Pentek GRO-75EN

Pentair Pentek GRO-75EN High Efficiency Reverse Osmosis Membrane User Manual

Model: GRO-75EN

1. Product Overview

The Pentair Pentek GRO-75EN is a high-efficiency Thin Layer Composite (TLC) encapsulated reverse osmosis membrane designed to produce high-quality water with reduced wastewater. This membrane features a 75 Gallon Per Day (GPD) flow rate and 96% nominal rejection, making it suitable for various water purification systems. It includes a permeate check valve and a 200 ML/Minute drain line flow control for optimized performance.
This product is NSF International tested and certified, ensuring reliability and safety for your peace of mind.



Image 1: A close-up view of the Pentair Pentek GRO-75EN High Efficiency Reverse Osmosis Membrane, showing its cylindrical shape and branding.

2. Key Features and Operational Limits

- **High Efficiency:** Double the recovery over standard reverse osmosis elements with comparable rejection performance.
- **Encapsulated Design:** TLC thin layer composite membrane maximizing shelf life.
- **Integrated Components:** Includes a permeate check valve and drain line flow control.
- **High Rejection Stability:** Maintains performance at high input Total Dissolved Solids (TDS).

- **Certified Quality:** NSF International tested and certified.
- **Flow Rate:** 75 Gallons Per Day (284 Liters Per Day).

Operational Limits:

Maximum Pressure: 125 PSI (8.60 bar)

Maximum Temperature: 120°F (48°C)

pH Range: 4-11

Free Chlorine: 0.1 ppm

Note: Filters and membrane elements are not certified to sanitize water, remove cysts, bacteria, or viruses. Filter and membrane element performance can be affected by fluctuations in water quality.

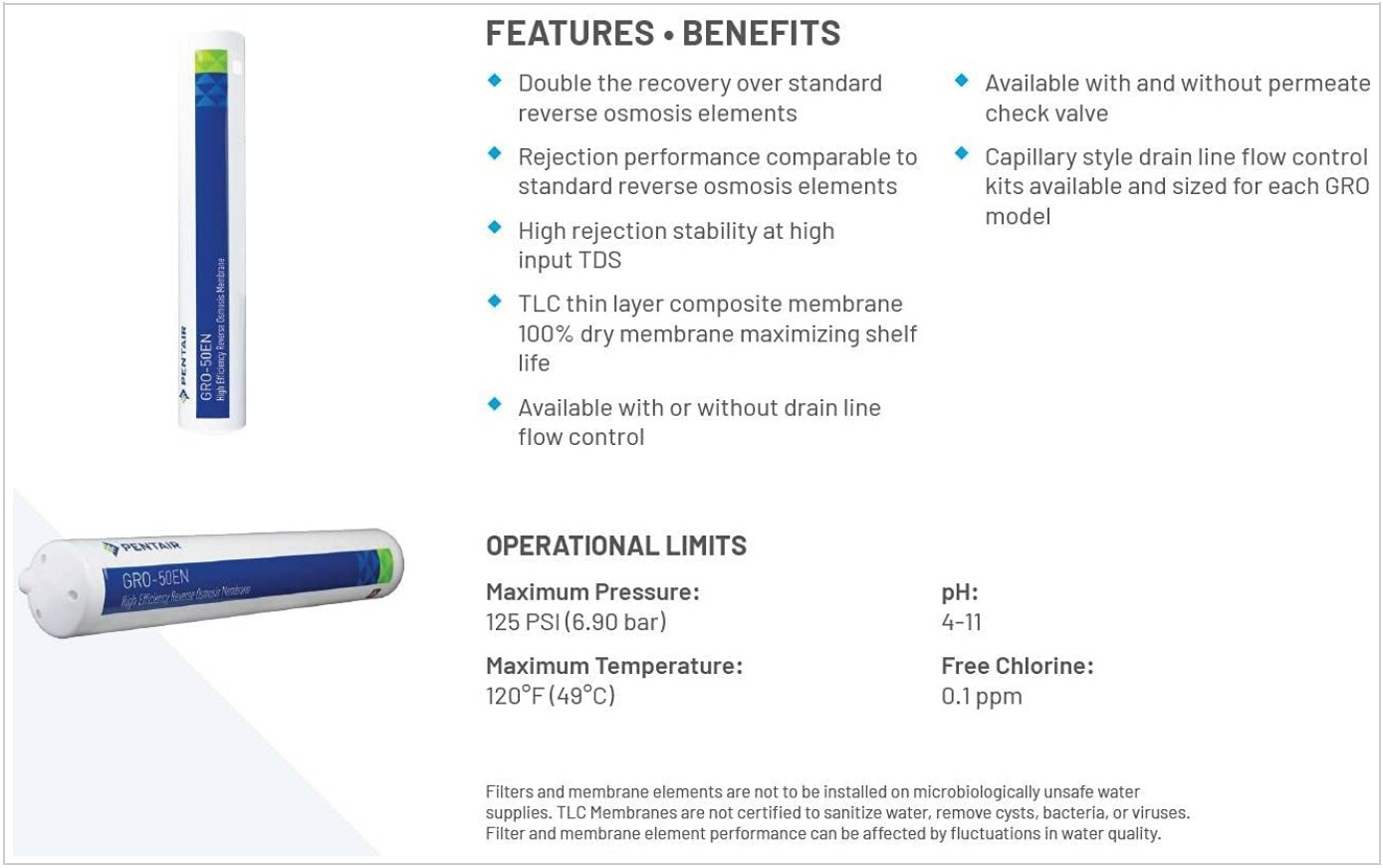


Image 2: A diagram detailing the key features, benefits, and operational limits, including maximum pressure, temperature, pH range, and free chlorine tolerance, for the Pentair Pentek GRO-75EN membrane.

3. Setup and Installation

The GRO-75EN membrane is designed for use in compatible reverse osmosis systems. Proper installation is crucial for optimal performance and to prevent system damage. Always refer to your specific RO system's instruction manual for detailed installation procedures.

General Installation Guidelines:

1. **System Preparation:** Turn off the water supply to your RO system and relieve any pressure.
2. **Remove Old Membrane:** Carefully remove the existing RO membrane from its housing.
3. **Inspect Housing:** Clean the membrane housing thoroughly and inspect O-rings for wear. Replace if necessary.
4. **Install New Membrane:** Insert the GRO-75EN membrane into the housing, ensuring the end with the two O-rings goes in first. Push firmly until it is seated properly.
5. **Secure Housing:** Re-attach the membrane housing cap securely.

6. **Connect Drain Line Flow Restrictor:** This membrane includes a drain line flow control. Ensure it is correctly installed in the drain line before connecting to the membrane's drain port. Failure to install this component can lead to excessive wastewater and poor performance.
7. **Restore Water Supply:** Slowly turn on the water supply to the RO system. Check for leaks.
8. **Flush System:** Allow the system to flush for at least 24 hours (or as recommended by your RO system manufacturer) before consuming the purified water. This flushes out any manufacturing preservatives.

Important: *Always follow the specific instructions provided with your reverse osmosis system for membrane replacement.*

4. Operating Instructions

Once installed and flushed, the Pentair Pentek GRO-75EN membrane will continuously purify water as your RO system operates. The system typically stores purified water in a pressure tank, which is then dispensed through a dedicated faucet.

Normal Operation:

- The membrane works by forcing water through a semi-permeable layer, separating impurities and sending them to the drain.
- The integrated permeate check valve helps maintain system pressure and prevents backflow.
- The drain line flow control regulates the wastewater flow, optimizing the system's efficiency and water recovery rate.

Monitor your system's performance by regularly checking the taste and clarity of the water, and if possible, using a TDS meter to measure the purified water quality.

5. Maintenance

The GRO-75EN membrane is a critical component of your RO system. Its lifespan depends on the quality of your incoming water and the proper functioning of pre-filters. Regular maintenance ensures continued high-quality water production.

Membrane Replacement:

- RO membranes typically require replacement every 2-5 years, depending on water usage and feed water quality.
- Signs that your membrane may need replacement include a noticeable drop in water production, a decline in water taste or odor, or an increase in the Total Dissolved Solids (TDS) level of the purified water.
- Always replace pre-filters (sediment and carbon filters) according to your system's schedule, as this protects the RO membrane and extends its life.

Refer to your RO system's manual for specific membrane replacement intervals and procedures.

6. Troubleshooting

If you experience issues with your reverse osmosis system after installing the GRO-75EN membrane, consider the following common troubleshooting steps:

- **Low Water Production:**
    - Ensure the water supply valve to the RO system is fully open.
    - Check the pressure in the storage tank; it may need re-pressurizing.
    - Verify that the drain line flow control is correctly installed and not obstructed. A missing or improperly installed flow restrictor can lead to excessive wastewater and reduced purified water output.

- Inspect pre-filters; clogged sediment or carbon filters can reduce water flow to the membrane.
- Confirm that the feed water pressure is within the operational limits (125 PSI maximum).

- **Poor Water Taste or Odor:**
  - Ensure the system was properly flushed after installation.
  - Check the post-carbon filter (if applicable) for replacement.
  - Measure the TDS of the purified water. A high TDS reading indicates the membrane may be fouled or damaged.
- **Excessive Wastewater:**
  - Confirm the drain line flow control is properly installed and not bypassed. This component is crucial for regulating the waste-to-pure water ratio.
  - Check for blockages in the purified water line or a faulty auto shut-off valve.
- **Leaks:**
  - Turn off the water supply immediately.
  - Inspect all connections and O-rings. Ensure fittings are tight but not overtightened.

If issues persist after performing these checks, consult your RO system's manufacturer or a qualified technician.

7. Specifications

Model Number	GRO-75EN
Brand	Pentek
Manufacturer	Pentair
Flow Rate	75 GPD (284 Liters Per Day)
Nominal Rejection	96%
Material	Polypropylene (PP)
Product Dimensions	10"D x 2"W x 2"H
Item Weight	1.5 Pounds
External Testing Certification	NSF
Maximum Operating Pressure	125 PSI (8.60 bar)
Maximum Operating Temperature	120°F (48°C)
pH Range	4-11
Free Chlorine Tolerance	0.1 ppm
Included Components	Membrane, Permeate Check Valve, Drain Line Flow Control
UPC	051678023495

8. Warranty Information

The Pentair Pentek GRO-75EN Reverse Osmosis Membrane comes with a manufacturer's warranty. Please refer to the specific terms and conditions provided by Pentair at the time of purchase.

- **Warranty Description:** 30-day manufacturer warranty.
- **Return Policy:** Amazon's return policy for this item allows returns for 2026 days (approximately 5.5 years) for refund/replacement, if purchased through Amazon. This is separate from the manufacturer's warranty.

Warranty coverage typically applies to defects in materials and workmanship under normal use and service. Damage resulting from improper installation, misuse, or neglect is generally not covered.

9. Support and Contact

For technical assistance, warranty claims, or further information regarding the Pentair Pentek GRO-75EN membrane, please contact Pentair customer support directly. You can often find contact details on the manufacturer's official website or on the product packaging.
When contacting support, please have your product model number (GRO-75EN) and purchase information readily available.

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