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CCS N93

NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 11828.1-2019

Replacing GB/T 11828.1-2002

Instruments for stage measurement - Part 1:Float-type stage gauge

水位测量仪器 第1部分：浮子式水位计

Issued on: June 4, 2019 **Implemented on: January 1, 2020**

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Foreword

GB/T 11828 "Water Level Measuring Instrument" is divided into 6 parts.

--- Part 1. Float type water level gauge;

--- Part 2. Pressure water level gauge;

--- Part 3. Groundwater level gauge;

--- Part 4. Ultrasonic water level gauge;

--- Part 5. Electronic code water gauge;

--- Part 6. Water level stylus. This part is the first part of GB/T 11828. This part is drafted in accordance with the rules given in GB/T 1.1-2009. This part replaces GB/T 11828.1-2002 "Water level measuring instrument Part 1. Float type water level gauge", and GB/T 11828.1-Compared with.2002, in addition to editorial changes, the main technical content changes are as follows:

--- Increased the scope of application, and added the scope of application of "groundwater monitoring" in the "Scope" chapter;

--- Deleted the classification of print records;

--- Increased the composition of the product;

--- Added "structure and materials";

--- Modified the "Output Interface" and "Interface Matching Requirements" and merged them into "Signal and Interface";

---Modified "display and record";

--- Revised the "accuracy" content. This part is proposed and managed by the Ministry of Water Resources of the People's Republic of China. This section drafted by: Ministry of Water Resources Hydrological Instruments and Geotechnical Instruments Quality

Supervision, Inspection and Testing Center, Ministry of Water Resources, Nanjing Water Conservancy and Hydrology Institute of Dynamic Research, Jiangsu Nanshui Technology Co., Ltd. The main drafters of this section. He Shengrong, Jin Fuyi, Yang Lili, Ban Ying, Zhang Jian, Li Yumei, Lu Wen, Xu Zhifeng. The previous versions of the standards replaced by this section are.

1 Scope

GB/T 11828.1-2019 is the Chinese national standard on instruments for stage measurement - part 1:float-type stage gauge, in the field of natural and applied sciences. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 4 June 2019 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 January 2020. Classification: ICS 07.060, CCS N93. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This part of GB/T 11828 specifies the product classification, composition, specifications, structure and structure of the float type water level gauge (hereinafter referred to as "water level gauge"). Materials, signals and interfaces, displays and records, technical requirements, test methods, inspection rules, signs and instructions for use, and packaging, transportation, Storage. This section applies to water level gauges used in surface water bodies such as rivers, lakes, open channels, reservoirs, etc. It is also applicable to water for monitoring groundwater level. Bit meter.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article. Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 4208 enclosure protection grade (IP code)

GB/T 9359 basic environmental test conditions and methods for hydrological instruments General technical conditions for

GB/T 13384 mechanical and electrical product packaging

GB/T 17626.5 Electromagnetic compatibility test and measurement technology Surge (impact) immunity test

GB/T 17626.8 Electromagnetic compatibility test and measurement technology power

frequency magnetic field immunity test

GB/T 18185 Hydrological Instrument Reliability Technical Requirements

GB/T 18522.6 General rules for hydrological instruments - Part 6. Rules for inspection and marking, packaging, transport, storage, instructions for use

GB/T 19677-2005 Hydrological instrument terminology and symbols

GB/T 50095 basic hydrological terminology and symbol standard

3 Terms and definitions

The terms and definitions defined in GB/T 19677-2005 and GB/T 50095 apply to this document.

4 Product working principle, classification, composition and specifications

4.1 Working principle The vertical position of the float changes with the water surface, and the water level wheel is rotated by the suspension cable connected to the float, and the change of the measured water level is converted into The angular displacement of the water level wheel is measured by a scribe line recording device with a timing function, or a given digital signal is output by the encoder.

4.2 Classification

4.2.1 According to the water level coding method.

a) Incremental type. according to the resolution requirement, a signal is sent every time the water level value is increased or decreased;

b) Full-size. Converts the water level value into a digital quantity with a uniquely determined coded output for each division value within the range.

4.2.2 Simulated scribing method. Record the water level change process line by scribing.

4.2.3 According to the coding principle.