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Tire valves for bicycles

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Contents

	Page
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Types and symbols	1
5 Configurations of valves	2
6 Performances	7
6.1 Airtightness	7
6.2 Adhesive strength of rubber seat	7
7 Dimensions	7
8 Appearance	7
9 Test methods	8
9.1 Airtightness test	8
9.2 Adhesive strength test of rubber seat	8
10 Designations of products	8
11 Marking	8
Annex A (normative) Screw threads of tyre valves for bicycles	9
Annex B (informative) Metal base valves	12

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Bicycle Promotion Institute (JBPI)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (**JIS D 9422** : 2008), which has been technically revised.

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Tire valves for bicycles

1 Scope

This Japanese Industrial Standard specifies the requirements for tyre valves used for inner tubes for bicycle tyres specified in **JIS K 6304** (hereafter referred to as valves).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS D 4211 *Tyre valve cores for automobiles*

JIS K 6304 *Inner tubes for bicycle tyres*

3 Terms and definitions

No terms and definitions are listed in this Standard.

4 Types and symbols

The valves shall be classified as **a)** and **b)** according to the air seal constructions and the jointing systems with tube. When using symbols to indicate the types, **c)** shall apply.

a) The air seal constructions are classified into three types as shown in Table 1.

Table 1 Types according to air seal constructions

Type	Symbol	Air seal construction
Woods valve	E	Seal by valve rubber
Schrader valve	A	Seal by use of valve packing
Presta valve	F	Seal by use of shell packing

b) The jointing systems with tube are classified into two types as shown in Table 2.

Table 2 Types according to jointing systems with tube

Type	Symbol	Jointing system with tube
Rubber base valve ^{a)}	R	Adhesion through rubber seat (system in which a valve is adhered to tube through rubber seat)
Metal base valve	M	Metal pressure welding (system in which tube is held between body flange and washer)
Note ^{a)} Including rubber covered valves.		

- For the items not specified in **a)** and **b)**, other symbols may be added as needed. In the case where the body length or the nuts to be used are designated, “the body length” and “the symbol of designated nuts” shall be arranged in this order after the symbol of jointing system with tube.

Example V E R 30

body length : 30 mm

jointing system with tube : rubber base valve

air seal construction : Woods valve

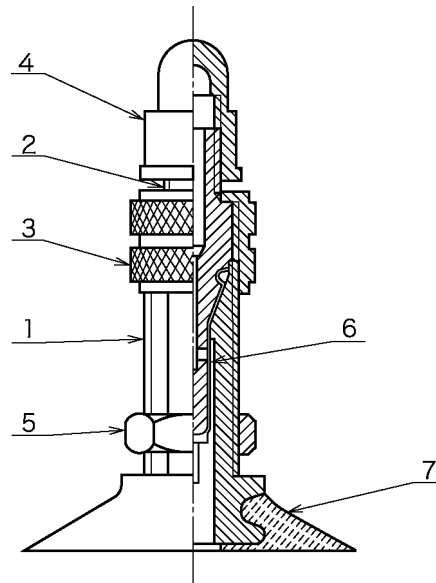
tyre valve for bicycles

The configurations of valves are as shown in Table 3. The names of components are shown in Figure 1 to Figure 6.

NOTE See Annex B for the configurations of metal base valves.

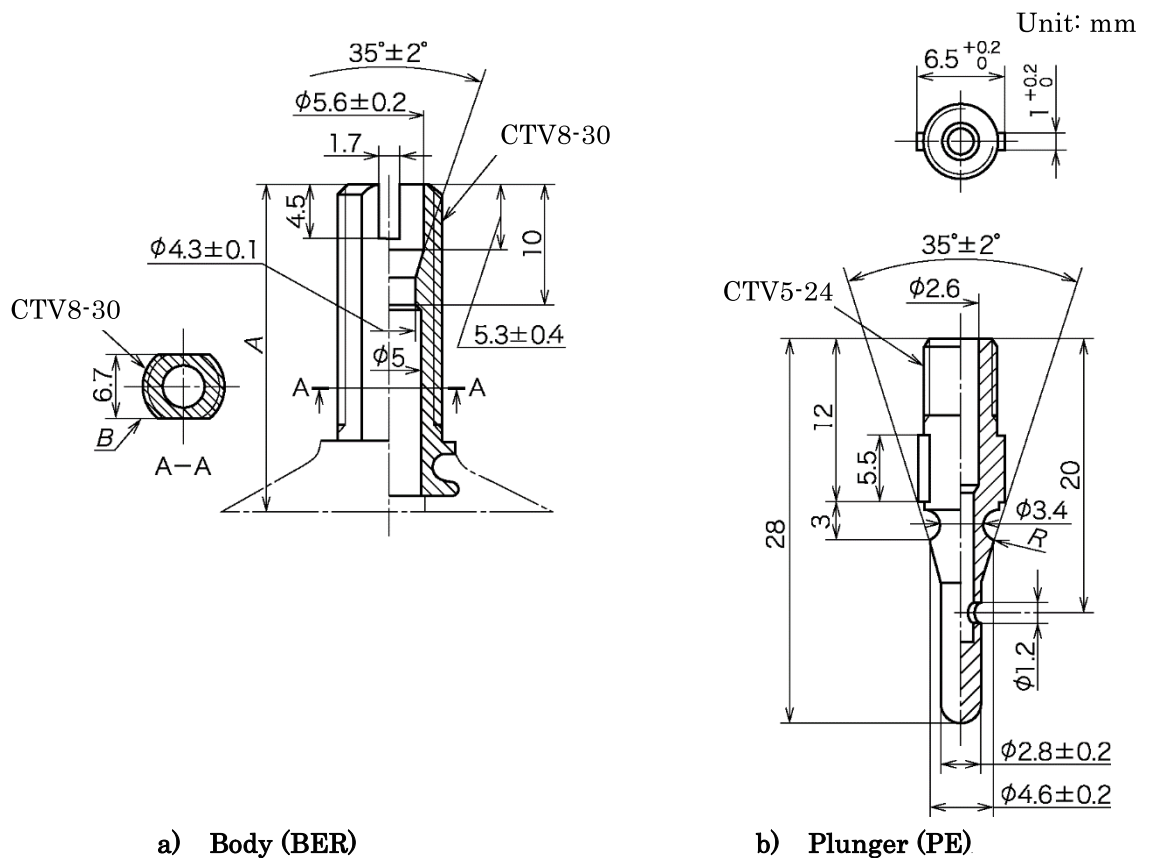
Table 3 Configurations of valves (rubber base valves)

Component	Type			Main material (informative)
	Woods valve	Schrader valve	Presta valve	
	VER (Figure 1)	VAR (Figure 3)	VFR (Figure 5)	
Body	Figure 2 a) (BER)	Figure 4 a) (BAR)	Figure 6 a) (BFR)	Materials specified in JIS H 3250
Plunger	Figure 2 b) (PE)	—	—	
Top nut	Figure 2 c) (TE)	—	—	
Cap	Figure 2 d) (CP-2)	Figure 4 b) (CP-1)	Figure 6 b) (CPF)	Materials specified in JIS H 3250 , or rubber or synthetic resin
Nut	Figure 2 e) (NE)	—	Figure 6 c) (NF-1) or Figure 6 d) (NF-2)	Materials specified in JIS H 3250
Valve rubber	Figure 2 f)	—	—	—
Valve core	—	Type A or Type B specified in JIS D 4211	—	—
NOTE 1	The valves are required to be configured with the components designated by figure numbers and others, if they are specified in this table.			
NOTE 2	A symbol indicated in parentheses after the figure number is the abbreviation of the corresponding component, shown for reference.			



- | | |
|-----------|-----------------|
| 1 Body | 5 Nut (rim nut) |
| 2 Plunger | 6 Valve rubber |
| 3 Top nut | 7 Rubber seat |
| 4 Cap | |

Figure 1 VER



The dimension *A* shall be determined upon the agreement between the parties concerned with delivery.

Side cutting of *B* part is optional.

A plunger may be constructed with spring, shell packing and valve packing.

Figure 2 Components of VER