DIN 5405-1:2016-12 (E)

Rolling bearings - Needle roller bearings - Part 1: Needle roller and cage asse mblies

Contents

Page

Foreword ... 3

Introduction ... 4

1 Scope ... 5

2 Normative references ... 5

3 Terms, definitions and symbols ... 5

4 Type, designation, dimensions ... 6
4.1 Type ... 6
4.2 Designation ... 6
4.3 Dimensions, symbols ... 7

5 Material ... 9

6 Design ... 10
6.1 General ... 10
6.2 Tolerances ... 10
6.3 Needle rollers ... 11

7 Mounting instructions ... 11
7.1 General ... 11
7.2 Design details of shaft and housing raceways ... 11
7.3 Axial guidance on lateral abutment surfaces ... 12
7.4 Paired mounting ... 13

Annex A (informative) Explanatory notes ... 14

Bibliography ... 16

Figures

Figure 1 — Radial needle roller and cage assembly ... 6

Figure 2 — Axial guidance of needle roller and cage assemblies ... 13

Tables

Table 1 — Symbols for sizes, tolerance symbols and GPS modifiers ... 6

Table 2 — Dimensions and symbols ... 7

Table 3 — Functional plug and ring gauge dimensions ... 10

Table 4 — Tolerances for cage width ... 11

Table 5 — Preferred diameter types for needle rollers ... 11

Table 6 — Precision of shaft and housing raceways ... 12