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

GB/T 28773-2024

Tooth-wedge belts

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document replaces GB/T 28773-2012 "Toothed wedge belts". Compared with GB/T 28773-2012, except for structural adjustments and editorial changes, In addition, the main technical changes are as follows:

- Changed the scope (see Chapter 1, Chapter 1 of the.2012 edition);
- Changed the symbol for center distance (see Figure 6, Formula 1, Figure 6 and Formula 1 of the.2012 edition);
- Changed the H-type belt tooth size drawing and dimensions (see Figure 2, Table 1, Figure 2 and Table 1 of the.2012 edition);
- Changed the R-type belt tooth dimension drawing (see Figure 3, Figure 3 of the.2012 edition);
- Increased R12M belt tooth size (see Table 2);
- Changed the S-type belt tooth dimension drawing (see Figure 4, Figure 4 of the.2012 edition);
- Changed the wedge section (see Figure 5, Figure 5 of the.2012 edition);
- Increased the belt length of the 12M series (see Table 5);
- Added R12M measurement pulley parameters (see Table 6);
- Increased the measuring force of R12M belt (see Table 7);
- Deleted the gear tooth and belt tooth clearance and corresponding parameters (see Figure 6, Figure 7, Figure 8 and Table 4 of the.2012 edition);
- Added technical requirements (see Chapter 6);

1 Scope

GB/T 28773-2024 is the Chinese standard for tooth-wedge belts, the ribbed V-belts whose underside is notched transversely. The notching is the point of the product: it lets a multi-rib belt bend around the small pulleys of a modern engine front end or appliance drive without the compression that cracks a plain rib, which is why these belts dominate automotive accessory drives. The standard sets the types, the rib profiles and pitches and the dimensions and tolerances, then the requirements: the tensile strength and elongation of the belt and its cords, the adhesion between the layers, the flex fatigue life over small pulleys, the resistance to heat, cold, ozone and oil, the transmission capacity and the loss of tension in service, the noise and the dimensional stability. It then gives the test methods, the inspection rules and the marking, packaging, transport and storage. It takes effect on 1 May 2025.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 6931.1 Belt drive terminology Part

GB/T 6931.2 Belt drive terminology Part 2: V-belt and multi-V belt drives

GB/T 6931.3 Belt drive terminology Part

3 Synchronous belt drive

GB/T 10716 Timing belt drive - Test method for physical properties of automotive timing belts

GB/T 24619 Synchronous belt drives G, H, R, S tooth profiles Curved toothed synchronous belts and pulleys

3 Terms, definitions and symbols The terms, definitions and symbols defined in GB/T 6931.1, GB/T 6931.2 and

GB/T 6931.3 apply to this document.

4 Model and marking

4.1 Model One side of the belt is a curved tooth synchronous belt, which is divided into three types of tooth shapes. H, R, and S. The H and S tooth shapes are divided into two

itches of 8mm and 14mm, and the R tooth shape is divided into two pitches of 8mm and 14mm. There are three pitches. 8mm, 12mm and 14mm. The other side of the belt is a multi-V belt, which is divided into two models. PK and PL. The structure is shown in Figure 1. Index number description. 1

---with teeth; 2

---with wedge; 3

---Tooth cloth. Figure

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