

PENTAX®

SM

PENTAX

mm f/2.8



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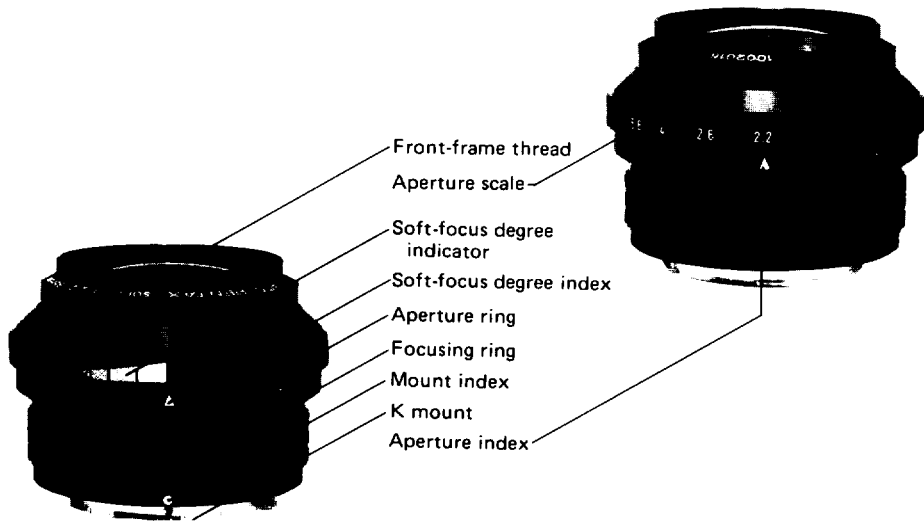
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SPECIFICATIONS AND FEATURE

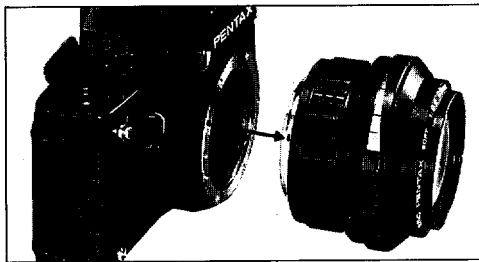
Compatible cameras	Pentax K-mount (KA/Kf) cameras
Lens construction	Two elements in a group
Angle of view	28.5°
Metering	Stop-down metering
Diaphragm	Manual diaphragm (click-stop)
Aperture scale	f/2.2 – f/5.6
Focusing	By turning focusing ring
Minimum focus distance	0.57 m (magnification: 1/4.3X)
Filter size	49 mm
Dimensions	72 mm (max. dia.) x 51.5 mm (length)
Weight	230 g
Accessories	Lens cap, Lens mount cap, Lens hood, Lens case

This lens is most suited for portraiture, flower and other still-life photography. When combined with the Rear Converter, Extension Tubes, etc., it enables you to take more original soft-focus pictures.
Use it for various picture-making purposes.

NOMENCLATURE

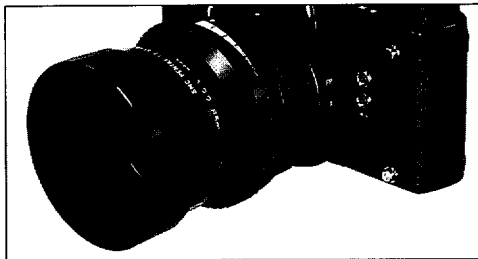


LENS MOUNTING, LENS HOOD, FILTER



To mount the lens, align the red dot on the front of the camera and the red dot on the lens. Insert the lens and turn it clockwise until it locks into place.

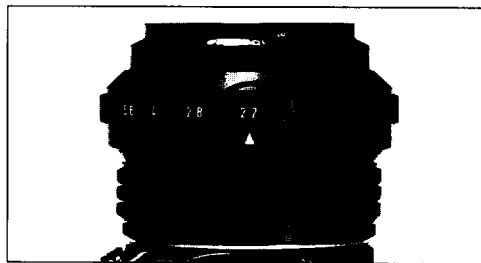
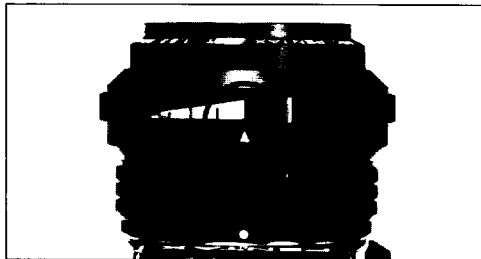
This lens has no aperture-A (Auto) mechanism. Use it with the camera set in the Aperture-priority AE or Metered Manual mode.



The compatible lens hood is the round 49mm spring-type and it attaches to the front frame of the lens. The use of the lens hood is especially recommended to avoid flare.

The compatible filter is the 49mm screw-in type and it is attached to the front frame of the lens by screwing it in. The polarizing filter is also usable.

APERTURE RING (TO CONTROL DEGREE OF SOFT-FOCUS IMAGE)



The aperture can be adjusted in the range of $f/2.2 - f/5.6$, but it is mainly used to control the degree of a soft-focus image. The f -stop indications are on the lower side of the aperture ring, while the soft-focus degree indicator is on the upper side. The soft-focus degree is the greatest at the maximum aperture ($f/2.2$) and it decreases as the lens is closed down.

f/5.6



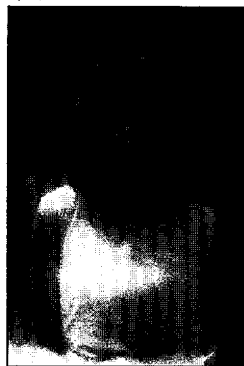
f/4



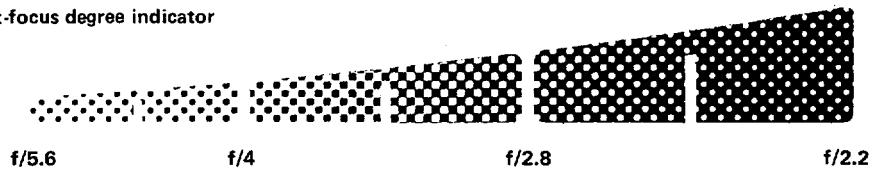
f/2.8



f/2.2



- Soft-focus degree indicator

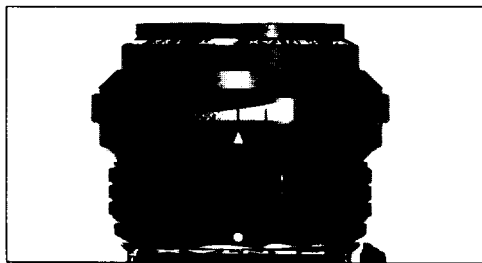


FOCUSING AND SHOOTING

After adjusting the degree of a soft-focus image, turn the focusing ring and focus on the subject through the matte field of the viewfinder. The split-image and microprism are difficult to focus, due to the characteristics of the soft-focus lens. If your camera is the type that accepts the all-matte screen (optional), use it by all means.

Precautions

- Be sure to focus after adjusting the degree of a soft-focus image. Otherwise, a picture will result in its main subject being out of focus.
- The focusing ring of this lens has no distance scale, but the focusing distance is from 0.57m (minimum; when lens extended; 1/4.3X magnification) to infinity.
- The depth-of-field scale and the infrared index are not provided on this lens, since they are not suitable for use with this lens.
- If you use this lens with the Pentax ME-F camera by operating the TTL Electronic Focus system, the focus accuracy will so greatly decrease that the use is not recommended.



Shooting

Measure the light by the stop-down metering method, and with the programmed camera, shoot in the Aperture-priority AE or Metered Manual mode.

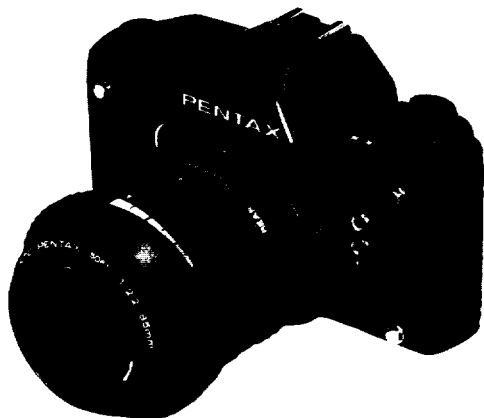
- Exposure or soft-focus degree varies, depending on the type of film in use, the type or purpose of pictures to take, etc., so it must be learned by making some actual shots.
- When the subject is too bright, making the camera indicate an over-exposure (out of the meter-coupling range), use an ND filter locally available or slow-speed film.



REAR CONVERTER

The picture taken with the Rear Converter combined is more uniform, better in quality and has a greater soft-focus degree than that taken with the soft-focus lens only. Combining the Rear Converter varies the focal length and speed of the lens as seen in the table at right.

- The combination of "soft-focus lens + Extension Tubes + Rear Converter" is also possible.



Combinations Specifications	Pentax Rear Converter A			
	1.4X-S	2X-S	1.4X-L	2X-L
Magnification	1/3X	1/2.2X	1/3X	1/2.2X
Focal length	119 mm	170 mm	119 mm	170 mm
Angle of view	20.5°	14.5°	20.5°	14.5°
Aperture	f/3.1 – f/8	f/4.4 – f/11	f/3.4 – f/8	f/5.1 – f/11
Others	Focus in the matte field.			

- Since the L-type Rear Converter has no effective diameter that satisfies the beam of the maximum aperture f/2.2, the maximum f-number varies.



1.4X-S



2X-S



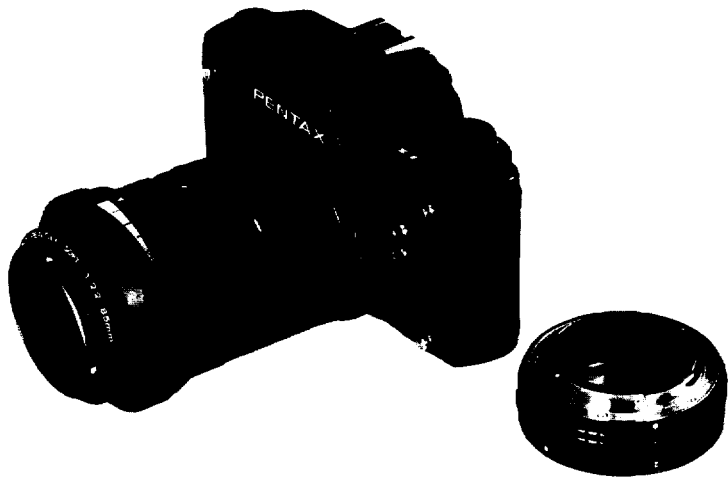
1.4X-L



2X-L

CLOSE-UP PHOTOGRAPHY

By combining this lens with the Extension Tubes (Auto Extension Tube Set K, Extension Tube Set K, Helicoid Extension Tube, etc.), you can take soft-focus close-up photographs.



CLOSE-UP TABLES

Auto Extension Tube Set K, Extension Tube Set K

Magnification	Tubes to be used	Picture area (mm)	Lens Extension (Maximum)	
			Film-to-subject distance (mm)	Exposure factor
0.23 (-)	Not used	103 x 155 (-)	566 (-)	X1.6 (-)
0.37 (0.34)	1	64 x 97 (70 x 105)	439 (457)	X1.9 (-)
0.45 (-)	2	53 x 79 (-)	405 (-)	X2.2 (-)
0.54 (0.56)	3	45 x 67 (43 x 64)	383 (377)	X2.5 (2.6)
0.59 (0.56)	1 + 2	40 x 61 (43 x 64)	372 (377)	X2.7 (2.6)
0.68 (-)	1 + 3	36 x 53 (-)	362 (-)	X2.9 (-)
0.76 (0.79)	2 + 3	32 x 48 (31 x 46)	355 (354)	X3.2 (3.4)
0.90 ()	1 + 2 + 3	27 x 40 (-)	350 (-)	X3.8 (-)

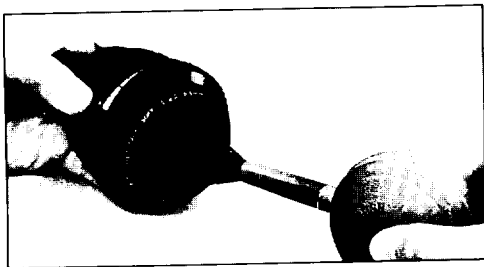
Figures in () are for Extension Tube Set K;

(-) means figures are the same as for Auto Extension Tube Set K.

Helicoid Extension Tube

Magnification	Helicoid extension	Lens extension	Picture area (mm)	Film-to-subject distance (mm)	Exposure factor
0.31	Minimum	Minimum	78 x 117	482	X1.8
0.54	Minimum	Maximum	44 x 67	382	X2.5
0.54	Maximum	Minimum	44 x 67	382	X2.5
0.77	Maximum	Maximum	31 x 47	354	X3.3

LENS MAINTENANCE



- Your lens needs periodic cleaning to keep it operating properly. To do the job right, you need lens-cleaning fluid, lens-cleaning tissues, a bulb-type ear syringe, a small, soft camel's-hair brush, cotton swabs on a toothpick (Q-tips), and a clean, soft, handkerchief which has been laundered a few times. Keep these handy in a small case in your camera bag.
- Handle the camera body carefully and don't scrub the lens. Use the brush and the blower regularly. Use lens-cleaning fluid sparingly when cleaning the lens. Place a few drops on the lens-cleaning tissue, not directly on the lens itself. Wipe with a light, circular motion. Do this only when absolutely necessary.
- When storing the lens in the case, be sure to put the lens cap and the lens mount cap on to keep the dust away.
- When you have removed the lens from the body, be careful about the way you put it down as it may roll and drop against immovable objects.
- Keep the lens away from humidity.
- When not using the lens for an extended period of time, take it out of the case and place it in a ventilated place.



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