX 235 exposed negative area: 24.9 mm x 18.7 mm	exposed negative area 24.25 mm x 14 mm ARRIFLEX 235: Conversion Kit K4.65170.0 exposed negative area 24.9 mm x 13.9 mm
			Capping Shutter Format Mask for ARRIFI	EX 435
			K2.52065.0 exposed negative area: 24 mm x 13.5 mm	in preparation
	_ _		Ground Glass Marking Dimensions	
	_ _	•	Ground Glass Marking Dimensions 22.5 mm × 12.65 mm =	DIN S35 TV 1.78 safe action (16
	_	•		DIN S35 TV 1.78 safe action (16) camera aperture with format mask K5.41474.0 + unexposed safety viewing space

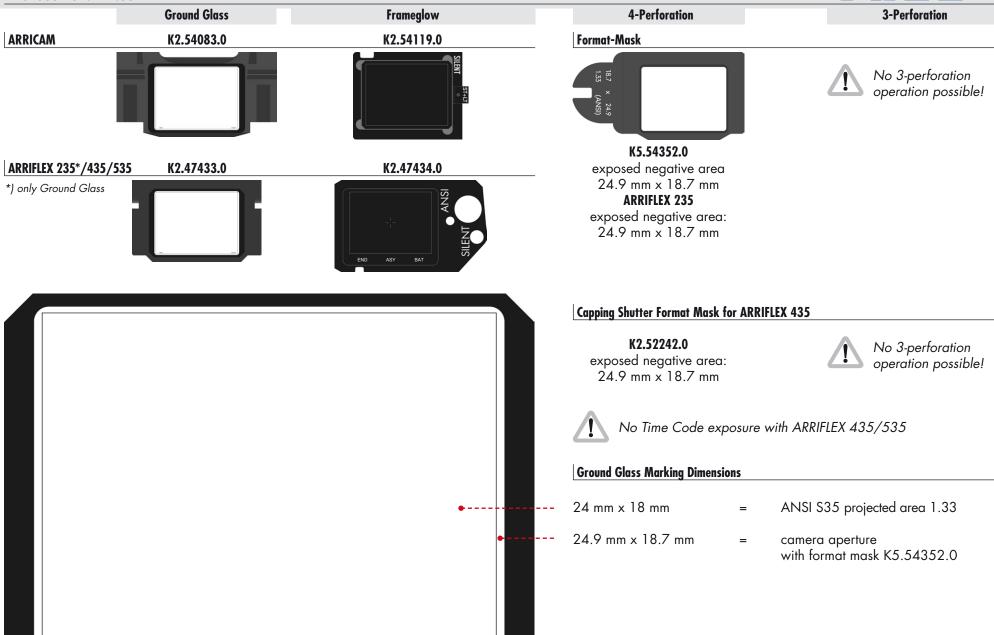


Ground Glass 4-Perforation Frameglow **3-Perforation** ARRICAM Format-Mask No 3-perforation N/A N/A operation possible! K5.42392.0 ARRIFLEX 235*/435/535 K2.41200.F K2.47281.3 exposed negative area: 24 mm x 18 mm *) only Ground Glass **ARRIFLEX 235** exposed negative area: 24.9 mm x 18.7 mm Capping Shutter Format Mask for ARRIFLEX 435 K2.52062.0 No 3-perforation exposed negative area: operation possible! 24 mm x 18 mm **Ground Glass Marking Dimensions** 22.5 mm x 16.9 mm DIN S35 TV 1.33 safe action (4:3) 25 mm x 19 mm camera aperture with format mask K5.42392.0 + unexposed safety viewing space T.V. SAFE (S 35)

drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm





drawing scale 5:1

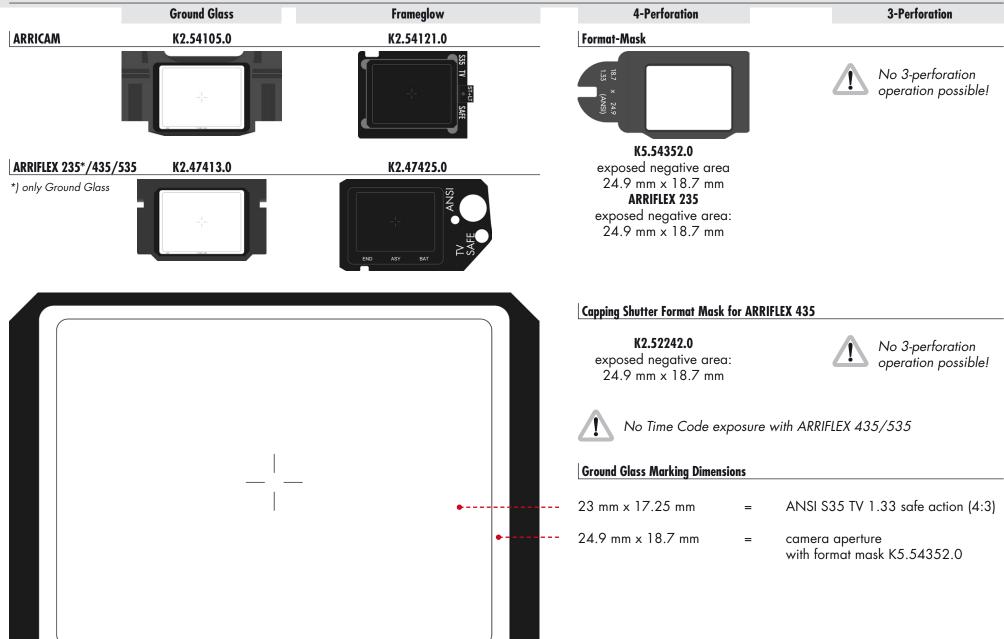
ANSI

© ARRI

tolerance for format markings on ground glass ± 0.02 mm

SILENT





drawing scale 5:1

ANSI

T.V. SAFE (S35)

© ARRI

tolerance for format markings on ground glass ± 0.02 mm

ANSI S35 TV 1.78 transmitted



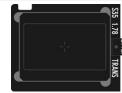
3-Perforation



ARRIFLEX 235*/435/535 K2.47414.0

*) only Ground Glass





K2.47426.0



4-Perforation

Format-Mask





No 3-perforation operation possible!

K5.59775.0

exposed negative area 24.9 mm x 14.4 mm **ARRIFLEX 235**

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52245.0

exposed negative area: 24.9 mm x 14.4 mm



No 3-perforation operation possible!



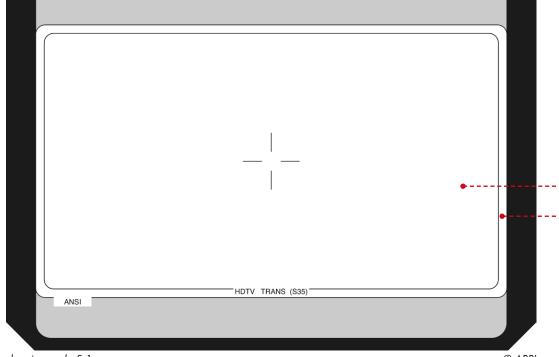
No Time Code exposure with ARRIFLEX 435/535

Ground Glass Marking Dimensions

24 mm x 13.5 mm ANSI S35 TV 1.78 transmitted (16:9)

24.9 mm x 14.4 mm camera aperture

with format mask K5.59775.0



ANSI S35 TV 1.78 + 1.33 trans



3-Perforation

Ground Glass Frameglow ARRICAM K2.54060.0 K2.54054.0

ARRIFLEX 235*/435/535

*) only Ground Glass



K2.47410.0

K2.47422.0



4-Perforation

Format-Mask





No 3-perforation operation possible!

K5.59775.0

exposed negative area 24.9 mm x 14.4 mm

ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52245.0

exposed negative area: 24.9 mm x 14.4 mm



No 3-perforation operation possible!



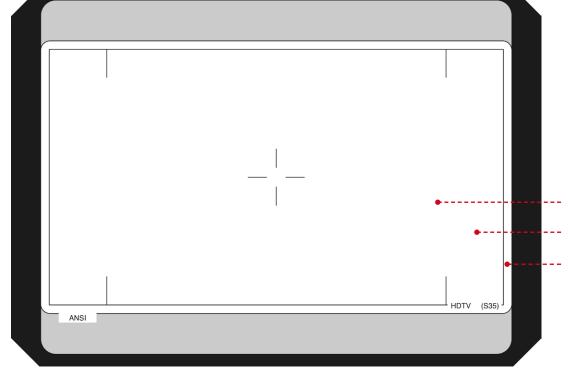
No Time Code exposure with ARRIFLEX 435/535

Ground Glass Marking Dimensions

17.93 mm x 13.5 mm ANSI S35 TV 1.33 transmitted (4:3)

24 mm x 13.5 mm ANSI S35 TV 1.78 transmitted (16:9)

24.9 mm x 14.4 mm camera aperture with format mask K5.59775.0







1.78

ARRIFLEX 235*/435/535

*) only Ground Glass

K2.47415.0

K2.47427.0



4-Perforation

3-Perforation

Format-Mask





No 3-perforation operation possible!

K5.59775.0

exposed negative area 24.9 mm x 14.4 mm ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52245.0

exposed negative area: 24.9 mm x 14.4 mm



No 3-perforation operation possible!



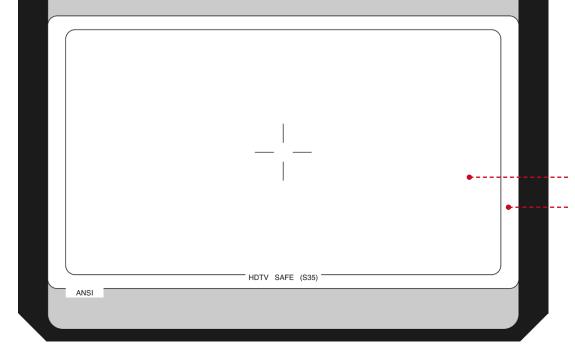
No Time Code exposure with ARRIFLEX 435/535

Ground Glass Marking Dimensions

 $23 \text{ mm} \times 12.94 \text{ mm} = \text{ANSI S35 TV } 1.78 \text{ safe action (16:9)}$

24.9 mm x 14.4 mm = camera aperture

with format mask K5.59775.0



ANSI S35 1.78 + 1.55 + 1.33 CGG



3-Perforation

Ground Glass Frameglow ARRICAM K2.54085.0 K2.54089.0

ARRIFLEX 235*/435/535

*) only Ground Glass

K2.47419.0

K2.47431.0



4-Perforation

Format-Mask



No 3-perforation operation possible!

K5.59775.0

exposed negative area 24.9 mm x 14.4 mm **ARRIFLEX 235**

exposed negative area: 24.9 mm x 18.7 mm

Capping Shutter Format Mask for ARRIFLEX 435

K2.52245.0

exposed negative area: 24.9 mm x 14.4 mm



No 3-perforation operation possible!



No Time Code exposure with ARRIFLEX 435/535

Ground Glass Marking Dimensions

16.8 mm x 12.56 mm ANSI S35 1.33

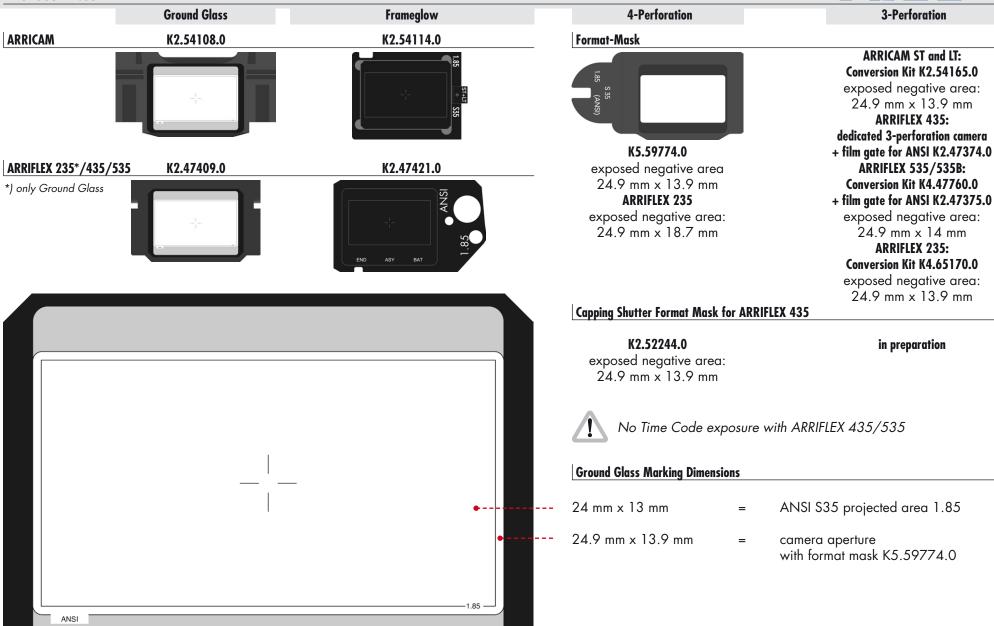
19.2 mm x 12.56 mm ANSI S35 1.55

24 mm x 13.5 mm ANSI S35 TV 1.78 transmitted (16:9)

24.9 mm x 14.4 mm camera aperture with format mask K5.59775.0

16:9 CGG ANSI

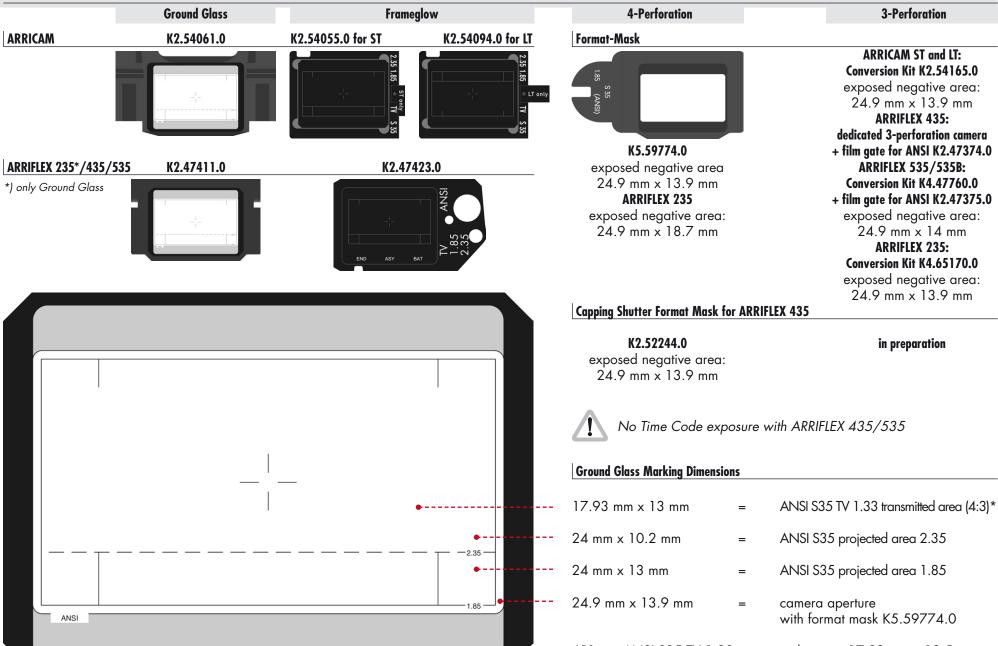




ANSI S35 2.35 + 1.85 + TV 1.33 Trans

drawing scale 5:1

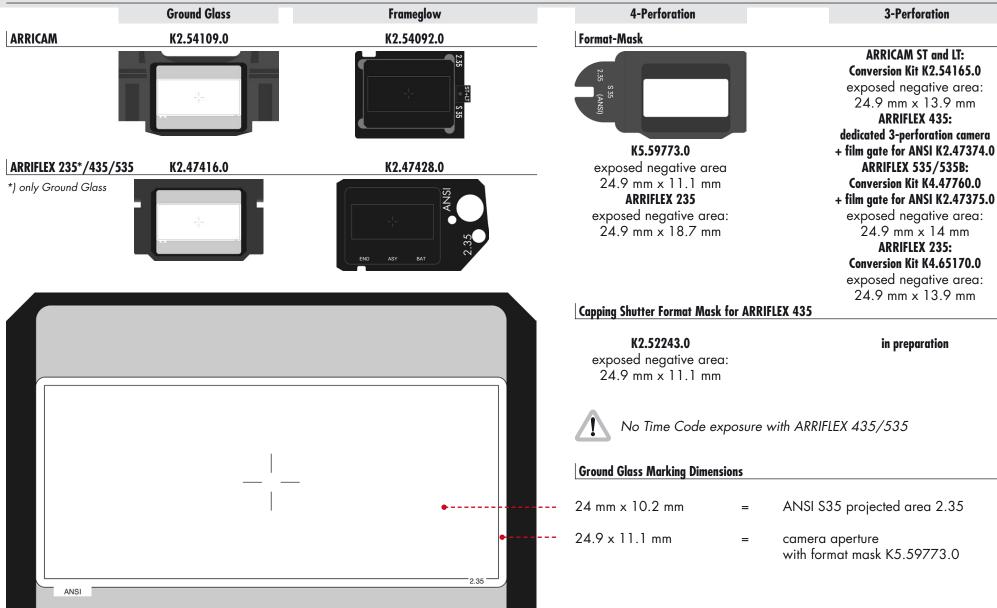




*Note: ANSI S35 TV 1.33 transmitted area = $17.93 \text{ mm} \times 13.5 \text{ mm}$ second line not shown for better readability tolerance for format markings on ground glass $\pm 0.02 \text{ mm}$

ANSI S35 2.35 centric

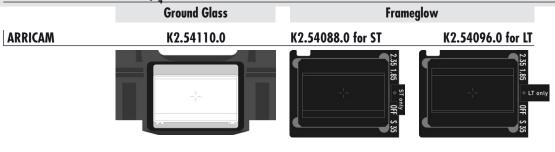




ANSI S35 2.35 + 1.85 1/4 offset



3-Perforation



Format-Mask



4-Perforation



No 3-perforation operation possible!

ARRIFLEX 235*/435/535

*) only Ground Glass



K2.47417.0

K2.47429.0



K5.59776.0

exposed negative area 24.9 mm x 13.9 mm

ARRIFLEX 235

exposed negative area: 24.9 mm x 18.7 mm



K2.52246.0

exposed negative area: 24.9 mm x 13.9 mm



No 3-perforation operation possible!



No Time Code exposure with ARRIFLEX 435/535

Ground Glass Marking Dimensions

 $24 \text{ mm} \times 10.2 \text{ mm}$ = ANSI S35 projected area 2.35

24 mm x 13 mm = ANSI S35 projected area 1.85

24.9 mm x 13.9 mm = camera aperture with format mask K5.59776.0

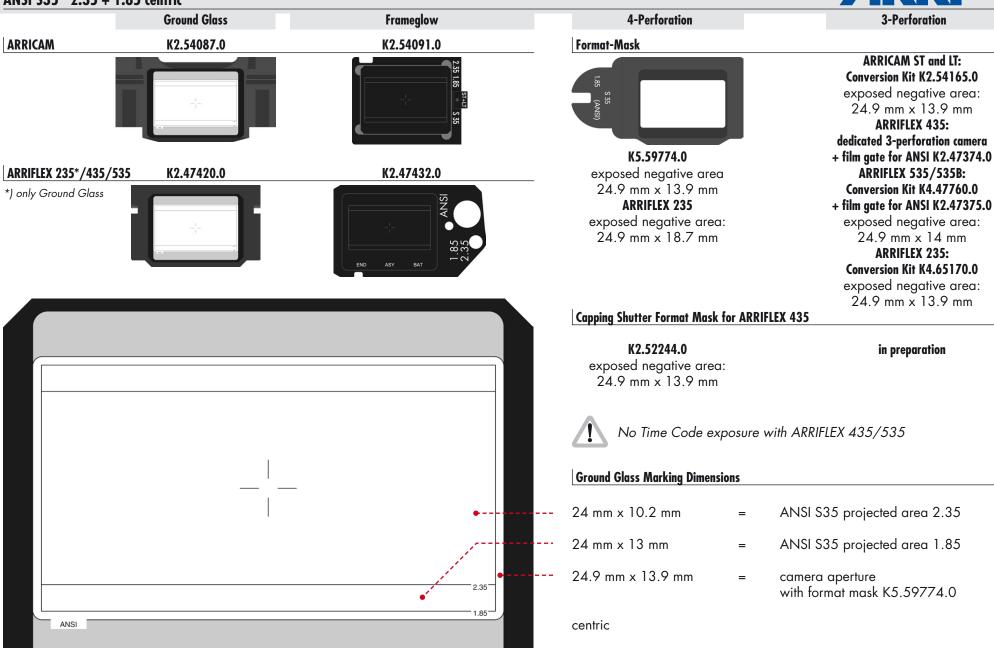
 $^{1}/_{4}$ offset (lines 24 mm x 13 mm shifted 0.7mm down against center cross)

ANSI 1.85 2.35

drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm





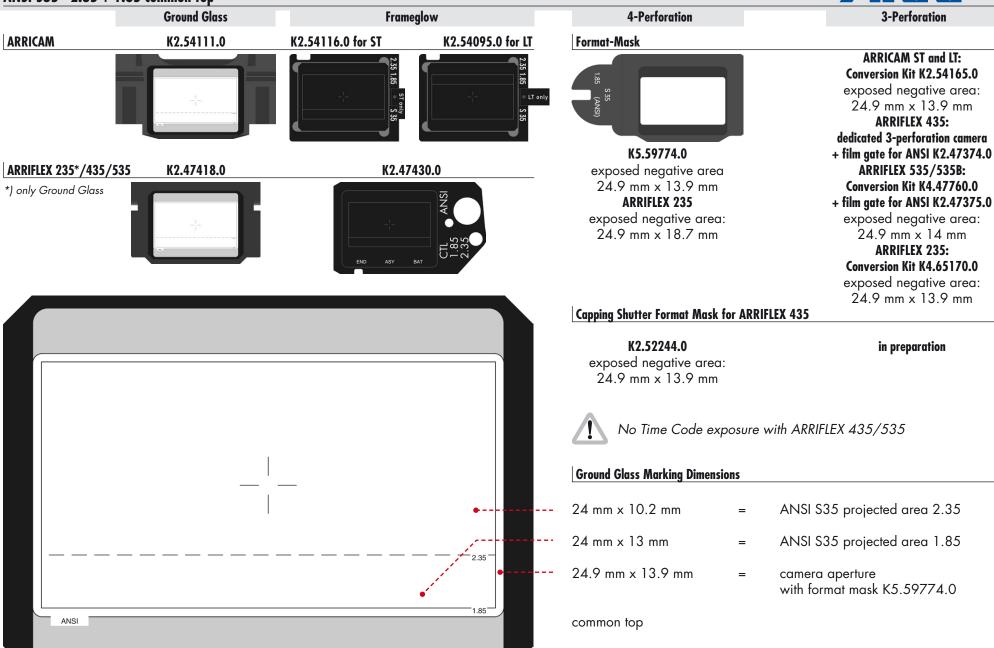
drawing scale 5:1

tolerance for format markings on ground glass ±0.02 mm

ANSI S35 2.35 + 1.85 common top

drawing scale 5:1

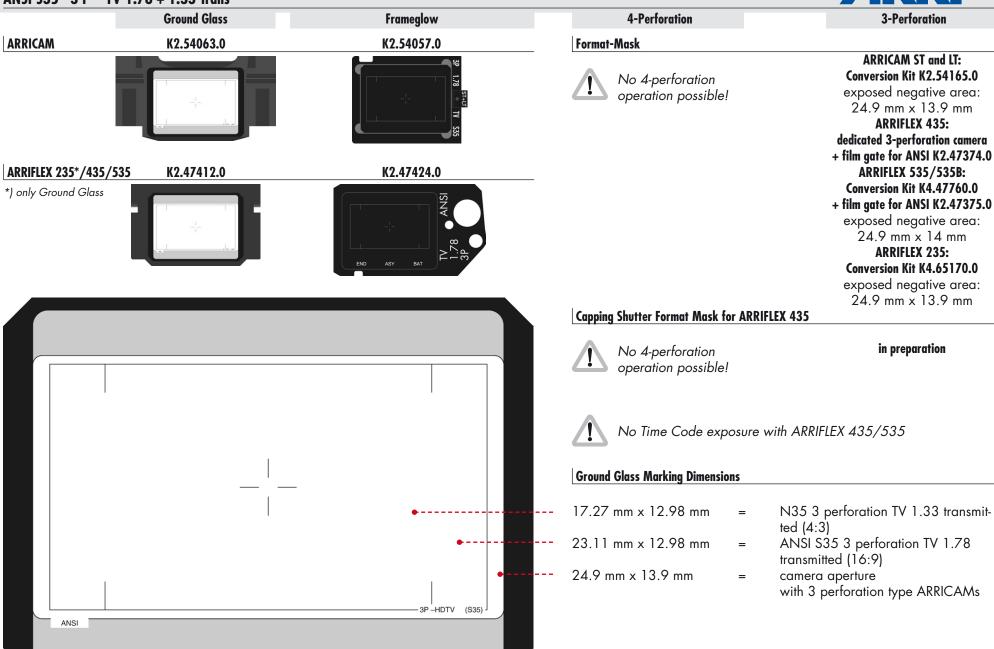




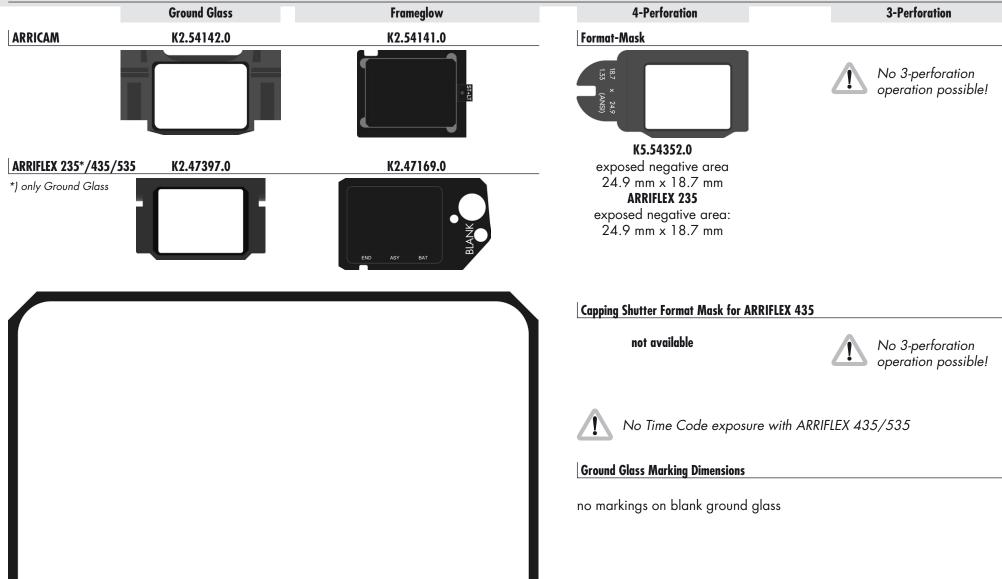
tolerance for format markings on ground glass ±0.02 mm

ANSI S35 3 P TV 1.78 + 1.33 Trans





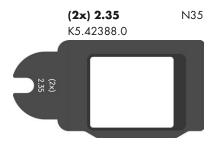




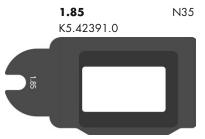


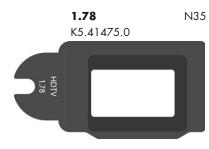
In the ground glass drawings section there is a format mask cited for each ground glass. This represents the smallest aperture suitable for the given ground glass. It is however possible to use format masks with larger apertures and to extract the required image format from the negative in post-production.





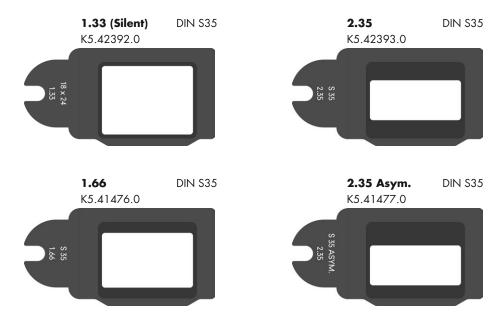


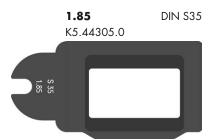


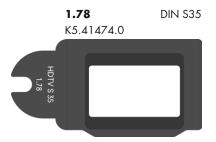




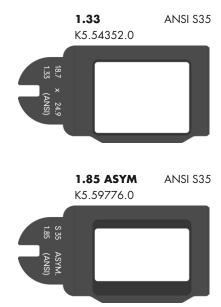


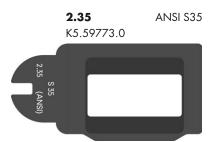


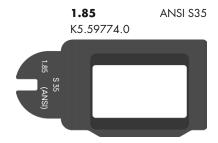


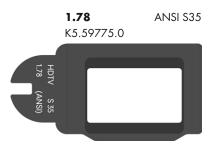






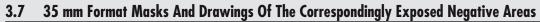








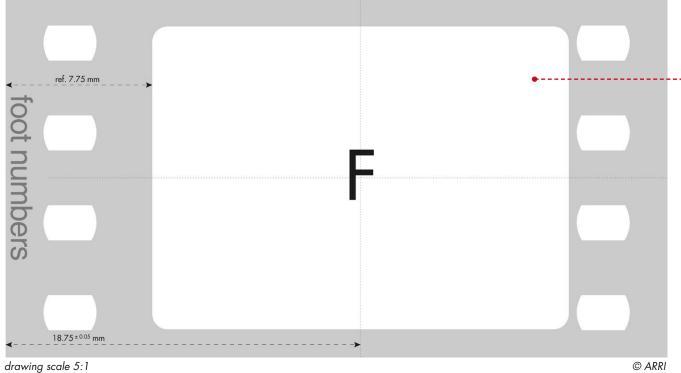
No Time Code exposure with ARRIFLEX 435/535





Format Mask	Format	Ident-Nr.
1.37 (Academy)	N35	K5.42387.0





Correspondingly Exposed Neagative Area

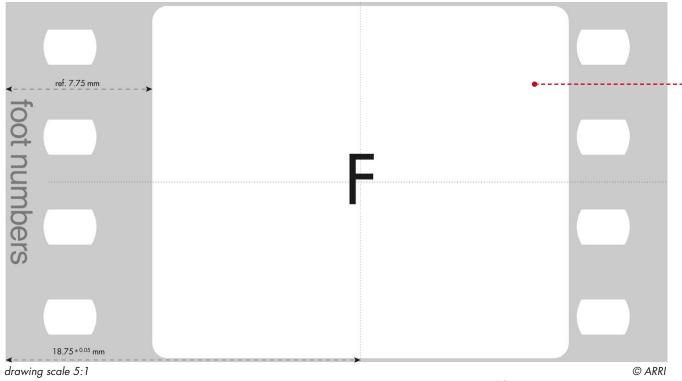
22 + 0.01 mm x 16 + 0.01 mm (R 0.8 mm)



Format Mask Format Ident-Nr.

(2x) 2.35 N35 K5.42388.0





Correspondingly Exposed Neagative Area

22 + 0.01 mm x 18.6 + 0.01 mm (R 0.8 mm)

1:2.35 (2x)



Format Mask Format Ident-Nr. 1.66 **N35** K5.42390.0





Correspondingly Exposed Neagative Area

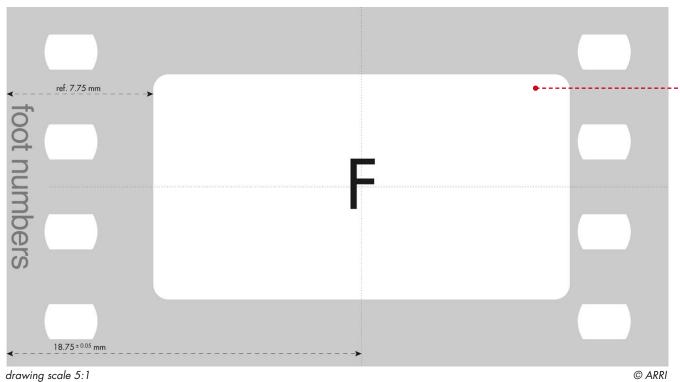
22 + 0.01 mm x 13.2 + 0.01 mm (R 0.8 mm)



 Format Mask
 Format
 Ident-Nr.

 1.85
 N35
 K5.42391.0





Correspondingly Exposed Neagative Area

22 + 0.01 mm x 11.9 + 0.01 mm (R 0.8 mm)

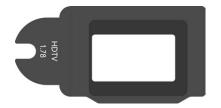
1:1.85

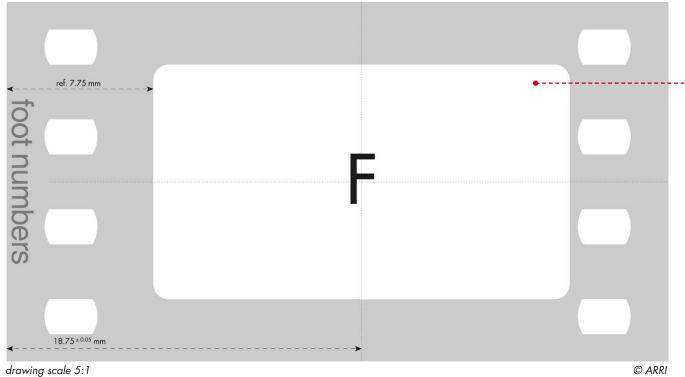
icule 5.1



 Format Mask
 Format
 Ident-Nr.

 1.78
 N35
 K5.41475.0



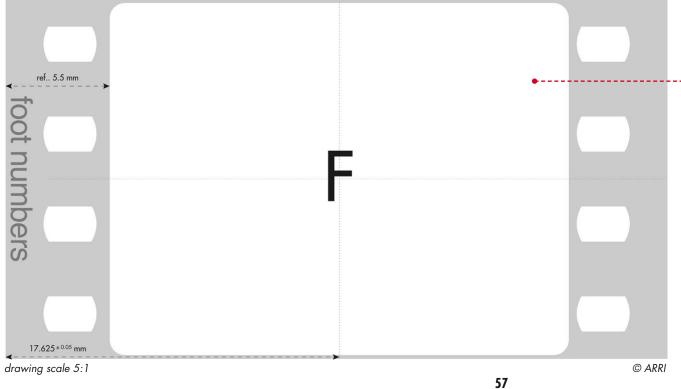


Correspondingly Exposed Neagative Area

 $22 + 0.01 \text{ mm} \times 12.4 + 0.01 \text{ mm} \text{ (R 0.8 mm)}$



Format Mask Format Ident-Nr. Universal N35 + DIN S 35 K5.42389.0



Correspondingly Exposed Neagative Area

24.25 + 0.01 mm x 18.6 + 0.01 mm (R 0.8 mm)

This format covers N35 as well as DIN S35.

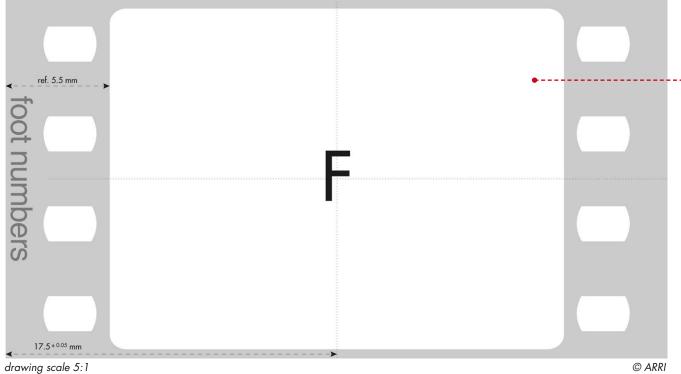
Extract the required image format from the negative in post-production.



Format Mask Format Ident-Nr.

1.33 (Silent) DIN S35 K5.42392.0





Correspondingly Exposed Neagative Area

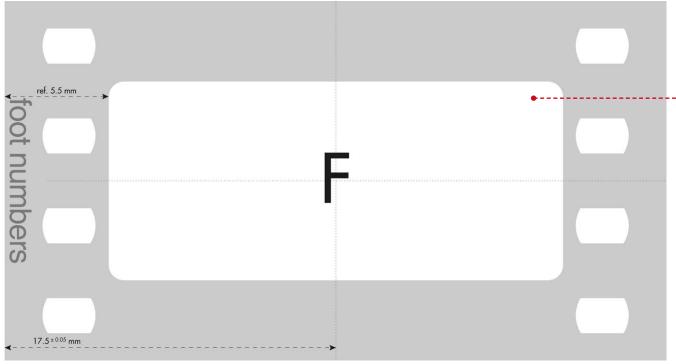
24 + 0.01 mm x 18 + 0.01 mm (R 0.8 mm)

1.33



Format Mask Format Ident-Nr. 2.35 **DIN S35** K5.42393.0





Correspondingly Exposed Neagative Area

 $24 + 0.01 \text{ mm} \times 10.5 + 0.01 \text{ mm} \text{ (R 0.8 mm)}$

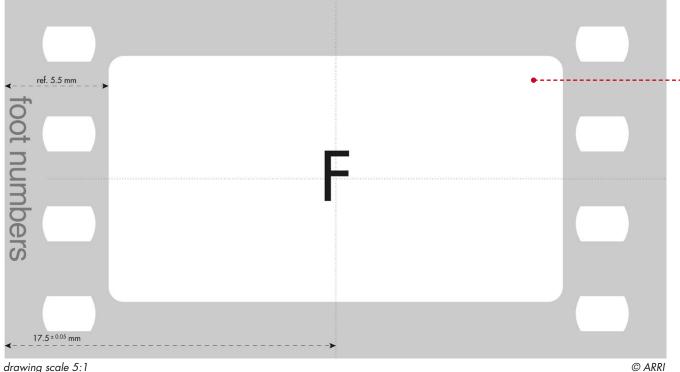
1:2.35

drawing scale 5:1 © ARRI 59



Format Mask Format Ident-Nr. 1.85 **DIN S35** K5.44305.0





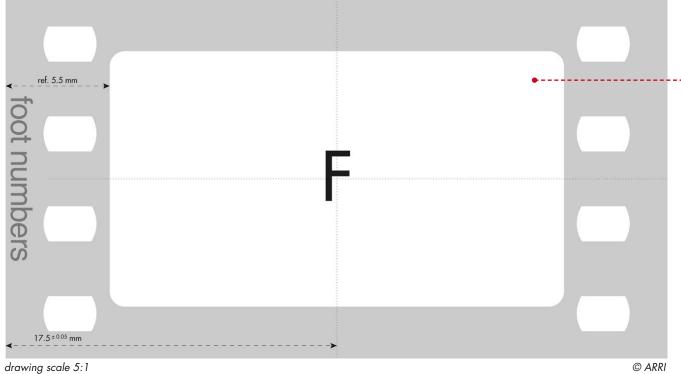
Correspondingly Exposed Neagative Area

 $24 + 0.01 \text{ mm} \times 13 + 0.01 \text{ mm} \text{ (R 0.8 mm)}$



Format Mask Format Ident-Nr. 1.78 **DIN S35** K5.41474.0





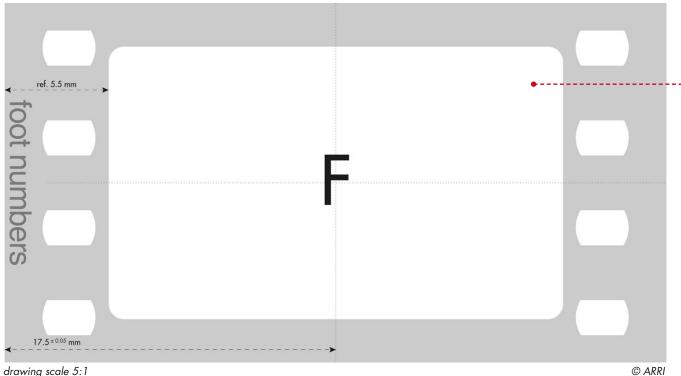
Correspondingly Exposed Neagative Area

 $24 + 0.01 \text{ mm} \times 13.5 + 0.01 \text{ mm} \text{ (R 0.8 mm)}$



Format Mask Format Ident-Nr. 1.66 **DIN S35** K5.41476.0





Correspondingly Exposed Neagative Area

 $24 + 0.01 \text{ mm} \times 14.4 + 0.01 \text{ mm} \text{ (R 0.8 mm)}$



Format Mask Format Ident-Nr.

2.35 ASYM. **DIN S35** K5.41477.0





Correspondingly Exposed Neagative Area

24 + 0.01 mm x 10.5 + 0.01 mm (R 0.8 mm)

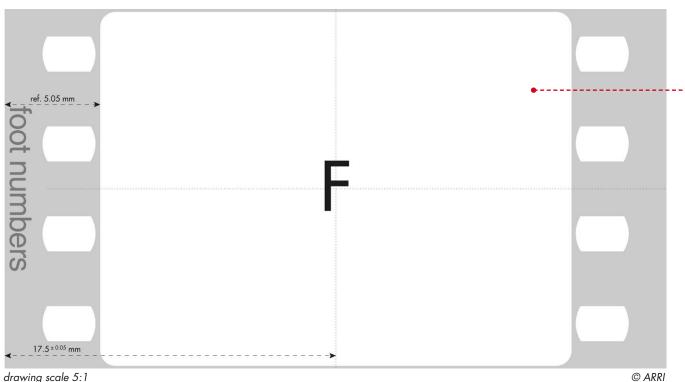
1:2.35



Format Mask Format Ident-Nr. 1.33 **ANSI S35** K5.54352.0



No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 18.7 ± 0.01 mm (R 0.8 mm)



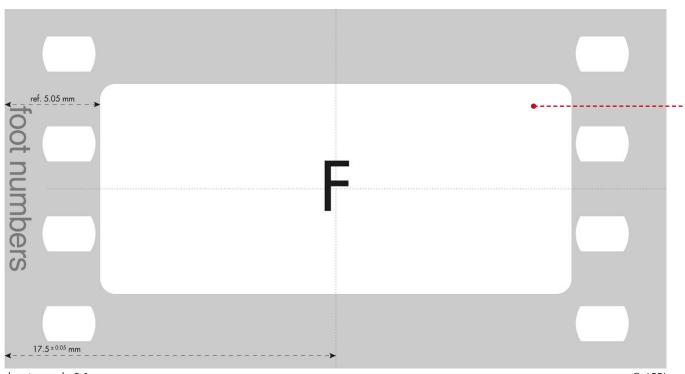
 Format Mask
 Format
 Ident-Nr.

 2.35
 ANSI S35
 K5.59773.0



1

No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

24.9 + 0.01 mm x 11.1 + 0.01 mm (R 0.8 mm)

1:2.35

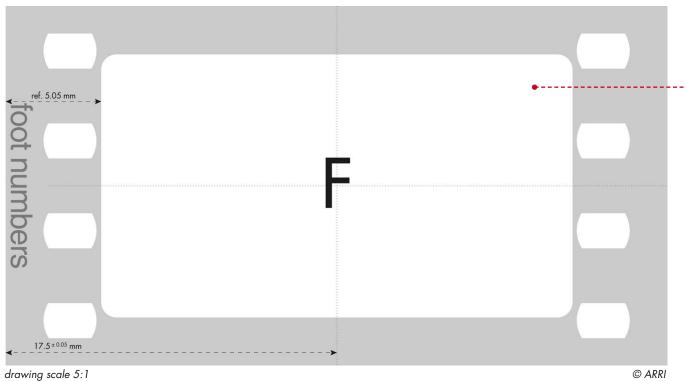
drawing scale 5:1 © ARRI



Format Mask Format Ident-Nr. 1.85 K5.59774.0 **ANSI S35**



No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 13.9 ± 0.01 mm (R 0.8 mm)



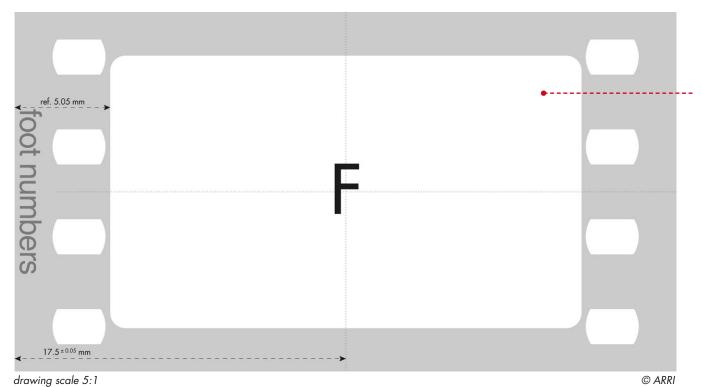
 Format Mask
 Format
 Ident-Nr.

 1.78
 ANSI S35
 K5.59775.0





No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 14.4 ± 0.01 mm (R 0.8 mm)



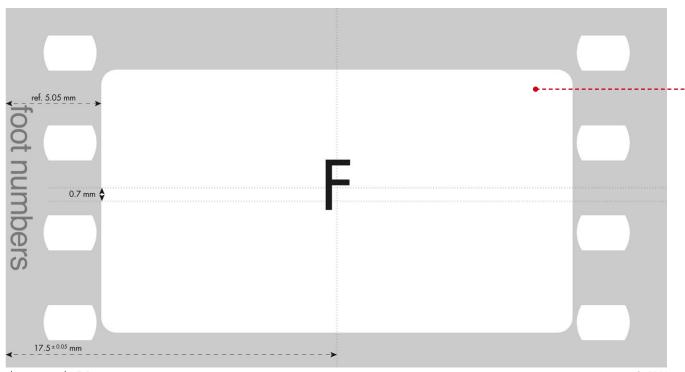
Format Mask Format Ident-Nr.

1.85 ASYM ANSI \$35 K5.59776.0





No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 13.9 ± 0.01 mm (R 0.8 mm)

1:1.85

- 0.7 mm off center

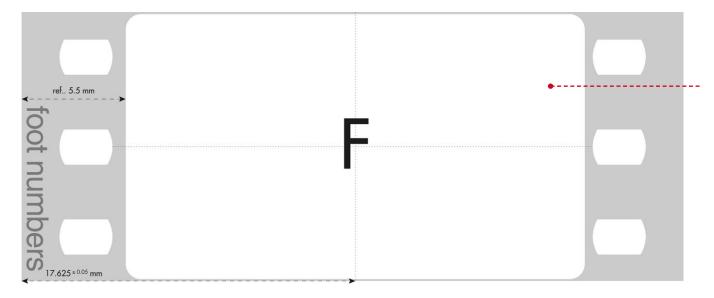


Format Mask

N35 / DIN S35 - 3 perforation aperture for ARRIFLEX 435 /535/ 535B

Camera aperture of the ARRIFLEX 435 3 perf

or with conversion kit for ARRIFLEX 535/535B K4.47760.0



Correspondingly Exposed Neagative Area

 24.25 ± 0.01 mm x 14 ± 0.01 mm (R 0.8 mm)

This format covers all 3 perforation negative areas of N35 as well as DIN S35.

Extract the required image format from the negative in post-production.



Format Mask

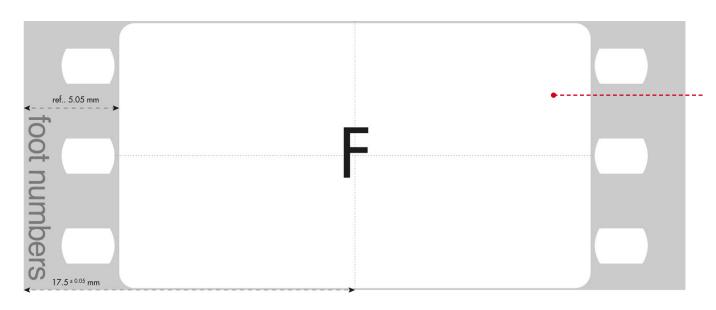
ANSI S35 – 3 perforation aperture for ARRIFLEX 435/535/535B

Camera aperture of the ARRIFLEX 435 3 perf and additional film gate for ANSI K2.47374.0

or of the ARRIFLEX 535/535B with conversion kit K4.47760.0 and additional film gate for ANSI K2.47375.0



No Time Code exposure with ARRIFLEX 435/535



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 14 ± 0.01 mm (R 0.8 mm)

This format covers all 3 perforation negative areas of N35, DIN S35 as well as ANSI S35.

Extract the required image format from the negative in post-production.

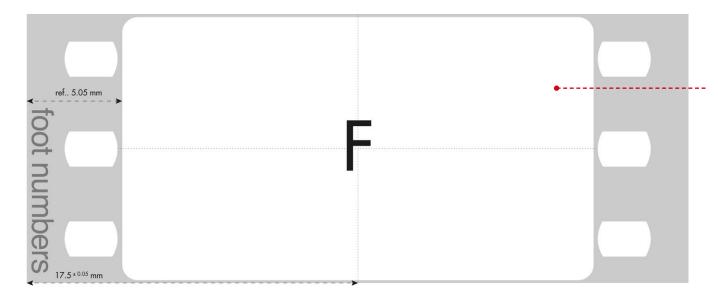
drawing scale 5:1 © ARRI



Format Mask

ANSI S35 - 3 perforation aperture for ARRICAM ST and LT

Camera aperture of the ARRICAM ST and LT with conversion kit K2.54165.0



Correspondingly Exposed Neagative Area

 24.9 ± 0.01 mm x 13.9 ± 0.01 mm (R 0.8 mm)

This format covers all 3 perforation negative areas of N35, DIN S35 as well as ANSI S35.

Extract the required image format from the negative in post-production.

4. 16 mm

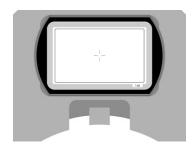


The methods of operating for 16mm and 35mm film are becoming increasingly similar. That's why the format markings of the 16mm ground glasses were adapted to fit the layout of the 35mm ground glasses. The hedged area, which shaded the outer field on the old fiberscreens was replaced with a neutral density area. This prevents the hatched pattern from interacting with the Video Assist's CCD sensor to produce a Moiré effect, which looks similar like something a plaid jacket would produce in a TV image.

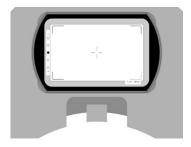
The new fiberscreens are retroactively compatible with the ARRIFLEX 16 SR3 Advanced.

They are also available with markings for the exposure meter (order numbers in italic typeface) – see sample on bottom.

All ground glasses show the area of the actual negative image according to ISO 5768 and DIN 15602. The area outside this space is reduced in transparency to clearly define the image area, which is actually being recorded onto the negative. Unwanted objects, such as microphones, can be easily recognized and kept out of the image.



Normal Typeface = without markings for exposure meter



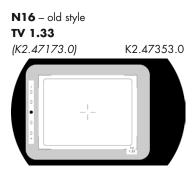
Italic Typeface = with exposure meter markings

4.1 N16 Ground Glass Template for ARRIFLEX 416, ARRIFLEX 16SR 3 (and Advanced Models)



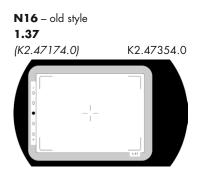
N16 – old style
1.37 - TV 1.33
(K4.47386.0)

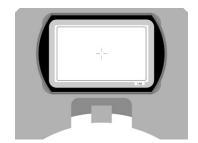
K4.48012.0



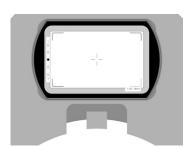






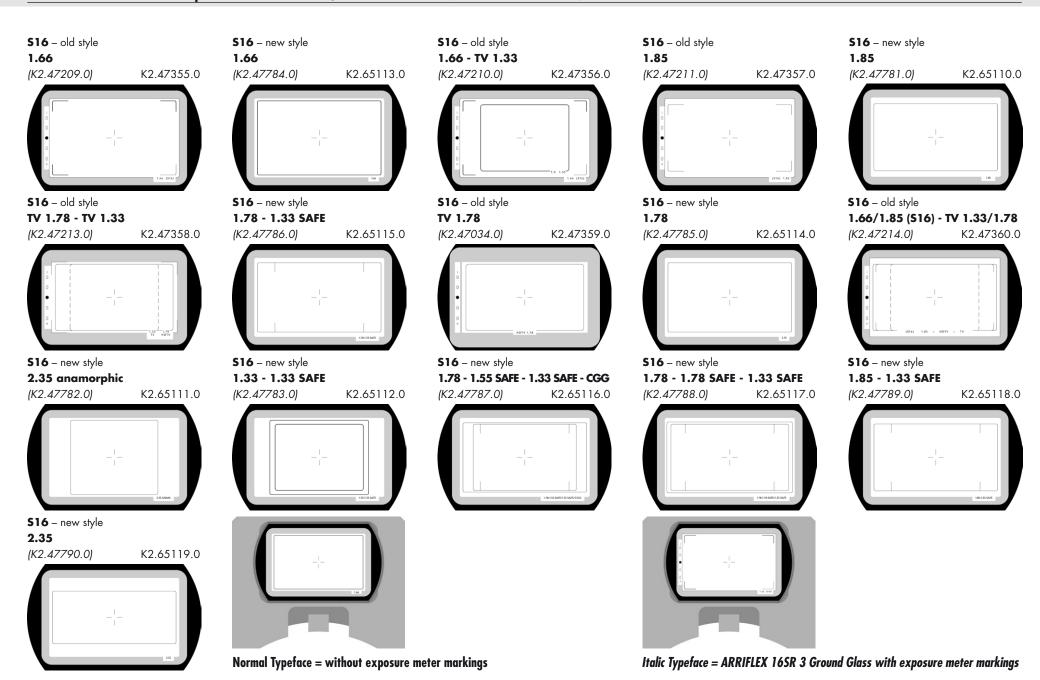


Normal Typeface = without exposure meter markings



Italic Typeface = ARRIFLEX 16SR 3 Ground Glass with exposure meter markings





4.3 16 mm Ground Glass Drawings



Ground Glass Drawing	Format	ldent-Nr.
1.37 - TV 1.33	N16	K4.47386.0
old style		K4.48012.0

with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $10.3^{+0.05}$ mm x $7.5^{+0.015}$ mm

0 ___ TV drawing scale 10:1 © ARRI

Ground Glass Marking Dimensions

 $8.4^{\pm0.02} \text{ mm x } 6.3^{\pm0.02} \text{ mm}$ TV safe action 4:3

 $9.35^{\pm0.02}$ mm x $7^{+0.1}$ mm TV transmitted 4:3

 $10.3^{+0.05}$ mm x $7.5^{+0.05}$ mm camera aperture



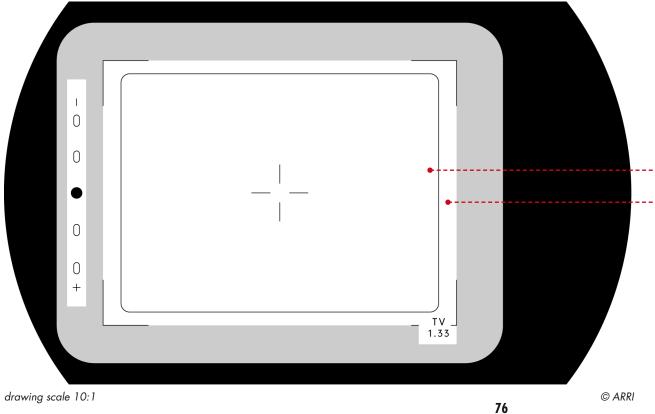
Ground Glass Drawing	Format	ldent-Nr.
TV 1.33	N16	K2.47173.0
old style		К2.47353.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $10.3^{+0.05}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $8.4^{\pm0.02}$ mm x $6.3^{\pm0.02}$ mm

TV safe action 4:3

 $9.35^{\pm0.02} \text{ mm x } 7^{+0.1} \text{ mm}$

transmitted area 4:3



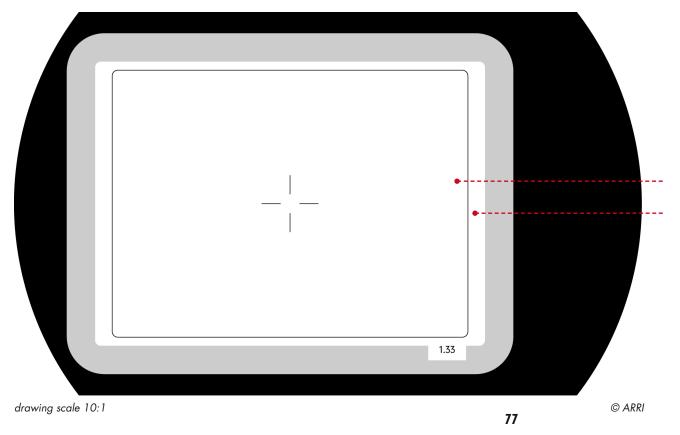
Ground Glass Drawing	Format	ldent-Nr.
1.33	N16	K2.47791.0
new style		K2.65120.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $10.3^{+0.05}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

9.4 mm x 7.05 mm TV transmitted (1.33)

 $10.3^{+0.05} \text{ mm x } 7.5^{+0.05} \text{ mm}$ camero

camera aperture N16



Ground Glass Drawing Ident-Nr. **Format N16** K2.47792.0 1.33 / 1.33 SAFE K2.65121.0 new style

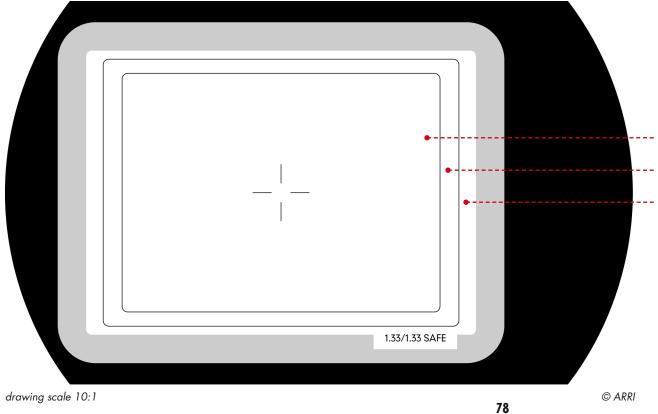
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $10.3^{+0.05}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.4 mm x 6.3 mm TV safe action (1.33)

9.4 mm x 7.05 mm TV transmitted (1.33)

 $10.3^{+0.05}$ mm x $7.5^{+0.05}$ mm camera aperture N16



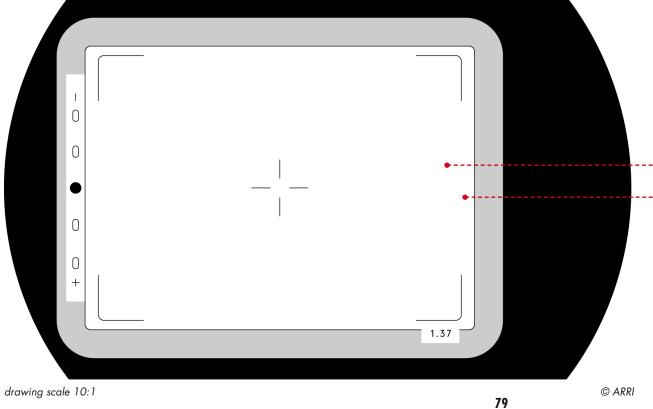
Ground Glass Drawing	Format	ldent-Nr.
1.37	N16	K2.47174.0
old style		K2.47354.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $10.3^{+0.05}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $9.6^{+0.05}$ mm x $7^{+0.05}$ mm

projected area

 $10.3^{+0.05}$ mm x $7.5^{+0.05}$ mm

camera aperture



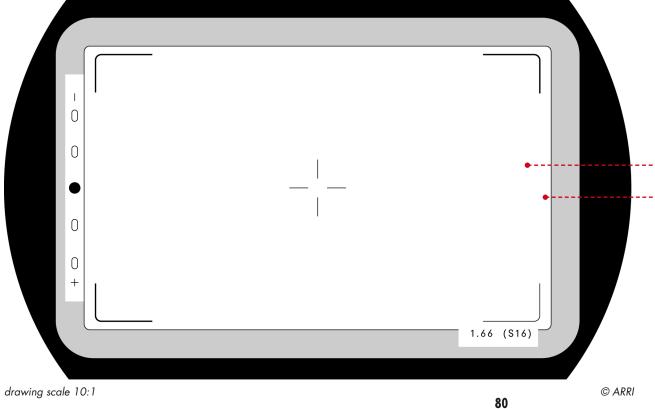
Ground Glass Drawing	Format	Ident-Nr.
1.66 (\$16)	\$16	K2.47209.0
old style		K2.47355.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $11.75^{+0.05}$ mm x $7.05^{+0.05}$ mm projected area

 $12.35^{+0.05}$ mm x $7.5^{+0.05}$ mm camera aperture



Ground Glass Drawing	Format	ldent-Nr.
1.66	\$16	K2.47784.0
new style		K2.65113.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

11.75 mm x 7.05 mm

projected area (1.66)

12.35 mm x 7.5 mm

camera aperture \$16



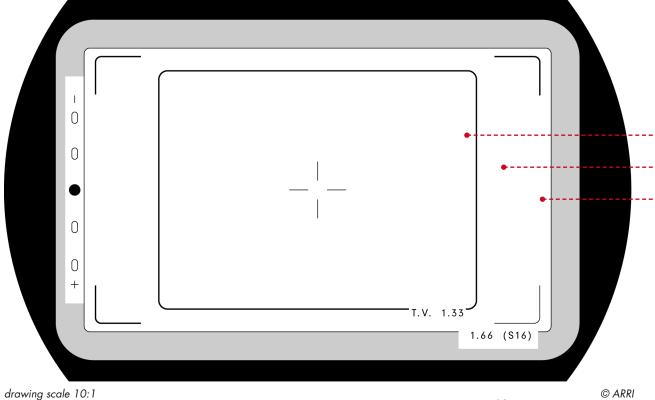
Ground Glass Drawing	Format	ldent-Nr.
1.66 (\$16) - TV 1.33	\$16	K2.47210.0
old style		K2.47356.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $8.4^{\pm0.02}$ mm x $6.3^{\pm0.02}$ mm TV safe action 4:3

 $11.75^{+0.05}$ mm x $7.05^{+0.1}$ mm projected area

 $12.35^{+0.05}$ mm x $7.5^{+0.05}$ mm camera aperture



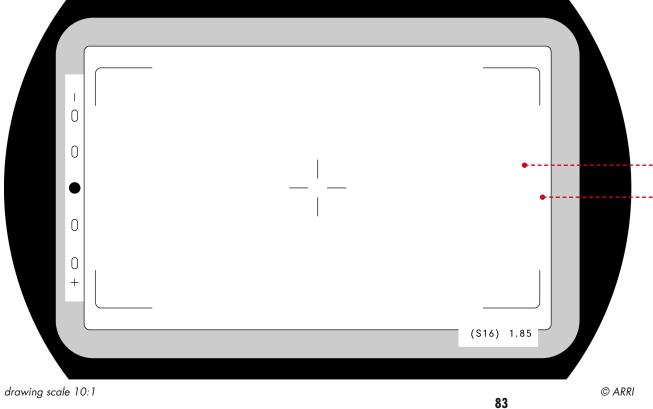
Ground Glass Drawing	Format	ldent-Nr.
1.85 (\$16)	\$16	K2.47211.0
old style		K2.47357.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $11.75^{+0.05} \text{ mm x } 6.35^{+0.1} \text{ mm}$ projected area

 $12.35^{+0.05}$ mm x $7.5^{+0.05}$ mm camera aperture



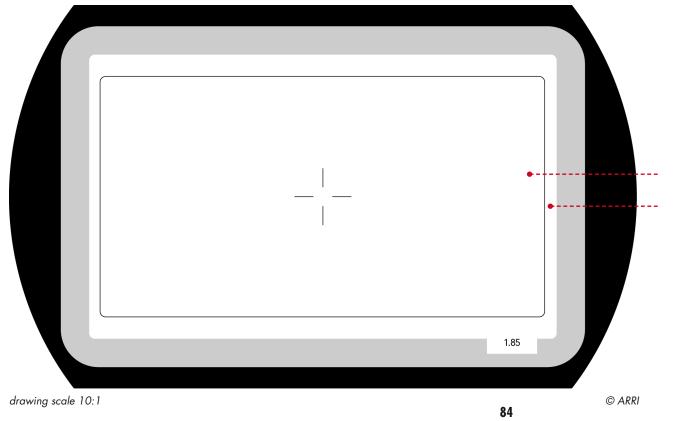
Ground Glass Drawing	Format	ldent-Nr.
1.85	\$16	K2.47781.0
new style		K2.65110.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $11.75 \text{ mm} \times 6.35 \text{ mm}$

projected area (1.85)

12.35 mm x 7.5 mm

camera aperture \$16



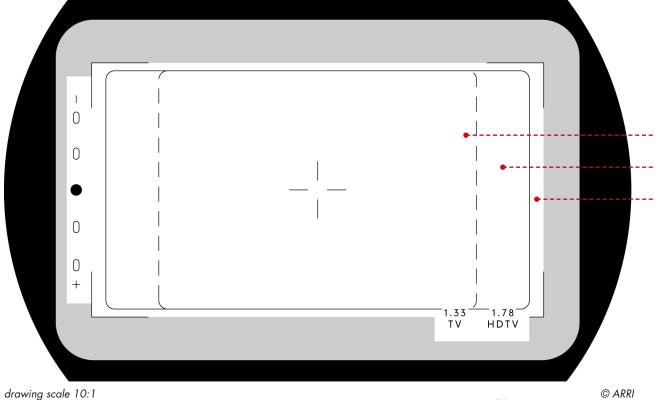
Ground Glass Drawing	Format	ldent-Nr.
TV 1.78 - TV 1.33	\$16	K2.47213.0
old style		K2.47358.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $8.4^{+0.05}$ mm x $6.3^{+0.05}$ mm TV safe action 4:3

 $11.2^{+0.05}$ mm x $6.3^{+0.05}$ mm TV safe action 16:9

 $11.95^{+0.05} \text{ mm x } 6.72^{+0.05} \text{ mm}$ transmitted area 16:9



Ground Glass Drawing Ident-Nr. **Format** 1.78 - 1.33 SAFE **S16** K2.47786.0 K2.65115.0 new style

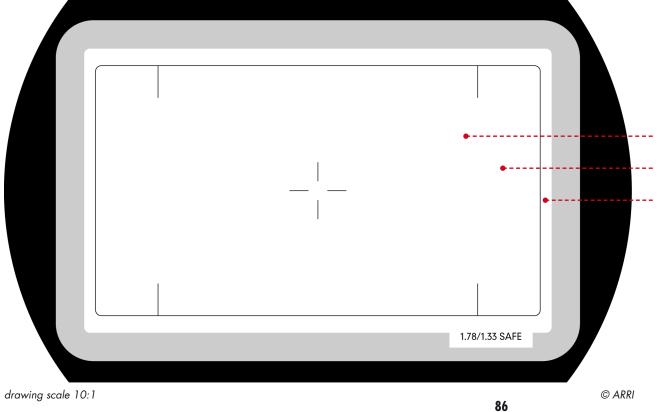
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $8.4 \text{ mm} \times 6.3 \text{ mm}$ (not shown) TV safe action (1.33)

11.75 mm x 6.6 mm TV transmitted (1.78)

12.35 mm x 7.5 mm camera aperture \$16



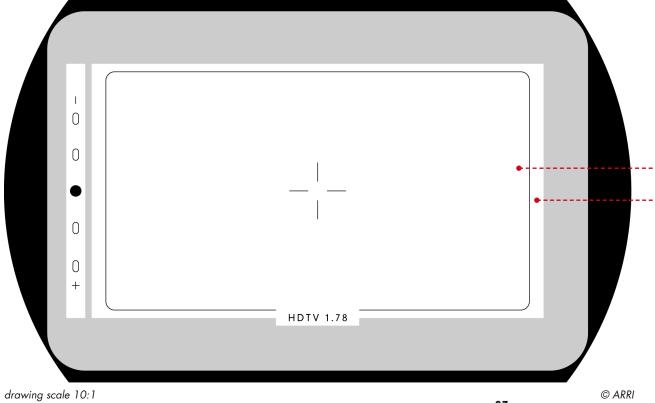
Ground Glass Drawing	Format	ldent-Nr.
TV 1.78	\$16	K2.47034.0
old style		K2.47359.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $11.2^{+0.05}$ mm x $6.3^{+0.05}$ mm TV safe action 16:9

 $11.95^{+0.05}$ mm x $6.72^{+0.05}$ mm transmitted area 16:9



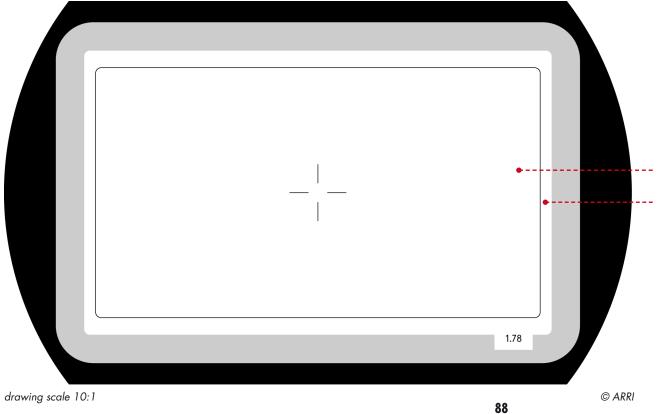
Ground Glass Drawing	Format	ldent-Nr.
1.78	\$16	K2.47785.0
new style		K2.65114.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

11.75 mm x 6.6 mm

TV transmitted (1.78)

12.35 mm x 7.5 mm

camera aperture \$16



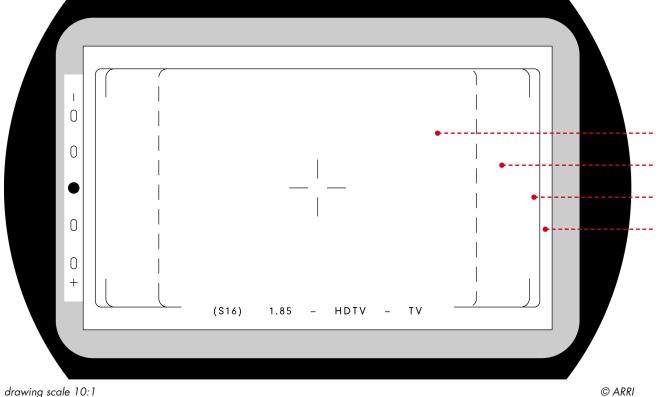
Ground Glass Drawing	Format	ldent-Nr.
1.66/1.85 (S16) - TV 1.33/1.78	\$16	K2.47214.0
old style		K2.47360.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

 $8.4^{+0.05}$ mm x $6.3^{+0.05}$ mm TV safe action 4:3

 $11.2^{+0.05}$ mm x $6.3^{+0.05}$ mm TV safe action 16:9

 $11.75^{+0.05}$ mm x $6.3^{+0.05}$ mm projected area

 $12.4^{-0.05}$ mm x $7.5^{+0.05}$ mm camera aperture

Line at 7.05 mm not shown for better readability



Ground Glass Drawing Ident-Nr. **Format** 2.35 anamorphic **S16** K2.47782.0 K2.65111.0 new style

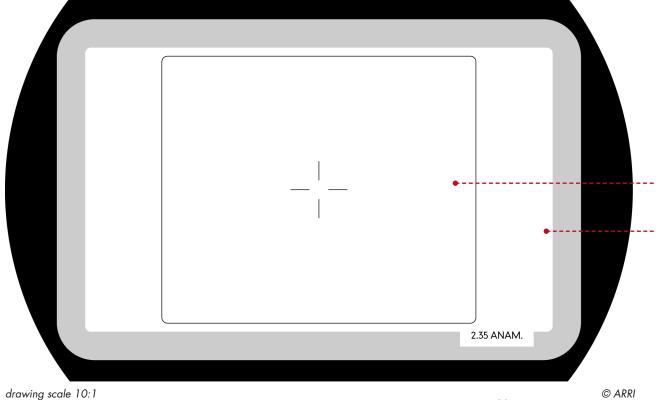
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.3 mm x 7.05 mm

projected area (anamorphic 2.35)

12.35 mm x 7.5 mm

camera aperture \$16



Ground Glass Drawing Ident-Nr. **Format** 1.33 / 1.33 SAFE **S16** K2.47783.0 K2.65112.0 new style

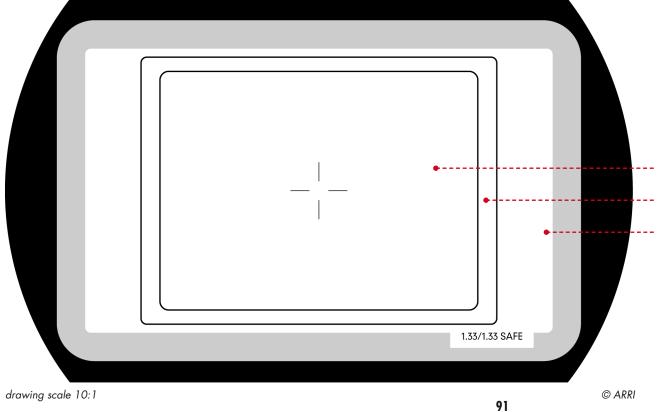
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.4 mm x 6.3 mm TV safe action (1.33)

9.4 mm x 7.05 mm TV transmitted (1.33)

12.35 mm x 7.5 mm camera aperture \$16



 Ground Glass Drawing
 Format
 Ident-Nr.

 1.78 / 1.55 SAFE / 1.33 SAFE / CGG
 \$16
 K2.47787.0

 new style
 K2.65116.0

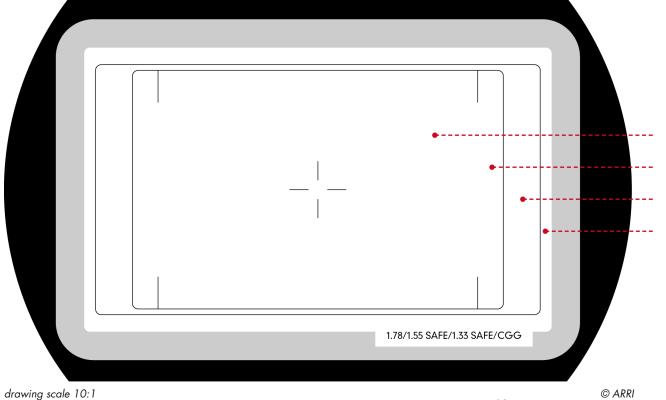
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.4 mm \times 6.3 mm TV safe action (1.33)

9.8 mm \times 6.3 mm TV safe action (1.55)

11.75 mm x 6.6 mm TV transmitted (1.78)

12.35 mm x 7.5 mm camera aperture \$16

The ground glasses are basically identical, however the version for ARRIFLEX 16SR 3 (and HS) additionally show markings for the exposure meter.

92



Ground Glass Drawing Ident-Nr. **Format** K2.47788.0 1.78 / 1.78 SAFE / 1.33 SAFE **S16** K2.65117.0 new style

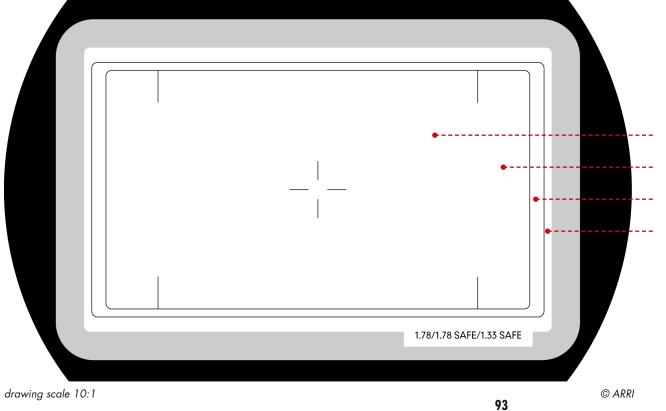
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.4 mm x 6.3 mm TV safe action (1.33)

11.2 mm x 6.3 mm TV safe action (1.78)

11.95 mm x 6.72 mm scanned area (1.78)

12.35 mm x 7.5 mm camera aperture \$16



 Ground Glass Drawing
 Format
 Ident-Nr.

 1.85 / 1.33 SAFE
 \$16
 K2.47789.0

 new style
 K2.65118.0

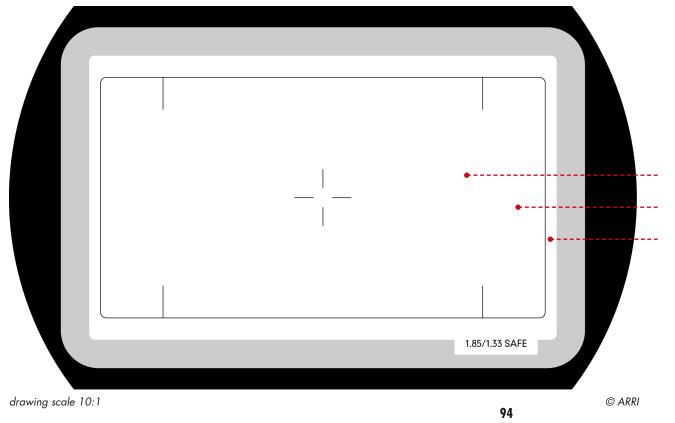
with exposure meter markings (for ARRIFLEX 16 SR 3)

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

8.4 mm x 6.3 mm (not shown) TV safe action (1.33)

11.75 mm x 6.35 mm projected area (1.85)

12.35 mm x 7.5 mm camera aperture \$16



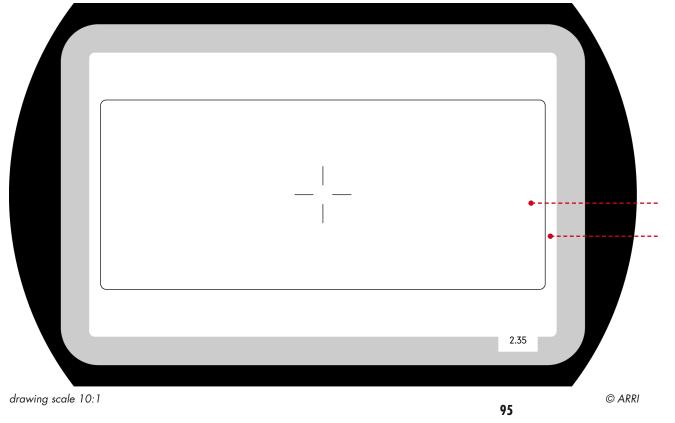
Ground Glass Drawing	Format	ldent-Nr.
2.35	\$16	K2.47790.0
new style		K2.65119.0

without exposure meter marking (for ARRIFLEX 416 and 16 SR 3 Advanced)

Correspondingly Exposed Neagative Area



 $12.35^{+0.02}$ mm x $7.5^{+0.015}$ mm



Ground Glass Marking Dimensions

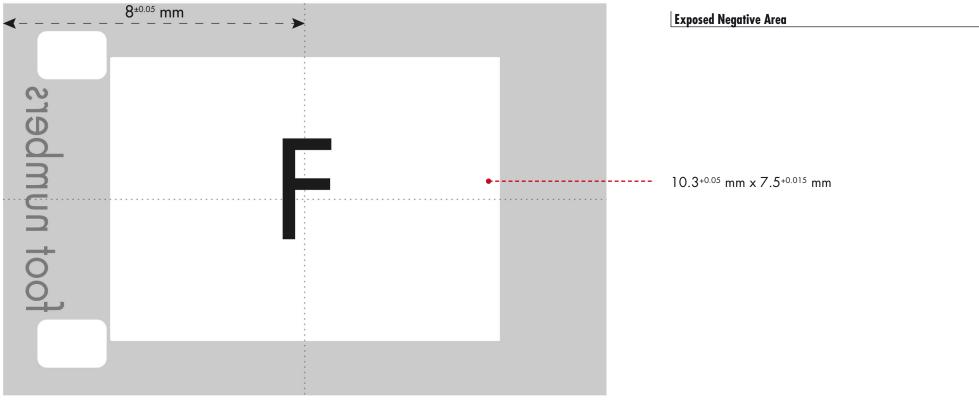
11.75 mm x 5 mm

projected area (2.35)

12.35 mm x 7.5 mm

camera aperture \$16

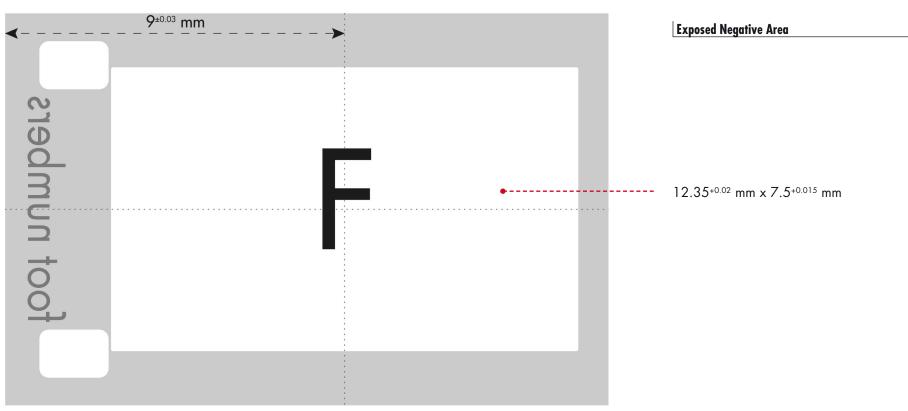




drawing scale 10:1

© ARRI





drawing scale 10:1

© ARRI

5. ARRI Service



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technical data are subject to change without notice