

DIN ISO 13012-1:2021-07 (E)

Rolling bearings - Accessories for sleeve type linear ball bearings - Part 1: Boundary dimensions, geometrical product specifications (GPS) and tolerances for series 1 and 3 (ISO 13012-1:2018)

| Contents | | Page |
|--|--|-------------|
| National foreword | | 3 |
| National Annex NA (informative) Bibliography | | 5 |
| Foreword | | 6 |
| Introduction | | 7 |
| 1 | Scope | 8 |
| 2 | Normative references | 8 |
| 3 | Terms and definitions | 9 |
| 4 | Symbols | 10 |
| 4.1 | General | 10 |
| 4.2 | Closed and adjustable flangeless housings for series 1 sleeve type linear ball bearings .. | 10 |
| 4.3 | Closed and adjustable flanged housings for series 3 sleeve type linear ball bearings | 10 |
| 4.4 | Open flanged housings for series 3 sleeve type linear ball bearings | 11 |
| 4.5 | Closed and adjustable flangeless housings for series 3 sleeve type linear ball bearings .. | 11 |
| 4.6 | Open and open adjustable flangeless housings for series 3 sleeve type linear ball bearings | 12 |
| 4.7 | Standard height shaft support rails for series 3 sleeve type linear ball bearings | 13 |
| 4.8 | Low height shaft support rails for series 3 sleeve type linear ball bearings | 13 |
| 4.9 | Flanged shaft support blocks for series 1 and 3 sleeve type linear ball bearings | 14 |
| 4.10 | Flangeless shaft support blocks for series 1 and 3 sleeve type linear ball bearings | 14 |
| 4.11 | Solid and tubular shafts for series 1 and 3 sleeve type linear ball bearings | 15 |
| 5 | Housings | 15 |
| 5.1 | General | 15 |
| 5.2 | Housings for series 1 sleeve type linear ball bearings | 15 |
| 5.3 | Housings for series 3 sleeve type linear ball bearings | 16 |
| 6 | Shaft support rails | 16 |
| 7 | Shaft support blocks | 16 |
| 8 | Shafts | 16 |
| 8.1 | Material | 16 |
| 8.2 | Heat treatment | 16 |
| 8.2.1 | Surface hardened shafts | 16 |
| 8.2.2 | Through hardened shafts | 16 |
| 8.3 | Geometrical tolerances | 17 |
| 8.3.1 | Tolerance classes | 17 |
| 8.3.2 | Geometric form | 17 |
| 8.3.3 | Shaft length tolerances | 17 |
| 8.3.4 | Chamfers | 17 |
| 8.3.5 | Surface roughness | 17 |
| 9 | Boundary dimensions and tolerances | 17 |
| 9.1 | Housings | 17 |
| 9.2 | Shaft support rails | 25 |
| 9.3 | Shaft support blocks | 28 |
| 9.4 | Shafts | 30 |
| Bibliography | | 33 |