

SMC PENTAX XL EYEPIECE SERIES

Features

The SMC Pentax XL series consists of newly designed American-size high-quality eyepieces incorporating recent advances in the performance of objective lenses. Features Common to all items in the series include high eye points with 20mm eye relief, a wide field with an apparent field of view of 65 degrees (excluding XL 28), and an optical system characterized by high image quality realized by special high-refraction, extra low-dispersion optical glass and comprehensive coating including laminated surfaces. It is now possible to obtain sharp, bright and undistorted images from the center to the periphery with a wide view field. A new type of movable eye cap (excluding XL 40) which enables fine adjustment of height in the eyepiece has been developed. In combination with the high eye point, these features contribute to unprecedented clarity of vision.

Handling precautions

- In the case of Pentax 100 SDUF and SDUF II tubes, focusing will be incorrect if the diagonal prism DP-317 is use with XL 5.2~XL 28. Use in the direct vision state (use with conversion adapter 38mm→31.7mm).
- To improve contrast, matting has been applied to screw sections up to the sleeve tip. When screwing in filters etc., a small amount of paint may come away.
- When you remove your eye from the eyepiece and look at the center, you may notice shiny white spots similar to smears. These will have no effect on performance.

Warning



1. Do not look directly at the sun. (You may damage your eyesight by doing so. Instructions should be followed for solar observation.)
2. Do not place the eyepiece under direct sunlight. (Doing so may cause fire)

Package contents

SMC Pentax XL Eyepiece	(1)
Replaceable eye cap (XL 40 only)	(1)
Front attachment cap	(1)
Rear attachment cap	(1)
Case	(1)
Owner's Manual	(1)

Specifications

	Focusing distance Lens structure	Eye relief Apparent field of view	Coating (laminated surface)	Attachment diameter Parfocal	Size Weight
SMC Pentax XL 5.2	5.2mm 7 element in 5 groups	2.0mm 65°	SMC on all surface (special coating)	φ31.7mm ○	φ60×126~141mm 440g
SMC Pentax XL 7	7mm 7 element in 5 groups	2.0mm 65°	SMC on all surface (special coating)	φ31.7mm ○	φ60×113~128mm 425g
SMC Pentax XL 10.5	10.5mm 6 element in 4 groups	2.0mm 65°	SMC on all surface (special coating)	φ31.7mm ○	φ60×107~122mm 380g
SMC Pentax XL 14	14mm 6 element in 4 groups	2.0mm 65°	SMC on all surface (special coating)	φ31.7mm ○	φ60×97~112mm 350g
SMC Pentax XL 21	21mm 6 element in 4 groups	2.0mm 65°	SMC on all surface (special coating)	φ31.7mm ○	φ60×86~101mm 325g
SMC Pentax XL 28	28mm 5 element in 4 groups	2.0mm 55°	SMC on all surface (special coating)	φ31.7mm ○	φ60×86~101mm 340g
SMC Pentax XL 40	40mm 5 element in 5 groups	2.0mm 65°	SMC on all surface	φ50.8mm ○	φ60×102, 118mm 380g

How to use

- SMC Pentax XL 5.2~XL 28
 - (1) XL 5.2~XL 28 should be attached to an eyepiece with an insert diameter of 31.7mm (1¼ inches).
In the case of Pentax astronomical telescopes, use together with a conversion adapter 38mm→31.7mm or diagonal prism DP-317.
 - (2) Eye caps XL 5.2~XL28 will move vertically about 15mm when turned. They have been designed so that users who do not wear glasses will gain the best view in the most extended position and users who do wear glasses will gain the best view in the most contracted position.
Differences will, however, occur between individuals, and further adjustment will be needed to ensure the optimum view.
When turning the eye cap, move the part indicated in the drawing
 - (3) XL 5.2~XL 28 have a thread (diameter 1¼ inch×pitch 1¼ inch) on the sleeve tip allowing for attachment of sunglasses and moon glasses made by other manufacturers.
- SMC Pentax XL 40
 - (1) XL 40 should be attached to an eyepiece with an insert diameter of 50.8mm (2 inches).
In the case of Pentax astronomical telescopes, use together with a conversion adapter 60.2mm→50.8mm
 - (2) XL 40 eye cap does not move up and down. If necessary, replace with a tall eye cap (users who do not wear glasses) or a short eye cap (users who wear glasses)
 - (3) XL 40 has a filter thread (diameter 48mm×pitch 0.75mm) on the sleeve tip to allow for attachment of commercially available camera filters.

