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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 4982-2025

Replacing GB/T 4982-2003

**Vacuum technology - Dimensions of clamped-type
quick-release couplings**

真空技术 夹紧型快卸连接器尺寸

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 4982-2003 "Vacuum Technology Quick-Release Connectors - Dimensions Part 1: Clamping Type", and is consistent with GB/T 4982-Compared to 2003, aside from structural adjustments and editorial changes, the main technical changes are as follows.

---Added the definition and type diagram of clamp-type quick-release connectors (see 3.1);

---Added material requirements for clamp-type quick-release connectors (see 5.1);

---The dimensions of the 50mm nominal diameter clamp-type quick-release connector have been increased (see Table 1);

---Added material requirements for O-ring seals (see 5.2);

---The dimensions of O-rings with a nominal diameter of 50 have been increased (see Table 2);

---Added material requirements for the support frame (see 5.3);

---The dimensions of the 50mm nominal diameter bracket have been increased (see Table 3);

---Added material requirements for clamps (see 5.4).

This document is equivalent to ISO 2861:2020 "Dimensions of vacuum-technical clamping quick-release connectors".

The following minimal editorial changes have been made to this document.

---Appendix NA (Informative) has been added;

---Added Appendix NB (Information).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Vacuum Technology (SAC/TC18).

1 Scope

This document specifies the dimensions of clamp-type quick-release connectors commonly used in vacuum technology, as well as the O-rings that mate with clamp-type quick-release connectors.

Dimensions of the sealing ring and its support, clamps and blind flange.

Note: The nominal diameter of the clamping quick-release connector is specified here to ensure that the clamping quick-release connector matches the corresponding vacuum flange size in ISO 1609[1].

2 Normative references

This document has no normative references.

3 Terms and Definitions

The following terms and definitions apply to this document.

Clamped-type quick-release coupling Connectors that can be connected or disconnected without tools.

Note 1: Vacuum sealing is ensured by connecting with the O-ring and its support.

Note 2: This document does not specify the type and size of the clamps.

Note 3: See Figure 1.

[Source. GB/T 2006 3.3-2006, 3.15, with modifications---the term "clamping type" has been added to the terminology; Notes 1 to 3 are from the original definition] Replenish] Index

number explanation.

1---O-ring seal;

2---Connector;

3---O-ring seal bracket;

4---Clamping clamps.

Figure 1.Quick-release connector with typical clamps.