

DIN 16833:2009-09 (E)

Pipes of raised-temperature-resistance polyethylene (PE-RT) - PE-RT Type I and PE-RT Type II - General quality requirements, testing

| Contents | | Page |
|-----------------------|--|-------------|
| Foreword | | 3 |
| 1 | Scope | 4 |
| 2 | Normative references | 4 |
| 3 | Terms and definitions | 4 |
| 4 | Material (moulding material) | 5 |
| 4.1 | General | 5 |
| 4.2 | Demonstrating long-term hydrostatic strength | 5 |
| 5 | Requirements | 7 |
| 5.1 | Form supplied | 7 |
| 5.2 | Surface quality | 8 |
| 5.3 | Dimensions and tolerances | 8 |
| 5.4 | Strength characteristics determined by long-term hydrostatic strength testing | 8 |
| 5.5 | Demonstrating thermal stability by means of long-term hydrostatic strength testing | 8 |
| 5.6 | Heat reversion | 8 |
| 6 | Testing | 9 |
| 6.1 | Surface quality | 9 |
| 6.2 | Dimensions | 9 |
| 6.3 | Out-of-roundness | 9 |
| 6.4 | Strength characteristics determined by long-term hydrostatic strength testing | 9 |
| 6.5 | Heat reversion | 10 |
| 6.6 | Inspection documents | 10 |
| Annex A (informative) | Explanatory notes | 11 |
| Bibliography | | 13 |
| Figures | Figure 1 -- Reference lines for long-term hydrostatic strength (time-to-failure curves) for pipes of polyethylene of raised temperature resistance PE-RT type I | 6 |
| | Figure 2 -- Reference lines for long-term hydrostatic strength (time-to-failure curves) for pipes of polyethylene of raised temperature resistance PE-RT type II | 7 |
| | Figure 3 -- Test piece for long-term hydrostatic strength test | 9 |
| Tables | Table 1 -- Test conditions for long-term hydrostatic strength testing | 8 |
| | Table 2 -- Thermal stability demonstrated by means of long-term hydrostatic strength testing | 8 |
| | Table 3 -- Test conditions for heat reversion test | 10 |
| | Table A.1 -- PE-RT properties (guideline values) | 12 |