DIN ISO 76:2019-04 (E)

Rolling bearings - Static load ratings (ISO 76:2006 + Amd.1:2017)

Contents

Page

National foreword ... 3

National Annex NA (informative) Bibliography ... 4

Foreword ... 5

Introduction ... 6

1 Scope ... 7

2 Normative references ... 7

3 Terms and definitions ... 7

4 Symbols ... 9

5 Radial ball bearings ... 10
5.1 Basic static radial load rating ... 10
5.2 Static equivalent radial load ... 13

6 Thrust ball bearings ... 14
6.1 〈A1〉 Basic static axial load rating ... 14
6.2 Static equivalent axial load ... 14

7 Radial roller bearings ... 15
7.1 Basic static radial load rating ... 15
7.2 Static equivalent radial load ... 15

8 Thrust roller bearings ... 16
8.1 Basic static axial load rating ... 16
8.2 Static equivalent axial load ... 16

9 Static safety factor ... 17
9.1 General ... 17
9.2 Ball bearings ... 18
9.3 Roller bearings ... 18

Annex A (informative) Discontinuities in the calculation of basic static load ratings ... 19
A.1 General ... 19
A.2 Symbols ... 19
A.3 Different factors for calculating basic static load rating for radial and thrust angular contact ball bearings ... 19
A.4 Comparison of adjusted basic static axial load ratings C_{0ar} and C_{0aa} for radial and thrust angular contact ball bearings ... 20
A.5 Examples ... 20

Annex B (informative) 〈A1〉 Calculation of the Hertzian parameters for point contact ... 23

Annex C (informative) 〈A1〉 Graphical presentation of f_0 and Y_0 ... 24