

2.9 Installation and alignment of 60X22 and 60X23 Side Looking Section

When side looking section 60X22 or 60X23 is used the measuring volume is alongside the central axis of the probe and the optical axis is turned 90° (**Figure 22**).

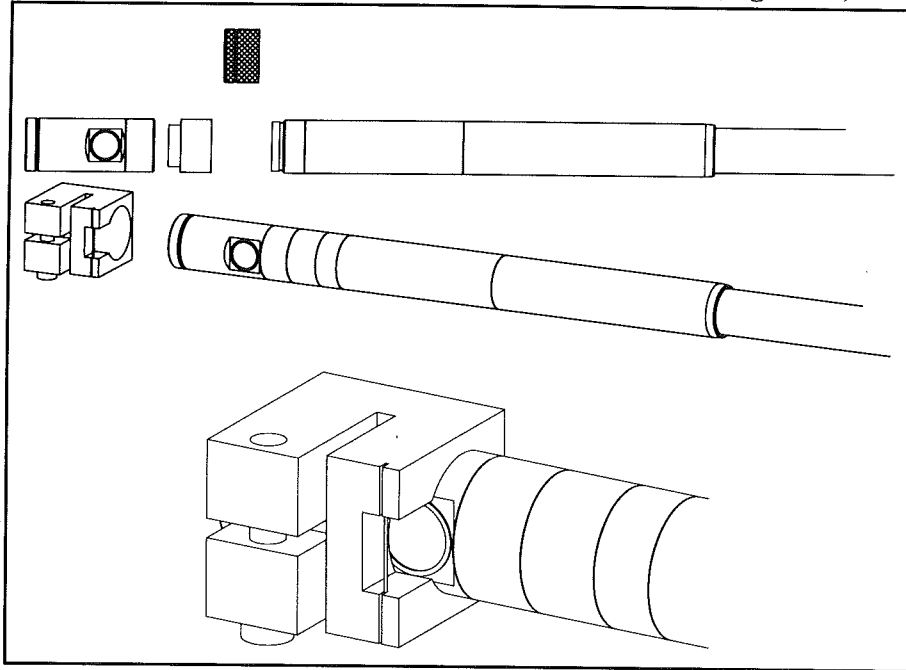


Figure 22. Side looking section 60X22 or 60X23 is designed for use with 14 mm probes. The cubic object is an adjustment tool. A cap at the end of the side looking section can be unscrewed, revealing the adjustment screw for the mirror.

If measurements are performed in liquids the transition to the liquid must occur over a flat surface to avoid aberrations. The side looking section contains a flat glass window and a mirror which directs the beams along an axis which is offset by 90° to the axis of symmetry (probe axis).

The side looking section is adjustable around the axis of symmetry. This feature enables fine adjustments of the measuring planes to be made. No lens effect is present.

An extension ring reduces the probe volume distance from the axis of symmetry from 43 mm to 33 mm in water, and from 33 mm to 25 mm in air.

Side looking section 60X22 is used with He-Ne lasers; side looking section 60X23 is used with Ar-ion lasers.

Installation and alignment

1. Remove the smoothing ring from the probe, if attached.
2. If you want the measuring volume to be closer to the probe, mount the extension ring between the probe and the side looking section.
3. Mount the side looking section on the probe and tighten the threaded ring.
4. Rotate the side looking section until the laser beams are perpendicular to the probe's axis while retaining the original beam orientation from the probe.
5. To fine adjust the beam orientation, mount the adjustment tool.
6. Remove the cap at the end of the side looking section.
7. Adjust the mirror using a screwdriver until the beams are precisely oriented.
8. Remount the cap.
9. Remove the adjustment tool.