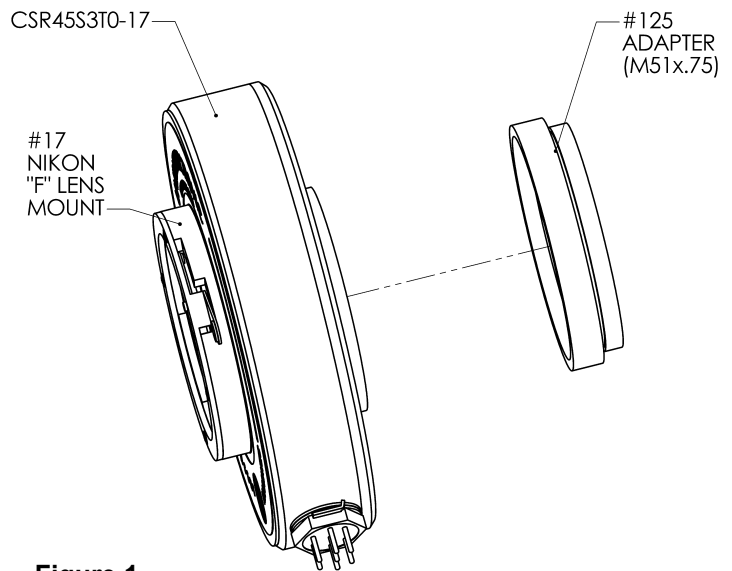


This application note illustrates the components and assemblies required to install a CSR45S3T0-17, 45mm aperture, normally open shutter (activates to the closed position) into a Camelia camera system. The system set up is easy and straight forward. Although bench top drivers, the VCM-D1 and VMM-D1 are illustrated, OEM and integral (to camera) shutter drivers can be substituted. The normally closed shutter, CS45S3T0-17, (activated open) can also be utilized.

• **CS45 SHUTTER WITH “F” MOUNT, #125 ADAPTER ATTACHED**

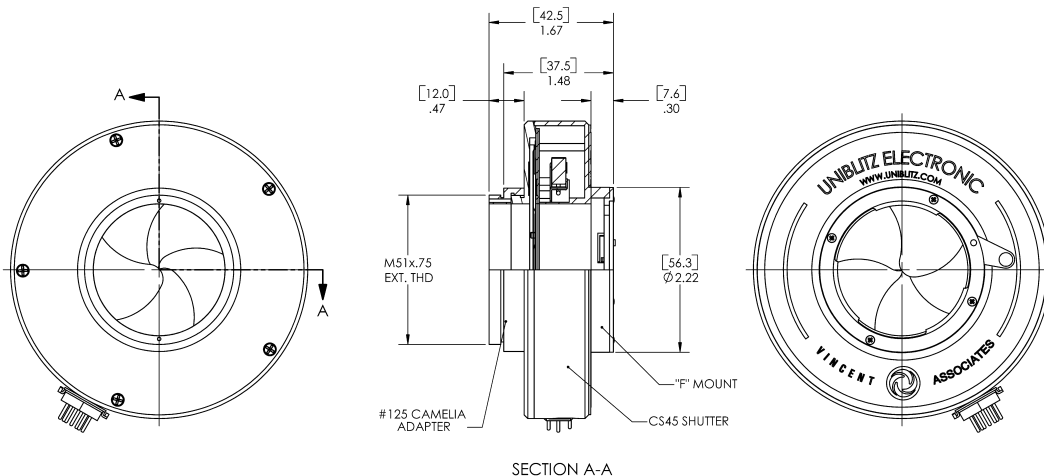
**Figure #1** Illustrates the **UNIBLITZ**<sup>®</sup> CSR45S3T0-17 and the Camelia Adapter prior to assembly. Parts to order are as follows:

- 1 each CSR45S3T0-17      45mm normally open (activated closed) shutter with Nikon lens mount.
- 1 each #125                    Adapter to convert 2.00x40TPI thread to M51x.75mm thread.
- 1 each VCM-D1 (or VMM-D1)    Shutter drive controller



**Figure 1**

**Figure #2** Illustrates a view of the completed shutter (**UNIBLITZ** CSR45S3T0-17 and #125 Camelia Adapter) assembly. Shutter is shown in the activated (closed) position.



**Figure 2**

• INTERFACE CAMELIA CAMERA WITH UNIBLITZ<sup>®</sup> CS45 SHUTTER

Figure #3 illustrates the camera, UNIBLITZ shutter assembly (with F mount and M51x.75mm thread adapter), and Nikon lens.

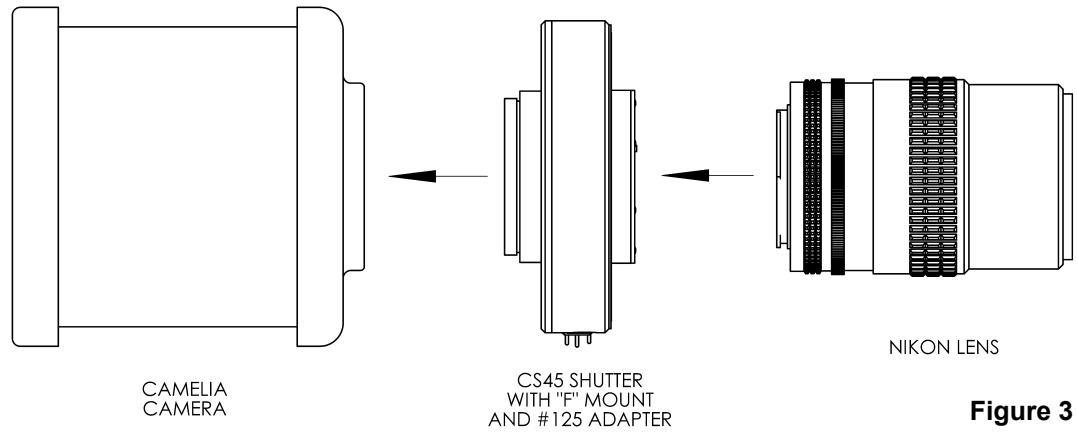


Figure 3

Figure #4 illustrates a camera system comprised of a UNIBLITZ CSR45S3T0-17 (normally open housed shutter with #17 "F" type lens mount) and the #125 Camelia Adapter. This adapter will connect the shutter to the Camelia camera when the camera is equipped with the M51x.75mm thread. The camera is also shown providing control signals to the VCM-D1 (or VMM-D1) shutter drive controller to directly control the shutter's exposure. Some Camelia cameras may not provide direct TTL signals which are required to trigger the VCM or VMM controllers. In this case, A LVDS adapter is required to convert the camera's LVDS control signals to the TTL levels required to trigger the shutter driver. Our LVD96 adapter can be utilized to accomplish this signal conversion. See figure 4.

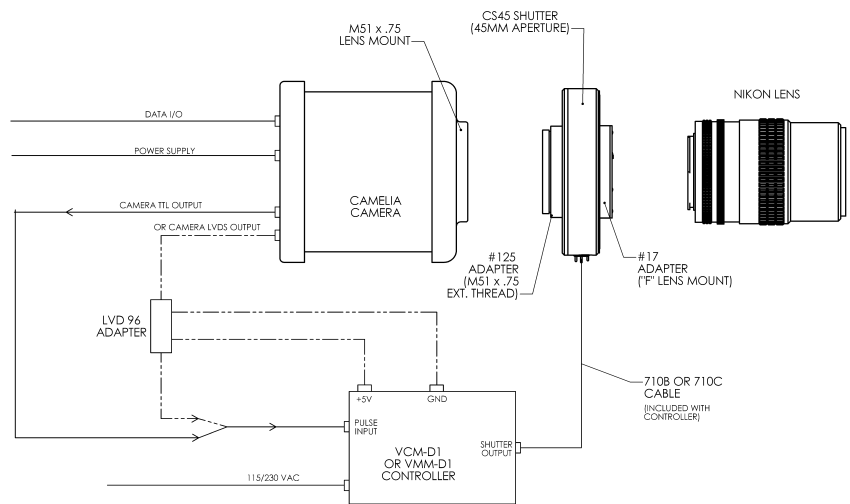


Figure 4