

JIS

JAPANESE INDUSTRIAL STANDARD

**Testing methods for diffusive
flow through membrane filters**

JIS K 3833—1990

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the original Standard in Japanese is to be final authority.

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Testing methods for diffusive
flow through membrane filters

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1. Scope

This Japanese Industrial Standard specifies the testing methods for diffusive flow in liquid filled fine pores of filter disk, filter cartridge and disposable filter of membrane filters to be used for filtration of liquid and gas.

Remarks 1. Applicable Standards to this Standard are shown in the following:

JIS B 6803 Pressure Regulators for Welding, Cutting and Allied Processes

JIS B 7411 Etched-Stem Liquid-in-Glass Thermometers, Total Immersion Type

JIS B 7505 Bourdon Tube Pressure Gauges

JIS B 8241 Seamless Steel Gas Cylinders

JIS B 8342 Small-size Reciprocating Air Compressors

JIS B 8372 Pressure Reducing Valves for Pneumatic Use

JIS K 0101 Testing Method for Industrial Water

JIS K 1107 High Purity Nitrogen

JIS K 3802 Technical Terms for Membranes and Membrane Processes

JIS K 8102 Ethanol (95) [Ethyl Alcohol (95)]

JIS K 8839 2-Propanol

2. In this Standard the units and numerical values shown in { } are in accordance with the traditional units and are currently the criteria in force.

2. Definition

For the purposes of this Standard main definitions are in accordance with JIS K 3802 and to others the following definitions apply.

- (1) filter disk The filter element of sheet state.
- (2) filter cartridge Filter elements of pleat state, cylinder state, etc.
- (3) disposable filter The filter assembly made non-reusable.
- (4) filter assembly Filter elements assembled in housing or holder.

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- (5) holder A container for using the filter disk.

3. Apparatus

The apparatus shall be constituted with the air compressor or nitrogen bomb, pressure reducing valve, gas-pressure regulator, pressure gauge, gas flowmeter, recorder, housing or holder, valves, pipe, etc. There are cases where the gas flowmeter is set at upstream of housing or holder as shown in Fig. 1 and where it is set at downstream as shown in Fig. 2.

Remark: After assembling of apparatus, confirm that there is no leak of gas for test from the connecting parts of parts and appliances.

Fig. 1. Example of Constitution in the Case of Setting the Gas Flowmeter at Upstream of Housing

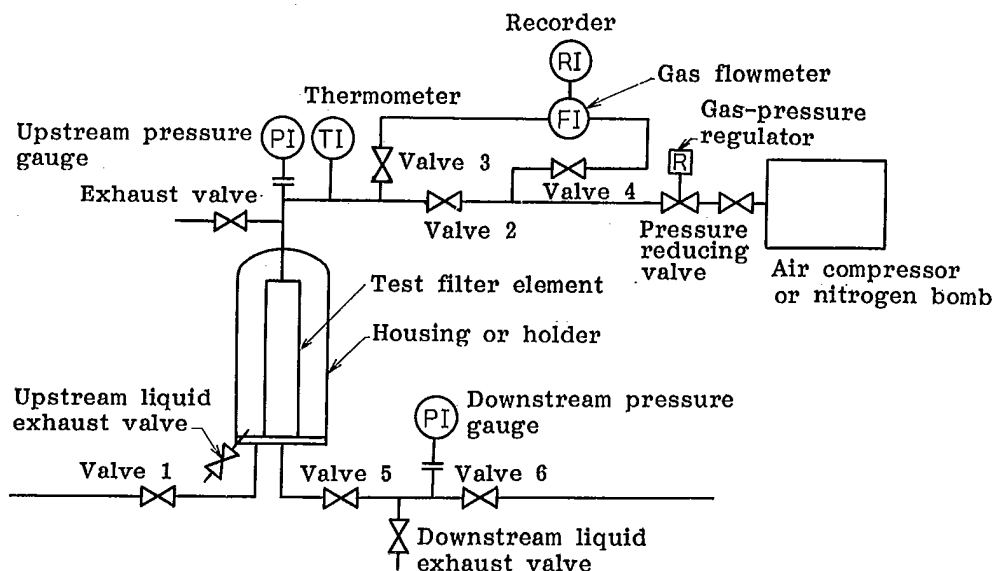


Fig. 2. Example of Constitution in the Case of Setting Gas Flowmeter at Downstream of Housing

