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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 20818.15-2023

Industrial-process measurement and control - Data structures and elements in process equipment catalogues - Part 15: Lists of properties (LOPs) for level measuring equipment for electronic data exchange

工业过程测量和控制 过程设备目录中的数据结构和元素 第15部分：物位测量设备电子数据交换用属性列表（LOPs）

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Standardization Administration of the PRC

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents" Drafting. This document is Part 15 of GB/T 20818 "Data structures and elements in catalogs of industrial process measurement and control process equipment". GB/T 20818 has released the following parts.

1 Scope

GB/T 20818.15-2023 is Part 15 of the Chinese series on data structures in process equipment catalogues, and gives the lists of properties for level measuring equipment. Selecting an instrument means comparing devices from several makers against a specification, and the properties that decide the choice - measuring principle, range, process connection, wetted materials, pressure and temperature limits, protection and approvals - are described differently in every catalogue, so the comparison is done by hand. A defined property list lets it be done by machine, and lets the selection be carried into the engineering database. The standard sets the general provisions and the description of the object and device lists of properties, with a normative annex giving the full property list for level measuring equipment. It took effect on 1 March 2024.

This document specifies.

---Operating attribute list (OLOP) used to describe the operating parameters of level measuring equipment and a set of requirements for level measuring equipment;

---Device attribute list (DLOP) used to describe different level measurement device types.

The structure of OLOP and DLOP conforms to the general structure defined in IEC 61987-11 and conforms to the structure defined in IEC 61987-

10 Basic principles of LOP structure. In addition to OLOP, other attribute requirements required in different electronic data exchange processes described in IEC 61987-10 have been Published in IEC 61987-92. The attribute library and block library used by LOP in this document are listed in Appendix C and Appendix D respectively.

2 Normative reference documents

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

GB/T 20818.10-2017 Industrial process measurement and control data structures and elements in process equipment catalogs Part

10 Sub. List of Properties (LOPs) Basic Principles for Electronic Data Exchange for Industrial Process Measurement and Control (IEC 61987-10.2009, IDT)

GB/T 20818.11-2018 Data structures and elements in industrial process measurement and control process equipment catalogs Part 11. Common structure of lists of properties (LOPs) for electronic data exchange of measuring equipment (IEC 61987-11.2012, IDT)

GB/T 17564.1-2011 Standard data element types and related classification schemas for electrical projects Part

3 Maintenance and validation procedures (eqv IEC 61360-3.1995)

GB/T 17564.4-2009 Standard data element types and related classification schemas for electrical components Part 4: IEC standard data element types and component category benchmark set (IEC 61360-4.2005, IDT)

GB/T 17564.6-2021 Standard data element types and related classification schemas for electrical components Part 6: IEC Public Data Dictionary (IEC CDD) Quality Guide (IEC 61360-6.2016, IDT)