PRODUCT DATASHEET

Flat Sheet Rectangular SS 316 RO Test Cell (<69 bar) – 3 cm x 7 cm





DETAIL – CLOSE-UP

OVERVIEW

The Tech Inc. Flat Sheet Rectangular SS 316 RO Test Cell is a precision-engineered membrane testing apparatus designed for advanced reverse osmosis (RO), nanofiltration (NF), and high-pressure separation research. With compact 3cm x 7cm membrane area and stainless steel 316 construction, this test cell delivers exceptional reliability for laboratory and pilot-scale applications.

TYPICAL DESIGN DATA

Construction Material	Stainless Steel 316 (body and internals)
Membrane Area	3cm x 7cm (21 cm^2 effective testing area)
Maximum Operating Pressure	69 bar (1000 psi) - suitable for RO/NF applications
Feed Flow Rate Capacity	0.5-2 L/min (customisable based on membrane properties)
Feed Inlet/Outlet Connections	1/4 inch tube fittings (standard)
Permeate Outlet	Separate line for independent collection and analysis
Concentration Polarisation Control	Optimised channel geometry minimising entrance effects
Operating Temperature Range	5-45°C (extended range available on request)
Weight	Approximately 2.5 kg (assembled)

APPLICATIONS

Reverse osmosis (RO) membrane performance evaluation and qualification testing under various operating conditions; nanofiltration (NF) membrane characterisation for industrial water treatment applications.

KEY ADVANTAGES

- Premium Stainless Steel 316 construction providing superior corrosion resistance and durability in aggressive environments
- Operating pressure capability up to 69 bar ideal for reverse osmosis (RO) and nanofiltration (NF) testing
- Rectangular flat sheet configuration (3cm x 7cm) optimised for efficient membrane testing and data accuracy
- Quick-disconnect design enabling rapid membrane changes and streamlined experimental workflows
- Minimal dead volume reducing channeling effects and ensuring representative concentration polarisation

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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