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

**GB/T 727-2025**

Replacing GB/T 727-2003

**Turbocharger nomenclature and code**

涡轮增压器产品命名和型号编制方法

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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 727-2003 "Methods for Naming and Compiling Model Numbers of Turbocharger Products". Compared with GB/T 727-2003, Apart from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The product name was changed (see Chapter 4, Chapter 2 of the.2003 edition);
- b) Added model designations for mixed-flow and electrically assisted turbochargers (see Chapter 5);
- c) The meaning of the structural features of the axial-flow turbocharger has been changed (see Chapter 5, Chapter 3 of the.2003 edition). 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 Internal Combustion Engines (SAC/TC177). This document was drafted by: Hunan Tianyan Machinery Co., Ltd., Shanghai Motor Vehicle Inspection and Certification Technology Research Center Co., Ltd., and Kangyue. Technology (Shandong) Co., Ltd., Ningbo Fengwo Turbocharging Technology Co., Ltd., Jiangsu Yihejie Automotive Technology Co., Ltd., Zhejiang Xinchai Joint-stock company, Weifang University of Science and Technology, Tianjin Beifang Tianli Turbocharging Technology Co., Ltd., Wuxi Best Precision Machinery Co., Ltd., China Northern Engine Research Institute. The main drafters of this document are. Hu Liaoping, Yao Guorui, Guo Hua, Liu Ying, Wang Zhihua, Liu Quan, Bo Cunzhi, Chen Shaolin, Li Yanzhao, and Yan Jianfei. Bian Qiyuan, Men Rixiu, Wang Qian, Pan Wei, Yan Wenbin, Sun Yangli, Ji Weibin, Hua Lin. This document was first published in 1965, revised for the first time in 1985, revised for the second time in.2003, and this is the third revision. Turbocharger Product

## Naming and Model Numbering Method

### 1 Scope

GB/T 727-2025 is the Chinese national standard covering how a turbocharger model number is built - the frame size, the turbine and compressor trims, the housing and the wastegate or variable geometry, so that a type designation identifies one machine in ordering and in service. Issued on 31 October 2025, it has been in force since 1 May 2026, replacing GB/T 727-2003.

This document describes the product naming and model numbering method for turbochargers used in internal combustion engines. This document applies to exhaust gas turbochargers and electrically assisted turbochargers.

### 2 Normative references

This document has no normative references.

### 3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4. Product Naming Turbochargers for internal combustion engines are classified into exhaust gas turbochargers and electric-assisted turbochargers based on their power source. Exhaust gas turbochargers consist of a single-stage centrifugal compressor and a single-stage radial-flow turbine or a single-stage mixed-flow turbine or a shaft-mounted turbocharger. Flow turbines are composed of components. Their naming conventions generally follow the turbine's name, and are as follows:

- a) Radial-flow turbocharger, also known as a "radial-flow turbocharger";
- b) Mixed-flow turbocharger, also known as a "mixed-flow turbocharger";
- c) Axial-flow exhaust gas turbocharger, abbreviated as "axial-flow turbocharger". An electrically assisted turbocharger is based on the structure of an exhaust gas turbocharger, with the addition of an electric motor component. The shaft of this electric motor component is parallel to that of the turbocharger. The shaft can drive the compressor to work alone or in conjunction with the turbine.

### 5 Model Numbering Method

5.1 The product model of turbochargers for internal combustion engines consists of Chinese Pinyin letters and Arabic numerals (see Figure 1), and its model number includes the following. List three parts.

- a) Heading. Product name symbol and structural feature symbol, as specified in Tables 1

and 2.

b) Middle section. Basic series symbols for products, expressed in millimeters, rounded to the nearest integer.

c) Tail section. Variant symbol. This variant design assumes the basic compressor impeller outer diameter remains unchanged, but alters only the flow path of the compressor and turbine. Modifications, or variations resulting from changes in the turbocharger's installation connection dimensions, bearing type, rotor rotation direction, or component materials. product. Figure