

# International Standard

# ISO 13672

### Fasteners — Parallel grooved pins — Half-length diamond grooves

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Fixations — Goupilles cannelées constantes — Cannelures diamant sur la moitié de la longueur **iTeh Standards** 

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#### Foreword

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This document was prepared by Technical Committee ISO/TC 2, *Fasteners*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 185 *Fasteners*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <u>www.iso.org/members.html</u>.

<u>O 13672:2</u>

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# Fasteners — Parallel grooved pins — Half-length diamond grooves

#### 1 Scope

This document specifies the characteristics of parallel grooved pins with half-length diamond grooves (with closed ends), in steel and stainless steel, and with nominal diameters 1 mm to 25 mm.

These grooved pins are designed to fulfil the main following functions:

- positioning or guiding, and
- relative rotation of the assembled parts,

with a more significant insertion force (due to its shape) and a high level of pull-out resistance (due to the elastic fit behaviour of the pin).

The general requirements (including functional principles for grooved pins and assembly) are specified in ISO 13669.

#### 2 Normative references

iTeh Standards

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1891-4, Fasteners — Vocabulary — Part 4: Control, inspection, delivery, acceptance and quality

ISO 3269, Fasteners — Acceptance inspection ISO 13672:2025

ISO 3506-6, Fasteners — Mechanical properties of corrosion-resistant stainless steel fasteners — Part 6: General rules for the selection of stainless steels and nickel alloys for fasteners

ISO 4042, Fasteners — Electroplated coating systems

ISO 9717, Metallic and other inorganic coatings — Phosphate conversion coating of metals

ISO 10683, Fasteners — Non-electrolytically applied zinc flake coating systems

ISO 13669, Fasteners — Grooved pins — General requirements

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 13669 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <u>https://www.electropedia.org/</u>

#### 4 Principles of grooved pins and assembly

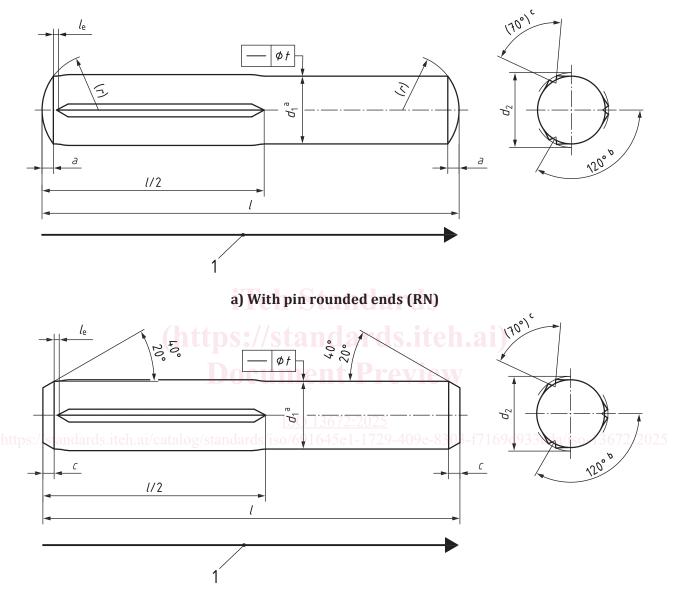
The principles of grooved pins and assembly specified in ISO 13669 shall apply.

#### **5** Dimensions

Dimensions shall be in accordance with Figure 1 and with Tables 1 and 2. The control of the expanded diameter  $d_2$  and pin straightness *t* shall be as specified in ISO 13669.

For coated pins, dimensions and tolerances shall apply prior to coating.

Unless otherwise agreed at the time of the order, the pins are manufactured with rounded ends.





#### Key

- 1 insertion side
- <sup>a</sup> The pin diameter  $d_1$  is only applicable in areas where grooves are not present.
- <sup>b</sup> The angle of  $120^{\circ}$  between two grooves applies with a tolerance of  $\pm 20^{\circ}$  (for the three grooves).
- <sup>c</sup> The groove angle of 70° (for the three grooves) is a reference dimension, see ISO 13669.

#### Figure 1 — Grooved pin with half-length diamond grooves