

DIN 471:2011-04 (E)

Retaining rings for shafts - Normal type and heavy type

| Contents | | Page |
|-----------------|--|-------------|
| Foreword | | 3 |
| 1 | Scope | 4 |
| 2 | Normative references | 4 |
| 3 | Symbols | 5 |
| 4 | Dimensions and design details | 6 |
| 5 | Material | 16 |
| 6 | Finish | 16 |
| 7 | Testing | 17 |
| 7.1 | Testing the material | 17 |
| 7.2 | Bend and fracture test | 17 |
| 7.3 | Testing the deformation | 17 |
| 7.3.1 | Testing the conical deformation | 17 |
| 7.3.2 | Testing the spiral flatness | 18 |
| 7.4 | Testing the function (permanent set and grip test) | 18 |
| 7.5 | Acceptance inspection | 18 |
| 8 | Load bearing capacity | 19 |
| 8.1 | General | 19 |
| 8.2 | Load bearing capacity of groove FN | 19 |
| 8.3 | Load bearing capacity of retaining ring FR | 19 |
| 9 | Detaching speed | 20 |
| 10 | Design of the groove | 21 |
| 10.1 | Groove diameter d_2 | 21 |
| 10.2 | Groove width m | 21 |
| 10.3 | Design of the groove base | 22 |
| 11 | Assembly | 23 |
| 12 | Designation | 24 |