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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 11828.2-2022

Replacing GB/T 11828.2-2005

**Instruments for stage measurement - Part 2: Pressure-type
stage gauge**

水位测量仪器 第2部分：压力式水位计

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part

1. Structure and Drafting Rules of Standardization Documents" drafted. This document is part 2 of GB/T 11828 "Water Level Measuring Instruments". GB/T 11828 has released the following parts.

1. Float-type water level gauge;

2. Pressure water level gauge;

3. Acoustic water level gauge;

4. Electronic water gauge. This document replaces GB/T 11828.2-2005 "Water Level Measuring Instruments - Part

2. Pressure Water Level Gauge", and GB/T 11828.2- Compared with.2005, except for editorial changes, the main technical content changes are as follows:

a) Added the definitions of terms "submersible pressure water level gauge", "time drift" and "temperature drift" (see 3.1.1, 3.2, 3.3,.2005 edition Chapter 3);

b) Changed the product classification of pressure water level gauges (see 4.1,

4.1 of the.2005 edition), and deleted the "pressure water level gauge product model" naming" (see

4.2 of the.2005 edition);

c) Added the category of ranges (see 5.3,

5.1.1 of the.2005 edition);

d) The category of resolution is deleted (see 5.4,

1 Scope

GB/T 11828.2-2022 is the Chinese national standard on instruments for stage

measurement - part 2: pressure-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 15 April 2022 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 November 2022. 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 document specifies the product classification, composition, technical requirements, test methods, inspection rules, signs and instructions for use of pressure water level gauges. Packaging, transportation, storage and installation. This document applies to the production, inspection and use of pressure-type water level gauges for measuring surface water and groundwater levels.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 4208 enclosure protection class (IP code)

GB/T 9359 Basic environmental test conditions and methods for hydrological instruments

GB/T 9969 General Principles of Instruction Manual for Industrial Products

GB/T 13384 General technical conditions for packaging of mechanical and electrical products

GB/T 17626.5-2019 Electromagnetic Compatibility Test and Measurement Technology Surge (Shock) Immunity Test

GB/T 17626.8-2006 Electromagnetic Compatibility Test and Measurement Technology Power Frequency Magnetic Field Immunity Test

GB/T 18185 Technical Requirements for Reliability of Hydrological Instruments

GB/T 50095 Standard for basic hydrological terms and symbols SL180 Telemetry terminal for automatic hydrological monitoring and reporting system equipment

3 Terms and Definitions

The terms and definitions defined in GB/T 50095 and the following apply to this document.

3.1 pressure-type stage gauge An instrument that uses a pressure sensor to directly or indirectly sense the hydrostatic pressure of a water body and convert it into a water level.

3.1.1 Submersible pressure-type stage gauge The pressure sensor is placed at the underwater measuring point to directly sense the hydrostatic pressure and convert it into an instrument of water level.

3.1.2 bubble-type stage gauge The hydrostatic pressure of the underwater measuring point is converted into gas pressure by the blowing pressure device, and the pressure is led above the water surface. An instrument that induces gas pressure in a device and converts it into a water level.

3.2 time drift Under reference working conditions, when the measured and environmental conditions are kept constant, the change in the output of the instrument within a specified time.