

Tamron announces the launch of lightest and most compact large aperture telephoto zoom lens in its class* for Sony E-mount full-frame mirrorless cameras

Third model in Tamron's series of fast F/2.8 zoom lenses
delivers quiet, fast focus and superb performance
70-180mm F/2.8 Di III VXD (Model A056)

April 7, 2020, Saitama, Japan – Tamron Co., Ltd. (President & CEO: Shiro Ajisaka), a leading manufacturer of optics for diverse applications, announces the launch of the 70-180mm F/2.8 Di III VXD (Model A056), a large aperture telephoto zoom lens for Sony E-mount full-frame mirrorless cameras.

The 70-180mm F/2.8 features a compact and light-weight design with a 67mm filter diameter, the same as Tamron's highly esteemed 17-28mm F/2.8 (Model A046) and the 28-75mm F/2.8 (Model A036). The optical construction includes several special lens elements that contribute to the lens's overall superb imaging performance. Its very short 0.85m (33.5 in) MOD (Minimum Object Distance) expands overall versatility. The lens utilizes Tamron's newly developed VXD (Voice-coil eXtreme-torque Drive) linear motor focus mechanism that produces an autofocus drive that's quieter and quicker than ever before. Additionally, a floating system is used to achieve excellent optical performance at all shooting distances. By simultaneously operating two VXD units via electronic control, the system produces clear and sharp images of all objects near and far. Other features that support a great shooting experience include Moisture-Resistant Construction for added weather protection and Fluorine Coating for easy maintenance. In addition, the 70-180mm F/2.8 is fully compatible with various camera-specific features including Fast Hybrid AF and Eye AF. Developed under the concept of "making large aperture zoom lenses user-friendly," the 70-180mm F/2.8 provides users with complete portrait-to-telephoto lens range coverage. This new model joins the 17-28mm F/2.8 Di III RXD (Model A046) and the 28-75mm F/2.8 Di III RXD (Model A036) and brings Tamron's total of F/2.8 zoom lens for full-frame mirrorless cameras to three.



Model A056

PRODUCT NAME	DATE OF LAUNCH
70-180mm F/2.8 Di III VXD (Model A056)	May 14, 2020

* Among interchangeable F/2.8 AF telephoto zoom lenses (As of January 2020: Tamron)

PRODUCT HIGHLIGHTS

1. Compact size maximizes the mobility advantages of mirrorless cameras

A true marvel of portability and utility, the 70-180mm F/2.8 incorporates an innovative zoom mechanism and 180mm telephoto power. It was possible to maintain extreme light weight and compactness even while attaining a fast F/2.8 aperture across the entire zoom range by leveraging the camera-based image stabilization. It is small: filter diameter 67mm, maximum diameter 81mm, length 149mm (5.9 in) at the 70mm setting, and also light weight: 810g (28.6 oz). The super-compact size helps make handheld shooting a breeze. As part of our constant, ongoing effort to achieve both high image quality and supreme compactness, Tamron went to great lengths to create this product in answer to demands of the new generation of digital cameras.

2. Newly developed VXD linear motor focus mechanism delivers high-speed and high-precision autofocus performance

Tamron developed its first-ever linear motor AF drive focus mechanism, VXD (Voice-coil eXtreme-torque Drive), especially for the 70-180mm F/2.8. While operating faster than ever before, the drive also maintains positional accuracy down to 0.005mm (0.0002 in), less than one tenth the width of a human hair! This provides unprecedented fast and precise AF performance. A floating system that uses two high-speed, high-precision VXD units with advanced electronic control is also used. This innovative design produces clear and beautiful images of all objects from near to far and at the same time helps reduce size and weight. In addition, its exceptional quietness enables low-noise shooting in silent settings. Active athletes and moving vehicles are among the subjects commonly photographed with telephoto zoom lenses. The enhanced, highly-responsive focus features of the 70-180mm F/2.8 enable following a subject's movements to provide users with a whisper-quiet, high-precision shooting experience, not just for still images but also video.

3. Superior design for uncompromised image quality

The 70-180mm F/2.8 has an optical construction of 19 elements in 14 groups. It includes a total of six XLD (eXtra Low Dispersion) and LD (Low Dispersion) lens elements combined, and three GM (Glass

Molded Aspherical) and hybrid aspherical lens elements combined. Special lens elements are generously and optimally arranged to correct chromatic aberration and maintain very high-resolution performance from edge-to-edge. This model also features BBAR-G2 (Broad-Band Anti-Reflection Generation 2) Coating, which minimizes ghosting and flare and produces stunning, clear images with brilliant, sharp subject detail. Furthermore, excellent high image quality across the entire zoom range is enhanced by camera-based distortion and shading correction. Additionally, the bokeh effect obtained using the fast F/2.8 aperture delivers beautifully smooth and soft transition from the subject to the background. The images created with this lens are emblematic of Tamron's pursuit to combine supreme compactness with superb image quality.

4. 67mm filter diameter for system convenience

The 70-180mm F/2.8 features the same 67mm filter diameter as Tamron's other lenses for full-frame mirrorless cameras including the 17-28mm F/2.8 (Model A046), an ultra wide-angle zoom, and the 28-75mm F/2.8 (Model A036), a standard zoom, as well as the fixed focal lens series (20mm, 24mm and 35mm). This uniformity significantly reduces cost and trouble when working with PL, ND and other filters. Even the front lens caps are the same size, eliminating the hassle of sorting caps when switching lenses. These features combine to produce a highly convenient and mobile system that adds more fun to photography.

5. Close focusing to a mere 0.85m (33.5 in)

The new 70-180mm F/2.8 lens has a MOD of 0.85m throughout the entire zoom range. This is astonishingly close for a large aperture telephoto zoom lens. The short MOD paves the way for impressive telephoto shooting at a maximum magnification ratio of 1:4.6 at the 180mm telephoto end. Moreover, a floating component equipped with two VXD linear focus mechanisms maintains high image quality while effectively controlling aberrations so that the 70-180mm F/2.8 ensures great image quality even at close-up. To effectively suppress optical aberrations, this lens features a floating mechanism that ensures great image quality at distances as short as 0.85m (33.5 in).

NOTE: At the 70mm setting, it's possible to shoot at the close range of 0.27m when manual focus (MF) is set on the camera. However, results may be less than optimum since image quality decreases in peripheral areas. For more details, please visit this website: <https://www.tamron.jp/en/support/guide/closeup.html>

6. Moisture-Resistant Construction, Fluorine Coating, and Zoom Lock switch

Seals are located at the lens mount area and other critical locations to deter infiltration of moisture and/or rain drops and afford Moisture-Resistant Construction. This feature provides an additional layer of protection when shooting outdoors under adverse weather conditions. Also, the front surface of the lens element is coated with a protective fluorine compound that has excellent water- and oil-repellant qualities. The lens surface is easier to wipe clean and is less vulnerable to the damaging effects of dirt, moisture or oily fingerprints, allowing for much easier maintenance. Additionally, the conventional Zoom Lock switch prevents unwanted barrel extension during transportation.

7. Compatible with main camera-specific features and functions

Tamron's new 70-180mm F/2.8 is compatible with many of the advanced features that are specific to certain mirrorless cameras. This includes the following:

- Fast Hybrid AF
- Eye AF
- Direct Manual Focus (DMF)
- In-camera lens correction (shading, chromatic aberration, distortion)
- Camera-based lens unit firmware updates

* Features vary by camera. Please consult your camera's instruction manual for details. (As of January, 2020.)

8. Tamron's 'Dream Team' of large aperture zooms for full-size mirrorless cameras

Tamron's 17-28mm F/2.8 Di III RXD (Model A046) ultra wide-angle zoom and the 28-75mm F/2.8 Di III RXD (Model A036) standard zoom lens earn high marks for user-friendliness and high image quality among large aperture zoom lenses for the Sony E-mount. Now, the 70-180mm F/2.8 Di III VXD (Model A056) telephoto zoom lens joins the lineup to complete the Dream Team of high-speed zoom lenses for full-size mirrorless cameras. A key advantage of this series is their portability. The three models altogether weigh surprisingly little, just 1,780g (62.8 oz). Featuring light weight, compact size, a fast F/2.8 aperture and superb image quality, Tamron's Dream Team is easy to carry, easy to deploy and easy to enjoy.

SPECIFICATIONS

Model	: A056
Focal Length	: 70-180mm
Maximum Aperture	: F/2.8
Angle of View (diagonal)	: 34°21'-13°42' (for full-frame mirrorless format)
Optical Construction	: 19 elements in 14 groups
Minimum Object Distance	: AF: 0.85m /33.5 in (Full zoom range) MF: 0.27m /10.6 in (WIDE), 0.85m /33.5 in (TELE)*
Maximum Magnification Ratio	: AF: 1:4.6, MF: 1:2 (WIDE) / 1:4.6 (TELE)*
Filter Size	: φ67mm
Maximum Diameter	: φ81mm
Length**	: 149mm (5.9 in)
Weight	: 810g (28.6 oz)
Aperture Blades	: 9 (circular diaphragm)***
Minimum Aperture	: F/22
Standard Accessories	: Flower-shaped hood, Lens caps
Compatible Mounts	: Sony E-mount

* Shooting at a close range of 0.27m, at the 70mm setting, is possible only when manual focus (MF) is set on the camera. However, it may be difficult to focus since the image quality decreases in peripheral areas. For detail, please visit this website. <https://www.tamron.jp/en/support/guide/closeup.html>

** Length is the distance from the front tip of the lens to the lens mount face.

*** The circular diaphragm stays almost perfectly circular up to two stops down from maximum aperture.

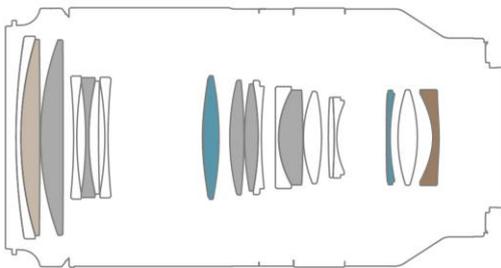
Specifications, appearance, functionality, etc. are subject to change without prior notice.

This product is developed, manufactured and sold based on the specifications of E-mount which was disclosed by Sony Corporation under the license agreement with Sony Corporation.

Lens Exterior

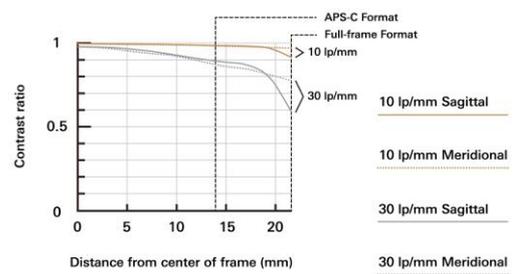


MTF/ Optical Construction

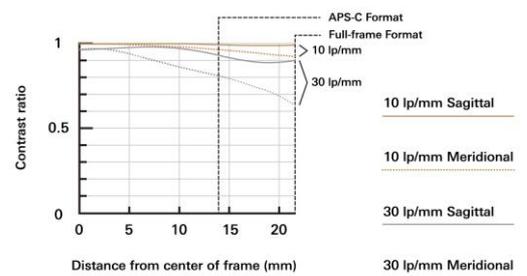


- Molded glass aspherical element
- LD (Low Dispersion) lens element
- Hybrid aspherical lens
- XLD (eXtra Low Dispersion) element

Focal Length: 70mm Exposure: F/2.8



Focal Length: 180mm Exposure: F/2.8



About Tamron Co., Ltd.

“New Eyes for Industry” is Tamron’s philosophy. This creed is consistent with the company’s position as a manufacturer of a wide range of original optical products, from interchangeable lenses for SLR cameras to various optical devices for both the general consumer and OEM. Tamron makes optical products that contribute to a range of different industries and will continue to devote its rich creativity and leading-edge technical prowess to various industrial fields. Furthermore, Tamron is fully aware of its responsibility to the environment and aspires to help preserve the natural environment in all of its business activities.

Optical Product Line-up:

Interchangeable lenses for 35mm / Digital SLR camera, Interchangeable lenses for Non-Reflex type camera, Camcorder lenses, Digital still camera lenses, Drone lenses, Optical device units, Surveillance camera lenses, FA and Machine vision lenses, Automotive camera lenses, Camera module, Test plates, etc.