



End Modification

Reliance shafts are available with standard end modifications to suit a wide variety of applications, as illustrated below.

Modification

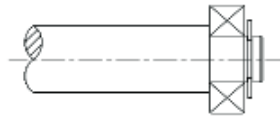
Application notes

1. Ball bearing journals (End A)



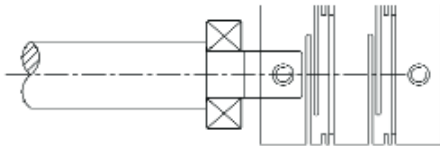
For most lightly loaded applications standard deep groove ball bearings will suffice. For higher loads angular contact or taper roller bearings may be required. A clearance fit is standard however transition fits may be used with care.

2. Ball bearing with circlip (End B)



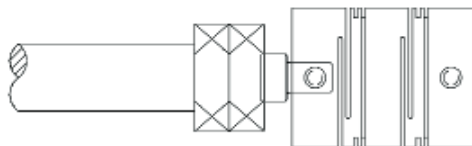
Standard circlip grooves can be provided to give axial location. Circlip grooves are generally used on longer shafts to provide simple retention of an outboard single bearing.

3. Ball bearing & coupling (End C)



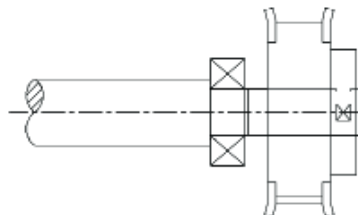
Integral extension can be provided to suit couplings. Couplings are the recommended method of attachment for accurate applications. Use Reli-a-Flex® series couplings.

4. Twin ball bearing & coupling (End D)



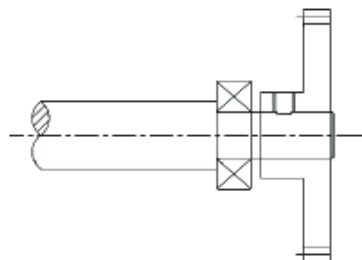
Twin ball bearings with slight pre-load provide the best axial location. The slight pre-load ensures that the bearing clearances do not add to the error budget.

5. Ball bearing & drive pulley (End E)



Drive pulleys provide a useful additional reduction ratio between the motor and the shaft. In applications where axial space is restricted, the motors can be mounted backwards. The drive belt also provides a degree of vibration damping.

6. Ball bearing & drive gear (End F)



Drive gears provide an alternative to drive pulleys, in general they will provide a more accurate drive than a belt and pulley system. If an anti-backlash gear system is used, care must be taken to ensure that the anti-backlash mesh force is not exceeded.

Additional modifications include external/internal threads, and pre-drilled pin holes.