For ball bearings	4,200 Mpa
(except Self-aligning Ball Bearings)	
For Self-aligning Ball Bearings	4,600 Mpa

7.6 Allowable static equivalent load
Generally the static equivalent load which can be permitted is limited by the basic static load rating. However, depending on requirements regarding friction and smooth operation, these limits may be greater or lesser than the basic static rating load. In the following formula (3.9) and Table 7.3 the safety factor *So* can be determined considering the maximum static equivalent load.

$$So = Co/Po \quad \text{..... (3.9)}$$

where,
So : Safety factor
Co : Basic static rating load, N (radial bearings: *Cor*)
Po max : Maximum static equivalent load, N (radial: *Por* max)

Table 7.3 Minimum safety factor values *So*

Operating conditions	Ball Bearings
High rotational accuracy demand	2
Normal rotating accuracy demand (Universal application)	1
Slight rotational accuracy deterioration permitted (Low speed, heavy loading, etc.)	0.5

8. Bearing handling

Bearing storage
Most rolling bearings are coated with a rust preventative before being packed and shipped, and they should be stored at room temperature with a relative humidity of less than 60%.

9. Allowable speed

As bearing speed increases, the temperature of the bearing also increases due to friction heat generated in the bearing interior. If the temperature continues to rise and exceeds certain limits, the efficiency of the lubricant start to fail down drastically, and the bearing can no longercontinue to operate in a stable manner. Therefore, the maximum speed at which it is possible for the bearing to continuously operate without the generation of excessive heat beyond specified limits, is called the allowable speed (r/min). The allowable speed of a bearing depends on the type of bearing, bearing dimensions, type of cage, load, lubricating conditions, and cooling conditions.

The allowable speeds listed in the bearing tables for grease and oil lubrication are for standard NIKO bearings under normal operating conditions, correctly installed, using the suitable lubricants with adequate supply and proper maintenance. Moreover, these values are based on normal load conditions ($P \leqslant 0.09C$, $Fa/Fr \leqslant 0.3$). For ball bearings with contact seals (LLU type), the allowable speed is determined by the peripheral lip speed of the seal.