

# RO for Light Commercial Applications



Light Commercial Applications

## 2.5" Membranes

### An Improved Performance Retrofit

Whilst other manufacturers are obsoleting the 2.5" range in favour of the mass produced 4" and 8" elements, SPECTRUM is committed to supporting the many systems in the field that incorporate the 2.5" membranes. Not only offering a retrofit, but one with improved performance, often enabling system production rates to increase without modification. All membranes have the added benefit of a fibreglass wrap for a more robust product.

### Specification

Maximum Operating Temperature	4 - 45°C
Maximum Operating Pressure	41 bar
Minimum Operating Pressure	- ERO 6 bar - SRO 10 bar - PRO 5.5 bar
Maximum Feed Flow Rate	22 LPM
Minimum Feed Flow Rate	6 LPM
Maximum Recommended Recovery	35 %
pH Range, Continuous Operation	3-10
pH Range, Short Term Cleaning	2-12
Maximum Feed Silt Density Index	5.5 SDI
Chlorine Tolerance (Total Exposure 2000 mg/l - hours) (mg/l)	<0.1
Maximum Feedwater Turbidity	<1 NTU
Maximum Feedwater Quality (TDS)	- ERO <2,000 mg/l - SRO <10,000 mg/l - PRO <1,000 mg/l
Recommended Shelf Life	2 Years

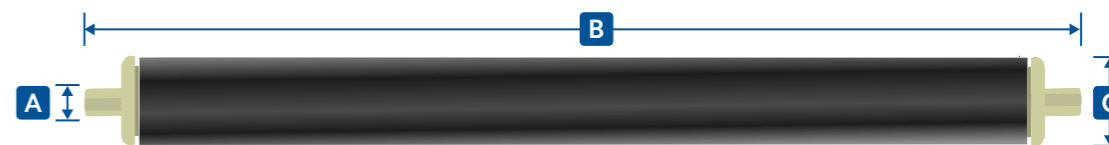
### Materials of Construction

Permeate Tube ABS	Outer Wrap Fibreglass
Feed Channel Spacer Polypropylene	Brine Seal Buna-N
Membrane Polyamide Thin-Film Composite	Permeate Collection Material Polyethylene Terephthalate (PET)
Anti-Telescoping Device ABS	

### Configurations

Diameter (")	Length (")	
2.5 (nominal)	21 (nominal)	40 (nominal)

### Dimensions



Product	Dimensions (")			Active Area ft <sup>2</sup> (m <sup>2</sup> )
	A	B	C	
ERO-2521	0.75	21	2.4	14 (1.3)
ERO-2540	0.75	40	2.4	30 (2.8)
SRO-2521	0.75	21	2.4	14 (1.3)
SRO-2540	0.75	40	2.4	30 (2.8)
PRO-2521	0.75	21	2.4	14 (1.3)
PRO-2540	0.75	40	2.4	30 (2.8)

### Part Number

### Flow Rate

Product Code	LPH (m <sup>3</sup> /day)	Operating Pressure bar (psi)	Avg Rejection %
ERO-2521	47 (1.1)	@ 10.3 (150)	99
ERO-2540	118 (2.8)	@ 10.3 (150)	99
SRO-2521	47 (1.1)	@ 15.5 (225)	99.5
SRO-2540	118 (2.8)	@ 15.5 (225)	99.5
PRO-2521	47 (1.1)	@ 6.9 (100)	99.2
PRO-2540	118 (2.8)	@ 6.9 (100)	99.2

## Durable 2½" RO Housing



**PED**  
Compliant  
Article 4, Paragraph 3  
Group 2 Liquids

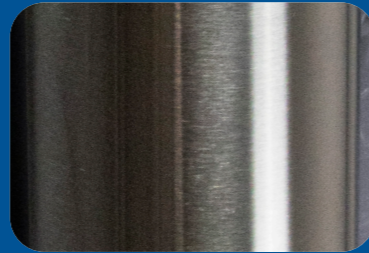
**SPECTRUM**

### Features



#### High Pressure

Single piece ABS endcaps provide increased strength and reliability at high operating pressures.



#### Corrosion Resistant

The highly polished 316L body provides superior corrosion protection against high chloride solutions.



#### Double Seal

Robust clamps and a double O-ring seal ensure the endcaps are securely fitted for sealing integrity.

## 2.5" Membrane Housings

### Supporting Existing and New Systems

The SPECTRUM stainless steel 2.5" membrane housings have been designed to provide a durable, long-term solution for reverse osmosis systems. Compatible with almost all industry 2.5" diameter membranes, these housings feature two twin-port single piece ABS end-caps, each with a double O-ring seal. Supplied as a complete package, this range is shipped with mounting straps included for simple system integration.

### Specification

Operating Temperature 1-50°C  
Maximum Operating Pressure 17 bar

### Materials of Construction

**Housing Body**  
316L Stainless Steel - Seamless

**Endcaps**  
ABS

**Clamps**  
304 Stainless Steel

**Clamp Screws**  
304 Stainless Steel

**O-rings**  
Silicone

**Mounting Strap**  
304 Stainless Steel

**Plug**  
¾" BSPT PVC

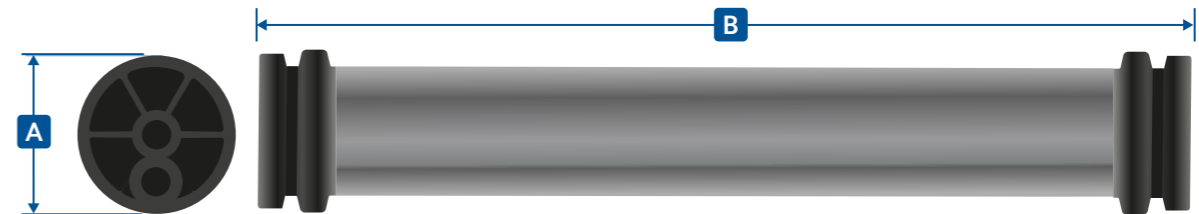


### Configurations

Diameter (")	Length (")	Port Size (")		
		Feed	Permeate	Concentrate
2.5 (nominal)	21 (nominal)	¾	¾	¾
	40 (nominal)			

- Increased resistance to UV (compared to PVC & FRP)
- Secure integrated clamping system
- Complete with mounting straps

### Dimensions



Product	Dimensions (")	
	A	B
SMH-SP-2521	3.5	23.3
SMH-SP-2540	3.5	42.6

### Part Number

Product Code	Material	Size	Port Size
SMH	SP	2521	¾
		2540	

e.g. SMH-SP-2521-¾