ISO 10553:2018 (E)

Horology — Procedure for evaluating the accuracy of quartz watches

Contents

Foreword

1 Scope

2 Normative references

3 Terms and definitions

4 Symbols and units

5 Practical factors affecting accuracy

- 5.1 General
- 5.2 Accuracy
- 5.3 Influence of temperature on accuracy
- 5.4 Accidents or abnormal environment

6 Types of measurement

7 Test methods

- 7.1 General test conditions
- 7.2 Ageing test programme
- 7.3 Temperature simulation test programme
- 7.4 Uncertainty of measurement

8 Calculation of accuracy

- 8.1 General
- 8.2 Calculation of the effect of ageing on accuracy

9 Relationship between the calculated accuracy and the accuracy classification indicated

10 Indication of the accuracy classification

11 Reliability

Annex A (normative) Statistical evaluation of accuracy

- A.1 Field of application
- A.2 Explanation of symbols
- A.2.1 Accuracy by lot
- A.2.2 Average values and standard deviations of VT(i) and VV(i)
- A.3 Test methods
- A.4 Accuracy evaluation method by lot
- A.4.1 Normal distribution
- A.4.2 Abnormal distribution
- A.5 Relationship between the calculated accuracy and the accuracy classification indicated
- A.6 Indications

Annex B (informative) Evaluation of coefficients α and c from the differences of rates

Annex C (informative) Reliability

Page count: 15