DATA SHEET

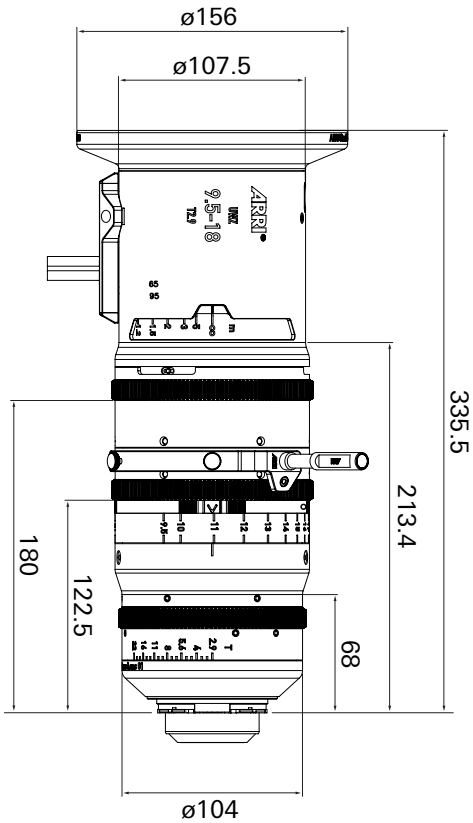
Ultra Wide Zoom UWZ 9.5-18

The new ARRI Ultra Wide Zoom UWZ 9.5-18/T2.9 is the first super wide-angle zoom lens for the professional cine market. With an unusually accommodating image circle of 34.5 mm, the UWZ has been designed for both existing and future generations of large-sensor digital cameras, incorporating patented, cutting-edge lens technologies that overcome known problems with previous wide-angle zooms. The optical performance of this new telecentric design is comparable to, or even exceeds, that of high-end wide-angle prime lenses. For maximum flexibility and cost efficiency on set, the UWZ can easily replace a complete range of wide-angle primes.

Optimized for the requirements of VFX applications, the UWZ is ideal for plate shots or any other situation where maximum image quality is vital. Distortion is at a level of less than 1% at 9.5 mm and less than 0.1% at 18 mm, which means that straight lines stay straight, even at close focus. Due to a new multilayer, anti-reflective coating, flare and veiling glare are reduced to an absolute minimum. The near telecentric optical design means that the UWZ has a highly uniform field illumination, from the center to the very corners of the image. Built-in ARRI Lens Data System (LDS) functionality provides precise lens metadata for zoom, focus and aperture settings, smoothing postproduction workflows.

Main Features

- Future-proof image circle of 34.5 mm for large sensor cameras
- Zoom index marker
- Very low image distortion, even at 9.5 mm
- Virtually no image breathing
- Uniform field illumination, even at close focus
- Fixed entrance pupil position over the entire zoom range
- Built-in lens support
- LDS for lens metadata in VFX applications
- Exchangeable matte box interfaces (dia. 134 mm and 156 mm)
- Matches other ARRI/FUJINON and ARRI/ZEISS lenses
- Available in ARRI PL-LDS or Canon EF mount



Technical Details

Lens Mount [1]	PL LDS
Aperture	T2.9 - T22
Close Focus [2]	0.55 m / 21.654“
Magnification Ratio [3]	1:10.7
Length [4]	335.5 mm / 13.209“
Length including flange focal distance [5]	387.5 mm / 15.256“
Front Diameter [6]	134 mm / 5.276“ or 156 mm / 6.142“
Max. diameter excluding front and gear	112 mm / 4.409“
Weight (kg)	4.8
Weight (lbs)	10.6
180° optical image rotation	

[x] For abbreviations please see legend at end of document

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Angle of View V-H-D

						Entrance pupil position [7]
Camera	**ALEXA HD**	**Normal 35**	**DIN Super 35**	**ANSI Super 35**	**ALEXA Open Gate**	
Sensor size (mm)	23.76 x 13.37	22 x 16	24 x 18	24.9 x 18.7	28.17 x 18.13	
Image circle (mm)	27.26	27.20	30.00	31.14	33.50	
Focal length 9.5 mm [8]	V=70.3° H=103.0° D=110.6°	V=80.3° H=98.6° D=110.5°	V=87.0° H=103.5° D=115.7°	V=89.2° H=105.6° D=117.6°	V=87.4° H=112.4° D=121.2°	310.4 mm / 12.22"
Focal length 12 mm [8]	V=58.3° H=89.5° D=97.4°	V=67.4° H=85.1° D=97.3°	V=73.8° H=90.1° D=102.9°	V=75.9° H=92.2° D=105.0°	V=74.2° H=99.3° D=109.0°	309.9 mm / 12.20"
Focal length 14 mm [8]	V=51.1° H=80.6° D=88.5°	V=59.5° H=76.3° D=88.3°	V=65.5° H=81.2° D=94.0°	V=67.5° H=83.3° D=96.1°	V=65.8° H=90.3° D=100.3°	309.4 mm / 12.18"
Focal length 16 mm [8]	V=45.3° H=73.1° D=80.8°	V=53.1° H=68.9° D=80.6°	V=58.7° H=73.6° D=86.2°	V=60.5° H=75.7° D=88.3°	V=59.0° H=82.6° D=92.5°	308.7 mm / 12.15"
Focal length 18 mm [8]	V=40.8° H=66.8° D=74.2°	V=47.9° H=62.8° D=74.1°	V=53.1° H=67.3° D=79,5°	V=54.9° H=69.3° D=81.6°	V=53.5° H=76.0° D=85.9°	308.0 mm / 12.13"

[x] For abbreviations please see legend at end of document

ARRI Lenses Technical Legend

[1] **Lens Mount**
Positive locking (PL) 54 mm stainless steel lens mount with Lens Data System (LDS) contacts.

[2] **Close Focus**
Close focus is measured from the film/sensor plane.

[3] **Magnification ratio**
Magnification Ratio is the relationship of the size of an object on the film/sensor plane (first number) to the size of that object in real life (second number) at the close focus setting; horizontal (H) and vertical (V).

[4] **Length**
Length is measured from the lens mount to the front of the lens housing.

[5] **Length including flange focal distance**
Length is measured from the image to the front of the lens housing.

[6] **Front Diameter**
Diameter of the lens/matte box interface.

[7] **Entrance Pupil**
The distance from the entrance pupil to the film/sensor plane at focus = infinity. Positive numbers indicated an entrance pupil in front, negative numbers indicated an entrance pupil behind the film/sensor plane.
The entrance pupil (often mistakenly called "nodal point") is the center of perspective; moving the camera/lens system around the center of the entrance pupil prevents parallax errors.
While largely irrelevant for live action, this measurement is important for special effects work.

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