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Abstract

HOLLOW FIBER MEMBRANE MODULE, AND A MANUFACTURING METHOD THEREFOR, AND HOUSING FOR HOLLOW FIBER MEMBRANE MODULE

In a hollow fiber membrane flat module according to the present invention, both ends of hollow fiber membrane bundle which are formed by bundling a plurality of hollow fiber membrane as a sheet are fixed to two housing separately by a fixing resin while maintaining an opening condition in an opening end section in the hollow fiber membrane. Furthermore, a maximum width in an orthogonal direction to a longitudinal direction of the hollow fiber membrane is no longer than 25 mm in a cross section which is orthogonal to a longitudinal direction of the housings, and a maximum deflection in the housings which are measured according to a method for measuring the deflection according to the present invention is not more than 1 % of a distance between the two housings. In such a hollow fiber membrane module, it is possible to enhance the integration ratio of the hollow fiber membrane module per a unit volume of the hollow fiber membrane module unit in which there is less deflections in the housing caused by factors such as an air bubble, and the entanglement of the hollow fiber membranes is restricted; thus, a hollow fiber membrane is not damaged. Also, in the hollow fiber membrane module, it is preferable that the housing is provided with a reinforcing rib section which strengthens the housing.



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