

# NIKKOR LENSES for Large-Format Cameras

At the heart of the image





### $65_{mm}f/4_{s}$



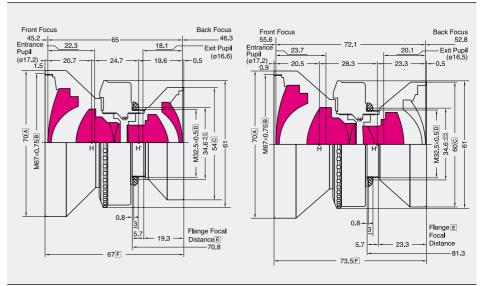


The SW-series lenses feature wide covering power and a wide image circle. Maximum apertures of f/4 and f/4.5 assure fast and pin-point focusing and bright images, corner to corner. Covering power can be extended to  $105^{\circ} \sim 106^{\circ}$  by stopping the lens down. SW series lenses deliver high contrast and resolution, reduced flare and excellent color rendition, thanks to Nikon Super Integrated Coating and strict control of aberrations. SW-series lenses with a maximum aperture of f/8 are compact and well compensated for distortion.





Nikkor-SW 65mm	f/4s	Nikkor-SW 75mm	f/4.5s
Focal length	65mm	Focal length	75mm
Maximum aperture ratio	1:4	Maximum aperture ratio	1:4.5
Minimum aperture	f/45	Minimum aperture	f/45
Lens construction	7 elements in 4 groups	Lens construction	7 elements in 4 groups
Covering power (f/4)	80°	Covering power (f/4.5)	80°
Covering power (f/16)	105°	Covering power (f/16)	106°
Image circle (f/4)	ø110mm	Image circle (f/4.5)	ø126mm
Image circle (f/16)	ø170mm (4" x 5")	Image circle (f/16) ø200m	ım (120mm x 165mm)
Shutter	No. 0 (Copal® *)	Shutter	No. 0 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/500 s, T, B
Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø70mm	Front mount size Å	ø70mm
Attachment size 1	ø67mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)
Rear mount size Ç	ø54mm	Rear mount size Ç	ø60mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø32.5mm x 0.5mm (P)
Flange focal distance %	70.8mm	Flange focal distance %	81.3mm
Overall length Ï	67mm	Overall length Ï	73.5mm
Weight	370g	Weight	420g



<sup>\*</sup> Designed exclusively for Nikon. "Copal" is the registered trademark of NIDEC COPAL CORPORATION, Tokyo, Japan.

### 90mm f/4.5s

### 90mm f/8s

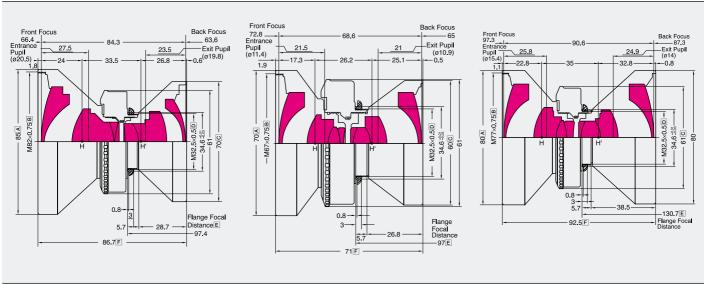
### 120<sub>mm</sub> f/8<sub>s</sub>







Nikkor-SW 90mm	f/4.5s	Nikkor-SW 90mm	<b>f/8</b> s	Nikkor-SW 120mm	m <b>f/8</b> s
Focal length	90mm	Focal length	90mm	Focal length	120mm
Maximum aperture ratio	1:4.5	Maximum aperture ratio	1:8	Maximum aperture ratio	1:8
Minimum aperture	f/64	Minimum aperture	f/64	Minimum aperture	f/64
Lens construction	7 elements in 4 groups	Lens construction	8 elements in 4 groups	Lens construction	8 elements in 4 groups
Covering power (f/4.5)	80°	Covering power (f/8)	80°	Covering power (f/8)	80°
Covering power (f/16)	105°	Covering power (f/22)	105°	Covering power (f/22)	105°
Image circle (f/4.5)	ø154mm	Image circle (f/8)	ø154mm	Image circle (f/8)	ø200mm
Image circle (f/16)	ø235mm (5" x 7")	Image circle (f/22)	ø235mm (5" x 7")	Image circle (f/22)	ø312mm (8" x 10")
Shutter	No. 0 (Copal® *)	Shutter	No. 0 (Copal® *)	Shutter	No. 0 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/500 s, T, B
Sync socket	X-contact	Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø85mm	Front mount size Å	ø70mm	Front mount size Å	ø80mm
Attachment size 1	ø82mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)	Attachment size 1	ø77mm x 0.75mm (P)
Rear mount size Ç	ø70mm	Rear mount size Ç	ø60mm	Rear mount size Ç	ø80mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø32.5mm x 0.5mm (P)
Flange focal distance &	97.4mm	Flange focal distance %	97.0mm	Flange focal distance %	130.7mm
Overall length Ï	86.7mm	Overall length Ï	71mm	Overall length Ï	92.5mm
Weight	600g	Weight	360g	Weight	610g



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### 105<sub>mm</sub> f/5.6<sub>s</sub> 135<sub>mm</sub> f/5.6<sub>s</sub>

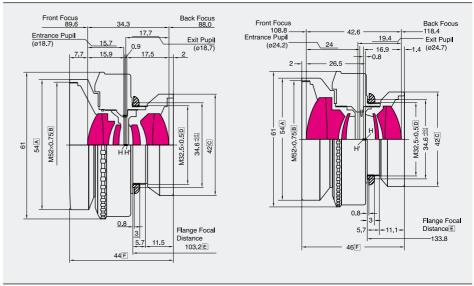


Covering power of the W series Nikkors is an ample 70° ~ 73° when stopped down. Lens construction of six elements in four groups in the series gives these lenses an outstanding degree of freedom from distortion, field curvature and chromatic aberration. And Nikon Super Integrated Coating applied to each lens assures high contrast and overall faithful color rendition. The W series lenses are recommended for a variety of subjects, including landscapes, portraits, architecture, and table-top photography.





Nikkor-W 105mm	f/5.6s	Nikkor-W 135mm	f/5.6s
Focal length	105mm	Focal length	135mm
Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:5.6
Minimum aperture	f/45	Minimum aperture	f/64
Lens construction	6 elements in 4 groups	Lens construction	6 elements in 4 groups
Covering power (f/5.6)	60°	Covering power (f/5.6)	60°
Covering power (f/22)	73°	Covering power (f/22)	73°
Image circle (f/5.6)	ø121mm	Image circle (f/5.6)	ø156mm
Image circle (f/22)	ø155mm (4" x 5")	Image circle (f/22) ø200m	m (120mm x 165mm)
Shutter	No. 0 (Copal® *)	Shutter	No. 0 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/500 s, T, B
Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø54mm	Front mount size Å	ø54mm
Attachment size 1	ø52mm x 0.75mm (P)	Attachment size 1	ø52mm x 0.75mm (P)
Rear mount size Ç	ø42mm	Rear mount size Ç	ø42mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø32.5mm x 0.5mm (P)
Flange focal distance &	103.2mm	Flange focal distance %	133.8mm
Overall length Ï	44mm	Overall length Ï	46mm
Weight	185g	Weight	200g



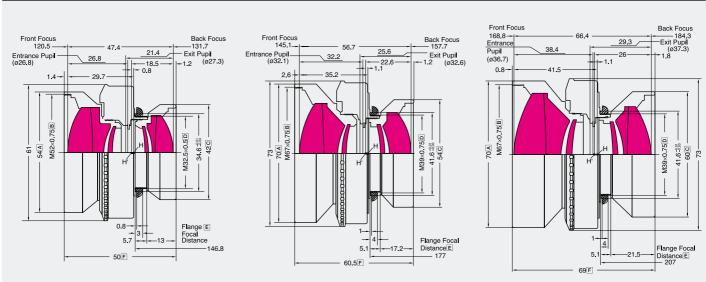
### 150<sub>mm</sub> f/5.6<sub>s</sub> 180<sub>mm</sub> f/5.6 210<sub>mm</sub> f/5.6







Nikkor-W 150mm	f/5.6s	Nikkor-W 180mm	f/5.6	Nikkor-W 210mm	f/5.6
Focal length	150mm	Focal length	180mm	Focal length	210mm
Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:5.6
Minimum aperture	f/64	Minimum aperture	f/64	Minimum aperture	f/64
Lens construction	6 elements in 4 groups	Lens construction	6 elements in 4 groups	Lens construction	6 elements in 4 groups
Covering power (f/5.6)	60°	Covering power (f/5.6)	60°	Covering power (f/5.6)	60°
Covering power (f/22)	70°	Covering power (f/22)	70°	Covering power (f/22)	70°
Image circle (f/5.6)	ø174mm	Image circle (f/5.6)	ø208mm	Image circle (f/5.6)	ø243mm
Image circle (f/22)	ø210mm (5" x 7")	Image circle (f/22)	ø253mm (5" x 7")	Image circle (f/22)	ø295mm (6 1/2" x 8 1/2")
Shutter	No. 0 (Copal® *)	Shutter	No. 1 (Copal® *)	Shutter	No. 1 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/400 s, T, B	Shutter speed	1 ~ 1/400 s, T, B
Sync socket	X-contact	Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø54mm	Front mount size Å	ø70mm	Front mount size Å	ø70mm
Attachment size 1	ø52mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)
Rear mount size Ç	ø42mm	Rear mount size Ç	ø54mm	Rear mount size Ç	ø60mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø39mm x 0.75mm (P)	Flange attachment size î	ø39mm x 0.75mm (P)
Flange focal distance %	146.8mm	Flange focal distance %	177mm	Flange focal distance &	207mm
Overall length Ï	50mm	Overall length Ï	60.5mm	Overall length Ï	69mm
Weight	230g	Weight	380g	Weight	460g



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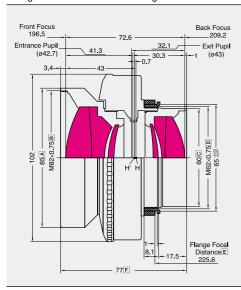
### 240<sub>mm</sub> f/5.6 300<sub>mm</sub> f/5.6 360<sub>mm</sub> f/6.5

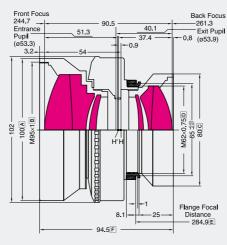


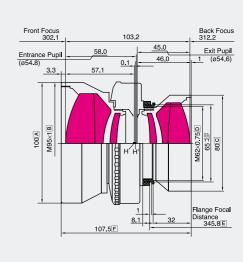




Nikkor-W 240mm	f/5.6	Nikkor-W 300mm	f/5.6	Nikkor-W 360mm	f/6.5
Focal length	240mm	Focal length	300mm	Focal length	360mm
Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:6.5
Minimum aperture	f/64	Minimum aperture	f/64	Minimum aperture	f/64
Lens construction	6 elements in 4 groups	Lens construction	6 elements in 4 groups	Lens construction	6 elements in 4 groups
Covering power (f/5.6)	60°	Covering power (f/5.6)	60°	Covering power (f/6.5)	60°
Covering power (f/22)	70°	Covering power (f/22)	70°	Covering power (f/22)	69°
Image circle (f/5.6)	ø278mm	Image circle (f/5.6)	ø346mm	Image circle (f/6.5)	ø415mm
Image circle (f/22)	ø336mm (8" x 10")	Image circle (f/22)	ø420mm (10" x 12")	Image circle (f/22)	ø494mm (11" x 14")
Shutter	No. 3 (Copal® *)	Shutter	No. 3 (Copal® *)	Shutter	No. 3 (Copal® *)
Shutter speed	1 ~ 1/125 s, T, B	Shutter speed	1 ~ 1/125 s, T, B	Shutter speed	1 ~ 1/125 s, T, B
Sync socket	X-contact	Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø85mm	Front mount size Å	ø100mm	Front mount size Å	ø100mm
Attachment size 1	ø82mm x 0.75mm (P)	Attachment size 1	ø95mm x 1mm (P)	Attachment size 1	ø95mm x 1mm (P)
Rear mount size Ç	ø60mm	Rear mount size Ç	ø80mm	Rear mount size Ç	ø80mm
Flange attachment size î	ø62mm x 0.75mm (P)	Flange attachment size î	ø62mm x 0.75mm (P)	Flange attachment size î	ø62mm x 0.75mm (P)
Flange focal distance %	225.6mm	Flange focal distance %	284.9mm	Flange focal distance &	345.8mm
Overall length Ï	77mm	Overall length Ï	94.5mm	Overall length Ï	107.5mm
Weight	820g	Weight	1,250g	Weight	1,420g







### ED120mm f/5.6s ED210mm f/5.6

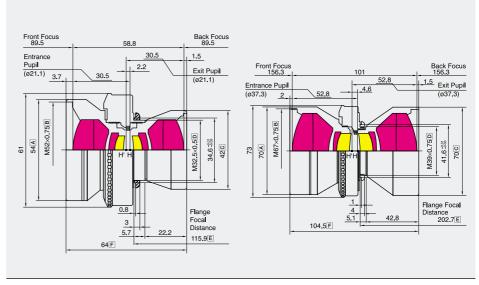


The Nikkor-AM (Apo Macro) lenses are exclusively designed for macro photography and provide outstanding performance at 1:1 reproduction. ED (Extra-low Dispersion) glass reduces chromatic aberration at all settings, and completely symmetrical lens construction ensures that the lens is 100% free of distortion and lateral chromatic aberration at 1:1 magnification. Combined with Nikon Super Integrated Coating, the result is outstandingly sharp images, free from flare and ghosts.





Nikkor-AM ED	120mm f/5.6s	Nikkor-AM ED 2	10mm f/5.6
Focal length	120mm	Focal length	210mm
Maximum aperture ratio	1:5.6	Maximum aperture ratio	1:5.6
Minimum aperture	f/45	Minimum aperture	f/64
Lens construction	8 elements in 4 groups	Lens construction	8 elements in 4 groups
Covering power (f/5.6)	47°	Covering power (f/5.6)	41°
Covering power (f/22)	55°	Covering power (f/22)	51°
Image circle (f/5.6)	ø210mm	Image circle (f/5.6)	ø310mm (M=1:1)
Image circle (f/22)	ø250mm (5" x 7")	Image circle (f/22)	Ø400mm (10" x 12") (M=1:1)
Shutter	No. 0 (Copal® *)	Shutter	No. 1 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/400 s, T, B
Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø54mm	Front mount size Å	ø70mm
Attachment size 1	ø52mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)
Rear mount size Ç	ø42mm	Rear mount size Ç	ø70mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø39mm x 0.75mm (P)
Flange focal distance %	115.9mm	Flange focal distance %	202.7mm
Overall length Ï	64mm	Overall length Ï	104.5mm
Weight	295g	Weight	850g



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### ED270mm f/6.3 ED360mm f/8

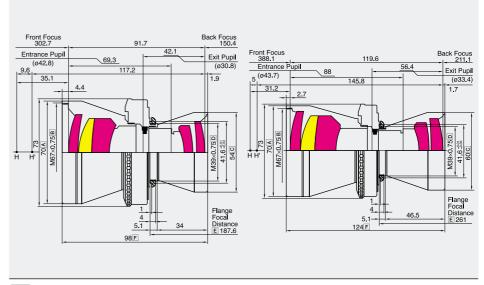


The Nikkor lenses in the T series are telephoto-type lenses which do not require long-length camera bellows. To maximize correction of chromatic aberration inherent in long focal length lenses, Nikon's performance-proven ED (Extralow Dispersion) glass was used for the first time for lenses for large-format cameras. Image distortion and curvature are also extremely minimized. Combined with Nikon Super Integrated Coating, the result is outstandingly sharp images, free from flare and ghosts.





Nikkor-T ED 270mm f/6.3		Nikkor-T ED 360mm f/8		
Focal length	270mm	Focal length	360mm	
Maximum aperture ratio	1:6.3	Maximum aperture ratio	1:8	
Minimum aperture	f/64	Minimum aperture	f/64	
Lens construction	5 elements in 4 groups	Lens construction	5 elements in 4 groups	
Covering power (f/6.3)	24°	Covering power (f/8)	24°	
Covering power (f/22)	33°	Covering power (f/22)	33°	
Image circle (f/6.3)	ø114mm	Image circle (f/8)	ø154mm	
Image circle (f/22)	ø160mm (4" x 5")	Image circle (f/22)	ø210mm (5" x 7")	
Shutter	No. 1 (Copal® *)	Shutter	No. 1 (Copal® *)	
Shutter speed	1 ~ 1/400 s, T, B	Shutter speed	1 ~ 1/400 s, T, B	
Sync socket	X-contact	Sync socket	X-contact	
Front mount size Å	ø70mm	Front mount size Å	ø70mm	
Attachment size 1	ø67mm x 0.75mm (P)	Attachment size 1	ø67mm x 0.75mm (P)	
Rear mount size Ç	ø54mm	Rear mount size Ç	ø60mm	
Flange attachment size î	ø39mm x 0.75mm (P)	Flange attachment size î	ø39mm x 0.75mm (P)	
Flange focal distance &	187.6mm	Flange focal distance &	261mm	
Overall length Ï	98mm	Overall length Ï	124mm	
Weight	590g	Weight	800g	



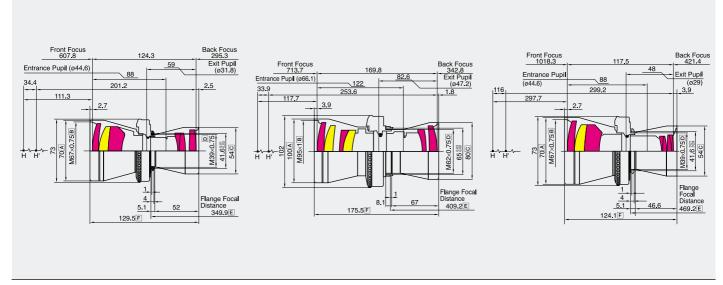
### ED500mm f/11 ED600mm f/9 ED720mm f/16







Nikkor-T ED 500mm f/11		Nikkor-T ED 600mm f/9		Nikkor-T ED 720mm f/16	
Focal length	500mm	Focal length	600mm	Focal length	720mm
Maximum aperture ratio	1:11	Maximum aperture ratio	1:9	Maximum aperture ratio	1:16
Minimum aperture	f/64	Minimum aperture	f/64	Minimum aperture	f/64
Lens construction	6 elements in 4 groups	Lens construction	6 elements in 5 groups	Lens construction	7 elements in 4 groups
Covering power (f/11)	17°	Covering power (f/9)	19°	Covering power (f/16)	12°
Covering power (f/22)	24°	Covering power (f/22)	29°	Covering power (f/22)	17°
Image circle (f/11)	ø154mm	Image circle (f/9)	ø200mm	Image circle (f/16)	ø154mm
Image circle (f/22)	ø210mm (5" x 7")	Image circle (f/22)	ø310mm (8" x 10")	Image circle (f/22)	ø210mm (5" x 7")
Shutter	No. 1 (Copal® *)	Shutter	No. 3 (Copal® *)	Shutter	No. 1 (Copal® *)
Shutter speed	1 ~ 1/400 s, T, B	Shutter speed	1 ~ 1/125 s, T, B	Shutter speed	1 ~ 1/400 s, T, B
Sync socket	X-contact	Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø70mm	Front mount size Å	ø100mm	Front mount size Å	ø70mm
Attachment size 1	ø67mm x 0.75mm (P)	Attachment size 1	ø95mm x 1mm (P)	Attachment size 1	ø67mm x 0.75mm (P)
Rear mount size Ç	ø54mm	Rear mount size Ç	ø80mm	Rear mount size Ç	ø54mm
Flange attachment size î	ø39mm x 0.75mm (P)	Flange attachment size î	ø62mm x 0.75mm (P)	Flange attachment size î	ø39mm x 0.75mm (P)
Flange focal distance %	349.9mm	Flange focal distance &	409.2mm	Flange focal distance %	469.2mm
Overall length Ï	129.5mm	Overall length Ï	175.5mm	Overall length Ï	124.1mm
Weight	760g	Weight	1,650g	Weight	780g



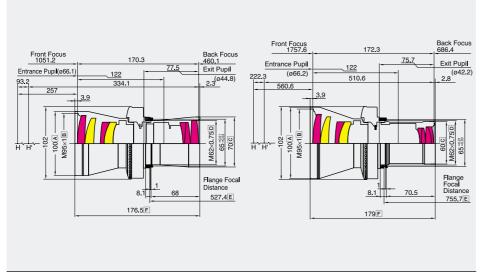
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### ED800mm f/12 ED1200mm f/18





Nikkor-T ED 800mm f/12		Nikkor-T ED 1200mm f/18	
Focal length	800mm	Focal length	1200mm
Maximum aperture ratio	1:12	Maximum aperture ratio	1:18
Minimum aperture	f/64	Minimum aperture	f/64
Lens construction	7 elements in 5 groups	Lens construction	8 elements in 5 groups
Covering power (f/12)	14°	Covering power (f/18)	10°
Covering power (f/22)	22°	Covering power (f/22)	15°
Image circle (f/12)	ø200mm	Image circle (f/18)	ø200mm
Image circle (f/22)	ø310mm (8" x 10")	Image circle (f/22)	ø310mm (8" x 10")
Shutter	No. 3 (Copal® *)	Shutter	No. 3 (Copal® *)
Shutter speed	1 ~ 1/125 s, T, B	Shutter speed	1 ~ 1/125 s, T, B
Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø100mm	Front mount size Å	ø100mm
Attachment size 1	ø95mm x 1mm (P)	Attachment size 1	ø95mm x 1mm (P)
Rear mount size Ç	ø70mm	Rear mount size Ç	ø60mm
Flange attachment size î	ø62mm x 0.75mm (P)	Flange attachment size $\hat{\mathtt{I}}$	ø62mm x 0.75mm (P)
Flange focal distance &	527.4mm	Flange focal distance &	755.7mm
Overall length Ï	176.5mm	Overall length $\ddot{\mathbb{I}}$	179mm
Weight	1,600g	Weight	1,480g





ED 360mm f/8 ED 500mm f/11 ED 720mm f/16 Rear lens component





ED 600mm f/9 ED 800mm f/12 ED 1200mm f/18

Rear lens component

And because the rear lens component is interchangeable between the ED 360mm f/8, ED 500mm f/11 and ED 720mm f/16, and between the ED 600mm f/9, ED 800mm f/12 and ED 1200mm f/18, superb cost-performance and greater carrying ease are assured.

### 200mm f/8s

### *300<sub>mm</sub> f/9*



The M series lenses are characterized by standard covering power and faithful reproduction of subtle variations in color and shading.

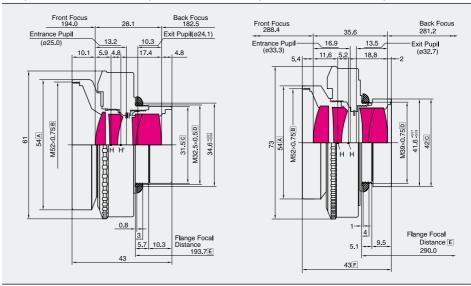
They are versatile enough to provide consistent performance from close distance to infinity.

Chromatic aberration is virtually eliminated over the entire visible portion of the spectrum, and other aberrations are corrected. And Nikon Super Integrated Coating is applied to each lens to assure high resolution and contrast.





Nikkor-M 200mm	f/8s	Nikkor-M 300mm	f/9
Focal length	200mm	Focal length	300mm
Maximum aperture ratio	1:8	Maximum aperture ratio	1:9
Minimum aperture	f/64	Minimum aperture	f/128
Lens construction	4 elements in 3 groups	Lens construction	4 elements in 3 groups
Covering power (f/8)	45°	Covering power (f/9)	55°
Covering power (f/22)	55°	Covering power (f/22)	57°
Image circle (f/8)	ø166mm	Image circle (f/9)	ø312mm
Image circle (f/22)	ø210mm (5" x 7")	Image circle (f/22)	ø325mm (8" x 10")
Shutter	No. 0 (Copal® *)	Shutter	No. 1 (Copal® *)
Shutter speed	1 ~ 1/500 s, T, B	Shutter speed	1 ~ 1/400 s, T, B
Sync socket	X-contact	Sync socket	X-contact
Front mount size Å	ø54mm	Front mount size Å	ø54mm
Attachment size 1	ø52mm x 0.75mm (P)	Attachment size 1	ø52mm x 0.75mm (P)
Rear mount size Ç	ø31.5mm	Rear mount size Ç	ø42mm
Flange attachment size î	ø32.5mm x 0.5mm (P)	Flange attachment size î	ø39mmx 0.75mm (P)
Flange focal distance &	193.7mm	Flange focal distance &	290.0mm
Overall length Ï	43mm	Overall length Ï	43mm
Weight	180g	Weight	290g

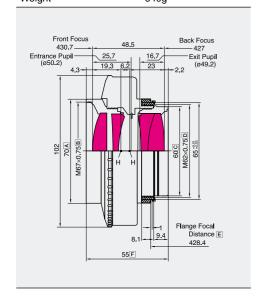


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## 450<sub>mm</sub> f/9



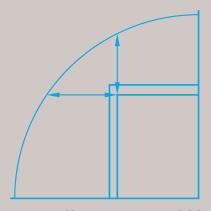
Nikkor-M 450mm	f/9
Focal length	450mm
Maximum aperture ratio	1:9
Minimum aperture	f/128
Lens construction	4 elements in 3 groups
Covering power (f/9)	50°
Covering power (f/22)	52°
Image circle (f/9)	ø420mm
Image circle (f/22)	ø440mm (10" x 12")
Shutter	No. 3 (Copal® *)
Shutter speed	1 ~ 1/125 s, T, B
Sync socket	X-contact
Front mount size Å	ø70mm
Attachment size 1	ø67mm x 0.75mm (P)
Rear mount size Ç	ø60mm
Flange attachment size î	ø62mm x 0.75mm (P)
Flange focal distance &	428.4mm
Overall length Ï	55mm
Weight	640g



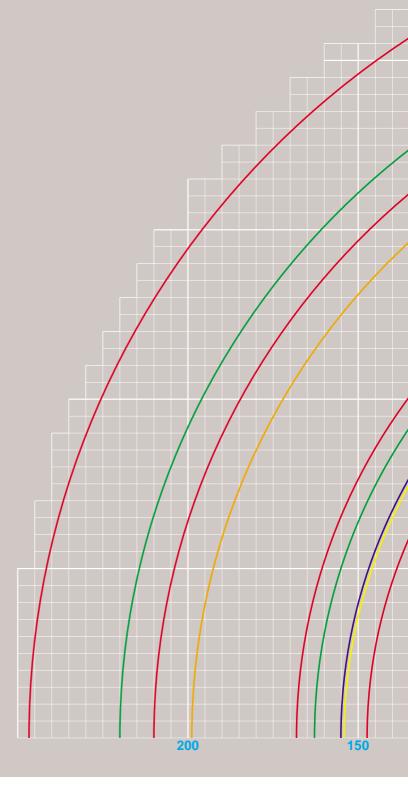


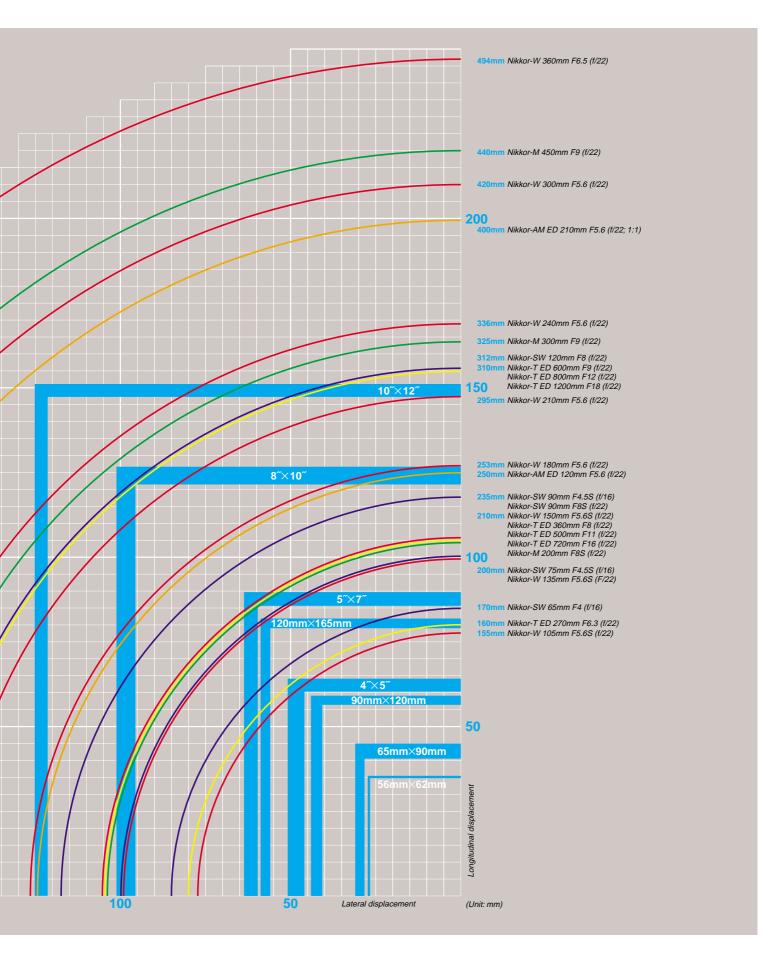
### Image Circle Chart

To ascertain if any Nikkor lens fully covers any given film format and how much displacement (longitudinal or lateral in one direction) is possible, this chart compares image circle and film format. The arc represents the image circle projected by each Nikkor lens stopped down to the specified f/number. The rectangular boxes indicate film formats: designated format size is approximated by the outer frame, and the usable size for that format is represented by the inner frame. One-quarter portion of the complete projection is shown here in this life-size chart. To find the entire displacement amount, either read the scale on the chart or measure the distance with a ruler.



Note: As usable image size may vary slightly depending on the film holder in use, this chart is intended as a rough guide only.





Specifications and designs are subject to change without any notice or obligation on the part of the manufacturer.

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TO ENSURE CORRECT USAGE, READ MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.





