Pentair Water™

PRF-RO

On-demand RO water without the need for water storage

- **Complete on-demand RO water system**
- **38°C**
- **Average rejection rate - 93% @ 5.5 bar**

Applications Include:

- Window washers
- Steamers
- Coffee makers
- Photography processing
- Water coolers
- Business offices
- Restaurants
- Humidifiers
- Aquariums
- Misters
- Plus many other applications

Accessories

Booster Pump - For lower pressure and/or low temperature applications, a pressure activated booster pump, conforming to IP65, for the PRF-RO is available to improve system performance.

The PRF-RO, the replacement to the Merlin RO system, has been designed to meet the requirements for smaller, more robust RO systems without any reduction in performance. Membranes, cartridge and all componentry locate into a manifold that makes the PRF-RO a third smaller in size, with just three simple push-fitting connections colour-coded for absolute simplicity.

Incorporating two high-flow membrane elements in series to produce an average of 1.9 lpm of purified water, protected by an all new carbon impregnated fibredyne pre-filter delivering twice the loading capacity, up from 19,000 to 38,000 litres. With the concentrate from one element being channelled through the second, the waste water is reduced by approximately 75% compared to conventional systems.

- Up to 2,600 litres per day of on-demand purified water without the need for water storage
- Works on mains pressure (2.8 bar+) requiring no pump or electricity for most applications
- NSF/ANSI 58 compliant
- Up to 75% less waste water

PRF-RO System Options

To meet the PRF-RO's ever increasing commercial uses, the system is now available in two formats;

PRF-RO:
Complete system with all components including a dedicated tap, ideal for residential use. One of the most important factors in determining the reject and production rate for the PRF-RO is inlet pressure. Therefore the system is now supplied with an inlet pressure gauge.

PRF-RO no tubing / tap / fittings / membranes:
The PRF-RO continuous flow characteristics make it an economical solution for light commercial use. In many of these applications not all the parts supplied with the standard system may be required, therefore a unit without the tap, drain valve and tubing has been created.

PRF-RO Technical Data

System Comparison

	PRF-RO	Standard RO
Average Daily Production Rate	2,600 lpd	37.9-189 lpd
Water Storage Tank	Optional	Integral part of system
System Efficiency*	22.7%	As little as 5%

* Efficiency rating is identical to recovery rating when the system is tested without a storage tank or when a storage tank is bypassed.

Minimum and Maximum Operating Conditions

Condition**	Minimum	Maximum
Inlet Pressure	2.76 bar (40 psi)	5.52 bar (80 psi)
Inlet Temperature	4.44°C (40°F)	37.78°C (100°F)
Inlet TDS	50 mg/L	2,000 mg/L
Inlet Hardness	-	171 mg/L - (10 grain)
Inlet Chlorine	-	1.0 mg/L
Inlet Iron	-	0.1 mg/L
Inlet Manganese	-	0.05 mg/L

**System is designed for use on potable water sources only.

Tubing/Fitting Dimensions

Inlet Tubing	4 feet of ½" natural tubing
Concentrate Tubing	4 feet of ⅜" black tubing
Permeate Tubing	4 feet of ⅜" blue tubing
Drain Tubing (for airgap installation)	3 feet of ½" red tubing
Drain Connection	⅜"
Carbon Post-Filter	⅜" quick disconnect fittings

Inlet Connectors

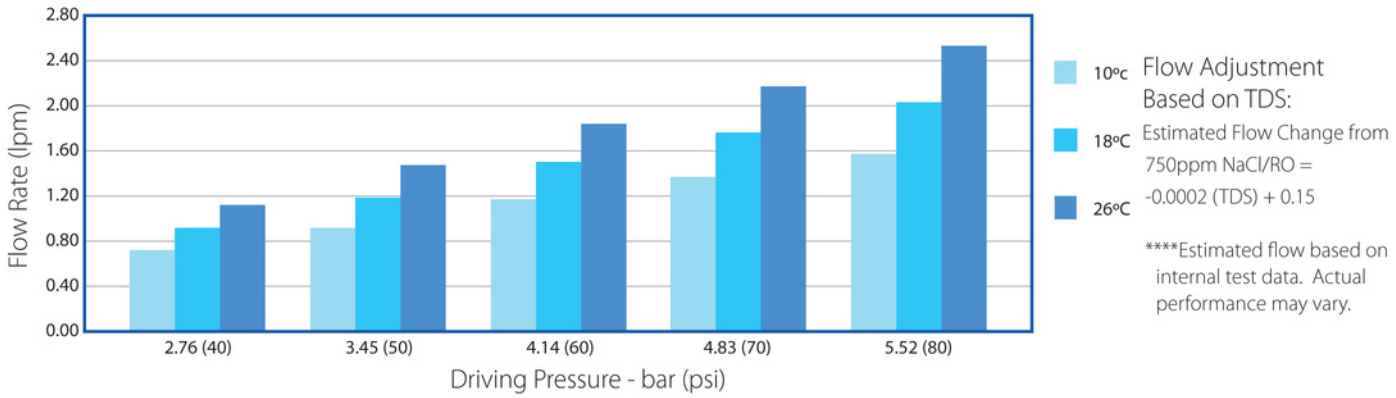
PRF-RO Feed Tee	15mm x 15mm x ½" with stop valve (optional accessory - not included)

Filter/Membrane Performance Specifications

Filter Type	Length(")	Diameter(")	Flow Rate***	Average Life
Carbon Pre-Filter	17.0	2.9	14.2 LPM	6-12 months, 38,000 litres
RO Element	18.75	3.16	0.95 LPM	2-4 years
Carbon Post-Filter	10.0	2.0	2.8 LPM	6-12 months

*** Based on internal testing data.

Performance - Flow Rate Characteristics****



****Estimated flow based on internal test data. Actual performance may vary.

PRF-RO Technical Data

Dimensions in Inches (cm)