Collimator Kit

EXVC

For use with XR-100CR or XR-100T-CdTe (standard box with 1.5 inch extender) and the EXV9 (detector box with 9 inch extender)

Standard 1.5 inch Extender Box

Tripod Mounting Plate

In order to accommodate applications where the X-ray flux is too high for both the detector and the electronics that process the X-ray spectrum, Amptek has developed a "Collimator Kit" to collimate the primary X-ray beam. This system is comprised of the standard XR100 1.5 inch extender box which slides inside the EXVC Collimator Housing.

The EXVC Collimator Housing can accommodate up to two Tungsten (W) collimator disks that are placed inside a bayonet holder in front of the detector. By selecting the appropriate Tungsten collimator disks, the user can reduce the incoming X-ray flux and allow the detector and electronics to process the X-ray spectrum. Seven different Tungsten collimator disks are provided with different size holes in order to allow for a wide range of applications.

The EXVC Collimator Housing is made of stainless steel and can also be used inside a vacuum chamber.

The EXVC Collimator Kit Includes:

- Stainless steel Collimator Housing
- Brass Spacer
- Tripod and Mounting Plate (included when ordering for use with standard 1.5 inch extender box)
- Laser Pointer
- 5 Tungsten (W) Collimator Disks:

  2 mm thick with 400 µm hole
  2 mm thick with 1000 µm hole
  2 mm thick with 2000 µm hole

All Tungsten disks are made of alloy HD17 (90% W, 6% Ni, 4% Cu).
All Tungsten disks and spacers have a diameter of 0.625 inches.

Optional: EXVC-W-SPACER

This Tungsten Spacer / Collimator is 36 mm thick with a 300 µm hole. It is designed to stop and collimate X-rays greater than 100 keV produced from high energy tubes.

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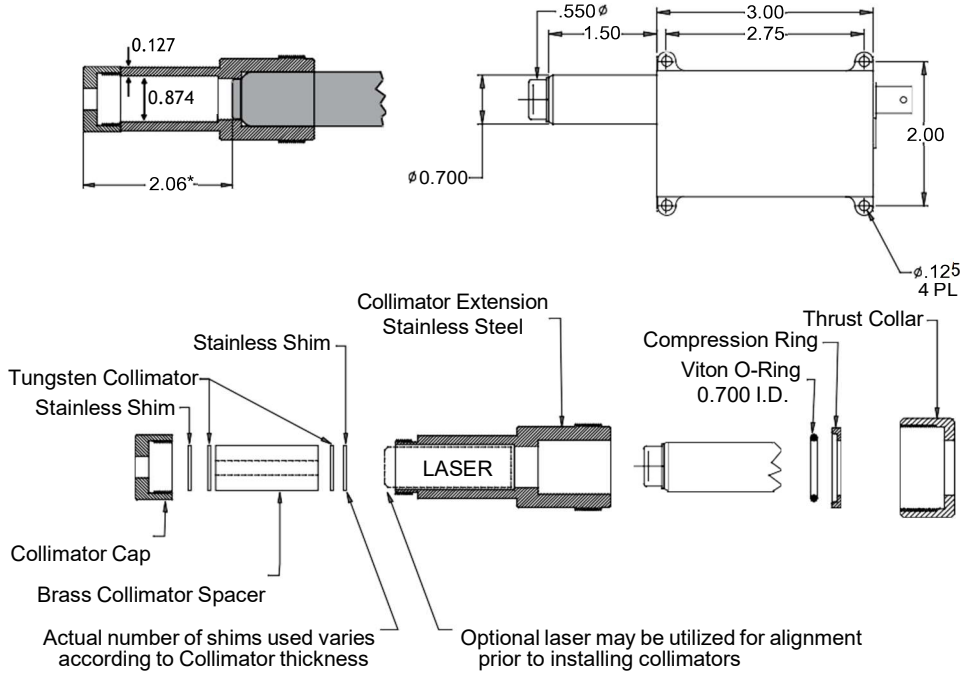
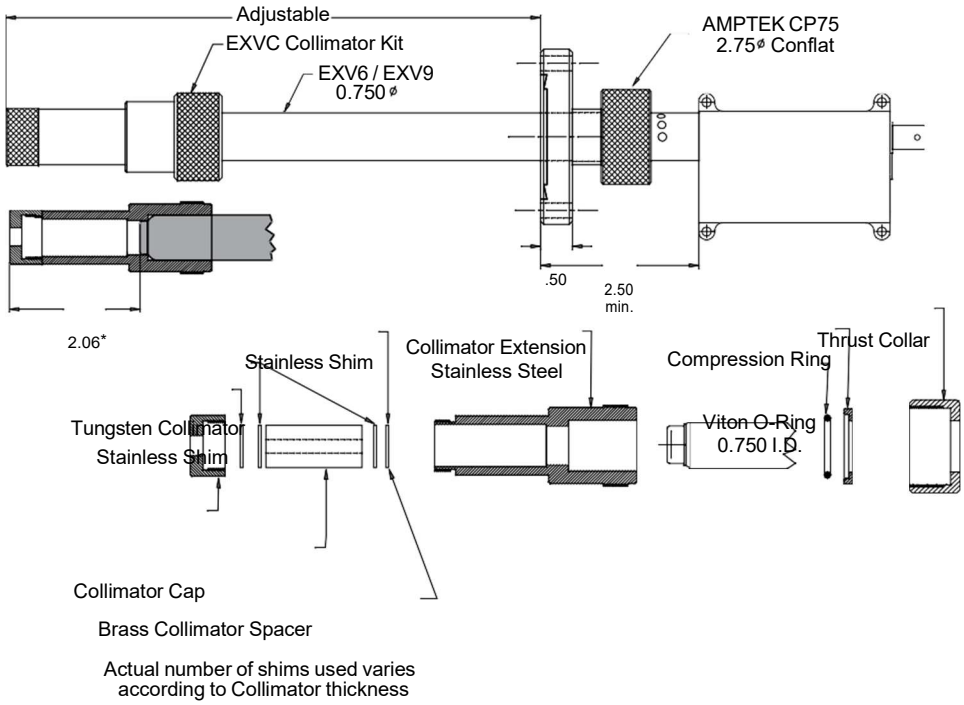
EXVC Collimator Kit for use with XR-100CR or XR-100T-CdTe (1.5 inch extender)
Mechanical Dimensions



*Dimension shown is to Be Window at assembly
Actual dimension to Detector element varies with type (CR, CdTe...)
Refer to Detector data sheet

EXVC Collimator Kit for use with XR-100CR and XR-100T-CdTe with EXV9
Mechanical Dimensions



*Dimension shown is to Be Window at assembly
Actual dimension to Detector element varies with type (CR, CdTe...)
Refer to Detector data sheet

Ordering note: When ordering, please specify the size of your detector box (standard box with 1.5 inch extender or EXV9 box with 9 inch extender). The O-ring component of the collimator kits are different depending on the size of the detector box.

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