

Which Prime Lenses Cover Which Sensor Size?

Updated 9/7/24

This chart shows lens coverage for specific camera sensor formats. We only show lenses which completely cover the sensor with no vignetting. A small amount of illumination falloff is acceptable if it is part of the lens design. If your chosen camera's shooting format is not shown, find and use the image circle that is closest to your format. <https://www.opticalcalculator.com/math/diagonal-of-rectangle>

Red Monstro 8K	40.96mm x 21.60mm (46.31 mm Ø)								8192 x 4320 Pixels				
Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm		
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm			
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm				
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm							
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm			
Cooke SP.3	25mm	32mm	50mm	75mm	100mm								
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm					
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm			
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm					
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm				
Canon Rangefinder - TLS	40mm	58mm	85mm	100mm									
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm									
Sigma Cine HS	14mm	20mm	24mm	28mm	35mm	40mm	50mm	80mm	105mm	135mm			
Zeiss CP3 XD	15mm	18mm	25mm	35mm	50mm	85mm	100mm	135mm					
Zeiss CP2 Superspeeds	35mm	50mm	85mm										
Schneider Xenon EF/ PL	50mm	75mm	100mm										
Leica Summicron	100mm												
Cooke S/i4	75mm	100mm	135mm										
Cooke Speed Panchro Classic	65mm Macro	75mm	100mm										
Zeiss Master Prime	50mm	100mm	100mm Macro										
Zeiss Ultraprime	65mm	85mm	100mm	135mm									
Zeiss Superspeed	65mm	85mm											
Zeiss Standard	50mm	85mm	100mm	135mm									
Zeiss Macro	100mm												

Arri Mini LF Open Gate	36.70mm x 25.54mm (44.71 mm Ø)								4448 x 3096 Pixels				
Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm		
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm			
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm				
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm							
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm			
Cooke SP.3	25mm	32mm	50mm	75mm	100mm								
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm					
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm			
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm					
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm				
Canon Rangefinder - TLS	19mm	25mm	35mm	40mm	50mm DL	58mm	85mm	100mm					
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm									
Sigma Cine HS	14mm	20mm	24mm	28mm	35mm	40mm	50mm	80mm	105mm	135mm			
Zeiss CP3 XD	15mm	18mm	25mm	35mm	50mm	85mm	100mm	135mm					
Zeiss CP2 Superspeeds	35mm	50mm	85mm										
Schneider Xenon EF/ PL	50mm	75mm	100mm										
Leica Summicron	100mm												
Cooke S/i4	65mm	75mm	100mm	135mm									
Cooke Speed Panchro Classic	65mm Macro	75mm	100mm										
Zeiss Master Prime	50mm	75mm	100mm	100mm Macro									
Zeiss Ultraprime	65mm	85mm	100mm	135mm									
Zeiss Superspeed	65mm	85mm											
Zeiss Standard	50mm	85mm	100mm	135mm									
Zeiss Macro	100mm												

Red Monstro 8KHD	38.40mm x 21.60mm (44.10 mm Ø)								7680 x 4320 Pixels				
Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm		
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm			
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm				
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm							
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm			
Cooke SP.3	25mm	32mm	50mm	75mm	100mm								
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm					
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm			
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm					
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm				
Canon Rangefinder - TLS	19mm	25mm	35mm	40mm	50mm DL	58mm	85mm	100mm					
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm									
Sigma Cine HS	14mm	20mm	24mm	28mm	35mm	40mm	50mm	80mm	105mm	135mm			
Zeiss CP3 XD	15mm	18mm	25mm	35mm	50mm	85mm	100mm	135mm					
Zeiss CP2 Superspeeds	35mm	50mm	85mm										
Schneider Xenon EF/ PL	50mm	75mm	100mm										
Leica Summicron	100mm												
Cooke S/i4	65mm	75mm	100mm	135mm									
Cooke Speed Panchro Classic	65mm Macro	75mm	100mm										
Zeiss Master Prime	50mm	75mm	100mm	100mm Macro									
Zeiss Ultraprime	65mm	85mm	100mm	135mm									
Zeiss Superspeed	65mm	85mm											
Zeiss Standard	50mm	85mm	100mm	135mm									
Zeiss Macro	100mm												

Red Monstro 7.5K	38.40mm x 20.40mm (43.50 mm Ø)								7680 x 4080 Pixels				
Sony Venice 2 8K 3:2	35.90mm x 24.00mm (43.18 mm Ø)								8640 x 5760 Pixels				
Sony Venice 6K 3:2	35.90mm x 24.00mm (43.18 mm Ø)								6048 x 4032 Pixels				
Canon C700, C500 Mk2 FF 17.9	38.10mm x 21.0mm (43.10 mm Ø)								5592 x 3140 Pixels				

Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm	
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm		
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm					
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm	
Cooke SP.3	25mm	32mm	50mm	75mm	100mm						
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm			
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm	
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm			
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm		
Canon Rangefinder - TLS	19mm	25mm	35mm	40mm	50mm DL	58mm	85mm	100mm			
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm							
Sigma Cine HS	14mm	20mm	24mm	28mm	35mm	40mm	50mm	80mm	105mm	135mm	
Zeiss CP3 XD	15mm	18mm	25mm	35mm	50mm	85mm	100mm	135mm			
Zeiss CP2 Superspeeds	35mm	50mm	85mm								
Schneider Xenon EF/ PL	50mm	75mm	100mm								
Leica Summicron	100mm										
Cooke S/i4	65mm	75mm	100mm	135mm							
Cooke Speed Panchro Classic	65mm Macro	75mm	100mm								
Zeiss Master Prime	50mm	75mm	100mm	100mm Macro							
Zeiss Ultraprime	65mm	85mm	100mm	135mm							
Zeiss Superspeed	65mm	85mm									
Zeiss Standard	50mm	85mm	100mm	135mm							
Zeiss Macro	100mm										

Red Monstro 7.5KHD	36.48mm x 20.52mm (41.86 mm Ø)								7296 x 4104 Pixels				
Sony Burano FF 8.6K 16:9	35.90mm x 20.52mm (41.19 mm Ø)								8632 x 4856 Pixels				

Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm	
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm		
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm					
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm	
Cooke SP.3	25mm	32mm	50mm	75mm	100mm						
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm			
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm	
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm			
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm		
Canon Rangefinder - TLS	19mm	25mm	35mm	40mm	50mm DL	58mm	85mm	100mm			
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm							
Sigma Cine HS	14mm	20mm	24mm	28mm	35mm	40mm	50mm	80mm	105mm	135mm	
Zeiss CP3 XD	15mm	18mm	25mm	35mm	50mm	85mm	100mm	135mm			
Zeiss CP2 Superspeeds	35mm	50mm	85mm								
Schneider Xenon EF/ PL	50mm	75mm	100mm								
Leica Summicron	100mm										
Cooke S/i4	65mm	75mm	100mm	135mm							
Cooke Speed Panchro Classic	65mm Macro	75mm	100mm								
Zeiss Master Prime	50mm	75mm	100mm	100mm Macro							
Zeiss Ultraprime	65mm	85mm	100mm	135mm							
Zeiss Superspeed	65mm	85mm									
Zeiss Standard	50mm	85mm	100mm	135mm							
Zeiss Macro	100mm										

Arri Mini LF 4.3K 16:9 - UHD	35.64mm x 20.05mm (40.89 mm Ø)								4320 x 2430 Pixels				
------------------------------	--------------------------------	--	--	--	--	--	--	--	--------------------	--	--	--	--

Arri Signature	15mm	18mm	21mm	25mm	29mm	35mm	40mm	47mm	58mm	75mm	125mm
Zeiss Supreme	18mm	21mm	25mm	29mm	35mm	50mm	65mm	85mm	100mm	135mm	
Tribe7 Blackwing7	20.7mm	23.7mm	27mm	37mm	47mm	57mm	77mm	107mm	137mm		
Leica M Rangefinder - Zero Optik	24mm	28mm	35mm	50mm	75mm	90mm					
Cooke Speed Panchro/i Full Frame	18mm	21mm	27mm	32mm	40mm	65mm Macro	75mm	100mm	135mm	152mm	
Cooke SP.3	25mm	32mm	50mm	75mm	100mm						
Olympus M Zuiko - Zero Optik	21mm	24mm	28mm	35mm	40mm	50mm Macro	85mm	135mm			
Leica R - T/SL/ Cinescape	19mm	24mm	28mm	35mm	50mm	60mm	80mm	100mm	135mm	135mm	
Nikkor AIS - Zero Optik	15mm	24mm	35mm	58mm	85mm	105mm	200mm	400mm			
Canon FD S.S.C Asph- Zero Optik	14mm	24mm	28mm	35mm	55mm	85mm	135mm	200mm	300mm		
Canon Rangefinder - TLS	19mm	25mm	35mm	40mm	50mm DL	58mm	85mm	100mm			
Canon Rangefinder - Type SK	50mm	60mm	85mm	100mm							
Sigma Cine HS	14mm	20mm	24mm	28mm							