

INTERNATIONAL STANDARD

**ISO
9176**

First edition
1988-10-01



INTERNATIONAL ORGANIZATION FOR STANDARDIZATION
ORGANISATION INTERNATIONALE DE NORMALISATION
МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Tubular technical pens — Adaptor for compasses

Plumes tubulaires — Adaptateur pour compas

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Reference number
ISO 9176:1988 (E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 9176 was prepared by Technical Committee ISO/TC 10, *Technical drawings*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Tubular technical pens — Adaptor for compasses

1 Scope and field of application

This International Standard specifies the preferred dimensions of adaptors for attaching tubular technical pens to compasses with interchangeable points¹⁾ and of the screw threads for the connecting plates and tubular technical pens.

2 Reference

ISO 9175-1, *Tubular tips for hand-held technical pens using India ink on tracing paper — Part 1: Definitions, dimensions, designation and marking.*

3 Definitions

For the purposes of this International Standard, the following definitions apply.

3.1 tubular technical pen

See ISO 9175-1.

3.2 adaptor for compasses: Attachment to connect a tubular technical pen to a compass, consisting of a shaft and a connecting plate.

3.3 shaft: Element, fixed or adjustable with respect to the connecting plate on which it is rigidly mounted, that is to be inserted and fixed into the compass leg.

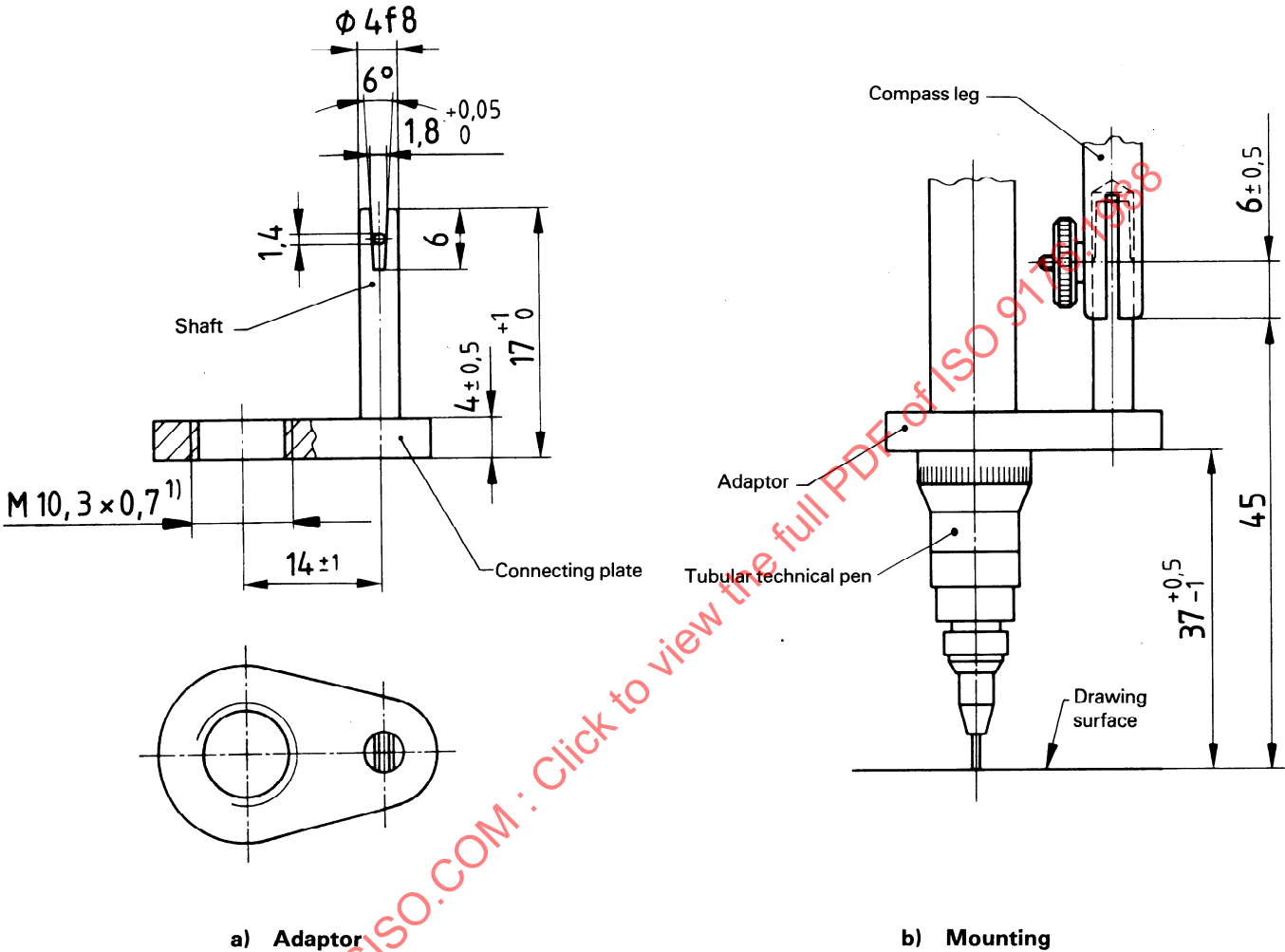
3.4 connecting plate: Plate, fixed or adjustable with respect to the shaft, on which the shaft is rigidly mounted and to which the tubular technical pen is attached.

4 Dimensions

Adaptors for compasses for tubular technical pens shall conform with the dimensions indicated in figures 1 and 2, which show an adaptor for a compass with a fixed (figure 1) or adjustable (figure 2) shaft and a connecting plate.

1) Compasses with interchangeable points will form the subject of a future International Standard.

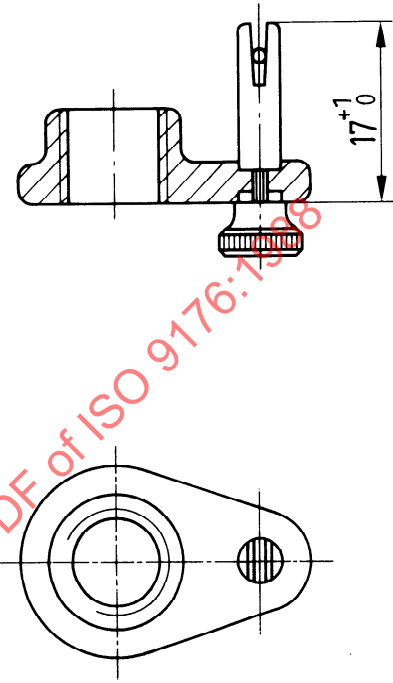
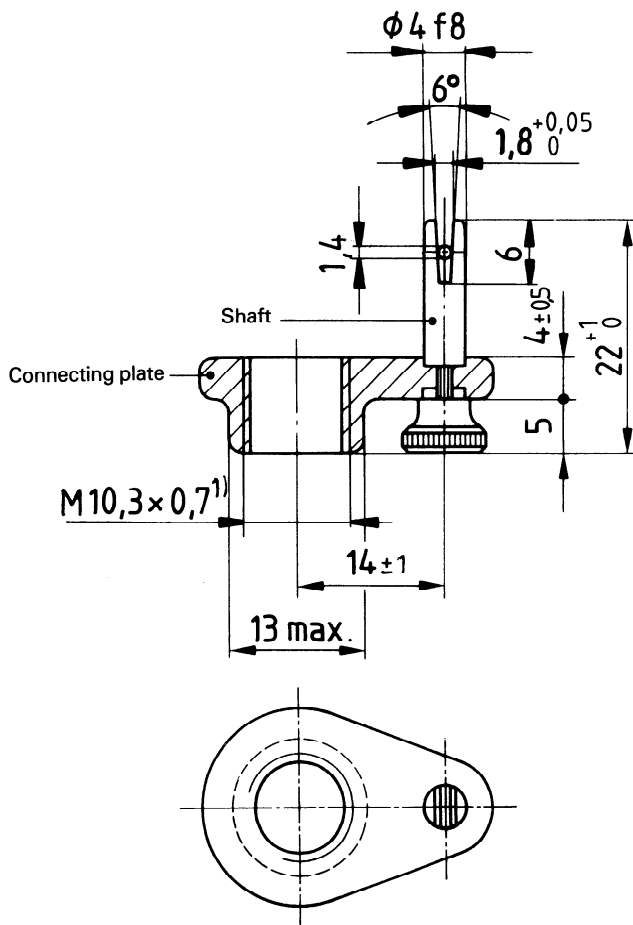
Dimensions in millimetres



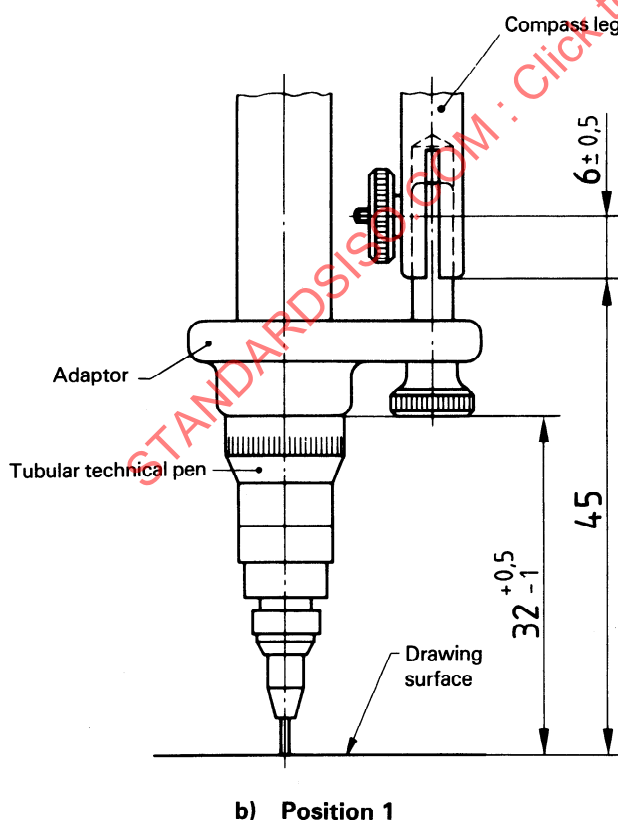
1) Screw thread, see clause 5.

Figure 1 — Adaptor for compasses with fixed shaft

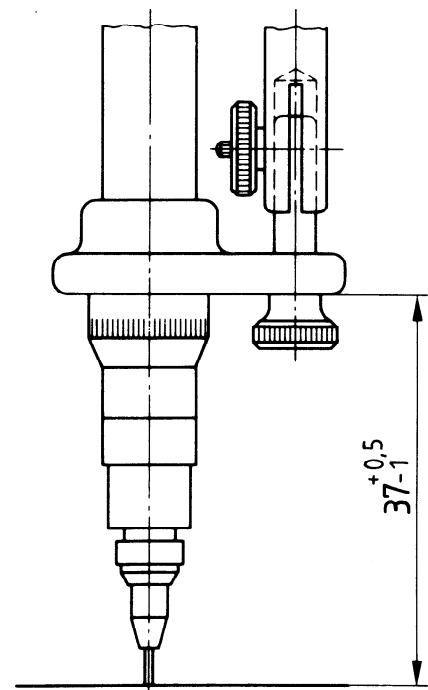
Dimensions in millimetres



a) Adaptors



b) Position 1



c) Position 2

1) Screw thread, see clause 5.

Figure 2 — Adaptor for compasses with adjustable shaft

5 Screw thread for connecting plates and tubular technical pens

The screw thread for the connecting plates and tubular technical pens is shown in figure 3; the dimensions are given in the table.

6 Designation

The designation of adaptors for compasses shall consist of the following in the order given:

- a) block descriptor "Adaptor for compasses";

- b) reference to this International Standard;
- c) letter "F" or "A" according to fixed or adjustable type.

Example:

The designation of a fixed adaptor for compasses shall be as follows :

Adaptor for compasses ISO 9176-F

7 Bibliography

ISO 286, ISO system of limits and fits.

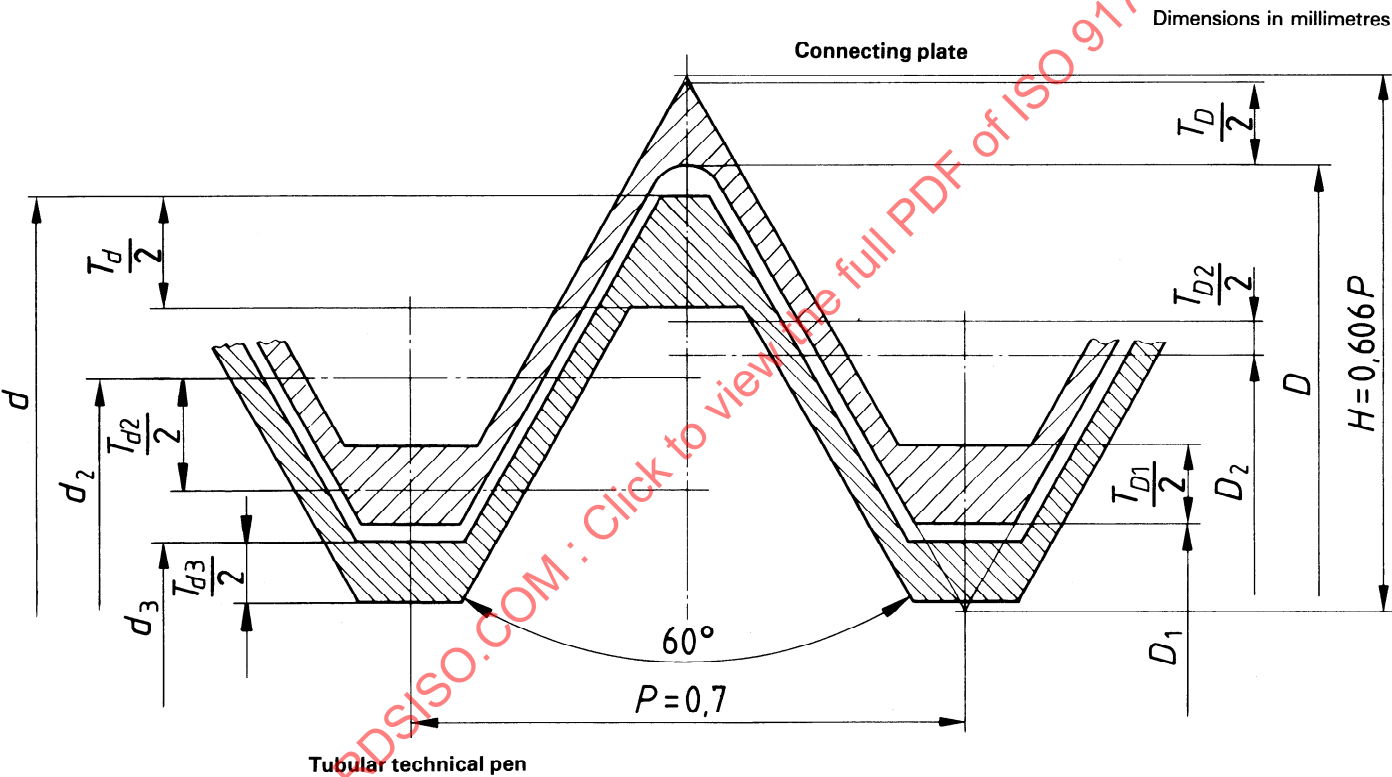


Figure 3 – Screw thread

Table – Dimensions for the screw thread

Dimensions in millimetres							
Thread size	Component	Major diameter		Minor diameter		Pitch diameter	
M10,3 × 0,7	Connecting plate (internal thread)	D	Tolerance T_D	D_1	Tolerance T_{D1}	D_2	Tolerance T_{D2}
		10,35	+ 0,21 0	9,46	+ 0,2 0	9,877	+ 0,085 0
	Tubular technical pen (external thread)	d	Tolerance T_d	d_3	Tolerance T_{d3}	d_2	Tolerance T_{d2}
		10,28	0 - 0,28	9,42	0 - 0,15	9,823	0 - 0,28