COLUMN LOADING

When a ballscrew shaft is subjected to an axially compressive load, the ability to resist buckling must be ascertained.

Figure 9. provides the values of the maximum safe load a ballscrew will sustain for various unsupported lengths and different types of bearing support. The upper horizontal portion of each line shows the maximum working

compressive load the screw will carry. This value is also the maximum working tensile load. For other than optimum conditions an appropriate additional safety factor should be allowed.

Note: The maximum static load limitation, beyond which brinelling of the balltrack in the screw and nut will occur must not be exceeded. this value is given in the Ballscrew Data Sheets.

