

## End Modification

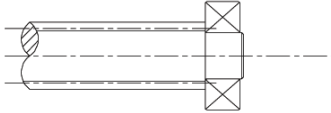
Reliance leadscrews are available with standard end modifications to suit a wide variety of applications, as illustrated below.

Please see page 16 for details of how to specify the end modifications and interface details.

### Modification

### Application notes

#### 1. Ball bearing journals (End A)



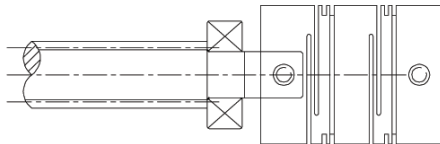
For most lightly loaded applications standard deep groove ball bearings will suffice. For higher loads angular contact or taper roller bearings may be required. A clearance fit is standard however transition fits may be used with care.

#### 2. Ball bearing with circlip (End B)



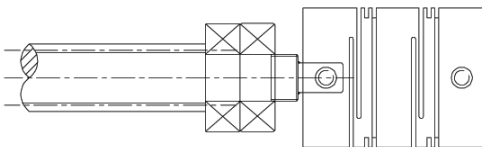
Standard circlip grooves can be provided to give axial location. Circlip grooves are generally used on longer leadscrews to provide simple retention of an outboard single bearing.

#### 3. Ball bearing & coupling (End C)



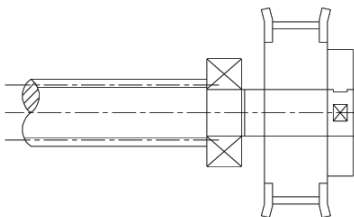
Integral extension can be provided to suit couplings. Couplings are the recommended method of attachment for accurate applications. Use Reli-a-Flex™ series couplings.

#### 4. Twin ball bearing & coupling (End D)



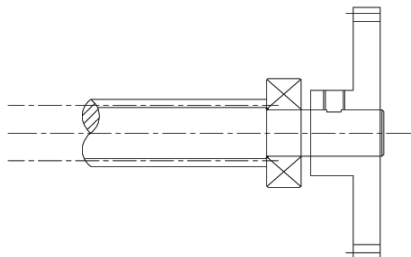
Twin ball bearings with slight pre-load provide the best axial location. The slight pre-load ensures that the bearing clearances do not add to the error budget.

#### 5. Ball bearing & drive pulley (End E)



Drive pulleys provide a useful additional reduction ratio between the motor and the leadscrew. 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.



# Ordering Detail

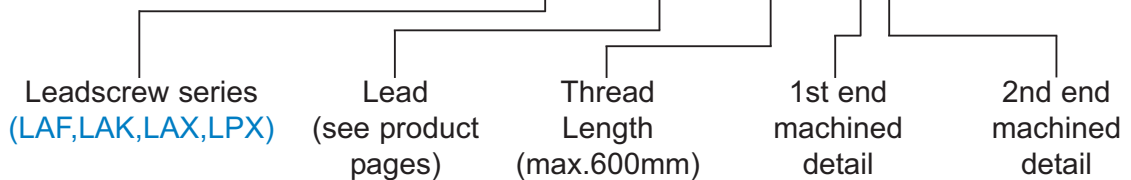
## End Modifications and Associated Products

- End **A** - Ball bearing : page 17      End **D** - Double brgs & coupling : page 20  
 End **B** - Ball bearing & circlip : page 18      End **E** - Ball bearing & pulley : page 21  
 End **C** - Ball bearing & coupling : page 19      End **F** - Ball bearing & gear : page 22

## Ordering Your Modified Leadscrew

To order a leadscrew with machined ends, use the ordering example below.  
 Note, if only one end is to be machined leave the 2nd end machining suffix blank.

Example part no. - **LPX10 - M050 - 350MM - C A**



### General Information

All dimensions in mm  
 General tolerances:  
 ±0.13mm

### Associated Products

See top of page.

Visit our online catalogue for associated products at:

www.rpmechatronics.co.uk

| Leadscrew series   | Standard RG Bearing p/no. <sup>1</sup>               | Standard RG Circlip p/no.  | Standard RG Coupling p/no. <sup>2</sup>                  |
|--|--|--|--|
| LAF6, LPX6<br>LAF10, LAK10, LPX10<br>LAF11, LPX11<br>LAF13, LAX13, LPX13 | B1-104-S-7<br>B1-106-S-7<br>B1-108-S-7<br>B1-108-S-7 | D1400-0040-SS<br>D1400-0060-SS<br>D1400-0080-SS<br>D1400-0080-SS | RCLA13C-*-*<br>RCLA16C-*-*<br>RCLA20C-*-*<br>RCLA20C-*-* |

<sup>1</sup> Bearings for low to medium loads. For high loads consult Reliance technical sales.

<sup>2</sup> Add bore diameters to complete part number



| Leadscrew series   | Standard RG Pulley p/no. <sup>3</sup>                        | Standard RG Shim p/no.                   | Standard RG Gear p/no. <sup>4</sup>                              |
|--|--|--|--|
| LAF6, LPX6<br>LAF10, LAK10, LPX10<br>LAF11, LPX11<br>LAF13, LAX13, LPX13 | TPMP25 F6-**<br>TPMP25 F6-**<br>TPMP25 F6-**<br>TPMP25 F6-** | SS1-104<br>SS1-108<br>SS1-112<br>SS1-112 | P**S1B4 F4A**<br>P**S1B6 F4A**<br>P**S1B8 F6A**<br>P**S1B8 F6A** |

<sup>3</sup> Add required number of teeth to complete part number.

<sup>4</sup> Add gear module and required number of teeth to complete part number.

Standard Product Sales : ☎ +44 (0)1484 601060      📠 +44 (0)1484 601061  
 www.rpmechatronics.co.uk      sales@rpmechatronics.co.uk