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CCS N 12



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

GB/T 2624.3-2006

Replacing GB/T 2624-1993

**Measurement of fluid flow by means of pressure differential
devices inserted in circular cross-section conduits running full
- Part 3: Nozzles and Venturi nozzles**

用安装在圆形截面管道中的差压装置测量满管流体流量 第3部分:喷嘴和文丘里喷嘴

(English Translation)

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1 Scope

This part of GB/T 2624 specifies the geometry and method of use (installation and operating conditions) of nozzles and Venturi nozzles when they are inserted in a conduit running full to determine the flowrate of the fluid flowing in the conduit.

This part of GB/T 2624 also provides background information for calculating the flowrate and is applicable in conjunction with the requirements given in GB/T 2624.1.

This part of GB/T 2624 is applicable to nozzles and Venturi nozzles in which the flow remains subsonic throughout the measuring section and where the fluid can be considered as single-phase. In addition, each of the devices can only be used within specified limits of pipe size and Reynolds number. It is not applicable to the measurement of pulsating flow. It does not cover the use of nozzles and Venturi nozzles in pipe sizes less than 50 mm or more than 630 mm, or where the pipe Reynolds numbers are below 10 000.

This part of GB/T 2624 deals with

a) two types of standard nozzles:

- 1) the ISA 1932 nozzle;
- 2) the long radius nozzle⁵⁾;

b) the Venturi nozzle.

The two types of standard nozzle are fundamentally different and are described separately in this part. The Venturi nozzle has the same upstream face as the ISA 1932 nozzle, but

has a divergent section and, therefore, a different location for the downstream pressure tapplings, and is described separately.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of GB/T 2624. For dated references, subsequent amendments