

B-2-4 Supporting Conditions for Calculation of Buckling Load and Critical Speed

Fig. 4.1 and 4.2 are typical conditions in supporting ball screw. Use them as reference to calculate buckling load and critical speed.

Please consult NSK if it is necessary to scrutinize calculation due to use conditions, or if boundary conditions are not clear due to special installation.

[How to read the tables]

Example ii: Buckling load generates between the nut and the left bearings, indicating that the critical speed appears between the nut and the right bearing. Therefore, set L at maximum stroke for each side. Calculate by applying support bearing conditions.

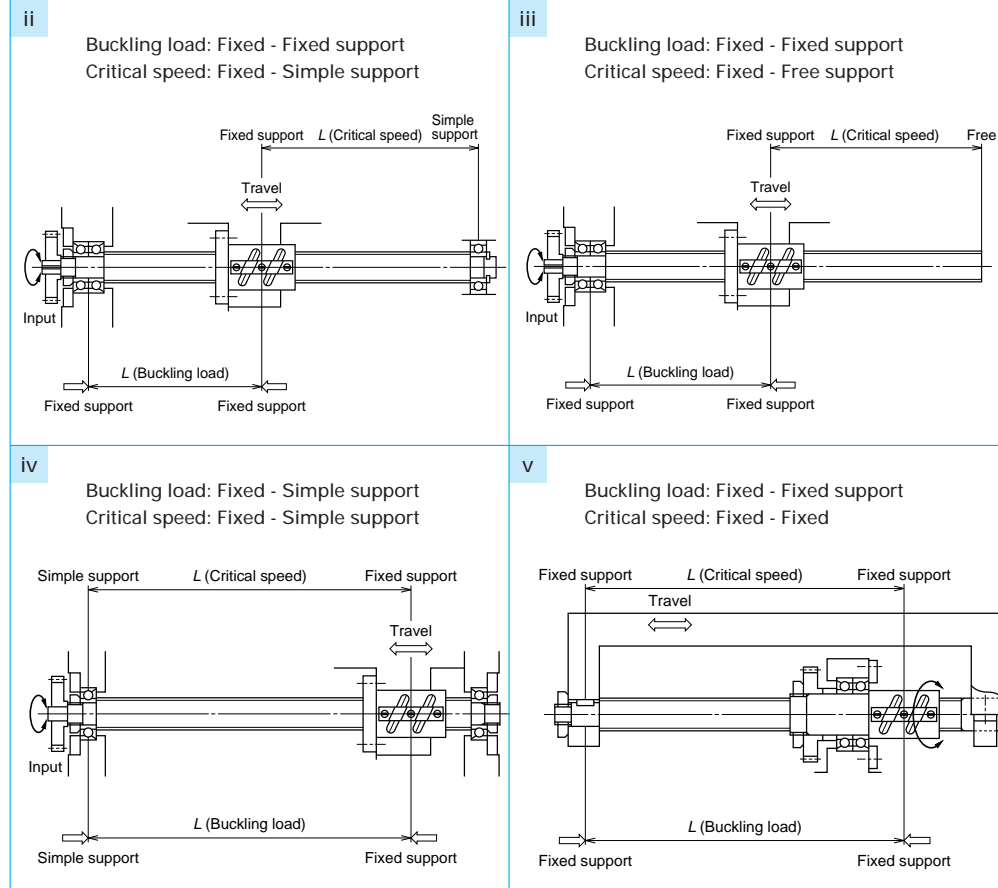


Fig. 4.1 Supporting conditions for screw shaft and ball nut

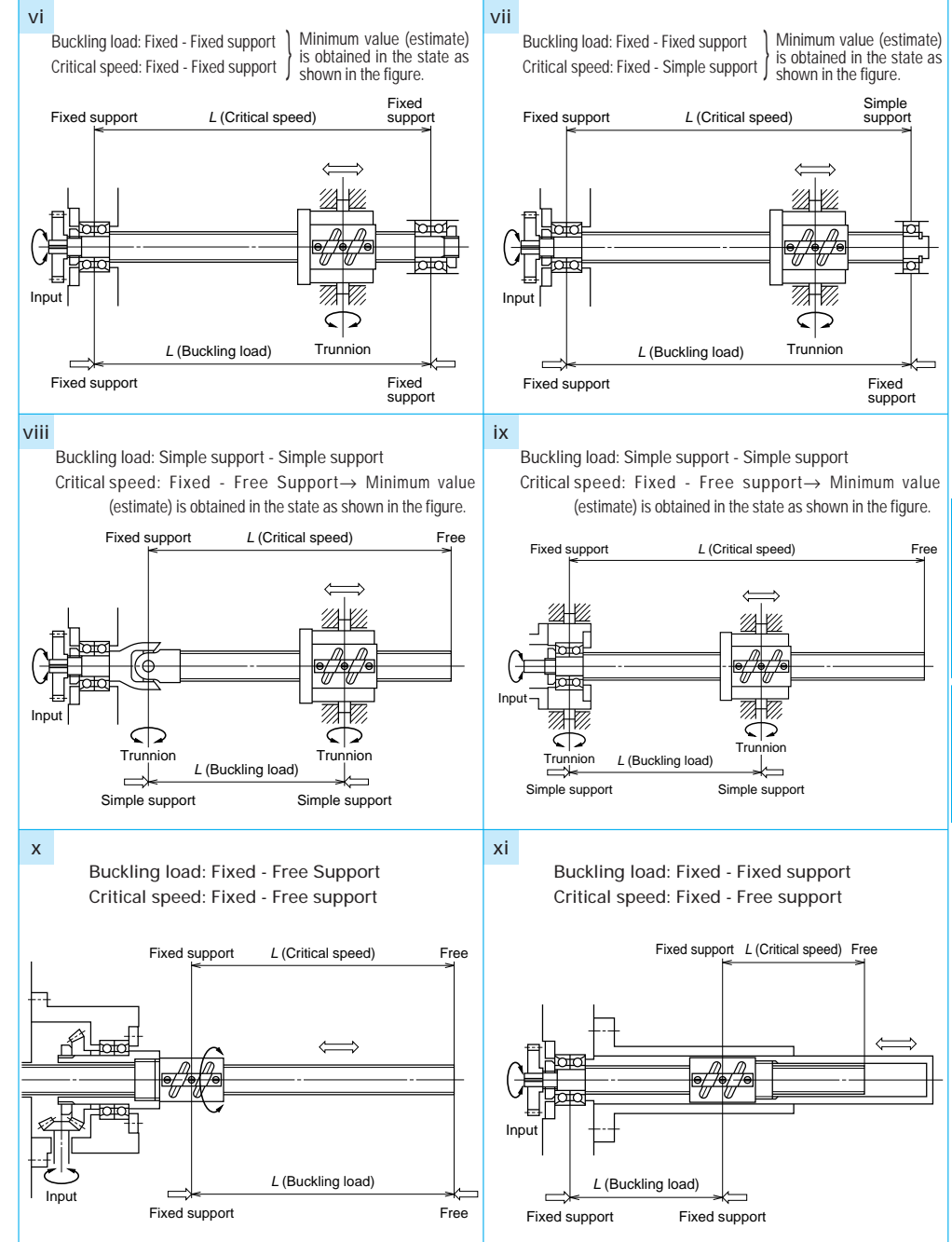


Fig. 4.2 Supporting conditions of screw shaft and ball nut w