Vernier callipers Requirements and testing



Meßschieber; Anforderungen, Prüfung

Supersedes March 1979 edition.

In keeping with current practice in standards published by the International Organization for Standardization (ISO), a comma has been used throughout as the decimal marker.

See Explanatory notes for connection with International Standards ISO 3599 – 1976 and ISO 6906 – 1984 published by the International Organization for Standardization (ISO).

Dimensions in mm

## **1 Field of application**

This standard applies both to analogue vernier callipers with a maximum measuring range from 0 to 2000 mm and a vernier or circular scale graduated in 0,1,0,05 or 0,02 mm, and to vernier callipers with digitized output over ranges from 0 up to a maximum of 1000 mm in 0,01 mm increments.

## 2 Terminology

See DIN 2257 Parts 1 and 2 for concepts relating to dimensional metrology, and DIN 1319 Parts 1 to 4 for basic metrological concepts.

## **3 Designations and dimensions**

Vernier callipers are not expected to conform to the designs illustrated here; compliance is only required in the case of the dimensions specified.

For general tolerances, accuracy grade m as specified in DIN 7168 shall apply.

## 3.1 Vernier callipers designed for internal, external and depth measurement

Type 1A, with clamping screw

Type 2A, with clamping device

The above types are normally designed for measuring lengths up to 160 mm.





Figure 1. Analogue vernier callipers (with main scale and vernier scale)

Continued on pages 2 to 7

ŝ

part of this standard may be reproduced without the prior permission of DIN Deutsches Institut für Normung e. V., Berlin. In case of doubt, the German-language original should be consulted as the authoritative text.

Sofort-Download-Beuth-Thomson Reuters (Scientific) Inc. Mr Lewis Poole-KdNr.7546103-ID.HTWG1FPBHJPWB4GLCPHUTSG0.1-2015-11-16 11:12:03

Beuth Verlag GmbH, Berlin, has the exclusive right of sale for German Standards (DIN-Normen). 10.89