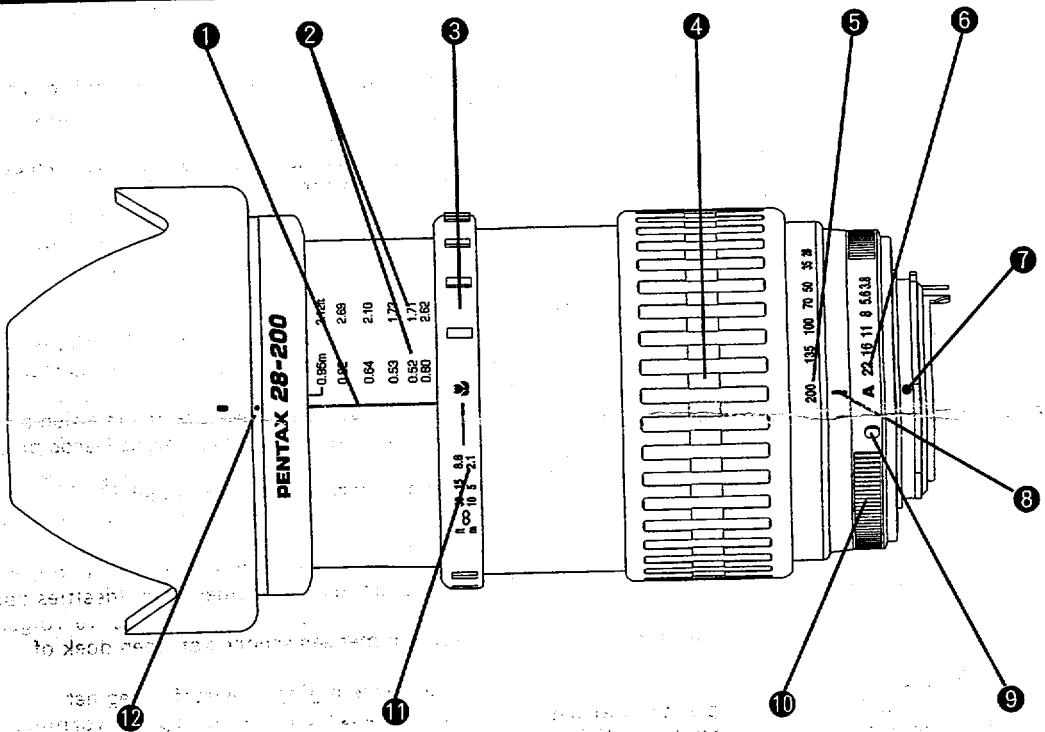
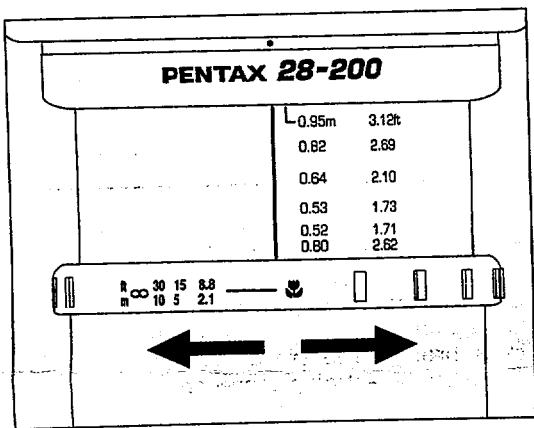


PENTAX®

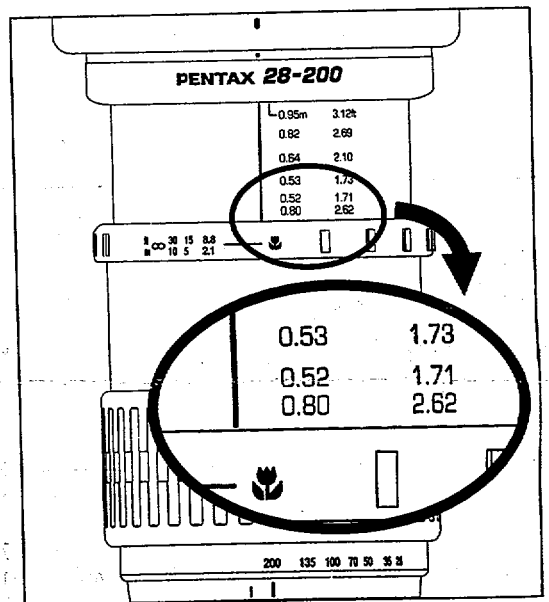
SMC PENTAX-FA ZOOM 28~200mm f/3.8-5.6 AL (IF)



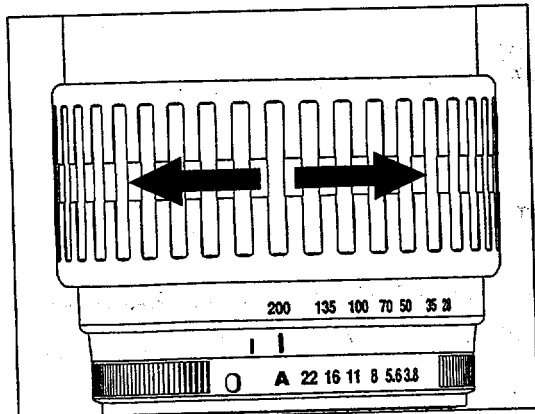
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OPERATING MANUAL (ENGLISH)

FOR SAFE USE OF YOUR LENS

WARNING

This mark indicates precautions that, if not followed, could result in serious injury to the operator.

WARNING

This mark indicates precautions that, if not followed, could result in minor or medium injury to the operator or damage to the equipment.

WARNING

Do not look directly at the sun through the lens. Doing so, could result in blindness.

CAUTION

Do not set the lens in places exposed to sun light. The light reflected off the lens may focus on a nearby object, and cause a fire.

PRECAUTIONS AND LENS MAINTENANCE

- When storing the lens in a case, attach the front and rear lens cap that come supplied with the lens to protect it from dust and scratches.
- After removing the lens from the camera body, be careful not let it roll over or fall. Be sure to place the lens with its front side down.
- Moisture can cause serious damage to optical glass elements. Storage in a damp place may cause mildew, so avoid storing the lens in a place where temperature and humidity are high. Keep your lens in as dry a place possible.
- If you do not expect to use the lens for an extended period, store it in the case with a desiccant or it is recommended that the lens occasionally be taken out of the case placed in a cool, dry, well-ventilated place to avoid the possibility of damage due to condensation build-up.
- Use a blower or lens brush to remove dust or fingerprints collected on the lens. If the lens becomes dirty, remove dirty particle with a blower brush, then wipe it off with a clean cotton cloth or tissue paper moistened with lens cleaning solution. Wipe in a spiral pattern from the center to the outside.

DESCRIPTION OF PARTS

- | | | |
|------------------------|--------------------------------|--------------------------|
| ① Focus distance index | ④ Minimum focus distance scale | ⑦ Manual focusing ring |
| ② Zooming ring | ⑤ Zooming scale | ⑧ Aperture scale |
| ③ Lens mounting guide | ⑥ Aperture index | ⑨ Aperture-A-lock button |
| ⑩ Aperture ring | ⑩ Focus distance scale | ⑫ Hood attaching index |

SPECIFICATIONS

Focal length	28 - 200 mm
Maximum aperture	f/3.8 - 5.6
Minimum aperture	f/22 - 32
Angle of view	75° - 12.5°
Lens construction	14 groups 16 elements
Minimum focus distance	0.52 m (1.7 ft) at 135 mm
Maximum magnification ratio	0.21X at 135 mm
Filter size	72 mm
Max. diameter and length	78 x 83 mm
Weight	465 g (16.4 oz)

SPECIFICATIONS ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTIFICATION OR ANY OBLIGATION ON THE PART OF THE MANUFACTURER.

MOUNTING/REMOVING THE LENS

Mounting

After removing the rear lens cap, place the lens in the camera mount, aligning the lens mount index line with that of the camera body. Rotate the lens clockwise until it seats with a click. (For details, please refer to the operating manual of your camera.)

Removing

Push in and hold the lens release button on the camera body while rotating the lens counter clockwise.

FOCUSING

Autofocus

When your camera is in the autofocus mode, your camera controls the focusing operation. Be careful not to hinder the movement of the focusing ring when in the AF mode.

Manual focus

When the lens is used in the manual focus mode, set the camera's focus mode switch to MF. Turn the focusing ring while looking through the viewfinder. The correct focus position is determined when the picture in the viewfinder becomes sharpest. In manual-focus photography, focusing should always be checked through the viewfinder even when shooting at infinity (∞). (Fig. 1)

* For further details, see the camera's operating manual.

- Minimum focus distances differ depending upon focal lengths. For confirming the minimum focus distance at the focal length in use, please refer to the minimum focus distance scale shown on the lens barrel. (Fig. 2)

ZOOMING

To set your lens to the image composition you desire, simply look through the viewfinder and operate the zoom ring. (Fig. 3)

APERTURE CONTROL AND AE SETTING

For the Programmed-AE or Shutter-Priority-AE, rotate the aperture ring of the lens to the position marked "A". For the Aperture-Priority AE or the Manual Mode, turn the aperture ring to the desired aperture opening position.

PRECAUTION WHEN THE BUILT-IN FLASH IS USED

When the built-in flash is used with the focal lengths set between 28-80mm, { } blinks in the viewfinder as a warning. It means that vignetting will occur in the picture corners.

LENS HOOD

A bayonet-type hood (PH-RBA72) is provided as a standard accessory. We recommend shooting with the hood attached because the lens hood cuts out stray light which is harmful to the picture. However, when you use a built-in flash, make sure to detach the lens hood.

Attaching the lens hood.

Align the index mark on the hood with the corresponding index mark on the lens. Push the hood onto the lens and then rotate it clockwise to secure it. When fitting the lens hood, hold the focusing ring and zoom control ring so that they are not rotated unintentionally.

LENS SOFT CASE

An optional lens soft case S90-160 is available.

LENS CAP

The lens cap 72mm is supplied as the standard accessory.

WARRANTY POLICY

Refer to the camera's warranty policy.