● Contact factor (fc)
Load biasing, attributed to mounting errors and multiple bearing assemblies can be accounted for by using the coefficient in table 4.1 .

Table 4.1 Contact factor

Number of bearings for shaft	Contact factor f_c
1	1,00
2	0,81
3	0,72
4	0,66
5	0,61

● Load factor (fw)
The loads acting on the linear units include payload, inertial effects during acceleration and deceleration as well as moment loads. All of these factors are difficult to assess and are further complicated by the potential presence of shocks and vibrations. A more practical solution involves the use of the coefficients in table 4.2 .

Table 4.2 Contact factor

Operating conditions	f_W
Low speed operations (<15 m/min) without shocks	1 - 1,5
Medium speed operation (60m/min) without shocks	1,5 - 2
High speed operations (>60m/min) with shocks	2 - 3,5

5. Static safety factor

For applications with a high requirement for accuracy and smooth running, the static safety factor fs should be higher than the values shown in table 5.1 to prevent permanent deformation at the contact points.

$$fs = \frac{CO}{PO}$$

fs = static safety factor
Po = static equivalent load (II)
Co = static load rating (II)

Table 5.1 Static safety factor

Operating conditions	f_s
Shafts subjected to small deflections and low shocks	1 ÷ 2
Elastic deflection can cross load the units	2 ÷ 4
System subjected to shock & vibration	3 ÷ 5