Information



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Two new smc DA* (DA Star) lenses — High-performance, topquality telephoto zoom and medium-telephoto models designed exclusively for PENTAX digital SLR cameras

HOYA CORPORATION PENTAX Imaging Systems Division is pleased to announce the launch of two high-performance interchangeable lenses for the acclaimed smc PENTAX-DA* (DA Star) series. These lenses are designed exclusively for use with PENTAX digital SLR cameras to deliver top-quality digital images. The smc PENTAX-DA*60-250mmF4ED[IF] SDM is a versatile telephoto zoom lens offering a high zoom ratio, while the smc PENTAX-DA*55mmF1.4 SDM is a compact medium-telephoto lens offering a large maximum aperture.

Common Features of Two New Lenses

1. High image quality

The two lenses are the newest members of the exclusive DA Star series, developed as part of PENTAX's pursuit of the highest image quality, and are designed to deliver the top optical performance of all PENTAX interchangeable lenses. Combining a host of advanced technologies including super-low-dispersion optical elements, extra-low dispersion (ED) optical elements and PENTAX-original lens coatings, they assure outstanding image description with clear, high-contrast images, even at edges of the image field.

2. Dust/water-resistant construction

Featuring a set of special seals, the lenses feature a reliable dust-resistant, water-resistant construction to prevent intrusion of dust, water and moisture into the lens body.

3. Quick-Shift Focus system

The PENTAX-invented Quick-Shift Focus system allows instant switching to manual-focus operation, after the subject is captured in focus by the camera's autofocus system.

4. SP coating to block dust and stains

The front surface of the optics is treated with the PENTAX-original Super Protect (SP) coating. Applying a special fluorine compound to the lens surface through a vapor deposition process, this coating effectively repels dust, water and grease, making it easy to wipe off annoying stains such as fingerprints and cosmetic marks.

5. Digital SLR-exclusive optical design

Thanks to a combination of special lens coatings, ideal curvature and best positioning of optical elements, these lenses are designed to optimize digital imaging characteristics, while effectively minimizing flare and ghost images. Their image circle is perfectly proportioned to the image-sensor size of PENTAX digital SLR cameras. Despite their large maximum aperture, they are designed to be compact and lightweight to enhance maneuverability and operability.

Main Features of the smc PENTAX-DA*60-250mmF4ED[IF] SDM Lens

- (1) When mounted on a PENTAX digital SLR camera body, this zoom lens provides focal lengths from 92mm to 383mm in the 35mm format. Its 4.2-times zoom ratio covers a broad telephoto range, making it ideal for capturing various sports scenes and portraits.
- (2) Two extra-low dispersion (ED) optical elements are incorporated into the optics for minimal chromatic aberrations. A unique nonlinear shifting system employed in the zoom mechanism effectively reduces field curvature aberrations and assures solid image-description performance at all focal lengths.
- (3) The large F4 maximum aperture is retained over the entire zoom range to assure a faster shutter speed or reduce the depth of field.
- (4) An innovative hybrid AF system offers both extra-smooth, super-quiet SDM autofocus operation using a supersonic motor installed in the lens body and conventional autofocus operation using a motor built into the camera body.

Main Features of smc PENTAX-DA*55 mm F1.4 SDM Lens

- (1) When mounted on a PENTAX digital SLR camera body, this medium-telephoto lens offers a focal length of 80mm in the 35mm format. Coupled with its large F1.4 maximum aperture, it is ideal for portraiture applications.
- (2) A newly developed Aero Bright Coating enhances image-description performance by effectively reducing reflections over a wider wavelength range. Compared to conventional multi-coatings, this new coating greatly improves light transmittance in the lens, while drastically reducing flare and ghost images that deteriorate image quality.
- (3) A combination of the latest optical design and a round-shaped diaphragm assures soft, beautifully obscured out-of-focus description, maximizing the advantage of a large-aperture lens in shallow depth-of-field applications.
- (4) Super-low-dispersion optical element is incorporated into the optics for effective compensation of a variety of aberrations.
- (5) The advanced SDM mechanism assures extra-smooth, super-quiet autofocus operation using a supersonic motor installed in the lens body. Thanks to its SDM-exclusive autofocus system, the lens is designed to be quite compact, despite its large maximum aperture.

Specifications

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	smc PENTAX-DA*	smc PENTAX-DA*
	60-250mmF4ED[IF] SDM	55mmF1.4 SDM
Lens mount	PENTAX K _{AF2} mount	PENTAX K _{AF3} mount
Lens construction	15 elements in 13 groups	9 elements in 8 groups
Angle of view	26.5-6.5°	28.6°
	(when used with PENTAX Digital SLR camera body)	
Aperture control	Automatic	Automatic
Minimum aperture	F32	F22
Number of diaphragm blades	9	9
Metering system	TTL open-aperture metering	TTL open-aperture metering
Minimum focusing distance	1.1m	0.45m
Filter size	67mm	58mm
Maximum magnification	0.15X	0.17X
Dimensions (diameter	82mm x 167.5mm	70.5mm x 66mm
x length)	(3.2 inches x 6.6 inches)	(2.8 inches x 2.6 inches)
Weight	1040g (36.7oz) without hood 1120g (39.5oz) with hood 1230g (43.4oz) with hood & tripod mount	375g (13.2 oz) without hood 415g (14.6 oz) with hood

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