

Q&A

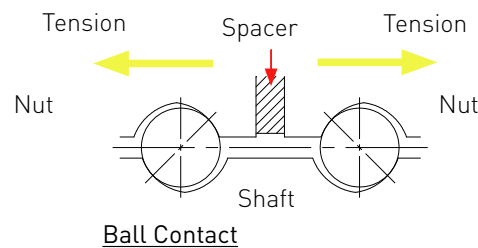
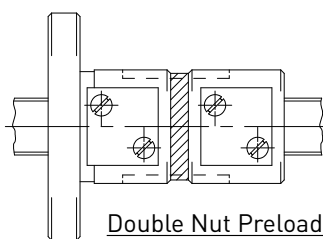
Question: Is there any way to remove Axial play?

To eliminate Axial play, which means to make the clearance between groove and Balls be negative, is possible, what we call Preload. By Preloading, it is possible to be zero of Axial play, to decrease Axial elastic displacement, and to increase Rigidity.

There are several types of Preload shown below.

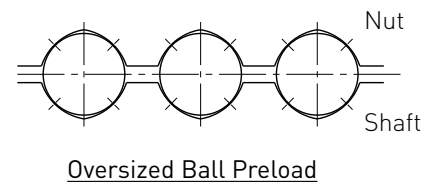
1) Double Nut Preload

This is the way to insert the Spacer into 2 sets of Nut to eliminate clearance.



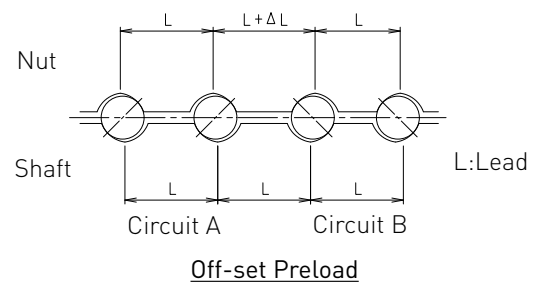
2) Oversized Ball Preload

It is convenient way to apply Preload by single Nut. Slightly larger Balls than clearance between Shaft and Nut groove are inserted to eliminate Axial play. It is suitable way for light Preload.



3) Off-set Preload (Integral Preload)

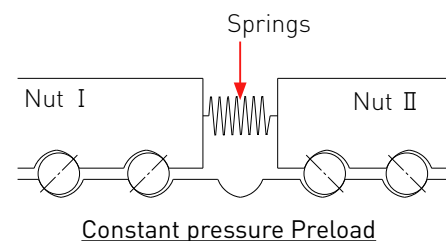
There is a dimensional allowance between the individual Nut circuit, which provides the same proper amount of Preload. Nut length can be shorter than Double Nut. This way is available on condition that number of circuits would be more than two.



4) Constant pressure Preload

It is the way to insert the Spring instead of Spacer between 2 sets of Nut.

KSS adopts oversized Ball Preload, which is said to be suitable for Miniature Ball screws.



Over-sized Ball pre-load is the most suitable way for Miniature Ball Screw!!!