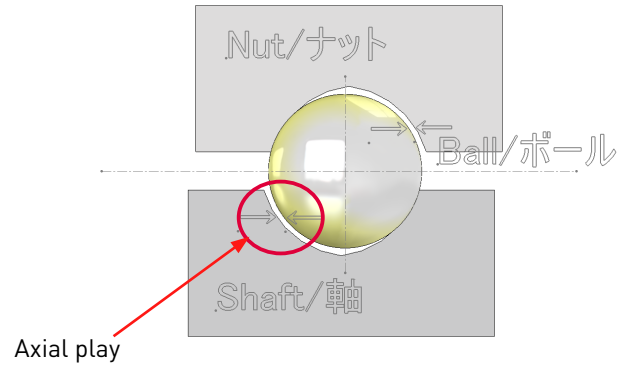


# Q&A

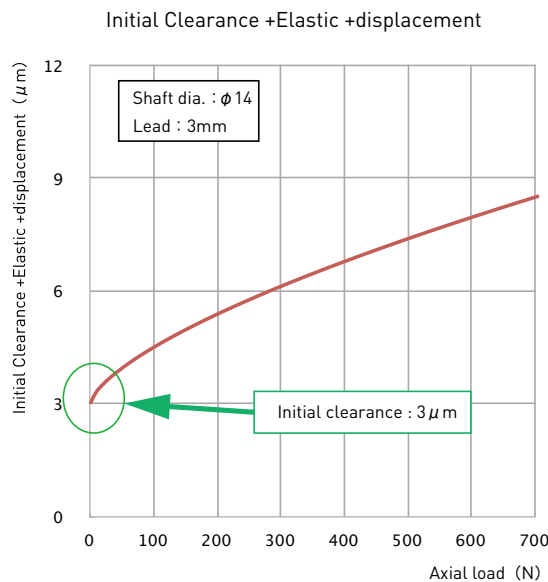
**Question:** Is an Axial play the same as backlash?

Axial play of Ball Screws is often called Backlash. It is no problem for actual use, but it is not accurate.

Usually, Ball Screws are assembled with small clearance between Shaft and Nut groove. We call this "Axial play" (see figure right).



If Ball Screws receive Axial load, groove of Shaft and Nut contact to Ball, after that the Elastic displacement will appear on the contact surface. Total of initial clearance (Axial play) and Elastic displacement becomes Backlash (see figure below).



To be more accurate, it is necessary to add Elongation by heat generation or deformation by torsion. But they can be disregarded in case of Miniature Ball Screws.

**To be exact, Axial play is different from Backlash!!!**