

Translated English of Chinese Standard: GB/T 2978-2008

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# GB

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### of the People's Republic of China

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## GB/T 2978-2008

Replacing GB/T 2978-1997

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### Size Designation, Dimensions, Inflation Pressure and Load Capacity for Passenger Car Tyres

(Replaced by GB/T 2978-2014, from Sep 2015)

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## Foreword

This Standard is not equivalent to ETRTO-2007 "The European Tyre and Rim Technical Organisation Standards Manual" (English Edition).

This Standard replaces GB/T 2978-1997 "Series of Passenger Car Tyres".

Compared with GB/T 2978-1997, this Standard has the main changes as follows:

- The expression "speed step " in GB/T 2978-1997 is changed to "speed symbol" (Chapters 3, 4 and 5 of the 1997 edition; Chapters 4 and 5, Tables 1~19 and Appendix B of this edition; )
- The expression "standard rim" is changed to ""measuring rim" (Tables 2~9 of the 1997 edition; Tables 1~15 of this edition);
- Radial tyre series 40, 35, 30, and 25 as well as Type T temporary-use spare tyre for passenger cars are added in this Standard (Tables 9~13 of this edition);
- The inflation pressure table for enhanced radial tyres for passenger cars is added in this Standard (Table 17 of this edition);
- The basic inflation pressures for enhanced tyres of each series are adjusted in this Standard (Tables 2~9 of the 1997 edition; Tables 1~14 of this edition);
- Requirements for enhanced radial tyres for passenger cars and the designation "ZR" are added in this Standard (Chapter 4 of this edition);
- The requirements for maximum pressure of use for radial tyres for passenger cars are added in this Standard (5.6 of this edition);
- Recommendatory requirements for the use of inflating valves of radial tyres for passenger cars are added in this Standard (Chapter 6 of this edition);
- Requirements for the corresponding relations between speeds and basic inflation pressures of tyres with speed over 160 km/h under the maximum load are added in this Standard (refer to Table 18);
- Requirements for the load variation for tyres with speed over 210 km/h are added in this Standard (Table 19 of this edition); and
- Requirements for the deviation of section width and overall diameter of passenger car tyres are adjusted in this Standard (Table 2 of the 1997 edition; Table 1 of this edition).

Appendixes A and B of this Standard are normative.

This Standard was proposed by China Petroleum and Chemical Industry Association.

This Standard shall be under the jurisdiction of National Technical Committee 19 on Tyres and Rims of Standardization Administration of China (SAC/TC 19).

Drafting organizations of this Standard: Guangzhou Southern China Tire & Rubber Co. Ltd., Shandong Linglong Tire Co., Ltd, Triangle Group Co., Ltd., Hangzhou Zhongce Rubber Co., Ltd., Beijing Research & Design Institute of Rubber Industry, Shanghai Michelin Warrior Tyre Co., Ltd., Giti Radial Tire Anhui Co., Ltd., Nanjing Kumho Tire Co., Ltd., Beijing Capital Tyre Co., Ltd, and Sailun Co., Ltd.

Chief drafting staff of this Standard: Lu Kun, Chi Wen, Dong Maohua, Yi Shanhui, Chen Guohua, Xu Lihong, Lu Yi, Xiao Song, Wang Zhengrong, Zhao Dongmei, and Liu Yansheng.

Historical editions replaced by this Standard are as follows:

— GB/T 2978-1982, GB/T 2978-1989, and GB/T 2978-1997.

# Size Designation, Dimensions, Inflation Pressure and Load Capacity for Passenger Car Tyres

## 1 Scope

This Standard specifies the terms and definitions of passenger car tyres, the size designation methods, and the dimensions, inflation pressures and loads corresponding to size designation etc.

This Standard is applicable to new pneumatic tyres of passenger cars.

## 2 Normative References

The following documents contain provisions which, through reference in this Standard, constitute provisions of this Standard. For dated reference, subsequent amendments (excluding corrections) or revisions of these publications do not apply. However, parties coming to agreements based on this Standard are encouraged to investigate the possibility of applying the most recent editions of the standards. For undated references, the latest edition of the normative document referred to applies.

GB/T 6326 "Tyre Terms and Definitions" (GB/T 6326-2005, ISO 4223-1: 2002, NEQ)

## 3 Terms and Definitions

For the purposes of this Standard, the terms and definitions established in GB/T 6326 apply.

## 4 Size Designation Method

The tyres for passenger cars are defined and represented with their size designations and directions for use.

Example 1:

measuring rim, new tyre dimensions, maximum dimensions in service, static loaded radius, rolling radius and approved rims.

**5.2** As for standard and enhanced radial tyre for passenger cars with speed of 160 km/h or below, the corresponding relations between their load capacities and different inflation pressures shall meet the requirements specified in Tables 16 and 17 respectively.

**5.4** The corresponding relations between load indexes and load capacities shall meet the requirements specified in Appendix A.

**5.5** The corresponding relations between speed symbols and maximum speeds shall meet the requirements specified in Appendix B.

**5.6** The "inflation pressure" mentioned in this Standard refers only to the inflation pressure of tyres under cold state at normal temperature, excluding the pressure increased by the temperature rise during traveling process; in any case, the maximum inflation pressure of passenger car tyres actually used shall not exceed 350 kPa for the sake of safety.

## 6 Inflating Valves

The model of inflating valves should meet the requirements specified in Table 20; if valves of other models are to be used, the user shall consult with the manufacturer.

## Appendix B

### (Normative)

#### Corresponding Relations between Speed Symbols and Maximum Speeds

The corresponding relation between speed symbols and maximum speeds shall meet the requirements specified in Table B.1.

**Table B.1 Corresponding Relations between Speed Symbols and Maximum Speeds**

| Speed symbol | Maximum speed /(km/h) | Speed symbol | Maximum speed /(km/h) |
|--------------|-----------------------|--------------|-----------------------|
| C            | 60                    | P            | 150                   |
| D            | 65                    | Q            | 160                   |
| E            | 70                    | R            | 170                   |
| F            | 80                    | S            | 180                   |
| G            | 90                    | T            | 190                   |
| J            | 100                   | H            | 210                   |
| K            | 110                   | V            | 240                   |
| L            | 120                   | W            | 270                   |
| M            | 130                   | Y            | 300                   |
| N            | 140                   | -            | -                     |

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