

# DIN ISO 20056-1:2019-07 (E)

## Rolling bearings - Load ratings for hybrid bearings with rolling elements made of ceramic - Part 1: Dynamic load ratings (ISO 20056-1:2017)

---

<b>Contents</b>	<b>Page</b>
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 .....	7
5 Dynamic load rating .....	9
5.1 Ball bearings .....	9
5.1.1 Basic dynamic radial load rating .....	9
5.1.2 Basic dynamic axial load rating .....	9
5.1.3 Rating and reduction factors for hybrid ball bearings .....	10
5.2 Roller bearings .....	11
5.2.1 Basic dynamic radial load rating .....	11
5.2.2 Basic dynamic axial load rating .....	11
5.2.3 Rating and reduction factors for hybrid roller bearings .....	12
Annex A (informative) Calculation of the fatigue load limit $C_u$ .....	13
Annex B (informative) Tabulated guide values for the factor $f_c$ .....	14
Bibliography .....	20
Tables Table 1 -- Rating and reduction factors for hybrid ball bearings .....	10
Table 2 -- Rating and reduction factors for hybrid roller bearings .....	12
Table B.1 -- Guide values of factor $f_c$ for radial ball bearings .....	14
Table B.2 -- Guide values of $f_c$ for thrust ball bearings .....	15
Table B.3 -- Guide values of $f_c$ for radial roller bearings .....	17
Table B.4 -- Guide values of $f_c$ for thrust roller bearings .....	18