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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 25501-2019

Replacing GB 25501-2010

Minimum allowable values of water efficiency and water efficiency grades for faucets

水嘴水效限定值及水效等级

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Standardization Administration of China

Table of Contents

Foreword

This Standard was drafted in accordance with the rules given in GB/T 1.1-2009. This Standard replaces GB 25501-2010 "Minimum allowable values of water efficiency and water efficiency grades for faucets". Compared with GB 25501- 2010, main technical changes in this Standard are as follows: - modified the standard scope; - modified some terms and definitions; - modified basic requirements; - modified indicators of flow uniformity; - modified indicators of water efficiency grades for faucets. This Standard was proposed by Standardization Administration of the People's Republic of China, Department of Resource Conservation and Environmental Protection, National Development and Reform Commission of People's Republic of China. This Standard shall be under the jurisdiction of Standardization Administration of the People's Republic of China. The drafting organizations of this Standard. Jiumu Kitchen & Bathroom Co., Ltd., Guangdong Huayi Sanitary Ware Industry Co., Ltd., Anhui Xueyu Sanitary Ware Co., Ltd., Guangdong Lehua Home Furnishing Co., Ltd., Hengjie Bathroom Group Co., Ltd., Xinle Bathroom (Foshan) Co., Ltd., Liaoning Supor Sanitary Ware Co., Ltd., Ningbo Jiemin Sanitary Ware Technology Co., Ltd., Luda (Xiamen) Industry Co., Ltd., Zhejiang Ruige Copper Industry Co., Ltd., Zhejiang Gaobo Sanitary Ware Co., Ltd., Zhejiang Sulda Sanitary Ware Co., Ltd., Zhejiang Anma Sanitary Ware Co., Ltd., Zhejiang Zhigao Sanitary Ware Co., Ltd., Zhejiang Kangyi Sanitary Ware Co., Ltd., Guangdong Weixiang Sanitary Ware Industry Co., Ltd., Kaiping Hanmak Sanitary Ware Co., Ltd., Guangdong Conner Sanitary Ware Technology Co., Ltd., Guangdong Oumeier Industry and Trade Industrial Co., Ltd., Kaiping Circuit Leading Fittings Co., Ltd., Xiamen Ruierte Sanitary Technology Co., Ltd., Guangdong Zhongou Sanitary Ware Co., Ltd., Yiyuan (Shanghai) Energy-saving Environmental Protection Technology Co., Ltd., Guangdong Jinen Sanitary Ware Industry Co., Ltd., Guangdong Anbi

Technology Co., Ltd., Braun (China) Sanitary Ware Co., Ltd., Huida Sanitary Ware Co., Ltd., Guangdong Shang Hi-Tech Co., Ltd., Xiamen Haoyamei Hardware Sanitary Ware Industry Co., Ltd., Grand Hyatt Shower Hose (Xinhui) Co., Ltd., Foshan Dongpeng Sanitary Ware Co., Ltd., Foshan Jiajia Sanitary Ware Co., Ltd., Quanzhou Lianchuang Kitchen & Bath Co., Ltd., Fujian Nan'an Huihuang Sanitary Ware Co., Ltd., Hansgrohe Sanitary Products (Shanghai) Co., Ltd., Kaiping Gold Medal Sanitary Ware Co., Ltd., Guangdong Chuangchao Yuge Technology Co., Ltd., China National Institute of Standardization, National Quality Supervision and Inspection Center for Drainage, Irrigation and Water-saving Equipment Products, China Building Materials Inspection and Certification Group (Shaanxi) Co., Ltd., Zhejiang Furniture and Hardware Research Institute, Foshan Quality Measurement Supervision and Inspection Center. Main drafters of this Standard. Bai Xue, Zhu Shuangsi, Zhang Fan, Lin Xiaowei, Ding Yanfei, Zeng Tiansehng, Ma Shiyong, Fang Huaming, Cai Rong, Shang Bei, Lin Busheng, Zhu Yijun, Huang Jinfei, Xie Yuerong, Cai Yudong, Hu Yaping, Zhao Guolei, Shi Yijie, Li Zhenkun, Lai Renzhong, Su Guangmao, Xie Dunwei, Yan Yangzhi, Ying Guoping, Xie Ganghua, Li Jianhai, Chen Shuding, Su Yaoguang, Zheng Xibiao, Dong Jiyue, Wang Bing, Liao Ronghua, Huang Hongzhen, Chen Chunhong, Li Qinyue, Huang Boqing, Chen Shiqing, Lei Ting, Guo Wanyi, Hu Dechun, Wang Hua, You Zhangsen, Luo Min, Yuan Qing, Qiu Taohui, Xie Jing, Yang Zhen, Zhao Qing, Li Wenchao, Duan Yunfeng. This Standard was issued in January 2011 for the first time. This time is the first revision. Minimum allowable values of water efficiency and water efficiency grades for faucets

1 Scope

China's mandatory water efficiency standard for taps - the water equivalent of an energy label, applied to the single most numerous water-using fitting in the country. It specifies the minimum allowable values of water efficiency, the water conservation evaluation values, the water efficiency grades and the test methods for faucets. The quantity regulated is the flow rate at a defined supply pressure, which is what a tap actually controls, and the grades are set against it: a tap that delivers more than the minimum allowable value may not be manufactured, imported or sold, and the water conservation evaluation value is the higher threshold used for the water saving product certification. The reason this works, and works cheaply, is that the flow of a tap is set by an aerator or a flow regulator costing very little, and most users cannot tell the difference in use between a well-designed restricted tap and an unrestricted one - the perceived strength of the stream depends on how the air is entrained, not on the volume passing. So a mandatory ceiling on flow removes a large quantity of water from the national demand at almost no cost to the user and no change in behaviour, which is the rarest thing in conservation policy. The standard also sets what must be declared and how the grade is marked, so that the figure is visible at the point of purchase where the decision is actually made. Issued on 31 December 2019 and in force since 1 July 2020, it replaces GB 25501-2010.

This Standard specifies minimum allowable values of water efficiency, evaluating values of water conservation, water efficiency grades and test methods for faucets. This Standard is applicable to water efficiency evaluation for wash-basin faucets, kitchen faucets, bidet faucets and ordinary faucets that are mounted at cold and hot water supply pipe ends in buildings, that the nominal pressure (static pressure) is not greater than 1.0MPa, and the medium temperature is 4°C~90°C. This Standard is not applicable to the faucets with delayed self-closing function.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 33733, Terminology and classification for the kitchen and sanitary ware fittings

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T 33733 as well as the followings apply.

3.1 uniformity of flow; DeltaF The difference between the highest average flow and the lowest average flow of a faucet under different test pressures.

3.3 evaluating values of water conservation for faucet The maximum flow that is allowed by a water-conservation faucet under standard-specified test conditions.

4 Technical requirements

4.1 Basic requirements The faucets shall meet the requirements of explicit implementation standards.

4.2 Uniformity of flow Carry out the test according to 5.2.The uniformity of flow of wash-basin faucets, kitchen faucets, bidet faucets shall not be greater than 3.0L/min.

4.3 Water efficiency grades for faucet

4.4 Minimum allowable values of water efficiency for faucet The faucet flow specified in water efficiency grade 3.

4.5 Evaluating values of water conservation for faucet The faucet flow specified in water efficiency grade 2.

5.2 Flow test

5.2.1 The dynamic pressure during test is (0.10±0.01) MPa.