Critical Axial Force

Ball screw length between bearing necks is limited by critical axial force:

$$P \le \frac{102 K d^4}{\mu^2 l^2}$$

P — critical axial force, kN;

d — ball thread minor diameter, mm;

l — unbearing screw length, mm;

μ — ratio of sealing method (see figures at page bottom);

K — reserve ratio (K=0,5…0,8).