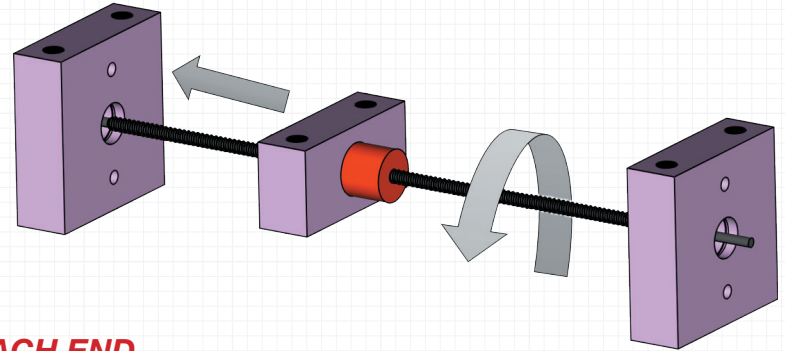


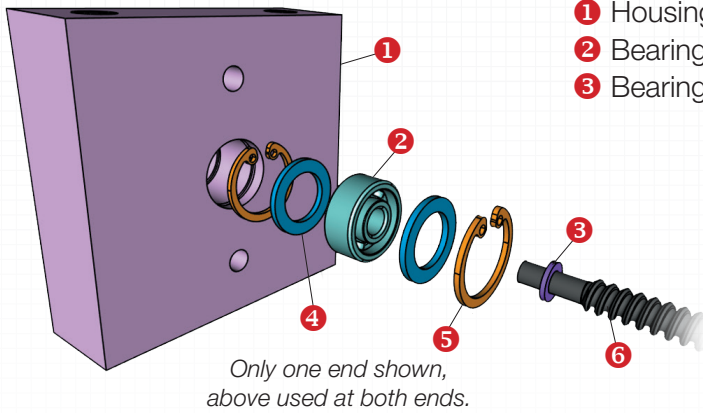
TRAINING: LEAD SCREW ASSEMBLIES

PIC Design® offers all the components needed to construct simple, universal lead screw systems. The following examples explain the components and configurations most commonly used. Once you have a design chosen, PIC® can machine the lead screw journals to match our standard bearings, housings, and associated hardware.



SIMPLE END SUPPORT - ONE BEARING AT EACH END

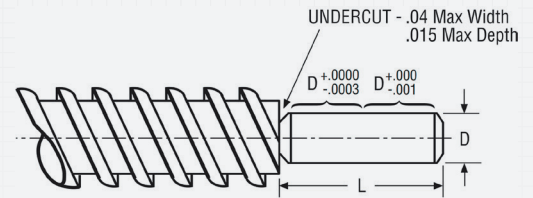
This type of simple support directs the thrust load from the lead screw on to snap rings installed the bearing housing.



- 1 Housing Block (S10-10)
- 2 Bearing (E1-9)
- 3 Bearing Spacer (B8 series)
- 4 Bearing Spacer (B3-15)
- 5 Retaining Ring (Z1-3)
- 6 Lead Screw (ARS4X-3708)

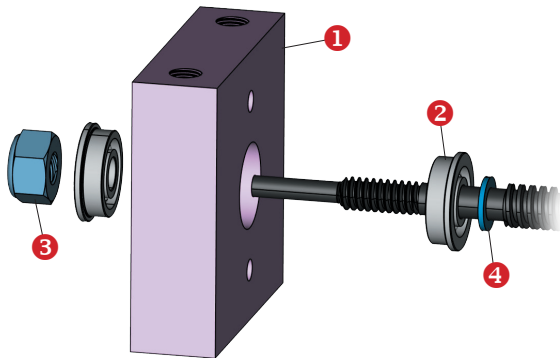
PIC's catalog contains guide-lines for designing your lead screw journals. Once your design is complete, submit your sketch to PIC® for a quote.

Lead Screw Journal Design



FIXED END SUPPORT - TWO BEARINGS AT ONE END

This type of support allows for pre-loading of the bearings on one end. Thrust load from the lead screw is transmitted to the bearing support through the bearing flanges. This type of configuration is used on PIC®'s LS9 and LS10 linear stages.



- 1 Housing Block (S12-8)
- 2 Flanged Bearing (E2-9)
- 3 Pre-Load Nut (user supplied)
- 4 Bearing Spacer (B8 series)

A fixed support on one end allows for several types of support on the other end (right). PIC®'s catalog shows lead screw design limits based on screw dimensions and end support style.

End Support Configurations

