

JB

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

JB/T 9248-2015

Replacing JB/T 9248-1999

Electromagnetic flowmeters

电磁流量计

(English Translation)

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1 Scope

This standard specifies the product structure and classification, basic parameters, technical requirements, test methods, inspection rules, marking, packaging and storage for electromagnetic flowmeters (hereinafter referred to as "flowmeter").

This standard is applicable to the electromagnetic flowmeters used for measuring the conducting liquid flow in closed pipeline.

This standard is not applicable to plug-in electromagnetic flowmeters and the electromagnetic flowmeters used for measuring open channel flow.

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 191-2008 Packaging-Pictorial Marking for Handling of Goods

GB/T 2829-2002 Sampling Procedures and Tables for Periodic Inspection by Attributes (Apply to Inspection of Process Stability)

GB 3836 (all parts) Explosive Atmospheres

GB 4208-2008 Degrees of Protection Provided by Enclosure (IP Code)

GB/T 9112-2010 Types and Parameters for Steel Pipe Flanges

GB/T 13384-2008 General Specifications for Packing of Mechanical and Electrical Product

GB/T 17626.2 Electromagnetic Compatibility(EMC)-Testing and Measurement Techniques-Electrostatic Discharge Immunity Test

GB/T 17626.3 Electromagnetic Compatibility-Testing and Measurement Techniques-Radiated Radio-frequency Electromagnetic Field Immunity Test

GB/T 17626.4 Electromagnetic Compatibility-Testing and Measurement
Techniques-Electrical Fast Transient/Burst Immunity Test

GB/T 17626.5 Electromagnetic Compatibility-Testing and Measurement Techniques-Surge
(Impact) Immunity Test

GB/T 17626.8 Electromagnetic Compatibility-Testing and Measurement Techniques-Power
Frequency Magnetic Field Immunity Test

GB/T 17626.11 Electromagnetic Compatibility-Testing and Measurement
Techniques-Voltage Dips, Short Interruptions and Voltage Variations Immunity Tests

GB/T 18271.3 Process Measurement and Control Devices-General Methods and
Procedures for Evaluating Performance-Part 3: Tests for the Effects of Influence Quantities

GB/T 18659-2002 Measurement of fluid flow in closed conduits-Methods of evaluating the
performance of electromagnetic flow-meters for liquids

GB/T 20729-2006 Measurement of conductive liquid flow in closed conduits-Flanged
electromagnetic flowmeters-Overall length

GB/T 25474-2010 Values of nominal size for industrial process measurement and control
instruments

GB/T 25480-2010 Basic environmental conditions and testing methods for transportation
and storage of instruments

3 Term and Definition

For the purposes of this document, the terms and definitions given in GB/T 18659-2002
and those below apply.

3.1 constant of primary device

an inherent factor of sensor, equivalent to the electromotive force of signal of a certain field
current, or the field current producing a certain electromotive force, at 1m/s flow rate. It may
serve as the ratio of electromotive force of signal to reference signal of magnetic field.