

KS

KOREAN INDUSTRIAL STANDARD

Derailleur for Bicycles

KS R 8045-1988

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Derailleur for Bicycles

1. Scope

This Korean Industrial Standard specifies derailleur, front derailleur, control levers and derailleur cables used mainly for bicycles for general use and bicycles for children specified in KS R 8002 (Classification and Essential Characteristics of Bicycles).

Remark The units and numerical values given in { } in this standard are in accordance with the traditional units system and are appended for reference.

2. Classification

(1) Rear Derailleur

Rear derailleurs shall be classified as shown in Table 1 according to the combination of the mounting method and shift type.

Table 1

Mounting method	Shift type ⁽¹⁾
With adapter	Top-normal
Without adapter	Low-normal
	Others

Note ⁽¹⁾ The shifting system in which the shift position when the derailleur cable is slackened (shift spring in returned position) is on the top gear side is termed "top-normal", and that in which it is on the low gear side is termed "low-normal". The "others" mean shifting systems having a mechanism in which the returned shift position is indefinite as in the case of lacking a shift spring.

(2) Front Derailleur

Front derailleurs shall be classified as shown in Table 2 according to the combination of the mounting method and shift type.

Normative References : See page 12.

Table 2

Mounting method	Shift type ⁽¹⁾
Clamping	Low-normal
Brazed on	Top-normal
	Others

(3) Control Lever

Control levers shall be classified as shown in Table 3 according to the combination of the type, constitution and mounting method.

Table 3

Type	Constitution	Mounting method
Normal lever	Single	Clamping
Console lever	Double	Brazed on
Others	Others	Others

3. Part name

The parts names are shown in Annex Figs. 1 to 4. Examples of the main materials used are shown for informative reference.

4. Strength

The strength of derailleur cables shall be as follows :

- (1) When the inner derailleur cable is fixed to a test apparatus as shown in Fig. 1, and a load of 980 N {100 kgf} is applied, there shall be no breakage in the respective parts. However, this does not apply to the derailleurs with a load reducing mechanism.

Unit : mm

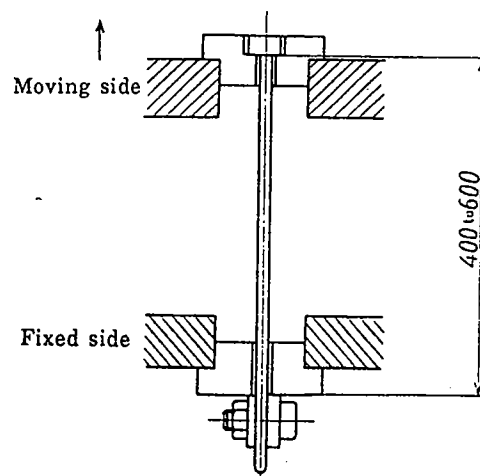


Fig. 1

- (2) When the outer derailleur cable casing is fixed to a test apparatus as shown in Fig. 2 and after application of an initial load of 98 N {10 kgf} for 1 min, the load is slowly increased to 490 N {50kgf}, the displacement on the moving side shall not exceed the sum of 0.6% of the length of the inner cable and 1 % of the outer cable casing measured respectively under the initial load. However, this does not apply to derailleurs having a load reducing mechanism.

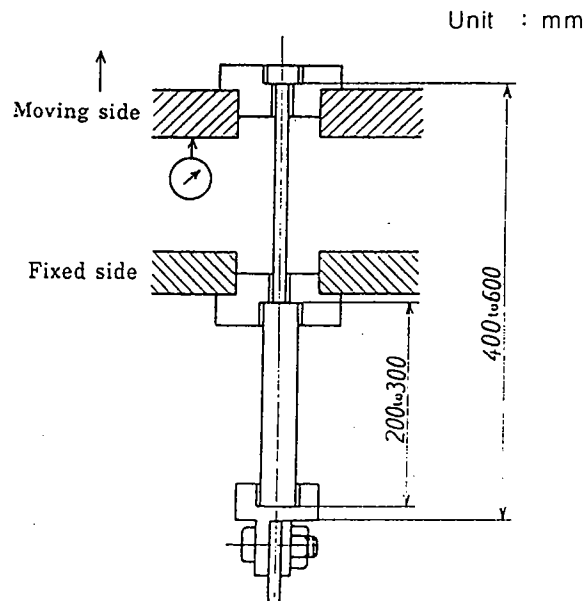


Fig. 2

5. Construction

The construction of derailleur shall be as follows:

- (1) The respective parts shall be assembled and joined firmly and shall function satisfactorily when they are operated.
- (2) The guide pulley and tension pulley of the rear derailleur shall smoothly turn without leaving more than necessary clearance to the guide plates.
- (3) When the derailleur is assembled to a bicycle for use, the control lever shall have sufficient strength for operation and be constructed to retain the required shift position opposing the returning force of the shift springs except where the rear derailleur and front derailleur have a retaining mechanism for shift positioning.
- (4) The fixing part of the derailleur cable shall be constructed to be resistant to abrasion. In addition, the end of the inner derailleur cable shall be treated not to come unraveled.

6. Shape and Dimensions

Examples of the shape and the main dimensions of derailleur are shown in Annex Figs. 1 to 3. Among the dimensions, those without indication of tolerance are recommended dimensions. The screw threads used shall conform to KS B 0201 (Metric Coarse Screw