

AF18-250mm F/3.5-6.3
Di II LD Aspherical [IF] Macro

For Digital
with smaller-size imagers

TAMRON
New eyes for industry



new

Experience the great power of 13.9x*
and enjoy an amazing 2 in 1 zoom

**Like a 28-388mm lens in 35mm format*

Di II Lens designed for exclusive use on digital SLR cameras with smaller-size imagers.

*This lens is not designed for use with 35mm film cameras and digital SLR cameras with image sensors larger than 24x16mm.

Model A18 For Canon, Nikon, Pentax, and Sony

www.tamroneurope.com

E



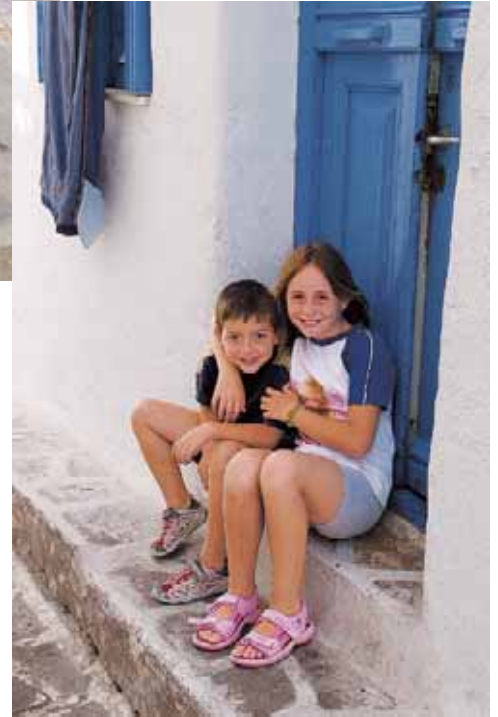
18mm ∇ 75°33'
 (Equivalent to 28mm)
 Exposure : F/11 Auto ISO200 RAW



250mm ∇ 6°23'
 (Equivalent to 388mm) Exposure : F/8 Auto ISO200 RAW



180mm ∇ 8°52'
 (Equivalent to 279mm)
 Exposure : F/8 Auto ISO100 RAW



50mm ∇ 31°11'
 (Equivalent to 78mm) Exposure : F/8 Auto ISO200 RAW

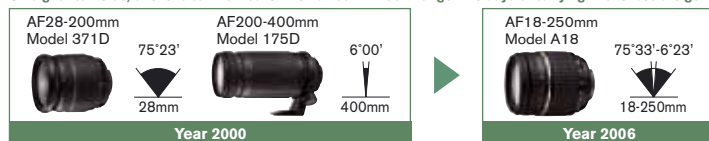
Get ultimate high-power zoom performance: 28-388mm zoom range* for total satisfaction with just a single lens

* Equivalent to approx. 28-388mm when converted to 35mm format.

World's Most Powerful Zoom, at 13.9x

Tamron's new high-power zoom lens is a photographer's dream come true — it is the result of Tamron's continuing mission to develop the world's most unique "one-lens-does-it-all" zooms to satisfy our customers' desire. While conventional 35mm film cameras required two lenses to cover 28-388mm, Tamron's new zoom is 13.9X, the world's most powerful zoom delivering enormous photographic freedom in a single compact lens. The life of a digital photographer has never been better.

On digital cameras, one lens can now cover the 28-400mm zoom range. The days of carrying two lenses are gone.



Zoom 13.9x



Optimum Optical System Enables Ultra High-Power Zoom

Not an XR. Yet compact

While achieving the ultra telephoto capabilities of a 388mm lens*, this Tamron zoom features an extremely compact optical system. Unlike previous Tamron lenses, this lens optimizes the power distribution of the entire optical configuration without using XR glass, to achieve both ultra high-power magnification and compact size.

*35mm format equivalent

High Quality Digital Images

This lens is designed exclusively for digital SLR photography, and provides high quality digital photos with outstanding resolution and contrast.

Packed with Special Glass Materials

In addition to LD (Low Dispersion) glass that eliminates chromatic aberration and sharpens ultra-long shots, use of special glass materials such as Hybrid Asphericelements and Anomalous Dispersion (AD) glass achieve three goals in at once: increased magnification, compact size, and improved image quality.



© Takehiko Nakafuji

250mm $\frac{6^{\circ}23'}$
 (Equivalent to 388mm)
 Exposure : F/11(+1.7)Auto
 ISO200 RAW



250mm $\frac{6^{\circ}23'}$
 (Equivalent to 388mm)
 Exposure : F/8 Auto
 ISO100 RAW
 MFD:0.45m
 Macro Magnification Ratio : 1:3.5



100mm $\frac{15^{\circ}53'}$
 (Equivalent to 155mm)
 Exposure : F/8 Auto ISO100
 RAW



18mm $\frac{75^{\circ}33'}$ (Equivalent to 28mm) Exposure : F/11 Auto ISO100 RAW



new

Great for macro photos, too. MFD = 0.45m (17.7")

Get amazing close-up shots with this digital SLR high-power zoom. The maximum magnification ratio of 1:3.5 (at f=250mm, MFD 0.45m) lets you fill the frame with a subject approximately the same size as a business card. You can easily and conveniently enjoy close-up (macro) photography of flowers, insects and more.

Counters Ghosting and Flare with New Technologies

Tamron has adopted various countermeasures against ghosting and flare, which are annoying factors in digital photography. "Internal Surface Coatings"* and new multiple-layer coating technology on ordinary elements are employed to minimize reflections that occur when light enters through the front element and to reduce image-degrading effects caused by the imagers themselves.

*Multiple-layer coatings on cemented surfaces of plural elements.

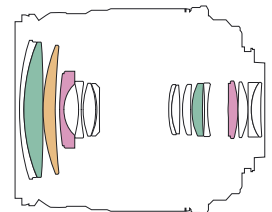
AF18-250mm F/3.5-6.3 Di II LD Aspherical [IF] Macro

Specifications

Model	A18
Focal Length	18-250mm
Maximum Aperture	F/3.5-6.3
Angle of View	Diagonal: 75°33'6"23'
(Equivalent to APS-C size)	Horizontal: 65°36'5"19'
	Vertical: 46°21'3"19'
	16 elements 13 groups
Lens Construction	0.45m (17.7")
Minimum Focus Distance	1:3.5 (at f=250mm, MFD:0.45m)
Max.Mag.Ratio	84.3mm (3.3")*
Overall Length	ø74.4mm (2.9")
Maximum Diameter	ø62mm
Filter Size	430g (15.2 oz.)*
Weight	7
Diaphragm Blades	F/22
Minimum Aperture	Flower-shaped hood
Standard Accessory	Canon, Nikon, Pentax, and Sony
Compatible Mount	

Lens Construction

<16 elements 13 groups>



LD glass Hybrid Aspherical Lens
 AD glass

*Values given are for Nikon camera.

*The images in this leaflet are taken with prototype model. The cosmetic design and specs are subject to change without notice.

Di II

What does the designation "Di-II" (designed for exclusive use on digital SLR cameras with smaller-size imagers) mean?

Designed to capture the optimum scope when used with a digital SLR camera

Since the size of 35mm film format is different from the image sensor of a digital camera, scopes captured are different even when focal lengths are the same (i.e., angles of view differ). The AF18-250mm Di-II is designed to have shorter focal lengths to achieve optimum angles of view in its wide-angle side.

Images taken with a digital SLR with a smaller-size imager are actually cropped to about 70% scope.

Same Focal Length 28mm

Angle of view 75°23'

Angle of view 52°58'

Principal ray

Focal Point

35mm Film

24mm

36mm

43.27mm

General image sensor

about 15.5mm

27.9mm

about 23.2mm

image sensor

Camera

Principal ray

Focal Length

Lights

Focal Point

Mirror

Film/ Image Sensor

Designed to fit smaller-size imagers in order to reduce its diameter

Attempts to design shorter focal lengths inevitably result in a larger lens diameter. Tamron has solved this problem by designing the size of the lens' image circle to match that of smaller-size image sensors. In the compact design, it is almost comparable to a lens offering the same angles of view in 35mm film format.

*When pictures are taken with a Di-II lens mounted on a 35mm film camera, image corners become dark (i.e., vignetting becomes noticeable).

Image circle for Di-II lenses

General image sensor

35mm Film

Vignetting when used with a film camera

Film and Digital – Angles of View and Focal Lengths

Film: 388mm
Digital: 250mm

Film: 78mm
Digital: 50mm

Film: 28mm
Digital: 18mm

Telephoto 6°23'

Standard 31°11'

Wide 75°33'

*Film = 35mm format.
*Digital = Digital cameras with smaller-size imagers.

Different Angles of View

Diagonal 75°33'	Horizontal 65°36'	Diagonal 31°11'	Horizontal 26°7'	Diagonal 15°53'	Horizontal 13°14'	Diagonal 7°59'	Horizontal 6°38'	Diagonal 6°23'	Horizontal 5°19'
18mm	Equivalent 28mm	50mm	Equivalent 78mm	100mm	Equivalent 155mm	200mm	Equivalent 300mm	250mm	Equivalent 388mm

Categories of Tamron's Di (Digitally Integrated design) lens series

Exclusively for digital

Di II Lens Series

For Digital

Designed for exclusive use on digital cameras with smaller-size imagers. Di-II lenses are designed exclusively for digital SLRs with smaller-size imagers. This series of lenses are not designed for 35mm film cameras and digital SLR cameras with image sensors larger than 24 x 16mm.

SP AF11-18mm F/4.5-5.6 Di II (Model A13) AF18-200mm F/3.5-6.3 XR Di II (Model A14)
SP AF17-50mm F/2.8 XR Di II (Model A16) AF18-250mm F/3.5-6.3 Di II (Model A18)
AF55-200mm F/4-5.6 Di II (Model A15)

NOTE: Vignetting occurs when pictures are taken with a Di-II lens mounted on a 35mm film SLR camera or a digital SLR camera with an image sensor larger than 24 x 16mm.

For film & digital

Di Lens Series

Film & Digital

Designed for use with both 35mm film SLR cameras and digital cameras. Di lenses are designed to fit the characteristics of digital cameras as well as film cameras by paying attention to countermeasures against ghosting and flare through such advances as special coatings.

SP AF17-35mm F/2.8-4 Di (Model A05) AF70-300mm F/4-5.6 Di Macro 1:2 (Model A17)
SP AF28-75mm F/2.8 XR Di (Model A09) SP AF200-500mm F/5-6.3 Di (Model A08)
AF28-300mm F/3.5-6.3 XR Di (Model A061) SP AF90mm F/2.8 Di Macro 1:1 (Model 272E)
AF28-200mm F/3.8-5.6 XR Di (Model A031) SP AF180mm F/3.5 Di Macro 1:1 (Model B01)

NOTE: The angles of view obtained by a "Di" lens mounted on a digital camera with smaller-size imagers differ from those obtained by the same lens mounted on a 35mm format film camera.

Caution : Please read the instruction manual carefully before using the lens.

TAMRON

Manufacturer of precise and sophisticated optical products for a broad range of industries.

TAMRON Europe GmbH www.tamroneurope.com

Robert-Bosch-Str. 9, 50769 Köln, Tel. +49 (0)221 970325-0, Fax +49 (0)221 970325-4, tamron-europe@tamron.de



Quality Assurance Activities: At Tamron, quality management activities are performed in compliance with ISO9001:2000 not only to assure product quality but to enhance customer satisfaction.

Environmental Protection: We recognize the significance of our social responsibilities. Tamron promotes corporate activities that protect the earth's environment through the establishment of a quality assurance system that is compliant with ISO14001.

TAMRON CO., LTD. <http://www.tamron.co.jp>

1385, Hasunuma, Minuma-ku, Saitama-shi, Saitama 337-8556 JAPAN Tel: +81-48-684-9339 Fax: +81-48-684-9349

09.2006

A18-EG-111-M-0608-0000