About the use of T-2 finetuning rings *#2458102*

At the beginning of the photographic application with the large pixels usual at that time, we produced these T-spacer rings with wider inner diameter, with the aim that they could be pushed over (our) standard-cut T-2 threads without the application of force. Unfortunately, this has led to angry protests from many owners of CCD and video cameras – only since cameras with extremely small pixels in the range of a few microns have been available.

The reason: in almost all adapters with T-2 threads that are not produced by us, the Delrin ring shifts so much to the side when the screw connection is tightened due to the deep undercut (see term explanation below) that its inner diameter protrudes completely or almost beyond the contact surface of the screwed-on counterpart. The result is a tilting of the image field, the cause of which is often not detected for a long time. This has caused a lot of detuning because all stars in one corner - or even (inexplicably) along one edge of the image – are blurred without the cause being noticed.

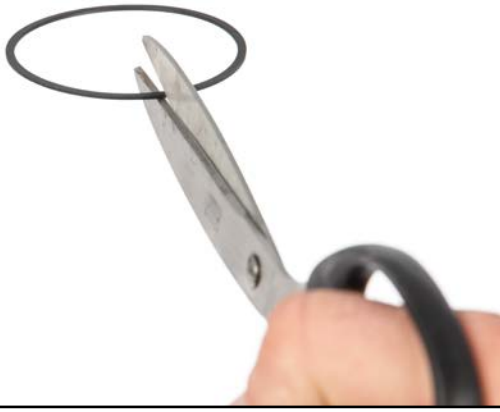
We therefore had to make our rings smaller on the inside to make sure that they would remain sufficiently centered even with a very generously dimensioned „undercut" at the lower end of the thread, so that in any case a large part of the surface of the ring on both sides would be within the contact area of such a screw connection. Only then can a mounted camera not tilt so much that blurred stars appear in the corners of the image.

What can be done if the rings cannot be pushed over a T-2 thread?

If the mounting process of the T-spacer ring on a T-male thread is too difficult, it is a very simple and easy solution to cut the ring with scissors. According to numerous feedbacks from our customers, this is a solution which has no negative effects on the image position. This allows you to pull all rings effortlessly over the respective thread and, if necessary, quickly replace them with a ring of a different height – please try it out and let us know your experience.

Definition: Thread undercut

When producing an external (male) or internal (female) thread, an undercut is always required at the bottom end of the thread, which must even be minimally deeper than the thread diameter – because the tap has a certain shank diameter and cannot go all the way to the thread end. The T-2 thread standard is widely used by absolutely every telescope manufacturer in the world – and many cheaper T-2 accessories have a much deeper undercut at this end of the thread than we would allow (making it easier and faster – but less accurate).



Usage as inner ring:

These finetuning rings can also be used for insertion into a female T-thread. This can be done by „cutting out" an approx. 11 mm long section from the desired ring. The ring is then pressed together in the female T-thread in such a way that the cut-out length is compensated and you have produced an almost continuous female thread damper. Because the main purpose of these rings is that each T-screw connection can be easily detached from each other and is no longer so tightly jammed that you need pliers to loosen a T-2 sleeve each time.