

LINEAR MOTION

Linear Bearings

Summarised descriptions of load ratings of Linear Bushing are given below.

Basic dynamic load rating C

The basic dynamic load rating is defined as the constant load both in direction and magnitude under which a group of identical Linear Bushings are individually operated and 90% of the units in the group can travel 50×10^3 meters free from material damage due to rolling contact fatigue.

Basic static load rating Co

The basic static load rating is defined as the static load that gives a prescribed constant contact stress at the center of the contact area between the rolling element and raceway receiving the maximum load.

Relationships between load ratings and the position of ball circuits

Load ratings of Linear Bushing are affected by the position of the ball circuits. In the table of dimensions, two types of load ratings are shown corresponding to the load directions and steel ball circuit positions as shown in Fig. 1 and Fig. 2.

In Fig. 1 the load direction is in line with the steel ball circuit position and this direction is referred to as load direction A in the table of dimensions. In general, the load ratings for this direction are also used, when the load direction is indeterminate or the steel ball circuit position in relation to the load direction cannot be determined.

In Fig. 2, the load direction is pointed at the center of two ball circuits and this direction is referred to as load direction B in the table of dimensions. In general, a larger load can be received in this case compared with load direction A.

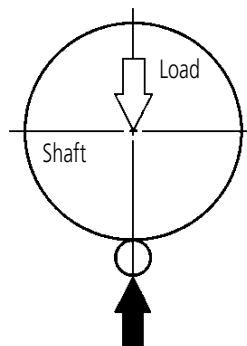


Fig. 1 Load direction **A**

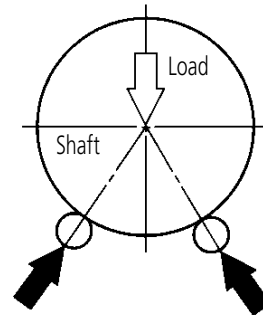


Fig. 2 Load direction **B**

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